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State Energy Price and Expenditure Report 1992

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Contents

	Page
Introduction	1
U.S. Energy Prices and Expenditures	5
State Rankings	11
Statistical Tables	
United States	21
Alabama	24
Alaska	27
Arizona	30
Arkansas	33
California	36
Colorado	39
Connecticut	42
Delaware	45
District of Columbia	48
Florida	51
Georgia	54
Hawaii	57
Idaho	60
Illinois	63
Indiana	66
Iowa	69
Kansas	72
Kentucky	75
Louisiana	78
Maine	81
Maryland	84
Massachusetts	87
Michigan	90
Minnesota	93
Mississippi	96
Missouri	99
Montana	102
Nebraska	105
Nevada	108
New Hampshire	111
New Jersey	114
New Mexico	117
New York	120
North Carolina	123
North Dakota	126
Ohio	129
Oklahoma	132
Oregon	135
Pennsylvania	138
Rhode Island	141
South Carolina	144

South Dakota 147
Tennessee 150
Texas 153
Utah 156
Vermont 159
Virginia 162
Washington 165
West Virginia 168
Wisconsin 171
Wyoming 174

Appendices

A. Documentation 179
Section 1. Overview 179
Section 2. Coal 185
Coking Coal 185
Steam Coal 186
Coal Coke, Imports and Exports 192
Section 3. Natural Gas 193
Section 4. Petroleum 197
Asphalt and Road Oil 197
Aviation Gasoline 198
Distillate Fuel 198
Heavy Oil (Utilities) 213
Jet Fuel 213
Kerosene 215
Light Oil (Utilities) 218
Liquefied Petroleum Gas 218
Lubricants 224
Motor Gasoline 225
Petroleum Coke (Utilities) 233
Residual Fuel 234
Other Petroleum 242
Section 5. Electricity 247
Electricity Consumed by End-Use Sectors 247
Nuclear Fuel for Generation of Electricity 248
Wood and Waste for Generation of Electricity 250
Section 6. Consumption Adjustments for Calculating Expenditures 253
B. Metric and Other Physical Conversion Factors 259
C. Summary of Changes Since the *State Energy Price and Expenditure Report 1991* 265
D. Additional Measures of Energy Consumption, Expenditures, and Prices . . . 271

Glossary 291

Introduction

The *State Energy Price and Expenditure Report (SEPER)* presents energy price and expenditure estimates individually for the 50 States and the District of Columbia and in aggregate for the United States. The price and expenditure estimates are provided by energy source and economic sector and are published for the years 1970, 1980, and 1985 through 1992. Data for all years, 1970 through 1992, are available on personal computer diskettes.

Consumption estimates used to calculate expenditures, and the documentation for those estimates, are from the *State Energy Data Report 1992, Consumption Estimates (SEDR)*, published in May 1993. Expenditures are calculated by multiplying the price estimates by the consumption estimates, adjusted to remove process fuel and intermediate product consumption. All expenditures are consumer expenditures, that is, they represent estimates of money directly spent by consumers to purchase energy, generally including taxes (see box on page 2).

The documentation in Appendix A describes how the price estimates are developed, including sources of data, methods of estimation, and conversion factors applied. This report is an update of the *State Energy Price and Expenditure Report 1991*, published in September 1993. Changes from the last report are summarized in Appendix B. Appendix C provides metric and other physical conversion factors for measures used in energy analyses.

Although all prices and expenditures in this report are expressed in nominal dollars, Appendix D, entitled "Additional Measures of Energy Consumption, Expenditures, and Prices," describes the methodology used to develop energy expenditure estimates in constant 1987 dollars and fixed-weight energy price indices in both nominal and real terms. In this edition of SEPER, Appendix D includes State estimates of energy expenditures and energy expenditures per capita, both in constant 1987 dollars and fixed-weight price indices. National and State-level analysis illustrating the use of these estimates is also presented in Appendix D.

Reliable data for State-level prices rarely exist, especially as series that are consistent over a long period. Estimates and assumptions are applied to fill data gaps and to maintain consistent definitions in the data series over time. *SEPER* incorporates the most consistent series and procedures possible. Users of this report (and of the personal computer diskettes) should recognize the limitations imposed on the system due to changing and inadequate data sources. Estimates often are based on a variety of surrogate measures that are selected on the basis of availability, applicability as indicators, continuity over time, and consistency among the various energy commodities. Original source documents for data used in *SEPER* (cited in the documentation) include descriptions of collection methodologies, universes, imputation or adjustment techniques (if any), and errors associated with the individual processes. Due to the numerous collection forms and procedures associated with these reports, it is not possible to develop a meaningful numerical estimate of the overall errors of the material published in *SEPER*.

It is also important to note that, even within a State, a single average price may have limited meaning in that it represents a consumption-weighted average over a whole State. For example, urban and rural electricity prices can vary significantly from a State's weighted average, and prices in one region of a State may differ from another because of access to less expensive hydroelectricity. Differences within a State may be greater than differences among adjacent States. Thus, the principal value of the estimates in this report lies in general comparisons among the States, interstate comparisons for a given year, and the analysis of trends over several years.

The five economic sectors used in *SEPER* correspond to those used in *SEDR* as follows:

- **Residential Sector**—The residential sector is considered to consist of all private residences, whether occupied or vacant, owned or rented, including single-family homes, multifamily housing units, and mobile homes. Secondary

Note: Throughout this report, the term "State" includes the District of Columbia.

homes, such as summer homes, are also included. Institutional housing, such as school dormitories, hospitals, and military barracks generally are not included in the residential sector; they are included in the commercial sector.

- **Commercial Sector**—The commercial sector, as defined economically, consists of business establishments that are not engaged in transportation or in manufacturing or other types of industrial activity (agriculture, mining, or construction). Commercial establishments include hotels, motels, restaurants, wholesale businesses, retail stores, laundries, and other service enterprises; religious and nonprofit organizations; health, social, and educational institutions; and Federal, State, and local governments. Street lights, pumps, bridges, and public services are also included if the establishment operating them is considered commercial.

Taxes in *SEPER*

While the objective is to provide price estimates that include all taxes, the data sources used in *SEPER* do not treat taxes uniformly. In general, where taxes are included in the source data, they are also included in *SEPER*. Where taxes are not included but can be separately estimated, they are generally added. In many cases, States and even some localities provide tax exemptions for various kinds of activities or classes of end users, and readers of this report should be careful to consider these exceptions when making detailed comparisons. The Energy Information Administration (EIA) is continuing to analyze these cases to see if a better representation can be made. A comprehensive and detailed study of taxes in EIA data is available in the report *End-Use Taxes: Current EIA Practices*, DOE/EIA-0583 (Washington, DC, August 1994). The status of tax data in this edition of *SEPER* is summarized below and described more fully in the Appendix A documentation for each energy source and sector.

End-Use Sectors

Coal. All steam coal and coking coal prices include taxes in all years. Appropriately, coal imports and exports in the industrial sector do not include end-user taxes.

Natural Gas. Natural gas prices are intended to include all Federal, State, and local taxes, surcharges, and adjustments billed to consumers. However, sales and other taxes itemized directly on customers' bills are frequently not reported as revenues and, therefore, are not included in calculating the prices.

Petroleum. Motor gasoline and diesel fuel prices include excise and other per-gallon taxes but do not include general sales taxes due to wide variation at the local level. Residual fuel oil, distillate fuel oil, and kerosene prices include sales taxes in all years. Residential liquefied petroleum gas prices include taxes in all years, but commercial, industrial, and transportation sector prices do not include taxes from 1985 forward. Jet fuel, aviation gasoline, asphalt and road oil, lubricants and other petroleum products do not include taxes. Other petroleum products are miscellaneous products, petrochemical feedstocks (naphtha, other oils, and still gas), industrial petroleum coke, special naphthas, and waxes.

Electricity. Taxes paid directly by electric utilities (rather than end users) are considered operating costs and are passed on to the end users as part of the price. Depending on jurisdiction, taxes collected from end users and turned over directly to a government authority are not generally included in the reported revenues and, therefore, are not included in calculating the prices.

Electric Utility Sector

Coal, natural gas, petroleum coke, nuclear, and biomass fuels prices include all taxes, transportation, and handling costs. There are no direct fuel costs (or taxes) for hydroelectric, geothermal, centralized solar, or wind energy. Capital, operation, and maintenance costs and related taxes associated with these energy sources are included indirectly because electricity prices reflect their presence in the rate base.

- **Industrial Sector**—The industrial sector comprises manufacturing industries, which make up the largest part of the sector, along with mining, construction, agriculture, fisheries, and forestry. Establishments in the sector range from steel mills, to small farms, to companies assembling electronic components.

- **Transportation Sector**—The transportation sector consists of private and public vehicles that move people and commodities. Included are automobiles, trucks, buses, motorcycles, railroads and railways (including streetcars), aircraft, ships, barges, and natural gas pipelines.

- **Electric Utility Sector**—The electric utility sector consists of privately and publicly owned establishments that generate, transmit, distribute, or sell electricity primarily for use by the public and meet the definition of an electric utility. Nonutility power producers are not included in the electric utility sector.

Although end-use allocations of energy consumption and expenditures follow those guidelines as closely as possible, some data are collected using different classifications. For example, electric utilities often classify commercial and industrial users by the quantity of electricity purchases rather than by the business activity of the purchaser. Agricultural use of natural gas is collected and reported in the commercial sector, rather than in the industrial sector. Since agricultural use of natural gas cannot be identified separately, it remains in the commercial sector in this report. Another example is master-metered condominiums, apartments, and buildings with a combination of residential and commercial units. In many cases, billing and metering practices cause residential energy usage of electricity, natural gas, or fuel oil to be included in the commercial sector. In those cases, there is no basis for separating residential from commercial use. Readers are advised to consult the *SEDR* documentation for specific assumptions regarding the consumption estimates.

Where prices for an energy source and sector are not available, comparable prices are substituted. For example, the transportation sector motor gasoline prices are also applied to the commercial and industrial sectors. In some cases, the average of adjacent States' prices is assigned to a missing State price. The documentation elaborates on these price assumptions. There are no direct fuel costs for hydroelectric, geothermal, centralized solar, or wind energy. Capital costs associated with these energy sources frequently are extensive and are included indirectly because the prices charged to the consumer for electricity reflect their presence in the rate base.

Except where specified, it is not generally possible to describe the prices in this report as "wholesale" or "retail." The prices paid in each consuming sector are actually a combination of both sets of prices depending on a number of closely interrelated factors, and the data reflect the combination of prices actually paid by each sector. Almost all residential sector prices are close to retail, reflecting the relatively small quantities of individual purchases and the increased costs of extensive, diffuse, and multilayered distribution systems. Similarly, in the transportation sector almost everyone pays the same retail-like price for motor gasoline, regardless of volume purchased or location of purchase. Conversely, residual fuel oil prices in the transportation sector are certainly more wholesale-like as a result of large deliveries to bulk facilities in major ports. In the same manner, most large industrial and many large commercial expenditures can be thought of as near wholesale, frequently involving direct access to a producer or bulk distribution facility for very large quantities. Many smaller industrial and commercial facilities pay something much closer to retail prices as a result of the small quantities involved and their institutional distance from primary suppliers. Notable exceptions to these relationships include natural gas and electric utilities, which typically establish fixed rates for each of several classes of service depending on representative quantities, service factors, and distribution expenses.

Under contract to the Energy Information Administration, the Battelle Pacific Northwest Laboratories developed many of the price series and estimating procedures incorporated into this report. Descriptions of those data series and procedures are included in the documentation in Appendix A.

U.S. Energy Prices and Expenditures

Overview

U.S. energy consumption increased to 82 quadrillion Btu in 1992, slightly more than the 81 quadrillion Btu recorded in each of the previous 3 years. The overall average price of energy declined by less than 1 percent for the second year in a row, to $8.27 per million Btu[1] in 1992. Despite the lower price, the increase in consumption caused expenditures to increase by 1 percent in 1992. Americans consumed 322 million Btu per person in 1992, 4 million Btu less than in 1970; however, including inflation, they spent over 4-½ times as much money per person for that same amount of energy (Table 1). During the 23-year period covered in this report, consumption per capita was at its highest level in 1978 and expenditures per capita peaked in 1990.

Table 1. U.S. Energy Consumption and Expenditures per Capita, 1970-1992

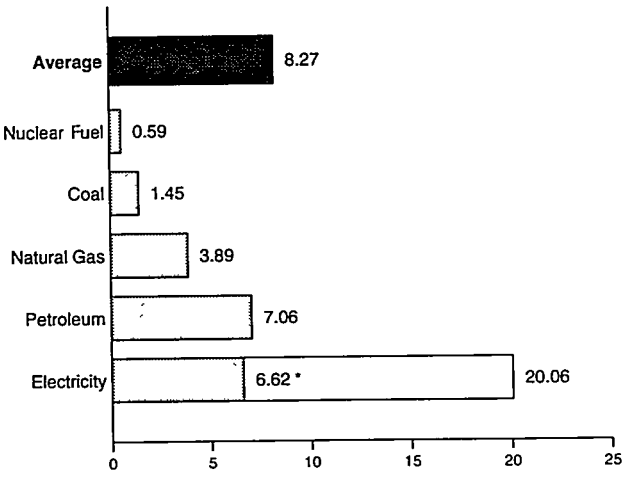
	Consumption per Capita		Expenditures per Capita	
	Million Btu	Index 1970=1.00	Dollars	Index 1970=1.00
1970	326	1.00	406	1.00
1971	328	1.00	434	1.07
1972	341	1.04	467	1.15
1973	352	1.08	528	1.30
1974	340	1.04	718	1.77
1975	328	1.00	797	1.96
1976	342	1.05	890	2.19
1977	347	1.06	1,002	2.47
1978	352	1.08	1,076	2.65
1979	351	1.08	1,323	3.26
1980	335	1.03	1,650	4.06
1981	322	0.99	1,857	4.57
1982	305	0.94	1,831	4.51
1983	301	0.92	1,775	4.37
1984	313	0.96	1,833	4.51
1985	310	0.95	1,824	4.49
1986	308	0.94	1,581	3.89
1987	316	0.97	1,617	3.98
1988	327	1.00	1,658	4.08
1989	328	1.00	1,750	4.31
1990	326	1.00	1,887	4.65
1991	322	0.99	1,852	4.56
1992	322	0.99	1,853	4.56

Source: State Energy Price and Expenditure Data System 1992.

Energy Prices

Prices by Energy Source. Of the major energy sources, electricity registered the highest energy price per million Btu ($20.06), followed by petroleum products ($7.06), natural gas ($3.89), coal ($1.45), and nuclear fuel ($0.59) (Figure 1). The prices of these major energy sources remained in the same relative order from 1970 through 1992. The price of electricity greatly exceeded other sources' prices because of

Figure 1. U.S. Energy Prices by Source, 1992
(Dollars per Million Btu)



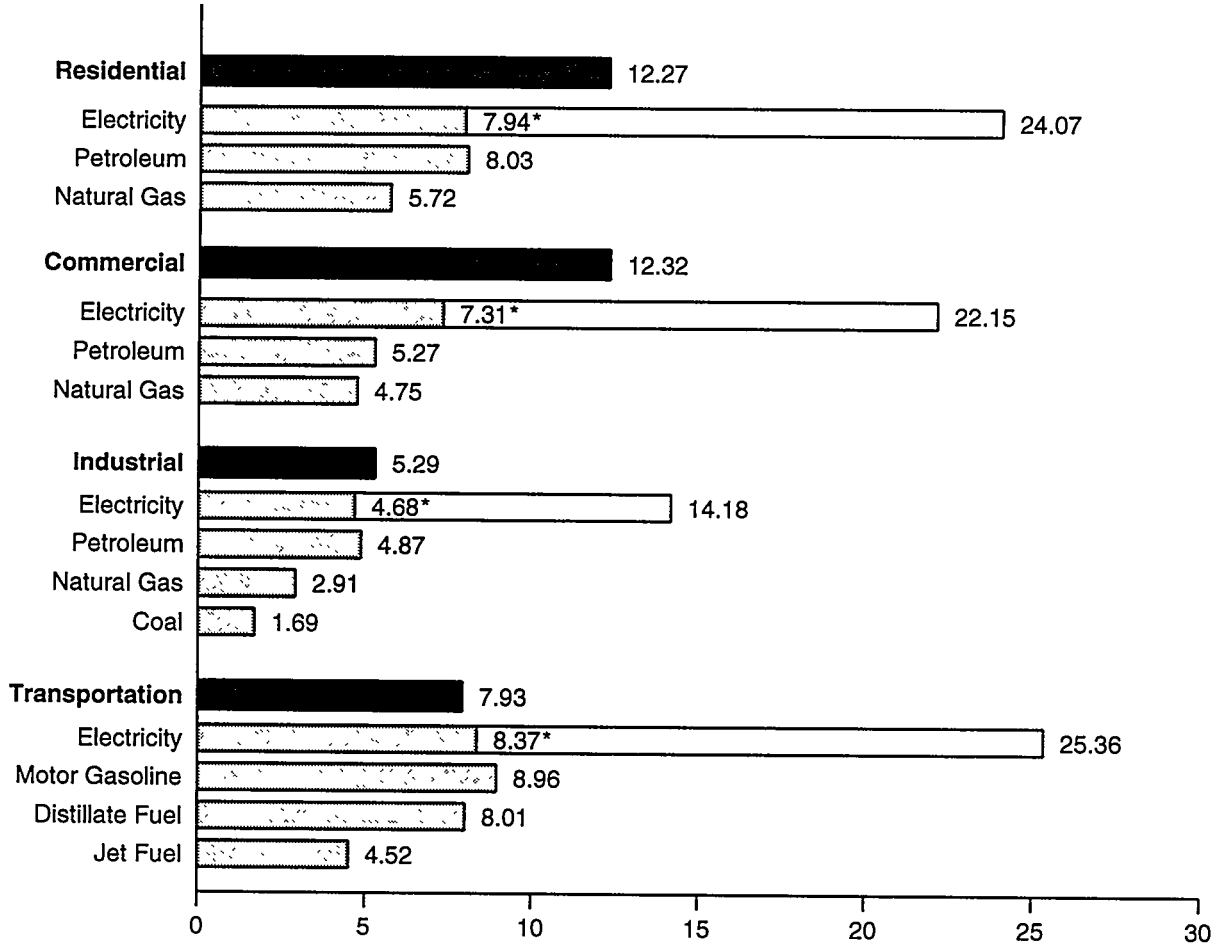
* Estimated price of site electricity.
Source: State Energy Price and Expenditure Data System 1992.

[1] All prices and expenditures are expressed in current dollars, which are not adjusted to remove the effects of inflation. See Appendix D for analyses of expenditures and expenditures per capita in 1987 dollars and using fixed-weight price indices in nominal and real terms.

the significant cost of converting energy from various forms (e.g., fossil fuels, nuclear fuel, hydroelectric energy, and geothermal energy) into electricity (see box on p. 7), as well as somewhat smaller costs for transmitting and distributing electricity to end users. Of the $20.06 per million Btu paid by consumers, $13.44 per million Btu was paid for the energy used and lost in the conversion process, and $6.62 per million Btu was paid for the electricity used by the consumer. Petroleum products, the next-highest-priced group of energy commodities, and especially motor gasoline at $8.96 per million Btu in 1992, are the predominate energy sources for the transportation sector and contribute to its being the sector with the largest energy expenditures.

Prices by End-Use Sector. Because of different mixes of energy sources consumed, the average price paid by major end-use sectors in the U.S. economy varies considerably. In 1992, the commercial and residential sectors' average prices were the highest, $12.32 per million Btu and $12.27 per million Btu, respectively (Figure 2). The transportation sector's average price of $7.93 per million Btu reflects that sector's reliance on petroleum products. Although the industrial sector consumed more energy than the other sectors, its lower average price of $5.29 per million Btu reflects the use of large contracted purchases, which are less costly, and the use of lower-priced fuels, such as coal and residual fuel. The higher average prices paid by residential and commercial consumers are a result, in part, of those sectors' greater reliance on higher-priced electricity. Throughout the 1970's, the residential, commercial, and transportation sectors' average prices for energy were close, with industrial sector prices about half of the residential prices but following the same year-to-year pattern in price fluctuations. For instance, in 1970, the average price for energy in the residential

Figure 2. U.S. Energy Prices by End-Use Sector and Source, 1992
(Dollars per Million Btu)



* Estimated price of site electricity.
Source: State Energy Price and Expenditure Data System 1992.

Evaluating Electricity Prices and Expenditures of Primary (Embodied) and Site (Point-of-Use) Consumption

Electricity is a secondary form of energy that is created from other primary energy sources. It can be measured in

- physical units, commonly in kilowatthours, or
- heat content, generally expressed in British thermal units (Btu).

Primary sources of energy, such as coal, petroleum, and natural gas are also measured in applicable physical units and by their heat content. Coal is measured by the short ton (equal to 2,000 pounds), petroleum by the barrel (equivalent to 42 gallons), and natural gas by the cubic foot. According to the EIA *State Energy Data Report 1992*, Appendix D, in 1992, the average short ton of bituminous coal and lignite consumed at electric utilities contained 20.8 million Btu, the average barrel of distillate fuel contained 5.825 million Btu, and the average cubic foot of natural gas consumed at electric utilities contained 1,023 Btu. The conventional conversion factor for electricity is 3,412 Btu per kilowatthour.

The *State Energy Data Report 1992*, Table A8 shows that electric utilities consumed 29.2 quadrillion Btu of primary energy sources in 1992 to generate 9.5 quadrillion Btu of electricity. These data indicate that 67 percent of the primary (embodied) energy in the fuels consumed was used or lost in the conversion to electricity and 33 percent was used as site (point-of-use) electricity by consumers.

In evaluating electricity prices and expenditures, it is possible to use those percentages to estimate what consumers are paying for the embodied primary energy sources and for the smaller site electricity that is actually consumed. The graphs in this chapter of electricity prices and expenditures illustrate both primary and site values.

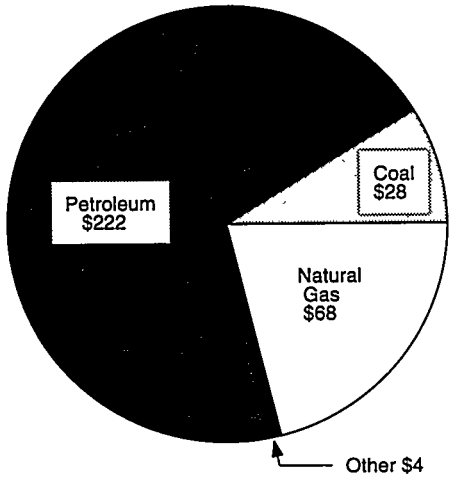
sector was $2.12 per million Btu; the commercial sector, $1.97 per million Btu; the transportation sector, $2.31 per million Btu; and the industrial sector, 83 cents per million Btu. During the 1980's, the transportation sector's average prices dropped significantly below the average residential and commercial prices, following the trend in motor gasoline prices. Industrial prices continued to follow the same fluctuations as the residential and commercial sectors' prices and remained at about half of those prices.

Energy Expenditures

Expenditures by Energy Source. Expenditures for primary energy sources totaled $322 billion in 1992. Of that amount, $222 billion (69 percent) was used to buy petroleum products; $68 billion (21 percent) to purchase natural gas; $28 billion (9 percent) for coal, including net imports of coal coke; and $4 billion (1 percent) was paid by electric utilities for other energy sources, i.e., nuclear fuel and biomass fuels (Figure 3). Of the $222 billion spent on petroleum products, $125 billion (56 percent) was used to buy motor gasoline and $45 billion (20 percent) to buy distillate fuel.

Expenditures by End-Use Sector. Consumers in the United States spent $473 billion to purchase energy in 1992. The residential, commercial, industrial, and

Figure 3. U.S. Primary Energy Expenditures by Source, 1992
(Billion Dollars, Total = $322 Billion)

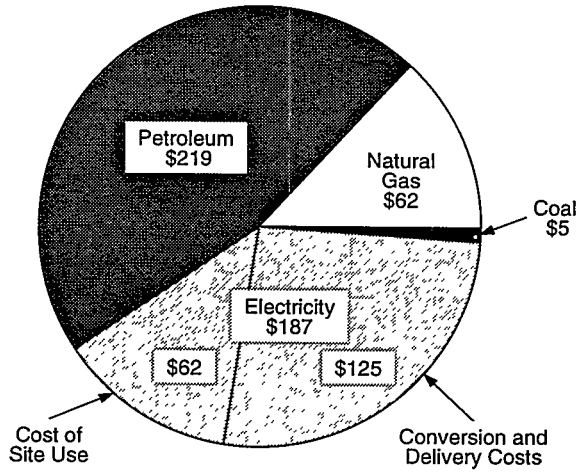


Source: State Energy Price and Expenditure Data System 1992.

transportation sectors combined spent $219 billion on petroleum products in 1992, 46 percent of their total energy purchases (Figure 4). Electricity was the second-largest energy purchase in 1992, accounting for $187 billion, or 40 percent of the money consumers spent on energy. Consumers spent $62 billion (13 percent) to purchase natural gas and $5 billion (1 percent) for coal. Over half (57 percent) of the petroleum expenditures by the four consuming sectors was for motor gasoline and 10 percent was for distillate fuel. Of the $187 billion spent on electricity, approximately $125 billion was the cost of converting primary energy into electricity and delivering it to end users and approximately $62 billion accounted for the electricity itself—all of which must be paid for by the end users of the electricity.

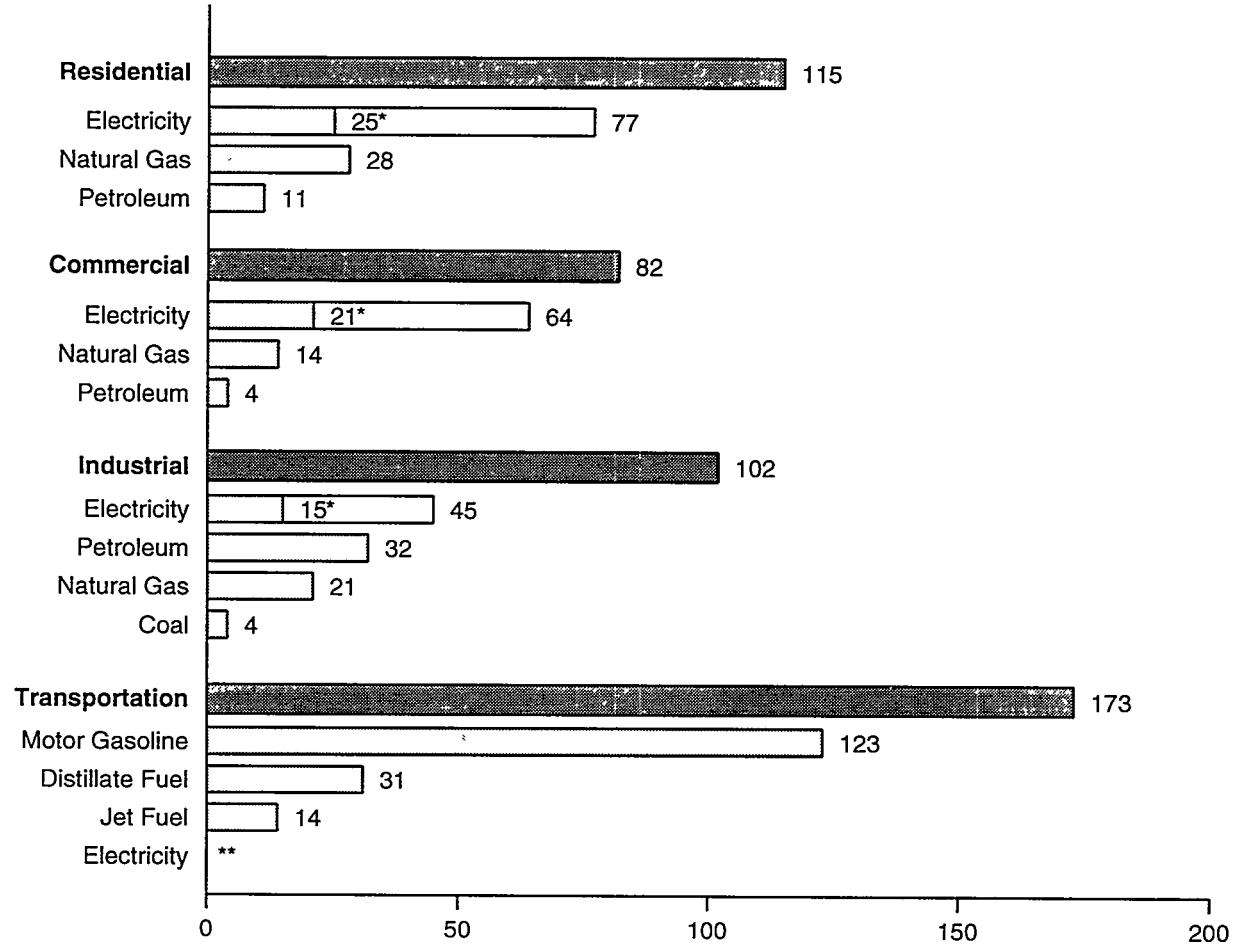
Electricity purchases accounted for the largest portion of the energy expenses in each of the residential, commercial, and industrial sectors in 1992 (Figure 5). Electricity accounted for over half of all energy

Figure 4. U.S. End-Use Energy Expenditures by Source, 1992
(Billion Dollars, Total = $473 Billion)



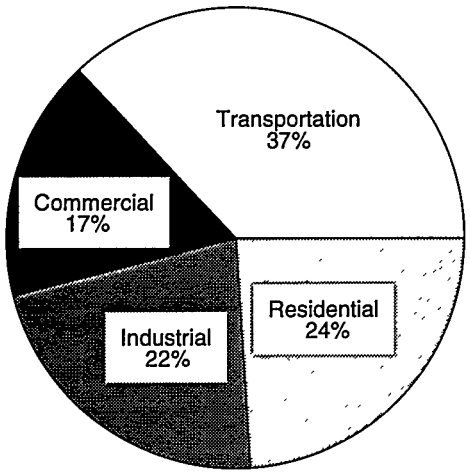
Source: State Energy Price and Expenditure Data System 1992.

Figure 5. U.S. Energy Expenditures by End-Use Sector and Source, 1992
(Billion Dollars)



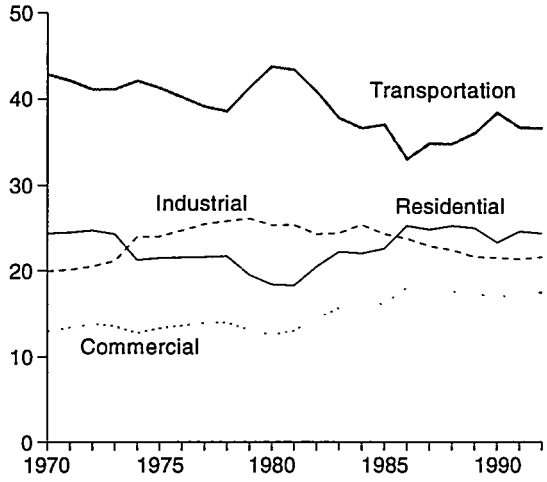
* Estimated price of site electricity.
** Value less than 0.5 billion dollars.
Source: State Energy Price and Expenditure Data System 1992.

Figure 6. U.S. End-Use Energy Expenditure Shares by Sector, 1992
(Percent)



Source: State Energy Price and Expenditure Data System 1992.

Figure 7. U.S. End-Use Energy Expenditure Shares by Sector, 1970-1992
(Percent)



Source: State Energy Price and Expenditure Data System 1992.

expenditures in the residential and commercial sectors each year from 1970 through 1992, with natural gas and petroleum consistently second and third in the size of their shares. In the industrial sector, petroleum products were the largest energy purchase from 1970 through 1984. In 1985, electricity began to be the largest item on the industrial energy bill, reaching $45 billion in 1992 compared with $32 billion for petroleum, $21 billion for natural gas, and $4 billion for coal. In contrast to the industrial sector's diversity of energy sources, the transportation sector was almost exclusively petroleum dependent. The $173 billion spent on transportation's consumption of petroleum products was 99.8 percent of that sector's total expenditures. Of the $173 billion, $123 billion (71 percent) was for motor gasoline and $31 billion (18 percent) for distillate fuel.

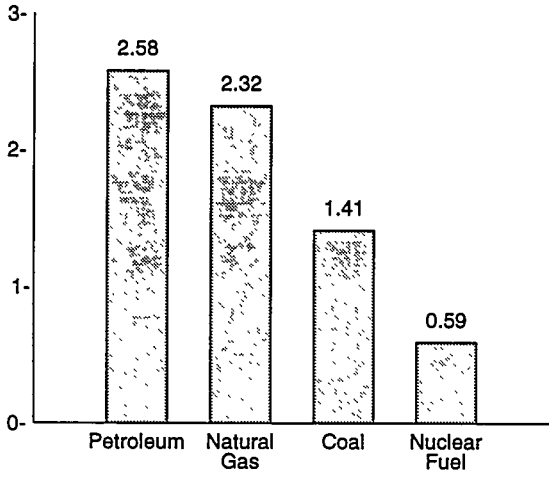
Transportation sector expenditures for energy continued to exceed all other sectors' energy expenditures in 1992, totaling $173 billion, or 37 percent of the $473 billion total (Figure 6). The residential sector spent $115 billion on energy in 1992, 24 percent of the total, while the industrial sector spent $102 billion (22 percent), and the commercial sector spent $82 billion (17 percent of the total).

During 1992, the four end-use sectors' shares of total expenditures for energy remained virtually the same as in the previous year, with very small decreases in the residential, commercial, and transportation sectors offset by a slight increase in the industrial sector (Figure 7). In comparison to 1970, the transportation sector is the only consuming sector with a smaller share in 1992 than in 1970, down by 6 percentage points. The residential sector's share of 24 percent is the same as it was 22 years earlier. Although the industrial sector's share consistently decreased from 1984 through 1991, its 1992 share is still 2 percentage points higher than in 1970. The residential and commercial sectors' shares of total energy expenditures generally grew during the early 1980's, peaking at 25 percent and 18 percent, respectively, in 1986. Since that time, the residential and commercial sectors' shares have decreased slightly with small fluctuations.

Energy Prices and Expenditures at Electric Utilities

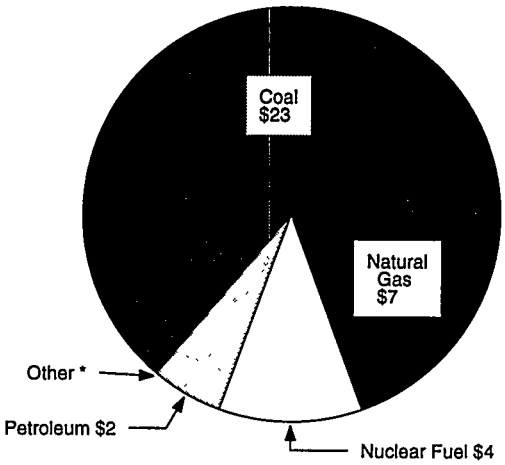
In 1992, electric utilities paid 59 cents per million Btu for nuclear fuel, $1.41 per million Btu for coal, $2.32 per million Btu for natural gas, and $2.58 per million Btu for petroleum (Figure 8). The average price of fuel consumed at electric utilities in 1992 was $1.34 per million Btu, compared with the peak price of $2.01 per million Btu paid in 1982, when petroleum and natural gas prices were near their highest levels. Petroleum was consistently the highest-priced fuel used by electric utilities during 1970 through 1992, and its price showed the greatest fluctuation. In 1970 through 1975, coal prices were slightly higher than natural gas prices. After 1975, natural gas prices rose rapidly until 1985, while coal prices grew more slowly. In 1986, natural gas prices dropped simultaneously with petroleum prices while coal prices remained relatively level. From 1986 through 1992, nuclear fuel prices generally declined, coal prices re-

Figure 8. U.S. Energy Prices at Electric Utilities by Source, 1992
(Dollars per Million Btu)



Source: State Energy Price and Expenditure Data System 1992.

Figure 9. U.S. Energy Expenditures at Electric Utilities by Source, 1992
(Billion Dollars, Total = $36 Billion)



* Value less than 0.5 billion dollars.
Source: State Energy Price and Expenditure Data System 1992.

mained level, and natural gas prices showed small fluctuations—all contributing to the declining trend in the average price paid for energy by electric utilities from 1.55 per million Btu in 1986 to $1.34 million Btu in 1992.

Of the $36 billion spent by electric utilities to purchase fuel in 1992, 64 percent ($23 billion) was used to purchase coal (Figure 9). Other fuel expenditures were much smaller—$7 billion for natural gas, $4 billion for nuclear fuel, and $2 billion for petroleum products. Electric utility consumption of coal more than doubled during 1970 through 1992. Coal's share of the electric utility annual energy expenditure total ranged from a low of 42 percent in 1977 to a high of 64 percent in 1992. Petroleum took increasing shares of the electric utility sector fuel budget in the early 1970's and peaked in 1974 at 44 percent. After that, electric utilities generally spent proportionally less each year on petroleum, and by 1992, petroleum purchases were only 7 percent of electric utilities' fuel expenditures. The natural gas share of electric utilities' expenditures ranged from 12 percent in 1974 to 27 percent in 1982. In 1992, natural gas accounted for 18 percent of the electric utility fuel bill. In general, expenditures expanded for coal and nuclear fuel over the entire period covered by this report, while expenditures for natural gas and petroleum lessened after the early 1980's.

State Rankings

Energy Prices. The average price paid for energy in 1992 ranged from $5.33 per million Btu in Louisiana to $11.56 per million Btu in Connecticut (Table 2). Some States' ranking positions changed significantly from 1970 to 1992. For example, the District of Columbia's price, which ranked 28th in 1970, ranked 3d highest in 1992, and Pennsylvania's rank rose from 42d to 19th. During the same period, North Dakota's ranking fell 42 places, from 7th to 49th, and Oklahoma's price fell from 18th place to 44th.

Energy Expenditures. State energy expenditures vary widely due to differences in population, climate, and size and type of industry, among other factors. In 1992, energy expenditures ranged from $1.1 billion in the District of Columbia to $49.4 billion in California (Table 3). The top nine States in the 1970 rankings were still the top nine in 1992, with small variations in their order. The five States with the largest energy expenditures in 1992 were California, Texas, New York, Pennsylvania, and Illinois. Their purchases accounted for 35 percent of the Nation's total, about the same as their 34-percent share in 1970.

Energy Expenditures per Capita. Energy expenditures per capita in 1992 ranged from $1,510 in Florida to $3,334 in Wyoming (Table 4). Some States ranked high in their total expenditures for energy but low in the per person rankings, and vice versa; for example, California spent the largest amount for energy in 1992 but ranked 47th in spending per person; New York's total expenditures ranked 3d, but its per capita expenditures ranked 48th; and Florida was 7th in total expenditures but last in per capita expenditures. On the other hand, Wyoming ranked 47th in total amount spent on energy but was 1st in the per capita ranking. Texas was high on both scales—2d in total expenditures and 5th in per capita.

Petroleum Prices and Expenditures. In 1992, the average prices for all petroleum products varied widely among the States: Vermont paid the highest, $8.49 per million Btu, while Louisiana paid the lowest, $5.48 per million Btu (Table 5). The States that paid the most for petroleum products in 1970 were not the same as those in 1992. Only Ohio and Nebraska were among the 10 States with the highest petroleum prices in both years. Mississippi paid the 2d highest price for petroleum products in 1970 but ranked 44th in average petroleum price in 1992. The District of Columbia, which was 50th in average price paid for petroleum in 1970, paid the 2d highest price in 1992. Even with its high price, the District of Columbia spent the smallest amount on petroleum products of all the States in 1992 (Table 6). Similarly, while Vermont paid the highest average price for petroleum in 1992, it made the 2d smallest petroleum expenditures that year. Nine of the top 10 States that spent the most for all energy in 1992 were also the leading petroleum-purchasing States, in slightly different order. The top five States accounted for 35 percent of all expenditures for petroleum in 1992, about the same as their 34 percent share in 1970.

Motor Gasoline Prices and Expenditures. Since 1970, the States paying the most for gasoline have changed considerably. Hawaii's price ranked the highest in both 1970 and 1992, but only two other States ranked among the 10 States with highest prices in both years, Alaska and Maine. In 1992, Motor gasoline prices ranged from $7.66 per million Btu in Georgia to $10.95 per million Btu in Hawaii (Table 7). In other words, in 1992 motor gasoline purchased in Georgia cost about 41 cents per gallon less than in Hawaii and about 16 cents per gallon less than the U.S. average of $1.12 per gallon. Expenditures for motor gasoline in 1992 ranged from $206 million in the District of Columbia to $15.2 billion in California (Table 8). Although California spent 60 percent more money on motor gasoline than the next largest State, the price paid ranked 24th among other State prices.

Natural Gas Prices and Expenditures. Average prices for natural gas generally ranged from $1.75 per million Btu in Alaska to $6.85 per million Btu in Connecticut (Table 9). Hawaii paid an unusually high rate ($13.33 per million Btu) due to its use of small quantities of liquefied natural gas. All 9 of the Northeastern States fell within the top 11 rankings.

Note: Throughout this report, the term "State" includes the District of Columbia.

Total expenditures for natural gas in 1992 ranged from Maine's $28 million to California's $7.9 billion (Table 10). Natural gas expenditures were more concentrated than other energy expenditures in 1992—the top five States accounted for 42 percent of the U.S. total natural gas expenditures versus 36 percent for electricity, 35 percent for petroleum, 34 percent for motor gasoline, and 34 percent for coal.

Coal Prices and Expenditures. In 1992, coal prices ranged from 74 cents per million Btu in Montana to $3.46 per million Btu in Alaska; that is, consumers of coal in Montana were able to purchase coal at a price that was $2.72 per million Btu less than in Alaska (Table 11). In 1970 and 1992, consumers in Alaska, Rhode Island, Vermont and Maine paid the highest prices for coal. Coal expenditures ranged from less than one-half million dollars in Rhode Island to $2.2 billion in Pennsylvania (Table 12). While the New England States generally ranked high in average price paid for coal, they tended to use little coal, thereby spending small sums for the resource. Pennsylvania, Ohio, Texas, Indiana, and Alabama were the largest purchasers of coal in 1992. Together, they accounted for 34 percent of the Nation's coal expenditures in 1992, much less concentrated than the top five States' share of 49 percent in 1970. In 1992, all States consumed some coal, compared with 1970, when 3 States consumed no coal. The 25 States with the smallest coal expenditures accounted for only 3 percent of the total in 1970, compared with 12 percent in 1992. Texas, which was 30th in coal expenditures in 1970, moved up to 3d place in 1992.

Electricity Prices and Expenditures. Electricity prices spanned the widest range of the major energy sources, varying from $10.13 per million Btu in the State of Washington in 1992 to Rhode Island's $30.12 per million Btu (Table 13). The large price range, nearly $20 per million Btu, reflects the wide differences in the prices of resources that the States depended on to generate the electricity. Washington, for example, relied heavily on hydroelectricity and had the lowest average cost for electricity in both 1970 and 1992. Similarly, almost all of the electricity in Idaho came from hydropower; its price ranked 50th in 1992. Montana depended on coal and hydropower for electricity, both low-cost sources of power in 1992. Electricity expenditures in 1992 ranged from $404 million in South Dakota to $20.4 billion in California (Table 14). The five leading State purchasers of electricity accounted for 36 percent of the Nation's total expenditures for electricity, 1 percent more than in 1970. Out of the top 10 ranked States for electricity expenditures in 1992, 9 States were ranked as high in 1970.

Table 2. Energy Prices by State, 1992
(Dollars per Million Btu)

Rank	State	Price
1	Connecticut	11.56
2	Arizona	11.55
3	District of Columbia	11.36
4	New Hampshire	11.31
5	Vermont	11.10
6	New York	10.79
7	Massachusetts	10.46
8	Florida	10.27
9	Maryland	9.91
10	Hawaii	9.78
11	North Carolina	9.75
12	California	9.65
13	Rhode Island	9.34
14	Maine	9.28
15	Nevada	9.07
16	Virginia	8.87
17	Delaware	8.80
18	New Jersey	8.77
19	Pennsylvania	8.65
20	Georgia	8.64
21	New Mexico	8.61
22	Arkansas	8.56
23	South Carolina	8.51
24	Missouri	8.45
25	Illinois	8.41
26	South Dakota	8.30
	United States	**8.27**
27	Ohio	8.21
28	Oregon	8.19
29	Tennessee	8.16
30	Nebraska	8.10
31	Wisconsin	8.04
32	Colorado	7.98
33	Michigan	7.96
34	Idaho	7.89
35	Minnesota	7.86
36	Montana	7.85
37	Mississippi	7.82
38	Iowa	7.58
39	Kansas	7.52
40	Alabama	7.46
41	Kentucky	7.44
42	Washington	7.28
43	Utah	7.15
44	Oklahoma	7.14
45	West Virginia	6.86
46	Indiana	6.61
47	Alaska	6.33
48	Texas	6.28
49	North Dakota	6.12
50	Wyoming	5.85
51	Louisiana	5.33

Note: Rankings are based on unrounded data.
Source: State Energy Price and Expenditure Data System 1992.

Table 3. Energy Expenditures by State, 1992
(Million Dollars)

Rank	State	Expenditure
1	California	49,418
2	Texas	43,390
3	New York	28,751
4	Pennsylvania	22,487
5	Illinois	21,273
6	Ohio	21,156
7	Florida	20,357
8	Michigan	16,744
9	New Jersey	16,156
10	North Carolina	12,885
11	Georgia	12,605
12	Louisiana	12,378
13	Indiana	11,606
14	Virginia	11,258
15	Massachusetts	10,848
16	Tennessee	9,529
17	Missouri	9,237
18	Washington	8,888
19	Alabama	8,356
20	Maryland	8,209
21	Wisconsin	8,140
22	Minnesota	7,648
23	Kentucky	7,263
24	Arizona	6,884
25	South Carolina	6,733
26	Connecticut	6,494
27	Oklahoma	6,048
28	Colorado	5,443
29	Iowa	5,295
30	Kansas	5,288
31	Oregon	5,101
32	Mississippi	4,924
33	Arkansas	4,691
34	West Virginia	3,761
35	Nebraska	3,024
36	New Mexico	3,004
37	Utah	2,861
38	Maine	2,567
39	Nevada	2,530
40	New Hampshire	2,002
41	Hawaii	1,968
42	Idaho	1,930
43	Alaska	1,867
44	Rhode Island	1,867
45	Montana	1,719
46	North Dakota	1,566
47	Wyoming	1,550
48	Delaware	1,379
49	South Dakota	1,287
50	Vermont	1,145
51	District of Columbia	1,143
	United States	**472,756**

Note: Rankings are based on unrounded data.
Source: State Energy Price and Expenditure Data System 1992.

Table 4. Energy Expenditures per Capita by State, 1992
(Dollars per Capita)

Rank	State	Expenditure
1	Wyoming	3,334
2	Alaska	3,175
3	Louisiana	2,893
4	North Dakota	2,471
5	Texas	2,454
6	Kansas	2,103
7	Montana	2,091
8	West Virginia	2,079
9	Maine	2,077
10	New Jersey	2,066
11	Indiana	2,051
12	Alabama	2,019
13	Vermont	2,005
14	Connecticut	1,980
15	Delaware	1,970
16	Arkansas	1,959
17	District of Columbia	1,954
18	Kentucky	1,935
19	Ohio	1,920
20	North Carolina	1,913
21	New Mexico	1,899
22	Tennessee	1,896
23	Nevada	1,894
24	Iowa	1,889
25	Nebraska	1,889
26	Oklahoma	1,887
27	Mississippi	1,883
28	Pennsylvania	1,875
29	South Carolina	1,869
30	Rhode Island	1,865
31	Georgia	1,861
	United States	**1,853**
32	Illinois	1,832
33	South Dakota	1,818
34	Idaho	1,811
35	Massachusetts	1,810
36	Arizona	1,797
37	New Hampshire	1,796
38	Missouri	1,779
39	Michigan	1,775
40	Virginia	1,761
41	Washington	1,728
42	Oregon	1,716
43	Minnesota	1,712
44	Hawaii	1,702
45	Maryland	1,670
46	Wisconsin	1,630
47	California	1,600
48	New York	1,588
49	Utah	1,580
50	Colorado	1,571
51	Florida	1,510

Note: Rankings are based on unrounded data.
Source: State Energy Price and Expenditure Data System 1992.

Table 5. Petroleum Prices by State, 1992
(Dollars per Million Btu)

Rank	State	Price
1	Vermont	8.49
2	District of Columbia	8.37
3	Idaho	8.16
4	Arizona	8.09
5	Wisconsin	8.01
6	Colorado	7.94
7	Ohio	7.88
8	Maryland	7.87
9	Nebraska	7.84
10	Arkansas	7.82
11	Pennsylvania	7.82
12	Illinois	7.81
13	Iowa	7.74
14	North Carolina	7.73
15	Rhode Island	7.72
16	Michigan	7.68
17	Nevada	7.67
18	Oregon	7.63
19	Montana	7.63
20	Tennessee	7.60
21	Connecticut	7.60
22	Utah	7.58
23	Minnesota	7.55
24	California	7.54
25	Virginia	7.52
26	West Virginia	7.50
27	South Dakota	7.39
28	New Mexico	7.38
29	Kansas	7.37
30	Kentucky	7.35
31	Wyoming	7.28
32	Alabama	7.25
33	Missouri	7.21
34	New Hampshire	7.20
35	South Carolina	7.15
36	New York	7.13
37	North Dakota	7.11
	United States	**7.06**
38	Oklahoma	6.99
39	Washington	6.94
40	Massachusetts	6.93
41	Indiana	6.91
42	Georgia	6.80
43	Alaska	6.80
44	Mississippi	6.70
45	New Jersey	6.70
46	Maine	6.56
47	Florida	6.42
48	Delaware	6.04
49	Texas	5.79
50	Hawaii	5.63
51	Louisiana	5.48

Note: Rankings are based on unrounded data.
Source: State Energy Price and Expenditure Data System 1992.

Table 6. Petroleum Expenditures by State, 1992
(Million Dollars)

Rank	State	Expenditure
1	Texas	23,756
2	California	22,619
3	New York	11,162
4	Florida	10,094
5	Pennsylvania	9,196
6	Ohio	8,410
7	Illinois	8,061
8	New Jersey	7,541
9	Michigan	6,849
10	Louisiana	6,584
11	North Carolina	5,787
12	Georgia	5,429
13	Virginia	5,398
14	Washington	5,266
15	Massachusetts	5,189
16	Indiana	5,079
17	Missouri	4,616
18	Tennessee	4,422
19	Maryland	3,910
20	Minnesota	3,862
21	Wisconsin	3,804
22	Alabama	3,787
23	Kentucky	3,657
24	Connecticut	3,129
25	Oklahoma	3,013
26	Arizona	2,923
27	South Carolina	2,865
28	Oregon	2,814
29	Colorado	2,706
30	Kansas	2,673
31	Mississippi	2,535
32	Iowa	2,472
33	Arkansas	2,184
34	West Virginia	1,949
35	New Mexico	1,698
36	Nebraska	1,618
37	Maine	1,475
38	Utah	1,451
39	Hawaii	1,367
40	Nevada	1,344
41	Alaska	1,255
42	New Hampshire	1,027
43	Idaho	1,006
44	Montana	990
45	North Dakota	792
46	Wyoming	782
47	Rhode Island	777
48	South Dakota	766
49	Delaware	724
50	Vermont	671
51	District of Columbia	282
	United States	**221,764**

Note: Rankings are based on unrounded data.
Source: State Energy Price and Expenditure Data System 1992.

Table 7. Motor Gasoline Prices by State, 1992
(Dollars per Million Btu)

Rank	State	Price
1	Hawaii	10.95
2	Connecticut	10.19
3	Oregon	10.03
4	Alaska	9.95
5	Massachusetts	9.83
6	Rhode Island	9.83
7	Maryland	9.74
8	District of Columbia	9.73
9	Maine	9.63
10	Colorado	9.56
11	Idaho	9.52
12	New Hampshire	9.50
13	West Virginia	9.49
14	Washington	9.47
15	Montana	9.39
16	Vermont	9.39
17	Pennsylvania	9.33
18	New Mexico	9.33
19	Nevada	9.30
20	North Dakota	9.29
21	New York	9.28
22	Louisiana	9.23
23	Arizona	9.23
24	California	9.19
25	Delaware	9.16
26	Minnesota	9.11
27	Nebraska	9.09
28	Texas	9.05
29	New Jersey	9.04
30	Virginia	9.04
31	Ohio	8.98
32	North Carolina	8.96
	United States	**8.96**
33	Utah	8.95
34	Wisconsin	8.94
35	Tennessee	8.92
36	Illinois	8.79
37	Wyoming	8.73
38	Iowa	8.72
39	Arkansas	8.69
40	Alabama	8.67
41	Kentucky	8.65
42	South Dakota	8.65
43	Mississippi	8.62
44	Kansas	8.49
45	Oklahoma	8.37
46	Florida	8.29
47	Indiana	8.28
48	South Carolina	8.25
49	Michigan	8.16
50	Missouri	8.11
51	Georgia	7.66

Note: Rankings are based on unrounded data.
Source: State Energy Price and Expenditure Data System 1992.

Table 8. Motor Gasoline Expenditures by State, 1992
(Million Dollars)

Rank	State	Expenditure
1	California	15,249
2	Texas	9,543
3	New York	6,294
4	Florida	6,237
5	Pennsylvania	5,268
6	Ohio	5,128
7	Illinois	4,908
8	Michigan	4,344
9	New Jersey	3,641
10	North Carolina	3,636
11	Virginia	3,400
12	Georgia	3,377
13	Massachusetts	2,864
14	Missouri	2,781
15	Washington	2,748
16	Tennessee	2,747
17	Indiana	2,697
18	Maryland	2,509
19	Minnesota	2,380
20	Wisconsin	2,362
21	Alabama	2,313
22	Louisiana	2,189
23	Arizona	2,015
24	Kentucky	2,013
25	South Carolina	1,870
26	Colorado	1,798
27	Oklahoma	1,754
28	Connecticut	1,745
29	Oregon	1,682
30	Iowa	1,453
31	Mississippi	1,383
32	Arkansas	1,343
33	Kansas	1,241
34	West Virginia	990
35	New Mexico	953
36	Nebraska	858
37	Utah	842
38	Nevada	784
39	Maine	714
40	New Hampshire	604
41	Idaho	598
42	Montana	529
43	Hawaii	510
44	Rhode Island	452
45	South Dakota	425
46	North Dakota	402
47	Delaware	393
48	Wyoming	341
49	Vermont	339
50	Alaska	307
51	District of Columbia	206
	United States	**125,158**

Note: Rankings are based on unrounded data.
Source: State Energy Price and Expenditure Data System 1992.

Table 9. Natural Gas Prices by State, 1992
(Dollars per Million Btu)

Rank	State	Price
1	Hawaii	13.33 *
2	Connecticut	6.85
3	District of Columbia	6.46
4	New Hampshire	6.23
5	Massachusetts	5.66
6	Rhode Island	5.52
7	New York	5.48
8	Maine	5.43
9	Pennsylvania	5.22
10	Vermont	5.03
11	New Jersey	5.02
12	Maryland	4.97
13	Virginia	4.77
14	Georgia	4.69
15	Wisconsin	4.60
16	Missouri	4.60
17	Arizona	4.57
18	Ohio	4.55
19	Illinois	4.50
20	South Dakota	4.44
21	Montana	4.42
22	West Virginia	4.41
23	Michigan	4.38
24	North Carolina	4.29
25	North Dakota	4.24
26	Iowa	4.24
27	Utah	4.18
28	Indiana	4.18
29	Tennessee	4.14
30	California	4.11
31	Nebraska	4.10
32	Alabama	4.06
33	Minnesota	3.99
34	South Carolina	3.96
35	Kentucky	3.92
	United States	**3.89**
36	Oregon	3.85
37	Delaware	3.82
38	Washington	3.70
39	Colorado	3.68
40	New Mexico	3.67
41	Nevada	3.65
42	Idaho	3.62
43	Arkansas	3.44
44	Kansas	3.38
45	Wyoming	3.17
46	Oklahoma	3.02
47	Florida	3.00
48	Mississippi	2.71
49	Texas	2.47
50	Louisiana	2.09
51	Alaska	1.75

* Based on small quantities of liquefied natural gas.
Note: Rankings are based on unrounded data.
Source: State Energy Price and Expenditure Data System 1992.

Table 10. Natural Gas Expenditures by State, 1992
(Million Dollars)

Rank	State	Expenditure
1	California	7,897
2	Texas	7,289
3	New York	5,365
4	Illinois	4,433
5	Michigan	3,783
6	Ohio	3,706
7	Pennsylvania	3,405
8	New Jersey	2,758
9	Louisiana	2,439
10	Indiana	1,977
11	Massachusetts	1,721
12	Georgia	1,576
13	Wisconsin	1,495
14	Oklahoma	1,282
15	Minnesota	1,170
16	Missouri	1,099
17	Florida	1,078
18	Iowa	953
19	Virginia	942
20	Tennessee	938
21	Alabama	932
22	Maryland	913
23	Kansas	875
24	Colorado	823
25	Connecticut	779
26	North Carolina	769
27	Kentucky	696
28	Arkansas	675
29	Washington	610
30	South Carolina	550
31	Mississippi	529
32	Arizona	493
33	West Virginia	478
34	Utah	475
35	Oregon	460
36	Rhode Island	435
37	Nebraska	419
38	New Mexico	341
39	Nevada	253
40	Wyoming	231
41	District of Columbia	213
42	Alaska	211
43	Montana	180
44	Idaho	170
45	Delaware	153
46	South Dakota	110
47	North Dakota	110
48	New Hampshire	105
49	Hawaii	39
50	Vermont	38
51	Maine	28
	United States	**68,401**

Note: Rankings are based on unrounded data.
Source: State Energy Price and Expenditure Data System 1992.

Table 11. Coal Prices by State, 1992
(Dollars per Million Btu)

Rank	State	Price
1	Alaska	3.46
2	Rhode Island	3.43
3	Vermont	2.91
4	Maine	2.67
5	Connecticut	1.99
6	District of Columbia	1.95
7	Idaho	1.89
8	California	1.83
9	Florida	1.83
10	Georgia	1.80
11	Massachusetts	1.74
12	New Hampshire	1.73
13	North Carolina	1.73
14	Alabama	1.72
15	New Jersey	1.72
16	Illinois	1.70
17	Delaware	1.70
18	Hawaii	1.70
19	Arkansas	1.66
20	Mississippi	1.60
21	Michigan	1.58
22	Maryland	1.58
23	South Carolina	1.57
24	New York	1.56
25	Virginia	1.54
26	Louisiana	1.54
27	Pennsylvania	1.54
28	Texas	1.48
29	West Virginia	1.47
30	Nevada	1.46
31	Ohio	1.46
	United States	**1.45**
32	Washington	1.45
33	Indiana	1.42
34	Arizona	1.40
35	Wisconsin	1.38
36	Missouri	1.34
37	New Mexico	1.32
38	Tennessee	1.30
39	Utah	1.28
40	Oklahoma	1.24
41	Minnesota	1.24
42	Kentucky	1.22
43	South Dakota	1.21
44	North Dakota	1.19
45	Kansas	1.18
46	Oregon	1.18
47	Iowa	1.14
48	Colorado	1.11
49	Wyoming	0.79
50	Nebraska	0.78
51	Montana	0.74

Note: Rankings are based on unrounded data.
Source: State Energy Price and Expenditure Data System 1992.

Table 12. Coal Expenditures by State, 1992
(Million Dollars)

Rank	State	Expenditure
1	Pennsylvania	2,169
2	Ohio	2,073
3	Texas	1,961
4	Indiana	1,844
5	Alabama	1,328
6	Florida	1,192
7	West Virginia	1,184
8	Illinois	1,180
9	Michigan	1,109
10	Georgia	1,108
11	North Carolina	1,038
12	Kentucky	991
13	Tennessee	765
14	Missouri	699
15	Wisconsin	550
16	Virginia	529
17	New York	525
18	Arizona	515
19	North Dakota	474
20	Utah	463
21	South Carolina	451
22	Maryland	390
23	Wyoming	390
24	Oklahoma	382
25	Iowa	373
26	Minnesota	371
27	Colorado	369
28	Arkansas	366
29	New Mexico	354
30	Louisiana	345
31	Kansas	300
32	Nevada	262
33	Massachusetts	193
34	Washington	154
35	Montana	140
36	Mississippi	139
37	California	119
38	Nebraska	110
39	New Jersey	108
40	Delaware	78
41	New Hampshire	60
42	Maine	57
43	Oregon	48
44	Connecticut	44
45	Alaska	43
46	South Dakota	41
47	Idaho	18
48	District of Columbia	2
49	Hawaii	2
50	Vermont	1
51	Rhode Island	*
	United States	**27,411**

* Value less than 0.5 million dollars.
Note: Rankings are based on unrounded data.
Source: State Energy Price and Expenditure Data System 1992.

Table 13. Electricity Prices by State, 1992
(Dollars per Million Btu)

Rank	State	Price
1	Rhode Island	30.12
2	New York	29.86
3	Connecticut	29.41
4	New Hampshire	29.23
5	Alaska	29.22
6	California	28.39
7	Massachusetts	28.31
8	New Jersey	27.91
9	Hawaii	27.81
10	Maine	26.52
11	Vermont	25.86
12	Arizona	23.94
13	Pennsylvania	23.61
14	Illinois	22.61
15	Michigan	21.24
16	New Mexico	21.03
17	Florida	20.49
	United States	**20.06**
18	Maryland	19.93
19	Arkansas	19.81
20	Delaware	19.71
21	Georgia	19.60
22	North Carolina	19.33
23	Kansas	19.27
24	District of Columbia	18.97
25	Missouri	18.79
26	Virginia	18.44
27	South Dakota	18.23
28	Texas	18.21
29	Ohio	17.84
30	Mississippi	17.84
31	Louisiana	17.81
32	Colorado	17.69
33	Iowa	17.53
34	North Dakota	17.04
35	Oklahoma	17.04
36	Nevada	16.69
37	Alabama	16.47
38	Minnesota	16.24
39	South Carolina	16.21
40	Nebraska	16.18
41	Wisconsin	16.12
42	Utah	15.61
43	Indiana	15.59
44	Tennessee	15.28
45	West Virginia	14.84
46	Oregon	12.64
47	Wyoming	12.56
48	Montana	12.39
49	Kentucky	12.33
50	Idaho	11.35
51	Washington	10.13

Note: Rankings are based on unrounded data.
Source: State Energy Price and Expenditure Data System 1992.

Table 14. Electricity Expenditures by State, 1992
(Million Dollars)

Rank	State	Expenditure
1	California	20,378
2	Texas	14,457
3	New York	13,091
4	Florida	10,280
5	Pennsylvania	9,274
6	Ohio	8,718
7	Illinois	8,598
8	North Carolina	6,213
9	Michigan	6,009
10	New Jersey	5,975
11	Georgia	5,529
12	Virginia	4,782
13	Massachusetts	4,347
14	Indiana	4,042
15	Tennessee	4,040
16	Louisiana	3,824
17	Arizona	3,517
18	Missouri	3,489
19	Maryland	3,468
20	Alabama	3,362
21	South Carolina	3,230
22	Washington	3,015
23	Kentucky	2,781
24	Wisconsin	2,772
25	Connecticut	2,722
26	Minnesota	2,593
27	Oklahoma	2,207
28	Mississippi	1,958
29	Colorado	1,902
30	Arkansas	1,863
31	Oregon	1,850
32	Iowa	1,807
33	Kansas	1,765
34	West Virginia	1,193
35	Maine	1,039
36	New Mexico	1,010
37	Nevada	987
38	Nebraska	982
39	New Hampshire	893
40	Utah	868
41	Hawaii	803
42	Idaho	736
43	Rhode Island	657
44	District of Columbia	650
45	Delaware	568
46	Montana	542
47	Wyoming	488
48	Vermont	436
49	Alaska	430
50	North Dakota	412
51	South Dakota	404
	United States	**186,956**

Note: Rankings are based on unrounded data.
Source: State Energy Price and Expenditure Data System 1992.

Statistical Tables

Energy Price and Expenditure Estimates by Source, United States 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.37	1.47	1.70	1.62	1.54	1.50	1.49	1.49	1.49	1.45
Coking Coal	.45	2.10	2.03	1.90	1.74	1.79	1.78	1.79	1.83	1.83
Steam Coal	.35	1.38	1.67	1.60	1.53	1.48	1.47	1.48	1.47	1.44
Natural Gas	.59	2.86	4.61	4.07	3.77	3.78	3.85	3.85	3.78	3.89
Petroleum	1.71	7.35	7.60	5.72	6.00	5.88	6.41	7.44	R7.16	7.06
Asphalt and Road Oil	.68	3.68	4.77	4.34	3.56	3.39	2.95	3.02	3.14	2.50
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.16	6.70	7.16	5.65	5.89	5.77	6.46	7.67	7.27	7.08
Jet Fuel	.73	6.36	5.91	3.92	4.03	3.80	4.39	5.68	4.83	4.52
Kerosene	1.19	6.97	8.17	6.41	6.11	6.15	6.74	8.26	7.83	7.25
LPG	1.46	5.64	6.33	6.21	5.85	5.65	5.35	R6.51	R6.54	5.95
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.85	9.84	9.01	6.79	7.22	7.32	8.01	9.12	8.93	8.96
Residual Fuel	.42	3.88	4.30	2.38	2.86	2.35	2.72	3.16	2.62	2.49
Other [a]	.95	6.57	7.13	4.59	5.18	4.35	5.11	5.80	5.19	4.95
Nuclear Fuel	.18	.43	.71	.70	.71	.73	.70	.67	.63	.59
Biomass Fuels at Utilities	.65	1.74	.79	.32	.95	.87	.69	.52	.55	.52
Exports of Coal Coke	1.27	2.54	2.76	2.63	3.37	2.85	2.98	3.53	2.74	2.78
Imports of Coal Coke	.93	3.19	2.99	3.11	2.40	2.90	3.79	3.80	3.40	3.32
Primary Energy — Five Sectors [b]	1.08	4.58	4.92	3.96	3.97	3.88	4.12	4.52	4.34	4.32
Electric Utility Fuel [c]	.32	1.75	1.85	1.55	1.51	1.45	1.48	1.46	1.37	1.34
Electricity Purchased by End Users	4.99	13.95	19.05	19.06	18.74	18.68	18.98	19.33	19.85	20.06
Total Energy	1.65	6.91	8.42	7.36	7.37	7.30	7.69	8.37	R8.32	8.27
	Expenditures in Millions of Dollars									
Coal	4,594	22,648	29,719	27,906	27,586	28,371	28,106	28,382	27,869	27,411
Coking Coal	1,175	3,753	2,228	1,825	1,718	2,006	1,934	1,862	1,660	1,587
Steam Coal	3,419	18,895	27,491	26,081	25,868	26,365	26,173	26,520	26,209	25,824
Natural Gas	10,891	51,061	72,938	59,702	58,019	61,089	65,383	64,102	R64,697	68,401
Petroleum	48,088	238,408	223,196	174,540	R186,413	189,261	R206,277	R234,461	R221,916	221,764
Asphalt and Road Oil	731	3,543	4,916	4,717	4,018	3,848	3,228	3,529	3,382	2,755
Aviation Gasoline	218	580	503	496	344	363	394	419	363	351
Distillate Fuel	6,253	40,797	43,611	34,954	R37,251	38,362	43,349	49,266	R45,105	44,923
Jet Fuel	1,441	13,923	14,747	10,505	11,448	11,318	13,434	17,784	R14,609	13,559
Kerosene	648	2,291	1,927	1,303	1,196	1,228	1,176	727	751	623
LPG	2,446	10,926	13,108	12,283	12,412	12,301	R11,772	R13,187	R14,372	13,624
Lubricants	1,532	5,081	5,671	4,909	4,523	5,017	4,682	4,857	4,999	5,909
Motor Gasoline	31,596	124,408	118,044	91,526	99,809	103,211	112,585	126,472	123,051	125,158
Residual Fuel	2,046	21,573	11,495	7,507	8,066	7,258	8,354	8,707	6,787	6,113
Other [a]	1,177	15,286	9,175	6,339	7,345	6,356	7,304	9,513	8,498	8,751
Nuclear Fuel	44	1,189	2,930	3,125	3,486	4,111	3,992	4,142	4,172	3,878
Biomass Fuels at Utilities	2	8	11	4	15	15	14	11	12	11
Exports of Coal Coke	-78	-130	-77	-65	-48	-77	-80	-50	-50	-44
Imports of Coal Coke	4	52	43	25	55	194	217	72	93	143
Primary Energy — Five Sectors [b]	63,544	313,237	328,760	265,236	R275,525	282,963	R303,909	R331,120	R318,709	321,563
Electric Utility Fuel [c]	-4,316	-37,435	-42,558	-35,793	R-36,692	-37,435	-38,895	-38,443	-36,501	-35,763
Electricity Purchased by End Users	23,351	98,098	149,242	151,806	154,692	162,070	169,340	176,742	184,822	186,956
Total Energy	82,579	373,900	435,444	381,250	393,525	407,597	R434,354	R469,420	R467,029	472,756

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

R=Revised data.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, United States 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.12**	**7.55**	**11.14**	**10.99**	**10.95**	**10.90**	**11.26**	**12.14**	**12.34**	**12.27**
Primary Energy	1.24	4.56	6.48	5.95	5.70	5.63	5.99	6.31	6.28	6.19
Coal	1.13	2.90	3.25	3.11	2.76	2.64	2.67	3.01	3.09	2.90
Natural Gas	1.06	3.60	5.94	5.67	5.39	5.32	5.47	5.63	5.66	5.72
Petroleum	1.56	7.26	8.27	6.91	6.71	6.70	7.74	8.89	8.68	8.03
Distillate Fuel	1.39	7.02	7.92	6.35	6.05	6.11	6.76	8.01	7.65	7.00
Kerosene	1.54	8.32	8.77	7.14	6.61	6.74	7.36	8.86	8.44	7.80
LPG	2.12	7.92	9.10	8.57	8.64	8.45	10.38	10.94	10.94	10.39
Electricity	6.51	15.71	21.66	21.75	21.82	21.92	22.41	22.96	23.57	24.07
Commercial Sector	**1.97**	**7.88**	**11.71**	**11.35**	**11.06**	**10.91**	**11.40**	**12.03**	**12.21**	**12.32**
Primary Energy	.79	4.02	5.52	4.72	4.57	4.41	4.66	4.93	4.80	4.79
Coal	.45	1.55	1.80	1.66	1.54	1.54	1.54	1.61	1.56	1.58
Natural Gas	.75	3.32	5.34	4.94	4.64	4.51	4.61	4.70	4.69	4.75
Petroleum	.90	5.64	6.33	4.55	4.69	4.41	5.07	5.97	5.47	5.27
Distillate Fuel	1.10	6.45	6.35	4.59	4.52	4.33	5.10	6.10	5.60	5.22
Kerosene	.77	6.46	6.94	5.90	5.69	4.72	5.55	6.75	6.03	5.56
LPG	1.24	5.15	8.59	8.22	7.67	7.80	7.33	8.61	9.02	8.42
Motor Gasoline	2.86	9.77	9.01	6.77	7.22	7.33	8.03	9.15	8.98	9.07
Residual Fuel	.45	4.12	4.50	2.70	3.10	2.52	2.92	3.41	2.61	2.68
Electricity	6.10	16.06	21.31	21.10	20.45	20.34	20.77	21.20	21.73	22.15
Industrial Sector	**.83**	**4.71**	**6.09**	**5.40**	**5.19**	**5.03**	**5.11**	**5.40**	**5.34**	**5.29**
Primary Energy	.60	3.77	4.49	3.65	3.50	3.34	3.37	R3.69	R3.56	3.51
Coal	.45	1.87	1.89	1.80	1.68	1.68	1.68	1.69	1.69	1.69
Coking Coal	.45	2.10	2.03	1.90	1.74	1.79	1.78	1.79	1.83	1.83
Steam Coal	.44	1.56	1.81	1.75	1.64	1.61	1.61	1.63	1.62	1.62
Natural Gas	.38	2.52	3.87	3.20	2.88	2.90	2.93	2.95	2.80	2.91
Petroleum	.96	5.59	6.20	4.80	4.80	4.48	R4.59	R5.34	R5.18	4.87
Asphalt and Road Oil	.68	3.68	4.77	4.34	3.56	3.39	2.95	3.02	3.14	2.50
Distillate Fuel	.72	5.54	6.10	3.76	4.16	3.83	4.78	5.68	5.14	4.92
Kerosene	.77	6.30	6.96	4.44	4.77	4.61	5.41	6.59	5.89	5.49
LPG	1.10	5.18	5.66	5.63	5.16	4.97	R4.06	R5.37	R5.42	4.90
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.86	9.82	9.07	6.80	7.25	7.32	8.05	9.15	8.95	8.94
Residual Fuel	.46	3.69	4.24	2.51	2.87	2.34	2.75	3.10	2.44	2.46
Other	.96	6.58	7.16	4.61	5.22	4.38	5.16	5.87	5.25	5.03
Exports of Coal Coke	1.27	2.54	2.76	2.63	3.37	2.85	2.98	3.53	2.74	2.78
Imports of Coal Coke	.93	3.19	2.99	3.11	2.40	2.90	3.79	3.80	3.40	3.32
Electricity	2.99	10.81	14.57	14.45	13.98	13.78	13.85	13.92	14.18	14.18
Transportation Sector	**2.31**	**8.61**	**8.26**	**6.22**	**6.57**	**6.56**	**7.16**	**8.26**	**7.97**	**7.93**
Primary Energy	2.31	8.60	8.25	6.21	6.56	6.55	7.15	8.25	7.96	7.92
Coal	.41	–	–	–	–	–	–	–	–	–
Petroleum	2.31	8.60	8.25	6.21	6.56	6.55	7.15	8.25	7.96	7.92
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.31	7.19	7.50	6.36	6.75	6.59	7.16	8.46	8.11	8.01
Jet Fuel	.73	6.36	5.91	3.92	4.03	3.80	4.39	5.68	4.83	4.52
LPG	1.11	5.20	8.64	8.03	7.62	7.77	7.31	8.46	8.80	8.31
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.85	9.84	9.01	6.79	7.22	7.32	8.01	9.12	8.93	8.96
Residual Fuel	.38	3.31	4.36	2.11	2.64	2.22	2.47	2.98	2.83	2.48
Electricity	4.65	14.71	19.74	19.63	23.03	22.05	22.99	23.49	R23.79	25.36
Total Energy	**1.65**	**6.91**	**8.42**	**7.36**	**7.37**	**7.30**	**7.69**	**8.37**	R**8.32**	**8.27**
Primary Energy — Four Sectors	1.30	5.85	6.53	5.23	5.29	5.21	5.57	6.24	6.03	5.97
Electricity	4.99	13.95	19.05	19.06	18.74	18.68	18.98	19.33	19.85	20.06
Electric Utility Sector [a]	**.32**	**1.75**	**1.85**	**1.55**	**1.51**	**1.45**	**1.48**	**1.46**	**1.37**	**1.34**
Coal	.31	1.35	1.65	1.58	1.51	1.47	1.45	1.45	1.45	1.41
Natural Gas	.28	2.20	3.43	2.35	2.24	2.26	2.36	2.32	2.14	2.32
Petroleum	.42	4.34	4.35	2.48	R3.04	2.49	2.95	3.41	2.59	2.58
Heavy Oil [b]	.41	4.25	4.24	2.42	2.97	2.41	2.85	3.30	2.46	2.48
Light Oil [b]	.57	5.75	5.89	3.67	R4.17	3.81	4.26	5.62	4.84	4.77
Petroleum Coke	.29	2.61	1.27	1.04	1.04	.99	.86	.83	.82	.62
Nuclear Fuel	.18	.43	.71	.70	.71	.73	.70	.67	.63	.59
Biomass Fuels	.65	1.74	.79	.32	.95	.87	.69	.52	.55	.52
Primary Energy — Five Sectors [c]	**1.08**	**4.58**	**4.92**	**3.96**	**3.97**	**3.88**	**4.12**	**4.52**	**4.34**	**4.32**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, United States 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**20,083**	**68,825**	**98,307**	**96,203**	**97,552**	**102,773**	**108,423**	**109,265**	**R114,739**	**115,150**
Primary Energy	9,731	30,367	39,636	35,427	34,235	35,980	39,180	R36,889	37,914	38,300
Coal	173	175	225	215	181	174	156	186	174	165
Natural Gas	5,272	17,497	27,136	25,147	23,926	25,332	26,953	25,442	26,508	27,600
Petroleum	4,286	12,695	12,274	10,064	10,127	10,474	R12,071	11,262	R11,232	10,535
Distillate Fuel	2,603	9,234	7,910	6,428	6,236	6,497	7,038	6,703	6,361	6,055
Kerosene	459	887	1,391	866	784	967	863	567	611	507
LPG	1,225	2,575	2,974	2,770	3,107	3,011	4,170	3,992	R4,260	3,974
Electricity	10,352	38,458	58,672	60,776	63,318	66,793	69,243	72,376	76,825	76,850
Commercial Sector	**10,668**	**46,881**	**70,263**	**68,444**	**68,777**	**71,579**	**75,467**	**78,922**	**R81,483**	**82,398**
Primary Energy	3,333	16,260	20,139	16,946	16,807	17,110	17,938	18,244	R18,021	18,112
Coal	98	135	193	178	154	158	135	150	132	135
Natural Gas	1,844	8,858	13,368	11,770	11,601	12,377	12,909	12,683	R13,178	13,690
Petroleum	1,391	7,267	6,579	4,998	5,053	4,576	4,894	5,412	R4,711	4,287
Distillate Fuel	646	3,337	3,965	2,731	2,680	2,487	2,731	2,971	2,697	2,424
Kerosene	47	262	228	295	277	123	153	80	73	62
LPG	127	296	496	469	487	491	520	555	620	568
Motor Gasoline	247	1,046	866	720	795	810	818	1,011	R764	721
Residual Fuel	323	2,325	1,025	784	813	665	672	796	557	512
Electricity	7,335	30,621	50,124	51,498	51,970	54,469	57,528	60,678	63,462	64,286
Industrial Sector	**16,458**	**94,520**	**105,723**	**90,496**	**89,975**	**91,315**	**R93,827**	**R100,903**	**R99,603**	**102,035**
Primary Energy	10,834	65,657	65,533	51,224	50,866	50,807	R51,572	R57,545	R55,399	56,561
Coal	2,082	5,888	5,244	4,759	4,466	4,749	4,651	4,649	4,399	4,247
Coking Coal	1,175	3,753	2,228	1,825	1,718	2,006	1,934	1,862	1,660	1,587
Steam Coal	907	2,135	3,016	2,934	2,748	2,743	2,717	2,787	2,739	2,660
Natural Gas	2,625	16,350	21,615	16,479	15,909	17,257	18,770	19,348	R18,912	20,553
Petroleum	6,202	43,497	38,708	30,027	30,485	28,685	R28,015	R33,526	R32,046	31,662
Asphalt and Road Oil	731	3,543	4,916	4,717	4,018	3,848	3,228	3,529	3,382	2,755
Distillate Fuel	866	7,232	7,208	4,478	5,082	4,652	5,473	6,698	5,841	5,611
Kerosene	142	1,143	308	143	135	138	160	81	67	54
LPG	1,046	7,967	9,399	8,836	8,662	8,627	R6,923	R8,456	R9,317	8,929
Lubricants	786	2,613	2,916	2,525	2,326	2,580	2,408	2,498	2,571	3,039
Motor Gasoline	824	1,553	1,977	1,402	1,487	1,414	1,599	1,685	1,729	1,737
Residual Fuel	635	4,175	2,817	1,598	1,441	1,082	934	1,087	658	804
Other	1,171	15,271	9,166	6,329	7,335	6,344	7,290	9,492	8,480	8,733
Exports of Coal Coke	-78	-130	-77	-65	-48	-77	-80	-50	-50	-44
Imports of Coal Coke	4	52	43	25	55	194	217	72	93	143
Electricity	5,624	28,863	40,190	39,271	39,109	40,507	42,255	43,358	44,204	45,473
Transportation Sector	**35,370**	**163,674**	**161,150**	**126,107**	**137,220**	**141,930**	**156,637**	**180,330**	**R171,204**	**173,173**
Primary Energy	35,330	163,517	160,894	125,847	136,925	141,630	156,324	179,999	R170,873	172,827
Coal	3	–	–	–	–	–	–	–	–	–
Petroleum	35,327	163,517	160,894	125,847	136,925	141,630	156,324	179,999	R170,873	172,827
Aviation Gasoline	218	580	503	496	344	363	394	419	363	351
Distillate Fuel	2,058	20,090	24,027	21,012	22,879	24,310	27,475	32,409	R29,818	30,512
Jet Fuel	1,441	13,856	14,747	10,505	11,448	11,318	13,434	17,784	R14,609	13,559
LPG	49	88	239	208	157	172	159	185	175	153
Lubricants	745	2,468	2,754	2,384	2,197	2,437	2,274	2,359	2,428	2,870
Motor Gasoline	30,525	121,809	115,201	89,404	97,527	100,988	110,168	123,775	R120,557	122,700
Residual Fuel	291	4,626	3,422	1,838	2,373	2,042	2,420	3,067	2,922	2,682
Electricity	40	156	256	260	295	300	313	331	331	347
Total Energy	**82,579**	**373,900**	**435,444**	**381,250**	**393,525**	**407,597**	**R434,354**	**R469,420**	**R467,029**	**472,756**
Primary Energy — Four Sectors	59,228	275,802	286,202	229,444	238,833	245,528	R265,014	R292,678	R282,207	285,800
Electricity	23,351	98,098	149,242	151,806	154,692	162,070	169,340	176,742	184,822	186,956
Electric Utility Sector [a]	**4,316**	**37,435**	**42,558**	**35,793**	**R36,692**	**37,435**	**38,895**	**38,443**	**36,501**	**35,763**
Coal	2,237	16,450	24,056	22,755	22,785	23,290	23,165	23,396	23,164	22,863
Natural Gas	1,151	8,357	10,819	6,305	6,583	6,123	6,750	6,631	6,099	6,558
Petroleum	882	11,432	4,742	3,603	R3,823	3,896	4,974	4,263	R3,055	2,454
Heavy Oil [b]	797	10,446	4,232	3,288	3,439	3,468	4,328	3,757	2,649	2,114
Light Oil [b]	80	972	502	306	R373	416	632	R485	387	321
Petroleum Coke	6	14	9	10	11	12	13	20	18	19
Nuclear Fuel	44	1,189	2,930	3,125	3,486	4,111	3,992	4,142	4,172	3,878
Biomass Fuels	2	8	11	4	15	15	14	11	12	11
Primary Energy — Five Sectors [c]	**63,544**	**313,237**	**328,760**	**265,236**	**R275,525**	**282,963**	**R303,909**	**R331,120**	**R318,709**	**321,563**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Alabama 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.32	1.70	2.01	1.89	1.87	1.87	1.83	1.83	1.80	1.72
Coking Coal	.42	1.96	2.02	1.81	1.71	1.70	1.74	1.83	1.80	1.78
Steam Coal	.26	1.63	2.00	1.89	1.89	1.90	1.84	1.83	1.79	1.71
Natural Gas	.52	2.90	4.73	4.50	4.27	4.03	3.92	4.07	4.08	4.06
Petroleum	2.09	7.86	7.96	6.23	6.38	6.22	6.85	7.80	R7.48	7.25
Asphalt and Road Oil	.65	3.02	4.72	4.90	3.37	3.07	2.86	2.94	3.31	2.03
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.10	6.58	6.66	5.46	5.90	5.54	6.35	7.55	7.09	6.55
Jet Fuel	.73	6.39	6.17	4.45	4.39	4.07	4.64	5.99	5.03	4.73
Kerosene	.90	6.42	8.63	5.06	5.18	5.30	6.05	7.62	7.01	4.72
LPG	2.00	6.62	6.98	7.06	7.21	6.97	R8.62	10.13	R11.24	10.23
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.82	9.89	9.15	6.99	7.27	7.21	7.96	8.96	8.69	8.67
Residual Fuel	.41	2.99	3.80	1.98	2.18	2.49	2.20	2.18	1.74	1.68
Other [a]	.61	5.80	7.07	4.21	5.03	4.19	5.07	6.17	5.35	5.12
Nuclear Fuel	–	.33	.77	.70	.69	.65	.60	.56	.71	.75
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	.84	3.37	3.99	3.48	3.56	3.46	3.71	4.03	3.79	3.58
Electric Utility Fuel [c]	.26	1.17	1.74	1.68	1.69	1.66	1.63	1.60	1.56	1.48
Electricity Purchased by End Users	3.51	12.52	16.59	16.66	16.48	16.34	16.43	16.46	16.69	16.47
Total Energy	1.37	6.41	7.90	7.15	7.11	6.89	7.28	7.87	R7.77	7.46
	Expenditures in Millions of Dollars									
Coal	215.3	1,121.0	1,328.5	1,245.2	1,234.1	1,223.2	1,234.0	1,238.1	1,292.2	1,327.5
Coking Coal	99.4	254.7	156.1	129.4	144.5	154.0	154.7	160.8	153.0	157.6
Steam Coal	115.9	866.3	1,172.4	1,115.8	1,089.6	1,069.2	1,079.3	1,077.2	1,139.2	1,170.0
Natural Gas	143.2	676.5	923.7	796.7	763.9	826.2	839.3	841.6	R871.7	932.1
Petroleum	731.8	3,495.8	3,353.6	2,755.3	3,037.6	2,962.2	R3,514.0	R4,012.6	R3,844.5	3,786.9
Asphalt and Road Oil	13.7	62.8	117.7	113.5	102.0	84.1	85.0	84.3	116.0	66.6
Aviation Gasoline	3.8	11.3	8.7	8.7	5.4	5.9	5.5	5.4	4.8	4.6
Distillate Fuel	54.6	579.2	631.8	523.4	644.1	658.9	913.4	1,118.7	987.1	931.9
Jet Fuel	7.2	72.3	121.6	93.5	95.2	42.2	52.7	63.1	R63.6	55.4
Kerosene	6.7	45.6	5.3	3.7	4.0	4.9	3.9	2.8	3.8	2.2
LPG	57.0	116.3	91.7	103.2	122.7	112.8	R151.2	R152.7	R154.6	147.0
Lubricants	25.0	86.4	96.4	83.5	76.9	85.3	79.6	82.6	85.0	100.5
Motor Gasoline	547.6	2,301.3	2,090.3	1,705.0	1,848.6	1,824.2	2,067.1	2,303.4	2,260.4	2,312.9
Residual Fuel	8.0	135.2	53.6	29.3	31.4	51.1	49.1	52.6	38.5	39.1
Other [a]	8.2	85.3	136.6	91.5	107.1	92.9	106.5	146.9	130.6	126.7
Nuclear Fuel	–	85.2	118.7	87.5	83.3	90.1	74.4	71.7	120.9	154.4
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1,090.4	5,378.4	5,724.5	4,884.6	5,119.0	5,101.7	R5,661.7	R6,164.0	R6,129.3	6,200.9
Electric Utility Fuel [c]	-103.4	-849.4	-1,174.9	-1,088.6	-1,063.7	-1,046.7	-1,065.0	-1,066.3	-1,172.3	-1,206.8
Electricity Purchased by End Users	411.6	2,120.5	2,735.9	2,818.4	2,950.9	3,039.7	3,139.7	3,236.6	3,356.8	3,362.4
Total Energy	1,398.6	6,649.6	7,285.5	6,614.4	7,006.2	7,094.7	R7,736.4	R8,334.3	R8,313.8	8,356.5

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Alabama 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.45**	**9.06**	**12.82**	**13.02**	**12.97**	**13.00**	**13.24**	**13.84**	**14.40**	**13.92**
Primary Energy	1.37	4.53	6.46	6.50	6.73	6.54	6.62	7.12	7.68	7.11
Coal	.81	2.97	3.19	2.89	2.88	2.62	2.64	2.70	2.81	2.69
Natural Gas	1.10	3.91	6.18	6.30	6.43	6.33	6.09	6.38	6.86	6.56
Petroleum	2.17	7.89	8.49	7.94	8.54	7.97	9.08	10.91	12.16	10.94
Distillate Fuel	1.24	6.83	7.68	5.33	5.13	4.93	5.52	6.70	6.16	5.52
Kerosene	1.62	9.13	8.90	6.18	5.94	5.71	6.40	7.76	7.15	6.40
LPG	2.22	7.75	8.49	8.08	8.68	8.21	9.25	11.04	12.45	11.08
Electricity	4.62	14.44	18.74	18.95	18.92	19.06	19.31	19.32	19.61	19.59
Commercial Sector	**1.98**	**8.44**	**11.47**	**11.41**	**11.65**	**11.08**	**11.84**	**12.34**	**13.34**	**12.97**
Primary Energy	.75	3.78	5.40	4.62	4.75	4.39	4.77	5.24	5.64	5.28
Coal	.28	1.73	1.86	1.76	1.63	1.60	1.65	1.65	1.64	1.61
Natural Gas	.58	3.27	5.27	5.21	5.31	5.13	5.01	5.28	5.59	5.55
Petroleum	1.53	6.61	6.17	3.83	4.27	3.50	4.54	5.63	5.87	5.03
Distillate Fuel	.97	6.22	6.76	3.65	4.04	3.43	4.11	5.96	5.54	3.63
Kerosene	.75	5.91	8.06	3.97	4.59	3.72	5.15	7.41	6.77	3.76
LPG	1.58	5.28	4.97	5.55	4.91	4.89	7.50	8.47	9.38	9.16
Motor Gasoline	2.82	9.89	9.15	6.99	7.27	7.21	7.96	8.96	8.69	8.67
Residual Fuel	.38	3.39	4.02	2.16	2.67	1.99	2.38	2.65	2.13	–
Electricity	5.39	16.19	20.01	20.03	19.36	19.29	19.65	19.52	19.82	19.91
Industrial Sector	**.63**	**3.99**	**5.58**	**5.03**	**4.75**	**4.50**	**4.70**	**5.04**	**4.90**	**4.54**
Primary Energy	.44	2.69	3.77	3.07	2.80	2.61	2.86	3.28	3.09	2.75
Coal	.40	1.89	1.95	1.78	1.67	1.65	1.71	1.76	1.74	1.70
Coking Coal	.42	1.96	2.02	1.81	1.71	1.70	1.74	1.83	1.80	1.78
Steam Coal	.28	1.73	1.86	1.76	1.63	1.60	1.65	1.65	1.64	1.61
Natural Gas	.32	2.46	4.09	3.54	3.01	2.92	2.93	3.07	2.92	2.99
Petroleum	.92	4.66	6.62	4.65	4.42	3.93	[R]4.58	5.66	5.30	4.13
Asphalt and Road Oil	.65	3.02	4.72	4.90	3.37	3.07	2.86	2.94	3.31	2.03
Distillate Fuel	.69	5.28	7.02	3.46	4.00	3.24	4.49	6.45	5.90	3.27
Kerosene	.75	5.91	8.06	3.97	4.59	3.72	5.15	7.41	6.77	3.76
LPG	1.58	5.28	4.97	5.55	4.91	4.89	7.50	8.47	9.38	9.16
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.82	9.89	9.15	6.99	7.27	7.21	7.96	8.96	8.69	8.67
Residual Fuel	.51	3.05	4.02	2.16	2.67	1.99	2.38	2.65	2.13	2.13
Other	.72	5.80	7.07	4.21	5.03	4.19	5.07	6.17	5.35	5.12
Electricity	2.24	10.29	13.60	13.34	13.23	12.96	12.72	12.72	12.81	12.57
Transportation Sector	**2.45**	**8.78**	**8.34**	**6.65**	**6.89**	**6.83**	**7.40**	**8.36**	[R]**7.97**	**7.99**
Primary Energy	2.45	8.78	8.34	6.65	6.89	6.83	7.40	8.36	[R]7.97	7.99
Coal	.28	–	–	–	–	–	–	–	–	–
Petroleum	2.46	8.78	8.34	6.65	6.89	6.83	7.40	8.36	[R]7.97	7.99
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.33	6.99	6.54	6.35	6.73	6.41	7.06	8.09	7.57	7.72
Jet Fuel	.73	6.39	6.17	4.45	4.39	4.07	4.64	5.99	5.03	4.73
LPG	1.58	5.28	4.97	5.55	4.91	4.89	7.50	8.47	9.38	9.16
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.82	9.89	9.15	6.99	7.27	7.21	7.96	8.96	8.69	8.67
Residual Fuel	.34	2.93	3.72	1.85	1.92	2.79	2.15	2.02	1.71	1.66
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.37**	**6.41**	**7.90**	**7.15**	**7.11**	**6.89**	**7.28**	**7.87**	[R]**7.77**	**7.46**
Primary Energy — Four Sectors	1.09	5.22	6.01	5.02	5.03	4.81	5.27	5.91	5.71	5.45
Electricity	3.51	12.52	16.59	16.66	16.48	16.34	16.43	16.46	16.69	16.47
Electric Utility Sector [a]	**.26**	**1.17**	**1.74**	**1.68**	**1.69**	**1.66**	**1.63**	**1.60**	**1.56**	**1.48**
Coal	.26	1.61	2.02	1.91	1.92	1.95	1.86	1.84	1.81	1.73
Natural Gas	.26	2.62	3.17	2.47	2.10	2.07	2.21	2.16	1.87	2.23
Petroleum	.20	6.35	6.00	3.49	4.03	3.67	4.14	5.57	5.12	4.60
Heavy Oil [b]	–	–	–	–	–	–	–	–	–	–
Light Oil [b]	.81	6.35	6.00	3.49	4.03	3.67	4.14	5.57	5.12	4.60
Petroleum Coke	.17	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	.33	.77	.70	.69	.65	.60	.56	.71	.75
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**.84**	**3.37**	**3.99**	**3.48**	**3.56**	**3.46**	**3.71**	**4.03**	**3.79**	**3.58**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Alabama 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**289.4**	**1,113.2**	**1,450.9**	**1,548.7**	**1,667.4**	**1,687.5**	**1,717.9**	**1,777.1**	**1,857.9**	**1,839.9**
Primary Energy	107.7	301.9	352.5	368.3	422.2	410.5	410.8	411.1	432.9	427.0
Coal	.9	5.7	3.4	3.2	3.4	3.5	1.6	2.4	.4	2.0
Natural Gas	63.0	211.7	280.1	291.3	325.9	318.4	301.7	298.4	325.4	334.6
Petroleum	43.8	84.5	69.0	73.7	92.9	88.6	107.5	110.3	107.1	90.3
Distillate Fuel	.3	.5	1.5	1.2	.9	1.2	1.1	1.0	.7	.3
Kerosene	2.2	10.2	3.7	2.2	2.0	4.2	2.9	1.7	2.5	1.1
LPG	41.4	73.7	63.8	70.3	90.0	83.2	103.5	107.6	104.0	88.9
Electricity	181.7	811.2	1,098.4	1,180.4	1,245.2	1,277.0	1,307.0	1,366.0	1,425.0	1,413.0
Commercial Sector	**131.2**	**551.3**	**829.3**	**821.1**	**835.9**	**862.5**	**944.9**	**981.7**	**1,001.2**	**972.8**
Primary Energy	36.6	154.2	228.1	186.0	179.8	188.5	199.9	209.7	193.2	187.8
Coal	.5	6.2	3.6	3.6	3.5	4.0	1.9	2.8	.4	2.2
Natural Gas	21.8	96.5	141.3	135.7	122.7	135.0	136.6	131.9	136.1	144.1
Petroleum	14.2	51.5	83.2	46.7	53.7	49.5	61.5	75.1	56.6	41.4
Distillate Fuel	1.5	23.2	50.8	20.6	27.1	22.5	29.4	37.7	31.7	21.8
Kerosene	1.8	5.9	.7	.6	1.3	.3	.4	.5	.6	.4
LPG	5.2	8.9	6.6	8.5	9.0	8.7	14.8	14.6	13.8	13.0
Motor Gasoline	5.8	13.4	12.1	9.3	9.9	9.2	9.3	12.1	7.3	6.3
Residual Fuel	*	.1	13.0	7.6	6.4	8.8	7.5	10.2	3.3	–
Electricity	94.6	397.2	601.1	635.2	656.1	674.0	745.0	772.0	808.0	785.0
Industrial Sector	**369.6**	**2,061.3**	**2,306.4**	**1,985.0**	**2,011.9**	**2,068.4**	**R2,156.2**	**R2,333.4**	**R2,308.5**	**2,304.9**
Primary Energy	234.3	1,149.2	1,270.1	982.2	962.3	979.7	R1,068.5	R1,234.8	R1,184.8	1,140.5
Coal	115.2	353.9	272.2	241.4	251.5	268.3	249.2	251.7	252.7	282.3
Coking Coal	99.4	254.7	156.1	129.4	144.5	154.0	154.7	160.8	153.0	157.6
Steam Coal	15.8	99.2	116.1	112.0	107.0	114.4	94.5	90.9	99.7	124.7
Natural Gas	54.2	364.1	498.5	366.8	312.1	367.2	397.0	402.3	R402.4	445.8
Petroleum	64.9	431.2	499.4	374.0	398.6	344.1	R422.3	R580.8	R529.7	412.5
Asphalt and Road Oil	13.7	62.8	117.7	113.5	102.0	84.1	85.0	84.3	116.0	66.6
Distillate Fuel	11.4	100.8	150.0	82.3	103.8	82.7	135.1	253.1	186.1	102.7
Kerosene	2.7	29.5	.9	.8	.7	.4	.5	.6	.8	.8
LPG	9.9	32.8	18.4	21.5	21.9	19.3	R30.5	R27.5	R33.6	42.3
Lubricants	12.0	44.1	49.2	42.6	39.3	43.5	40.6	42.2	43.4	51.3
Motor Gasoline	3.0	5.4	24.4	15.8	16.7	14.6	20.7	20.8	18.6	19.8
Residual Fuel	4.4	70.5	2.2	6.0	7.0	6.6	3.5	5.4	.6	2.2
Other	7.7	85.3	136.6	91.5	107.1	92.9	106.5	146.9	130.6	126.7
Electricity	135.3	912.1	1,036.4	1,002.8	1,049.6	1,088.7	1,087.7	1,098.6	1,123.7	1,164.4
Transportation Sector	**608.4**	**2,923.8**	**2,698.9**	**2,259.6**	**2,491.0**	**2,476.3**	**2,917.4**	**3,242.1**	**R3,146.2**	**3,238.9**
Primary Energy	608.4	2,923.8	2,698.9	2,259.6	2,491.0	2,476.3	2,917.4	3,242.1	R3,146.2	3,238.9
Coal	.1	–	–	–	–	–	–	–	–	–
Petroleum	608.3	2,923.8	2,698.9	2,259.6	2,491.0	2,476.3	2,917.4	3,242.1	R3,146.2	3,238.9
Aviation Gasoline	3.8	11.3	8.7	8.7	5.4	5.9	5.5	5.4	4.8	4.6
Distillate Fuel	41.3	449.8	426.4	418.0	510.9	548.8	742.6	822.6	763.8	803.2
Jet Fuel	7.2	72.3	121.6	93.5	95.2	42.2	52.7	63.1	R63.6	55.4
LPG	.6	.9	2.9	3.0	1.8	1.6	2.4	3.0	3.2	2.8
Lubricants	13.0	42.3	47.2	40.9	37.7	41.8	39.0	40.4	41.6	49.2
Motor Gasoline	538.8	2,282.5	2,053.8	1,679.9	1,822.0	1,800.4	2,037.0	2,270.6	R2,234.5	2,286.8
Residual Fuel	3.5	64.6	38.4	15.7	18.0	35.7	38.1	36.9	34.7	36.9
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1,398.6**	**6,649.6**	**7,285.5**	**6,614.4**	**7,006.2**	**7,094.7**	**R7,736.4**	**R8,334.3**	**R8,313.8**	**8,356.5**
Primary Energy — Four Sectors	987.0	4,529.1	4,549.6	3,796.0	4,055.3	4,054.9	R4,596.7	R5,097.7	R4,957.0	4,994.1
Electricity	411.6	2,120.5	2,735.9	2,818.4	2,950.9	3,039.7	3,139.7	3,236.6	3,356.8	3,362.4
Electric Utility Sector [a]	**103.4**	**849.4**	**1,174.9**	**1,088.6**	**1,063.7**	**1,046.7**	**1,065.0**	**1,066.3**	**1,172.3**	**1,206.8**
Coal	98.6	755.2	1,049.4	996.9	975.7	947.4	981.4	981.2	1,038.7	1,041.0
Natural Gas	4.2	4.1	3.8	2.8	3.3	5.5	4.0	9.1	7.8	7.7
Petroleum	.6	4.8	3.1	1.4	1.4	3.7	5.2	4.3	4.9	3.8
Heavy Oil [b]	–	–	–	–	–	–	–	–	–	–
Light Oil [b]	.1	4.8	3.1	1.4	1.4	3.7	5.2	4.3	4.9	3.8
Petroleum Coke	.4	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	85.2	118.7	87.5	83.3	90.1	74.4	71.7	120.9	154.4
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1,090.4**	**5,378.4**	**5,724.5**	**4,884.6**	**5,119.0**	**5,101.7**	**R5,661.7**	**R6,164.0**	**R6,129.3**	**6,200.9**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Alaska 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.92	1.91	3.65	3.38	2.00	2.63	1.95	3.79	4.02	3.46
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.92	1.91	3.65	3.38	2.00	2.63	1.95	3.79	4.02	3.46
Natural Gas	.67	.62	1.23	1.48	1.42	1.70	1.82	1.96	1.83	1.75
Petroleum	1.33	7.06	7.04	5.29	R5.42	5.44	6.23	7.59	R6.77	6.80
Asphalt and Road Oil	.57	3.62	4.47	4.49	4.25	3.93	3.19	3.14	3.28	2.80
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.15	6.82	7.67	6.71	R6.42	6.38	7.62	R8.46	R7.74	7.44
Jet Fuel	.73	6.21	6.07	4.16	4.13	4.14	4.69	6.17	5.50	5.15
Kerosene	1.25	7.29	8.05	6.68	6.32	4.57	7.27	9.05	8.68	7.47
LPG	2.09	6.88	13.62	11.59	11.33	11.37	14.88	R15.10	R15.64	14.68
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.18	10.20	9.83	7.86	7.90	8.14	8.65	10.03	8.99	9.95
Residual Fuel	1.37	4.07	4.66	3.04	3.36	4.10	3.90	5.26	3.33	3.24
Other [a]	.43	4.04	2.79	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.12	4.04	4.71	4.06	R4.00	4.04	4.71	5.50	R4.86	4.75
Electric Utility Fuel [c]	.66	1.25	1.71	1.48	R1.87	R2.13	1.86	R2.37	R1.81	1.91
Electricity Purchased by End Users	9.02	15.09	24.52	24.89	26.64	26.36	27.06	27.80	28.75	29.22
Total Energy	1.39	5.06	5.99	5.26	5.28	5.42	6.24	7.01	R6.46	6.33
	Expenditures in Millions of Dollars									
Coal	12.1	8.2	42.3	41.1	8.7	11.5	9.2	47.0	51.0	43.3
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	12.1	8.2	42.3	41.1	8.7	11.5	9.2	47.0	51.0	43.3
Natural Gas	26.2	64.5	162.4	165.5	158.4	187.1	187.4	223.7	212.4	210.6
Petroleum	122.7	853.7	1,428.2	1,266.9	R1,134.9	R1,016.4	R1,270.8	R1,553.9	R1,283.9	1,255.2
Asphalt and Road Oil	1.0	7.4	14.4	11.1	7.2	18.2	5.8	5.6	5.6	4.9
Aviation Gasoline	5.1	22.7	24.7	26.2	7.9	15.2	20.5	23.1	R27.2	19.8
Distillate Fuel	33.3	264.0	462.1	292.9	R298.6	R317.4	R490.4	R570.9	R441.4	450.3
Jet Fuel	27.5	335.7	520.3	379.8	345.6	394.0	491.0	604.3	R528.3	426.9
Kerosene	.2	.8	.3	188.7	171.7	5.0	.1	.1	.4	.1
LPG	1.1	4.2	15.2	10.3	10.4	10.6	R14.7	20.6	22.3	20.6
Lubricants	1.9	10.0	11.2	9.7	8.9	9.9	9.2	9.6	9.8	11.6
Motor Gasoline	43.8	196.9	291.2	224.1	215.4	227.7	230.7	306.6	R238.4	307.3
Residual Fuel	8.7	9.4	84.4	124.1	69.2	18.4	8.5	13.0	10.5	13.7
Other [a]	.1	2.5	4.5	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	161.0	926.4	1,632.9	1,473.5	R1,301.9	R1,215.1	R1,467.5	R1,824.5	R1,547.3	1,509.1
Electric Utility Fuel [c]	-9.9	-48.3	-77.0	-66.3	R-73.8	R-84.0	R-78.4	R-102.1	R-73.6	-72.1
Electricity Purchased by End Users	33.9	129.5	331.5	339.3	353.4	358.8	380.1	400.9	414.8	429.9
Total Energy	185.0	1,007.7	1,887.3	1,746.5	1,581.6	1,489.8	1,769.2	2,123.3	R1,888.5	1,866.9

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Alaska 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.34**	**6.67**	**9.18**	**9.46**	**9.31**	**9.66**	**9.86**	**10.35**	**10.78**	**10.10**
Primary Energy	1.49	4.31	5.20	5.11	4.72	4.75	5.29	6.36	6.62	5.72
Coal	2.47	–	7.75	7.99	–	–	–	7.96	10.99	7.92
Natural Gas	1.51	1.73	2.79	3.22	3.18	3.45	3.64	4.00	4.17	3.78
Petroleum	1.46	7.21	8.32	7.36	6.63	6.76	7.63	8.78	8.63	7.77
Distillate Fuel	1.40	7.05	7.81	6.84	6.24	6.27	6.95	7.94	7.57	6.78
Kerosene	1.61	–	8.99	7.88	7.18	7.21	8.00	9.14	8.71	7.80
LPG	2.93	12.23	13.97	13.14	13.02	12.85	15.85	16.66	17.04	15.84
Electricity	9.29	16.18	25.96	26.48	28.75	28.39	28.72	29.64	31.26	31.81
Commercial Sector	**1.67**	**4.16**	**7.15**	**6.25**	**6.38**	**7.37**	**8.15**	**8.05**	**8.19**	**7.93**
Primary Energy	1.08	2.54	3.66	4.49	4.49	3.26	3.35	3.78	R3.66	3.51
Coal	1.01	–	3.37	2.22	–	–	–	2.76	2.17	2.29
Natural Gas	.68	1.06	2.35	2.50	2.39	2.59	2.57	2.77	2.88	2.63
Petroleum	1.66	7.69	7.69	5.69	5.42	4.91	6.60	7.32	R7.43	6.46
Distillate Fuel	1.21	6.75	7.01	5.90	5.69	5.65	6.33	7.16	7.24	6.26
Kerosene	–	–	7.89	6.68	6.32	4.52	6.82	7.97	7.63	7.08
LPG	1.10	3.96	13.07	9.06	8.52	8.58	12.13	9.03	9.29	9.26
Motor Gasoline	3.18	10.20	9.83	7.86	7.90	8.14	8.65	10.03	8.99	9.95
Residual Fuel	1.49	4.31	–	2.64	3.23	2.51	–	–	–	–
Electricity	9.46	18.02	24.36	24.90	25.78	25.88	26.62	27.34	27.87	28.71
Industrial Sector	**.75**	**1.91**	**2.61**	**2.60**	**2.29**	**2.42**	**2.97**	**2.86**	**2.79**	**2.59**
Primary Energy	.70	1.61	2.38	2.33	1.79	1.91	2.37	2.35	2.30	2.13
Coal	1.01	–	–	–	–	–	–	–	–	–
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	1.01	–	–	–	–	–	–	–	–	–
Natural Gas	.43	.39	.71	.80	.73	1.07	1.08	1.28	1.18	1.18
Petroleum	.75	5.96	5.68	4.09	5.11	4.19	5.82	6.46	R6.15	5.72
Asphalt and Road Oil	.57	3.62	4.47	4.49	4.25	3.93	3.19	3.14	3.28	2.80
Distillate Fuel	.66	6.27	6.98	5.91	5.59	4.00	6.03	7.05	6.75	6.27
Kerosene	.76	7.29	7.89	6.68	6.32	4.52	6.82	7.97	7.63	7.08
LPG	1.10	3.96	13.07	9.06	8.52	8.58	12.13	9.03	9.29	9.26
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.18	10.20	9.83	7.86	7.90	8.14	8.65	10.03	8.99	9.95
Residual Fuel	.36	3.59	4.55	3.24	3.54	–	–	3.33	2.96	2.70
Other	.43	4.04	2.79	–	–	–	–	–	–	–
Electricity	5.36	10.32	19.13	18.53	22.97	21.63	22.80	22.99	23.90	22.68
Transportation Sector	**1.39**	**7.31**	**7.27**	**5.45**	**5.31**	**5.48**	**6.19**	**7.56**	**R6.69**	**6.86**
Primary Energy	1.39	7.31	7.27	5.45	5.31	5.48	6.19	7.56	R6.69	6.86
Coal	1.01	–	–	–	–	–	–	–	–	–
Petroleum	1.39	7.31	7.27	5.45	5.31	5.48	6.19	7.56	R6.69	6.86
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.46	7.39	8.00	7.33	6.58	7.50	8.51	9.03	8.35	8.49
Jet Fuel	.73	6.21	6.07	4.16	4.13	4.14	4.69	6.17	5.50	5.15
LPG	1.10	3.96	13.07	9.06	8.52	8.58	12.13	9.03	9.29	9.26
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.18	10.20	9.83	7.86	7.90	8.14	8.65	10.03	8.99	9.95
Residual Fuel	1.11	–	4.55	2.42	3.23	4.61	3.34	5.00	2.96	3.25
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.39**	**5.06**	**5.99**	**5.26**	**5.28**	**5.42**	**6.24**	**7.01**	**R6.46**	**6.33**
Primary Energy — Four Sectors	1.17	4.61	5.16	4.42	4.29	4.33	5.15	5.97	5.30	5.13
Electricity	9.02	15.09	24.52	24.89	26.64	26.36	27.06	27.80	28.75	29.22
Electric Utility Sector [a]	**.66**	**1.25**	**1.71**	**1.48**	**R1.87**	**R2.13**	**1.86**	**R2.37**	**R1.81**	**1.91**
Coal	.68	1.91	1.80	1.82	2.00	2.63	1.95	2.46	1.94	1.99
Natural Gas	.37	.48	.92	1.11	1.13	1.33	1.35	1.58	1.16	1.18
Petroleum	1.68	4.90	6.12	3.40	R6.94	R7.56	R5.61	R9.27	R6.14	6.57
Heavy Oil [b]	1.35	4.08	5.18	2.82	3.68	5.70	4.19	6.38	3.73	3.97
Light Oil [b]	1.68	5.48	7.06	4.15	R9.50	R8.81	R6.31	R10.36	R7.31	7.25
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.12**	**4.04**	**4.71**	**4.06**	**R4.00**	**4.04**	**4.71**	**5.50**	**R4.86**	**4.75**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Alaska 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**38.6**	**124.8**	**273.6**	**257.8**	**257.4**	**252.3**	**283.4**	**342.4**	**349.0**	**336.7**
Primary Energy	21.9	64.5	125.3	111.0	105.5	98.3	122.4	174.4	178.0	158.7
Coal	.4	–	18.7	21.9	–	–	–	21.7	30.6	22.5
Natural Gas	9.4	13.8	37.3	39.3	39.3	43.4	49.3	53.7	56.7	54.4
Petroleum	12.1	50.8	69.3	49.7	66.2	54.9	73.0	98.9	90.7	81.7
Distillate Fuel	11.1	48.2	59.6	42.4	58.6	46.9	61.5	80.7	70.4	63.4
Kerosene	.2	–	.1	*	*	.1	*	.1	.4	*
LPG	.9	2.6	9.6	7.3	7.5	7.9	11.6	18.1	19.9	18.3
Electricity	16.7	60.3	148.3	146.8	151.9	154.0	161.0	168.0	171.0	178.0
Commercial Sector	**39.0**	**99.0**	**274.3**	**484.2**	**464.8**	**264.7**	**276.2**	**323.4**	R326.8	**338.3**
Primary Energy	23.5	54.2	116.6	317.9	298.2	95.8	90.2	124.3	R118.8	123.4
Coal	.3	–	15.1	11.3	–	–	–	14.0	11.2	12.1
Natural Gas	8.6	17.5	48.1	52.7	48.7	54.2	55.9	56.9	60.4	56.2
Petroleum	14.7	36.8	53.4	253.9	249.4	41.6	34.4	53.5	R47.1	55.1
Distillate Fuel	3.0	22.7	37.8	28.8	34.9	28.8	30.4	49.0	41.1	50.2
Kerosene	–	–	.1	188.6	171.6	4.8	*	*	*	*
LPG	.1	.1	1.6	.9	.9	.9	1.6	1.7	1.9	1.9
Motor Gasoline	4.1	13.8	13.8	8.3	2.1	2.2	2.4	2.7	R4.1	3.0
Residual Fuel	7.5	.1	–	27.4	39.9	4.9	–	–	–	–
Electricity	15.4	44.8	157.7	166.3	166.6	168.9	186.0	199.0	208.0	215.0
Industrial Sector	**25.7**	**128.0**	**255.4**	**215.2**	**149.5**	**154.5**	**146.4**	**169.5**	**185.2**	**188.1**
Primary Energy	23.9	103.5	230.0	189.0	114.6	118.7	113.4	135.7	149.4	151.1
Coal	8.6	–	–	–	–	–	–	–	–	–
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	8.6	–	–	–	–	–	–	–	–	–
Natural Gas	5.1	19.5	45.2	34.9	35.5	48.3	37.7	58.5	59.1	65.9
Petroleum	10.2	84.0	184.8	154.1	79.1	70.4	75.7	77.2	90.3	85.2
Asphalt and Road Oil	1.0	7.4	14.4	11.1	7.2	18.2	5.8	5.6	5.6	4.9
Distillate Fuel	6.9	64.0	71.2	37.7	31.9	46.0	64.1	64.7	76.3	71.4
Kerosene	.1	.8	.2	.1	*	*	*	*	*	*
LPG	.2	1.3	3.3	1.9	1.9	1.6	1.2	.6	R.3	.3
Lubricants	*	1.8	2.0	1.7	1.6	1.8	1.7	1.7	1.8	2.1
Motor Gasoline	1.8	5.9	21.0	15.9	16.6	2.7	2.9	2.9	2.7	3.0
Residual Fuel	.1	.3	68.3	85.6	19.8	–	–	1.7	3.5	3.5
Other	.1	2.5	4.5	–	–	–	–	–	–	–
Electricity	1.7	24.5	25.5	26.2	34.9	35.8	33.0	33.9	35.8	36.9
Transportation Sector	**81.8**	**655.9**	**1,084.0**	**789.3**	**709.8**	**818.3**	**1,063.1**	**1,288.0**	R1,027.6	**1,003.9**
Primary Energy	81.8	655.9	1,084.0	789.3	709.8	818.3	1,063.1	1,288.0	R1,027.6	1,003.9
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	81.7	655.9	1,084.0	789.3	709.8	818.3	1,063.1	1,288.0	R1,027.6	1,003.9
Aviation Gasoline	5.1	22.7	24.7	26.2	7.9	15.2	20.5	23.1	R27.2	19.8
Distillate Fuel	8.5	112.1	272.2	173.5	149.8	173.9	315.8	347.1	231.0	239.7
Jet Fuel	27.5	335.7	520.3	379.8	345.6	394.0	491.0	604.3	R528.3	426.9
LPG	*	.1	.7	.3	.2	.3	.3	.2	.1	.1
Lubricants	1.8	8.2	9.1	7.9	7.3	8.1	7.6	7.8	8.1	9.5
Motor Gasoline	37.9	177.1	256.4	199.9	196.6	222.8	225.4	301.0	231.6	301.3
Residual Fuel	.9	–	.5	1.7	2.4	4.1	2.5	4.4	1.4	6.5
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**185.0**	**1,007.7**	**1,887.3**	**1,746.5**	**1,581.6**	**1,489.8**	**1,769.2**	**2,123.3**	R1,888.5	**1,866.9**
Primary Energy — Four Sectors	151.2	878.2	1,555.9	1,407.2	1,228.1	1,131.1	1,389.1	1,722.4	R1,473.8	1,437.0
Electricity	33.9	129.5	331.5	339.3	353.4	358.8	380.1	400.9	414.8	429.9
Electric Utility Sector [a]	**9.9**	**48.3**	**77.0**	**66.3**	R73.8	R84.0	R78.4	R102.1	R73.6	**72.1**
Coal	2.9	8.2	8.4	7.8	8.7	11.5	9.2	11.3	9.1	8.7
Natural Gas	3.1	13.8	31.8	38.5	34.8	41.3	44.5	54.6	36.3	34.0
Petroleum	3.9	26.3	36.8	19.9	R30.4	R31.2	R24.6	R36.2	R28.2	29.3
Heavy Oil [b]	*	9.1	15.5	9.4	7.1	9.4	6.1	6.9	5.6	3.7
Light Oil [b]	3.9	17.2	21.3	10.6	R23.3	R21.7	R18.6	R29.4	R22.6	25.7
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**161.0**	**926.4**	**1,632.9**	**1,473.5**	R1,301.9	R1,215.1	R1,467.5	R1,824.5	R1,547.3	**1,509.1**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Arizona 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.21	1.01	1.36	1.49	1.33	1.42	1.38	1.45	1.43	1.40
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.21	1.01	1.36	1.49	1.33	1.42	1.38	1.45	1.43	1.40
Natural Gas	.54	2.86	4.92	4.12	4.10	4.45	3.92	4.52	4.58	4.57
Petroleum	1.96	8.14	8.08	6.46	6.85	6.54	7.25	8.37	R7.79	8.09
Asphalt and Road Oil	.60	3.63	4.76	4.33	3.21	3.28	2.84	2.71	3.34	2.99
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.10	6.57	6.45	5.32	6.02	5.97	6.33	8.23	7.78	7.55
Jet Fuel	.76	6.59	6.20	4.25	4.36	4.15	4.80	6.04	5.03	4.72
Kerosene	1.63	5.45	5.42	3.34	3.28	4.45	4.02	8.14	7.37	11.09
LPG	2.08	6.85	9.98	9.55	9.81	9.05	R11.56	R11.74	R12.23	10.49
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.80	9.68	9.06	7.24	7.77	7.31	8.19	9.22	8.57	9.23
Residual Fuel	.48	3.92	3.79	2.36	2.33	2.37	2.76	3.31	2.65	2.53
Other [a]	–	4.04	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	.65	.65	.82	.77	.85	.72	.70	.55
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.29	4.49	4.58	3.68	3.74	3.35	3.93	3.98	3.64	3.67
Electric Utility Fuel [c]	.33	1.35	1.60	1.26	1.21	1.18	1.38	1.21	1.13	1.08
Electricity Purchased by End Users	5.32	15.68	21.15	21.87	21.31	21.73	22.10	22.82	23.09	23.94
Total Energy	1.97	8.42	10.03	9.17	9.72	9.75	10.35	11.30	R11.02	11.55
	Expenditures in Millions of Dollars									
Coal	1.8	247.0	466.2	440.9	376.0	439.6	493.8	498.5	497.6	515.3
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	1.8	247.0	466.2	440.9	376.0	439.6	493.8	498.5	497.6	515.3
Natural Gas	96.8	434.0	580.6	379.7	426.6	487.9	510.6	464.2	468.8	492.9
Petroleum	417.7	2,448.1	2,563.0	2,164.6	2,356.0	2,282.3	R2,553.6	R2,917.8	R2,743.1	2,922.9
Asphalt and Road Oil	14.6	49.6	81.0	72.7	53.1	58.4	45.0	42.6	48.3	59.1
Aviation Gasoline	4.7	12.8	9.3	9.6	7.9	7.0	8.8	9.1	8.3	6.8
Distillate Fuel	31.3	412.0	382.6	350.5	373.2	363.9	420.6	577.1	469.4	496.4
Jet Fuel	27.5	289.7	244.4	181.0	202.5	195.0	217.4	285.9	R270.2	219.1
Kerosene	1.5	2.3	.5	1.1	.9	1.4	1.1	.9	1.5	.2
LPG	10.2	40.0	61.9	59.2	69.8	56.8	R61.6	R57.8	R63.5	63.6
Lubricants	10.6	53.2	59.4	51.4	47.4	52.6	49.1	50.9	52.4	61.9
Motor Gasoline	316.9	1,555.4	1,719.7	1,438.5	1,599.5	1,546.4	1,747.4	1,892.9	R1,827.1	2,014.6
Residual Fuel	.3	33.0	4.2	.6	1.8	.8	2.6	.5	2.4	1.2
Other [a]	–	.1	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	8.0	69.8	118.4	190.6	71.8	158.1	188.9	149.6
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	516.4	3,129.0	3,617.8	3,054.9	3,277.1	3,400.4	R3,629.8	R4,038.6	R3,898.5	4,080.7
Electric Utility Fuel [c]	-23.5	-398.7	-580.5	-490.6	-539.1	-671.5	-664.3	-696.2	-711.4	-713.0
Electricity Purchased by End Users	250.1	1,431.6	2,381.4	2,536.2	2,664.5	2,886.0	3,030.3	3,181.4	3,249.2	3,516.7
Total Energy	743.0	4,161.9	5,418.7	5,100.5	5,402.4	5,614.9	R5,995.8	R6,523.8	R6,436.3	6,884.4

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Arizona 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.96**	**11.20**	**16.56**	**17.63**	**17.34**	**18.35**	**18.96**	**18.90**	**19.10**	**20.43**
Primary Energy	1.29	4.21	7.05	6.50	6.48	7.03	7.38	7.23	7.48	7.48
Coal	–	–	3.85	–	2.62	2.63	–	3.02	3.06	2.80
Natural Gas	1.13	3.88	6.69	6.06	5.89	6.76	6.66	6.64	6.82	7.02
Petroleum	2.48	8.46	10.12	9.87	10.60	9.47	14.07	13.66	14.07	11.43
Distillate Fuel	1.27	7.27	4.00	4.74	3.74	4.98	4.98	7.57	7.36	6.97
Kerosene	2.88	–	8.02	9.52	7.51	10.00	9.98	15.18	14.77	13.99
LPG	2.65	8.46	10.25	9.97	10.80	9.52	14.20	13.79	14.13	11.46
Electricity	6.99	18.28	24.18	25.37	25.09	25.65	25.93	26.49	26.80	28.08
Commercial Sector	**2.51**	**10.00**	**15.18**	**15.70**	**14.30**	**15.10**	**15.41**	**16.20**	**16.72**	**17.49**
Primary Energy	.69	3.44	5.39	4.57	4.52	4.87	4.66	5.15	5.35	5.37
Coal	–	–	1.81	–	1.94	1.84	–	1.97	2.01	2.02
Natural Gas	.60	3.00	5.33	4.47	4.38	4.81	4.57	4.64	4.95	5.04
Petroleum	1.51	7.63	5.81	5.19	5.21	5.34	5.51	8.20	7.98	8.03
Distillate Fuel	1.12	6.94	4.11	3.48	2.97	4.22	4.05	7.60	7.14	5.99
Kerosene	.77	–	4.80	2.95	3.01	4.11	3.97	8.05	7.22	6.17
LPG	1.05	5.72	9.63	9.06	8.52	8.58	8.09	9.03	9.29	9.26
Motor Gasoline	2.80	9.68	9.06	7.24	7.77	7.31	8.19	9.22	8.57	9.23
Residual Fuel	.63	–	4.13	–	–	2.30	–	–	2.53	–
Electricity	5.57	16.68	22.33	22.86	21.20	21.80	22.05	23.09	23.61	24.34
Industrial Sector	**1.00**	**5.34**	**6.49**	**6.00**	**7.01**	**7.26**	**7.19**	**8.27**	**8.31**	**8.45**
Primary Energy	.58	3.59	3.73	3.25	3.49	3.75	3.51	4.55	R4.30	4.20
Coal	.63	1.58	1.81	2.17	1.94	1.84	1.92	1.97	2.01	2.02
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.63	1.58	1.81	2.17	1.94	1.84	1.92	1.97	2.01	2.02
Natural Gas	.41	2.57	4.25	3.77	3.62	3.66	3.52	3.60	3.43	4.03
Petroleum	.86	5.19	5.68	4.40	3.98	4.46	R4.07	R5.81	R5.64	5.00
Asphalt and Road Oil	.60	3.63	4.76	4.33	3.21	3.28	2.84	2.71	3.34	2.99
Distillate Fuel	.72	5.15	4.22	2.59	2.64	3.61	3.49	7.07	6.35	5.42
Kerosene	.77	5.45	4.80	2.95	3.01	4.11	3.97	8.05	7.22	6.17
LPG	1.05	5.72	9.63	9.06	8.52	8.58	8.09	9.03	9.29	9.26
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.80	9.68	9.06	7.24	7.77	7.31	8.19	9.22	8.57	9.23
Residual Fuel	.36	3.95	4.13	2.29	2.88	2.30	2.51	3.18	2.53	2.41
Other	–	4.04	–	–	–	–	–	–	–	–
Electricity	3.56	11.39	15.05	15.07	15.37	15.41	15.80	16.36	16.34	16.89
Transportation Sector	**2.20**	**8.79**	**8.40**	**6.73**	**7.22**	**6.79**	**7.63**	**8.68**	**R7.97**	**8.45**
Primary Energy	2.20	8.79	8.40	6.73	7.22	6.79	7.63	8.68	R7.97	8.45
Coal	.63	–	–	–	–	–	–	–	–	–
Petroleum	2.20	8.79	8.40	6.73	7.22	6.79	7.63	8.68	R7.97	8.45
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.26	7.34	7.15	6.42	7.44	6.74	7.62	8.79	8.38	8.23
Jet Fuel	.76	6.59	6.20	4.25	4.36	4.15	4.80	6.04	5.03	4.72
LPG	1.05	5.72	9.63	9.06	8.52	8.58	8.09	9.03	9.29	9.26
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.80	9.68	9.06	7.24	7.77	7.31	8.19	9.22	8.57	9.23
Residual Fuel	–	–	–	–	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.97**	**8.42**	**10.03**	**9.17**	**9.72**	**9.75**	**10.35**	**11.30**	**R11.02**	**11.55**
Primary Energy — Four Sectors	1.49	6.77	7.10	5.83	6.35	6.16	6.71	7.63	7.19	7.50
Electricity	5.32	15.68	21.15	21.87	21.31	21.73	22.10	22.82	23.09	23.94
Electric Utility Sector [a]	**.33**	**1.35**	**1.60**	**1.26**	**1.21**	**1.18**	**1.38**	**1.21**	**1.13**	**1.08**
Coal	.21	.98	1.31	1.36	1.30	1.41	1.36	1.43	1.41	1.37
Natural Gas	.35	2.41	3.74	2.35	2.20	2.24	2.24	2.37	2.00	2.21
Petroleum	.61	4.57	5.15	3.64	3.80	4.07	3.76	5.03	4.89	4.53
Heavy Oil [b]	.60	3.92	3.71	3.51	2.24	2.47	2.77	3.48	3.86	3.23
Light Oil [b]	.68	6.48	6.22	3.64	4.34	4.26	4.50	5.11	4.99	4.67
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	.65	.65	.82	.77	.85	.72	.70	.55
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.29**	**4.49**	**4.58**	**3.68**	**3.74**	**3.35**	**3.93**	**3.98**	**3.64**	**3.67**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Arizona 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**149.1**	**741.3**	**1,246.7**	**1,278.8**	**1,400.9**	**1,516.3**	**1,580.3**	**1,636.7**	**1,694.0**	**1,800.0**
Primary Energy	45.8	140.1	236.2	193.3	217.8	227.3	231.2	246.8	264.0	244.9
Coal	–	–	*	–	*	*	–	*	*	.1
Natural Gas	35.6	119.6	200.5	159.6	173.7	197.2	188.0	207.7	219.2	205.5
Petroleum	10.2	20.5	35.7	33.7	44.1	30.1	43.3	39.1	44.8	39.3
Distillate Fuel	.7	.1	.3	.3	.4	.2	.2	.5	.2	.2
Kerosene	1.1	–	.1	.2	.1	.2	*	*	.1	.2
LPG	8.4	20.4	35.3	33.3	43.6	29.8	43.0	38.6	44.5	39.0
Electricity	103.3	601.2	1,010.5	1,085.5	1,183.1	1,289.0	1,349.0	1,390.0	1,430.0	1,555.0
Commercial Sector	**107.8**	**628.4**	**1,101.9**	**1,152.3**	**1,191.7**	**1,272.6**	**1,341.9**	**1,440.6**	**1,447.9**	**1,528.6**
Primary Energy	18.7	109.1	165.3	131.3	155.7	162.6	154.9	175.6	174.9	169.6
Coal	–	–	*	–	*	*	–	*	*	.1
Natural Gas	14.3	86.2	141.3	111.6	125.6	140.6	136.1	136.0	140.1	141.1
Petroleum	4.3	22.9	24.0	19.6	30.1	22.0	18.7	39.5	34.8	28.4
Distillate Fuel	1.4	11.3	11.4	7.7	9.2	11.9	8.8	22.6	12.6	7.9
Kerosene	.1	–	.1	.3	.3	*	.1	.1	.1	*
LPG	.6	2.4	5.9	5.3	6.1	4.7	4.3	4.5	5.2	5.6
Motor Gasoline	2.2	9.1	6.7	6.3	14.5	5.3	5.5	12.4	16.7	14.9
Residual Fuel	.1	–	*	–	–	*	–	–	.2	–
Electricity	89.1	519.3	936.7	1,021.0	1,036.0	1,110.0	1,187.0	1,265.0	1,273.0	1,359.0
Industrial Sector	**115.2**	**650.4**	**767.9**	**735.1**	**684.5**	**762.5**	**R750.3**	**R843.5**	**R834.3**	**900.4**
Primary Energy	57.4	339.3	333.6	305.4	239.1	275.5	R256.0	R317.1	R288.1	297.7
Coal	.1	20.6	70.2	100.4	25.8	22.7	27.4	26.1	27.6	25.9
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.1	20.6	70.2	100.4	25.8	22.7	27.4	26.1	27.6	25.9
Natural Gas	25.2	101.5	73.4	33.2	66.6	91.4	68.5	61.0	61.6	75.7
Petroleum	32.1	217.1	190.1	171.8	146.7	161.4	R160.1	R230.0	R198.9	196.1
Asphalt and Road Oil	14.6	49.6	81.0	72.7	53.1	58.4	45.0	42.6	48.3	59.1
Distillate Fuel	5.8	107.1	45.5	42.0	37.6	42.8	62.3	127.2	96.2	75.2
Kerosene	.4	2.3	.3	.6	.5	1.2	1.1	.8	1.4	*
LPG	1.0	15.5	17.5	17.8	18.3	20.3	R12.4	R12.9	R11.9	17.2
Lubricants	3.6	23.0	25.7	22.2	20.5	22.7	21.2	22.0	22.7	26.8
Motor Gasoline	6.7	15.7	19.2	15.9	16.5	15.6	18.0	24.2	16.6	16.8
Residual Fuel	.1	3.8	.8	.5	.3	.5	.1	.3	1.9	1.0
Other	–	.1	–	–	–	–	–	–	–	–
Electricity	57.8	311.1	434.2	429.7	445.3	487.0	494.3	526.4	546.2	602.7
Transportation Sector	**370.9**	**2,141.9**	**2,302.2**	**1,934.2**	**2,125.3**	**2,063.5**	**2,323.4**	**2,603.0**	**R2,460.1**	**2,655.5**
Primary Energy	370.9	2,141.9	2,302.2	1,934.2	2,125.3	2,063.5	2,323.4	2,603.0	R2,460.1	2,655.5
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	370.9	2,141.9	2,302.2	1,934.2	2,125.3	2,063.5	2,323.4	2,603.0	R2,460.1	2,655.5
Aviation Gasoline	4.7	12.8	9.3	9.6	7.9	7.0	8.8	9.1	8.3	6.8
Distillate Fuel	23.4	277.0	317.7	295.3	317.7	304.1	343.7	420.9	356.2	409.7
Jet Fuel	27.5	289.7	244.4	181.0	202.5	195.0	217.4	285.9	R270.2	219.1
LPG	.2	1.6	3.2	2.8	1.9	2.0	1.9	1.8	1.9	1.9
Lubricants	7.1	30.2	33.7	29.2	26.9	29.8	27.8	28.9	29.7	35.1
Motor Gasoline	308.1	1,530.5	1,693.9	1,416.3	1,568.4	1,525.5	1,723.8	1,856.3	R1,793.8	1,982.9
Residual Fuel	–	–	–	–	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**743.0**	**4,161.9**	**5,418.7**	**5,100.5**	**5,402.4**	**5,614.9**	**R5,995.8**	**R6,523.8**	**R6,436.3**	**6,884.4**
Primary Energy — Four Sectors	492.9	2,730.3	3,037.3	2,564.3	2,738.0	2,728.9	R2,965.5	R3,342.4	R3,187.1	3,367.7
Electricity	250.1	1,431.6	2,381.4	2,536.2	2,664.5	2,886.0	3,030.3	3,181.4	3,249.2	3,516.7
Electric Utility Sector [a]	**23.5**	**398.7**	**580.5**	**490.6**	**539.1**	**671.5**	**664.3**	**696.2**	**711.4**	**713.0**
Coal	1.8	226.3	396.0	340.5	350.2	416.9	466.4	472.4	470.0	489.2
Natural Gas	21.7	126.7	165.5	75.2	60.7	58.7	118.0	59.5	47.9	70.6
Petroleum	.1	45.7	11.0	5.1	9.8	5.2	8.2	6.2	4.5	3.6
Heavy Oil [b]	.1	29.2	3.4	.1	1.5	.3	2.6	.2	.3	.2
Light Oil [b]	*	16.5	7.7	5.1	8.3	4.9	5.6	6.0	4.2	3.3
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	8.0	69.8	118.4	190.6	71.8	158.1	188.9	149.6
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**516.4**	**3,129.0**	**3,617.8**	**3,054.9**	**3,277.1**	**3,400.4**	**R3,629.8**	**R4,038.6**	**R3,898.5**	**4,080.7**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Arkansas 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	–	1.44	1.60	1.58	1.57	1.60	1.64	1.62	1.61	1.66
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	–	1.44	1.60	1.58	1.57	1.60	1.64	1.62	1.61	1.66
Natural Gas	.38	2.27	3.83	3.53	3.34	3.43	3.39	3.27	3.36	3.44
Petroleum	1.97	7.57	8.29	6.18	6.67	6.39	6.99	8.43	R8.37	7.82
Asphalt and Road Oil	.68	3.58	4.21	4.62	3.33	3.27	2.90	3.01	3.22	2.23
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	.98	6.04	7.92	4.76	5.68	5.13	5.92	7.69	7.43	6.21
Jet Fuel	.72	6.34	5.96	3.93	4.07	3.66	4.27	5.90	5.01	4.52
Kerosene	.88	5.51	11.00	3.99	5.24	4.44	5.07	8.42	7.80	4.09
LPG	1.63	6.97	8.54	7.54	7.29	7.70	7.17	R10.15	11.20	10.13
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.74	9.93	8.80	6.84	7.28	7.13	7.69	8.86	8.81	8.69
Residual Fuel	.43	3.23	4.01	2.37	2.74	3.08	2.95	2.55	2.30	2.00
Other [a]	.86	6.16	7.81	7.92	8.40	7.45	8.73	8.40	8.13	9.62
Nuclear Fuel	–	.54	.77	.71	.75	.74	.75	.73	.70	.64
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.02	4.38	4.38	3.53	3.62	3.66	3.90	4.19	R4.10	4.04
Electric Utility Fuel [c]	.26	1.46	1.36	1.32	1.28	1.34	1.39	1.32	1.27	1.31
Electricity Purchased by End Users	4.78	12.77	18.24	19.61	19.00	18.74	19.04	19.78	19.76	19.81
Total Energy	1.52	6.68	8.41	7.52	8.03	7.48	7.72	8.74	R8.90	8.56
	Expenditures in Millions of Dollars									
Coal	–	52.6	351.1	354.7	330.7	349.4	332.8	344.9	346.9	366.3
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	–	52.6	351.1	354.7	330.7	349.4	332.8	344.9	346.9	366.3
Natural Gas	133.8	581.7	636.9	613.0	486.6	632.7	724.6	665.3	R635.2	675.5
Petroleum	469.3	2,318.9	2,302.5	1,661.8	1,803.1	1,814.4	R1,958.6	R2,284.6	R2,229.9	2,183.7
Asphalt and Road Oil	9.4	65.9	35.3	30.1	22.5	29.8	15.0	9.9	11.4	17.4
Aviation Gasoline	3.2	12.5	4.4	4.7	3.5	3.7	4.3	5.9	6.3	6.6
Distillate Fuel	31.1	376.2	687.9	367.7	444.5	423.4	500.9	638.6	582.9	554.5
Jet Fuel	8.5	70.0	65.7	41.1	45.8	44.5	45.2	54.5	R48.8	28.0
Kerosene	4.1	17.8	9.7	1.2	1.3	1.3	1.3	1.8	1.6	.5
LPG	62.4	123.7	112.9	104.3	93.4	99.8	R99.8	R127.3	133.8	110.5
Lubricants	16.4	61.0	68.0	58.9	54.3	60.2	56.2	58.3	60.0	70.9
Motor Gasoline	323.7	1,381.9	1,235.5	1,001.9	1,089.6	1,108.1	1,187.7	1,341.8	1,342.2	1,342.6
Residual Fuel	2.4	100.3	17.0	11.1	3.4	5.8	5.5	2.7	1.1	.2
Other [a]	8.0	109.6	65.9	40.9	44.8	37.7	42.7	43.8	41.7	52.6
Nuclear Fuel	–	46.0	82.8	68.0	91.6	70.4	71.4	88.3	95.4	77.7
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	603.0	2,999.2	3,373.2	2,697.5	2,711.9	2,866.9	R3,087.4	R3,383.1	R3,307.4	3,303.2
Electric Utility Fuel [c]	-29.3	-286.3	-451.4	-454.4	-459.1	-445.9	-448.2	-476.2	-473.8	-475.8
Electricity Purchased by End Users	217.4	1,149.8	1,440.1	1,490.5	1,521.8	1,570.6	1,644.7	1,789.8	1,859.8	1,863.5
Total Energy	791.2	3,862.7	4,361.9	3,733.6	3,774.6	3,991.7	R4,283.8	R4,696.7	R4,693.4	4,690.8

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Arkansas 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1.91**	**8.14**	**11.53**	**12.19**	**12.15**	**12.11**	**12.27**	**13.67**	**13.75**	**13.90**
Primary Energy	1.07	3.45	5.01	5.22	4.99	5.21	5.15	5.90	5.83	5.73
Coal	–	2.97	3.19	–	2.88	2.62	2.64	2.70	2.81	2.69
Natural Gas	.75	2.49	4.35	4.77	4.57	4.78	4.83	5.06	4.90	5.07
Petroleum	1.81	8.54	8.52	7.31	7.39	7.86	6.93	10.74	12.09	10.54
Distillate Fuel	.93	6.54	10.33	4.38	5.30	4.71	4.95	7.69	7.11	4.99
Kerosene	1.40	–	11.07	4.70	5.68	5.05	5.30	8.24	7.62	5.34
LPG	1.84	8.77	8.46	7.36	7.42	7.92	6.97	10.78	12.15	10.66
Electricity	6.82	15.58	21.91	22.68	22.46	22.31	22.78	23.65	23.76	24.28
Commercial Sector	**1.58**	**6.73**	**10.20**	**10.81**	**10.55**	**10.50**	**10.74**	**11.64**	**11.59**	**11.67**
Primary Energy	.64	2.80	5.34	4.51	4.40	4.44	4.49	4.94	4.70	4.49
Coal	–	1.89	2.12	–	2.02	2.04	1.98	1.99	1.86	1.86
Natural Gas	.52	2.29	4.06	4.33	4.21	4.31	4.36	4.43	4.28	4.35
Petroleum	1.37	5.24	9.10	5.94	5.61	5.53	5.30	7.86	7.86	5.53
Distillate Fuel	.86	6.25	9.09	3.00	4.18	3.31	3.69	6.84	6.39	3.28
Kerosene	.77	5.51	10.98	3.31	4.81	3.84	4.68	8.62	7.92	3.44
LPG	1.23	5.54	8.65	7.83	7.13	7.45	7.40	9.42	10.22	9.62
Motor Gasoline	2.74	9.93	8.80	6.84	7.28	7.13	7.69	8.86	8.81	8.69
Residual Fuel	.42	3.33	–	2.42	–	–	–	–	–	2.00
Electricity	6.07	14.73	19.06	19.70	19.06	19.11	19.64	20.40	20.32	20.72
Industrial Sector	**.69**	**4.17**	**6.73**	**5.43**	**6.14**	**5.21**	**R5.30**	**5.94**	**R6.22**	**5.65**
Primary Energy	.46	3.26	5.48	3.70	4.01	3.53	3.61	R4.04	4.09	3.61
Coal	–	1.89	2.12	2.04	2.02	2.04	1.98	1.99	1.86	1.86
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	–	1.89	2.12	2.04	2.02	2.04	1.98	1.99	1.86	1.86
Natural Gas	.28	2.24	3.65	3.40	3.10	3.04	3.08	2.86	3.01	3.11
Petroleum	.98	4.95	8.32	4.36	5.16	4.55	5.36	R7.61	7.56	4.98
Asphalt and Road Oil	.68	3.58	4.21	4.62	3.33	3.27	2.90	3.01	3.22	2.23
Distillate Fuel	.67	4.87	9.44	2.84	4.14	3.30	4.02	7.41	6.80	2.96
Kerosene	.77	5.51	10.98	3.31	4.81	3.84	4.68	8.62	7.92	3.44
LPG	1.23	5.54	8.65	7.83	7.13	7.45	7.40	9.42	10.22	9.62
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.74	9.93	8.80	6.84	7.28	7.13	7.69	8.86	8.81	8.69
Residual Fuel	.45	2.95	4.01	2.42	2.74	2.49	2.68	2.54	2.30	2.00
Other	.86	6.16	7.81	7.92	8.40	7.45	8.73	8.40	8.13	9.62
Electricity	2.78	9.15	13.74	15.53	14.56	14.14	14.34	14.93	14.80	14.72
Transportation Sector	**2.38**	**9.11**	**8.24**	**6.63**	**7.01**	**6.81**	**7.34**	**8.53**	**R8.40**	**8.40**
Primary Energy	2.38	9.11	8.24	6.63	7.01	6.81	7.34	8.53	R8.40	8.40
Coal	–	–	–	–	–	–	–	–	–	–
Petroleum	2.38	9.11	8.24	6.63	7.01	6.81	7.34	8.53	R8.40	8.40
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.16	6.70	6.56	6.09	6.59	6.21	6.71	7.87	7.64	7.69
Jet Fuel	.72	6.34	5.96	3.93	4.07	3.66	4.27	5.90	5.01	4.52
LPG	1.23	5.54	8.65	7.83	7.13	7.45	7.40	9.42	10.22	9.62
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.74	9.93	8.80	6.84	7.28	7.13	7.69	8.86	8.81	8.69
Residual Fuel	.40	–	–	–	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.52**	**6.68**	**8.41**	**7.52**	**8.03**	**7.48**	**7.72**	**8.74**	**R8.90**	**8.56**
Primary Energy — Four Sectors	1.20	5.56	6.64	5.34	5.78	5.38	5.63	6.51	R6.54	6.23
Electricity	4.78	12.77	18.24	19.61	19.00	18.74	19.04	19.78	19.76	19.81
Electric Utility Sector [a]	**.26**	**1.46**	**1.36**	**1.32**	**1.28**	**1.34**	**1.39**	**1.32**	**1.27**	**1.31**
Coal	–	1.34	1.58	1.56	1.55	1.58	1.63	1.61	1.60	1.65
Natural Gas	.25	2.15	2.82	1.56	1.52	1.35	1.65	1.54	1.41	1.53
Petroleum	.42	3.39	4.99	2.20	3.86	4.43	3.81	4.72	5.61	4.81
Heavy Oil [b]	.42	3.34	3.84	1.65	2.76	3.81	3.26	2.75	2.72	2.16
Light Oil [b]	.46	4.34	5.86	4.42	3.86	5.12	4.36	4.94	5.64	4.81
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	.54	.77	.71	.75	.74	.75	.73	.70	.64
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.02**	**4.38**	**4.38**	**3.53**	**3.62**	**3.66**	**3.90**	**4.19**	**R4.10**	**4.04**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Arkansas 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**192.8**	**734.6**	**911.3**	**964.7**	**982.1**	**1,018.3**	**1,032.6**	**1,125.1**	**1,168.5**	**1,124.9**
Primary Energy	92.3	190.8	243.5	248.5	238.3	261.3	258.6	273.1	276.5	259.8
Coal	–	.1	*	–	*	*	.1	*	*	.1
Natural Gas	45.1	115.9	177.9	186.2	185.5	206.2	205.2	199.9	202.4	201.3
Petroleum	47.2	74.8	65.5	62.3	52.8	55.1	53.3	73.3	74.1	58.5
Distillate Fuel	.4	5.8	*	*	*	*	*	*	*	.4
Kerosene	1.2	–	1.9	.7	.7	.7	.9	.9	.6	.2
LPG	45.6	69.0	63.5	61.6	52.1	54.3	52.4	72.3	73.5	57.9
Electricity	100.5	543.7	667.9	716.2	743.8	757.0	774.0	852.0	892.0	865.0
Commercial Sector	**87.1**	**371.3**	**575.1**	**526.2**	**526.3**	**554.9**	**583.2**	**612.4**	**620.5**	**608.7**
Primary Energy	29.3	103.5	194.7	128.7	127.5	137.9	143.2	147.4	140.5	130.8
Coal	–	.2	*	–	*	*	.1	*	*	*
Natural Gas	20.6	69.9	110.5	109.5	104.8	119.2	119.4	112.1	113.0	110.9
Petroleum	8.7	33.5	84.2	19.2	22.7	18.8	23.7	35.3	27.4	19.8
Distillate Fuel	.2	4.1	62.0	3.3	8.8	4.9	9.4	17.5	12.7	7.2
Kerosene	.4	4.1	5.2	.1	.1	.2	.1	.1	.1	.1
LPG	5.4	7.7	11.5	11.6	8.8	9.0	9.8	11.2	10.9	9.2
Motor Gasoline	2.6	8.5	5.5	4.2	5.0	4.6	4.4	6.6	3.7	3.3
Residual Fuel	.1	9.2	–	.1	–	–	–	–	–	.1
Electricity	57.8	267.8	380.4	397.5	398.8	417.0	440.0	465.0	480.0	478.0
Industrial Sector	**147.4**	**1,000.4**	**1,264.4**	**900.4**	**791.2**	**925.4**	**R1,009.8**	**R1,080.7**	**R1,031.8**	**1,088.7**
Primary Energy	88.3	662.1	872.6	523.7	412.1	528.8	R579.2	R607.9	R544.0	568.2
Coal	–	12.0	17.0	15.8	13.6	11.7	11.8	11.6	12.8	13.2
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	–	12.0	17.0	15.8	13.6	11.7	11.8	11.6	12.8	13.2
Natural Gas	40.7	265.8	314.5	270.6	146.0	276.7	350.3	303.0	R279.7	320.8
Petroleum	47.7	384.4	541.1	237.2	252.4	240.4	R217.1	R293.3	251.5	234.2
Asphalt and Road Oil	9.4	65.9	35.3	30.1	22.5	29.8	15.0	9.9	11.4	17.4
Distillate Fuel	7.7	100.5	331.9	87.0	112.1	95.5	84.7	153.8	105.9	75.5
Kerosene	2.6	13.7	2.6	.4	.5	.3	.4	.8	.9	.2
LPG	8.2	42.8	33.4	28.6	30.5	34.5	R35.6	R40.9	46.5	41.3
Lubricants	7.1	23.3	26.0	22.6	20.8	23.0	21.5	22.3	23.0	27.1
Motor Gasoline	4.2	2.7	29.1	17.3	17.9	16.9	14.5	19.3	21.0	20.0
Residual Fuel	.5	25.9	16.8	10.5	3.4	2.6	2.7	2.5	1.1	.2
Other	8.0	109.6	65.9	40.9	44.8	37.7	42.7	43.8	41.7	52.6
Electricity	59.1	338.3	391.8	376.8	379.1	396.7	430.7	472.8	487.9	520.5
Transportation Sector	**363.9**	**1,756.4**	**1,611.1**	**1,342.3**	**1,474.9**	**1,493.0**	**1,658.2**	**1,878.4**	**R1,872.6**	**1,868.5**
Primary Energy	363.9	1,756.4	1,611.1	1,342.3	1,474.9	1,493.0	1,658.2	1,878.4	R1,872.6	1,868.5
Coal	–	–	–	–	–	–	–	–	–	–
Petroleum	363.9	1,756.4	1,611.1	1,342.3	1,474.9	1,493.0	1,658.2	1,878.4	R1,872.6	1,868.5
Aviation Gasoline	3.2	12.5	4.4	4.7	3.5	3.7	4.3	5.9	6.3	6.6
Distillate Fuel	22.8	261.3	293.5	277.1	323.4	319.1	403.2	463.2	460.0	468.8
Jet Fuel	8.5	70.0	65.7	41.1	45.8	44.5	45.2	54.5	R48.8	28.0
LPG	3.2	4.2	4.6	2.6	2.0	2.0	1.9	2.9	2.9	2.2
Lubricants	9.2	37.6	42.0	36.4	33.5	37.1	34.7	36.0	37.0	43.8
Motor Gasoline	316.9	1,370.7	1,200.9	980.4	1,066.7	1,086.5	1,168.9	1,316.0	1,317.5	1,319.3
Residual Fuel	*	–	–	–	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**791.2**	**3,862.7**	**4,361.9**	**3,733.6**	**3,774.6**	**3,991.7**	**R4,283.8**	**R4,696.7**	**R4,693.4**	**4,690.8**
Primary Energy — Four Sectors	573.8	2,712.9	2,921.8	2,243.1	2,252.8	2,421.0	R2,639.1	R2,906.9	R2,833.5	2,827.4
Electricity	217.4	1,149.8	1,440.1	1,490.5	1,521.8	1,570.6	1,644.7	1,789.8	1,859.8	1,863.5
Electric Utility Sector [a]	**29.3**	**286.3**	**451.4**	**454.4**	**459.1**	**445.9**	**448.2**	**476.2**	**473.8**	**475.8**
Coal	–	40.3	334.0	338.9	317.0	337.7	320.8	333.3	334.2	353.1
Natural Gas	27.4	130.1	34.0	46.7	50.3	30.7	49.7	50.3	40.1	42.4
Petroleum	1.9	69.8	.6	.8	.2	7.1	6.4	4.3	4.2	2.7
Heavy Oil [b]	1.8	65.3	.2	.5	*	3.2	2.8	.3	*	*
Light Oil [b]	*	4.5	.4	.3	.2	3.9	3.6	4.0	4.2	2.7
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	46.0	82.8	68.0	91.6	70.4	71.4	88.3	95.4	77.7
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**603.0**	**2,999.2**	**3,373.2**	**2,697.5**	**2,711.9**	**2,866.9**	**R3,087.4**	**R3,383.1**	**R3,307.4**	**3,303.2**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, California 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.45	1.91	2.30	2.26	2.09	1.96	1.93	2.01	1.99	1.83
Coking Coal	.43	1.97	–	–	–	–	–	–	–	–
Steam Coal	.83	1.82	2.30	2.26	2.09	1.96	1.93	2.01	1.99	1.83
Natural Gas	.56	3.54	5.01	4.02	3.77	4.05	4.10	4.31	4.49	4.11
Petroleum	1.78	7.37	7.39	5.72	5.85	5.82	6.31	7.19	6.87	7.54
Asphalt and Road Oil	.49	3.78	4.78	5.08	5.36	4.53	3.10	3.13	3.18	2.74
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.26	6.62	6.48	5.55	5.92	5.93	6.72	7.39	7.25	7.68
Jet Fuel	.73	6.21	6.01	3.99	4.04	3.84	4.50	5.76	4.80	4.53
Kerosene	1.08	6.44	6.50	7.89	5.51	7.22	10.15	8.42	7.93	8.89
LPG	1.84	6.09	9.35	9.52	9.57	9.43	R8.88	R10.21	R10.95	10.64
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.80	10.19	8.68	6.68	6.95	7.08	7.66	8.57	8.18	9.19
Residual Fuel	.38	4.49	4.75	2.71	2.61	2.31	2.68	3.66	2.57	1.87
Other [a]	1.04	6.28	7.43	6.15	6.10	5.18	5.67	5.80	5.73	5.50
Nuclear Fuel	.19	.49	.96	.97	.99	.90	.85	.72	.67	.55
Biomass Fuels at Utilities	.65	1.74	.79	.32	.95	.87	([d])	([d])	([d])	([d])
Primary Energy — Five Sectors [b]	1.20	5.95	6.19	4.87	4.79	4.90	5.20	5.77	R5.58	5.75
Electric Utility Fuel [c]	.34	3.99	3.70	2.16	2.02	2.17	2.20	2.17	1.95	1.87
Electricity Purchased by End Users	4.76	17.16	22.90	23.21	22.70	23.42	24.91	25.98	27.70	28.39
Total Energy	1.73	7.71	8.91	7.79	7.63	7.86	8.34	9.03	R9.15	9.65
	Expenditures in Millions of Dollars									
Coal	27.9	126.7	104.1	96.0	94.0	99.5	111.6	131.1	127.4	118.8
Coking Coal	25.6	79.8	–	–	–	–	–	–	–	–
Steam Coal	2.3	46.8	104.1	96.0	94.0	99.5	111.6	131.1	127.4	118.8
Natural Gas	1,126.7	6,063.2	9,251.8	6,011.6	7,109.8	7,145.3	7,426.4	7,830.2	8,242.8	7,897.4
Petroleum	4,210.9	24,321.3	21,232.6	16,756.0	18,140.0	18,877.4	R20,887.6	R23,598.0	R20,871.7	22,618.7
Asphalt and Road Oil	39.0	462.2	439.0	517.9	585.1	461.6	308.2	308.8	301.0	246.7
Aviation Gasoline	23.9	13.0	68.3	56.8	41.3	49.1	54.4	52.0	R48.0	45.7
Distillate Fuel	283.0	2,390.8	2,729.9	2,409.2	2,539.5	2,908.9	3,199.9	3,548.4	3,181.4	3,003.8
Jet Fuel	242.7	2,199.3	2,257.8	1,685.3	1,811.7	1,784.5	2,286.8	3,081.3	R2,438.9	2,219.3
Kerosene	6.1	77.3	33.8	22.0	21.4	9.2	11.1	6.9	6.3	3.8
LPG	99.5	365.8	585.7	550.7	654.6	637.4	R658.1	R615.7	R573.4	556.0
Lubricants	122.3	427.3	476.9	412.9	380.3	421.9	393.8	408.5	420.4	496.9
Motor Gasoline	3,149.1	13,579.1	12,192.3	9,816.4	10,665.9	11,300.4	12,504.1	13,699.5	R12,829.8	15,248.9
Residual Fuel	161.1	4,131.7	1,953.0	957.7	1,064.4	984.3	1,123.1	1,479.4	727.3	400.2
Other [a]	84.0	674.9	496.0	327.1	375.7	320.0	348.2	397.5	345.2	397.4
Nuclear Fuel	6.7	26.1	204.0	273.7	322.6	297.0	295.9	251.9	226.9	207.7
Biomass Fuels at Utilities	.3	.4	*	.1	.2	.1	([d])	([d])	([d])	([d])
Primary Energy — Five Sectors [b]	5,372.4	30,537.6	30,792.6	23,137.4	25,666.8	26,419.3	R28,721.5	R31,811.3	R29,468.8	30,842.6
Electric Utility Fuel [c]	-282.1	-4,018.4	-3,498.6	-1,694.0	-2,060.3	-2,131.0	-2,168.0	-1,882.4	-1,572.2	-1,802.4
Electricity Purchased by End Users	1,886.7	9,560.0	14,143.4	14,220.3	14,334.2	15,574.0	17,085.2	18,417.8	19,412.5	20,377.5
Total Energy	6,977.0	36,079.3	41,437.4	35,663.8	37,940.7	39,862.2	R43,638.7	R48,346.7	R47,309.1	49,417.7

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Utilities used biomass fuels at no charge or received a fee for accepting them.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
*Value less than 0.05 million dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, California 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1.92**	**6.76**	**10.02**	**10.27**	**10.42**	**11.36**	**11.89**	**12.67**	**13.74**	**14.32**
Primary Energy	.99	3.53	5.61	5.16	5.39	5.72	5.67	5.86	6.41	6.07
Coal	1.31	5.13	4.54	–	3.76	3.37	3.66	3.77	5.21	3.76
Natural Gas	.93	3.37	5.51	4.95	5.13	5.48	5.40	5.60	6.11	5.81
Petroleum	2.49	8.14	8.53	10.82	11.84	11.04	11.46	12.00	12.39	12.99
Distillate Fuel	1.27	6.92	5.25	7.58	6.05	5.84	7.63	5.70	5.60	7.07
Kerosene	2.57	13.04	9.18	13.26	10.57	10.22	13.34	9.96	9.78	12.37
LPG	2.67	8.15	8.66	10.95	12.37	11.39	11.64	12.45	12.75	13.39
Electricity	6.53	17.18	22.80	23.26	23.55	25.02	27.69	29.26	31.61	32.46
Commercial Sector	**2.09**	**9.58**	**15.05**	**15.17**	**14.10**	**13.83**	**14.66**	**15.08**	**15.96**	**16.82**
Primary Energy	.71	4.30	6.42	5.62	5.27	4.68	4.93	5.14	5.43	5.19
Coal	.63	1.82	2.28	–	2.09	1.96	1.92	2.00	1.97	1.83
Natural Gas	.69	3.82	6.39	5.65	5.28	4.55	4.71	4.96	5.36	5.01
Petroleum	.76	6.02	6.71	5.53	5.24	5.28	6.23	6.27	6.01	7.52
Distillate Fuel	1.12	6.60	5.40	5.56	4.81	4.94	6.22	5.72	5.42	6.07
Kerosene	.78	6.38	6.27	4.69	4.83	4.79	6.05	6.02	5.46	6.22
LPG	1.37	5.21	9.65	9.02	8.47	8.53	7.63	9.03	9.29	9.26
Motor Gasoline	2.80	10.19	8.68	6.68	6.95	7.08	7.66	8.57	8.18	9.19
Residual Fuel	.40	4.90	3.93	2.16	2.60	2.09	2.30	3.00	2.24	2.26
Electricity	5.02	17.99	23.61	24.19	23.47	24.15	25.33	26.31	28.12	29.05
Industrial Sector	**.87**	**6.20**	**7.93**	**7.15**	**6.48**	**6.82**	**7.03**	**7.07**	**R7.18**	**7.16**
Primary Energy	.57	4.34	5.19	4.22	4.18	4.20	4.18	R4.32	R4.20	4.12
Coal	.43	1.91	2.28	2.26	2.09	1.96	1.92	2.00	1.97	1.83
Coking Coal	.43	1.97	–	–	–	–	–	–	–	–
Steam Coal	.63	1.82	2.28	2.26	2.09	1.96	1.92	2.00	1.97	1.83
Natural Gas	.38	3.64	4.54	3.46	3.39	3.65	3.62	3.79	3.86	3.57
Petroleum	.92	5.22	6.04	5.15	5.28	5.11	R5.35	R5.55	R5.34	5.66
Asphalt and Road Oil	.49	3.78	4.78	5.08	5.36	4.53	3.10	3.13	3.18	2.74
Distillate Fuel	.68	5.49	5.54	4.14	4.27	4.24	5.35	5.33	4.82	5.50
Kerosene	.78	6.38	6.27	4.69	4.83	4.79	6.05	6.02	5.46	6.22
LPG	1.37	5.21	9.65	9.02	8.47	8.53	7.63	9.03	9.29	9.26
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.80	10.19	8.68	6.68	6.95	7.08	7.66	8.57	8.18	9.19
Residual Fuel	.35	3.16	3.93	2.16	2.60	2.09	2.30	3.00	2.24	2.26
Other	1.04	6.28	7.43	6.15	6.10	5.18	5.67	5.80	5.73	5.50
Electricity	2.90	16.04	22.00	21.63	20.38	20.15	20.89	21.35	22.22	22.24
Transportation Sector	**2.07**	**8.22**	**7.68**	**5.82**	**5.94**	**5.98**	**6.50**	**7.42**	**R7.01**	**7.71**
Primary Energy	2.07	8.22	7.67	5.82	5.94	5.97	6.50	7.42	R7.00	7.71
Coal	.63	–	–	–	–	–	–	–	–	–
Petroleum	2.07	8.22	7.67	5.82	5.94	5.97	6.50	7.42	R7.00	7.71
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.42	7.07	6.90	5.93	6.70	6.51	7.14	8.21	8.02	8.19
Jet Fuel	.73	6.21	6.01	3.99	4.04	3.84	4.50	5.76	4.80	4.53
LPG	1.37	5.21	9.65	9.02	8.47	8.53	7.63	9.03	9.29	9.26
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.80	10.19	8.68	6.68	6.95	7.08	7.66	8.57	8.18	9.19
Residual Fuel	.36	4.14	5.02	2.86	2.60	2.26	2.57	3.59	2.58	1.85
Electricity	2.88	11.39	18.29	18.21	13.47	14.99	13.15	13.25	14.80	16.23
Total Energy	**1.73**	**7.71**	**8.91**	**7.79**	**7.63**	**7.86**	**8.34**	**9.03**	**R9.15**	**9.65**
Primary Energy — Four Sectors	1.40	6.43	6.77	5.41	5.44	5.51	5.84	R6.44	6.24	6.60
Electricity	4.76	17.16	22.90	23.21	22.70	23.42	24.91	25.98	27.70	28.39
Electric Utility Sector[a]	**.34**	**3.99**	**3.70**	**2.16**	**2.02**	**2.17**	**2.20**	**2.17**	**1.95**	**1.87**
Coal	–	–	–	–	–	–	–	–	–	–
Natural Gas	.33	3.53	4.47	2.81	2.50	2.83	2.92	3.03	2.87	2.72
Petroleum	.40	5.06	5.33	3.26	2.93	2.67	3.09	4.36	3.23	2.64
Heavy Oil[b]	.40	5.03	5.31	3.16	2.82	2.66	3.08	4.36	3.06	2.18
Light Oil[b]	.36	5.84	5.69	4.79	4.10	4.03	3.64	4.57	4.90	4.57
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	.19	.49	.96	.97	.99	.90	.85	.72	.67	.55
Biomass Fuels	.65	1.74	.79	.32	.95	.87	([d])	([d])	([d])	([d])
Primary Energy — Five Sectors[c]	**1.20**	**5.95**	**6.19**	**4.87**	**4.79**	**4.90**	**5.20**	**5.77**	**R5.58**	**5.75**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[d] Utilities used biomass fuels at no charge or received a fee for accepting them.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, California 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1,401.1**	**5,063.6**	**7,666.2**	**7,138.8**	**7,751.8**	**8,576.9**	**R9,242.9**	**9,892.5**	**R10,642.7**	**10,650.5**
Primary Energy	603.5	2,014.1	3,193.4	2,573.1	2,901.0	3,058.9	R3,162.9	R3,246.5	R3,522.7	3,106.5
Coal	1.1	.2	2.0	–	*	.2	.3	.8	1.9	*
Natural Gas	544.3	1,861.6	3,016.1	2,384.7	2,648.3	2,803.9	2,874.8	2,973.8	3,189.5	2,862.8
Petroleum	58.2	152.4	175.3	188.4	252.7	254.8	R287.7	R271.9	R331.3	243.6
Distillate Fuel	3.7	3.8	4.5	10.6	10.0	7.8	10.7	7.5	6.5	8.3
Kerosene	2.4	1.3	3.8	13.8	4.9	5.9	8.2	5.0	4.4	2.3
LPG	52.1	147.2	167.0	164.0	237.7	241.2	R268.9	R259.4	R320.4	233.1
Electricity	797.6	3,049.5	4,472.8	4,565.8	4,850.8	5,518.0	6,080.0	6,646.0	7,120.0	7,544.0
Commercial Sector	**905.1**	**5,377.9**	**7,528.4**	**7,525.2**	**7,719.1**	**8,112.7**	**R8,803.7**	**9,683.0**	**R10,113.1**	**10,357.9**
Primary Energy	208.7	1,482.7	1,598.4	1,354.8	1,487.3	1,455.6	1,546.9	1,750.3	1,847.1	1,640.0
Coal	1.0	.1	1.8	–	*	.2	.3	.8	1.3	*
Natural Gas	152.9	1,027.9	1,359.7	1,070.4	1,153.9	1,162.5	1,264.5	1,459.7	1,581.9	1,467.9
Petroleum	54.8	454.6	236.9	284.5	333.4	293.0	282.1	289.9	263.9	172.1
Distillate Fuel	4.3	124.0	110.5	182.9	192.7	181.9	167.1	152.8	140.5	70.6
Kerosene	2.3	8.0	12.5	3.0	4.6	2.4	1.4	.6	.7	.7
LPG	4.7	16.6	32.8	23.9	28.7	31.9	31.1	33.2	41.2	28.4
Motor Gasoline	21.8	96.1	80.2	61.6	91.8	66.0	71.7	86.3	70.7	71.8
Residual Fuel	21.8	209.9	.9	13.0	15.5	10.8	10.8	16.9	10.7	.6
Electricity	696.3	3,895.2	5,930.0	6,170.4	6,231.8	6,657.1	7,256.7	7,932.7	R8,266.0	8,717.9
Industrial Sector	**920.6**	**6,347.4**	**8,227.1**	**6,814.4**	**7,242.0**	**6,967.6**	**R7,381.9**	**R7,855.6**	**R7,854.1**	**7,860.9**
Primary Energy	528.3	3,739.6	4,501.7	3,344.8	4,000.3	3,580.6	R3,643.8	R4,028.8	R3,842.6	3,761.4
Coal	25.8	126.4	100.3	96.0	94.0	99.1	111.0	129.6	124.2	118.8
Coking Coal	25.6	79.8	–	–	–	–	–	–	–	–
Steam Coal	.2	46.5	100.3	96.0	94.0	99.1	111.0	129.6	124.2	118.8
Natural Gas	209.3	1,248.7	1,745.8	1,252.1	1,637.5	1,557.2	1,712.8	1,967.7	2,147.0	1,981.9
Petroleum	293.2	2,364.5	2,655.6	1,996.7	2,268.8	1,924.3	R1,820.0	R1,931.5	R1,571.3	1,660.7
Asphalt and Road Oil	39.0	462.2	439.0	517.9	585.1	461.6	308.2	308.8	301.0	246.7
Distillate Fuel	31.2	489.1	586.9	346.6	443.8	414.5	504.7	590.6	400.2	352.6
Kerosene	1.5	67.9	17.4	5.2	11.9	1.0	1.5	1.3	1.1	.8
LPG	41.1	191.9	343.2	332.3	362.2	336.2	R333.3	R292.6	R186.3	272.6
Lubricants	46.6	183.1	204.4	176.9	163.0	180.8	168.8	175.1	180.2	213.0
Motor Gasoline	28.6	90.9	139.8	111.5	118.6	110.8	130.0	141.6	140.5	159.3
Residual Fuel	21.3	204.4	428.9	179.2	208.4	99.2	25.5	24.1	16.8	18.5
Other	84.0	674.9	496.0	327.1	375.7	320.0	348.2	397.5	345.2	397.4
Electricity	392.2	2,607.7	3,725.4	3,469.7	3,241.7	3,387.0	3,738.1	3,826.8	4,011.5	4,099.5
Transportation Sector	**3,750.3**	**19,290.4**	**18,015.7**	**14,185.3**	**15,227.8**	**16,205.0**	**18,210.2**	**20,915.6**	**R18,699.1**	**20,548.4**
Primary Energy	3,749.8	19,282.8	18,000.4	14,170.8	15,217.9	16,193.1	18,199.9	20,903.2	R18,684.2	20,532.3
Coal	.1	–	–	–	–	–	–	–	–	–
Petroleum	3,749.7	19,282.8	18,000.4	14,170.8	15,217.9	16,193.1	18,199.9	20,903.2	R18,684.2	20,532.3
Aviation Gasoline	23.9	13.0	68.3	56.8	41.3	49.1	54.4	52.0	R48.0	45.7
Distillate Fuel	243.7	1,720.6	2,017.9	1,859.4	1,884.6	2,300.8	2,511.1	2,792.5	2,631.2	2,569.2
Jet Fuel	242.7	2,166.4	2,257.8	1,685.3	1,811.7	1,784.5	2,286.8	3,081.3	R2,438.9	2,219.3
LPG	1.6	10.0	42.6	30.6	25.9	28.1	24.9	30.5	R25.5	21.9
Lubricants	75.7	244.2	272.5	235.9	217.3	241.1	225.0	233.4	240.2	284.0
Motor Gasoline	3,098.8	13,392.0	11,972.3	9,643.3	10,455.5	11,123.6	12,302.4	13,471.6	R12,618.6	15,017.9
Residual Fuel	63.3	1,736.6	1,369.0	659.5	781.5	665.9	795.3	1,241.9	681.8	374.5
Electricity	.5	7.6	15.2	14.5	9.9	11.9	10.3	12.4	R14.9	16.1
Total Energy	**6,977.0**	**36,079.3**	**41,437.4**	**35,663.8**	**37,940.7**	**39,862.2**	**R43,638.7**	**R48,346.7**	**R47,309.1**	**49,417.7**
Primary Energy — Four Sectors	5,090.3	26,519.2	27,294.0	21,443.4	23,606.5	24,288.3	R26,553.5	R29,928.9	R27,896.6	29,040.2
Electricity	1,886.7	9,560.0	14,143.4	14,220.3	14,334.2	15,574.0	17,085.2	18,417.8	19,412.5	20,377.5
Electric Utility Sector [a]	**282.1**	**4,018.4**	**3,498.6**	**1,694.0**	**2,060.3**	**2,131.0**	**2,168.0**	**1,882.4**	**1,572.2**	**1,802.4**
Coal	–	–	–	–	–	–	–	–	–	–
Natural Gas	220.1	1,925.0	3,130.1	1,304.4	1,670.1	1,621.7	1,574.3	1,429.0	1,324.3	1,584.8
Petroleum	54.9	2,067.0	164.4	115.8	67.3	212.2	297.8	201.4	20.9	9.9
Heavy Oil [b]	54.7	1,980.8	154.2	106.1	58.9	208.3	291.5	196.4	18.0	6.6
Light Oil [b]	.2	86.2	10.2	9.7	8.4	3.9	6.3	5.0	3.0	3.3
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	6.7	26.1	204.0	273.7	322.6	297.0	295.9	251.9	226.9	207.7
Biomass Fuels	.3	.4	*	.1	.2	.1	([d])	([d])	([d])	([d])
Primary Energy — Five Sectors [c]	**5,372.4**	**30,537.6**	**30,792.6**	**23,137.4**	**25,666.8**	**26,419.3**	**R28,721.5**	**R31,811.3**	**R29,468.8**	**30,842.6**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[d] Utilities used biomass fuels at no charge or received a fee for accepting them.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Colorado 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.33	1.00	1.17	1.18	1.14	1.08	1.08	1.07	1.10	1.11
Coking Coal	.43	1.97	–	–	–	–	–	–	–	–
Steam Coal	.30	.89	1.17	1.18	1.14	1.08	1.08	1.07	1.10	1.11
Natural Gas	.48	2.98	4.71	4.54	4.26	3.95	3.85	3.92	3.74	3.68
Petroleum	1.88	7.93	8.00	6.07	6.47	6.24	7.10	8.07	7.97	7.94
Asphalt and Road Oil	.58	3.40	4.73	4.30	3.03	3.19	2.73	2.59	3.24	2.89
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.04	6.45	6.26	5.52	5.86	5.46	6.66	7.70	7.33	6.81
Jet Fuel	.76	6.59	5.94	3.92	4.05	3.78	4.30	5.59	4.87	4.47
Kerosene	.98	5.78	7.69	4.66	4.23	4.10	5.39	6.99	7.06	6.02
LPG	1.60	5.88	6.39	6.21	4.80	3.27	5.97	R6.55	R7.91	8.03
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.72	9.36	9.28	6.76	7.59	7.34	8.13	9.29	9.23	9.56
Residual Fuel	.44	3.88	3.80	2.34	2.63	2.80	1.96	2.64	3.86	3.22
Other [a]	1.09	7.39	6.78	5.24	5.01	4.35	4.04	3.98	3.63	3.12
Nuclear Fuel	–	.21	–	.27	.28	.29	.28	–	–	–
Biomass Fuels at Utilities	–	–	.79	.32	.95	.87	.80	.80	.80	–
Primary Energy — Five Sectors [b]	1.03	4.33	4.72	3.93	4.01	3.77	3.98	4.37	R4.37	4.35
Electric Utility Fuel [c]	.25	1.12	1.21	1.21	1.15	1.09	1.08	1.08	1.11	1.11
Electricity Purchased by End Users	6.09	12.94	17.88	17.69	17.12	17.32	17.48	17.31	17.49	17.69
Total Energy	1.52	6.49	8.20	7.24	7.35	7.13	7.57	8.09	7.93	7.98
	Expenditures in Millions of Dollars									
Coal	38.3	248.2	349.9	349.5	336.8	337.3	349.0	353.3	355.4	369.0
Coking Coal	12.0	50.2	–	–	–	–	–	–	–	–
Steam Coal	26.3	197.9	349.9	349.5	336.8	337.3	349.0	353.3	355.4	369.0
Natural Gas	128.2	706.8	931.2	810.9	793.7	817.3	837.0	820.8	854.2	823.3
Petroleum	503.5	2,577.0	2,598.7	2,007.3	2,134.8	2,073.9	R2,242.1	R2,579.6	R2,646.5	2,705.5
Asphalt and Road Oil	12.3	51.6	97.5	88.2	62.6	75.2	53.1	55.9	66.8	61.1
Aviation Gasoline	3.7	12.1	7.1	7.5	5.8	6.2	7.6	7.8	6.8	5.9
Distillate Fuel	30.9	422.1	348.2	325.5	336.7	355.7	395.9	465.0	504.2	492.6
Jet Fuel	32.0	175.9	264.1	178.8	192.0	138.0	129.8	193.0	R179.5	186.0
Kerosene	4.5	13.5	4.0	1.6	2.0	2.0	6.9	2.0	2.0	1.7
LPG	27.5	83.3	51.3	47.3	39.6	30.4	R78.8	R70.5	R96.1	88.7
Lubricants	13.0	55.8	62.3	53.9	49.7	55.1	51.4	53.4	54.9	64.9
Motor Gasoline	372.5	1,685.6	1,742.4	1,297.1	1,439.3	1,404.9	1,512.7	1,725.8	R1,730.1	1,798.2
Residual Fuel	3.9	43.6	3.7	1.1	*	.5	.1	*	1.1	.7
Other [a]	3.1	33.5	18.0	6.3	7.1	6.0	5.8	6.2	5.0	5.6
Nuclear Fuel	–	1.5	–	.2	.5	2.1	1.6	–	–	–
Biomass Fuels at Utilities	–	–	*	*	*	*	*	*	*	–
Primary Energy — Five Sectors [b]	670.0	3,533.4	3,879.8	3,167.8	3,265.9	3,230.6	R3,429.7	R3,753.7	R3,856.1	3,897.9
Electric Utility Fuel [c]	-30.6	-272.5	-342.6	-340.8	-332.3	-337.3	-350.7	-344.7	-345.8	-357.3
Electricity Purchased by End Users	222.3	918.2	1,608.3	1,621.9	1,622.8	1,716.9	1,775.2	1,800.4	1,858.4	1,902.3
Total Energy	861.7	4,179.0	5,145.4	4,448.9	4,556.4	4,610.2	R4,854.1	R5,209.3	R5,368.7	5,442.9

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
*Value less than 0.05 million dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Colorado 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1.71**	**5.72**	**8.76**	**9.06**	**8.61**	**8.22**	**8.60**	**8.69**	**8.53**	**8.78**
Primary Energy	.88	3.53	5.18	5.08	4.74	4.27	4.66	4.70	4.64	4.64
Coal	.90	2.54	2.83	2.78	2.40	2.12	2.43	2.41	2.36	2.43
Natural Gas	.74	3.26	5.11	4.99	4.74	4.39	4.57	4.55	4.46	4.46
Petroleum	1.74	7.31	6.71	6.61	5.07	2.63	6.10	7.02	7.30	7.56
Distillate Fuel	1.28	6.96	6.91	4.32	3.49	3.47	5.09	6.19	5.90	4.82
Kerosene	1.51	7.98	9.20	5.75	4.65	4.62	6.78	8.24	7.85	6.42
LPG	1.79	7.32	6.55	6.81	5.18	2.51	6.11	7.02	7.32	7.66
Electricity	7.73	15.00	20.28	20.60	20.01	20.31	20.56	20.57	20.72	21.11
Commercial Sector	**1.66**	**6.09**	**9.48**	**9.51**	**8.91**	**8.69**	**9.17**	**9.27**	**9.15**	**9.29**
Primary Energy	.62	3.26	4.64	4.39	4.11	3.77	4.05	4.11	4.11	4.02
Coal	.39	1.20	1.31	1.24	1.39	1.36	1.34	1.29	1.39	1.51
Natural Gas	.59	3.03	4.61	4.41	4.15	3.83	4.00	3.97	3.92	3.91
Petroleum	1.28	7.08	6.16	5.03	4.20	3.62	4.98	6.36	6.48	5.43
Distillate Fuel	1.06	6.48	5.45	4.83	3.61	2.95	3.83	4.95	4.30	4.04
Kerosene	.89	5.65	5.98	3.67	4.02	3.78	5.08	5.98	6.35	4.98
LPG	1.18	4.79	6.12	5.10	4.09	4.21	5.86	5.93	8.68	8.50
Motor Gasoline	2.72	9.36	9.28	6.76	7.59	7.34	8.13	9.29	9.23	9.56
Residual Fuel	.38	4.35	4.07	2.34	–	–	1.80	–	–	1.75
Electricity	5.97	14.37	18.34	17.73	17.05	17.03	17.17	16.89	17.07	17.20
Industrial Sector	**.65**	**4.20**	**5.65**	**5.19**	**5.14**	**4.97**	**4.79**	**4.94**	**R5.01**	**4.74**
Primary Energy	.53	3.44	4.34	3.64	3.37	3.35	3.18	3.28	**R3.44**	3.18
Coal	.42	1.66	1.31	1.24	1.39	1.36	1.34	1.29	1.39	1.51
Coking Coal	.43	1.97	–	–	–	–	–	–	–	–
Steam Coal	.39	1.20	1.31	1.24	1.39	1.36	1.34	1.29	1.39	1.51
Natural Gas	.29	2.65	4.01	3.82	3.60	3.43	2.50	2.77	2.27	2.15
Petroleum	.97	5.17	5.80	4.35	3.93	3.83	4.40	**R4.45**	**R5.25**	4.60
Asphalt and Road Oil	.58	3.40	4.73	4.30	3.03	3.19	2.73	2.59	3.24	2.89
Distillate Fuel	.83	5.33	5.25	3.23	3.53	3.32	4.47	5.26	5.58	4.38
Kerosene	.89	5.65	5.98	3.67	4.02	3.78	5.08	5.98	6.35	4.98
LPG	1.18	4.79	6.12	5.10	4.09	4.21	5.86	5.93	8.68	8.50
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.72	9.36	9.28	6.76	7.59	7.34	8.13	9.29	9.23	9.56
Residual Fuel	.47	3.82	4.07	2.34	2.68	1.82	1.80	2.46	2.26	1.75
Other	1.09	7.39	6.78	5.24	5.01	4.35	4.04	3.98	3.63	3.12
Electricity	3.50	9.40	12.67	12.95	12.78	13.22	13.32	13.17	13.38	13.44
Transportation Sector	**2.17**	**8.75**	**8.43**	**6.38**	**6.98**	**6.88**	**7.68**	**8.76**	**R8.54**	**8.70**
Primary Energy	2.17	8.75	8.43	6.38	6.98	6.88	7.68	8.76	**R8.54**	8.70
Coal	.39	–	–	–	–	–	–	–	–	–
Petroleum	2.17	8.75	8.43	6.38	6.98	6.88	7.68	8.76	**R8.54**	8.70
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.20	7.13	6.70	6.91	7.28	7.13	7.85	8.80	8.39	8.62
Jet Fuel	.76	6.59	5.94	3.92	4.05	3.78	4.30	5.59	4.87	4.47
LPG	1.18	4.79	6.12	5.10	4.09	4.21	5.86	5.93	8.68	8.50
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.72	9.36	9.28	6.76	7.59	7.34	8.13	9.29	9.23	9.56
Residual Fuel	.38	–	3.79	2.01	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.52**	**6.49**	**8.20**	**7.24**	**7.35**	**7.13**	**7.57**	**8.09**	**7.93**	**7.98**
Primary Energy — Four Sectors	1.20	5.69	6.58	5.40	5.58	5.29	5.71	6.31	**R6.15**	6.16
Electricity	6.09	12.94	17.88	17.69	17.12	17.32	17.48	17.31	17.49	17.69
Electric Utility Sector [a]	**.25**	**1.12**	**1.21**	**1.21**	**1.15**	**1.09**	**1.08**	**1.08**	**1.11**	**1.11**
Coal	.26	.86	1.15	1.18	1.12	1.07	1.06	1.06	1.09	1.09
Natural Gas	.24	2.64	3.53	3.00	2.29	2.29	2.28	2.17	2.15	2.14
Petroleum	.37	5.65	5.79	3.37	3.86	3.52	4.07	5.34	4.39	4.08
Heavy Oil [b]	.36	4.38	4.00	–	2.35	2.80	2.74	3.09	3.86	3.23
Light Oil [b]	.45	6.50	5.92	3.37	3.86	3.88	4.10	5.34	5.13	4.79
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	.21	–	.27	.28	.29	.28	–	–	–
Biomass Fuels	–	–	.79	.32	.95	.87	.80	.80	.80	–
Primary Energy — Five Sectors [c]	**1.03**	**4.33**	**4.72**	**3.93**	**4.01**	**3.77**	**3.98**	**4.37**	**R4.37**	**4.35**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Colorado 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**185.9**	**684.1**	**1,116.1**	**1,068.0**	**1,069.7**	**1,088.8**	**1,136.9**	**1,153.3**	**1,214.7**	**1,217.4**
Primary Energy	84.1	341.6	502.9	444.9	440.2	426.9	463.9	466.3	500.7	481.4
Coal	1.6	1.9	3.3	2.2	1.5	1.5	1.2	1.0	1.2	1.0
Natural Gas	59.4	290.6	459.9	406.6	408.9	410.6	424.0	420.1	447.2	431.4
Petroleum	23.1	49.1	39.6	36.1	29.8	14.8	38.8	45.2	52.3	48.9
Distillate Fuel	1.3	3.2	4.3	1.6	1.2	1.1	1.2	1.0	.9	.6
Kerosene	1.0	1.0	2.6	1.0	.7	.8	1.6	1.0	1.1	1.3
LPG	20.9	44.9	32.8	33.6	27.9	12.9	35.9	43.2	50.3	47.0
Electricity	101.8	342.5	613.3	623.0	629.5	662.0	673.0	687.0	714.0	736.0
Commercial Sector	**134.4**	**594.0**	**1,129.0**	**1,051.7**	**1,036.0**	**1,078.7**	**1,131.2**	**1,128.8**	**1,172.8**	**1,170.0**
Primary Energy	40.9	237.1	356.8	298.6	300.9	294.7	304.2	297.8	321.8	304.1
Coal	1.3	1.7	2.8	1.8	1.6	1.8	1.2	1.0	1.3	1.2
Natural Gas	33.7	201.9	317.8	272.8	267.1	264.5	273.3	264.5	278.6	265.8
Petroleum	5.9	33.6	36.2	24.0	32.3	28.4	29.7	32.2	42.0	37.1
Distillate Fuel	.9	12.8	21.6	11.4	20.2	17.5	12.0	12.6	14.8	19.6
Kerosene	.7	.2	.5	.3	.6	.3	4.5	.3	.4	.2
LPG	2.4	5.2	5.4	4.4	3.9	3.8	6.1	6.4	10.5	9.2
Motor Gasoline	1.8	15.4	8.6	6.8	7.6	6.8	7.0	12.9	16.3	8.1
Residual Fuel	.1	.1	*	1.1	–	–	.1	–	–	*
Electricity	93.5	356.8	772.2	753.0	735.1	784.0	827.0	831.0	850.9	866.0
Industrial Sector	**121.5**	**769.0**	**631.1**	**591.7**	**552.1**	**618.9**	**R623.5**	**R630.3**	**R695.8**	**695.2**
Primary Energy	94.6	550.2	408.4	345.9	293.8	348.0	R348.4	R348.0	R402.4	394.9
Coal	17.4	71.3	22.4	20.5	21.8	19.6	17.9	19.8	21.6	22.3
Coking Coal	12.0	50.2	–	–	–	–	–	–	–	–
Steam Coal	5.4	21.1	22.4	20.5	21.8	19.6	17.9	19.8	21.6	22.3
Natural Gas	23.1	131.6	136.3	117.6	100.0	123.2	121.1	124.4	116.1	115.3
Petroleum	54.1	347.2	249.6	207.7	172.0	205.2	R209.4	R203.8	R264.7	257.3
Asphalt and Road Oil	12.3	51.6	97.5	88.2	62.6	75.2	53.1	55.9	66.8	61.1
Distillate Fuel	10.1	123.7	70.2	64.9	54.7	71.4	73.5	82.2	114.8	110.9
Kerosene	2.8	12.3	.9	.4	.7	.8	.8	.6	.6	.2
LPG	3.6	32.4	11.6	8.2	7.2	12.9	R35.5	R19.2	R32.7	30.5
Lubricants	4.2	20.8	23.2	20.1	18.5	20.5	19.1	19.8	20.4	24.1
Motor Gasoline	14.8	34.2	28.3	19.7	21.1	18.4	21.6	19.8	24.4	24.8
Residual Fuel	3.0	38.8	*	*	*	*	*	*	*	*
Other	3.1	33.5	18.0	6.3	7.1	6.0	5.8	6.2	5.0	5.6
Electricity	26.9	218.8	222.7	245.8	258.3	270.9	275.1	282.3	293.4	300.4
Transportation Sector	**419.9**	**2,131.9**	**2,269.2**	**1,737.6**	**1,898.7**	**1,823.7**	**1,962.6**	**2,296.8**	**R2,285.4**	**2,360.2**
Primary Energy	419.9	2,131.9	2,269.2	1,737.6	1,898.7	1,823.7	1,962.6	2,296.8	R2,285.4	2,360.2
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	419.8	2,131.9	2,269.2	1,737.6	1,898.7	1,823.7	1,962.6	2,296.8	R2,285.4	2,360.2
Aviation Gasoline	3.7	12.1	7.1	7.5	5.8	6.2	7.6	7.8	6.8	5.9
Distillate Fuel	18.6	272.1	248.2	245.7	258.6	264.4	307.5	367.7	372.6	360.2
Jet Fuel	32.0	175.9	264.1	178.8	192.0	138.0	129.8	193.0	R179.5	186.0
LPG	.6	.8	1.5	1.1	.6	.8	1.3	1.6	2.6	2.1
Lubricants	8.8	35.1	39.1	33.9	31.2	34.6	32.3	33.5	34.5	40.8
Motor Gasoline	356.0	1,636.1	1,705.6	1,270.6	1,410.6	1,379.7	1,484.1	1,693.2	1,689.4	1,765.3
Residual Fuel	.2	–	3.5	*	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**861.7**	**4,179.0**	**5,145.4**	**4,448.9**	**4,556.4**	**4,610.2**	**R4,854.1**	**R5,209.3**	**R5,368.7**	**5,442.9**
Primary Energy — Four Sectors	639.4	3,260.9	3,537.1	2,827.0	2,933.6	2,893.3	R3,079.0	R3,408.9	R3,510.3	3,540.6
Electricity	222.3	918.2	1,608.3	1,621.9	1,622.8	1,716.9	1,775.2	1,800.4	1,858.4	1,902.3
Electric Utility Sector [a]	**30.6**	**272.5**	**342.6**	**340.8**	**332.3**	**337.3**	**350.7**	**344.7**	**345.8**	**357.3**
Coal	18.0	173.3	321.3	324.9	312.0	314.3	328.7	331.4	331.4	344.5
Natural Gas	12.0	82.7	17.2	13.9	17.7	19.1	18.7	11.8	12.2	10.7
Petroleum	.6	15.1	4.1	1.9	2.0	1.8	1.7	1.6	2.2	2.1
Heavy Oil [b]	.6	4.7	.2	–	*	.5	*	*	1.1	.7
Light Oil [b]	.1	10.3	3.9	1.9	2.0	1.3	1.7	1.6	1.1	1.3
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	1.5	–	.2	.5	2.1	1.6	–	–	–
Biomass Fuels	–	–	*	*	*	*	*	*	*	–
Primary Energy — Five Sectors [c]	**670.0**	**3,533.4**	**3,879.8**	**3,167.8**	**3,265.9**	**3,230.6**	**R3,429.7**	**R3,753.7**	**R3,856.1**	**3,897.9**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Connecticut 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.48	3.35	2.40	2.32	2.45	2.31	2.16	2.15	2.19	1.99
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.48	3.35	2.40	2.32	2.45	2.31	2.16	2.15	2.19	1.99
Natural Gas	1.57	4.97	7.20	6.86	5.94	6.04	6.35	6.40	6.49	6.85
Petroleum	1.37	7.09	7.45	5.67	5.99	6.13	6.61	7.61	7.49	7.60
Asphalt and Road Oil	.68	3.67	5.20	4.86	3.58	3.39	3.20	3.38	3.05	2.80
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.29	6.82	8.25	6.61	6.28	6.49	7.19	8.50	8.12	7.28
Jet Fuel	.75	6.50	6.29	4.50	4.34	4.00	4.67	5.91	5.10	4.68
Kerosene	1.40	7.17	8.79	6.87	6.55	6.33	6.98	8.61	7.87	7.34
LPG	1.98	6.85	10.95	10.66	10.02	10.79	11.12	12.31	R13.89	11.56
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.96	10.10	9.37	7.45	7.93	8.91	9.30	10.06	10.04	10.19
Residual Fuel	.40	4.66	4.32	2.56	2.97	2.42	2.88	3.04	2.49	2.43
Other [a]	.91	7.68	7.94	5.19	6.05	5.08	5.91	6.68	5.96	6.08
Nuclear Fuel	.13	.38	.91	.91	.92	.86	.89	.84	.80	.71
Biomass Fuels at Utilities	–	–	–	–	–	.87	([d])	([d])	([d])	([d])
Primary Energy — Five Sectors [b]	1.26	5.65	5.95	4.46	4.47	4.51	4.99	5.37	5.82	5.58
Electric Utility Fuel [c]	.35	2.60	2.38	1.54	1.61	1.42	1.64	1.53	1.50	1.17
Electricity Purchased by End Users	6.27	19.10	26.62	24.65	24.27	24.55	25.68	26.83	28.13	29.41
Total Energy	2.09	9.07	11.20	9.66	9.61	9.97	10.49	11.57	11.73	11.56
	Expenditures in Millions of Dollars									
Coal	23.5	1.2	51.1	49.1	52.4	53.3	51.1	55.1	49.5	44.4
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	23.5	1.2	51.1	49.1	52.4	53.3	51.1	55.1	49.5	44.4
Natural Gas	96.4	368.3	577.0	553.0	556.8	546.3	620.3	642.2	678.4	779.5
Petroleum	802.3	3,612.9	3,317.1	2,641.8	2,727.2	2,992.9	3,316.7	R3,255.2	R3,127.5	3,129.4
Asphalt and Road Oil	4.6	15.3	72.2	68.6	50.9	41.7	38.2	35.6	40.0	31.2
Aviation Gasoline	1.4	4.1	3.6	3.1	2.1	1.8	1.7	4.4	R1.2	1.2
Distillate Fuel	181.0	885.8	909.1	793.6	775.0	868.6	1,073.0	1,009.5	938.1	943.5
Jet Fuel	12.3	72.5	38.5	31.9	43.7	48.8	59.2	78.4	R64.7	60.7
Kerosene	6.2	20.0	35.5	21.8	21.5	26.0	26.6	15.4	16.9	10.3
LPG	13.9	37.8	50.6	44.0	57.1	59.8	64.9	R71.0	R74.6	78.9
Lubricants	17.5	39.7	44.3	38.3	35.3	39.2	36.5	37.9	39.0	46.1
Motor Gasoline	445.2	1,602.8	1,525.5	1,247.2	1,348.0	1,539.8	1,575.7	1,636.1	1,680.7	1,744.5
Residual Fuel	89.3	859.2	571.4	358.2	353.4	332.8	401.7	317.3	227.4	166.0
Other [a]	31.0	75.8	66.5	35.2	40.2	34.4	39.3	49.6	44.8	46.9
Nuclear Fuel	5.3	49.1	125.5	182.7	203.0	205.2	186.1	177.5	105.5	126.3
Biomass Fuels at Utilities	–	–	–	–	–	2.2	([d])	([d])	([d])	([d])
Primary Energy — Five Sectors [b]	927.5	4,031.6	4,070.8	3,426.7	3,539.5	3,799.9	R4,174.2	4,130.1	R3,960.9	4,079.7
Electric Utility Fuel [c]	-76.1	-688.1	-634.9	-521.1	-561.8	-541.4	-588.1	-512.4	-367.2	-307.5
Electricity Purchased by End Users	345.0	1,381.4	2,132.6	2,062.9	2,130.0	2,255.1	2,398.0	2,489.0	2,608.0	2,721.9
Total Energy	1,196.4	4,724.8	5,568.5	4,968.5	5,107.7	5,513.6	5,984.1	6,106.7	R6,201.7	6,494.0

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Utilities used biomass fuels at no charge or received a fee for accepting them.

R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Connecticut 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.47**	**9.39**	**13.42**	**11.89**	**11.59**	**11.51**	**12.03**	**13.66**	**14.06**	**13.30**
Primary Energy	1.62	6.73	8.60	7.52	7.04	7.05	7.61	8.61	8.55	7.92
Coal	1.30	4.47	4.39	4.19	3.85	4.24	4.21	4.37	4.08	4.17
Natural Gas	1.88	5.72	8.88	8.57	7.96	7.63	7.98	8.31	8.48	8.72
Petroleum	1.53	7.14	8.48	7.02	6.59	6.77	7.44	8.78	8.61	7.52
Distillate Fuel	1.48	7.07	8.37	6.90	6.46	6.61	7.23	8.55	8.27	7.24
Kerosene	1.70	8.15	8.98	7.40	6.94	7.10	7.76	9.18	8.88	7.77
LPG	2.70	9.21	10.41	10.52	9.13	10.96	12.74	13.60	14.99	12.43
Electricity	7.21	20.27	29.24	27.20	26.82	27.03	28.09	29.32	30.79	32.45
Commercial Sector	**2.60**	**10.31**	**13.55**	**12.33**	**12.24**	**12.52**	**12.91**	**14.39**	**15.49**	**15.04**
Primary Energy	1.13	5.43	6.54	5.27	5.06	4.87	5.49	6.12	6.64	6.65
Coal	.79	1.67	2.38	2.13	2.73	2.56	2.61	2.63	2.66	2.66
Natural Gas	1.45	4.67	6.59	6.24	5.59	5.45	5.88	6.10	6.69	7.00
Petroleum	1.00	6.06	6.54	4.53	4.57	4.30	5.11	6.16	6.60	6.35
Distillate Fuel	1.09	6.37	7.27	5.15	4.83	4.72	5.74	6.87	6.46	5.59
Kerosene	.79	6.29	7.70	5.24	5.64	5.38	6.40	7.68	7.02	5.75
LPG	1.42	5.31	11.48	10.80	10.95	10.63	9.28	10.80	11.94	9.96
Motor Gasoline	2.96	10.10	9.37	7.45	7.93	8.91	9.30	10.06	10.04	10.19
Residual Fuel	.42	4.59	4.68	2.79	3.12	2.57	3.04	3.25	2.69	2.53
Electricity	7.15	19.84	27.30	25.26	24.53	24.74	25.99	27.09	28.21	29.30
Industrial Sector	**1.06**	**7.04**	**9.88**	**8.46**	**8.21**	**8.18**	**8.81**	**9.32**	**8.89**	**8.87**
Primary Energy	.72	5.13	6.10	4.69	4.57	4.31	4.74	5.17	R4.87	4.80
Coal	.79	–	2.38	2.13	2.73	2.56	2.61	2.63	2.66	2.66
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.79	–	2.38	2.13	2.73	2.56	2.61	2.63	2.66	2.66
Natural Gas	1.03	4.08	5.38	4.53	4.08	3.92	4.36	4.65	4.69	4.79
Petroleum	.69	5.40	6.41	4.76	4.78	4.50	4.91	5.53	R5.03	4.84
Asphalt and Road Oil	.68	3.67	5.20	4.86	3.58	3.39	3.20	3.38	3.05	2.80
Distillate Fuel	.73	5.75	6.72	4.57	4.92	4.70	5.59	6.70	6.13	5.02
Kerosene	.79	6.29	7.70	5.24	5.64	5.38	6.40	7.68	7.02	5.75
LPG	1.42	5.31	11.48	10.80	10.95	10.63	9.28	10.80	11.94	9.96
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.96	10.10	9.37	7.45	7.93	8.91	9.30	10.06	10.04	10.19
Residual Fuel	.43	4.55	4.68	2.79	3.12	2.57	3.04	3.25	2.69	2.53
Other	.91	7.68	7.94	5.19	6.05	5.08	5.91	6.68	5.96	6.08
Electricity	4.27	16.60	21.93	20.00	19.93	20.17	21.11	22.15	23.21	24.09
Transportation Sector	**2.63**	**9.69**	**9.28**	**7.42**	**7.70**	**8.49**	**8.88**	**9.75**	R**9.67**	**9.70**
Primary Energy	2.63	9.69	9.28	7.42	7.70	8.49	8.88	9.75	R9.67	9.70
Coal	.79	–	–	–	–	–	–	–	–	–
Petroleum	2.63	9.69	9.28	7.42	7.70	8.49	8.88	9.75	R9.67	9.70
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.39	7.40	9.19	7.60	7.35	7.78	8.33	9.74	9.42	8.90
Jet Fuel	.75	6.51	6.29	4.50	4.34	4.00	4.67	5.91	5.10	4.68
LPG	1.42	5.31	11.48	10.80	10.95	10.63	9.28	10.80	11.94	9.96
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.96	10.10	9.37	7.45	7.93	8.91	9.30	10.06	10.04	10.19
Residual Fuel	.38	3.88	4.06	2.32	2.73	2.20	2.63	2.74	2.29	2.22
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**2.09**	**9.07**	**11.20**	**9.66**	**9.61**	**9.97**	**10.49**	**11.57**	**11.73**	**11.56**
Primary Energy — Four Sectors	1.64	7.45	8.23	6.75	6.71	7.06	7.52	8.32	R8.24	8.04
Electricity	6.27	19.10	26.62	24.65	24.27	24.55	25.68	26.83	28.13	29.41
Electric Utility Sector [a]	**.35**	**2.60**	**2.38**	**1.54**	**1.61**	**1.42**	**1.64**	**1.53**	**1.50**	**1.17**
Coal	.45	–	2.35	2.27	2.42	2.29	2.14	2.13	2.17	1.95
Natural Gas	.34	–	3.39	2.09	2.37	2.17	2.51	2.70	2.09	2.66
Petroleum	.38	4.71	4.25	2.51	2.94	2.41	2.87	3.02	2.49	2.42
Heavy Oil [b]	.38	4.70	4.24	2.51	2.93	2.40	2.85	3.01	2.47	2.40
Light Oil [b]	.37	6.13	5.88	3.59	4.01	3.63	4.26	5.67	4.92	4.82
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	.13	.38	.91	.91	.92	.86	.89	.84	.80	.71
Biomass Fuels	–	–	–	–	–	.87	([d])	([d])	([d])	([d])
Primary Energy — Five Sectors [c]	**1.26**	**5.65**	**5.95**	**4.46**	**4.47**	**4.51**	**4.99**	**5.37**	**5.82**	**5.58**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[d] Utilities used biomass fuels at no charge or received a fee for accepting them.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Connecticut 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**353.6**	**1,342.0**	**1,694.5**	**1,659.2**	**1,662.9**	**1,813.3**	**1,993.1**	**1,981.6**	**2,024.2**	**2,172.8**
Primary Energy	196.4	773.7	832.6	816.6	778.0	863.3	988.0	943.6	927.3	1,010.8
Coal	.8	1.0	2.2	2.2	1.5	.7	.8	.8	.8	1.0
Natural Gas	59.6	187.4	299.8	309.8	296.7	310.7	335.7	321.3	325.0	379.9
Petroleum	136.0	585.3	530.6	504.5	479.8	551.8	651.6	621.5	601.5	630.0
Distillate Fuel	122.7	554.3	475.8	465.2	437.3	505.9	599.6	569.1	541.2	566.4
Kerosene	5.1	10.8	30.8	17.7	16.0	16.2	12.6	10.2	8.8	8.6
LPG	8.2	20.1	24.0	21.5	26.5	29.7	39.4	42.2	51.5	55.0
Electricity	157.3	568.4	861.9	842.6	884.9	950.0	1,005.0	1,038.0	1,096.9	1,162.0
Commercial Sector	**169.6**	**731.2**	**1,195.1**	**1,104.1**	**1,109.9**	**1,145.4**	**1,295.2**	**1,333.1**	**1,405.2**	**1,504.1**
Primary Energy	56.1	254.8	381.8	305.3	289.8	274.4	351.2	343.1	355.2	419.2
Coal	.3	.2	.8	.8	.7	.3	.3	.3	.3	.7
Natural Gas	21.3	96.1	166.9	158.9	158.9	154.0	187.1	185.3	185.2	214.8
Petroleum	34.4	158.4	214.1	145.6	130.2	120.0	163.8	157.5	169.6	203.7
Distillate Fuel	29.5	107.8	150.2	105.8	88.2	83.1	114.6	117.2	112.2	95.9
Kerosene	.1	.2	2.8	2.0	3.6	2.0	5.3	2.2	6.7	1.5
LPG	.8	2.0	4.7	3.9	5.6	5.1	5.1	5.9	7.2	7.8
Motor Gasoline	1.5	14.6	7.0	5.7	7.2	7.7	9.3	10.7	34.6	84.3
Residual Fuel	2.6	33.8	49.4	28.2	25.6	22.0	29.6	21.4	9.0	14.2
Electricity	113.5	476.4	813.3	798.8	820.1	871.0	944.0	990.0	1,050.0	1,084.9
Industrial Sector	**193.4**	**857.8**	**861.9**	**723.9**	**739.1**	**722.2**	**R753.5**	**793.0**	**R805.5**	**828.9**
Primary Energy	119.2	521.2	404.6	302.4	314.2	288.2	R304.5	332.0	R344.4	353.9
Coal	2.7	–	.2	.4	.2	1.0	.1	.1	.2	.8
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	2.7	–	.2	.4	.2	1.0	.1	.1	.2	.8
Natural Gas	15.3	84.7	105.0	82.6	83.4	78.7	89.0	122.2	158.1	179.0
Petroleum	101.1	436.4	299.4	219.3	230.6	208.5	215.4	R209.7	R186.2	174.1
Asphalt and Road Oil	4.6	15.3	72.2	68.6	50.9	41.7	38.2	35.6	40.0	31.2
Distillate Fuel	8.3	108.4	42.0	28.1	48.7	36.5	47.4	39.8	38.5	27.3
Kerosene	1.0	9.0	1.9	2.1	2.0	7.8	8.7	2.9	1.5	.3
LPG	4.8	15.3	20.7	17.7	24.1	23.8	19.3	R21.4	R14.1	15.0
Lubricants	10.2	18.1	20.2	17.5	16.1	17.9	16.7	17.3	17.8	21.1
Motor Gasoline	4.2	3.5	11.1	9.3	9.8	12.5	13.5	13.8	12.6	12.9
Residual Fuel	37.0	191.1	64.8	40.8	38.9	33.9	32.4	29.3	16.8	19.5
Other	31.0	75.8	66.5	35.2	40.2	34.4	39.3	49.6	44.8	46.9
Electricity	74.3	336.6	457.4	421.5	424.9	434.0	449.0	461.0	461.0	475.0
Transportation Sector	**479.8**	**1,793.8**	**1,817.0**	**1,481.4**	**1,595.7**	**1,832.7**	**1,942.3**	**1,999.0**	**R1,966.8**	**1,988.2**
Primary Energy	479.8	1,793.8	1,817.0	1,481.4	1,595.7	1,832.7	1,942.3	1,999.0	R1,966.8	1,988.2
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	479.8	1,793.8	1,817.0	1,481.4	1,595.7	1,832.7	1,942.3	1,999.0	R1,966.8	1,988.2
Aviation Gasoline	1.4	4.1	3.6	3.1	2.1	1.8	1.7	4.4	R1.2	1.2
Distillate Fuel	18.3	111.2	238.2	192.0	197.6	238.3	306.5	281.2	243.0	252.1
Jet Fuel	12.3	70.7	38.5	31.9	43.7	48.8	59.2	78.4	R64.7	60.7
LPG	.1	.3	1.3	.9	.9	1.2	1.1	1.4	1.7	1.2
Lubricants	7.3	21.5	24.0	20.8	19.2	21.3	19.9	20.6	21.2	25.1
Motor Gasoline	439.6	1,584.7	1,507.4	1,232.2	1,331.0	1,519.6	1,552.8	1,611.6	1,633.5	1,647.3
Residual Fuel	.9	1.3	3.9	.5	1.2	1.8	1.1	1.5	1.3	.6
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1,196.4**	**4,724.8**	**5,568.5**	**4,968.5**	**5,107.7**	**5,513.6**	**5,984.1**	**6,106.7**	**R6,201.7**	**6,494.0**
Primary Energy — Four Sectors	851.4	3,343.4	3,435.9	2,905.6	2,977.7	3,258.5	R3,586.1	3,617.7	R3,593.7	3,772.1
Electricity	345.0	1,381.4	2,132.6	2,062.9	2,130.0	2,255.1	2,398.0	2,489.0	2,608.0	2,721.9
Electric Utility Sector [a]	**76.1**	**688.1**	**634.9**	**521.1**	**561.8**	**541.4**	**588.1**	**512.4**	**367.2**	**307.5**
Coal	19.7	–	47.8	45.7	50.0	51.3	49.9	54.0	48.2	41.9
Natural Gas	.1	–	5.4	1.6	17.9	2.8	8.5	13.5	10.2	5.8
Petroleum	51.0	639.0	456.1	291.1	290.9	280.0	343.6	267.4	203.4	133.5
Heavy Oil [b]	48.8	633.0	453.2	288.7	287.7	275.1	338.7	265.2	200.3	131.7
Light Oil [b]	2.2	6.0	2.9	2.4	3.2	4.9	4.9	2.3	3.1	1.8
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	5.3	49.1	125.5	182.7	203.0	205.2	186.1	177.5	105.5	126.3
Biomass Fuels	–	–	–	–	–	2.2	([d])	([d])	([d])	([d])
Primary Energy — Five Sectors [c]	**927.5**	**4,031.6**	**4,070.8**	**3,426.7**	**3,539.5**	**3,799.9**	**R4,174.2**	**4,130.1**	**R3,960.9**	**4,079.7**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[d] Utilities used biomass fuels at no charge or received a fee for accepting them.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Delaware 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.39	1.57	1.87	1.87	1.78	1.77	1.75	1.76	1.75	1.70
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.39	1.57	1.87	1.87	1.78	1.77	1.75	1.76	1.75	1.70
Natural Gas	.91	3.37	4.87	4.43	3.93	4.04	4.06	3.82	3.43	3.82
Petroleum	1.27	6.00	7.39	5.22	5.52	5.34	R6.03	6.91	R6.30	6.04
Asphalt and Road Oil	.66	3.58	4.97	4.16	3.17	3.13	2.90	2.90	3.06	2.24
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.16	6.77	7.58	5.94	5.70	5.68	6.33	7.58	7.08	6.76
Jet Fuel	.73	6.46	6.63	4.87	4.03	4.16	4.80	6.33	5.51	5.14
Kerosene	1.26	8.36	8.65	7.03	6.50	6.47	7.30	8.68	8.11	7.70
LPG	1.25	5.20	10.65	10.76	10.36	10.14	R11.49	R12.14	R13.06	12.05
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.86	9.60	9.39	6.97	7.61	8.07	8.88	10.26	9.51	9.16
Residual Fuel	.45	4.23	4.16	2.32	2.73	2.24	2.68	2.71	2.25	2.29
Other [a]	.35	5.84	4.94	2.88	3.30	2.92	3.45	2.73	2.58	2.19
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.06	5.13	5.16	4.06	4.08	4.08	4.55	4.92	R4.59	4.64
Electric Utility Fuel [c]	.39	3.35	2.48	2.01	2.05	1.96	2.12	1.97	1.92	1.85
Electricity Purchased by End Users	4.94	18.84	21.42	19.09	18.79	19.54	18.47	19.00	19.70	19.71
Total Energy	1.69	7.28	9.16	7.64	7.47	7.88	8.32	9.09	R8.85	8.80
	Expenditures in Millions of Dollars									
Coal	14.5	44.1	133.3	124.1	125.1	121.8	106.4	104.9	99.1	78.4
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	14.5	44.1	133.3	124.1	125.1	121.8	106.4	104.9	99.1	78.4
Natural Gas	24.4	102.9	188.6	145.4	144.1	118.9	143.4	150.9	145.9	153.5
Petroleum	173.0	1,059.8	818.0	602.0	647.7	683.8	R760.1	R798.1	R777.4	723.8
Asphalt and Road Oil	2.3	8.3	27.3	16.8	12.1	8.5	10.0	10.3	2.9	1.2
Aviation Gasoline	.2	.5	.8	.8	.6	.7	.7	3.6	.8	.8
Distillate Fuel	29.1	146.5	150.8	114.3	126.9	127.3	155.3	142.0	141.1	127.4
Jet Fuel	8.1	54.6	56.0	35.2	27.9	30.5	32.4	44.4	R70.9	40.1
Kerosene	3.1	14.3	34.6	13.5	13.6	12.5	11.8	7.8	8.6	6.5
LPG	10.6	56.7	37.9	34.2	37.9	37.0	R39.3	R44.7	R51.3	40.2
Lubricants	3.3	12.1	13.5	11.7	10.8	11.9	11.1	11.6	11.9	14.1
Motor Gasoline	93.8	333.5	372.5	282.7	314.6	347.3	380.3	429.3	R389.3	392.5
Residual Fuel	18.6	335.5	92.7	72.6	79.3	87.1	94.4	63.4	67.1	67.3
Other [a]	3.8	97.8	32.1	20.2	24.0	20.9	24.6	41.0	33.7	33.8
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	211.8	1,206.8	1,139.9	871.6	916.8	924.6	R1,009.9	R1,053.9	R1,022.5	955.8
Electric Utility Fuel [c]	-23.1	-239.3	-229.9	-179.4	-186.2	-185.6	-191.6	-171.0	-175.9	-145.2
Electricity Purchased by End Users	75.7	368.7	457.9	440.0	446.3	499.4	504.3	533.6	567.9	568.1
Total Energy	264.4	1,336.2	1,367.9	1,132.2	1,176.9	1,238.4	R1,322.7	R1,416.5	R1,414.5	1,378.7

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Delaware 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.39**	**10.19**	**12.67**	**12.47**	**11.69**	**11.91**	**12.47**	**13.78**	**14.03**	**13.57**
Primary Energy	1.52	6.05	7.86	7.04	6.46	6.32	7.12	7.68	7.57	7.20
Coal	1.13	3.38	3.76	3.75	3.50	3.65	3.51	3.75	3.60	3.74
Natural Gas	1.55	4.16	6.91	6.97	6.26	5.90	6.33	6.04	5.72	5.93
Petroleum	1.51	7.34	8.33	7.13	6.68	6.63	7.71	9.19	9.13	8.39
Distillate Fuel	1.42	6.88	7.54	6.13	5.72	5.78	6.36	7.63	7.19	6.66
Kerosene	1.34	8.55	8.80	7.15	6.67	6.74	7.42	8.90	8.39	7.77
LPG	2.40	8.53	10.37	11.18	10.86	10.04	13.10	13.54	14.48	13.30
Electricity	7.53	21.76	27.29	24.88	24.21	24.65	23.91	24.65	25.22	25.35
Commercial Sector	**1.55**	**6.60**	**14.10**	**12.77**	**11.48**	**12.01**	**12.10**	**12.81**	**13.11**	**13.04**
Primary Energy	.76	4.47	6.57	5.52	4.62	4.64	4.95	5.23	5.16	4.99
Coal	.28	1.20	1.33	1.33	1.30	1.32	1.28	1.22	1.35	1.32
Natural Gas	1.22	3.92	6.30	6.26	5.12	4.84	5.32	5.04	4.69	4.78
Petroleum	.68	4.54	6.99	4.81	4.66	4.67	4.84	5.82	6.07	5.35
Distillate Fuel	1.12	6.30	6.57	4.94	4.46	4.67	5.19	6.11	5.52	5.00
Kerosene	.85	6.36	6.93	5.01	4.68	4.35	5.11	6.44	5.93	5.32
LPG	.99	4.72	11.06	10.37	9.88	10.26	9.19	10.33	11.09	9.50
Motor Gasoline	2.86	9.60	9.39	6.97	7.61	8.07	8.88	10.26	9.51	9.16
Residual Fuel	.46	4.24	4.35	2.68	2.87	2.31	2.81	3.13	2.38	2.42
Electricity	6.56	20.78	22.97	20.37	19.77	20.53	19.78	20.48	20.88	20.88
Industrial Sector	**1.02**	**5.69**	**6.66**	**5.51**	**5.25**	**5.40**	**5.56**	**5.84**	**R 6.00**	**5.85**
Primary Energy	.66	4.36	4.73	3.64	3.52	3.26	R 3.53	3.83	R 3.65	3.51
Coal	.28	1.20	1.33	1.33	1.30	1.32	1.28	1.22	1.35	1.32
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.28	1.20	1.33	1.33	1.30	1.32	1.28	1.22	1.35	1.32
Natural Gas	.57	2.72	4.38	3.41	3.27	3.16	3.40	3.39	3.02	3.14
Petroleum	.69	5.23	6.16	4.64	4.40	3.97	R 4.26	R 4.96	R 5.12	4.46
Asphalt and Road Oil	.66	3.58	4.97	4.16	3.17	3.13	2.90	2.90	3.06	2.24
Distillate Fuel	.78	5.71	6.20	4.48	4.19	3.89	4.57	5.76	5.31	4.76
Kerosene	.85	6.36	6.93	5.01	4.68	4.35	5.11	6.44	5.93	5.32
LPG	.99	4.72	11.06	10.37	9.88	10.26	9.19	10.33	11.09	9.50
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.86	9.60	9.39	6.97	7.61	8.07	8.88	10.26	9.51	9.16
Residual Fuel	.46	4.19	4.35	2.68	2.87	2.31	2.81	3.13	2.38	2.42
Other	.50	6.16	6.71	3.95	4.30	3.64	4.37	5.10	5.23	4.96
Electricity	3.10	15.28	16.15	13.80	13.27	14.17	12.89	13.26	13.84	13.81
Transportation Sector	**2.13**	**8.41**	**8.78**	**6.42**	**6.52**	**6.96**	**7.67**	**8.92**	**R 7.78**	**7.87**
Primary Energy	2.13	8.41	8.78	6.42	6.52	6.96	7.67	8.92	R 7.78	7.87
Coal	.28	–	–	–	–	–	–	–	–	–
Petroleum	2.13	8.41	8.78	6.42	6.52	6.96	7.67	8.92	R 7.78	7.87
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.24	7.72	8.52	6.56	6.53	6.66	7.27	8.71	8.26	7.97
Jet Fuel	.73	6.46	6.63	4.87	4.03	4.16	4.80	6.33	5.51	5.14
LPG	.99	4.72	11.06	10.37	9.88	10.26	9.19	10.33	11.09	9.50
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.86	9.60	9.39	6.97	7.61	8.07	8.88	10.26	9.51	9.16
Residual Fuel	.42	3.93	3.99	2.12	2.57	2.00	2.35	2.33	2.04	2.06
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.69**	**7.28**	**9.16**	**7.64**	**7.47**	**7.88**	**8.32**	**9.09**	**R 8.85**	**8.80**
Primary Energy — Four Sectors	1.34	5.90	7.11	5.53	5.46	5.61	6.22	6.91	R 6.46	6.34
Electricity	4.94	18.84	21.42	19.09	18.79	19.54	18.47	19.00	19.70	19.71
Electric Utility Sector [a]	**.39**	**3.35**	**2.48**	**2.01**	**2.05**	**1.96**	**2.12**	**1.97**	**1.92**	**1.85**
Coal	.39	1.64	1.91	1.91	1.81	1.81	1.79	1.81	1.78	1.73
Natural Gas	.37	3.47	3.88	2.53	2.75	2.42	2.54	2.58	2.37	2.60
Petroleum	.40	4.33	3.86	2.20	2.59	2.23	2.66	2.05	1.92	1.80
Heavy Oil [b]	.46	4.27	4.13	2.29	2.75	2.27	2.72	2.71	2.31	2.32
Light Oil [b]	.47	6.21	5.51	3.50	3.99	3.51	3.90	4.58	4.62	4.44
Petroleum Coke	.29	4.32	1.27	1.09	1.05	1.01	.94	.90	.84	.78
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.06**	**5.13**	**5.16**	**4.06**	**4.08**	**4.08**	**4.55**	**4.92**	**R 4.59**	**4.64**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Delaware 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**65.9**	**246.2**	**336.2**	**296.5**	**315.3**	**337.6**	**350.0**	**346.7**	**369.3**	**367.8**
Primary Energy	35.9	107.7	157.1	116.4	122.9	124.6	136.0	123.7	126.2	126.8
Coal	.1	.2	.2	.4	1.3	.6	.6	.7	.6	*
Natural Gas	12.4	29.7	43.9	48.6	44.7	45.5	48.8	44.6	42.1	50.2
Petroleum	23.4	77.8	113.0	67.5	76.9	78.4	86.6	78.4	83.5	76.5
Distillate Fuel	16.8	52.7	58.5	37.7	44.7	46.9	48.9	43.0	42.6	40.4
Kerosene	2.8	13.3	32.4	12.9	12.8	11.6	11.3	7.3	7.9	6.3
LPG	3.8	11.7	22.1	16.8	19.5	20.0	26.4	28.1	33.0	29.8
Electricity	30.0	138.6	179.1	180.1	192.4	213.0	214.0	223.0	243.0	241.0
Commercial Sector	**34.4**	**261.3**	**177.9**	**166.5**	**171.7**	**190.5**	**195.4**	**207.7**	**218.4**	**219.5**
Primary Energy	14.5	154.0	44.9	36.9	37.8	39.5	41.3	42.7	42.4	41.5
Coal	*	.1	.1	.2	.8	.4	.4	.4	.4	*
Natural Gas	3.5	13.1	22.0	22.4	19.3	19.9	22.6	20.7	20.5	24.5
Petroleum	11.0	140.8	22.8	14.3	17.6	19.2	18.4	21.6	21.5	17.0
Distillate Fuel	5.1	23.3	12.8	7.0	9.4	10.6	9.0	12.0	14.1	10.2
Kerosene	.2	.3	2.0	.5	.4	.7	.2	.4	.4	*
LPG	.3	1.1	4.2	2.8	3.1	3.6	3.3	3.8	4.5	3.8
Motor Gasoline	.4	2.3	1.9	1.4	1.7	1.7	1.8	1.9	1.7	1.7
Residual Fuel	5.0	113.8	1.9	2.6	3.0	2.6	4.1	3.6	.8	1.4
Electricity	19.9	107.3	133.0	129.6	133.9	151.0	154.0	165.0	176.0	178.0
Industrial Sector	**57.1**	**375.0**	**355.5**	**282.8**	**266.8**	**263.0**	**R271.0**	**R300.7**	**R280.1**	**277.9**
Primary Energy	31.3	252.1	209.8	152.5	146.8	127.6	R134.7	R155.2	R131.1	128.8
Coal	.2	5.4	7.0	6.7	7.0	8.1	6.5	6.5	7.0	4.7
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.2	5.4	7.0	6.7	7.0	8.1	6.5	6.5	7.0	4.7
Natural Gas	7.0	34.8	93.5	69.7	57.7	46.2	50.2	56.4	47.5	56.1
Petroleum	24.1	212.0	109.3	76.1	82.0	73.4	R77.9	R92.3	R76.7	68.0
Asphalt and Road Oil	2.3	8.3	27.3	16.8	12.1	8.5	10.0	10.3	2.9	1.2
Distillate Fuel	3.6	20.5	15.0	10.8	10.2	10.1	12.0	14.5	13.6	9.5
Kerosene	.1	.6	.2	.1	.4	.3	.3	.2	.3	.1
LPG	6.5	43.6	11.4	13.0	15.2	13.1	R9.5	R12.6	R13.5	6.5
Lubricants	1.3	6.6	7.3	6.3	5.8	6.5	6.0	6.3	6.5	7.6
Motor Gasoline	1.4	1.8	2.7	2.2	2.3	2.4	3.0	2.6	2.5	2.5
Residual Fuel	7.3	45.1	16.1	9.6	14.3	13.6	14.3	12.6	10.3	14.9
Other	1.6	85.6	29.4	17.4	21.6	18.9	22.8	33.4	27.0	25.9
Electricity	25.7	122.9	145.7	130.3	119.9	135.4	136.3	145.5	148.9	149.1
Transportation Sector	**107.0**	**453.7**	**498.3**	**386.5**	**423.1**	**447.3**	**506.3**	**561.4**	**R546.9**	**513.5**
Primary Energy	107.0	453.7	498.3	386.5	423.1	447.3	506.3	561.4	R546.9	513.5
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	107.0	453.7	498.3	386.5	423.1	447.3	506.3	561.4	R546.9	513.5
Aviation Gasoline	.2	.5	.8	.8	.6	.7	.7	3.6	.8	.8
Distillate Fuel	2.8	43.3	61.3	56.5	59.6	56.3	79.1	69.6	67.6	64.1
Jet Fuel	8.1	54.6	56.0	35.2	27.9	30.5	32.4	44.4	R70.9	40.1
LPG	.1	.2	.2	1.7	.1	.2	.2	.2	.3	.2
Lubricants	2.1	5.5	6.2	5.4	4.9	5.5	5.1	5.3	5.5	6.4
Motor Gasoline	92.1	329.4	367.9	279.0	310.5	343.2	375.5	424.9	385.0	388.4
Residual Fuel	1.8	20.1	5.8	7.8	19.4	11.0	13.1	13.4	16.9	13.5
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**264.4**	**1,336.2**	**1,367.9**	**1,132.2**	**1,176.9**	**1,238.4**	**R1,322.7**	**R1,416.5**	**R1,414.5**	**1,378.7**
Primary Energy — Four Sectors	188.8	967.5	910.0	692.2	730.6	739.0	R818.3	R882.9	R846.6	810.6
Electricity	75.7	368.7	457.9	440.0	446.3	499.4	504.3	533.6	567.9	568.1
Electric Utility Sector [a]	**23.1**	**239.3**	**229.9**	**179.4**	**186.2**	**185.6**	**191.6**	**171.0**	**175.9**	**145.2**
Coal	14.2	38.5	125.9	116.9	115.9	112.8	98.8	97.3	91.1	73.7
Natural Gas	1.4	25.3	29.3	4.8	22.3	7.3	21.9	29.3	35.8	22.6
Petroleum	7.5	175.6	74.7	57.7	48.0	65.5	70.9	44.4	49.0	48.8
Heavy Oil [b]	4.5	156.5	68.8	52.6	42.6	60.0	62.8	33.9	39.1	37.6
Light Oil [b]	.8	6.8	3.2	2.3	3.1	3.5	6.3	2.9	3.2	3.3
Petroleum Coke	2.2	12.2	2.7	2.8	2.4	2.0	1.8	7.6	6.7	7.9
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**211.8**	**1,206.8**	**1,139.9**	**871.6**	**916.8**	**924.6**	**R1,009.9**	**R1,053.9**	**R1,022.5**	**955.8**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, District of Columbia 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.29	1.76	2.01	2.00	1.93	1.94	1.97	1.96	1.96	1.95
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.29	1.76	2.01	2.00	1.93	1.94	1.97	1.96	1.96	1.95
Natural Gas	1.27	4.36	7.30	6.77	6.06	6.00	6.36	6.40	6.08	6.46
Petroleum	1.19	7.86	8.74	6.31	6.80	6.98	7.27	8.77	R8.50	8.37
Asphalt and Road Oil	.67	3.58	4.95	4.18	3.22	3.16	2.88	2.94	3.10	2.35
Aviation Gasoline	–	–	–	–	–	–	–	–	–	–
Distillate Fuel	1.09	7.18	7.95	6.22	6.26	6.04	6.42	8.26	R7.21	6.77
Jet Fuel	.73	6.46	5.80	4.01	4.01	3.75	–	5.47	–	–
Kerosene	1.41	8.50	7.72	6.92	6.85	6.30	5.05	6.21	7.46	7.20
LPG	1.49	6.00	11.49	11.11	10.80	11.00	10.23	10.89	11.78	10.16
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.86	9.97	10.19	8.11	8.36	8.80	9.50	10.66	10.14	9.73
Residual Fuel	.50	4.46	4.36	2.95	3.27	2.41	2.79	3.22	2.61	2.79
Other [a]	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.06	6.36	7.83	6.41	6.38	6.50	6.78	7.59	R7.22	7.32
Electric Utility Fuel [c]	.43	4.59	4.24	2.28	3.04	2.40	2.89	3.12	2.46	2.81
Electricity Purchased by End Users	5.39	14.92	20.89	20.14	18.84	18.00	17.22	17.38	18.34	18.97
Total Energy	1.72	8.75	11.67	10.38	10.24	10.44	10.52	11.27	R11.27	11.36
	Expenditures in Millions of Dollars									
Coal	8.4	5.8	7.0	2.7	3.4	1.5	2.9	3.4	3.2	2.4
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	8.4	5.8	7.0	2.7	3.4	1.5	2.9	3.4	3.2	2.4
Natural Gas	33.5	121.8	211.5	200.6	188.7	197.1	213.1	184.5	188.5	212.5
Petroleum	154.1	374.9	337.1	297.6	290.5	292.0	310.9	326.2	R296.3	282.2
Asphalt and Road Oil	.1	.4	.9	.9	.7	.7	.5	.6	.5	.3
Aviation Gasoline	–	–	–	–	–	–	–	–	–	–
Distillate Fuel	31.4	95.6	103.2	86.8	70.6	65.7	68.8	74.0	R65.1	61.2
Jet Fuel	*	12.1	.2	11.4	*	.1	–	.2	–	–
Kerosene	.4	12.9	3.0	.5	.5	.5	1.7	.4	.3	.3
LPG	*	.1	.2	.1	.2	.2	.2	.2	.2	.3
Lubricants	1.7	5.3	5.9	5.1	4.7	5.2	4.9	5.1	5.2	6.2
Motor Gasoline	85.4	203.3	203.4	165.2	185.9	201.8	209.4	225.1	R214.2	205.7
Residual Fuel	35.1	45.2	20.3	27.5	27.9	17.7	25.4	20.7	10.9	8.3
Other [a]	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	195.9	502.4	555.6	500.8	482.6	490.6	526.9	514.1	R488.0	497.2
Electric Utility Fuel [c]	-18.0	-45.1	-8.3	-6.7	-11.7	-16.4	-26.8	-17.0	-7.6	-4.4
Electricity Purchased by End Users	99.2	356.5	585.3	590.1	578.9	576.0	567.0	584.0	638.0	650.0
Total Energy	277.2	813.8	1,132.6	1,084.2	1,049.8	1,050.2	1,067.1	1,081.1	R1,118.4	1,142.9

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
*Value less than 0.05 million dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, District of Columbia 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.01**	**7.12**	**9.77**	**9.60**	**9.26**	**9.18**	**9.41**	**9.54**	**9.96**	**10.06**
Primary Energy	1.42	5.15	7.67	7.29	6.88	6.84	7.26	7.05	6.98	7.48
Coal	1.05	3.18	3.28	3.22	3.10	3.07	3.25	3.36	3.09	3.10
Natural Gas	1.43	4.56	7.80	7.42	6.99	6.88	7.37	7.12	7.03	7.56
Petroleum	1.42	7.41	8.74	7.13	7.03	7.02	7.57	8.26	8.60	8.11
Distillate Fuel	1.42	7.40	8.74	7.12	7.02	7.00	7.54	8.24	8.58	8.08
Kerosene	1.50	8.55	8.88	7.23	7.13	7.11	7.66	8.37	8.71	8.21
LPG	2.57	9.81	13.53	13.81	13.84	14.13	14.13	12.58	13.46	13.03
Electricity	7.02	17.32	20.31	19.97	19.15	18.41	17.59	17.82	19.29	19.30
Commercial Sector	**1.40**	**8.62**	**12.94**	**11.30**	**10.77**	**11.34**	**11.06**	**11.78**	**11.65**	**11.93**
Primary Energy	.71	4.45	5.98	4.88	4.48	4.71	5.01	5.54	5.02	5.01
Coal	.11	1.19	1.33	1.33	1.30	1.33	1.28	1.21	1.34	1.32
Natural Gas	1.09	4.21	6.62	5.84	4.94	4.98	5.25	5.59	5.14	5.32
Petroleum	.61	6.60	6.42	4.19	4.15	4.22	4.98	6.43	5.44	4.62
Distillate Fuel	1.12	6.55	6.73	4.95	4.91	4.49	5.19	7.11	6.02	5.15
Kerosene	1.33	8.50	7.51	5.12	5.70	5.17	4.46	5.25	6.21	6.37
LPG	1.03	5.13	10.88	10.37	9.88	10.26	9.19	10.33	11.09	9.50
Motor Gasoline	2.86	9.97	10.19	8.11	8.36	8.80	9.50	10.66	10.14	9.73
Residual Fuel	.46	4.43	5.16	3.34	3.50	3.23	3.70	3.91	3.38	3.11
Electricity	6.86	18.41	22.82	21.78	20.19	19.29	18.37	18.53	19.42	20.15
Industrial Sector	**1.19**	**10.20**	**17.08**	**16.15**	**15.65**	**15.03**	**14.56**	**14.72**	**15.57**	**16.20**
Primary Energy	.49	6.16	8.31	6.08	6.90	7.08	7.77	8.61	8.36	7.89
Coal	.11	1.20	–	–	–	–	–	–	–	–
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.11	1.20	–	–	–	–	–	–	–	–
Natural Gas	.67	2.45	–	–	–	–	–	–	–	–
Petroleum	.66	7.60	8.31	6.08	6.90	7.08	7.77	8.61	8.36	7.89
Asphalt and Road Oil	.67	3.58	4.95	4.18	3.22	3.16	2.88	2.94	3.10	2.35
Distillate Fuel	1.22	7.63	6.73	4.59	5.11	4.63	5.37	6.14	5.56	5.70
Kerosene	1.33	8.50	7.51	5.12	5.70	5.17	–	–	6.21	–
LPG	1.03	5.13	10.88	10.37	9.88	10.26	9.19	10.33	11.09	9.50
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	–	–	10.19	8.11	8.36	8.80	9.50	10.66	10.14	9.73
Residual Fuel	.59	3.97	5.16	–	–	–	3.70	3.91	3.38	3.11
Other	–	–	–	–	–	–	–	–	–	–
Electricity	3.80	11.65	17.86	17.34	16.37	15.55	15.00	15.17	15.94	16.68
Transportation Sector	**2.74**	**9.44**	**9.85**	**7.77**	**8.35**	**8.68**	**9.19**	**10.54**	**R9.98**	**9.62**
Primary Energy	2.74	9.40	9.68	7.59	8.22	8.56	9.08	10.44	R9.84	9.48
Coal	.11	–	–	–	–	–	–	–	–	–
Petroleum	2.74	9.40	9.68	7.59	8.22	8.56	9.08	10.44	R9.84	9.48
Aviation Gasoline	–	–	–	–	–	–	–	–	–	–
Distillate Fuel	1.32	7.70	8.78	7.67	7.25	7.19	7.49	9.33	R8.05	7.83
Jet Fuel	.73	6.46	5.80	4.01	4.01	3.75	–	5.47	–	–
LPG	1.03	5.13	10.88	10.37	9.88	10.26	9.19	10.33	11.09	9.50
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.86	9.97	10.19	8.11	8.36	8.80	9.50	10.66	10.14	9.73
Residual Fuel	.45	4.20	3.75	2.05	–	2.12	2.57	2.88	–	2.27
Electricity	–	12.62	20.73	20.40	17.14	16.91	16.91	16.54	18.09	18.05
Total Energy	**1.72**	**8.75**	**11.67**	**10.38**	**10.24**	**10.44**	**10.52**	**11.27**	**R11.27**	**11.36**
Primary Energy — Four Sectors	1.25	6.62	7.93	6.58	6.56	6.91	7.30	7.98	R7.45	7.43
Electricity	5.39	14.92	20.89	20.14	18.84	18.00	17.22	17.38	18.34	18.97
Electric Utility Sector [a]	**.43**	**4.59**	**4.24**	**2.28**	**3.04**	**2.40**	**2.89**	**3.12**	**2.46**	**2.81**
Coal	.39	–	–	–	–	–	–	–	–	–
Natural Gas	–	–	–	–	–	–	–	–	–	–
Petroleum	.47	4.59	4.24	2.28	3.04	2.40	2.89	3.12	2.46	2.81
Heavy Oil [b]	.47	4.49	3.94	2.16	2.93	2.22	2.71	3.02	2.22	2.38
Light Oil [b]	.46	5.95	5.43	2.98	3.83	3.47	4.08	4.29	4.55	4.45
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.06**	**6.36**	**7.83**	**6.41**	**6.38**	**6.50**	**6.78**	**7.59**	**R7.22**	**7.32**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, District of Columbia 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**54.0**	**162.5**	**246.6**	**239.3**	**229.8**	**226.9**	**226.3**	**208.1**	**222.4**	**233.8**
Primary Energy	34.1	98.3	161.2	148.6	137.7	134.9	138.3	118.1	118.4	135.8
Coal	.4	3.0	4.0	1.5	1.9	.8	1.7	2.0	1.8	1.4
Natural Gas	20.2	62.8	131.4	130.0	118.6	121.6	129.7	108.7	108.1	126.2
Petroleum	13.6	32.6	25.8	17.0	17.2	12.4	6.9	7.4	8.5	8.2
Distillate Fuel	13.4	32.3	25.2	16.5	16.7	12.0	6.4	7.2	8.2	8.0
Kerosene	.2	.2	.5	.5	.4	.3	.5	.2	.2	.2
LPG	*	*	*	*	*	*	.1	*	.1	.1
Electricity	19.9	64.1	85.4	90.7	92.1	92.0	88.0	90.0	104.0	98.0
Commercial Sector	**82.6**	**242.5**	**462.6**	**460.1**	**438.2**	**424.2**	**428.6**	**440.7**	**R469.5**	**485.3**
Primary Energy	37.4	88.0	125.5	123.3	109.2	96.1	106.3	107.6	109.2	110.8
Coal	.1	2.1	3.0	1.2	1.5	.7	1.2	1.4	1.4	1.1
Natural Gas	12.9	58.0	80.1	70.6	70.1	75.5	83.4	75.9	80.4	86.3
Petroleum	24.3	27.9	42.5	51.6	37.6	19.9	21.6	30.4	27.3	23.4
Distillate Fuel	8.5	24.7	29.4	28.5	18.6	14.3	16.3	20.8	20.6	16.5
Kerosene	.1	*	2.3	*	*	.1	1.2	.2	.1	.2
LPG	*	*	*	*	*	*	*	*	*	*
Motor Gasoline	1.0	2.1	1.5	2.1	.9	1.0	1.1	4.0	1.9	1.5
Residual Fuel	14.8	1.0	9.3	21.0	18.1	4.5	3.0	5.4	4.7	5.3
Electricity	45.3	154.6	337.0	336.8	329.0	328.1	322.3	333.1	R360.4	374.5
Industrial Sector	**50.6**	**158.6**	**160.8**	**160.6**	**156.5**	**153.4**	**155.0**	**160.4**	**170.4**	**174.7**
Primary Energy	16.6	25.2	6.4	6.4	5.2	4.4	5.0	6.4	4.4	4.7
Coal	1.1	.7	–	–	–	–	–	–	–	–
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	1.1	.7	–	–	–	–	–	–	–	–
Natural Gas	.3	.9	–	–	–	–	–	–	–	–
Petroleum	15.2	23.6	6.4	6.4	5.2	4.4	5.0	6.4	4.4	4.7
Asphalt and Road Oil	.1	.4	.9	.9	.7	.7	.5	.6	.5	.3
Distillate Fuel	2.7	8.5	1.4	2.1	.4	.1	.1	.1	.1	.4
Kerosene	.1	12.6	.1	*	.1	.1	–	–	*	–
LPG	*	.1	.1	.1	.1	.1	.1	.1	.1	.2
Lubricants	.1	.6	.7	.6	.6	.6	.6	.6	.6	.7
Motor Gasoline	–	–	3.1	2.7	3.5	2.9	3.7	5.0	3.1	3.0
Residual Fuel	12.2	1.3	*	–	–	–	*	*	*	*
Other	–	–	–	–	–	–	–	–	–	–
Electricity	34.1	133.4	154.4	154.2	151.2	149.0	150.0	154.0	166.0	170.0
Transportation Sector	**89.9**	**250.2**	**262.6**	**224.2**	**225.3**	**245.7**	**257.2**	**272.0**	**R256.1**	**249.0**
Primary Energy	89.9	245.8	254.2	215.9	218.7	238.8	250.5	265.0	R248.5	241.6
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	89.9	245.8	254.2	215.9	218.7	238.8	250.5	265.0	R248.5	241.6
Aviation Gasoline	–	–	–	–	–	–	–	–	–	–
Distillate Fuel	3.8	26.3	45.1	38.5	33.1	35.9	40.9	44.1	R34.7	34.8
Jet Fuel	*	12.1	.2	11.4	*	.1	–	.2	–	–
LPG	*	*	*	*	*	*	*	*	*	*
Lubricants	1.6	4.7	5.2	4.5	4.2	4.6	4.3	4.5	4.6	5.4
Motor Gasoline	84.4	201.2	198.8	160.4	181.5	197.9	204.6	216.2	209.2	201.2
Residual Fuel	*	1.6	4.8	1.0	–	.1	.6	.1	–	.1
Electricity	–	4.4	8.4	8.3	6.6	6.9	6.7	6.9	R7.6	7.5
Total Energy	**277.2**	**813.8**	**1,132.6**	**1,084.2**	**1,049.8**	**1,050.2**	**1,067.1**	**1,081.1**	**R1,118.4**	**1,142.9**
Primary Energy — Four Sectors	178.0	457.3	547.3	494.1	470.9	474.2	500.1	497.1	R480.4	492.9
Electricity	99.2	356.5	585.3	590.1	578.9	576.0	567.0	584.0	638.0	650.0
Electric Utility Sector [a]	**18.0**	**45.1**	**8.3**	**6.7**	**11.7**	**16.4**	**26.8**	**17.0**	**7.6**	**4.4**
Coal	6.8	–	–	–	–	–	–	–	–	–
Natural Gas	–	–	–	–	–	–	–	–	–	–
Petroleum	11.2	45.1	8.3	6.7	11.7	16.4	26.8	17.0	7.6	4.4
Heavy Oil [b]	8.1	41.3	6.2	5.5	9.8	13.1	21.7	15.2	6.2	2.9
Light Oil [b]	3.1	3.8	2.1	1.2	1.9	3.3	5.1	1.8	1.4	1.5
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**195.9**	**502.4**	**555.6**	**500.8**	**482.6**	**490.6**	**526.9**	**514.1**	**R488.0**	**497.2**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Florida 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	**0.31**	**1.80**	**2.12**	**1.93**	**1.82**	**1.78**	**1.79**	**1.85**	**1.86**	**1.83**
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.31	1.80	2.12	1.93	1.82	1.78	1.79	1.85	1.86	1.83
Natural Gas	**.49**	**2.19**	**3.73**	**2.76**	**3.21**	**2.80**	**3.02**	**3.21**	**2.84**	**3.00**
Petroleum	**1.53**	**6.66**	**7.46**	**5.32**	**5.82**	**5.49**	**5.95**	**6.95**	**6.40**	**6.42**
Asphalt and Road Oil	.67	3.57	4.99	4.16	3.20	3.13	2.87	2.91	3.06	2.25
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.08	6.91	6.78	5.90	6.12	5.83	6.16	7.86	7.27	7.58
Jet Fuel	.73	6.46	5.90	4.19	4.07	3.82	4.43	5.64	4.93	4.56
Kerosene	1.28	8.45	7.46	7.78	7.70	7.94	7.27	10.50	11.47	14.47
LPG	2.61	7.48	10.91	10.27	10.98	11.20	10.15	11.70	12.19	14.15
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.81	9.80	9.03	6.70	7.11	7.12	7.68	8.85	8.48	8.29
Residual Fuel	.33	3.61	3.90	2.15	2.90	2.17	2.64	2.92	2.20	2.36
Other [a]	1.35	7.97	8.30	5.32	6.18	5.21	5.86	6.66	5.89	5.87
Nuclear Fuel	–	**.35**	**.65**	**.73**	**.69**	**.94**	**.66**	**.64**	**.66**	**.62**
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	**1.20**	**5.12**	**5.17**	**3.96**	**4.19**	**3.92**	**4.23**	**4.81**	**4.43**	**4.39**
Electric Utility Fuel [c]	.33	2.40	2.21	1.76	1.96	1.72	1.90	1.98	1.81	1.79
Electricity Purchased by End Users	5.67	16.24	22.59	21.37	20.55	20.70	20.45	20.62	20.99	20.49
Total Energy	**2.35**	**8.84**	**10.84**	**9.31**	**9.35**	**9.22**	**9.70**	**10.54**	R10.57	**10.27**
	Expenditures in Millions of Dollars									
Coal	**35.8**	**405.4**	**999.9**	**887.5**	**1,066.6**	**1,088.2**	**1,128.3**	**1,155.6**	**1,194.6**	**1,191.7**
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	35.8	405.4	999.9	887.5	1,066.6	1,088.2	1,128.3	1,155.6	1,194.6	1,191.7
Natural Gas	**170.1**	**693.8**	**1,081.0**	**787.7**	**964.7**	**825.1**	**976.6**	**1,081.4**	**1,004.3**	**1,077.9**
Petroleum	**1,632.1**	**11,051.3**	**9,831.1**	**7,989.0**	**8,540.0**	**8,680.4**	R9,425.3	R10,919.0	R9,912.7	**10,094.4**
Asphalt and Road Oil	18.0	106.4	220.8	227.3	160.8	164.6	123.5	131.3	148.5	103.7
Aviation Gasoline	34.4	61.0	42.4	43.4	29.6	33.0	40.8	38.0	R31.3	25.6
Distillate Fuel	98.0	1,183.7	1,198.8	1,089.5	1,172.6	1,169.0	1,269.2	1,574.3	1,328.7	1,531.7
Jet Fuel	96.6	1,302.3	762.5	587.3	604.7	685.3	835.0	1,013.5	R693.5	626.4
Kerosene	26.6	45.6	107.1	63.5	49.7	51.9	35.2	19.6	15.4	25.6
LPG	77.1	294.6	388.1	394.0	353.3	327.9	R299.7	R328.3	350.5	409.7
Lubricants	33.6	122.7	137.0	118.6	109.2	121.2	113.1	117.3	120.7	142.7
Motor Gasoline	1,125.2	5,627.4	5,947.5	4,614.0	5,132.4	5,310.7	5,731.5	6,581.4	R6,297.2	6,237.3
Residual Fuel	112.8	2,193.5	911.5	767.6	831.7	735.4	888.0	1,001.8	826.2	888.4
Other [a]	9.8	114.0	115.5	83.7	95.9	81.4	89.3	113.4	100.6	103.3
Nuclear Fuel	–	**63.8**	**165.1**	**172.9**	**138.6**	**265.0**	**148.5**	**149.2**	**146.2**	**166.0**
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	**1,838.1**	**12,214.3**	**12,077.1**	**9,837.1**	**10,709.9**	**10,858.8**	R11,678.6	R13,305.2	R12,257.8	**12,530.1**
Electric Utility Fuel [c]	-196.0	-2,439.2	-2,244.7	-1,980.3	-2,256.9	-2,200.2	-2,433.9	-2,516.8	-2,424.6	-2,452.6
Electricity Purchased by End Users	971.7	5,029.8	8,548.0	8,480.2	8,586.9	9,197.0	9,661.0	10,098.0	10,479.0	10,280.0
Total Energy	**2,613.8**	**14,804.8**	**18,380.3**	**16,336.9**	**17,039.8**	**17,855.6**	R18,905.7	R20,886.4	R20,312.2	**20,357.4**

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Florida 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**4.60**	**14.66**	**21.57**	**20.66**	**20.36**	**20.80**	**20.84**	**21.25**	**21.65**	**21.38**
Primary Energy	2.37	7.48	8.81	8.86	9.33	9.44	9.14	10.49	10.91	12.66
Coal	–	3.12	3.31	3.00	2.96	2.95	3.05	3.10	2.94	2.92
Natural Gas	2.42	4.49	6.72	6.70	6.83	6.94	7.42	7.79	R8.18	8.25
Petroleum	2.35	9.24	10.04	10.13	10.88	11.10	10.24	12.38	12.75	15.87
Distillate Fuel	1.25	6.92	6.73	7.67	6.75	7.17	6.56	9.59	8.95	11.11
Kerosene	1.63	8.92	9.34	10.63	9.36	9.94	9.10	13.30	12.40	15.40
LPG	3.11	10.34	10.70	10.35	12.01	12.01	10.81	12.55	13.05	16.36
Electricity	6.10	16.74	24.73	23.36	22.73	22.91	22.67	22.78	23.18	22.71
Commercial Sector	**3.53**	**12.27**	**15.73**	**14.30**	**14.17**	**14.62**	**14.97**	**15.25**	**15.41**	**15.09**
Primary Energy	1.07	4.68	5.62	4.49	4.68	4.44	4.71	5.55	R4.92	5.07
Coal	–	1.77	2.04	1.98	1.87	1.84	1.86	1.89	1.89	1.93
Natural Gas	.89	3.21	4.80	4.11	4.28	4.20	4.47	4.64	4.48	4.53
Petroleum	1.23	6.24	6.27	4.83	5.06	4.65	4.93	6.36	5.40	5.77
Distillate Fuel	.98	6.30	5.79	5.01	4.85	4.46	4.60	7.29	5.88	6.46
Kerosene	.61	6.41	6.49	5.99	5.64	5.32	5.80	8.04	7.13	7.90
LPG	1.27	5.46	11.24	10.15	9.27	9.94	9.15	10.15	10.59	10.04
Motor Gasoline	2.81	9.80	9.03	6.70	7.11	7.12	7.68	8.85	8.48	8.29
Residual Fuel	.33	3.71	4.08	2.27	2.98	2.29	2.75	3.09	2.37	2.49
Electricity	6.24	17.38	22.03	20.45	19.57	19.75	19.40	19.57	19.85	19.33
Industrial Sector	**.93**	**5.48**	**7.10**	**6.42**	**6.11**	**5.63**	**R5.95**	**6.12**	**5.95**	**5.68**
Primary Energy	.55	3.88	4.99	4.16	3.93	3.50	3.67	4.06	3.73	3.67
Coal	–	1.77	2.04	1.98	1.87	1.84	1.86	1.89	1.89	1.93
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	–	1.77	2.04	1.98	1.87	1.84	1.86	1.89	1.89	1.93
Natural Gas	.37	2.61	3.71	2.85	3.01	2.63	2.88	3.29	2.83	2.93
Petroleum	.69	4.71	6.11	5.06	4.84	4.35	R4.67	5.20	4.91	4.68
Asphalt and Road Oil	.67	3.57	4.99	4.16	3.20	3.13	2.87	2.91	3.06	2.25
Distillate Fuel	.56	5.75	5.81	5.36	5.05	4.77	5.19	7.20	6.38	7.07
Kerosene	.61	6.41	6.49	5.99	5.64	5.32	5.80	8.04	7.13	7.90
LPG	1.27	5.46	11.24	10.15	9.27	9.94	9.15	10.15	10.59	10.04
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.81	9.80	9.03	6.70	7.11	7.12	7.68	8.85	8.48	8.29
Residual Fuel	.37	3.44	4.08	2.27	2.98	2.29	2.75	3.09	2.37	2.49
Other	1.35	7.97	8.30	5.32	6.18	5.21	5.86	6.66	5.89	5.87
Electricity	3.56	13.38	16.63	16.29	14.99	14.93	14.84	14.90	15.22	14.71
Transportation Sector	**2.19**	**8.39**	**8.19**	**6.12**	**6.42**	**6.28**	**6.79**	**7.93**	**R7.63**	**7.45**
Primary Energy	2.19	8.39	8.19	6.12	6.42	6.28	6.79	7.93	R7.63	7.45
Coal	–	–	–	–	–	–	–	–	–	–
Petroleum	2.19	8.39	8.19	6.12	6.42	6.28	6.79	7.93	R7.63	7.45
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.44	7.72	7.24	6.24	6.66	6.25	6.64	8.21	7.75	7.91
Jet Fuel	.73	6.46	5.90	4.19	4.07	3.82	4.43	5.64	4.93	4.56
LPG	1.27	5.46	11.24	10.15	9.27	9.94	9.15	10.15	10.59	10.04
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.81	9.80	9.03	6.70	7.11	7.12	7.68	8.85	8.48	8.29
Residual Fuel	.29	3.14	3.76	2.00	2.82	1.94	2.33	2.56	1.95	2.13
Electricity	–	–	22.04	19.81	19.74	19.83	19.67	20.05	20.07	19.94
Total Energy	**2.35**	**8.84**	**10.84**	**9.31**	**9.35**	**9.22**	**9.70**	**10.54**	**R10.57**	**10.27**
Primary Energy — Four Sectors	1.74	7.16	7.46	5.78	6.02	5.81	6.26	7.23	R6.91	6.81
Electricity	5.67	16.24	22.59	21.37	20.55	20.70	20.45	20.62	20.99	20.49
Electric Utility Sector [a]	**.33**	**2.40**	**2.21**	**1.76**	**1.96**	**1.72**	**1.90**	**1.98**	**1.81**	**1.79**
Coal	.31	1.80	2.12	1.93	1.81	1.78	1.79	1.85	1.86	1.82
Natural Gas	.35	1.53	3.25	2.08	2.71	2.10	2.46	2.53	2.13	2.28
Petroleum	.33	3.80	3.96	2.18	2.94	2.23	2.77	3.08	2.31	2.46
Heavy Oil [b]	.33	3.72	3.87	2.15	2.91	2.20	2.69	2.99	2.23	2.40
Light Oil [b]	.36	5.76	5.71	3.41	3.93	3.54	4.27	5.09	4.63	4.46
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	.35	.65	.73	.69	.94	.66	.64	.66	.62
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.20**	**5.12**	**5.17**	**3.96**	**4.19**	**3.92**	**4.23**	**4.81**	**4.43**	**4.39**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Florida 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**645.6**	**2,884.5**	**4,970.0**	**4,994.9**	**5,096.9**	**5,384.9**	**5,604.8**	**5,888.6**	**6,144.5**	**6,153.6**
Primary Energy	133.6	329.5	403.2	398.3	413.0	383.9	331.9	361.7	385.5	482.6
Coal	–	.3	3.2	2.5	1.5	.1	*	.1	*	.4
Natural Gas	37.0	72.7	100.9	99.9	109.0	111.5	105.5	109.9	115.9	130.6
Petroleum	96.6	256.5	299.1	296.0	302.6	272.3	226.4	251.6	269.6	351.6
Distillate Fuel	7.4	49.0	22.3	20.7	28.3	21.8	13.9	13.1	12.4	20.0
Kerosene	22.3	39.1	45.7	33.5	33.4	36.9	19.7	11.6	13.7	23.9
LPG	66.9	168.4	231.1	241.8	240.9	213.6	192.8	227.0	243.5	307.7
Electricity	512.1	2,555.0	4,566.8	4,596.6	4,683.9	5,001.0	5,273.0	5,527.0	5,759.0	5,671.0
Commercial Sector	**411.3**	**1,921.0**	**3,595.6**	**3,491.5**	**3,533.7**	**3,741.5**	**3,891.2**	**4,195.0**	**R4,266.5**	**4,197.9**
Primary Energy	65.3	294.8	492.3	422.1	423.3	380.7	368.7	470.7	405.3	419.7
Coal	–	.3	3.6	3.1	1.6	.1	*	.1	*	.5
Natural Gas	24.9	103.6	163.4	158.6	175.8	171.8	170.3	183.0	193.2	207.8
Petroleum	40.4	190.9	325.3	260.5	245.9	208.9	198.5	287.5	212.1	211.3
Distillate Fuel	11.7	70.7	123.3	99.7	109.1	86.0	74.4	137.6	102.7	112.9
Kerosene	.5	1.0	38.5	28.8	14.9	12.6	11.7	5.7	1.2	1.3
LPG	4.8	15.7	42.8	41.9	32.8	31.2	28.8	32.4	34.9	33.3
Motor Gasoline	20.4	69.0	64.9	50.2	51.0	48.8	49.1	65.3	41.3	35.6
Residual Fuel	3.1	34.4	55.7	39.9	38.0	30.3	34.4	46.6	32.0	28.2
Electricity	345.9	1,626.2	3,103.3	3,069.5	3,110.4	3,360.8	3,522.4	3,724.3	R3,861.2	3,778.3
Industrial Sector	**235.4**	**2,059.8**	**2,059.8**	**1,718.3**	**1,632.9**	**1,681.3**	**R1,691.9**	**R1,822.6**	**1,732.4**	**1,753.0**
Primary Energy	121.7	1,211.1	1,183.1	906.7	843.0	848.3	R828.9	R978.6	R876.4	925.0
Coal	–	30.2	45.4	37.9	46.4	49.2	53.2	57.0	53.8	64.4
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	–	30.2	45.4	37.9	46.4	49.2	53.2	57.0	53.8	64.4
Natural Gas	35.8	259.6	272.5	174.5	199.3	214.5	236.3	304.1	259.4	273.1
Petroleum	85.8	921.3	865.3	694.3	597.3	584.7	R539.4	R617.5	563.2	587.4
Asphalt and Road Oil	18.0	106.4	220.8	227.3	160.8	164.6	123.5	131.3	148.5	103.7
Distillate Fuel	14.7	236.8	154.0	156.6	148.7	116.4	111.9	146.4	114.5	149.1
Kerosene	3.9	5.5	22.8	1.2	1.3	2.5	3.8	2.3	.5	.4
LPG	4.4	107.2	98.3	94.2	73.0	75.2	R71.0	R61.1	65.3	62.6
Lubricants	12.9	52.6	58.7	50.8	46.8	51.9	48.5	50.3	51.8	61.2
Motor Gasoline	3.0	4.5	48.5	36.1	37.2	35.2	41.6	49.4	43.0	42.7
Residual Fuel	19.1	294.2	146.6	44.3	33.5	57.5	49.9	63.4	39.0	64.5
Other	9.8	114.0	115.5	83.7	95.9	81.4	89.3	113.4	100.6	103.3
Electricity	113.7	848.6	876.6	811.6	789.9	833.0	863.0	844.0	856.0	828.0
Transportation Sector	**1,321.5**	**7,939.6**	**7,755.0**	**6,132.1**	**6,776.3**	**7,047.9**	**7,717.8**	**8,980.2**	**R8,168.8**	**8,252.9**
Primary Energy	1,321.5	7,939.6	7,753.7	6,129.7	6,773.6	7,045.7	7,715.2	8,977.4	R8,166.0	8,250.2
Coal	–	–	–	–	–	–	–	–	–	–
Petroleum	1,321.5	7,939.6	7,753.7	6,129.7	6,773.6	7,045.7	7,715.2	8,977.4	R8,166.0	8,250.2
Aviation Gasoline	34.4	61.0	42.4	43.4	29.6	33.0	40.8	38.0	R31.3	25.6
Distillate Fuel	63.0	719.9	857.8	792.2	862.6	923.5	1,008.4	1,221.9	1,050.3	1,212.7
Jet Fuel	96.6	1,302.3	762.5	587.3	604.7	685.3	835.0	1,013.5	R693.5	626.4
LPG	.9	3.2	15.8	16.2	6.6	7.9	7.2	7.9	6.8	6.1
Lubricants	20.6	70.1	78.2	67.7	62.4	69.2	64.6	67.0	69.0	81.5
Motor Gasoline	1,101.8	5,553.9	5,834.1	4,527.7	5,044.1	5,226.7	5,640.8	6,466.7	R6,212.9	6,159.0
Residual Fuel	4.2	229.2	162.9	95.1	163.6	100.1	118.5	162.4	102.2	138.8
Electricity	–	–	1.3	2.5	2.7	2.2	2.6	2.7	R2.8	2.7
Total Energy	**2,613.8**	**14,804.8**	**18,380.3**	**16,336.9**	**17,039.8**	**17,855.6**	**R18,905.7**	**R20,886.4**	**R20,312.2**	**20,357.4**
Primary Energy — Four Sectors	1,642.1	9,775.0	9,832.3	7,856.7	8,452.9	8,658.6	R9,244.7	R10,788.4	R9,833.2	10,077.5
Electricity	971.7	5,029.8	8,548.0	8,480.2	8,586.9	9,197.0	9,661.0	10,098.0	10,479.0	10,280.0
Electric Utility Sector [a]	**196.0**	**2,439.2**	**2,244.7**	**1,980.3**	**2,256.9**	**2,200.2**	**2,433.9**	**2,516.8**	**2,424.6**	**2,452.6**
Coal	35.8	374.6	947.7	844.1	1,017.1	1,038.9	1,075.1	1,098.4	1,140.8	1,126.4
Natural Gas	72.4	257.9	544.2	354.8	480.6	327.3	464.5	484.4	435.8	466.3
Petroleum	87.8	1,743.0	587.7	608.6	620.6	568.9	745.8	784.9	701.8	693.9
Heavy Oil [b]	86.5	1,635.7	546.2	588.3	596.7	547.5	685.2	729.4	653.0	656.9
Light Oil [b]	1.3	107.3	41.5	20.3	23.9	21.4	60.6	55.4	48.8	37.0
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	63.8	165.1	172.9	138.6	265.0	148.5	149.2	146.2	166.0
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1,838.1**	**12,214.3**	**12,077.1**	**9,837.1**	**10,709.9**	**10,858.8**	**R11,678.6**	**R13,305.2**	**R12,257.8**	**12,530.1**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Georgia 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.39	1.50	1.87	1.81	1.79	1.75	1.75	1.79	1.80	1.80
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.39	1.50	1.87	1.81	1.79	1.75	1.75	1.79	1.80	1.80
Natural Gas	.58	3.06	5.25	4.95	4.78	4.72	4.77	4.80	4.65	4.69
Petroleum	1.94	8.02	7.56	5.71	5.95	5.74	6.35	7.33	7.16	6.80
Asphalt and Road Oil	.76	3.72	4.97	4.19	3.21	3.15	2.85	2.86	3.18	2.38
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.06	7.00	6.68	5.43	5.71	5.37	5.79	7.16	6.74	6.39
Jet Fuel	.73	6.46	5.66	3.51	3.77	3.54	4.12	5.45	4.61	4.39
Kerosene	.85	6.51	9.35	6.14	6.26	6.22	6.17	7.60	7.05	7.03
LPG	2.01	6.40	9.48	8.82	8.77	8.37	9.09	10.16	10.58	8.93
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.80	9.91	8.76	6.29	6.66	6.51	7.12	8.24	7.95	7.66
Residual Fuel	.38	3.27	4.13	2.23	2.90	2.29	2.61	2.52	2.11	2.55
Other [a]	2.53	8.56	9.22	6.46	7.19	6.14	7.35	7.56	7.08	8.00
Nuclear Fuel	–	.45	.72	.84	.94	1.01	1.00	.87	.73	.59
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.24	4.55	4.63	3.89	3.85	3.81	3.91	4.26	4.17	4.05
Electric Utility Fuel [c]	.35	1.38	1.73	1.71	1.63	1.61	1.53	1.53	1.46	1.39
Electricity Purchased by End Users	4.58	12.75	17.09	16.91	17.44	18.29	18.70	19.25	19.28	19.60
Total Energy	1.86	7.34	8.48	7.43	7.57	7.56	8.10	8.83	R8.75	8.64
	Expenditures in Millions of Dollars									
Coal	75.7	784.3	1,359.4	1,249.4	1,267.9	1,220.7	1,182.3	1,282.3	1,161.0	1,107.8
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	75.7	784.3	1,359.4	1,249.4	1,267.9	1,220.7	1,182.3	1,282.3	1,161.0	1,107.8
Natural Gas	195.4	970.9	1,467.5	1,370.2	1,437.2	1,508.1	1,489.8	1,466.3	1,471.1	1,575.5
Petroleum	1,070.5	5,638.0	5,799.6	4,340.2	4,728.1	4,762.7	5,121.2	R6,016.6	R5,605.4	5,428.5
Asphalt and Road Oil	19.7	118.2	151.2	156.7	127.4	126.4	93.9	121.2	109.6	77.3
Aviation Gasoline	6.6	17.6	10.7	10.8	8.3	8.5	8.8	9.2	8.0	7.2
Distillate Fuel	79.1	792.6	924.0	776.2	865.8	872.4	948.5	1,188.7	1,057.5	1,011.8
Jet Fuel	42.8	598.1	518.0	351.4	419.2	405.8	405.7	567.9	R375.5	307.3
Kerosene	2.2	20.4	19.5	11.8	7.8	11.9	11.0	8.5	7.8	6.2
LPG	56.5	175.0	231.5	202.9	202.5	202.4	242.2	R216.3	R254.9	230.7
Lubricants	31.5	108.8	121.4	105.1	96.9	107.4	100.3	104.0	107.1	126.5
Motor Gasoline	795.3	3,409.4	3,356.1	2,543.8	2,796.6	2,859.1	3,122.4	3,580.3	R3,493.8	3,376.8
Residual Fuel	24.5	185.0	285.0	46.8	53.7	40.8	38.9	51.4	32.8	98.6
Other [a]	12.4	212.9	182.0	134.7	149.9	127.9	149.6	169.0	158.7	186.1
Nuclear Fuel	–	41.7	79.4	66.0	154.6	164.6	267.5	230.0	205.1	176.5
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1,341.6	7,434.9	8,705.8	7,025.7	7,587.8	7,656.0	8,060.8	R8,995.2	R8,442.7	8,288.4
Electric Utility Fuel [c]	-88.1	-837.7	-1,379.9	-1,256.5	-1,347.1	-1,305.3	-1,372.2	-1,425.9	-1,280.3	-1,212.4
Electricity Purchased by End Users	491.7	2,227.3	3,690.2	3,916.7	4,236.8	4,608.9	4,885.1	5,254.7	5,317.3	5,529.5
Total Energy	1,745.3	8,824.5	11,016.0	9,685.8	10,477.5	10,959.6	11,573.8	R12,824.0	R12,479.7	12,605.4

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Georgia 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.33**	**7.88**	**12.10**	**12.58**	**12.28**	**12.38**	**12.98**	**14.28**	**14.10**	**13.76**
Primary Energy	1.21	4.17	6.87	6.78	6.51	6.31	6.59	7.05	7.00	6.48
Coal	1.00	3.12	3.31	3.00	2.96	2.95	3.05	3.10	2.94	2.92
Natural Gas	1.02	3.57	6.42	6.46	6.18	6.07	6.09	6.64	6.52	6.28
Petroleum	2.22	7.53	9.11	8.63	8.68	8.04	9.61	9.77	10.18	7.94
Distillate Fuel	1.24	6.92	7.51	5.43	5.45	5.54	5.34	6.70	6.25	6.01
Kerosene	1.48	8.77	10.25	7.41	7.44	7.56	7.29	9.15	8.53	8.20
LPG	2.35	7.64	9.22	9.26	9.22	8.36	10.21	10.16	10.57	8.06
Electricity	5.18	13.85	18.91	19.67	19.80	20.58	21.18	21.86	21.98	22.67
Commercial Sector	**2.60**	**7.69**	**12.23**	**11.32**	**12.05**	**12.77**	**13.79**	**14.58**	**14.78**	**14.72**
Primary Energy	.84	3.47	5.83	5.12	5.06	5.06	5.27	5.77	5.65	5.45
Coal	.50	1.60	1.80	1.76	1.73	1.75	1.73	1.78	1.79	1.80
Natural Gas	.72	3.12	5.57	5.46	5.26	5.32	5.33	5.61	5.52	5.41
Petroleum	1.44	7.00	6.81	4.09	4.49	4.29	5.04	6.53	6.39	5.85
Distillate Fuel	.97	6.31	6.46	3.55	3.92	3.45	3.74	5.09	4.11	3.49
Kerosene	.63	6.06	7.24	4.24	4.56	4.12	4.72	5.62	4.98	4.28
LPG	1.58	5.27	9.84	8.26	8.12	8.40	7.64	10.15	10.59	10.04
Motor Gasoline	2.80	9.91	8.76	6.29	6.66	6.51	7.12	8.24	7.95	7.66
Residual Fuel	.32	3.44	4.20	2.46	2.90	2.37	2.72	3.04	2.26	2.40
Electricity	5.85	14.64	19.94	18.17	19.81	20.90	21.33	21.58	21.68	22.10
Industrial Sector	**.86**	**4.97**	**6.47**	**6.03**	**5.83**	**5.84**	**6.03**	**6.03**	**6.01**	**6.10**
Primary Energy	.58	3.81	4.89	4.00	3.78	3.64	3.81	3.84	3.74	3.80
Coal	.50	1.60	1.80	1.76	1.73	1.75	1.73	1.78	1.79	1.80
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.50	1.60	1.80	1.76	1.73	1.75	1.73	1.78	1.79	1.80
Natural Gas	.40	2.75	4.41	3.80	3.57	3.52	3.64	3.50	3.25	3.41
Petroleum	.81	5.36	6.14	5.18	5.00	4.72	5.07	5.29	R5.50	5.25
Asphalt and Road Oil	.76	3.72	4.97	4.19	3.21	3.15	2.85	2.86	3.18	2.38
Distillate Fuel	.58	5.44	6.48	3.80	4.08	3.68	4.23	5.03	4.46	3.83
Kerosene	.63	6.06	7.24	4.24	4.56	4.12	4.72	5.62	4.98	4.28
LPG	1.58	5.27	9.84	8.26	8.12	8.40	7.64	10.15	10.59	10.04
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.80	9.91	8.76	6.29	6.66	6.51	7.12	8.24	7.95	7.66
Residual Fuel	.40	3.44	4.20	2.46	2.90	2.37	2.72	3.04	2.26	2.40
Other	2.53	8.56	9.22	6.46	7.19	6.14	7.35	7.56	7.08	8.00
Electricity	2.91	10.43	13.09	12.95	13.01	13.68	13.72	14.16	14.01	13.95
Transportation Sector	**2.33**	**8.73**	**7.90**	**5.79**	**6.09**	**5.90**	**6.50**	**7.66**	**7.37**	**7.05**
Primary Energy	2.33	8.73	7.90	5.79	6.08	5.89	6.50	7.65	7.36	7.05
Coal	.50	–	–	–	–	–	–	–	–	–
Petroleum	2.33	8.73	7.90	5.79	6.08	5.89	6.50	7.65	7.36	7.05
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.32	7.48	6.74	5.88	6.09	5.74	6.18	7.67	7.21	6.85
Jet Fuel	.73	6.46	5.66	3.51	3.77	3.54	4.12	5.45	4.61	4.39
LPG	1.58	5.27	9.84	8.26	8.12	8.40	7.64	10.15	10.59	10.04
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.80	9.91	8.76	6.29	6.66	6.51	7.12	8.24	7.95	7.66
Residual Fuel	.28	2.91	3.38	1.67	2.81	1.95	2.34	1.85	1.94	2.66
Electricity	–	10.06	12.92	13.59	21.39	21.42	22.70	23.84	24.88	25.55
Total Energy	**1.86**	**7.34**	**8.48**	**7.43**	**7.57**	**7.56**	**8.10**	**8.83**	**R8.75**	**8.64**
Primary Energy — Four Sectors	1.51	6.42	6.76	5.38	5.47	5.30	5.73	6.42	6.23	6.01
Electricity	4.58	12.75	17.09	16.91	17.44	18.29	18.70	19.25	19.28	19.60
Electric Utility Sector [a]	**.35**	**1.38**	**1.73**	**1.71**	**1.63**	**1.61**	**1.53**	**1.53**	**1.46**	**1.39**
Coal	.38	1.50	1.88	1.81	1.79	1.75	1.75	1.79	1.80	1.80
Natural Gas	.29	2.56	4.30	2.00	3.71	2.73	3.16	2.97	2.76	2.82
Petroleum	.31	4.48	5.22	2.32	3.42	2.95	4.37	4.26	4.49	4.22
Heavy Oil [b]	.31	3.47	3.59	1.82	3.09	2.24	2.77	2.18	2.22	3.05
Light Oil [b]	.39	6.22	5.65	3.46	3.90	3.39	4.52	5.44	4.74	4.66
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	.45	.72	.84	.94	1.01	1.00	.87	.73	.59
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.24**	**4.55**	**4.63**	**3.89**	**3.85**	**3.81**	**3.91**	**4.26**	**4.17**	**4.05**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Georgia 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**353.0**	**1,406.8**	**2,234.3**	**2,463.4**	**2,603.5**	**2,743.0**	**2,866.9**	**2,990.0**	**3,063.3**	**3,187.6**
Primary Energy	132.3	460.2	717.9	731.1	780.2	804.0	817.9	757.0	799.3	826.7
Coal	1.1	.6	1.1	.2	1.0	.7	.3	.6	.2	1.0
Natural Gas	91.6	332.0	555.0	591.3	638.0	672.5	648.0	615.6	647.6	696.9
Petroleum	39.7	127.6	161.8	139.7	141.3	130.8	169.6	140.8	151.5	128.8
Distillate Fuel	1.8	23.3	15.5	11.5	10.9	8.3	8.3	9.8	6.5	6.2
Kerosene	1.0	4.5	15.0	8.5	5.5	8.8	7.3	5.8	5.5	5.1
LPG	36.9	99.7	131.3	119.6	124.9	113.6	153.9	125.3	139.5	117.5
Electricity	220.7	946.6	1,516.4	1,732.3	1,823.2	1,939.0	2,049.0	2,233.0	2,264.0	2,361.0
Commercial Sector	**206.7**	**830.4**	**1,565.1**	**1,483.8**	**1,683.5**	**1,853.2**	**1,974.0**	**2,117.8**	**R2,133.1**	**2,220.2**
Primary Energy	43.5	232.9	407.6	351.9	371.4	377.5	353.8	371.1	350.5	364.7
Coal	1.0	.6	1.1	.2	1.0	.8	.4	.6	.2	1.1
Natural Gas	28.6	189.1	295.1	282.6	294.8	305.0	290.4	285.0	289.4	298.9
Petroleum	13.9	43.2	111.4	69.1	75.6	71.7	63.1	85.5	60.9	64.6
Distillate Fuel	4.0	11.6	58.2	20.5	22.9	24.1	21.3	37.7	20.6	21.1
Kerosene	.1	.4	1.9	1.7	.9	.5	2.0	2.0	1.5	.9
LPG	4.4	12.1	24.7	18.8	19.4	20.1	20.3	22.1	24.7	25.8
Motor Gasoline	5.1	18.9	14.2	11.9	14.3	15.5	15.1	22.4	13.8	16.7
Residual Fuel	.2	.2	12.4	16.1	18.2	11.4	4.4	1.3	.3	.1
Electricity	163.1	597.5	1,157.5	1,131.9	1,312.1	1,475.7	1,620.2	1,746.7	R1,782.6	1,855.6
Industrial Sector	**270.4**	**1,855.6**	**2,604.7**	**2,161.0**	**2,215.3**	**2,316.9**	**2,378.8**	**R2,544.6**	**R2,455.4**	**2,526.3**
Primary Energy	162.5	1,173.0	1,590.8	1,111.2	1,117.6	1,127.1	1,167.8	R1,275.0	R1,190.0	1,218.8
Coal	6.0	26.5	69.5	77.8	84.1	91.6	88.0	99.5	93.4	79.9
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	6.0	26.5	69.5	77.8	84.1	91.6	88.0	99.5	93.4	79.9
Natural Gas	58.0	440.0	613.4	484.3	501.3	526.1	549.2	559.8	531.8	576.4
Petroleum	98.6	706.5	907.9	549.1	532.3	509.3	530.6	R615.6	R564.8	562.6
Asphalt and Road Oil	19.7	118.2	151.2	156.7	127.4	126.4	93.9	121.2	109.6	77.3
Distillate Fuel	13.5	126.4	135.3	86.4	84.8	72.8	97.2	118.4	88.2	61.6
Kerosene	1.1	15.4	2.7	1.5	1.5	2.6	1.7	.7	.8	.2
LPG	14.5	61.7	67.9	58.8	54.4	64.5	64.7	R65.1	R86.4	83.4
Lubricants	14.6	55.0	61.4	53.2	49.0	54.3	50.7	52.6	54.1	64.0
Motor Gasoline	1.8	1.4	57.5	38.3	42.6	39.5	48.5	55.4	49.0	49.2
Residual Fuel	21.0	115.4	249.9	19.5	22.7	21.4	24.2	33.1	18.0	40.7
Other	12.4	212.9	182.0	134.7	149.9	127.9	149.6	169.0	158.7	186.1
Electricity	107.9	682.6	1,013.9	1,049.8	1,097.7	1,189.8	1,211.1	1,269.7	1,265.4	1,307.5
Transportation Sector	**915.2**	**4,731.6**	**4,612.0**	**3,577.6**	**3,975.2**	**4,046.4**	**4,354.0**	**5,171.6**	**R4,828.0**	**4,671.3**
Primary Energy	915.2	4,731.1	4,609.6	3,574.9	3,971.4	4,042.1	4,349.2	5,166.3	R4,822.7	4,665.9
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	915.2	4,731.1	4,609.6	3,574.9	3,971.4	4,042.1	4,349.2	5,166.3	R4,822.7	4,665.9
Aviation Gasoline	6.6	17.6	10.7	10.8	8.3	8.5	8.8	9.2	8.0	7.2
Distillate Fuel	59.6	616.2	707.4	654.4	743.7	761.0	813.3	1,015.9	936.8	917.4
Jet Fuel	42.8	598.1	518.0	351.4	419.2	405.8	405.7	567.9	R375.5	307.3
LPG	.6	1.5	7.5	5.7	3.9	4.2	3.3	3.9	4.3	4.0
Lubricants	16.9	53.8	60.0	52.0	47.9	53.1	49.6	51.4	52.9	62.5
Motor Gasoline	788.3	3,389.1	3,284.4	2,493.6	2,739.7	2,804.1	3,058.8	3,502.5	R3,431.1	3,310.9
Residual Fuel	.3	54.8	21.5	7.1	8.8	5.5	9.8	15.4	14.2	56.5
Electricity	–	.5	2.4	2.7	3.7	4.3	4.8	5.3	R5.4	5.4
Total Energy	**1,745.3**	**8,824.5**	**11,016.0**	**9,685.8**	**10,477.5**	**10,959.6**	**11,573.8**	**R12,824.0**	**R12,479.7**	**12,605.4**
Primary Energy — Four Sectors	1,253.6	6,597.2	7,325.8	5,769.1	6,240.7	6,350.7	6,688.7	R7,569.4	R7,162.4	7,076.0
Electricity	491.7	2,227.3	3,690.2	3,916.7	4,236.8	4,608.9	4,885.1	5,254.7	5,317.3	5,529.5
Electric Utility Sector [a]	**88.1**	**837.7**	**1,379.9**	**1,256.5**	**1,347.1**	**1,305.3**	**1,372.2**	**1,425.9**	**1,280.3**	**1,212.4**
Coal	67.7	756.7	1,287.7	1,171.2	1,181.8	1,127.6	1,093.6	1,181.5	1,067.1	1,025.8
Natural Gas	17.3	9.7	3.9	11.9	3.1	4.4	2.2	5.9	2.4	3.4
Petroleum	3.1	29.7	9.0	7.5	7.5	8.7	8.9	8.5	5.6	6.7
Heavy Oil [b]	3.0	14.6	1.3	4.1	4.0	2.5	.5	1.6	.3	1.3
Light Oil [b]	.1	15.1	7.7	3.4	3.5	6.2	8.4	6.9	5.3	5.4
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	41.7	79.4	66.0	154.6	164.6	267.5	230.0	205.1	176.5
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1,341.6**	**7,434.9**	**8,705.8**	**7,025.7**	**7,587.8**	**7,656.0**	**8,060.8**	**R8,995.2**	**R8,442.7**	**8,288.4**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Hawaii 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	–	–	2.15	2.09	1.95	1.81	1.76	1.82	1.80	1.70
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	–	–	2.15	2.09	1.95	1.81	1.76	1.82	1.80	1.70
Natural Gas	–	13.06	14.20	11.96	11.89	11.52	11.41	12.24	14.16	13.33
Petroleum	1.09	6.17	6.79	5.05	5.20	4.84	5.38	6.50	R5.94	5.63
Asphalt and Road Oil	.56	3.61	4.47	4.49	4.24	3.95	3.18	3.15	3.29	2.81
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.04	6.58	7.88	6.33	6.06	6.26	6.88	8.09	7.97	7.32
Jet Fuel	.73	6.21	6.21	4.36	4.30	4.04	4.59	5.99	5.17	4.90
Kerosene	.85	6.38	6.86	4.18	4.60	4.71	5.64	6.77	6.22	6.30
LPG	2.53	6.32	13.79	12.99	12.77	12.61	14.94	R15.56	R15.41	14.70
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.32	10.81	11.14	9.63	9.47	9.55	10.42	11.71	10.40	10.95
Residual Fuel	.40	3.80	4.81	2.83	3.41	2.80	3.20	4.01	3.21	2.83
Other[a]	.51	2.49	2.51	1.53	1.50	1.45	1.74	2.02	1.72	1.29
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	.65	–	.79	–	–	–	([d])	([d])	–	–
Primary Energy — Five Sectors[b]	1.09	6.25	6.85	5.13	5.26	4.90	5.43	6.55	R6.02	5.70
Electric Utility Fuel[c]	.41	3.97	4.94	2.98	3.54	2.95	3.32	4.33	3.44	3.26
Electricity Purchased by End Users	6.98	22.01	29.81	23.66	24.49	22.53	23.76	26.53	27.14	27.81
Total Energy	1.73	8.71	10.30	8.49	8.63	7.84	8.60	10.03	R9.95	9.78
	Expenditures in Millions of Dollars									
Coal	–	–	2.4	0.8	3.1	2.2	1.4	1.3	1.7	2.0
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	–	–	2.4	.8	3.1	2.2	1.4	1.3	1.7	2.0
Natural Gas	–	39.4	38.1	32.0	33.1	32.4	33.2	36.5	41.2	38.5
Petroleum	207.0	1,499.6	1,547.4	1,100.1	1,149.7	1,243.2	1,425.0	1,742.5	R1,488.2	1,366.9
Asphalt and Road Oil	1.4	6.8	9.1	8.1	11.2	9.2	6.3	8.0	8.4	8.0
Aviation Gasoline	1.5	9.1	7.8	11.8	9.5	10.5	12.0	12.8	11.5	10.5
Distillate Fuel	9.9	228.7	211.5	168.2	142.6	215.1	227.7	321.4	335.8	238.1
Jet Fuel	58.4	492.4	462.1	248.5	277.1	271.7	341.8	425.3	R323.4	276.6
Kerosene	.7	.3	.1	.1	.1	*	*	*	*	*
LPG	8.5	31.1	6.5	5.8	7.2	8.0	10.0	9.8	R10.8	31.6
Lubricants	2.2	8.2	9.1	7.9	7.3	8.1	7.6	7.8	8.1	9.5
Motor Gasoline	99.2	410.7	444.3	398.5	406.1	425.8	478.8	530.3	490.0	510.1
Residual Fuel	24.7	308.6	395.4	250.6	287.8	293.7	339.8	425.7	299.3	281.4
Other[a]	.5	3.7	1.5	.4	.9	1.0	1.2	1.4	.9	1.0
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	.2	–	.2	–	–	–	([d])	([d])	–	–
Primary Energy — Five Sectors[b]	207.2	1,538.9	1,588.1	1,132.9	1,185.9	1,277.9	1,459.6	1,780.3	R1,531.0	1,407.5
Electric Utility Fuel[c]	-17.4	-275.8	-342.5	-215.9	-269.6	-240.5	-282.8	-371.8	-271.5	-242.9
Electricity Purchased by End Users	87.4	456.9	654.7	538.6	570.6	565.5	629.6	732.1	768.9	803.0
Total Energy	277.2	1,720.0	1,900.4	1,455.6	1,487.0	1,602.9	1,806.3	2,140.5	R2,028.4	1,967.5

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Utilities used biomass fuels at no charge or received a fee for accepting them.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
*Value less than 0.05 million dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Hawaii 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**7.07**	**20.08**	**30.90**	**25.56**	**25.90**	**24.35**	**25.71**	**28.41**	**29.57**	**28.97**
Primary Energy	4.11	12.48	16.13	14.55	14.49	14.16	15.65	16.47	19.93	16.98
Coal	–	–	–	–	–	–	–	–	–	–
Natural Gas	–	13.50	16.74	14.82	14.89	14.55	14.50	15.37	21.23	16.80
Petroleum	4.11	11.61	15.01	14.06	13.93	13.67	17.02	17.90	18.31	17.05
Distillate Fuel	1.27	6.92	7.57	5.86	5.83	5.77	6.49	7.69	7.48	6.91
Kerosene	–	–	–	–	–	–	–	–	14.47	13.35
LPG	4.12	11.63	15.04	14.16	14.02	13.84	17.07	17.94	18.36	17.06
Electricity	8.22	23.64	33.29	27.17	27.63	25.89	27.19	30.01	30.83	31.98
Commercial Sector	**5.65**	**17.85**	**25.75**	**20.08**	**18.22**	**10.53**	**12.25**	**16.04**	**20.70**	**15.87**
Primary Energy	1.55	8.75	11.10	8.34	7.26	4.32	4.94	6.50	8.64	5.63
Coal	–	–	–	–	–	–	–	–	–	–
Natural Gas	–	12.70	13.34	11.08	11.01	10.69	10.59	11.45	12.37	12.43
Petroleum	1.55	6.60	7.46	5.21	4.92	3.38	3.90	5.13	6.50	4.02
Distillate Fuel	1.12	6.60	6.61	4.95	4.64	4.87	5.76	6.67	6.26	5.93
Kerosene	.85	–	6.86	4.18	4.60	4.71	5.64	6.77	6.08	6.07
LPG	.91	3.81	9.63	9.06	8.52	8.58	8.09	9.03	9.29	9.26
Motor Gasoline	3.32	10.81	11.14	9.63	9.47	9.55	10.42	11.71	10.40	10.95
Residual Fuel	.42	3.86	4.60	2.81	3.33	2.71	3.09	3.83	3.11	2.84
Electricity	9.92	26.40	34.41	27.29	27.52	25.60	26.97	29.67	30.23	30.80
Industrial Sector	**1.55**	**8.67**	**13.02**	**9.12**	**9.58**	**8.73**	**11.13**	**11.84**	**11.86**	**12.36**
Primary Energy	.60	4.44	4.93	3.41	3.74	3.39	3.87	4.57	4.03	3.87
Coal	–	–	2.15	2.09	1.95	1.81	1.76	1.82	1.80	1.70
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	–	–	2.15	2.09	1.95	1.81	1.76	1.82	1.80	1.70
Natural Gas	–	–	–	–	–	–	–	–	–	–
Petroleum	.60	4.44	5.15	3.45	3.92	3.50	4.00	4.69	R4.16	4.05
Asphalt and Road Oil	.56	3.61	4.47	4.49	4.24	3.95	3.18	3.15	3.29	2.81
Distillate Fuel	.74	5.49	6.07	3.70	4.07	4.16	4.99	5.99	5.38	5.37
Kerosene	.85	6.38	6.86	4.18	4.60	4.71	5.64	6.77	6.08	6.07
LPG	.91	3.81	9.63	9.06	8.52	8.58	8.09	9.03	9.29	9.26
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.32	10.81	11.14	9.63	9.47	9.55	10.42	11.71	10.40	10.95
Residual Fuel	.42	3.82	4.60	2.81	3.33	2.71	3.09	3.83	3.11	2.84
Other	.51	2.49	2.51	1.53	1.50	1.45	1.74	2.02	1.72	1.29
Electricity	4.59	18.63	25.08	18.96	20.08	18.20	19.42	22.21	22.60	22.99
Transportation Sector	**1.34**	**7.40**	**7.81**	**6.41**	**6.36**	**6.22**	**6.70**	**7.92**	R7.37	**7.01**
Primary Energy	1.34	7.40	7.81	6.41	6.36	6.22	6.70	7.92	R7.37	7.01
Coal	–	–	–	–	–	–	–	–	–	–
Petroleum	1.34	7.40	7.81	6.41	6.36	6.22	6.70	7.92	R7.37	7.01
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.37	7.39	8.53	7.31	8.21	7.95	8.73	9.69	10.11	9.63
Jet Fuel	.73	6.21	6.21	4.36	4.30	4.04	4.59	5.99	5.17	4.90
LPG	.91	3.81	9.63	9.06	8.52	8.58	8.09	9.03	9.29	9.26
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.32	10.81	11.14	9.63	9.47	9.55	10.42	11.71	10.40	10.95
Residual Fuel	.37	3.27	4.65	2.62	3.18	2.49	2.81	3.51	2.85	2.56
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.73**	**8.71**	**10.30**	**8.49**	**8.63**	**7.84**	**8.60**	**10.03**	R9.95	**9.78**
Primary Energy — Four Sectors	1.29	7.15	7.66	6.17	6.15	5.79	6.41	7.58	R7.18	6.76
Electricity	6.98	22.01	29.81	23.66	24.49	22.53	23.76	26.53	27.14	27.81
Electric Utility Sector [a]	**.41**	**3.97**	**4.94**	**2.98**	**3.54**	**2.95**	**3.32**	**4.33**	**3.44**	**3.26**
Coal	–	–	–	–	–	–	–	–	–	–
Natural Gas	–	–	–	–	–	–	–	–	–	–
Petroleum	.40	3.97	4.95	2.98	3.54	2.95	3.32	4.33	3.44	3.26
Heavy Oil [b]	.40	3.87	4.86	2.86	3.44	2.87	3.29	4.15	3.31	2.92
Light Oil [b]	.43	5.19	6.40	4.69	4.63	3.82	3.61	5.79	4.34	5.15
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	.65	–	.79	–	–	–	([d])	([d])	–	–
Primary Energy — Five Sectors [c]	**1.09**	**6.25**	**6.85**	**5.13**	**5.26**	**4.90**	**5.43**	**6.55**	R6.02	**5.70**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[d] Utilities used biomass fuels at no charge or received a fee for accepting them.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Hawaii 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**43.0**	**185.3**	**230.2**	**196.1**	**211.0**	**205.7**	**225.6**	**255.6**	**273.2**	**301.5**
Primary Energy	7.0	36.8	16.8	14.3	15.6	15.7	17.6	17.6	21.2	35.5
Coal	–	–	–	–	–	–	–	–	–	–
Natural Gas	–	18.4	11.3	9.3	9.4	8.8	8.8	9.3	12.5	9.9
Petroleum	7.0	18.4	5.5	4.9	6.2	6.8	8.8	8.3	8.7	25.5
Distillate Fuel	*	*	*	*	*	.1	*	*	*	*
Kerosene	–	–	–	–	–	–	–	–	*	*
LPG	7.0	18.4	5.5	4.9	6.1	6.8	8.8	8.3	8.7	25.5
Electricity	36.0	148.5	213.4	181.9	195.4	190.0	208.0	238.0	252.0	266.0
Commercial Sector	**30.3**	**172.7**	**225.4**	**202.5**	**223.2**	**255.2**	**271.1**	**299.5**	**297.8**	**321.7**
Primary Energy	4.2	41.0	36.1	32.0	40.8	74.2	73.1	71.4	54.9	67.7
Coal	–	–	–	–	–	–	–	–	–	–
Natural Gas	–	21.0	26.8	22.7	23.7	23.6	24.4	27.2	28.7	28.6
Petroleum	4.2	20.0	9.3	9.3	17.1	50.6	48.8	44.2	26.2	39.1
Distillate Fuel	1.1	15.3	5.2	5.2	13.1	17.1	16.6	19.7	22.3	15.1
Kerosene	.4	–	.1	.1	*	*	*	*	*	*
LPG	.3	1.1	.6	.6	.7	.7	.7	.7	.8	2.4
Motor Gasoline	2.3	3.1	2.8	2.3	2.2	2.7	2.8	3.6	2.7	2.6
Residual Fuel	.1	.6	.6	1.2	1.1	30.0	28.6	20.1	.4	19.0
Electricity	26.1	131.7	189.3	170.5	182.4	181.0	198.0	228.1	242.9	254.0
Industrial Sector	**36.0**	**275.7**	**325.7**	**244.1**	**257.5**	**258.6**	**274.4**	**R344.1**	**R341.1**	**342.6**
Primary Energy	10.7	99.1	73.8	57.9	64.6	64.1	50.8	78.1	R67.1	59.7
Coal	–	–	2.4	.8	3.1	2.2	1.4	1.3	1.7	2.0
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	–	–	2.4	.8	3.1	2.2	1.4	1.3	1.7	2.0
Natural Gas	–	–	–	–	–	–	–	–	–	–
Petroleum	10.7	99.1	71.3	57.0	61.5	61.9	49.4	76.9	R65.4	57.7
Asphalt and Road Oil	1.4	6.8	9.1	8.1	11.2	9.2	6.3	8.0	8.4	8.0
Distillate Fuel	2.8	43.0	16.5	11.1	18.0	18.2	14.9	28.2	21.5	18.7
Kerosene	.3	.3	*	*	*	*	*	*	*	*
LPG	1.2	11.3	.2	.2	.3	.3	.3	.4	R.9	2.4
Lubricants	.1	1.7	1.9	1.7	1.5	1.7	1.6	1.6	1.7	2.0
Motor Gasoline	.9	2.8	6.1	5.1	5.3	5.5	7.0	8.2	8.2	8.7
Residual Fuel	3.5	29.4	36.0	30.3	24.4	25.9	18.2	29.1	23.9	16.8
Other	.5	3.7	1.5	.4	.9	1.0	1.2	1.4	.9	1.0
Electricity	25.3	176.7	252.0	186.3	192.9	194.5	223.6	266.0	274.0	282.9
Transportation Sector	**167.9**	**1,086.3**	**1,119.0**	**812.9**	**795.4**	**883.5**	**1,035.2**	**1,241.3**	**R1,116.4**	**1,001.6**
Primary Energy	167.9	1,086.3	1,119.0	812.9	795.4	883.5	1,035.2	1,241.3	R1,116.4	1,001.6
Coal	–	–	–	–	–	–	–	–	–	–
Petroleum	167.9	1,086.3	1,119.0	812.9	795.4	883.5	1,035.2	1,241.3	R1,116.4	1,001.6
Aviation Gasoline	1.5	9.1	7.8	11.8	9.5	10.5	12.0	12.8	11.5	10.5
Distillate Fuel	5.7	143.5	161.7	129.4	82.7	151.3	166.8	218.5	248.7	145.7
Jet Fuel	58.4	492.4	462.1	248.5	277.1	271.7	341.8	425.3	R323.4	276.6
LPG	.1	.4	.2	.2	.2	.3	.3	.4	.5	1.2
Lubricants	2.1	6.5	7.2	6.3	5.8	6.4	6.0	6.2	6.4	7.5
Motor Gasoline	96.0	404.9	435.4	391.0	398.5	417.6	468.9	518.5	479.1	498.8
Residual Fuel	4.1	29.7	44.6	25.7	21.6	25.6	39.5	59.5	46.7	61.2
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**277.2**	**1,720.0**	**1,900.4**	**1,455.6**	**1,487.0**	**1,602.9**	**1,806.3**	**2,140.5**	**R2,028.4**	**1,967.5**
Primary Energy — Four Sectors	189.8	1,263.2	1,245.7	917.0	916.3	1,037.4	1,176.7	1,408.4	R1,259.5	1,164.5
Electricity	87.4	456.9	654.7	538.6	570.6	565.5	629.6	732.1	768.9	803.0
Electric Utility Sector [a]	**17.4**	**275.8**	**342.5**	**215.9**	**269.6**	**240.5**	**282.8**	**371.8**	**271.5**	**242.9**
Coal	–	–	–	–	–	–	–	–	–	–
Natural Gas	–	–	–	–	–	–	–	–	–	–
Petroleum	17.2	275.8	342.3	215.9	269.6	240.5	282.8	371.8	271.5	242.9
Heavy Oil [b]	17.0	248.9	314.2	193.4	240.7	212.2	253.5	316.8	228.3	184.3
Light Oil [b]	.2	26.8	28.0	22.5	28.9	28.3	29.3	55.0	43.2	58.6
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	.2	–	.2	–	–	–	([d])	([d])	–	–
Primary Energy — Five Sectors [c]	**207.2**	**1,538.9**	**1,588.1**	**1,132.9**	**1,185.9**	**1,277.9**	**1,459.6**	**1,780.3**	**R1,531.0**	**1,407.5**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[d] Utilities used biomass fuels at no charge or received a fee for accepting them.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Idaho 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.59	1.78	1.70	2.01	1.97	1.78	1.82	1.76	1.87	1.89
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.59	1.78	1.70	2.01	1.97	1.78	1.82	1.76	1.87	1.89
Natural Gas	.66	3.87	5.07	4.22	5.86	4.49	3.57	3.43	3.62	3.62
Petroleum	1.92	8.11	8.50	6.49	6.53	6.78	7.28	8.05	R8.02	8.16
Asphalt and Road Oil	.60	3.64	4.78	4.40	3.43	3.39	2.79	2.64	3.28	2.93
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.01	6.54	7.62	5.73	5.75	5.80	6.58	7.65	7.29	7.35
Jet Fuel	.76	6.59	6.68	4.40	4.39	4.24	4.93	6.07	5.50	5.44
Kerosene	.82	–	8.03	7.54	7.63	7.74	8.35	9.73	9.11	9.39
LPG	2.41	6.39	9.45	7.91	9.05	9.03	9.92	10.09	10.31	10.03
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.81	9.79	9.31	7.07	7.26	7.61	8.21	9.15	9.13	9.52
Residual Fuel	.34	4.45	3.67	2.38	2.57	1.93	1.66	2.51	2.31	1.78
Other [a]	4.14	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.50	6.57	7.23	5.72	6.10	5.93	6.04	6.56	R6.49	6.64
Electric Utility Fuel [c]	.35	3.87	5.60	4.25	2.78	4.07	4.45	5.38	5.04	4.83
Electricity Purchased by End Users	2.95	7.39	10.66	10.94	10.81	10.84	11.10	11.15	11.27	11.35
Total Energy	1.77	6.75	8.16	7.12	7.36	7.26	7.39	7.77	7.67	7.89
	Expenditures in Millions of Dollars									
Coal	4.7	17.1	15.1	17.3	17.4	17.3	17.7	17.7	22.9	18.1
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	4.7	17.1	15.1	17.3	17.4	17.3	17.7	17.7	22.9	18.1
Natural Gas	29.5	182.6	192.9	138.4	200.0	167.7	149.1	142.4	173.8	170.1
Petroleum	202.2	913.5	880.6	685.2	700.0	748.3	847.5	967.7	R1,016.8	1,006.0
Asphalt and Road Oil	4.5	19.2	20.0	15.9	11.4	9.0	15.4	22.4	21.5	28.5
Aviation Gasoline	1.7	7.4	4.0	3.7	2.9	1.9	2.3	1.9	1.7	*
Distillate Fuel	32.9	215.6	247.7	197.2	213.7	219.9	263.3	319.4	361.4	307.5
Jet Fuel	3.9	44.9	40.7	26.8	27.7	27.3	33.4	38.1	R28.9	29.1
Kerosene	1.1	–	.3	.3	.4	.4	.2	.5	.2	.1
LPG	9.6	23.3	26.5	21.2	20.6	24.6	30.6	22.3	30.3	24.3
Lubricants	4.7	15.8	17.7	15.3	14.1	15.6	14.6	15.1	15.6	18.4
Motor Gasoline	142.8	570.0	521.6	404.5	408.1	448.7	487.3	547.2	556.4	597.7
Residual Fuel	.6	17.1	2.0	.3	1.0	.7	.5	.7	.6	.2
Other [a]	.4	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	236.4	1,113.1	1,088.6	840.9	917.4	933.3	1,014.4	1,127.9	R1,213.5	1,194.3
Electric Utility Fuel [c]	*	-.2	-.2	*	*	*	-.1	*	*	*
Electricity Purchased by End Users	105.8	345.9	596.4	589.5	593.8	635.1	675.0	685.0	694.0	736.0
Total Energy	342.2	1,458.8	1,684.9	1,430.4	1,511.2	1,568.3	1,689.3	1,812.8	R1,907.5	1,930.2

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
*Value less than 0.05 million dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Idaho 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.58**	**7.14**	**10.30**	**10.28**	**10.39**	**10.44**	**10.57**	**10.83**	**10.61**	**10.72**
Primary Energy	1.54	5.28	6.91	6.04	5.71	5.61	5.77	5.95	6.04	5.78
Coal	.99	2.56	1.97	1.91	1.54	1.26	1.56	1.55	1.49	1.57
Natural Gas	1.31	4.73	6.57	5.89	5.41	5.38	4.92	4.91	5.02	5.08
Petroleum	1.91	6.97	7.84	6.51	6.40	6.51	7.95	8.58	8.45	7.73
Distillate Fuel	1.40	6.60	7.29	5.59	5.21	5.21	5.89	7.37	7.20	6.49
Kerosene	–	–	12.00	9.20	8.58	8.58	9.70	12.14	11.86	10.69
LPG	2.83	7.84	9.55	9.70	10.64	10.38	12.49	11.73	12.24	11.55
Electricity	4.81	8.54	12.60	13.14	13.45	13.88	14.11	14.27	14.33	14.45
Commercial Sector	**2.12**	**6.49**	**9.16**	**9.20**	**9.04**	**8.68**	**8.88**	**9.23**	**9.01**	**9.43**
Primary Energy	.95	4.53	5.70	4.88	4.65	4.71	4.64	4.61	4.98	5.01
Coal	.50	1.70	1.69	2.01	1.98	1.82	1.84	1.77	1.88	1.90
Natural Gas	.96	4.36	5.42	4.68	4.44	4.43	4.09	4.07	4.28	4.27
Petroleum	1.35	5.65	7.37	6.15	5.39	5.88	6.54	6.96	7.18	7.12
Distillate Fuel	1.21	6.41	6.82	5.74	4.72	4.41	5.27	6.24	5.66	5.54
Kerosene	.82	–	7.00	4.85	5.02	5.06	5.77	6.53	6.93	6.77
LPG	1.55	5.72	9.38	6.76	7.98	7.99	7.58	8.30	8.68	8.82
Motor Gasoline	2.81	9.79	9.31	7.07	7.26	7.61	8.21	9.15	9.13	9.52
Residual Fuel	–	4.63	3.67	2.38	2.57	1.93	1.66	2.51	2.31	1.78
Electricity	4.10	8.33	12.10	12.58	12.25	12.06	12.58	12.54	12.54	12.66
Industrial Sector	**.96**	**4.53**	**5.68**	**5.00**	**5.80**	**5.20**	**4.88**	**4.82**	**4.99**	**5.02**
Primary Energy	.69	4.30	4.80	3.78	5.03	4.11	3.67	3.65	4.09	3.81
Coal	.50	1.70	1.69	2.01	1.98	1.82	1.84	1.77	1.88	1.90
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.50	1.70	1.69	2.01	1.98	1.82	1.84	1.77	1.88	1.90
Natural Gas	.42	3.58	4.32	3.23	6.59	4.18	2.84	2.65	2.85	2.88
Petroleum	.96	6.02	6.60	4.92	4.82	4.93	5.05	5.12	5.88	5.35
Asphalt and Road Oil	.60	3.64	4.78	4.40	3.43	3.39	2.79	2.64	3.28	2.93
Distillate Fuel	.77	6.02	6.15	4.26	4.41	4.44	5.07	5.74	6.10	5.95
Kerosene	.82	–	7.00	4.85	5.02	5.06	5.77	6.53	6.93	6.77
LPG	1.55	5.72	9.38	6.76	7.98	7.99	7.58	8.30	8.68	8.82
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.81	9.79	9.31	7.07	7.26	7.61	8.21	9.15	9.13	9.52
Residual Fuel	.34	3.76	3.67	2.38	2.57	1.93	1.66	2.51	2.31	1.78
Other	4.14	–	–	–	–	–	–	–	–	–
Electricity	1.84	5.44	7.69	7.70	7.56	7.53	7.67	7.69	7.68	8.00
Transportation Sector	**2.47**	**8.98**	**9.05**	**6.90**	**7.05**	**7.33**	**7.96**	**8.99**	**R8.86**	**9.11**
Primary Energy	2.47	8.98	9.05	6.90	7.05	7.33	7.96	8.99	R8.86	9.11
Coal	.50	–	–	–	–	–	–	–	–	–
Petroleum	2.47	8.98	9.05	6.90	7.05	7.33	7.96	8.99	R8.86	9.11
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.31	6.95	8.70	6.86	7.06	7.23	8.08	9.27	8.74	8.59
Jet Fuel	.76	6.59	6.68	4.40	4.39	4.24	4.93	6.07	5.50	5.44
LPG	1.55	5.72	9.38	6.76	7.98	7.99	7.58	8.30	8.68	8.82
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.81	9.79	9.31	7.07	7.26	7.61	8.21	9.15	9.13	9.52
Residual Fuel	.39	–	–	–	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.77**	**6.75**	**8.16**	**7.12**	**7.36**	**7.26**	**7.39**	**7.77**	**7.67**	**7.89**
Primary Energy — Four Sectors	1.50	6.57	7.23	5.72	6.10	5.93	6.04	6.56	R6.49	6.64
Electricity	2.95	7.39	10.66	10.94	10.81	10.84	11.10	11.15	11.27	11.35
Electric Utility Sector [a]	**.35**	**3.87**	**5.60**	**4.25**	**2.78**	**4.07**	**4.45**	**5.38**	**5.04**	**4.83**
Coal	–	–	–	–	–	–	–	–	–	–
Natural Gas	–	3.76	5.44	4.70	2.31	–	–	–	–	–
Petroleum	.35	6.39	6.07	3.74	4.25	4.07	4.45	5.38	5.04	4.83
Heavy Oil [b]	–	–	–	–	–	–	–	–	–	–
Light Oil [b]	.35	6.39	6.07	3.74	4.25	4.07	4.45	5.38	5.04	4.83
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.50**	**6.57**	**7.23**	**5.72**	**6.10**	**5.93**	**6.04**	**6.56**	**R6.49**	**6.64**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Idaho 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**65.3**	**210.6**	**341.1**	**319.0**	**305.3**	**332.3**	**358.0**	**354.7**	**392.0**	**368.2**
Primary Energy	26.6	66.8	92.5	75.4	66.4	74.3	83.0	80.7	99.9	85.2
Coal	1.5	2.3	.7	.6	.3	.8	1.0	.7	.8	.6
Natural Gas	10.7	36.8	53.5	43.8	38.5	42.2	44.4	43.3	53.1	50.5
Petroleum	14.4	27.8	38.3	31.1	27.5	31.4	37.6	36.6	46.1	34.1
Distillate Fuel	6.8	18.7	27.0	20.6	17.4	18.7	19.1	22.7	29.5	21.5
Kerosene	–	–	.1	.3	.3	.4	.1	.4	.1	.1
LPG	7.6	9.1	11.3	10.2	9.8	12.3	18.4	13.5	16.5	12.4
Electricity	38.6	143.8	248.5	243.5	239.0	258.0	275.0	274.0	292.0	283.0
Commercial Sector	**40.9**	**170.8**	**265.7**	**248.3**	**246.3**	**269.3**	**281.3**	**281.7**	**298.2**	**318.5**
Primary Energy	11.7	57.8	76.1	57.9	53.6	67.3	68.3	58.7	77.2	71.5
Coal	1.4	2.8	1.2	1.1	.7	2.0	2.1	1.6	1.9	1.4
Natural Gas	5.9	26.4	51.2	40.9	34.4	37.3	37.9	35.7	42.4	39.3
Petroleum	4.3	28.6	23.8	15.9	18.5	27.9	28.3	21.5	32.9	30.8
Distillate Fuel	2.1	8.1	14.5	9.5	11.6	11.1	10.7	12.4	14.3	13.4
Kerosene	.5	–	.1	*	.1	*	*	*	*	*
LPG	.7	1.2	2.0	1.3	1.3	1.7	2.0	1.7	2.1	1.7
Motor Gasoline	1.0	5.1	6.6	5.0	5.4	15.1	15.4	7.1	16.5	15.6
Residual Fuel	–	14.2	.6	*	.2	.1	.3	.3	*	.2
Electricity	29.2	113.0	189.6	190.4	192.7	202.0	213.0	223.0	221.0	247.0
Industrial Sector	**84.4**	**369.3**	**384.4**	**324.0**	**407.7**	**380.6**	**394.5**	**407.1**	**470.1**	**449.1**
Primary Energy	46.5	280.3	226.1	168.4	245.7	205.6	207.5	219.1	289.1	243.1
Coal	1.8	12.0	13.2	15.6	16.5	14.5	14.7	15.4	20.2	16.1
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	1.8	12.0	13.2	15.6	16.5	14.5	14.7	15.4	20.2	16.1
Natural Gas	12.8	119.2	88.1	53.7	127.0	88.2	66.9	63.4	78.4	80.3
Petroleum	31.8	149.0	124.8	99.1	102.2	102.9	125.9	140.2	190.5	146.7
Asphalt and Road Oil	4.5	19.2	20.0	15.9	11.4	9.0	15.4	22.4	21.5	28.5
Distillate Fuel	14.3	77.5	62.7	53.0	61.6	63.6	79.0	91.1	132.9	85.2
Kerosene	.5	–	.1	*	*	*	*	.1	.1	*
LPG	1.2	12.6	11.3	8.1	8.5	9.4	9.2	5.6	10.5	9.1
Lubricants	1.0	3.8	4.3	3.7	3.4	3.8	3.5	3.7	3.8	4.4
Motor Gasoline	9.2	32.9	25.0	18.1	16.5	16.3	18.7	16.8	21.1	19.4
Residual Fuel	.6	3.0	1.4	.3	.9	.6	.2	.4	.6	.1
Other	.4	–	–	–	–	–	–	–	–	–
Electricity	37.9	89.1	158.3	155.6	162.1	175.0	187.0	188.0	181.0	206.0
Transportation Sector	**151.6**	**708.1**	**693.7**	**539.2**	**551.8**	**586.1**	**655.5**	**769.3**	**R747.2**	**794.4**
Primary Energy	151.6	708.1	693.7	539.2	551.8	586.1	655.5	769.3	R747.2	794.4
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	151.6	708.1	693.7	539.2	551.8	586.1	655.5	769.3	R747.2	794.4
Aviation Gasoline	1.7	7.4	4.0	3.7	2.9	1.9	2.3	1.9	1.7	*
Distillate Fuel	9.7	111.3	143.5	114.1	123.1	126.5	154.3	193.1	184.7	187.4
Jet Fuel	3.9	44.9	40.7	26.8	27.7	27.3	33.4	38.1	R28.9	29.1
LPG	.1	.5	2.0	1.6	1.0	1.2	1.1	1.5	1.2	1.2
Lubricants	3.7	12.0	13.4	11.6	10.7	11.9	11.1	11.5	11.8	14.0
Motor Gasoline	132.6	532.0	490.1	381.3	386.3	417.3	453.2	523.3	518.8	562.7
Residual Fuel	*	–	–	–	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**342.2**	**1,458.8**	**1,684.9**	**1,430.4**	**1,511.2**	**1,568.3**	**1,689.3**	**1,812.8**	**R1,907.5**	**1,930.2**
Primary Energy — Four Sectors	236.4	1,113.0	1,088.5	840.9	917.4	933.3	1,014.3	1,127.8	R1,213.5	1,194.2
Electricity	105.8	345.9	596.4	589.5	593.8	635.1	675.0	685.0	694.0	736.0
Electric Utility Sector [a]	*	.2	.2	*	*	*	.1	*	*	*
Coal	–	–	–	–	–	–	–	–	–	–
Natural Gas	–	.2	.1	*	*	–	–	–	–	–
Petroleum	*	*	*	*	*	*	.1	*	*	*
Heavy Oil [b]	–	–	–	–	–	–	–	–	–	–
Light Oil [b]	*	*	*	*	*	*	.1	*	*	*
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**236.4**	**1,113.1**	**1,088.6**	**840.9**	**917.4**	**933.3**	**1,014.4**	**1,127.9**	**R1,213.5**	**1,194.3**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Illinois 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.36	1.64	2.12	2.06	1.93	1.84	1.77	1.72	1.70	1.70
Coking Coal	.42	1.93	2.08	2.05	1.92	2.02	1.92	1.84	1.99	2.00
Steam Coal	.35	1.63	2.12	2.06	1.93	1.82	1.75	1.70	1.67	1.67
Natural Gas	.72	3.33	5.00	4.59	4.36	4.10	4.41	4.57	4.40	4.50
Petroleum	1.86	7.67	8.49	6.51	6.69	6.69	7.25	8.48	8.04	7.81
Asphalt and Road Oil	.64	3.83	4.91	4.57	3.34	3.51	2.92	3.20	3.38	3.02
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.11	6.88	7.62	5.75	6.00	5.97	6.67	8.17	7.43	7.29
Jet Fuel	.74	6.38	6.00	4.22	4.21	3.84	4.32	5.84	4.75	4.44
Kerosene	1.13	6.67	8.49	5.75	6.17	6.20	6.90	8.36	7.68	7.16
LPG	1.39	5.16	8.75	7.27	6.86	6.95	R7.40	R9.11	R8.15	7.77
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.05	9.81	9.03	6.78	7.23	7.27	8.00	9.35	9.13	8.79
Residual Fuel	.60	4.92	5.22	4.10	3.27	2.63	2.87	3.00	2.71	2.80
Other [a]	1.29	6.78	7.79	5.79	6.23	5.24	6.13	6.44	5.95	6.21
Nuclear Fuel	.15	.33	.64	.64	.64	.66	.60	.57	.49	.52
Biomass Fuels at Utilities	.65	–	–	–	–	–	–	–	–	1.11
Primary Energy — Five Sectors [b]	1.08	4.32	4.83	4.04	3.96	3.75	3.85	4.34	4.01	4.03
Electric Utility Fuel [c]	.32	1.60	1.67	1.61	1.42	1.23	1.13	1.12	1.06	1.04
Electricity Purchased by End Users	5.98	15.33	21.07	22.37	22.86	21.49	22.07	22.02	22.41	22.61
Total Energy	1.69	6.69	8.45	7.73	7.89	7.53	7.96	8.67	8.53	8.41
	Expenditures in Millions of Dollars									
Coal	329.4	1,388.1	1,720.0	1,654.0	1,508.1	1,370.3	1,261.3	1,283.1	1,285.6	1,180.0
Coking Coal	41.6	93.7	131.6	122.9	129.3	141.7	131.2	116.4	119.4	124.4
Steam Coal	287.8	1,294.5	1,588.3	1,531.1	1,378.8	1,228.7	1,130.1	1,166.8	1,166.2	1,055.7
Natural Gas	831.7	3,601.8	4,873.0	4,234.0	3,771.4	3,933.5	4,376.3	4,271.0	4,307.8	4,433.0
Petroleum	2,593.2	10,370.9	8,843.8	6,989.9	7,426.5	7,708.1	R7,556.4	R9,487.9	R8,143.3	8,061.4
Asphalt and Road Oil	53.8	205.7	244.5	187.4	140.1	130.4	156.0	176.9	177.5	186.1
Aviation Gasoline	2.9	6.0	10.7	8.9	6.1	7.0	8.0	7.7	7.7	7.6
Distillate Fuel	287.9	1,464.6	1,427.6	1,174.5	1,191.9	1,169.7	1,342.8	2,024.7	1,564.0	1,543.7
Jet Fuel	95.2	710.2	92.2	48.4	46.8	85.3	109.3	130.1	R172.6	185.8
Kerosene	22.9	22.9	36.3	13.2	10.6	12.3	14.4	8.2	8.8	5.8
LPG	148.4	702.6	837.5	841.8	1,026.4	1,123.6	R325.8	R398.6	R420.0	346.3
Lubricants	100.3	302.4	337.5	292.2	269.2	298.6	278.7	289.1	297.5	351.7
Motor Gasoline	1,715.3	5,622.7	5,272.2	3,869.4	4,186.1	4,436.3	4,852.9	5,913.3	R5,004.9	4,907.5
Residual Fuel	89.2	764.2	157.5	181.9	126.4	82.2	60.6	59.1	53.1	39.0
Other [a]	77.2	569.7	427.8	372.4	422.9	362.6	408.0	480.2	437.0	487.8
Nuclear Fuel	4.1	99.4	270.5	294.6	347.5	488.7	484.5	436.4	381.5	409.9
Biomass Fuels at Utilities	*	–	–	–	–	–	–	–	–	.1
Primary Energy — Five Sectors [b]	3,758.5	15,460.2	15,707.3	13,172.5	13,053.6	13,500.6	R13,678.4	R15,478.3	R14,118.2	14,084.4
Electric Utility Fuel [c]	-254.5	-1,794.2	-1,856.1	-1,849.5	-1,678.7	-1,638.8	-1,550.4	-1,548.3	-1,486.4	-1,410.0
Electricity Purchased by End Users	1,417.5	4,948.6	7,063.0	7,689.4	8,095.9	7,995.8	8,157.9	8,307.1	8,856.5	8,598.5
Total Energy	4,921.4	18,614.6	20,914.2	19,012.3	19,470.9	19,857.6	R20,285.9	R22,237.1	R21,488.3	21,272.8

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
*Value less than 0.05 million dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Illinois 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1.91**	**6.05**	**9.05**	**9.15**	**9.79**	**9.12**	**9.06**	**9.65**	**9.67**	**9.58**
Primary Energy	1.11	3.77	5.47	5.01	4.82	4.60	4.91	5.05	4.94	5.08
Coal	1.03	2.15	2.34	2.05	2.27	2.08	2.20	2.26	2.19	2.16
Natural Gas	1.02	3.53	5.34	4.96	4.74	4.52	4.81	4.95	4.86	5.00
Petroleum	1.48	7.02	7.76	6.00	6.54	6.35	7.32	7.74	7.10	7.35
Distillate Fuel	1.21	6.91	7.38	5.47	6.04	5.87	6.12	7.36	7.10	6.71
Kerosene	1.65	8.71	9.07	6.72	7.43	7.22	7.53	9.05	8.73	8.25
LPG	2.02	7.07	7.82	6.55	6.94	6.77	8.16	7.89	7.02	7.61
Electricity	7.97	17.78	26.42	27.74	29.82	28.54	29.21	29.07	28.92	30.17
Commercial Sector	**1.90**	**7.37**	**10.24**	**10.73**	**10.99**	**10.09**	**11.06**	**11.18**	**R11.64**	**11.54**
Primary Energy	.73	3.68	4.98	4.40	4.29	4.10	4.46	4.63	4.53	4.58
Coal	.46	1.71	1.71	1.60	1.44	1.35	1.37	1.39	1.41	1.28
Natural Gas	.73	3.27	4.84	4.47	4.33	4.12	4.45	4.54	4.47	4.57
Petroleum	.85	6.41	6.46	4.29	4.57	4.47	5.45	6.61	6.09	5.70
Distillate Fuel	1.04	6.49	6.11	4.03	4.22	4.00	4.72	5.67	4.91	4.70
Kerosene	.82	5.93	6.70	4.77	4.94	4.55	6.08	7.39	6.27	6.35
LPG	1.11	4.93	8.89	7.35	6.85	6.96	7.08	9.55	8.57	7.83
Motor Gasoline	3.05	9.81	9.03	6.78	7.23	7.27	8.00	9.35	9.13	8.79
Residual Fuel	.60	5.51	4.14	2.38	2.93	2.39	2.43	2.29	2.63	2.80
Electricity	6.61	16.70	22.36	23.72	22.95	21.38	22.24	22.18	22.68	23.07
Industrial Sector	**.95**	**4.94**	**6.69**	**6.23**	**6.01**	**5.64**	**R5.79**	**6.23**	**R6.02**	**6.07**
Primary Energy	.74	4.04	5.14	4.44	4.30	4.08	R3.83	R4.29	R4.06	4.06
Coal	.44	1.79	1.88	1.78	1.64	1.63	1.61	1.58	1.63	1.59
Coking Coal	.42	1.93	2.08	2.05	1.92	2.02	1.92	1.84	1.99	2.00
Steam Coal	.46	1.71	1.71	1.60	1.44	1.35	1.37	1.39	1.41	1.28
Natural Gas	.49	3.10	4.57	4.06	3.77	3.36	3.65	4.01	3.70	3.68
Petroleum	1.15	5.58	7.62	6.13	5.96	5.92	R5.63	R6.41	R6.20	6.07
Asphalt and Road Oil	.64	3.83	4.91	4.57	3.34	3.51	2.92	3.20	3.38	3.02
Distillate Fuel	.76	5.37	6.05	4.31	4.46	4.10	5.49	6.67	5.65	5.73
Kerosene	.82	5.93	6.70	4.77	4.94	4.55	6.08	7.39	6.27	6.35
LPG	1.11	4.93	8.89	7.35	6.85	6.96	7.08	9.55	8.57	7.83
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.05	9.81	9.03	6.78	7.23	7.27	8.00	9.35	9.13	8.79
Residual Fuel	.59	3.78	4.14	2.38	2.93	2.39	2.43	2.29	2.63	2.80
Other	1.29	6.78	7.79	5.79	6.23	5.24	6.13	6.44	5.95	6.21
Electricity	3.56	11.82	15.35	16.46	16.54	15.14	15.75	15.83	16.09	16.04
Transportation Sector	**2.47**	**9.00**	**9.00**	**6.84**	**7.21**	**7.20**	**7.81**	**9.18**	**8.82**	**8.53**
Primary Energy	2.47	8.99	8.98	6.81	7.19	7.18	7.79	9.16	8.80	8.51
Coal	.46	–	–	–	–	–	–	–	–	–
Petroleum	2.47	8.99	8.98	6.81	7.19	7.18	7.79	9.16	8.80	8.51
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.39	7.45	8.52	6.60	6.89	6.91	7.20	8.73	8.21	8.08
Jet Fuel	.74	6.38	6.00	4.22	4.21	3.84	4.32	5.84	4.75	4.44
LPG	1.11	4.93	8.89	7.35	6.85	6.96	7.08	9.55	8.57	7.83
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.05	9.81	9.03	6.78	7.23	7.27	8.00	9.35	9.13	8.79
Residual Fuel	.57	5.32	5.88	4.86	3.32	2.59	2.90	3.11	2.39	2.51
Electricity	4.08	11.82	19.14	20.87	20.31	18.70	19.82	19.64	20.04	20.33
Total Energy	**1.69**	**6.69**	**8.45**	**7.73**	**7.89**	**7.53**	**7.96**	**8.67**	**8.53**	**8.41**
Primary Energy — Four Sectors	1.31	5.56	6.48	5.35	5.38	5.23	5.57	R6.36	5.95	5.90
Electricity	5.98	15.33	21.07	22.37	22.86	21.49	22.07	22.02	22.41	22.61
Electric Utility Sector [a]	**.32**	**1.60**	**1.67**	**1.61**	**1.42**	**1.23**	**1.13**	**1.12**	**1.06**	**1.04**
Coal	.30	1.62	2.17	2.12	2.00	1.91	1.81	1.75	1.71	1.74
Natural Gas	.35	3.19	5.19	4.62	3.66	3.27	3.26	2.67	2.10	2.20
Petroleum	.63	5.64	6.03	5.09	3.63	3.12	3.59	3.99	3.03	3.06
Heavy Oil [b]	.60	5.60	6.03	5.24	3.56	2.95	3.36	3.63	2.73	2.81
Light Oil [b]	.67	6.38	6.05	3.64	4.22	3.77	4.39	5.26	4.71	4.44
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	.15	.33	.64	.64	.64	.66	.60	.57	.49	.52
Biomass Fuels	.65	–	–	–	–	–	–	–	–	1.11
Primary Energy — Five Sectors [c]	**1.08**	**4.32**	**4.83**	**4.04**	**3.96**	**3.75**	**3.85**	**4.34**	**4.01**	**4.03**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Illinois 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1,252.7**	**3,801.3**	**5,412.9**	**5,299.9**	**5,378.6**	**5,597.1**	**5,862.9**	**5,650.6**	**6,017.8**	**5,899.4**
Primary Energy	639.8	1,985.7	2,710.7	2,368.9	2,123.7	2,288.0	2,635.9	2,390.6	2,468.8	2,567.4
Coal	18.2	3.1	4.9	4.3	5.2	4.4	5.4	4.7	4.5	4.9
Natural Gas	459.4	1,728.1	2,480.4	2,214.8	1,961.9	2,126.8	2,459.9	2,237.3	2,311.5	2,419.6
Petroleum	162.2	254.4	225.4	149.8	156.7	156.9	170.6	148.5	152.8	142.9
Distillate Fuel	84.1	141.3	97.1	70.0	67.1	72.6	56.4	51.5	50.8	39.1
Kerosene	12.5	7.9	29.2	7.7	6.3	8.9	8.9	5.2	5.8	2.8
LPG	65.7	105.2	99.1	72.2	83.3	75.4	105.4	91.8	96.3	101.0
Electricity	612.9	1,815.6	2,702.2	2,930.9	3,254.9	3,309.0	3,227.0	3,260.0	3,549.0	3,332.0
Commercial Sector	**733.8**	**2,802.2**	**3,768.8**	**3,761.9**	**3,748.0**	**3,752.5**	**3,869.2**	**3,992.1**	R4,138.8	**4,069.7**
Primary Energy	226.9	1,002.3	1,280.5	1,038.3	938.7	997.5	979.0	1,036.8	979.5	1,008.3
Coal	15.2	4.5	6.7	6.2	6.1	5.3	6.2	5.4	5.3	5.4
Natural Gas	144.9	761.8	1,073.9	934.7	838.7	901.9	892.6	929.3	884.0	915.9
Petroleum	66.8	236.0	200.0	97.4	94.0	90.3	80.3	102.1	90.3	87.0
Distillate Fuel	22.9	79.4	141.5	46.6	40.5	45.6	38.8	51.1	48.3	49.4
Kerosene	.2	.5	3.6	2.6	1.2	1.5	2.2	1.1	1.4	1.2
LPG	6.4	12.9	19.9	14.3	14.5	13.7	16.1	19.6	20.7	18.3
Motor Gasoline	8.5	51.9	26.1	20.5	21.0	20.9	19.7	27.4	19.1	17.3
Residual Fuel	28.8	91.1	8.9	13.3	16.8	8.7	3.5	3.0	.6	.8
Electricity	506.9	1,799.9	2,488.3	2,723.6	2,809.3	2,755.0	2,890.1	2,955.3	R3,159.2	3,061.4
Industrial Sector	**1,057.8**	**4,777.0**	**5,325.8**	**5,118.5**	**5,210.2**	**5,037.5**	R4,494.1	R4,859.0	R4,867.0	**4,925.9**
Primary Energy	763.5	3,454.9	3,476.0	3,108.6	3,201.7	3,128.7	R2,477.2	R2,790.9	R2,743.4	2,745.4
Coal	115.5	228.7	266.9	264.1	260.4	278.9	251.0	237.9	255.8	233.6
Coking Coal	41.6	93.7	131.6	122.9	129.3	141.7	131.2	116.4	119.4	124.4
Steam Coal	73.9	135.1	135.2	141.2	131.1	137.2	119.8	121.6	136.4	109.2
Natural Gas	179.9	1,049.4	1,287.4	1,055.7	959.0	885.8	1,000.6	1,079.6	1,084.8	1,076.7
Petroleum	468.1	2,176.7	1,921.8	1,788.8	1,982.3	1,964.0	R1,225.6	R1,473.4	R1,402.9	1,435.1
Asphalt and Road Oil	53.8	205.7	244.5	187.4	140.1	130.4	156.0	176.9	177.5	186.1
Distillate Fuel	47.4	240.0	224.0	231.3	248.8	186.8	220.6	295.8	252.6	283.1
Kerosene	10.2	14.4	3.5	2.8	3.1	1.9	3.3	2.0	1.7	1.7
LPG	74.2	581.2	705.0	745.2	920.9	1,026.0	R197.4	R275.8	R293.4	217.9
Lubricants	62.1	170.6	190.4	164.8	151.8	168.4	157.2	163.0	167.8	198.3
Motor Gasoline	96.4	180.7	82.5	56.0	59.5	57.2	59.6	61.7	64.4	56.0
Residual Fuel	46.8	214.4	44.3	28.8	35.2	30.6	23.6	18.0	8.5	4.1
Other	77.2	569.7	427.8	372.4	422.9	362.6	408.0	480.2	437.0	487.8
Electricity	294.3	1,322.1	1,849.8	2,009.9	2,008.4	1,908.8	2,016.8	2,068.0	2,123.6	2,180.5
Transportation Sector	**1,877.0**	**7,234.1**	**6,406.7**	**4,832.1**	**5,134.1**	**5,470.5**	**6,059.7**	**7,735.5**	R6,464.8	**6,378.0**
Primary Energy	1,873.7	7,223.2	6,383.9	4,807.2	5,110.8	5,447.5	6,035.8	7,711.7	R6,440.0	6,353.3
Coal	.2	–	–	–	–	–	–	–	–	–
Petroleum	1,873.5	7,223.2	6,383.9	4,807.2	5,110.8	5,447.5	6,035.8	7,711.7	R6,440.0	6,353.3
Aviation Gasoline	2.9	6.0	10.7	8.9	6.1	7.0	8.0	7.7	7.7	7.6
Distillate Fuel	123.2	978.7	949.7	816.9	825.1	852.6	1,015.4	1,611.3	1,198.8	1,162.7
Jet Fuel	95.2	704.0	92.2	48.4	46.8	85.3	109.3	130.1	R172.6	185.8
LPG	2.2	3.2	13.5	10.1	7.7	8.5	6.9	11.4	9.6	9.1
Lubricants	38.2	131.8	147.1	127.4	117.4	130.2	121.5	126.0	129.7	153.3
Motor Gasoline	1,610.4	5,390.1	5,163.7	3,792.9	4,105.6	4,358.2	4,773.6	5,824.2	R4,921.4	4,834.3
Residual Fuel	1.5	9.4	6.9	2.6	2.1	5.7	1.0	1.0	.2	.5
Electricity	3.3	10.9	22.7	24.9	23.3	22.9	23.9	23.7	R24.7	24.6
Total Energy	**4,921.4**	**18,614.6**	**20,914.2**	**19,012.3**	**19,470.9**	**19,857.6**	R20,285.9	R22,237.1	R21,488.3	**21,272.8**
Primary Energy — Four Sectors	3,504.0	13,666.0	13,851.2	11,323.0	11,375.0	11,861.8	R12,128.0	R13,930.0	R12,631.8	12,674.4
Electricity	1,417.5	4,948.6	7,063.0	7,689.4	8,095.9	7,995.8	8,157.9	8,307.1	8,856.5	8,598.5
Electric Utility Sector [a]	**254.5**	**1,794.2**	**1,856.1**	**1,849.5**	**1,678.7**	**1,638.8**	**1,550.4**	**1,548.3**	**1,486.4**	**1,410.0**
Coal	180.2	1,151.8	1,441.6	1,379.4	1,236.5	1,081.7	998.7	1,035.1	1,020.0	936.2
Natural Gas	47.7	62.5	31.3	28.8	11.9	19.0	23.1	24.8	27.6	20.8
Petroleum	22.5	480.6	112.7	146.8	82.8	49.3	44.1	52.1	57.3	43.1
Heavy Oil [b]	12.2	449.3	97.4	137.1	72.3	37.2	32.5	37.0	43.7	33.7
Light Oil [b]	10.3	31.3	15.4	9.7	10.4	12.1	11.6	15.0	13.6	9.5
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	4.1	99.4	270.5	294.6	347.5	488.7	484.5	436.4	381.5	409.9
Biomass Fuels	*	–	–	–	–	–	–	–	–	.1
Primary Energy — Five Sectors [c]	**3,758.5**	**15,460.2**	**15,707.3**	**13,172.5**	**13,053.6**	**13,500.6**	R13,678.4	R15,478.3	R14,118.2	**14,084.4**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Indiana 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.36	1.53	1.77	1.67	1.55	1.57	1.49	1.46	1.46	1.42
Coking Coal	.44	2.13	2.24	2.05	1.92	2.02	1.92	1.84	1.99	2.00
Steam Coal	.32	1.31	1.64	1.58	1.46	1.44	1.37	1.37	1.36	1.32
Natural Gas	.68	2.88	4.71	4.59	4.08	4.31	4.52	4.26	4.25	4.18
Petroleum	2.01	7.78	7.87	5.76	5.95	5.92	6.48	R7.39	7.21	6.91
Asphalt and Road Oil	.76	3.72	4.81	3.94	3.30	3.33	3.03	3.14	3.14	2.62
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.03	6.85	7.66	5.77	6.11	5.77	6.41	7.59	7.14	6.80
Jet Fuel	.74	6.38	5.81	3.80	3.96	3.74	4.33	5.62	4.76	4.41
Kerosene	1.48	7.94	8.03	5.51	6.13	6.11	6.96	8.32	7.65	6.56
LPG	1.86	6.08	8.71	7.81	7.44	7.45	R8.82	R9.64	9.37	8.93
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.98	10.00	8.85	6.48	6.90	6.94	7.60	8.74	8.60	8.28
Residual Fuel	.57	3.63	4.40	2.62	2.64	2.10	2.34	2.66	2.37	2.46
Other [a]	.77	4.63	6.17	4.04	4.18	3.44	4.01	4.26	4.18	3.74
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	.93	3.67	4.12	3.49	3.42	3.37	3.54	3.72	3.65	3.55
Electric Utility Fuel [c]	.26	1.30	1.66	1.59	1.47	1.44	1.37	1.38	1.36	1.32
Electricity Purchased by End Users	5.15	12.32	16.95	17.74	16.91	16.53	15.92	15.75	15.64	15.59
Total Energy	1.43	5.64	6.94	6.28	6.09	6.06	6.31	6.71	6.73	6.61
	Expenditures in Millions of Dollars									
Coal	364.5	1,775.9	2,108.1	1,881.9	1,812.4	1,989.6	1,911.0	1,983.5	1,958.1	1,844.5
Coking Coal	151.8	684.0	560.1	429.4	454.8	561.8	502.0	437.9	438.9	384.2
Steam Coal	212.7	1,091.9	1,548.0	1,452.5	1,357.7	1,427.8	1,409.0	1,545.6	1,519.2	1,460.2
Natural Gas	359.0	1,343.1	1,995.4	1,776.1	1,639.6	1,920.7	2,043.8	1,875.7	1,903.3	1,976.6
Petroleum	1,314.0	5,383.4	5,348.7	4,174.6	4,508.9	4,319.1	R4,845.9	R5,731.3	R5,394.7	5,079.2
Asphalt and Road Oil	30.7	127.5	170.2	158.5	166.4	153.5	128.4	178.1	146.8	108.0
Aviation Gasoline	4.0	11.8	19.8	18.4	14.4	16.2	12.0	14.2	13.3	10.9
Distillate Fuel	176.3	1,227.3	1,373.4	1,067.7	1,126.8	965.7	1,235.7	1,447.3	1,347.8	1,266.2
Jet Fuel	10.6	76.5	507.4	400.2	428.4	350.1	429.8	569.3	R463.5	399.7
Kerosene	17.9	29.7	33.3	22.9	20.9	24.7	25.7	17.4	17.6	11.1
LPG	62.9	174.3	153.5	172.4	164.1	182.0	R258.1	R325.3	R316.9	226.0
Lubricants	48.8	155.7	173.8	150.5	138.6	153.8	143.5	148.9	153.2	181.1
Motor Gasoline	921.2	3,162.9	2,694.3	2,043.5	2,289.7	2,340.0	2,460.7	2,827.0	R2,769.6	2,697.2
Residual Fuel	14.2	261.7	57.9	44.8	43.7	29.9	35.7	47.7	31.0	40.9
Other [a]	27.4	155.9	165.1	95.8	116.0	103.4	116.4	156.0	135.0	138.0
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	2,037.6	8,502.3	9,452.2	7,832.5	7,960.9	8,229.4	R8,800.7	R9,590.4	R9,256.2	8,900.3
Electric Utility Fuel [c]	-136.5	-951.4	-1,359.6	-1,270.9	-1,194.4	-1,261.8	-1,254.3	-1,404.9	-1,391.5	-1,336.4
Electricity Purchased by End Users	657.3	2,524.5	3,647.8	3,846.6	3,848.9	3,993.9	3,912.8	3,927.0	4,062.7	4,042.4
Total Energy	2,558.3	10,075.4	11,740.5	10,408.3	10,615.4	10,961.6	R11,459.2	R12,112.5	R11,927.3	11,606.3

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Indiana 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.02**	**6.42**	**9.82**	**10.02**	**9.88**	**9.72**	**9.87**	**10.13**	**10.16**	**9.99**
Primary Energy	1.18	4.10	5.81	5.55	5.10	5.25	5.78	5.73	5.71	5.66
Coal	1.10	2.43	2.77	2.83	2.57	2.54	2.46	2.62	2.62	2.58
Natural Gas	1.00	3.19	5.50	5.47	4.91	5.08	5.41	5.28	5.38	5.37
Petroleum	1.52	7.31	8.04	6.40	6.38	6.49	8.06	8.95	8.02	7.87
Distillate Fuel	1.21	7.18	7.50	5.66	5.71	5.71	6.30	7.52	6.95	6.14
Kerosene	1.59	8.55	8.79	6.64	6.69	6.69	7.38	8.81	8.15	7.20
LPG	2.10	7.37	8.76	7.64	7.32	7.46	9.78	10.09	8.97	9.46
Electricity	6.56	13.86	20.37	21.14	21.38	20.95	20.31	20.13	19.72	20.11
Commercial Sector	**1.78**	**6.18**	**8.72**	**9.09**	**9.06**	**9.43**	**9.46**	**9.69**	**9.73**	**9.57**
Primary Energy	.86	3.69	5.03	4.54	4.22	4.26	4.56	4.55	4.52	4.48
Coal	.52	1.58	1.60	1.53	1.38	1.47	1.46	1.44	1.44	1.38
Natural Gas	.83	2.99	5.00	4.90	4.41	4.53	4.70	4.52	4.55	4.52
Petroleum	1.09	5.51	6.30	4.60	4.90	4.66	5.42	6.85	5.96	5.75
Distillate Fuel	1.04	6.66	6.04	3.94	4.17	3.70	4.79	5.32	4.73	4.56
Kerosene	.81	6.14	6.69	4.20	4.98	4.55	5.07	6.80	5.94	5.51
LPG	1.28	5.10	8.66	7.93	7.55	7.44	7.81	9.36	9.61	8.43
Motor Gasoline	2.98	10.00	8.85	6.48	6.90	6.94	7.60	8.74	8.60	8.28
Residual Fuel	.70	4.35	4.40	2.61	2.61	2.08	2.31	2.64	2.38	2.47
Electricity	6.58	13.36	17.51	18.42	18.34	18.72	18.18	17.97	17.64	17.81
Industrial Sector	**.75**	**3.67**	**4.87**	**4.71**	**4.24**	**4.12**	**R4.18**	**4.31**	**4.37**	**4.33**
Primary Energy	.58	2.76	3.39	3.01	2.79	2.86	R2.92	3.06	R3.09	2.96
Coal	.47	1.99	2.04	1.87	1.75	1.87	1.79	1.72	1.82	1.79
Coking Coal	.44	2.13	2.24	2.05	1.92	2.02	1.92	1.84	1.99	2.00
Steam Coal	.52	1.58	1.60	1.53	1.38	1.47	1.46	1.44	1.44	1.38
Natural Gas	.47	2.63	4.04	3.79	3.38	3.69	3.83	3.57	3.48	3.35
Petroleum	1.05	4.76	6.42	4.73	4.51	4.39	R4.63	R5.21	R5.26	4.65
Asphalt and Road Oil	.76	3.72	4.81	3.94	3.30	3.33	3.03	3.14	3.14	2.62
Distillate Fuel	.74	5.57	6.03	3.79	4.49	4.10	4.57	6.14	5.36	4.97
Kerosene	.81	6.14	6.69	4.20	4.98	4.55	5.07	6.80	5.94	5.51
LPG	1.28	5.10	8.66	7.93	7.55	7.44	7.81	9.36	9.61	8.43
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.98	10.00	8.85	6.48	6.90	6.94	7.60	8.74	8.60	8.28
Residual Fuel	.50	3.43	4.40	2.61	2.61	2.08	2.31	2.64	2.38	2.47
Other	.80	4.63	6.17	4.25	4.38	3.62	4.34	4.93	4.42	3.89
Electricity	3.52	11.00	14.54	15.13	13.35	12.43	11.98	11.94	11.83	11.73
Transportation Sector	**2.66**	**9.25**	**8.27**	**6.03**	**6.35**	**6.31**	**6.88**	**8.03**	**R7.75**	**7.51**
Primary Energy	2.66	9.25	8.27	6.03	6.35	6.31	6.88	8.03	R7.75	7.50
Coal	.52	–	–	–	–	–	–	–	–	–
Petroleum	2.67	9.25	8.27	6.03	6.35	6.31	6.88	8.03	R7.75	7.50
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.23	7.17	8.28	6.46	6.76	6.31	6.89	8.00	7.71	7.46
Jet Fuel	.74	6.38	5.81	3.80	3.96	3.74	4.33	5.62	4.76	4.41
LPG	1.28	5.10	8.66	7.93	7.55	7.44	7.81	9.36	9.61	8.43
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.98	10.00	8.85	6.48	6.90	6.94	7.60	8.74	8.60	8.28
Residual Fuel	.65	3.87	4.85	3.25	3.22	2.37	2.66	2.80	2.29	2.42
Electricity	–	–	–	–	–	–	–	23.88	23.17	24.15
Total Energy	**1.43**	**5.64**	**6.94**	**6.28**	**6.09**	**6.06**	**6.31**	**6.71**	**6.73**	**6.61**
Primary Energy — Four Sectors	1.15	4.78	5.48	4.56	4.46	4.45	4.80	5.26	5.20	5.06
Electricity	5.15	12.32	16.95	17.74	16.91	16.53	15.92	15.75	15.64	15.59
Electric Utility Sector [a]	**.26**	**1.30**	**1.66**	**1.59**	**1.47**	**1.44**	**1.37**	**1.38**	**1.36**	**1.32**
Coal	.25	1.26	1.64	1.58	1.47	1.43	1.36	1.36	1.34	1.31
Natural Gas	.35	2.51	4.15	4.54	2.82	2.59	2.69	2.58	2.38	2.48
Petroleum	.58	5.99	5.87	2.55	2.71	2.37	2.30	2.03	2.86	2.41
Heavy Oil [b]	.75	–	–	–	–	–	–	–	–	–
Light Oil [b]	.77	5.99	5.87	3.89	4.12	3.63	4.22	5.12	4.94	4.43
Petroleum Coke	.24	–	–	.80	.99	.93	.74	.71	.81	.69
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**.93**	**3.67**	**4.12**	**3.49**	**3.42**	**3.37**	**3.54**	**3.72**	**3.65**	**3.55**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Indiana 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**591.5**	**1,771.6**	**2,406.9**	**2,446.8**	**2,430.6**	**2,617.2**	**2,665.9**	**2,503.3**	**2,644.7**	**2,597.3**
Primary Energy	289.6	860.9	1,030.6	967.4	886.1	1,010.2	1,121.9	984.3	1,014.7	1,030.3
Coal	6.3	4.1	11.3	12.2	11.1	12.7	10.0	11.4	9.0	8.4
Natural Gas	160.3	516.3	810.4	772.9	688.3	792.6	857.6	755.8	799.6	829.1
Petroleum	123.1	340.4	208.9	182.3	186.8	204.8	254.3	217.0	206.2	192.8
Distillate Fuel	56.3	225.8	111.8	95.1	91.8	92.9	84.9	75.3	78.4	67.8
Kerosene	16.6	23.8	23.2	14.8	15.3	19.7	22.3	13.9	14.6	7.6
LPG	50.2	90.8	73.9	72.4	79.6	92.3	147.1	127.9	113.1	117.3
Electricity	301.8	910.8	1,376.4	1,479.4	1,544.4	1,607.0	1,544.0	1,519.0	1,630.0	1,567.0
Commercial Sector	**247.2**	**854.4**	**1,233.2**	**1,224.7**	**1,212.8**	**1,414.3**	**1,423.2**	**1,391.2**	**1,423.0**	**1,427.5**
Primary Energy	100.8	379.3	500.8	411.7	371.0	410.3	439.2	403.1	398.8	413.5
Coal	5.5	5.0	12.1	12.1	11.0	13.7	11.0	11.6	9.1	8.2
Natural Gas	64.5	206.9	350.9	320.3	288.8	329.9	351.9	309.4	315.5	332.6
Petroleum	30.7	167.4	137.8	79.3	71.2	66.8	76.4	82.1	74.3	72.6
Distillate Fuel	16.9	77.0	92.8	42.2	33.9	28.8	32.2	33.2	32.4	37.6
Kerosene	.8	1.1	5.1	3.3	1.4	2.0	1.1	1.3	1.5	1.8
LPG	5.4	11.1	12.9	13.3	14.5	16.2	20.7	20.9	21.4	18.4
Motor Gasoline	3.9	11.7	16.3	16.6	16.8	16.5	17.1	25.6	16.0	14.5
Residual Fuel	3.7	66.5	10.7	4.0	4.6	3.1	5.1	1.0	3.1	.3
Electricity	146.4	475.1	732.3	813.0	841.8	1,004.0	984.0	988.1	1,024.2	1,014.1
Industrial Sector	**743.8**	**3,446.0**	**3,867.5**	**3,451.2**	**3,383.0**	**3,469.4**	**R3,470.2**	**R3,631.1**	**R3,533.7**	**3,441.7**
Primary Energy	534.7	2,307.4	2,328.4	1,897.0	1,920.3	2,086.5	R2,085.3	R2,212.1	R2,126.1	1,981.3
Coal	228.6	845.6	744.0	600.2	609.8	720.2	657.8	589.5	584.3	518.8
Coking Coal	151.8	684.0	560.1	429.4	454.8	561.8	502.0	437.9	438.9	384.2
Steam Coal	76.9	161.6	183.9	170.7	155.0	158.4	155.7	151.6	145.4	134.6
Natural Gas	123.9	615.0	829.5	677.9	658.8	789.2	823.2	793.3	764.3	795.7
Petroleum	182.2	846.8	754.9	618.9	651.8	577.1	R604.3	R829.3	R777.4	666.8
Asphalt and Road Oil	30.7	127.5	170.2	158.5	166.4	153.5	128.4	178.1	146.8	108.0
Distillate Fuel	43.8	162.6	157.8	118.2	148.4	101.6	128.2	162.8	166.3	158.8
Kerosene	.5	4.7	5.0	4.8	4.2	3.0	2.3	2.1	1.6	1.7
LPG	6.9	70.8	62.1	82.5	66.4	69.4	R85.9	R171.3	R176.8	85.2
Lubricants	30.0	95.5	106.5	92.2	85.0	94.3	88.0	91.3	93.9	111.0
Motor Gasoline	35.0	39.5	41.9	28.3	30.3	29.3	30.2	28.5	32.0	27.8
Residual Fuel	8.2	190.3	46.2	39.9	36.9	24.5	27.0	43.2	26.6	37.5
Other	27.1	155.9	165.1	94.6	114.3	101.6	114.4	151.9	133.3	136.8
Electricity	209.0	1,138.6	1,539.1	1,554.2	1,462.6	1,382.9	1,384.8	1,419.0	1,407.6	1,460.4
Transportation Sector	**975.9**	**4,003.3**	**4,232.9**	**3,285.6**	**3,589.0**	**3,460.6**	**3,899.9**	**4,587.0**	**R4,325.9**	**4,139.7**
Primary Energy	975.9	4,003.3	4,232.9	3,285.6	3,589.0	3,460.6	3,899.9	4,586.1	R4,325.1	4,138.9
Coal	.4	–	–	–	–	–	–	–	–	–
Petroleum	975.5	4,003.3	4,232.9	3,285.6	3,589.0	3,460.6	3,899.9	4,586.1	R4,325.1	4,138.9
Aviation Gasoline	4.0	11.8	19.8	18.4	14.4	16.2	12.0	14.2	13.3	10.9
Distillate Fuel	58.1	736.5	996.8	805.0	844.2	734.3	981.3	1,163.3	1,060.6	995.2
Jet Fuel	10.6	76.5	507.4	400.2	428.4	350.1	429.8	569.3	R463.5	399.7
LPG	.5	1.6	4.6	4.2	3.6	4.1	4.4	5.2	5.5	5.0
Lubricants	18.8	60.3	67.3	58.2	53.6	59.5	55.5	57.6	59.3	70.1
Motor Gasoline	882.2	3,111.7	2,636.0	1,998.6	2,242.6	2,294.2	2,413.4	2,772.9	R2,721.6	2,654.9
Residual Fuel	1.3	4.9	.9	1.0	2.3	2.3	3.5	3.5	1.3	3.2
Electricity	–	–	–	–	–	–	–	.9	.8	.9
Total Energy	**2,558.3**	**10,075.4**	**11,740.5**	**10,408.3**	**10,615.4**	**10,961.6**	**R11,459.2**	**R12,112.5**	**R11,927.3**	**11,606.3**
Primary Energy — Four Sectors	1,901.0	7,550.9	8,092.7	6,561.7	6,766.5	6,967.6	R7,546.4	R8,185.5	R7,864.7	7,563.9
Electricity	657.3	2,524.5	3,647.8	3,846.6	3,848.9	3,993.9	3,912.8	3,927.0	4,062.7	4,042.4
Electric Utility Sector [a]	**136.5**	**951.4**	**1,359.6**	**1,270.9**	**1,194.4**	**1,261.8**	**1,254.3**	**1,404.9**	**1,391.5**	**1,336.4**
Coal	123.7	921.2	1,340.7	1,257.4	1,180.5	1,243.0	1,232.3	1,371.0	1,355.8	1,309.0
Natural Gas	10.3	4.8	4.7	5.0	3.7	9.0	11.0	17.1	23.9	19.3
Petroleum	2.5	25.4	14.2	8.5	10.1	9.8	11.1	16.7	11.8	8.1
Heavy Oil [b]	1.0	–	–	–	–	–	–	–	–	–
Light Oil [b]	1.2	25.4	14.2	7.3	8.5	8.0	9.1	12.6	10.1	6.8
Petroleum Coke	.4	–	–	1.2	1.7	1.8	2.0	4.1	1.7	1.3
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**2,037.6**	**8,502.3**	**9,452.2**	**7,832.5**	**7,960.9**	**8,229.4**	**R8,800.7**	**R9,590.4**	**R9,256.2**	**8,900.3**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Iowa 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	**0.36**	**1.42**	**1.52**	**1.41**	**1.31**	**1.28**	**1.25**	**1.16**	**1.15**	**1.14**
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.36	1.42	1.52	1.41	1.31	1.28	1.25	1.16	1.15	1.14
Natural Gas	**.57**	**2.79**	**4.60**	**4.22**	**3.63**	**3.80**	**3.57**	**3.81**	**3.65**	**4.24**
Petroleum	**2.11**	**8.19**	**8.15**	**6.54**	**6.69**	**6.52**	**7.43**	**8.26**	**8.04**	**7.74**
Asphalt and Road Oil	.72	3.77	5.03	3.89	3.55	3.46	3.00	3.12	3.15	2.49
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.01	6.41	6.16	5.47	5.95	5.48	6.27	7.37	6.66	6.46
Jet Fuel	.75	6.47	6.28	4.36	4.27	4.12	4.57	6.11	5.21	4.78
Kerosene	1.31	6.23	6.95	5.79	5.83	5.43	5.39	5.91	5.94	5.81
LPG	1.59	5.57	7.32	7.23	5.85	5.81	R6.84	5.86	R7.44	7.42
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.83	9.97	9.47	7.13	7.36	7.37	8.40	9.38	9.11	8.72
Residual Fuel	.61	3.19	4.07	2.86	2.48	2.38	2.25	2.36	2.24	2.21
Other[a]	2.15	7.65	8.17	6.06	6.86	5.86	6.59	7.12	6.45	6.76
Nuclear Fuel	**–**	**.39**	**.94**	**.75**	**.71**	**.68**	**.67**	**.66**	**.66**	**.56**
Biomass Fuels at Utilities	**.65**	**1.74**	**.79**	**.32**	**.95**	**.87**	**1.47**	**1.60**	**1.67**	**1.58**
Primary Energy — Five Sectors[b]	**1.19**	**4.60**	**4.87**	**4.09**	**3.87**	**3.79**	**3.98**	**4.24**	**4.03**	**4.21**
Electric Utility Fuel[c]	.30	1.32	1.46	1.31	1.21	1.19	1.18	1.10	1.07	1.06
Electricity Purchased by End Users	6.39	13.97	19.02	19.25	18.30	17.59	17.30	17.37	17.41	17.53
Total Energy	**1.80**	**6.72**	**8.03**	**7.28**	**7.06**	**6.87**	**7.12**	**7.65**	**7.43**	**7.58**
	Expenditures in Millions of Dollars									
Coal	**47.5**	**333.3**	**407.9**	**370.6**	**375.2**	**390.6**	**397.8**	**386.2**	**397.9**	**373.1**
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	47.5	333.3	407.9	370.6	375.2	390.6	397.8	386.2	397.9	373.1
Natural Gas	**190.2**	**719.9**	**1,003.4**	**851.8**	**713.4**	**874.1**	**777.2**	**803.0**	**R833.2**	**953.1**
Petroleum	**730.5**	**3,029.5**	**2,585.0**	**2,090.9**	**2,059.9**	**2,079.7**	**R2,314.3**	**R2,509.6**	**R2,474.7**	**2,471.5**
Asphalt and Road Oil	13.9	42.5	67.6	52.6	42.1	50.8	34.1	31.8	32.6	23.2
Aviation Gasoline	2.8	8.4	4.2	6.4	4.2	5.4	4.6	4.7	3.6	3.2
Distillate Fuel	80.7	594.5	555.9	508.6	546.5	508.9	546.1	653.6	566.3	616.4
Jet Fuel	3.0	29.6	20.9	14.5	18.7	16.5	19.3	30.7	R26.1	21.6
Kerosene	3.6	6.0	6.1	3.8	3.6	3.3	2.2	2.7	1.7	1.4
LPG	66.2	228.5	224.5	230.9	130.5	140.2	R180.8	R135.1	R195.1	241.5
Lubricants	21.6	62.1	69.3	60.0	55.3	61.3	57.3	59.4	61.1	72.3
Motor Gasoline	530.1	1,853.2	1,565.7	1,174.7	1,222.9	1,260.5	1,435.8	1,552.2	R1,552.9	1,453.5
Residual Fuel	1.5	8.3	4.7	9.1	1.8	3.9	2.6	1.9	1.4	1.5
Other[a]	7.1	196.2	66.2	30.2	34.2	28.8	31.6	37.6	33.9	36.9
Nuclear Fuel	**–**	**10.9**	**19.6**	**24.4**	**19.3**	**23.0**	**22.6**	**21.3**	**29.2**	**20.4**
Biomass Fuels at Utilities	**.3**	**.5**	**.5**	**.2**	**.7**	**.5**	**.4**	**.3**	**.3**	**.2**
Primary Energy — Five Sectors[b]	**968.4**	**4,094.1**	**4,016.3**	**3,337.9**	**3,168.5**	**3,368.0**	**R3,512.2**	**R3,720.4**	**R3,735.4**	**3,818.3**
Electric Utility Fuel[c]	-50.4	-313.1	-366.7	-335.2	-326.2	-354.1	-350.2	-340.8	-353.3	-330.5
Electricity Purchased by End Users	337.5	1,184.5	1,666.6	1,731.1	1,687.4	1,731.0	1,695.0	1,745.1	1,829.0	1,807.0
Total Energy	**1,255.5**	**4,965.5**	**5,316.2**	**4,733.9**	**4,529.6**	**4,744.9**	**R4,857.0**	**R5,124.7**	**R5,211.1**	**5,294.8**

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Iowa 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.06**	**6.87**	**9.65**	**9.65**	**9.97**	**9.51**	**9.65**	**10.29**	**9.90**	**10.39**
Primary Energy	1.16	4.09	5.38	5.11	4.75	4.76	5.14	5.19	4.96	5.43
Coal	1.27	3.31	3.41	3.12	2.89	2.51	2.60	2.41	2.32	2.25
Natural Gas	.96	3.18	5.33	5.07	4.71	4.76	4.65	4.96	4.77	5.21
Petroleum	1.63	6.84	5.81	5.46	5.17	5.14	7.39	6.73	6.08	6.51
Distillate Fuel	1.22	6.79	5.94	5.32	5.33	4.80	4.86	5.73	5.32	5.38
Kerosene	1.57	8.10	7.33	6.57	6.57	5.92	5.99	7.07	6.57	6.64
LPG	1.85	6.86	5.62	5.51	5.00	5.31	8.68	7.19	6.39	6.92
Electricity	7.75	16.13	22.53	22.56	22.91	22.23	22.19	22.89	22.74	23.50
Commercial Sector	**1.80**	**6.33**	**9.24**	**9.40**	**8.87**	**8.38**	**8.43**	**8.58**	**8.63**	**9.11**
Primary Energy	.77	3.38	4.84	4.40	3.84	3.91	3.88	3.93	4.28	4.59
Coal	.41	1.59	1.66	1.57	1.52	1.42	1.35	1.34	1.31	1.32
Natural Gas	.68	2.84	4.80	4.41	3.84	4.00	3.86	4.00	3.96	4.25
Petroleum	1.30	6.57	6.28	5.60	5.23	5.00	5.03	5.10	7.01	6.76
Distillate Fuel	1.05	6.44	5.10	3.81	4.18	3.41	3.65	4.32	3.78	4.07
Kerosene	.81	5.52	5.86	4.37	5.02	4.08	4.54	5.41	4.70	5.05
LPG	1.16	4.88	8.25	8.25	6.45	6.23	5.21	4.85	8.34	7.73
Motor Gasoline	2.83	9.97	9.47	7.13	7.36	7.37	8.40	9.38	9.11	8.72
Residual Fuel	.66	3.80	4.07	2.86	2.49	2.38	2.25	2.36	2.24	2.21
Electricity	7.68	15.93	21.88	21.81	19.95	19.06	18.63	18.33	18.24	18.64
Industrial Sector	**1.04**	**4.69**	**5.86**	**5.36**	**4.78**	**4.62**	**4.30**	**4.55**	**R4.46**	**4.97**
Primary Energy	.83	3.96	4.64	3.89	3.38	3.30	2.93	3.18	R3.14	3.74
Coal	.41	1.59	1.66	1.57	1.52	1.42	1.35	1.34	1.31	1.32
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.41	1.59	1.66	1.57	1.52	1.42	1.35	1.34	1.31	1.32
Natural Gas	.36	2.51	3.87	3.36	2.80	3.09	2.51	2.85	2.63	3.54
Petroleum	1.48	6.27	6.85	5.41	5.33	4.72	R4.94	5.37	R5.69	5.70
Asphalt and Road Oil	.72	3.77	5.03	3.89	3.55	3.46	3.00	3.12	3.15	2.49
Distillate Fuel	.75	5.28	5.32	3.97	4.56	3.70	4.12	4.92	4.27	4.59
Kerosene	.81	5.52	5.86	4.37	5.02	4.08	4.54	5.41	4.70	5.05
LPG	1.16	4.88	8.25	8.25	6.45	6.23	5.21	4.85	8.34	7.73
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.83	9.97	9.47	7.13	7.36	7.37	8.40	9.38	9.11	8.72
Residual Fuel	.57	2.88	4.07	2.86	2.49	2.38	2.25	2.36	2.24	2.21
Other	2.15	7.65	8.17	6.06	6.86	5.86	6.59	7.12	6.45	6.76
Electricity	3.87	10.47	13.50	14.16	12.71	12.15	11.81	11.65	11.76	11.76
Transportation Sector	**2.60**	**9.34**	**8.95**	**7.13**	**7.30**	**7.27**	**8.19**	**9.20**	**R8.92**	**8.60**
Primary Energy	2.60	9.34	8.95	7.13	7.30	7.27	8.19	9.20	R8.92	8.60
Coal	.41	–	–	–	–	–	–	–	–	–
Petroleum	2.60	9.34	8.95	7.13	7.30	7.27	8.19	9.20	R8.92	8.60
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.27	6.97	6.85	6.76	7.01	6.77	7.55	8.74	8.32	8.05
Jet Fuel	.75	6.47	6.28	4.36	4.27	4.12	4.57	6.11	5.21	4.78
LPG	1.16	4.88	8.25	8.25	6.45	6.23	5.21	4.85	8.34	7.73
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.83	9.97	9.47	7.13	7.36	7.37	8.40	9.38	9.11	8.72
Residual Fuel	.66	–	–	–	2.33	–	2.08	1.82	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.80**	**6.72**	**8.03**	**7.28**	**7.06**	**6.87**	**7.12**	**7.65**	**7.43**	**7.58**
Primary Energy — Four Sectors	1.42	5.78	6.36	5.36	5.17	5.09	5.41	5.94	5.67	5.86
Electricity	6.39	13.97	19.02	19.25	18.30	17.59	17.30	17.37	17.41	17.53
Electric Utility Sector [a]	**.30**	**1.32**	**1.46**	**1.31**	**1.21**	**1.19**	**1.18**	**1.10**	**1.07**	**1.06**
Coal	.32	1.39	1.48	1.37	1.25	1.24	1.22	1.12	1.10	1.10
Natural Gas	.27	2.41	3.61	3.42	2.15	2.03	2.67	3.04	2.69	3.07
Petroleum	.74	5.41	5.88	3.62	4.06	3.72	4.45	5.18	4.38	4.24
Heavy Oil [b]	.70	3.78	3.99	–	–	–	–	–	–	–
Light Oil [b]	.75	6.06	5.93	3.62	4.06	3.72	4.45	5.18	4.38	4.24
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	.39	.94	.75	.71	.68	.67	.66	.66	.56
Biomass Fuels	.65	1.74	.79	.32	.95	.87	1.47	1.60	1.67	1.58
Primary Energy — Five Sectors [c]	**1.19**	**4.60**	**4.87**	**4.09**	**3.87**	**3.79**	**3.98**	**4.24**	**4.03**	**4.21**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Iowa 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**332.2**	**1,020.5**	**1,303.6**	**1,267.5**	**1,188.2**	**1,275.3**	**1,293.9**	**1,281.3**	**1,355.7**	**1,328.3**
Primary Energy	160.9	467.9	546.3	497.1	403.1	465.3	506.9	460.3	489.7	503.3
Coal	1.6	2.1	7.1	5.9	7.1	7.2	3.7	5.0	4.4	1.2
Natural Gas	92.9	271.2	424.1	379.8	309.9	364.6	363.8	356.2	379.0	391.6
Petroleum	66.4	194.6	115.1	111.3	86.1	93.4	139.3	99.1	106.3	110.4
Distillate Fuel	15.8	94.5	49.7	43.0	37.8	31.2	30.2	26.6	27.5	24.4
Kerosene	2.9	2.2	4.8	2.8	2.1	2.6	1.4	1.0	1.3	.8
LPG	47.6	98.0	60.6	65.5	46.1	59.6	107.8	71.5	77.6	85.3
Electricity	171.3	552.6	757.4	770.4	785.1	810.0	787.0	821.0	866.0	825.0
Commercial Sector	**151.3**	**505.7**	**769.7**	**731.0**	**651.1**	**691.9**	**680.2**	**682.8**	R749.8	**751.7**
Primary Energy	55.5	206.7	298.9	243.6	193.9	227.9	216.2	211.8	R255.8	256.7
Coal	1.0	1.9	6.4	5.5	6.9	7.2	3.5	5.1	4.6	1.3
Natural Gas	39.4	144.0	231.3	194.7	147.3	181.2	180.0	177.1	R186.0	196.8
Petroleum	15.1	60.8	61.2	43.4	39.7	39.5	32.7	29.5	65.2	58.6
Distillate Fuel	5.5	28.2	33.4	15.1	18.5	13.6	10.4	12.5	12.4	11.6
Kerosene	.1	.2	.2	*	.2	.1	.1	1.2	.1	.1
LPG	5.3	12.3	15.7	17.3	10.5	12.3	11.4	8.5	17.9	16.8
Motor Gasoline	4.0	18.3	11.8	10.2	10.3	13.1	10.3	6.9	34.8	29.6
Residual Fuel	.3	1.9	*	.7	.3	.3	.5	.5	.1	.5
Electricity	95.8	299.0	470.8	487.4	457.3	464.0	464.0	471.0	494.0	495.0
Industrial Sector	**272.8**	**1,335.6**	**1,374.5**	**1,245.5**	**1,114.8**	**1,166.4**	R1,044.2	R1,096.1	R1,158.0	**1,348.1**
Primary Energy	202.4	1,002.7	936.1	772.2	669.8	709.5	R600.2	R643.1	R689.0	861.1
Coal	17.8	51.6	59.1	55.6	64.8	59.4	72.7	71.3	77.9	69.9
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	17.8	51.6	59.1	55.6	64.8	59.4	72.7	71.3	77.9	69.9
Natural Gas	36.3	288.2	340.2	272.6	249.1	317.3	226.9	259.0	258.2	357.7
Petroleum	148.2	662.9	536.8	444.0	355.8	332.9	R300.6	R312.8	R352.8	433.5
Asphalt and Road Oil	13.9	42.5	67.6	52.6	42.1	50.8	34.1	31.8	32.6	23.2
Distillate Fuel	25.8	144.4	148.4	135.4	131.6	110.8	98.7	118.5	114.6	166.2
Kerosene	.7	3.7	1.1	1.0	1.3	.5	.6	.6	.4	.5
LPG	13.0	117.6	145.5	143.8	72.8	67.2	R60.6	R54.3	R98.2	138.2
Lubricants	6.8	16.7	18.6	16.1	14.9	16.5	15.4	16.0	16.4	19.4
Motor Gasoline	80.0	136.7	84.8	56.5	57.5	54.6	57.5	52.5	55.5	48.2
Residual Fuel	.9	5.0	4.6	8.4	1.4	3.6	2.1	1.4	1.2	1.0
Other	7.1	196.2	66.2	30.2	34.2	28.8	31.6	37.6	33.9	36.9
Electricity	70.5	332.9	438.4	473.2	445.1	457.0	444.0	453.0	469.0	487.0
Transportation Sector	**499.2**	**2,103.8**	**1,868.4**	**1,489.9**	**1,575.5**	**1,611.3**	**1,838.7**	**2,064.5**	R1,947.6	**1,866.7**
Primary Energy	499.2	2,103.8	1,868.4	1,489.9	1,575.5	1,611.3	1,838.7	2,064.5	R1,947.6	1,866.7
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	499.1	2,103.8	1,868.4	1,489.9	1,575.5	1,611.3	1,838.7	2,064.5	R1,947.6	1,866.7
Aviation Gasoline	2.8	8.4	4.2	6.4	4.2	5.4	4.6	4.7	3.6	3.2
Distillate Fuel	32.2	321.6	320.9	312.8	355.8	350.6	403.9	492.3	409.1	412.1
Jet Fuel	3.0	29.6	20.9	14.5	18.7	16.5	19.3	30.7	R26.1	21.6
LPG	.3	.6	2.7	4.2	1.1	1.0	1.0	.7	1.5	1.3
Lubricants	14.8	45.4	50.7	43.9	40.4	44.9	41.9	43.4	44.7	52.8
Motor Gasoline	446.0	1,698.2	1,469.1	1,108.0	1,155.2	1,192.8	1,368.0	1,492.7	1,462.6	1,375.7
Residual Fuel	.1	–	–	–	.1	–	*	*	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1,255.5**	**4,965.5**	**5,316.2**	**4,733.9**	**4,529.6**	**4,744.9**	R4,857.0	R5,124.7	R5,211.1	**5,294.8**
Primary Energy — Four Sectors	918.0	3,781.0	3,649.7	3,002.8	2,842.2	3,013.9	R3,162.0	R3,379.7	R3,382.1	3,487.8
Electricity	337.5	1,184.5	1,666.6	1,731.1	1,687.4	1,731.0	1,695.0	1,745.1	1,829.0	1,807.0
Electric Utility Sector [a]	**50.4**	**313.1**	**366.7**	**335.2**	**326.2**	**354.1**	**350.2**	**340.8**	**353.3**	**330.5**
Coal	27.0	277.7	335.3	303.6	296.4	316.7	317.9	304.8	311.1	300.7
Natural Gas	21.5	16.6	7.7	4.7	7.1	11.1	6.5	10.7	9.9	7.0
Petroleum	1.6	7.4	3.6	2.2	2.7	2.7	2.9	3.7	2.8	2.2
Heavy Oil [b]	.2	1.5	.1	–	–	–	–	–	–	–
Light Oil [b]	1.4	5.9	3.5	2.2	2.7	2.7	2.9	3.7	2.8	2.2
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	10.9	19.6	24.4	19.3	23.0	22.6	21.3	29.2	20.4
Biomass Fuels	.3	.5	.5	.2	.7	.5	.4	.3	.3	.2
Primary Energy — Five Sectors [c]	**968.4**	**4,094.1**	**4,016.3**	**3,337.9**	**3,168.5**	**3,368.0**	R3,512.2	R3,720.4	R3,735.4	**3,818.3**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Kansas 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.34	1.08	1.41	1.33	1.27	1.24	1.24	1.24	1.23	1.18
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.34	1.08	1.41	1.33	1.27	1.24	1.24	1.24	1.23	1.18
Natural Gas	.39	2.14	3.58	3.30	3.15	3.03	3.36	3.30	3.11	3.38
Petroleum	1.97	7.39	7.17	6.32	6.46	6.14	6.84	R7.24	R6.97	7.37
Asphalt and Road Oil	.74	4.02	5.22	3.88	3.70	3.49	3.00	2.94	2.98	2.54
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	.99	6.52	6.42	5.54	5.66	5.16	6.30	7.50	6.85	6.83
Jet Fuel	.75	6.47	5.94	3.73	4.01	3.81	4.27	5.57	4.81	4.36
Kerosene	.96	5.25	6.88	4.84	3.52	3.54	5.95	6.43	5.76	6.03
LPG	1.27	4.41	4.28	8.04	7.51	7.51	7.24	R4.40	R3.79	7.74
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.64	9.27	9.28	6.72	7.05	6.78	7.66	8.90	8.72	8.49
Residual Fuel	.47	3.24	3.91	2.28	2.36	1.89	2.06	2.10	1.47	2.20
Other [a]	.83	3.95	6.62	6.77	6.57	5.60	6.66	6.47	6.33	6.98
Nuclear Fuel	–	–	.84	.63	.51	.45	.32	.30	.31	.29
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	.98	3.88	4.29	3.75	3.71	3.61	R3.79	3.94	R3.79	4.01
Electric Utility Fuel [c]	.30	1.38	1.44	1.22	1.16	1.13	1.04	1.08	1.12	.99
Electricity Purchased by End Users	5.74	13.75	19.07	20.53	20.06	19.22	18.83	19.31	19.30	19.27
Total Energy	1.54	5.93	7.21	7.03	6.91	6.70	7.22	R7.52	R7.30	7.52
	Expenditures in Millions of Dollars									
Coal	3.7	207.0	365.8	334.3	340.5	334.5	330.4	338.3	329.6	300.3
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	3.7	207.0	365.8	334.3	340.5	334.5	330.4	338.3	329.6	300.3
Natural Gas	175.6	808.1	960.1	768.5	809.7	772.4	828.9	871.6	R889.5	875.1
Petroleum	535.3	2,507.7	2,703.5	2,327.9	2,389.8	2,467.2	R2,582.7	R2,657.7	R2,419.8	2,672.7
Asphalt and Road Oil	10.7	80.5	58.9	68.4	64.2	101.4	61.9	75.7	73.5	62.7
Aviation Gasoline	3.6	10.1	6.9	6.9	4.6	5.5	6.5	6.4	5.5	6.1
Distillate Fuel	43.3	560.3	561.8	461.6	550.4	498.4	578.8	723.0	627.2	602.2
Jet Fuel	6.4	89.3	147.6	148.2	96.7	89.2	91.5	115.4	R88.2	101.0
Kerosene	1.7	14.6	2.2	2.1	1.4	.8	1.9	1.0	.8	1.1
LPG	37.1	131.0	369.0	474.6	432.4	509.8	R479.5	R237.6	R177.3	461.5
Lubricants	20.2	88.1	98.3	85.1	78.4	86.9	81.1	84.2	86.6	102.4
Motor Gasoline	399.6	1,440.7	1,375.2	1,005.0	1,077.4	1,099.1	1,200.6	1,330.7	R1,284.5	1,241.2
Residual Fuel	1.5	17.9	1.3	4.4	3.8	7.1	3.6	2.4	.8	1.7
Other [a]	11.2	75.3	82.2	71.7	80.4	69.0	77.3	81.3	75.5	92.7
Nuclear Fuel	–	–	34.9	47.7	35.7	32.4	33.3	25.3	19.4	26.7
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	714.6	3,522.7	4,064.3	3,478.4	3,575.7	3,606.4	R3,775.2	R3,892.8	R3,658.3	3,874.8
Electric Utility Fuel [c]	-53.9	-394.3	-453.4	-412.3	-405.4	-404.4	-400.5	-410.7	-408.0	-351.7
Electricity Purchased by End Users	259.0	986.7	1,520.6	1,656.3	1,658.4	1,680.9	1,646.7	1,774.8	1,839.4	1,765.3
Total Energy	919.7	4,115.0	5,131.5	4,722.4	4,828.6	4,883.0	R5,021.3	R5,256.9	R5,089.8	5,288.4

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Kansas 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1.68**	**5.48**	**8.70**	**9.57**	**9.34**	**9.36**	**9.38**	**10.16**	**9.95**	**10.18**
Primary Energy	.82	2.79	4.29	4.04	3.95	4.13	4.49	4.68	4.49	4.92
Coal	.91	2.15	2.31	2.33	1.94	1.80	1.85	1.88	1.82	1.63
Natural Gas	.69	2.38	4.12	3.95	3.90	4.08	4.20	4.48	4.33	4.76
Petroleum	1.52	6.83	6.54	5.39	4.69	4.79	8.46	7.80	6.95	7.73
Distillate Fuel	1.19	6.85	6.43	5.45	3.53	3.55	6.16	6.22	5.78	5.87
Kerosene	1.40	7.68	7.47	6.33	4.09	4.12	7.15	7.23	6.71	6.81
LPG	1.53	6.83	6.52	5.37	4.73	4.84	8.57	7.86	6.98	7.83
Electricity	7.17	15.75	21.98	24.01	23.63	22.94	22.46	22.95	22.93	23.15
Commercial Sector	**1.56**	**5.62**	**8.49**	**8.94**	**8.71**	**8.36**	**8.62**	**9.20**	**9.04**	**9.59**
Primary Energy	.53	2.27	3.41	3.07	3.01	3.17	3.32	3.48	3.37	3.71
Coal	.45	1.32	1.69	1.74	1.58	1.42	1.28	1.18	1.26	1.31
Natural Gas	.46	1.91	3.15	2.90	2.88	3.07	3.16	3.36	3.28	3.57
Petroleum	1.22	6.51	5.90	5.43	5.19	4.61	5.81	5.48	4.74	5.43
Distillate Fuel	1.03	6.49	5.52	3.85	2.77	2.52	4.54	4.69	4.10	4.44
Kerosene	.69	5.22	6.35	4.35	3.32	3.01	5.39	5.88	5.11	5.51
LPG	.83	3.58	4.14	8.25	7.76	7.73	7.13	4.10	3.43	7.73
Motor Gasoline	2.64	9.27	9.28	6.72	7.05	6.78	7.66	8.90	8.72	8.49
Residual Fuel	.50	–	–	2.28	2.36	1.67	2.04	2.13	1.48	2.21
Electricity	6.02	14.81	19.87	21.03	20.37	19.25	19.17	19.65	19.56	19.79
Industrial Sector	**.78**	**3.94**	**5.23**	**5.98**	**5.44**	**5.23**	**R5.69**	**4.89**	**R4.62**	**5.43**
Primary Energy	.60	3.26	4.34	4.92	4.42	4.24	R4.70	3.77	3.44	4.42
Coal	.45	1.32	1.69	1.74	1.58	1.42	1.28	1.18	1.26	1.31
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.45	1.32	1.69	1.74	1.58	1.42	1.28	1.18	1.26	1.31
Natural Gas	.27	2.35	3.54	3.17	2.93	2.39	3.08	2.88	2.64	2.64
Petroleum	1.24	4.74	5.18	6.46	6.00	5.67	R6.06	4.69	R4.36	6.24
Asphalt and Road Oil	.74	4.02	5.22	3.88	3.70	3.49	3.00	2.94	2.98	2.54
Distillate Fuel	.64	4.99	5.76	3.95	3.02	2.74	4.89	5.34	4.64	5.00
Kerosene	.69	5.22	6.35	4.35	3.32	3.01	5.39	5.88	5.11	5.51
LPG	.83	3.58	4.14	8.25	7.76	7.73	7.13	4.10	3.43	7.73
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.64	9.27	9.28	6.72	7.05	6.78	7.66	8.90	8.72	8.49
Residual Fuel	.43	2.53	3.86	2.28	2.36	1.67	2.04	2.13	1.48	2.21
Other	.83	3.95	6.62	6.77	6.57	5.60	6.66	6.47	6.33	6.98
Electricity	3.50	10.68	14.74	15.76	15.33	14.68	14.17	14.50	14.51	14.46
Transportation Sector	**2.34**	**8.58**	**8.38**	**6.30**	**6.74**	**6.47**	**7.23**	**8.49**	**R8.29**	**8.03**
Primary Energy	2.34	8.58	8.38	6.30	6.74	6.47	7.23	8.49	R8.29	8.03
Coal	.45	–	–	–	–	–	–	–	–	–
Petroleum	2.34	8.58	8.38	6.30	6.74	6.47	7.23	8.49	R8.29	8.03
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.18	7.05	6.75	6.43	6.69	6.21	6.87	8.28	7.94	7.80
Jet Fuel	.75	6.47	5.94	3.73	4.01	3.81	4.27	5.57	4.81	4.36
LPG	.83	3.58	4.14	8.25	7.76	7.73	7.13	4.10	3.43	7.73
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.64	9.27	9.28	6.72	7.05	6.78	7.66	8.90	8.72	8.49
Residual Fuel	.49	3.82	–	2.34	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.54**	**5.93**	**7.21**	**7.03**	**6.91**	**6.70**	**7.22**	**R7.52**	**R7.30**	**7.52**
Primary Energy — Four Sectors	1.20	5.03	5.71	5.19	5.15	4.99	5.55	5.73	R5.40	5.76
Electricity	5.74	13.75	19.07	20.53	20.06	19.22	18.83	19.31	19.30	19.27
Electric Utility Sector [a]	**.30**	**1.38**	**1.44**	**1.22**	**1.16**	**1.13**	**1.04**	**1.08**	**1.12**	**.99**
Coal	.31	1.07	1.40	1.32	1.27	1.24	1.24	1.24	1.23	1.18
Natural Gas	.30	1.78	2.88	2.50	2.17	2.06	1.98	1.76	1.71	2.00
Petroleum	.52	4.60	5.39	3.27	3.62	3.12	3.81	4.86	4.25	4.33
Heavy Oil [b]	.47	3.78	3.99	2.33	2.39	2.73	2.12	1.85	1.41	1.47
Light Oil [b]	.62	5.74	5.55	3.36	3.87	3.43	4.33	5.40	4.32	4.38
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	.84	.63	.51	.45	.32	.30	.31	.29
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**.98**	**3.88**	**4.29**	**3.75**	**3.71**	**3.61**	**R3.79**	**3.94**	**R3.79**	**4.01**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Kansas 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**226.7**	**646.6**	**975.4**	**983.4**	**1,002.6**	**1,047.7**	**1,046.8**	**1,099.5**	**1,138.9**	**1,069.2**
Primary Energy	95.9	260.4	360.8	299.8	308.0	333.7	364.9	354.6	361.8	368.2
Coal	.1	.1	*	*	*	*	.1	*	*	*
Natural Gas	66.7	201.9	322.7	274.8	284.9	307.2	317.1	319.5	327.7	336.2
Petroleum	29.2	58.4	38.1	25.0	23.1	26.5	47.7	35.0	34.1	32.1
Distillate Fuel	.4	6.0	2.5	.8	.4	.6	1.1	.9	.8	1.0
Kerosene	.9	.2	1.1	.7	.4	.5	.7	.5	.4	.5
LPG	27.9	52.2	34.5	23.6	22.2	25.4	45.8	33.7	32.9	30.6
Electricity	130.8	386.2	614.6	683.6	694.6	714.0	682.0	745.0	777.0	701.0
Commercial Sector	**112.0**	**488.0**	**767.6**	**780.0**	**774.0**	**795.1**	**803.3**	**847.2**	**874.8**	**872.1**
Primary Energy	30.6	144.1	213.4	180.2	180.0	204.1	206.3	207.2	211.8	214.1
Coal	.1	.1	*	*	*	*	.1	*	*	*
Natural Gas	23.9	111.7	178.0	159.6	161.9	185.2	183.9	188.3	194.5	190.5
Petroleum	6.6	32.3	35.3	20.6	18.1	18.9	22.3	18.9	17.4	23.6
Distillate Fuel	.7	13.6	22.5	7.7	4.4	5.7	8.8	7.7	8.7	13.0
Kerosene	.1	.3	.4	.2	.3	.2	.5	.2	.1	.1
LPG	2.7	4.8	3.9	6.4	6.4	7.1	6.7	3.1	2.9	5.3
Motor Gasoline	3.0	13.6	8.6	6.2	7.0	5.9	6.2	7.5	5.7	4.9
Residual Fuel	.1	–	–	.1	*	*	.1	.4	.1	.3
Electricity	81.4	343.9	554.2	599.8	593.9	591.0	597.0	640.0	663.0	658.0
Industrial Sector	**165.8**	**1,031.4**	**1,459.5**	**1,439.2**	**1,399.3**	**1,408.6**	**R1,406.8**	**R1,259.6**	**R1,194.9**	**1,516.4**
Primary Energy	118.9	774.8	1,107.7	1,066.3	1,029.5	1,032.7	R1,039.1	R869.8	R795.5	1,110.1
Coal	1.0	9.4	13.1	9.7	8.7	6.5	5.2	4.5	4.6	5.1
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	1.0	9.4	13.1	9.7	8.7	6.5	5.2	4.5	4.6	5.1
Natural Gas	35.5	322.0	400.3	297.7	328.4	241.3	291.2	316.4	R307.6	321.3
Petroleum	82.4	443.3	694.2	758.8	692.5	784.9	R742.7	R548.8	R483.3	783.7
Asphalt and Road Oil	10.7	80.5	58.9	68.4	64.2	101.4	61.9	75.7	73.5	62.7
Distillate Fuel	9.4	101.0	130.8	104.8	75.4	70.9	111.7	121.5	123.6	132.3
Kerosene	.6	14.1	.7	1.2	.7	.2	.7	.3	.3	.5
LPG	5.4	72.5	329.2	441.6	400.6	473.3	R422.0	R198.7	R140.2	422.8
Lubricants	6.4	35.5	39.6	34.3	31.6	35.1	32.7	34.0	34.9	41.3
Motor Gasoline	38.5	58.3	51.9	32.8	36.1	30.2	33.7	35.5	34.6	30.1
Residual Fuel	.2	6.1	.8	4.0	3.4	5.0	2.7	1.8	.7	1.4
Other	11.2	75.3	82.2	71.7	80.4	69.0	77.3	81.3	75.5	92.7
Electricity	46.8	256.6	351.8	372.9	369.8	375.9	367.7	389.8	399.4	406.3
Transportation Sector	**415.3**	**1,949.1**	**1,929.0**	**1,519.8**	**1,652.7**	**1,631.6**	**1,764.4**	**2,050.5**	**R1,881.2**	**1,830.7**
Primary Energy	415.3	1,949.1	1,929.0	1,519.8	1,652.7	1,631.6	1,764.4	2,050.5	R1,881.2	1,830.7
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	415.3	1,949.1	1,929.0	1,519.8	1,652.7	1,631.6	1,764.4	2,050.5	R1,881.2	1,830.7
Aviation Gasoline	3.6	10.1	6.9	6.9	4.6	5.5	6.5	6.4	5.5	6.1
Distillate Fuel	32.2	426.9	399.8	344.9	467.2	418.1	452.3	588.7	490.3	453.4
Jet Fuel	6.4	89.3	147.6	148.2	96.7	89.2	91.5	115.4	R88.2	101.0
LPG	1.1	1.5	1.4	3.0	3.2	4.0	4.8	2.1	1.3	2.8
Lubricants	13.8	52.5	58.6	50.8	46.8	51.9	48.4	50.2	51.7	61.1
Motor Gasoline	358.2	1,368.8	1,314.7	966.1	1,034.3	1,063.0	1,160.7	1,287.6	1,244.2	1,206.2
Residual Fuel	*	*	–	*	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**919.7**	**4,115.0**	**5,131.5**	**4,722.4**	**4,828.6**	**4,883.0**	**R5,021.3**	**R5,256.9**	**R5,089.8**	**5,288.4**
Primary Energy — Four Sectors	660.7	3,128.4	3,610.9	3,066.1	3,170.2	3,202.1	R3,374.7	R3,482.1	R3,250.4	3,523.2
Electricity	259.0	986.7	1,520.6	1,656.3	1,658.4	1,680.9	1,646.7	1,774.8	1,839.4	1,765.3
Electric Utility Sector [a]	**53.9**	**394.3**	**453.4**	**412.3**	**405.4**	**404.4**	**400.5**	**410.7**	**408.0**	**351.7**
Coal	2.6	197.4	352.6	324.6	331.9	328.0	324.9	333.8	325.0	295.2
Natural Gas	49.5	172.4	59.1	36.4	34.5	38.6	36.7	47.3	59.7	27.1
Petroleum	1.8	24.5	6.8	3.6	3.3	5.3	5.5	4.3	3.9	2.6
Heavy Oil [b]	1.1	11.7	.5	.2	.4	2.1	.7	.3	*	*
Light Oil [b]	.6	12.8	6.3	3.4	3.0	3.2	4.8	4.1	3.8	2.6
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	34.9	47.7	35.7	32.4	33.3	25.3	19.4	26.7
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**714.6**	**3,522.7**	**4,064.3**	**3,478.4**	**3,575.7**	**3,606.4**	**R3,775.2**	**R3,892.8**	**R3,658.3**	**3,874.8**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Kentucky 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.26	1.37	1.48	1.39	1.33	1.26	1.22	1.27	1.24	1.22
Coking Coal	.38	1.81	1.93	1.75	1.63	1.73	1.75	1.80	1.72	1.74
Steam Coal	.25	1.35	1.46	1.38	1.32	1.24	1.20	1.24	1.23	1.20
Natural Gas	.65	2.85	4.77	4.38	3.91	3.89	4.07	4.12	3.90	3.92
Petroleum	2.12	7.82	7.87	6.23	6.59	6.51	6.97	7.95	R7.59	7.35
Asphalt and Road Oil	.67	3.56	4.74	4.90	3.19	3.05	2.86	2.94	3.30	2.03
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.21	6.41	6.81	5.39	5.91	5.81	6.49	7.53	6.95	6.94
Jet Fuel	.73	6.39	6.17	4.39	4.16	3.93	4.45	5.82	4.92	4.61
Kerosene	1.42	7.55	8.05	5.04	5.47	5.64	6.34	6.97	6.41	6.70
LPG	1.90	5.85	6.58	6.97	7.97	7.19	R6.02	R6.91	R6.45	6.52
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.93	9.65	8.80	6.69	7.36	7.42	8.08	9.25	8.94	8.65
Residual Fuel	.56	3.64	4.89	3.08	2.98	2.91	3.05	3.61	3.12	2.71
Other [a]	1.07	6.83	7.08	6.35	5.68	4.86	5.25	5.14	4.85	4.24
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	.94	4.00	3.97	3.28	3.38	3.27	3.55	3.78	R3.62	3.59
Electric Utility Fuel [c]	.22	1.32	1.43	1.34	1.26	1.20	1.14	1.20	1.18	1.17
Electricity Purchased by End Users	3.37	10.07	14.84	15.26	15.18	15.08	14.17	13.17	12.96	12.33
Total Energy	1.66	6.74	8.03	7.24	7.34	7.29	7.43	R7.86	R7.69	7.44
	Expenditures in Millions of Dollars									
Coal	138.9	878.8	1,061.1	1,045.4	993.3	1,033.6	933.9	1,018.6	998.3	991.1
Coking Coal	16.4	44.0	60.5	52.2	57.1	60.4	60.6	56.9	39.4	52.7
Steam Coal	122.4	834.8	1,000.6	993.2	936.2	973.2	873.3	961.8	958.9	938.4
Natural Gas	136.7	511.8	722.4	630.7	587.4	637.0	689.6	656.4	659.4	696.2
Petroleum	760.8	3,870.9	3,341.5	2,658.4	2,963.7	3,127.9	R3,448.5	R3,740.1	R3,580.4	3,657.1
Asphalt and Road Oil	13.8	47.8	58.9	74.3	57.2	53.0	52.4	59.1	61.3	34.1
Aviation Gasoline	3.6	5.1	3.3	3.6	2.4	2.3	2.2	2.4	R2.3	2.4
Distillate Fuel	58.0	855.7	863.2	640.8	705.8	835.7	1,063.4	1,026.1	917.5	1,035.2
Jet Fuel	12.6	104.4	119.3	87.8	113.5	110.8	127.7	188.2	R177.3	179.7
Kerosene	24.9	124.6	68.8	31.1	20.1	31.2	33.9	22.4	20.0	19.2
LPG	67.5	216.4	129.0	127.8	193.8	173.7	R136.1	R149.4	R153.7	149.7
Lubricants	26.0	92.0	102.7	88.9	81.9	90.9	84.8	88.0	90.5	107.0
Motor Gasoline	517.3	2,019.1	1,845.7	1,494.7	1,658.9	1,722.4	1,841.4	2,079.8	2,054.4	2,013.4
Residual Fuel	3.2	20.9	9.5	8.9	11.2	7.4	6.3	8.9	5.4	4.5
Other [a]	33.8	385.0	141.1	100.5	118.8	100.5	100.4	115.9	98.0	112.0
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1,036.3	5,261.6	5,125.0	4,334.5	4,544.4	4,798.5	R5,072.0	R5,415.2	R5,238.1	5,344.4
Electric Utility Fuel [c]	-90.6	-743.7	-883.4	-886.1	-832.6	-884.5	-768.0	-859.2	-862.0	-862.7
Electricity Purchased by End Users	354.9	1,698.6	2,528.3	2,552.6	2,596.4	2,747.0	2,792.2	2,707.4	2,800.1	2,780.9
Total Energy	1,300.6	6,216.4	6,769.9	6,001.0	6,308.1	6,661.0	R7,096.2	R7,263.3	R7,176.2	7,262.6

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Kentucky 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1.87**	**6.84**	**10.10**	**9.83**	**9.70**	**9.49**	**9.78**	**10.48**	**10.42**	**10.23**
Primary Energy	1.08	4.13	5.75	5.06	4.88	4.75	5.23	5.52	5.33	5.40
Coal	.86	2.30	2.45	2.29	2.12	2.04	2.01	2.25	2.12	2.09
Natural Gas	.81	3.00	5.15	4.75	4.37	4.32	4.50	4.74	4.65	4.74
Petroleum	1.98	8.10	8.62	6.96	7.34	6.97	8.75	9.59	8.70	8.97
Distillate Fuel	1.19	6.89	7.67	5.10	5.25	5.60	6.14	6.76	6.27	6.42
Kerosene	1.73	8.52	8.19	5.45	5.61	5.98	6.56	7.22	6.70	6.86
LPG	2.36	8.31	9.78	9.15	8.93	8.34	11.02	11.86	10.54	11.12
Electricity	5.85	12.91	17.06	16.94	16.68	16.60	16.51	16.70	16.65	16.69
Commercial Sector	**1.51**	**5.96**	**7.95**	**7.84**	**9.10**	**8.65**	**9.02**	**9.74**	**9.56**	**9.23**
Primary Energy	.75	4.01	5.18	4.29	4.17	4.01	4.21	4.58	4.30	4.27
Coal	.44	1.75	1.88	1.79	2.00	1.76	1.83	1.86	1.87	1.76
Natural Gas	.66	2.89	4.95	4.55	4.11	4.06	4.19	4.35	4.24	4.22
Petroleum	1.34	6.53	6.88	4.57	5.86	5.10	5.38	6.37	5.52	5.51
Distillate Fuel	1.02	6.49	6.58	3.65	4.12	3.98	4.61	5.09	4.45	4.86
Kerosene	.79	6.08	7.89	4.37	5.16	4.96	5.99	6.66	5.78	6.29
LPG	1.65	5.22	5.26	5.91	7.44	6.64	3.18	4.73	4.47	4.36
Motor Gasoline	2.93	9.65	8.80	6.69	7.36	7.42	8.08	9.25	8.94	8.65
Residual Fuel	.78	4.12	4.89	3.08	2.98	2.91	3.05	3.61	–	–
Electricity	5.48	10.42	12.34	12.94	15.63	15.30	15.13	15.33	15.20	15.09
Industrial Sector	**1.00**	**5.23**	**7.07**	**6.75**	**6.28**	**6.35**	**6.03**	**5.67**	**R5.50**	**5.37**
Primary Energy	.70	4.10	4.30	3.59	3.60	3.47	3.37	3.61	**R3.46**	3.43
Coal	.42	1.77	1.90	1.78	1.84	1.74	1.80	1.84	1.82	1.75
Coking Coal	.38	1.81	1.93	1.75	1.63	1.73	1.75	1.80	1.72	1.74
Steam Coal	.44	1.75	1.88	1.79	2.00	1.76	1.83	1.86	1.87	1.76
Natural Gas	.48	2.66	4.25	3.79	3.27	3.32	3.55	3.47	3.08	3.05
Petroleum	1.17	5.92	6.84	5.33	5.29	5.03	4.84	**R5.28**	**R5.05**	4.90
Asphalt and Road Oil	.67	3.56	4.74	4.90	3.19	3.05	2.86	2.94	3.30	2.03
Distillate Fuel	.73	5.43	6.87	3.81	4.49	4.32	5.21	5.79	5.03	5.48
Kerosene	.79	6.08	7.89	4.37	5.16	4.96	5.99	6.66	5.78	6.29
LPG	1.65	5.22	5.26	5.91	7.44	6.64	3.18	4.73	4.47	4.36
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.93	9.65	8.80	6.69	7.36	7.42	8.08	9.25	8.94	8.65
Residual Fuel	.44	3.58	4.89	3.08	2.98	2.91	3.05	3.61	3.12	2.71
Other	1.07	6.83	7.08	6.35	5.68	4.86	5.25	5.14	4.85	4.24
Electricity	2.16	8.63	14.51	15.14	13.98	14.00	12.46	10.49	9.93	9.25
Transportation Sector	**2.58**	**8.82**	**8.19**	**6.50**	**6.97**	**6.92**	**7.44**	**8.68**	**8.27**	**8.00**
Primary Energy	2.58	8.82	8.19	6.50	6.97	6.92	7.44	8.68	8.27	8.00
Coal	.44	–	–	–	–	–	–	–	–	–
Petroleum	2.58	8.82	8.19	6.50	6.97	6.92	7.44	8.68	8.27	8.00
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.45	6.86	6.78	6.16	6.61	6.40	6.86	8.21	7.75	7.56
Jet Fuel	.73	6.39	6.17	4.39	4.16	3.93	4.45	5.82	4.92	4.61
LPG	1.65	5.22	5.26	5.91	7.44	6.64	3.18	4.73	4.47	4.36
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.93	9.65	8.80	6.69	7.36	7.42	8.08	9.25	8.94	8.65
Residual Fuel	.77	3.94	–	–	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.66**	**6.74**	**8.03**	**7.24**	**7.34**	**7.29**	**7.43**	**R7.86**	**R7.69**	**7.44**
Primary Energy — Four Sectors	1.39	5.99	6.30	5.22	5.40	5.35	5.68	6.34	6.10	5.97
Electricity	3.37	10.07	14.84	15.26	15.18	15.08	14.17	13.17	12.96	12.33
Electric Utility Sector [a]	**.22**	**1.32**	**1.43**	**1.34**	**1.26**	**1.20**	**1.14**	**1.20**	**1.18**	**1.17**
Coal	.21	1.31	1.41	1.34	1.26	1.20	1.14	1.19	1.18	1.16
Natural Gas	.29	2.16	3.54	2.97	2.78	2.46	2.67	2.98	2.60	2.71
Petroleum	.88	6.54	5.80	3.50	4.07	3.85	4.75	5.75	5.05	4.79
Heavy Oil [b]	.87	–	–	–	–	–	–	–	–	–
Light Oil [b]	1.12	6.54	5.80	3.50	4.07	3.85	4.75	5.75	5.05	4.79
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**.94**	**4.00**	**3.97**	**3.28**	**3.38**	**3.27**	**3.55**	**3.78**	**R3.62**	**3.59**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Kentucky 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**268.1**	**986.8**	**1,301.7**	**1,279.1**	**1,302.6**	**1,361.4**	**1,400.1**	**1,354.2**	**1,474.0**	**1,451.6**
Primary Energy	128.6	410.9	455.5	394.4	387.4	409.4	447.1	396.3	415.0	438.6
Coal	3.8	5.6	5.2	5.7	5.3	6.3	3.9	2.9	3.4	3.9
Natural Gas	71.6	224.9	318.9	292.7	267.7	286.8	304.6	276.4	289.6	310.2
Petroleum	53.1	180.4	131.4	95.9	114.4	116.2	138.6	117.0	122.0	124.6
Distillate Fuel	2.8	32.9	36.8	20.3	23.2	28.9	26.7	25.4	25.7	28.8
Kerosene	20.4	84.6	38.7	20.7	14.2	21.9	21.7	13.1	14.4	14.2
LPG	30.0	63.0	55.9	54.9	77.0	65.4	90.3	78.5	81.9	81.6
Electricity	139.6	575.9	846.2	884.7	915.1	952.0	953.0	958.0	1,059.0	1,013.0
Commercial Sector	**111.2**	**563.7**	**663.3**	**647.1**	**739.8**	**777.8**	**796.1**	**812.2**	**852.2**	**837.5**
Primary Energy	46.5	263.8	264.6	209.3	193.3	212.8	208.1	198.2	198.3	209.5
Coal	3.5	7.7	7.4	8.4	9.2	10.1	6.6	4.5	5.6	6.0
Natural Gas	28.3	114.9	172.1	154.4	141.8	150.4	157.2	143.8	149.6	158.3
Petroleum	14.6	141.1	85.1	46.6	42.3	52.3	44.2	50.0	43.0	45.2
Distillate Fuel	5.0	99.6	58.3	21.8	12.8	22.6	17.4	19.4	18.6	24.9
Kerosene	1.8	21.4	4.1	3.7	2.0	4.0	5.6	3.6	3.3	2.1
LPG	3.7	7.0	5.3	6.3	11.3	9.2	4.6	5.5	6.1	5.6
Motor Gasoline	4.1	12.7	17.5	14.2	16.2	15.8	16.7	21.5	15.0	12.6
Residual Fuel	.1	.5	*	.6	*	.7	*	*	–	–
Electricity	64.8	299.9	398.7	437.7	546.5	565.0	588.0	614.0	654.0	628.0
Industrial Sector	**341.1**	**1,994.8**	**2,306.0**	**2,002.6**	**1,975.6**	**2,037.8**	**R2,070.8**	**R2,046.3**	**R1,912.8**	**1,984.8**
Primary Energy	190.6	1,172.0	1,022.6	772.6	840.8	807.7	R819.6	R910.9	R825.7	844.9
Coal	44.0	134.6	178.3	151.4	152.5	138.4	162.5	160.0	134.6	124.8
Coking Coal	16.4	44.0	60.5	52.2	57.1	60.4	60.6	56.9	39.4	52.7
Steam Coal	27.5	90.6	117.9	99.2	95.4	77.9	102.0	103.2	95.2	72.1
Natural Gas	34.3	167.8	227.4	182.3	176.9	198.6	226.9	235.4	219.6	226.9
Petroleum	112.3	869.6	617.0	439.0	511.4	470.7	R430.2	R515.5	R471.6	493.2
Asphalt and Road Oil	13.8	47.8	58.9	74.3	57.2	53.0	52.4	59.1	61.3	34.1
Distillate Fuel	8.9	203.6	224.3	110.1	142.4	131.0	145.2	175.7	153.1	184.5
Kerosene	2.7	18.6	26.0	6.6	4.0	5.3	6.7	5.7	2.4	2.9
LPG	33.5	146.2	65.9	64.9	103.5	97.4	R40.4	R64.3	R64.8	61.5
Lubricants	14.6	46.9	52.4	45.3	41.8	46.3	43.2	44.8	46.2	54.6
Motor Gasoline	3.2	4.5	39.0	28.9	32.6	30.6	35.6	41.0	40.6	39.1
Residual Fuel	1.8	17.1	9.5	8.3	11.2	6.6	6.3	8.9	5.4	4.5
Other	33.8	385.0	141.1	100.5	118.8	100.5	100.4	115.9	98.0	112.0
Electricity	150.5	822.8	1,283.4	1,230.1	1,134.8	1,230.0	1,251.2	1,135.4	1,087.1	1,139.9
Transportation Sector	**580.1**	**2,671.1**	**2,498.9**	**2,072.1**	**2,290.2**	**2,484.1**	**2,829.1**	**3,050.5**	**R2,937.1**	**2,988.7**
Primary Energy	580.1	2,671.1	2,498.9	2,072.1	2,290.2	2,484.1	2,829.1	3,050.5	R2,937.1	2,988.7
Coal	.1	–	–	–	–	–	–	–	–	–
Petroleum	580.0	2,671.1	2,498.9	2,072.1	2,290.2	2,484.1	2,829.1	3,050.5	R2,937.1	2,988.7
Aviation Gasoline	3.6	5.1	3.3	3.6	2.4	2.3	2.2	2.4	R2.3	2.4
Distillate Fuel	41.4	511.0	534.7	483.8	522.1	648.7	867.7	798.4	713.4	791.6
Jet Fuel	12.6	104.4	119.3	87.8	113.5	110.8	127.7	188.2	R177.3	179.7
LPG	.3	.2	1.9	1.7	1.9	1.8	.9	1.1	.8	.9
Lubricants	11.4	45.1	50.4	43.6	40.2	44.5	41.6	43.1	44.4	52.5
Motor Gasoline	510.0	2,002.0	1,789.3	1,451.6	1,610.1	1,676.0	1,789.1	2,017.3	R1,998.9	1,961.7
Residual Fuel	.7	3.4	–	–	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1,300.6**	**6,216.4**	**6,769.9**	**6,001.0**	**6,308.1**	**6,661.0**	**R7,096.2**	**R7,263.3**	**R7,176.2**	**7,262.6**
Primary Energy — Four Sectors	945.7	4,517.8	4,241.6	3,448.4	3,711.7	3,914.0	R4,304.0	R4,556.0	R4,376.1	4,481.7
Electricity	354.9	1,698.6	2,528.3	2,552.6	2,596.4	2,747.0	2,792.2	2,707.4	2,800.1	2,780.9
Electric Utility Sector [a]	**90.6**	**743.7**	**883.4**	**886.1**	**832.6**	**884.5**	**768.0**	**859.2**	**862.0**	**862.7**
Coal	87.4	730.9	870.2	879.9	826.3	878.9	760.8	851.3	854.7	856.5
Natural Gas	2.5	4.2	4.1	1.3	1.0	1.1	.9	.9	.6	.7
Petroleum	.7	8.6	9.1	4.8	5.3	4.5	6.4	7.1	6.7	5.5
Heavy Oil [b]	.7	–	–	–	–	–	–	–	–	–
Light Oil [b]	*	8.6	9.1	4.8	5.3	4.5	6.4	7.1	6.7	5.5
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1,036.3**	**5,261.6**	**5,125.0**	**4,334.5**	**4,544.4**	**4,798.5**	**R5,072.0**	**R5,415.2**	**R5,238.1**	**5,344.4**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Louisiana 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	–	1.26	2.14	1.80	1.66	1.57	1.62	1.68	1.65	1.54
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	–	1.26	2.14	1.80	1.66	1.57	1.62	1.68	1.65	1.54
Natural Gas	.27	1.61	3.09	2.15	2.00	2.14	2.12	2.11	1.89	2.09
Petroleum	1.48	5.98	6.23	4.84	5.29	5.15	5.48	6.79	R6.42	5.48
Asphalt and Road Oil	.66	3.62	4.17	4.57	3.15	3.14	2.89	2.91	3.08	2.17
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	.86	6.02	5.01	4.84	5.45	5.61	6.12	7.61	7.20	6.99
Jet Fuel	.72	6.34	5.70	3.67	3.90	3.61	4.12	5.79	4.67	4.29
Kerosene	.60	5.53	3.57	3.77	4.92	5.33	5.88	7.60	6.95	7.30
LPG	1.12	5.30	5.12	5.68	5.85	5.77	R5.45	7.82	R7.83	4.28
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.86	9.89	9.36	7.04	7.14	7.25	7.90	9.47	9.51	9.23
Residual Fuel	.45	3.31	3.60	1.39	2.55	2.55	2.52	2.10	2.84	1.90
Other [a]	.70	6.28	6.57	3.81	4.63	3.86	4.71	5.85	5.03	4.64
Nuclear Fuel	–	–	.86	1.04	.97	.92	.90	.88	.84	.81
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	.65	3.70	4.48	3.32	3.41	3.40	R3.48	4.02	R3.80	3.50
Electric Utility Fuel [c]	.21	2.19	2.46	1.67	1.46	1.44	1.51	1.49	1.40	1.52
Electricity Purchased by End Users	4.69	11.49	18.25	17.40	17.33	17.30	17.64	17.77	17.59	17.81
Total Energy	.94	4.50	6.33	5.06	5.21	5.24	5.28	6.00	R5.70	5.33
	Expenditures in Millions of Dollars									
Coal	–	3.1	340.0	308.6	286.7	332.9	335.6	351.2	353.8	344.8
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	–	3.1	340.0	308.6	286.7	332.9	335.6	351.2	353.8	344.8
Natural Gas	376.4	2,396.3	3,152.5	2,249.7	2,095.4	2,203.4	2,440.3	2,466.5	R2,207.6	2,439.5
Petroleum	964.9	8,196.5	6,761.1	5,607.7	5,921.2	6,036.3	R6,268.2	R7,811.8	R7,666.9	6,583.9
Asphalt and Road Oil	9.7	46.8	50.8	54.3	47.5	49.9	44.4	32.3	30.6	24.3
Aviation Gasoline	4.9	11.6	8.6	7.0	5.0	4.6	4.8	5.1	4.1	3.8
Distillate Fuel	59.1	752.1	980.8	984.5	1,162.3	1,270.6	1,319.7	1,739.2	1,458.1	1,283.2
Jet Fuel	23.4	306.8	410.5	369.3	415.1	435.5	518.2	845.1	R848.7	653.1
Kerosene	8.5	179.2	3.8	4.8	2.0	7.8	5.6	3.5	3.4	1.9
LPG	199.3	1,012.5	1,293.9	1,248.6	1,138.3	1,105.1	R1,012.0	R1,343.2	R1,468.1	840.6
Lubricants	49.0	174.1	194.3	168.2	154.9	171.9	160.4	166.4	171.3	202.4
Motor Gasoline	523.4	2,449.2	2,424.2	1,847.2	1,804.3	1,862.1	1,944.6	2,174.1	2,148.7	2,189.1
Residual Fuel	31.1	1,265.9	546.9	228.6	377.3	416.0	406.6	302.9	457.3	355.5
Other [a]	56.5	1,998.3	847.3	695.2	814.4	712.8	851.9	1,200.0	1,076.5	1,030.1
Nuclear Fuel	–	–	22.9	119.4	128.5	135.7	119.8	133.6	125.4	89.2
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1,341.4	10,595.9	10,276.5	8,285.4	8,431.7	8,708.2	R9,163.9	R10,763.1	R10,353.7	9,457.3
Electric Utility Fuel [c]	-72.9	-1,079.1	-1,168.2	-942.4	-811.9	-886.9	-881.3	-931.6	-869.3	-903.4
Electricity Purchased by End Users	435.9	1,899.6	3,664.5	3,408.9	3,379.5	3,430.5	3,604.0	3,739.3	3,754.6	3,823.6
Total Energy	1,704.4	11,416.4	12,772.8	10,751.9	10,999.3	11,251.8	R11,886.5	R13,570.7	R13,238.9	12,377.6

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Louisiana 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.29**	**7.84**	**13.04**	**13.52**	**13.34**	**13.47**	**14.10**	**14.77**	**14.56**	**14.54**
Primary Energy	.90	3.56	5.58	5.76	5.56	5.72	5.98	6.12	5.87	5.76
Coal	–	2.97	–	2.89	–	2.62	–	–	2.81	–
Natural Gas	.75	3.28	5.47	5.56	5.35	5.51	5.72	5.85	5.51	5.36
Petroleum	2.19	8.52	7.54	8.90	9.10	9.28	10.27	11.29	12.75	11.69
Distillate Fuel	.96	6.65	3.24	5.05	5.00	6.69	5.62	6.46	5.94	8.61
Kerosene	1.60	–	4.77	7.44	7.37	9.85	8.28	9.50	8.75	12.68
LPG	2.20	8.54	7.67	8.99	9.13	9.28	10.44	11.43	12.88	11.68
Electricity	6.58	13.81	20.27	20.75	21.05	20.89	21.50	21.70	21.68	22.02
Commercial Sector	**1.62**	**5.54**	**12.08**	**11.78**	**12.77**	**13.42**	**14.02**	**14.77**	**14.46**	**14.60**
Primary Energy	.48	3.40	4.28	4.25	4.58	4.87	4.86	5.41	4.96	4.86
Coal	–	1.24	–	1.83	–	1.85	–	–	1.73	–
Natural Gas	.37	2.60	5.09	5.05	4.78	4.94	4.98	5.04	4.68	4.59
Petroleum	1.04	3.77	3.37	3.39	4.17	4.70	4.45	6.48	5.91	6.28
Distillate Fuel	.89	6.36	2.85	3.20	3.95	4.66	4.19	5.74	5.34	5.67
Kerosene	.59	5.53	3.45	3.49	4.54	5.11	5.32	7.24	6.61	5.94
LPG	1.06	5.22	5.08	5.62	5.79	5.70	5.36	7.76	7.75	4.14
Motor Gasoline	2.86	9.89	9.36	7.04	7.14	7.25	7.90	9.47	9.51	9.23
Residual Fuel	.49	3.55	4.12	2.14	2.67	1.91	2.29	2.62	2.03	2.02
Electricity	5.07	12.08	20.24	19.24	19.25	19.56	19.99	20.57	20.30	20.73
Industrial Sector	**.48**	**3.30**	**4.64**	**3.56**	**3.59**	**3.64**	**R3.55**	**R4.15**	**R3.89**	**3.50**
Primary Energy	.42	3.07	3.96	3.02	3.07	3.10	R3.01	R3.65	R3.37	2.92
Coal	–	1.24	1.46	1.83	2.03	1.85	1.55	1.56	1.73	1.69
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	–	1.24	1.46	1.83	2.03	1.85	1.55	1.56	1.73	1.69
Natural Gas	.23	1.24	2.92	1.84	1.73	1.91	1.89	1.92	1.66	1.85
Petroleum	.97	5.68	5.33	4.65	5.02	4.75	R5.01	R6.62	R6.24	4.70
Asphalt and Road Oil	.66	3.62	4.17	4.57	3.15	3.14	2.89	2.91	3.08	2.17
Distillate Fuel	.51	4.89	2.96	3.00	3.90	4.39	4.57	6.22	5.68	5.10
Kerosene	.59	5.53	3.45	3.49	4.54	5.11	5.32	7.24	6.61	5.94
LPG	1.06	5.22	5.08	5.62	5.79	5.70	5.36	7.76	7.75	4.14
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.86	9.89	9.36	7.04	7.14	7.25	7.90	9.47	9.51	9.23
Residual Fuel	.49	3.68	4.12	2.14	2.67	1.91	2.29	2.62	2.03	2.02
Other	.70	6.28	6.57	3.81	4.63	3.86	4.71	5.85	5.03	4.75
Electricity	2.49	9.02	14.93	12.63	12.30	12.25	12.46	12.27	12.15	12.38
Transportation Sector	**1.97**	**6.87**	**7.16**	**5.06**	**5.50**	**5.43**	**5.80**	**6.91**	**6.52**	**6.05**
Primary Energy	1.97	6.87	7.16	5.06	5.50	5.43	5.80	6.91	6.52	6.05
Coal	–	–	–	–	–	–	–	–	–	–
Petroleum	1.97	6.87	7.16	5.06	5.50	5.43	5.80	6.91	6.52	6.05
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.09	6.84	6.38	6.35	6.56	6.40	6.97	8.48	8.21	8.14
Jet Fuel	.72	6.34	5.70	3.67	3.90	3.61	4.12	5.79	4.67	4.29
LPG	1.06	5.22	5.08	5.62	5.79	5.70	5.36	7.76	7.75	4.14
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.86	9.89	9.36	7.04	7.14	7.25	7.90	9.47	9.51	9.23
Residual Fuel	.44	3.05	3.40	1.34	2.54	2.61	2.53	2.07	2.87	1.90
Electricity	5.07	12.08	20.24	19.24	17.55	18.24	17.80	20.18	18.68	18.90
Total Energy	**.94**	**4.50**	**6.33**	**5.06**	**5.21**	**5.24**	**5.28**	**6.00**	**R5.70**	**5.33**
Primary Energy — Four Sectors	.74	4.02	5.01	3.81	3.98	4.02	R4.04	R4.80	R4.50	4.06
Electricity	4.69	11.49	18.25	17.40	17.33	17.30	17.64	17.77	17.59	17.81
Electric Utility Sector [a]	**.21**	**2.19**	**2.46**	**1.67**	**1.46**	**1.44**	**1.51**	**1.49**	**1.40**	**1.52**
Coal	–	–	2.19	1.79	1.64	1.55	1.63	1.70	1.65	1.53
Natural Gas	.21	2.01	2.73	1.85	1.60	1.63	1.70	1.66	1.53	1.83
Petroleum	.57	3.68	5.08	1.63	3.24	3.35	4.04	4.15	4.32	.37
Heavy Oil [b]	.55	3.58	3.51	1.45	2.72	2.98	2.85	2.46	3.30	2.16
Light Oil [b]	.60	4.37	5.84	3.20	3.63	4.42	5.01	5.01	4.56	4.31
Petroleum Coke	–	–	–	–	–	–	–	–	–	([d])
Nuclear Fuel	–	–	.86	1.04	.97	.92	.90	.88	.84	.81
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**.65**	**3.70**	**4.48**	**3.32**	**3.41**	**3.40**	**R3.48**	**4.02**	**R3.80**	**3.50**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[d] Utilities used petroleum coke at no charge.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Louisiana 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**299.1**	**1,077.9**	**1,767.3**	**1,806.0**	**1,811.3**	**1,811.1**	**1,886.0**	**1,945.2**	**1,950.1**	**1,946.6**
Primary Energy	89.4	285.0	372.3	371.3	375.5	376.1	381.0	358.3	354.1	354.7
Coal	–	.1	–	*	–	*	–	–	*	–
Natural Gas	66.7	248.7	344.3	335.6	341.3	342.7	344.5	325.2	315.0	309.2
Petroleum	22.8	36.2	28.0	35.6	34.3	33.4	36.5	33.1	39.1	45.4
Distillate Fuel	*	.2	.2	.3	.1	.1	.3	.3	.1	*
Kerosene	.2	–	.5	.7	.4	.6	1.5	.7	.7	.7
LPG	22.5	36.0	27.3	34.7	33.8	32.6	34.8	32.1	38.4	44.8
Electricity	209.6	792.9	1,395.0	1,434.7	1,435.7	1,435.0	1,505.0	1,587.0	1,596.0	1,592.0
Commercial Sector	**187.4**	**981.0**	**1,395.4**	**1,325.1**	**1,262.5**	**1,283.6**	**1,308.5**	**1,348.5**	**1,317.9**	**1,334.2**
Primary Energy	41.6	453.2	252.8	238.2	199.7	194.7	178.6	188.6	172.0	171.4
Coal	–	.1	–	*	–	*	–	–	*	–
Natural Gas	26.6	107.7	159.7	146.9	138.4	141.2	140.9	131.1	124.8	136.3
Petroleum	15.0	345.4	93.1	91.3	61.3	53.5	37.7	57.5	47.2	35.1
Distillate Fuel	4.3	14.8	62.2	75.1	43.2	35.2	20.6	36.5	27.9	20.0
Kerosene	1.5	17.2	1.3	.4	.5	3.2	1.1	.9	.8	.3
LPG	1.9	3.9	3.2	3.8	3.8	3.5	3.1	3.8	4.1	2.8
Motor Gasoline	5.7	8.7	11.6	8.8	9.3	9.0	9.2	15.7	12.9	11.9
Residual Fuel	1.6	300.8	14.9	3.1	4.5	2.6	3.6	.7	1.5	.1
Electricity	145.8	527.7	1,142.6	1,086.9	1,062.8	1,088.8	1,129.9	1,159.9	1,145.9	1,162.9
Industrial Sector	**589.6**	**5,442.9**	**5,611.6**	**4,457.4**	**4,508.8**	**4,561.6**	**R4,827.4**	**R5,724.5**	**R5,484.3**	**4,932.5**
Primary Energy	509.2	4,864.0	4,484.9	3,570.3	3,627.9	3,655.1	R3,858.4	R4,732.2	R4,471.8	3,863.9
Coal	–	2.9	15.8	11.5	17.6	19.5	22.0	24.8	17.8	18.7
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	–	2.9	15.8	11.5	17.6	19.5	22.0	24.8	17.8	18.7
Natural Gas	210.8	1,150.2	1,833.1	1,248.4	1,203.7	1,292.8	1,519.5	1,544.3	R1,362.2	1,507.9
Petroleum	298.4	3,710.9	2,635.9	2,310.3	2,406.6	2,342.8	R2,316.8	R3,163.0	R3,091.8	2,337.2
Asphalt and Road Oil	9.7	46.8	50.8	54.3	47.5	49.9	44.4	32.3	30.6	24.3
Distillate Fuel	12.4	210.9	164.5	208.3	304.5	360.0	316.2	487.0	424.2	338.1
Kerosene	6.8	161.9	2.0	3.7	1.1	3.9	3.0	1.9	1.9	.9
LPG	173.5	969.6	1,261.4	1,208.1	1,098.8	1,067.2	R972.7	R1,305.2	R1,423.6	792.1
Lubricants	32.4	111.3	124.2	107.5	99.1	109.9	102.6	106.4	109.5	129.4
Motor Gasoline	4.5	3.2	23.9	14.5	14.0	13.1	12.1	16.7	17.8	16.7
Residual Fuel	2.5	208.8	161.8	18.6	27.3	25.9	13.9	13.6	7.7	5.7
Other	56.5	1,998.3	847.3	695.2	814.4	712.8	851.9	1,200.0	1,076.5	1,030.1
Electricity	80.5	578.8	1,126.7	887.1	880.9	906.5	969.0	992.3	1,012.5	1,068.6
Transportation Sector	**628.3**	**3,914.7**	**3,998.5**	**3,163.4**	**3,416.8**	**3,595.6**	**3,864.7**	**4,552.4**	**R4,486.6**	**4,164.2**
Primary Energy	628.3	3,914.6	3,998.4	3,163.3	3,416.7	3,595.4	3,864.6	4,552.3	R4,486.4	4,164.0
Coal	–	–	–	–	–	–	–	–	–	–
Petroleum	628.3	3,914.6	3,998.4	3,163.3	3,416.7	3,595.4	3,864.6	4,552.3	R4,486.4	4,164.0
Aviation Gasoline	4.9	11.6	8.6	7.0	5.0	4.6	4.8	5.1	4.1	3.8
Distillate Fuel	42.1	496.3	749.4	699.4	813.1	871.6	974.0	1,210.7	1,004.0	923.3
Jet Fuel	23.4	306.8	410.5	369.3	415.1	435.5	518.2	845.1	R848.7	653.1
LPG	1.4	3.0	2.0	1.9	1.9	1.7	1.4	2.1	R2.1	1.0
Lubricants	16.6	62.8	70.0	60.6	55.9	62.0	57.8	60.0	61.7	73.0
Motor Gasoline	513.2	2,437.3	2,388.8	1,823.9	1,780.9	1,839.9	1,923.3	2,141.7	2,118.0	2,160.5
Residual Fuel	26.8	596.8	368.9	201.1	344.7	380.1	385.0	287.5	447.7	349.5
Electricity	*	.1	.2	.2	.1	.2	.1	.2	.2	.2
Total Energy	**1,704.4**	**11,416.4**	**12,772.8**	**10,751.9**	**10,999.3**	**11,251.8**	**R11,886.5**	**R13,570.7**	**R13,238.9**	**12,377.6**
Primary Energy — Four Sectors	1,268.5	9,516.8	9,108.3	7,343.0	7,619.8	7,821.3	R8,282.6	R9,831.4	R9,484.4	8,554.0
Electricity	435.9	1,899.6	3,664.5	3,408.9	3,379.5	3,430.5	3,604.0	3,739.3	3,754.6	3,823.6
Electric Utility Sector [a]	**72.9**	**1,079.1**	**1,168.2**	**942.4**	**811.9**	**886.9**	**881.3**	**931.6**	**869.3**	**903.4**
Coal	–	–	324.2	297.1	269.1	313.4	313.5	326.3	336.0	326.1
Natural Gas	72.3	889.7	815.3	518.7	412.0	426.6	435.3	465.9	405.6	486.0
Petroleum	.5	189.4	5.8	7.2	2.3	11.2	12.7	5.8	2.3	2.1
Heavy Oil [b]	.3	159.5	1.3	5.7	.8	7.4	4.0	1.2	.3	.2
Light Oil [b]	.2	29.9	4.5	1.4	1.5	3.8	8.7	4.7	1.9	1.9
Petroleum Coke	–	–	–	–	–	–	–	–	–	([d])
Nuclear Fuel	–	–	22.9	119.4	128.5	135.7	119.8	133.6	125.4	89.2
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1,341.4**	**10,595.9**	**10,276.5**	**8,285.4**	**8,431.7**	**8,708.2**	**R9,163.9**	**R10,763.1**	**R10,353.7**	**9,457.3**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[d] Utilities used petroleum coke at no charge.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Maine 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	**1.06**	**1.89**	**2.58**	**2.27**	**2.48**	**2.63**	**2.66**	**2.72**	**2.67**	**2.67**
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	1.06	1.89	2.58	2.27	2.48	2.63	2.66	2.72	2.67	2.67
Natural Gas	**1.48**	**5.03**	**7.41**	**7.06**	**6.45**	**5.64**	**5.78**	**6.05**	**5.50**	**5.43**
Petroleum	**1.46**	**7.00**	**7.38**	**5.28**	**5.85**	**5.65**	**6.17**	**6.99**	**6.71**	**6.56**
Asphalt and Road Oil	.73	3.73	5.21	4.88	3.55	3.35	3.23	3.34	3.05	2.81
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.37	6.83	8.00	6.06	6.21	6.23	6.98	7.87	7.56	6.98
Jet Fuel	.75	6.51	6.10	4.50	4.41	4.13	4.79	5.92	5.07	5.20
Kerosene	1.53	7.82	8.78	6.60	6.58	6.61	7.77	8.62	8.29	7.65
LPG	2.37	7.86	10.89	10.53	10.66	10.59	10.31	13.04	14.45	11.39
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.02	9.69	9.35	7.38	7.72	8.15	8.69	9.74	9.64	9.63
Residual Fuel	.38	4.10	4.37	2.44	2.93	2.33	2.80	2.86	2.33	2.42
Other [a]	.89	–	–	–	–	–	–	–	–	–
Nuclear Fuel	**–**	**.58**	**.62**	**.58**	**.60**	**.64**	**.54**	**.46**	**.43**	**.39**
Biomass Fuels at Utilities	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Primary Energy — Five Sectors [b]	**1.45**	**5.70**	**5.84**	**4.21**	**4.96**	**4.78**	**4.85**	**5.77**	**5.21**	**5.13**
Electric Utility Fuel [c]	.35	1.82	1.60	1.11	1.50	1.27	1.21	1.17	.73	.76
Electricity Purchased by End Users	5.92	16.30	20.16	19.88	19.10	19.62	20.53	22.42	25.21	26.52
Total Energy	**1.95**	**8.44**	**9.49**	**7.45**	**8.05**	**7.77**	**8.55**	**9.49**	**9.48**	**9.28**
	Expenditures in Millions of Dollars									
Coal	**2.3**	**5.7**	**13.2**	**21.1**	**17.0**	**18.2**	**18.0**	**18.0**	**25.0**	**57.3**
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	2.3	5.7	13.2	21.1	17.0	18.2	18.0	18.0	25.0	57.3
Natural Gas	**1.9**	**11.2**	**19.3**	**17.9**	**17.6**	**18.5**	**21.3**	**26.4**	**26.5**	**28.2**
Petroleum	**337.1**	**1,388.1**	**1,509.0**	**1,270.4**	**1,331.6**	**1,536.0**	**1,556.6**	**1,675.5**	**R1,537.5**	**1,475.2**
Asphalt and Road Oil	3.4	10.8	75.6	23.8	20.1	35.2	21.5	14.3	20.0	19.8
Aviation Gasoline	1.0	3.7	2.1	2.4	2.0	2.5	2.9	2.9	1.9	1.8
Distillate Fuel	94.2	422.8	446.4	405.7	432.6	497.8	498.7	549.8	456.3	442.8
Jet Fuel	9.4	66.7	54.4	39.6	43.7	47.7	59.5	82.9	R66.7	54.8
Kerosene	15.5	22.4	51.8	25.0	26.5	37.5	41.7	32.1	34.9	24.0
LPG	5.7	25.2	26.5	39.8	50.8	62.2	59.6	65.7	77.0	50.9
Lubricants	5.2	17.1	19.1	16.5	15.2	16.9	15.8	16.3	16.8	19.9
Motor Gasoline	174.9	598.7	615.9	520.9	570.3	658.8	647.4	718.6	714.7	714.3
Residual Fuel	27.5	220.7	217.2	196.6	170.3	177.4	209.6	192.7	149.1	146.8
Other [a]	.4	–	–	–	–	–	–	–	–	–
Nuclear Fuel	**–**	**27.9**	**35.7**	**38.9**	**25.9**	**34.2**	**40.0**	**24.1**	**29.0**	**22.2**
Biomass Fuels at Utilities	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**
Primary Energy — Five Sectors [b]	**341.3**	**1,432.8**	**1,577.2**	**1,348.3**	**1,392.1**	**1,606.9**	**1,635.9**	**1,744.0**	**R1,618.0**	**1,582.9**
Electric Utility Fuel [c]	-10.6	-129.8	-127.6	-105.0	-106.3	-107.3	-128.9	-86.5	-59.3	-54.4
Electricity Purchased by End Users	102.3	455.3	675.7	692.1	698.4	754.0	801.0	882.0	979.1	1,038.9
Total Energy	**433.1**	**1,758.3**	**2,125.3**	**1,935.4**	**1,984.2**	**2,253.6**	**2,308.0**	**2,539.5**	**R2,537.7**	**2,567.4**

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Maine 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.17**	**9.29**	**11.75**	**10.18**	**10.42**	**10.52**	**11.55**	**13.27**	**13.96**	**13.92**
Primary Energy	1.56	7.09	7.86	5.93	6.11	6.33	7.18	8.16	8.20	7.14
Coal	1.29	3.90	4.39	4.19	3.85	3.99	3.96	4.21	4.07	3.94
Natural Gas	1.96	6.20	8.76	8.26	7.73	7.07	7.14	7.57	6.82	6.86
Petroleum	1.56	7.12	7.90	5.93	6.12	6.35	7.21	8.22	8.25	7.18
Distillate Fuel	1.51	6.94	7.55	5.63	5.66	5.88	6.77	7.49	7.34	6.66
Kerosene	1.60	8.15	8.95	6.68	6.70	6.97	8.02	8.88	8.70	7.89
LPG	3.04	10.04	11.45	9.79	10.37	10.37	10.37	14.41	15.88	12.26
Electricity	8.12	18.30	23.71	23.98	23.79	24.17	24.93	27.28	30.64	33.36
Commercial Sector	**2.40**	**9.16**	**12.02**	**9.69**	**10.49**	**8.54**	**9.42**	**9.82**	**10.18**	**11.85**
Primary Energy	1.03	5.72	5.96	4.22	4.88	4.06	4.58	4.76	4.18	4.61
Coal	.98	1.68	2.38	2.13	2.37	2.55	2.61	2.61	2.65	2.65
Natural Gas	1.42	5.00	7.73	7.26	6.71	6.09	6.28	6.69	5.98	6.11
Petroleum	1.02	5.84	5.99	4.13	4.84	3.97	4.49	4.69	4.06	4.49
Distillate Fuel	1.11	6.32	7.06	5.32	5.26	5.12	5.86	6.44	6.14	5.62
Kerosene	.68	6.50	7.60	5.57	5.57	5.30	6.31	7.08	6.68	6.24
LPG	1.35	6.06	10.29	11.25	11.14	10.88	10.22	10.80	11.94	9.96
Motor Gasoline	3.02	9.69	9.35	7.38	7.72	8.15	8.69	9.74	9.64	9.63
Residual Fuel	.35	4.33	4.50	2.47	2.93	2.33	2.83	2.91	2.41	2.47
Electricity	7.86	19.20	23.69	23.53	20.68	21.15	22.09	23.99	27.09	27.78
Industrial Sector	**1.03**	**6.32**	**7.37**	**5.14**	**6.15**	**5.71**	**6.38**	**7.10**	**6.79**	**6.11**
Primary Energy	.59	4.21	5.00	3.12	3.59	3.28	3.62	3.66	3.24	3.02
Coal	.98	1.68	2.38	2.13	2.37	2.55	2.61	2.61	2.65	2.65
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.98	1.68	2.38	2.13	2.37	2.55	2.61	2.61	2.65	2.65
Natural Gas	.84	4.19	6.14	5.81	5.26	4.39	4.56	5.03	4.66	4.09
Petroleum	.58	4.38	5.23	3.23	3.73	3.34	3.73	3.73	3.28	3.13
Asphalt and Road Oil	.73	3.73	5.21	4.88	3.55	3.35	3.23	3.34	3.05	2.81
Distillate Fuel	.63	5.94	6.63	4.86	4.86	4.63	5.51	6.18	5.83	5.45
Kerosene	.68	6.50	7.60	5.57	5.57	5.30	6.31	7.08	6.68	6.24
LPG	1.35	6.06	10.29	11.25	11.14	10.88	10.22	10.80	11.94	9.96
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.02	9.69	9.35	7.38	7.72	8.15	8.69	9.74	9.64	9.63
Residual Fuel	.43	3.84	4.50	2.47	2.93	2.33	2.83	2.91	2.41	2.47
Other	.89	–	–	–	–	–	–	–	–	–
Electricity	3.52	13.15	15.15	14.14	14.12	14.86	15.74	17.46	19.67	20.23
Transportation Sector	**2.28**	**8.99**	**9.06**	**7.14**	**7.42**	**7.55**	**8.11**	**9.10**	**R8.97**	**8.99**
Primary Energy	2.28	8.99	9.06	7.14	7.42	7.55	8.11	9.10	R8.97	8.99
Coal	.98	–	–	–	–	–	–	–	–	–
Petroleum	2.28	8.99	9.06	7.14	7.42	7.55	8.11	9.10	R8.97	8.99
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.39	7.41	9.16	7.24	7.62	7.55	8.20	9.10	9.11	8.65
Jet Fuel	.75	6.51	6.10	4.50	4.41	4.13	4.79	5.92	5.07	5.20
LPG	1.35	6.06	10.29	11.25	11.14	10.88	10.22	10.80	11.94	9.96
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.02	9.69	9.35	7.38	7.72	8.15	8.69	9.74	9.64	9.63
Residual Fuel	.31	3.68	4.08	2.22	2.83	2.03	2.48	2.52	1.90	2.16
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.95**	**8.44**	**9.49**	**7.45**	**8.05**	**7.77**	**8.55**	**9.49**	**9.48**	**9.28**
Primary Energy — Four Sectors	1.62	7.22	7.61	5.53	6.13	5.96	6.52	7.26	6.81	6.44
Electricity	5.92	16.30	20.16	19.88	19.10	19.62	20.53	22.42	25.21	26.52
Electric Utility Sector [a]	**.35**	**1.82**	**1.60**	**1.11**	**1.50**	**1.27**	**1.21**	**1.17**	**.73**	**.76**
Coal	–	–	–	–	–	–	–	–	–	–
Natural Gas	–	–	–	–	–	–	–	–	–	–
Petroleum	.35	4.41	4.23	2.40	2.94	2.37	2.79	2.79	2.09	2.29
Heavy Oil [b]	.34	4.38	4.21	2.39	2.93	2.35	2.78	2.78	2.07	2.27
Light Oil [b]	.41	6.33	5.89	3.49	4.19	4.43	4.14	5.40	4.59	4.37
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	.58	.62	.58	.60	.64	.54	.46	.43	.39
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.45**	**5.70**	**5.84**	**4.21**	**4.96**	**4.78**	**4.85**	**5.77**	**5.21**	**5.13**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Maine 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**137.9**	**482.8**	**558.7**	**528.2**	**543.1**	**597.5**	**642.3**	**666.0**	**708.3**	**703.6**
Primary Energy	90.2	295.6	282.1	235.5	240.7	275.5	301.3	300.0	309.3	267.6
Coal	.7	1.1	2.2	2.6	2.0	1.6	1.1	1.9	.8	1.5
Natural Gas	1.0	3.5	4.8	4.6	4.2	4.1	4.6	4.9	5.0	6.1
Petroleum	88.4	291.0	275.1	228.3	234.5	269.8	295.6	293.2	303.5	260.1
Distillate Fuel	69.1	257.7	214.6	186.4	179.9	204.6	223.9	219.8	220.4	204.8
Kerosene	14.9	18.7	46.2	23.6	24.0	31.0	36.6	28.3	29.2	21.2
LPG	4.4	14.6	14.4	18.2	30.5	34.3	35.2	45.1	53.9	34.1
Electricity	47.7	187.2	276.6	292.7	302.4	322.0	341.0	366.0	399.0	436.0
Commercial Sector	**39.9**	**210.3**	**280.6**	**290.7**	**266.1**	**305.0**	**328.6**	**362.7**	**379.1**	**375.4**
Primary Energy	13.7	97.8	91.6	90.7	79.8	107.0	115.6	129.7	115.1	100.5
Coal	.4	.5	1.6	2.0	1.7	1.4	1.0	1.6	.4	1.4
Natural Gas	.6	4.4	9.1	9.1	8.7	9.1	10.5	11.3	11.2	13.7
Petroleum	12.7	92.9	80.9	79.6	69.3	96.4	104.2	116.8	103.5	85.4
Distillate Fuel	10.8	67.7	39.9	48.4	45.5	53.3	55.3	63.4	51.6	56.1
Kerosene	.3	2.6	4.2	.8	1.3	4.8	3.4	2.7	4.7	2.3
LPG	.3	1.6	2.3	3.7	5.8	6.3	6.1	6.0	7.2	4.9
Motor Gasoline	.6	2.5	5.1	4.1	3.8	4.5	5.3	5.1	2.7	2.5
Residual Fuel	.6	18.6	29.4	22.7	13.0	27.5	34.1	39.6	37.3	19.5
Electricity	26.1	112.5	189.0	199.9	186.4	198.0	213.0	233.0	264.1	274.9
Industrial Sector	**55.3**	**317.1**	**437.5**	**395.2**	**376.0**	**429.0**	**440.3**	**461.6**	**504.2**	**551.7**
Primary Energy	26.9	161.4	227.3	195.7	166.4	195.0	193.3	178.6	188.2	223.7
Coal	1.1	4.1	9.3	16.5	13.3	15.1	15.9	14.5	23.9	54.4
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	1.1	4.1	9.3	16.5	13.3	15.1	15.9	14.5	23.9	54.4
Natural Gas	.3	3.2	5.4	4.2	4.7	5.2	6.3	10.2	10.4	8.5
Petroleum	25.5	154.2	212.6	175.0	148.5	174.7	171.1	153.9	153.9	160.8
Asphalt and Road Oil	3.4	10.8	75.6	23.8	20.1	35.2	21.5	14.3	20.0	19.8
Distillate Fuel	2.9	26.4	17.6	15.7	26.0	33.3	34.6	25.5	26.4	23.9
Kerosene	.2	1.1	1.4	.6	1.2	1.7	1.7	1.1	1.0	.5
LPG	.9	8.9	9.2	17.0	13.9	20.4	17.2	14.0	15.2	11.4
Lubricants	1.7	5.6	6.3	5.4	5.0	5.5	5.2	5.4	5.5	6.5
Motor Gasoline	2.2	3.8	6.1	5.1	5.5	5.7	6.4	4.8	5.1	5.1
Residual Fuel	13.8	97.6	96.3	107.4	76.8	72.9	84.6	88.9	80.7	93.5
Other	.4	–	–	–	–	–	–	–	–	–
Electricity	28.4	155.7	210.2	199.5	209.6	234.0	247.0	283.0	316.0	328.0
Transportation Sector	**199.9**	**748.1**	**848.5**	**721.3**	**798.9**	**922.0**	**896.8**	**1,049.2**	**R946.2**	**936.7**
Primary Energy	199.9	748.1	848.5	721.3	798.9	922.0	896.8	1,049.2	R946.2	936.7
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	199.9	748.1	848.5	721.3	798.9	922.0	896.8	1,049.2	R946.2	936.7
Aviation Gasoline	1.0	3.7	2.1	2.4	2.0	2.5	2.9	2.9	1.9	1.8
Distillate Fuel	11.2	68.8	173.3	154.4	180.4	205.3	183.8	240.6	157.3	157.4
Jet Fuel	9.4	66.7	54.4	39.6	43.7	47.7	59.5	82.9	R66.7	54.8
LPG	*	.2	.6	.9	.6	1.2	1.1	.7	.7	.6
Lubricants	3.5	11.5	12.8	11.1	10.2	11.3	10.6	11.0	11.3	13.3
Motor Gasoline	172.1	592.4	604.7	511.8	561.1	648.7	635.8	708.7	R707.0	706.6
Residual Fuel	2.7	4.8	.5	1.0	.9	5.4	3.1	2.4	1.4	2.1
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**433.1**	**1,758.3**	**2,125.3**	**1,935.4**	**1,984.2**	**2,253.6**	**2,308.0**	**2,539.5**	**R2,537.7**	**2,567.4**
Primary Energy — Four Sectors	330.7	1,303.0	1,449.6	1,243.3	1,285.8	1,499.6	1,507.0	1,657.5	R1,558.7	1,528.5
Electricity	102.3	455.3	675.7	692.1	698.4	754.0	801.0	882.0	979.1	1,038.9
Electric Utility Sector [a]	**10.6**	**129.8**	**127.6**	**105.0**	**106.3**	**107.3**	**128.9**	**86.5**	**59.3**	**54.4**
Coal	–	–	–	–	–	–	–	–	–	–
Natural Gas	–	–	–	–	–	–	–	–	–	–
Petroleum	10.6	101.9	91.9	66.1	80.4	73.0	88.9	62.4	30.3	32.2
Heavy Oil [b]	10.3	99.7	90.9	65.5	79.6	71.7	87.8	61.8	29.8	31.6
Light Oil [b]	.2	2.2	1.0	.7	.8	1.3	1.1	.6	.6	.6
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	27.9	35.7	38.9	25.9	34.2	40.0	24.1	29.0	22.2
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**341.3**	**1,432.8**	**1,577.2**	**1,348.3**	**1,392.1**	**1,606.9**	**1,635.9**	**1,744.0**	**R1,618.0**	**1,582.9**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Maryland 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.45	1.77	1.75	1.67	1.56	1.57	1.60	1.62	1.62	1.58
Coking Coal	.58	2.38	1.88	1.76	1.59	1.61	1.67	1.71	1.75	–
Steam Coal	.34	1.50	1.71	1.64	1.56	1.56	1.59	1.61	1.61	1.58
Natural Gas	1.07	3.81	6.29	5.99	5.31	4.92	5.12	5.07	4.69	4.97
Petroleum	1.62	7.66	8.13	6.41	6.49	6.49	6.89	7.91	7.72	7.87
Asphalt and Road Oil	.60	3.73	4.95	4.18	3.22	3.16	2.90	2.97	2.89	2.20
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.20	6.87	7.83	6.13	6.34	6.32	6.81	8.07	7.64	7.34
Jet Fuel	.73	6.46	5.80	4.01	4.01	3.75	4.38	5.47	4.78	4.49
Kerosene	1.46	7.88	8.63	7.11	6.89	6.68	7.27	8.65	8.35	7.70
LPG	1.87	6.81	11.26	10.99	10.82	9.68	R 13.84	R 11.58	R 12.52	11.33
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.85	9.93	9.50	7.55	7.80	8.18	8.84	9.88	9.56	9.74
Residual Fuel	.43	4.04	4.06	2.30	3.03	2.27	2.68	3.03	2.16	2.16
Other [a]	1.53	8.91	7.31	6.35	5.73	5.05	7.05	6.23	6.37	6.91
Nuclear Fuel	–	.44	.59	.56	.49	.49	.52	.61	.50	.45
Biomass Fuels at Utilities	–	–	.79	.32	.95	.87	1.27	–	–	–
Primary Energy — Five Sectors [b]	1.17	4.92	5.39	4.34	4.38	4.27	4.96	5.45	4.92	5.05
Electric Utility Fuel [c]	.40	1.66	1.65	1.32	1.43	1.35	1.83	1.88	1.46	1.35
Electricity Purchased by End Users	5.76	15.47	18.60	18.66	17.61	17.12	17.53	18.47	19.97	19.93
Total Energy	1.79	7.70	9.10	8.20	7.93	7.94	8.54	9.35	9.67	9.91
	Expenditures in Millions of Dollars									
Coal	139.6	416.8	448.6	458.3	451.2	473.4	473.0	463.9	444.8	390.0
Coking Coal	79.6	168.9	107.4	91.5	82.3	82.8	77.4	57.6	46.6	–
Steam Coal	60.0	247.9	341.2	366.7	368.9	390.6	395.6	406.3	398.3	390.0
Natural Gas	168.5	607.5	966.9	933.1	913.8	864.2	990.5	884.5	822.0	913.4
Petroleum	860.4	4,059.4	3,877.0	3,107.1	3,318.6	3,439.5	3,896.9	R 3,957.6	R 3,806.6	3,910.0
Asphalt and Road Oil	11.1	65.3	148.6	144.7	102.9	91.3	86.7	98.7	71.0	51.2
Aviation Gasoline	3.4	7.9	3.8	4.3	3.3	3.5	3.5	3.5	3.3	4.1
Distillate Fuel	138.3	872.6	807.7	621.0	668.0	682.5	816.8	799.5	770.9	784.4
Jet Fuel	18.1	126.3	125.7	86.7	84.0	93.7	107.2	110.9	R 87.8	76.8
Kerosene	19.3	52.2	61.0	37.7	47.2	57.8	41.5	22.9	22.5	16.5
LPG	13.0	51.5	73.3	57.2	68.9	59.9	108.8	R 82.4	R 91.3	108.2
Lubricants	19.2	63.1	70.4	60.9	56.1	62.3	58.1	60.3	62.1	73.3
Motor Gasoline	556.7	2,296.3	2,275.7	1,860.2	1,970.1	2,114.9	2,278.9	2,446.9	2,433.3	2,509.4
Residual Fuel	58.7	415.8	201.9	105.5	173.2	148.8	254.9	188.4	127.0	106.3
Other [a]	22.5	108.3	108.9	128.8	144.8	124.8	140.5	144.1	137.4	179.7
Nuclear Fuel	–	52.5	62.9	77.3	53.2	62.1	15.1	8.2	48.2	51.8
Biomass Fuels at Utilities	–	–	.1	.1	.5	.5	.2	–	–	–
Primary Energy — Five Sectors [b]	1,168.5	5,136.2	5,355.5	4,575.8	4,737.3	4,839.7	5,375.6	R 5,314.2	R 5,121.7	5,265.2
Electric Utility Fuel [c]	-91.0	-544.9	-536.2	-495.4	-517.2	-544.1	-646.8	-568.0	-558.0	-524.0
Electricity Purchased by End Users	442.4	1,825.5	2,496.0	2,671.2	2,698.1	2,779.1	2,946.0	3,122.0	3,483.1	3,468.0
Total Energy	1,519.9	6,416.7	7,315.3	6,751.7	6,918.2	7,074.7	7,674.8	R 7,868.1	R 8,046.8	8,209.1

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Maryland 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.34**	**8.54**	**11.76**	**11.51**	**11.04**	**10.69**	**11.58**	**12.68**	**13.46**	**13.16**
Primary Energy	1.46	5.71	7.54	6.83	6.43	6.11	6.83	7.13	6.90	6.90
Coal	1.05	3.18	3.28	3.22	3.10	3.07	3.25	3.36	3.09	3.10
Natural Gas	1.42	4.38	7.01	6.64	6.16	5.72	6.11	6.28	6.01	6.26
Petroleum	1.50	7.31	8.62	7.32	7.02	6.85	8.31	9.04	8.99	8.42
Distillate Fuel	1.42	7.06	8.24	6.92	6.56	6.59	7.10	8.47	8.21	7.56
Kerosene	1.50	8.55	8.84	7.42	7.03	7.07	7.62	9.09	8.80	8.11
LPG	2.57	9.81	11.42	11.25	11.25	9.17	17.98	12.58	13.46	13.03
Electricity	7.02	17.32	21.32	21.14	20.19	19.68	20.10	21.17	23.15	23.36
Commercial Sector	**2.60**	**9.78**	**13.15**	**12.50**	**10.74**	**11.33**	**11.11**	**12.21**	**11.61**	**11.14**
Primary Energy	.98	4.74	6.20	4.88	4.40	4.50	4.99	5.50	5.21	5.08
Coal	.07	1.19	1.33	1.33	1.30	1.33	1.28	1.21	1.34	1.32
Natural Gas	1.09	3.88	6.17	5.54	4.94	4.93	5.27	5.21	4.92	5.10
Petroleum	.93	5.81	6.87	4.32	4.17	4.18	4.78	6.07	6.09	5.07
Distillate Fuel	1.12	6.39	6.77	4.70	4.58	4.27	5.45	6.28	5.87	5.20
Kerosene	.88	6.24	6.95	4.71	4.63	4.26	5.79	6.60	6.08	5.58
LPG	1.03	5.13	11.07	10.71	10.30	10.26	9.42	10.33	11.09	9.50
Motor Gasoline	2.85	9.93	9.50	7.55	7.80	8.18	8.84	9.88	9.56	9.74
Residual Fuel	.43	4.16	4.41	2.56	3.14	2.39	2.82	3.13	2.36	2.26
Electricity	6.86	18.41	22.00	21.81	19.92	19.27	19.63	19.94	20.88	21.06
Industrial Sector	**.91**	**5.00**	**6.36**	**6.14**	**5.71**	**5.52**	**6.29**	**6.56**	**7.10**	**7.91**
Primary Energy	.63	3.64	4.42	4.03	3.66	3.43	3.88	R3.82	R3.52	4.10
Coal	.50	2.15	1.75	1.65	1.50	1.54	1.57	1.50	1.55	1.32
Coking Coal	.58	2.38	1.88	1.76	1.59	1.61	1.67	1.71	1.75	–
Steam Coal	.07	1.19	1.33	1.33	1.30	1.33	1.28	1.21	1.34	1.32
Natural Gas	.67	3.19	5.51	5.43	4.97	4.17	4.67	4.45	3.42	3.47
Petroleum	.84	5.77	6.33	5.17	4.74	4.47	5.10	R4.97	5.18	5.25
Asphalt and Road Oil	.60	3.73	4.95	4.18	3.22	3.16	2.90	2.97	2.89	2.20
Distillate Fuel	.81	5.60	6.22	4.22	4.14	3.82	5.18	5.91	5.44	5.00
Kerosene	.88	6.24	6.95	4.71	4.63	4.26	5.79	6.60	6.08	5.58
LPG	1.03	5.13	11.07	10.71	10.30	10.26	9.42	10.33	11.09	9.50
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.85	9.93	9.50	7.55	7.80	8.18	8.84	9.88	9.56	9.74
Residual Fuel	.43	4.37	4.41	2.56	3.14	2.39	2.82	3.13	2.36	2.26
Other	1.53	8.91	7.31	6.35	5.73	5.05	7.05	6.23	6.37	6.91
Electricity	3.80	11.65	13.92	14.12	13.43	12.97	13.83	14.94	16.11	15.83
Transportation Sector	**2.30**	**8.92**	**9.01**	**7.11**	**7.34**	**7.51**	**8.09**	**9.25**	**R8.98**	**9.06**
Primary Energy	2.30	8.92	9.00	7.10	7.33	7.50	8.07	9.24	R8.96	9.05
Coal	.07	–	–	–	–	–	–	–	–	–
Petroleum	2.30	8.92	9.00	7.10	7.33	7.50	8.07	9.24	R8.96	9.05
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.32	7.69	8.64	6.68	7.32	7.40	7.61	8.97	8.44	8.31
Jet Fuel	.73	6.46	5.80	4.01	4.01	3.75	4.38	5.47	4.78	4.49
LPG	1.03	5.13	11.07	10.71	10.30	10.26	9.42	10.33	11.09	9.50
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.85	9.93	9.50	7.55	7.80	8.18	8.84	9.88	9.56	9.74
Residual Fuel	.39	3.53	3.88	2.09	2.85	2.07	2.39	2.72	1.97	1.98
Electricity	–	12.62	17.74	17.80	24.06	23.33	23.37	24.42	25.65	25.95
Total Energy	**1.79**	**7.70**	**9.10**	**8.20**	**7.93**	**7.94**	**8.54**	**9.35**	**9.67**	**9.91**
Primary Energy — Four Sectors	1.39	6.42	7.19	6.00	5.87	5.89	6.47	7.06	6.94	7.24
Electricity	5.76	15.47	18.60	18.66	17.61	17.12	17.53	18.47	19.97	19.93
Electric Utility Sector [a]	**.40**	**1.66**	**1.65**	**1.32**	**1.43**	**1.35**	**1.83**	**1.88**	**1.46**	**1.35**
Coal	.39	1.54	1.75	1.67	1.58	1.58	1.61	1.65	1.63	1.59
Natural Gas	.32	2.50	3.73	2.74	2.68	2.60	2.60	2.45	2.26	2.55
Petroleum	.44	4.41	4.22	2.41	3.17	2.46	2.86	3.28	2.32	2.37
Heavy Oil [b]	.44	4.21	4.02	2.25	3.06	2.33	2.72	3.10	2.17	2.19
Light Oil [b]	.48	5.97	5.53	3.39	3.81	3.49	4.12	5.29	4.44	4.30
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	.44	.59	.56	.49	.49	.52	.61	.50	.45
Biomass Fuels	–	–	.79	.32	.95	.87	1.27	–	–	–
Primary Energy — Five Sectors [c]	**1.17**	**4.92**	**5.39**	**4.34**	**4.38**	**4.27**	**4.96**	**5.45**	**4.92**	**5.05**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Maryland 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**387.3**	**1,450.2**	**1,878.7**	**1,899.7**	**1,936.3**	**1,996.5**	**2,103.6**	**2,090.8**	**2,309.5**	**2,333.9**
Primary Energy	203.1	733.9	837.0	758.5	750.3	755.4	795.6	710.8	706.4	758.9
Coal	.9	1.2	3.6	3.6	4.9	3.5	1.6	1.5	1.2	.4
Natural Gas	106.1	304.1	496.1	494.8	450.2	442.0	473.4	428.5	426.5	483.0
Petroleum	96.1	428.6	337.4	260.1	295.2	310.0	320.6	280.9	278.7	275.4
Distillate Fuel	67.9	361.7	241.0	194.2	210.8	227.2	212.6	211.4	199.9	196.4
Kerosene	18.4	40.2	55.8	34.9	45.3	52.7	35.1	19.8	19.8	14.6
LPG	9.8	26.7	40.6	31.0	39.1	30.1	72.9	49.6	59.1	64.5
Electricity	184.2	716.3	1,041.6	1,141.2	1,186.1	1,241.0	1,308.0	1,380.0	1,603.0	1,575.0
Commercial Sector	**204.9**	**849.7**	**981.7**	**972.9**	**975.2**	**965.4**	**966.5**	**988.7**	R1,092.9	**1,139.6**
Primary Energy	56.4	260.1	258.9	208.9	236.0	206.2	252.6	238.1	289.8	322.5
Coal	.1	.6	2.5	2.7	3.7	2.6	1.1	.9	.9	.3
Natural Gas	28.8	113.1	153.9	136.6	130.3	131.7	146.2	128.7	192.1	222.5
Petroleum	27.5	146.4	102.5	69.6	102.0	71.9	105.4	108.5	96.8	99.7
Distillate Fuel	20.9	106.6	76.6	42.2	51.6	46.3	63.6	76.7	78.5	78.0
Kerosene	.3	.7	3.5	1.3	.6	1.5	2.9	1.8	1.8	1.3
LPG	.7	2.5	6.9	5.2	6.3	5.9	6.7	7.2	8.6	8.3
Motor Gasoline	1.5	6.3	8.5	6.9	7.4	7.3	9.2	11.9	5.9	5.3
Residual Fuel	4.1	30.3	7.0	14.0	36.1	10.8	22.9	10.9	2.0	6.8
Electricity	148.5	589.7	722.8	764.0	739.2	759.3	713.9	750.6	R803.1	817.1
Industrial Sector	**304.0**	**1,310.0**	**1,628.4**	**1,581.3**	**1,554.4**	**1,499.9**	**1,723.7**	R1,754.5	R1,658.2	**1,644.2**
Primary Energy	194.2	791.5	901.0	819.5	787.3	727.9	805.7	R770.5	R589.2	576.2
Coal	81.4	190.1	131.0	115.4	113.7	105.5	99.1	86.3	81.8	23.5
Coking Coal	79.6	168.9	107.4	91.5	82.3	82.8	77.4	57.6	46.6	–
Steam Coal	1.8	21.2	23.5	23.9	31.4	22.8	21.7	28.7	35.2	23.5
Natural Gas	29.8	176.9	311.7	295.4	300.5	276.0	318.8	282.6	165.5	177.0
Petroleum	83.1	424.5	458.3	408.7	373.1	346.4	387.9	R401.5	R342.0	375.7
Asphalt and Road Oil	11.1	65.3	148.6	144.7	102.9	91.3	86.7	98.7	71.0	51.2
Distillate Fuel	14.8	104.1	92.3	51.3	40.1	38.2	63.5	59.6	49.3	41.0
Kerosene	.5	11.3	1.7	1.5	1.3	3.5	3.4	1.3	1.0	.6
LPG	2.4	21.9	23.3	19.5	22.3	21.8	R27.1	R23.7	R21.9	31.9
Lubricants	10.0	36.1	40.2	34.8	32.1	35.6	33.2	34.5	35.5	41.9
Motor Gasoline	3.9	7.6	14.9	12.7	13.6	15.2	15.9	15.3	14.3	14.1
Residual Fuel	17.8	69.9	28.3	15.3	15.9	15.9	17.5	24.4	11.5	15.2
Other	22.5	108.3	108.9	128.8	144.8	124.8	140.5	144.1	137.4	179.7
Electricity	109.7	518.5	727.4	761.8	767.2	772.0	918.0	984.0	1,069.0	1,068.0
Transportation Sector	**623.7**	**2,806.8**	**2,826.5**	**2,297.7**	**2,452.2**	**2,612.8**	**2,881.0**	**3,034.2**	R2,986.2	**3,091.5**
Primary Energy	623.7	2,805.9	2,822.4	2,293.6	2,446.6	2,606.0	2,874.8	3,026.8	R2,978.3	3,083.6
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	623.7	2,805.9	2,822.4	2,293.6	2,446.6	2,606.0	2,874.8	3,026.8	R2,978.3	3,083.6
Aviation Gasoline	3.4	7.9	3.8	4.3	3.3	3.5	3.5	3.5	3.3	4.1
Distillate Fuel	32.1	262.0	371.1	318.6	347.6	353.4	447.0	433.3	428.9	457.6
Jet Fuel	18.1	125.9	125.7	86.7	84.0	93.7	107.2	110.9	R87.8	76.8
LPG	.1	.5	2.4	1.4	1.2	2.1	2.0	1.9	1.7	3.5
Lubricants	9.2	27.0	30.1	26.1	24.0	26.7	24.9	25.8	26.6	31.4
Motor Gasoline	551.2	2,282.4	2,252.3	1,840.6	1,949.1	2,092.4	2,253.8	2,419.6	2,413.0	2,490.0
Residual Fuel	9.5	100.1	36.9	15.9	37.4	34.2	36.4	31.6	17.0	20.3
Electricity	–	.9	4.1	4.2	5.7	6.8	6.2	7.4	R7.9	7.9
Total Energy	**1,519.9**	**6,416.7**	**7,315.3**	**6,751.7**	**6,918.2**	**7,074.7**	**7,674.8**	R7,868.1	R8,046.8	**8,209.1**
Primary Energy — Four Sectors	1,077.5	4,591.3	4,819.3	4,080.5	4,220.1	4,295.6	R4,728.7	R4,746.1	R4,563.8	4,741.2
Electricity	442.4	1,825.5	2,496.0	2,671.2	2,698.1	2,779.1	2,946.0	3,122.0	3,483.1	3,468.0
Electric Utility Sector [a]	**91.0**	**544.9**	**536.2**	**495.4**	**517.2**	**544.1**	**646.8**	**568.0**	**558.0**	**524.0**
Coal	57.3	224.9	311.6	336.6	328.9	361.8	371.2	375.2	361.0	365.9
Natural Gas	3.8	13.4	5.2	6.4	32.9	14.4	52.1	44.7	37.9	30.8
Petroleum	30.0	254.1	156.4	75.1	101.7	105.3	208.2	139.9	110.8	75.5
Heavy Oil [b]	27.4	215.5	129.7	60.3	83.8	87.8	178.1	121.5	96.5	64.0
Light Oil [b]	2.6	38.6	26.7	14.7	17.9	17.4	30.1	18.4	14.3	11.5
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	52.5	62.9	77.3	53.2	62.1	15.1	8.2	48.2	51.8
Biomass Fuels	–	–	.1	.1	.5	.5	.2	–	–	–
Primary Energy — Five Sectors [c]	**1,168.5**	**5,136.2**	**5,355.5**	**4,575.8**	**4,737.3**	**4,839.7**	**5,375.6**	R5,314.2	R5,121.7	**5,265.2**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Massachusetts 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.55	2.03	2.03	1.81	1.66	1.66	1.64	1.77	1.75	1.74
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.55	2.03	2.03	1.81	1.66	1.66	1.64	1.77	1.75	1.74
Natural Gas	1.58	4.88	6.25	6.35	5.23	5.46	5.33	5.55	5.66	5.66
Petroleum	1.24	6.60	7.28	5.13	5.60	5.56	6.11	7.13	R6.97	6.93
Asphalt and Road Oil	.63	3.73	5.21	4.87	3.57	3.38	3.20	3.36	3.05	2.79
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.34	6.87	8.05	6.00	5.86	5.87	6.55	7.99	7.53	6.93
Jet Fuel	.75	6.51	6.04	4.18	4.12	4.02	4.61	5.83	5.00	4.63
Kerosene	1.36	7.06	8.65	6.21	6.60	6.46	7.10	8.41	7.17	7.03
LPG	2.31	6.62	11.77	10.13	11.06	11.01	12.00	12.12	13.73	11.48
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.86	9.69	9.18	7.25	7.56	7.90	8.50	9.53	10.01	9.83
Residual Fuel	.39	3.84	4.04	2.31	2.77	2.27	2.64	2.88	2.21	2.33
Other[a]	1.86	8.66	9.25	6.58	7.32	6.31	7.21	7.50	6.95	7.60
Nuclear Fuel	.20	.41	.60	.88	.92	.96	.70	.62	.61	.50
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors[b]	1.25	6.04	6.22	4.96	5.10	5.12	5.40	5.99	R5.91	5.87
Electric Utility Fuel[c]	.37	3.41	2.74	2.03	2.26	2.04	2.18	2.15	1.85	1.90
Electricity Purchased by End Users	7.29	21.13	24.34	22.70	23.46	22.86	24.39	25.93	27.94	28.31
Total Energy	1.90	8.90	10.09	8.39	8.71	8.85	9.45	10.52	R10.81	10.46
	Expenditures in Millions of Dollars									
Coal	11.7	46.4	223.8	180.9	195.2	194.2	198.4	200.4	204.7	193.2
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	11.7	46.4	223.8	180.9	195.2	194.2	198.4	200.4	204.7	193.2
Natural Gas	234.1	901.9	1,395.1	1,203.3	1,215.6	1,174.4	1,367.2	1,479.7	1,470.6	1,720.9
Petroleum	1,537.4	6,042.8	5,682.3	4,569.6	4,732.3	4,777.1	R5,340.4	5,579.2	R5,309.5	5,189.3
Asphalt and Road Oil	12.0	30.5	36.4	36.0	35.0	39.6	30.3	29.9	40.0	29.0
Aviation Gasoline	3.0	12.5	6.8	6.2	4.7	4.8	4.9	4.5	2.0	1.9
Distillate Fuel	461.9	1,504.7	1,550.3	1,241.9	1,290.7	1,258.0	1,540.7	1,567.8	1,456.0	1,419.2
Jet Fuel	33.3	315.8	238.4	163.4	182.9	212.1	260.8	323.3	R264.2	206.1
Kerosene	16.3	27.9	36.2	29.1	23.3	15.3	15.8	14.7	15.0	16.9
LPG	15.9	51.7	72.9	84.0	106.6	95.4	R113.4	R115.6	95.2	77.8
Lubricants	29.2	73.2	81.7	70.7	65.2	72.3	67.5	70.0	72.0	85.1
Motor Gasoline	743.8	2,619.1	2,643.9	2,147.8	2,284.5	2,465.8	2,601.2	2,789.2	R2,864.3	2,864.4
Residual Fuel	210.9	1,306.9	915.4	721.3	661.9	548.3	633.1	581.2	424.7	401.8
Other[a]	11.2	100.5	100.5	69.3	77.6	65.4	72.8	83.0	76.1	87.0
Nuclear Fuel	2.7	14.3	39.8	23.1	11.3	11.5	22.7	33.6	29.0	25.5
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors[b]	1,785.8	7,005.4	7,341.1	5,976.9	6,154.4	6,157.1	R6,928.8	R7,292.8	R7,013.7	7,128.9
Electric Utility Fuel[c]	-112.4	-1,191.4	-1,011.3	-698.3	-782.8	-704.3	-862.8	-801.1	-661.1	-628.3
Electricity Purchased by End Users	612.9	2,398.4	3,166.2	3,101.9	3,392.0	3,489.0	3,801.0	4,021.1	4,271.0	4,347.0
Total Energy	2,286.3	8,212.4	9,496.0	8,380.5	8,763.6	8,941.8	R9,867.0	10,512.8	R10,623.6	10,847.6

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Massachusetts 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.24**	**8.65**	**11.05**	**9.81**	**9.82**	**9.85**	**10.65**	**11.97**	**12.46**	**11.71**
Primary Energy	1.61	6.36	7.93	6.75	6.37	6.35	7.10	7.99	7.95	7.42
Coal	1.05	4.47	4.39	4.19	3.85	3.99	3.96	4.21	4.07	3.94
Natural Gas	1.90	5.33	7.65	7.23	6.45	6.28	6.91	7.56	7.81	7.63
Petroleum	1.52	7.10	8.24	6.33	6.32	6.43	7.29	8.45	8.11	7.21
Distillate Fuel	1.49	7.05	8.10	6.22	6.10	6.22	7.01	8.21	7.80	7.00
Kerosene	1.62	8.15	8.94	6.86	6.73	6.86	7.74	9.06	8.61	7.72
LPG	3.04	8.99	11.43	9.01	10.88	10.95	12.96	13.36	14.73	12.29
Electricity	8.59	22.18	26.16	24.38	25.52	24.88	26.70	28.31	30.47	31.12
Commercial Sector	**1.64**	**9.35**	**12.93**	**11.33**	**11.79**	**11.33**	**11.59**	**12.63**	**R12.62**	**12.59**
Primary Energy	.83	5.04	6.36	5.09	5.00	4.83	5.06	5.50	5.17	4.99
Coal	.89	1.67	2.38	2.11	2.35	2.51	2.57	2.62	2.65	2.67
Natural Gas	1.40	4.65	6.88	6.49	5.75	5.93	5.67	6.14	5.94	5.65
Petroleum	.72	5.37	6.08	4.16	4.38	3.94	4.63	5.04	4.62	4.35
Distillate Fuel	1.10	6.36	6.89	4.85	4.84	4.58	5.45	6.37	5.85	5.34
Kerosene	.81	6.12	7.61	5.20	5.81	5.45	5.68	7.68	6.18	5.93
LPG	1.54	5.52	12.27	11.25	11.25	11.10	10.43	10.80	11.94	9.96
Motor Gasoline	2.86	9.69	9.18	7.25	7.56	7.90	8.50	9.53	10.01	9.83
Residual Fuel	.37	3.81	4.31	2.46	2.93	2.36	2.69	3.05	2.28	2.27
Electricity	8.05	22.08	25.20	23.40	23.49	22.72	24.05	25.44	27.38	27.58
Industrial Sector	**1.05**	**8.40**	**8.68**	**6.66**	**7.64**	**8.29**	**8.83**	**9.52**	**9.45**	**8.68**
Primary Energy	.64	5.20	5.54	3.85	4.43	4.32	4.51	R5.02	4.47	4.47
Coal	.89	1.67	2.38	2.11	2.35	2.51	2.57	2.62	2.65	2.67
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.89	1.67	2.38	2.11	2.35	2.51	2.57	2.62	2.65	2.67
Natural Gas	1.03	4.09	5.24	4.88	4.13	3.91	3.93	4.00	3.84	3.99
Petroleum	.60	5.92	5.83	3.67	4.63	4.62	4.93	5.92	5.34	5.28
Asphalt and Road Oil	.63	3.73	5.21	4.87	3.57	3.38	3.20	3.36	3.05	2.79
Distillate Fuel	.74	5.59	6.64	4.54	5.07	4.75	4.96	6.71	5.40	5.18
Kerosene	.81	6.12	7.61	5.20	5.81	5.45	5.68	7.68	6.18	5.93
LPG	1.54	5.52	12.27	11.25	11.25	11.10	10.43	10.80	11.94	9.96
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.86	9.69	9.18	7.25	7.56	7.90	8.50	9.53	10.01	9.83
Residual Fuel	.42	4.14	4.31	2.46	2.93	2.36	2.69	3.05	2.28	2.27
Other	1.86	8.66	9.25	6.58	7.32	6.31	7.21	7.50	6.95	7.60
Electricity	4.88	18.21	20.47	19.18	20.32	19.94	21.40	23.14	24.99	25.20
Transportation Sector	**2.38**	**9.02**	**8.86**	**6.95**	**7.12**	**7.32**	**7.81**	**8.91**	**R9.25**	**9.14**
Primary Energy	2.37	9.01	8.84	6.93	7.09	7.28	7.77	8.88	R9.21	9.11
Coal	.89	–	–	–	–	–	–	–	–	–
Petroleum	2.37	9.01	8.84	6.93	7.09	7.28	7.77	8.88	R9.21	9.11
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.35	7.40	9.24	7.07	6.82	6.90	7.43	9.37	9.22	8.78
Jet Fuel	.75	6.51	6.04	4.18	4.12	4.02	4.61	5.83	5.00	4.63
LPG	1.54	5.52	12.27	11.25	11.25	11.10	10.43	10.80	11.94	9.96
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.86	9.69	9.18	7.25	7.56	7.90	8.50	9.53	10.01	9.83
Residual Fuel	.34	3.22	3.77	2.09	2.55	2.00	2.33	2.44	1.94	2.12
Electricity	5.66	21.74	23.83	22.13	30.14	28.58	30.55	31.94	34.15	32.99
Total Energy	**1.90**	**8.90**	**10.09**	**8.39**	**8.71**	**8.85**	**9.45**	**10.52**	**R10.81**	**10.46**
Primary Energy — Four Sectors	1.49	7.18	7.80	6.12	6.23	6.36	6.83	7.69	R7.66	7.35
Electricity	7.29	21.13	24.34	22.70	23.46	22.86	24.39	25.93	27.94	28.31
Electric Utility Sector [a]	**.37**	**3.41**	**2.74**	**2.03**	**2.26**	**2.04**	**2.18**	**2.15**	**1.85**	**1.90**
Coal	.31	1.95	1.97	1.78	1.61	1.61	1.60	1.73	1.73	1.69
Natural Gas	.33	3.40	3.41	2.27	2.40	2.22	2.37	2.40	2.18	2.59
Petroleum	.38	3.86	3.97	2.27	2.73	2.32	2.72	2.91	2.24	2.39
Heavy Oil [b]	.38	3.84	3.91	2.23	2.71	2.26	2.64	2.86	2.20	2.36
Light Oil [b]	.43	6.00	5.80	3.54	3.22	3.63	4.22	5.41	4.58	4.28
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	.20	.41	.60	.88	.92	.96	.70	.62	.61	.50
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.25**	**6.04**	**6.22**	**4.96**	**5.10**	**5.12**	**5.40**	**5.99**	**R5.91**	**5.87**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Massachusetts 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**793.8**	**2,362.9**	**2,844.0**	**2,620.5**	**2,694.3**	**2,759.2**	**3,165.3**	**3,243.9**	**3,264.1**	**3,434.4**
Primary Energy	520.1	1,487.2	1,692.1	1,488.8	1,433.9	1,442.2	1,728.2	1,738.9	1,665.1	1,782.4
Coal	2.6	5.2	7.2	4.1	3.1	3.2	2.7	3.1	1.5	2.4
Natural Gas	158.6	511.9	765.7	758.4	696.2	702.8	799.5	835.2	835.0	947.8
Petroleum	358.9	970.1	919.2	726.3	734.6	736.2	926.0	900.6	828.6	832.2
Distillate Fuel	334.9	932.9	847.8	669.5	660.3	671.1	838.4	826.4	755.8	766.6
Kerosene	13.2	14.9	29.3	19.5	20.2	11.7	11.9	8.4	7.4	11.4
LPG	10.7	22.3	42.1	37.3	54.1	53.4	75.7	65.8	65.4	54.3
Electricity	273.7	875.7	1,151.9	1,131.8	1,260.4	1,317.0	1,437.0	1,505.0	1,599.0	1,652.0
Commercial Sector	**390.4**	**1,645.4**	**1,971.0**	**1,881.7**	**1,938.2**	**1,995.7**	**2,225.4**	**2,357.0**	**R2,496.4**	**2,503.7**
Primary Energy	176.2	662.0	631.5	557.8	519.6	540.8	636.9	660.3	679.7	659.0
Coal	1.7	2.0	3.9	1.9	1.5	2.1	1.9	2.2	.8	2.2
Natural Gas	50.1	252.5	291.5	290.4	275.4	298.9	302.4	321.4	328.2	377.1
Petroleum	124.4	407.5	336.2	265.4	242.7	239.9	332.6	336.6	350.8	279.7
Distillate Fuel	86.4	278.0	228.9	188.4	171.1	169.8	246.1	231.3	259.4	208.1
Kerosene	.5	1.0	4.6	8.6	1.6	2.2	2.1	5.5	7.0	2.4
LPG	1.0	2.4	8.0	8.2	9.9	9.6	10.8	9.4	9.4	7.8
Motor Gasoline	1.5	9.7	9.1	7.2	7.7	7.6	8.4	3.4	9.6	8.5
Residual Fuel	35.0	116.3	85.6	53.0	52.4	50.8	65.4	87.0	65.4	52.9
Electricity	214.2	983.4	1,339.5	1,323.9	1,418.6	1,454.9	1,588.6	1,696.7	R1,816.7	1,844.8
Industrial Sector	**277.7**	**989.3**	**1,330.1**	**1,199.0**	**1,295.8**	**1,141.4**	**R1,222.4**	**1,329.7**	**1,300.7**	**1,409.7**
Primary Energy	154.3	461.9	669.7	565.5	599.7	444.4	R464.4	527.7	465.7	578.7
Coal	3.2	4.0	10.4	5.9	9.8	8.9	7.3	4.8	5.6	10.3
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	3.2	4.0	10.4	5.9	9.8	8.9	7.3	4.8	5.6	10.3
Natural Gas	23.5	120.2	177.8	119.7	145.1	127.3	144.8	183.5	218.5	293.4
Petroleum	127.6	337.7	481.4	439.9	444.8	308.3	R312.2	339.4	241.7	275.0
Asphalt and Road Oil	12.0	30.5	36.4	36.0	35.0	39.6	30.3	29.9	40.0	29.0
Distillate Fuel	12.5	61.5	40.4	41.4	114.2	67.9	73.3	85.0	37.6	55.9
Kerosene	2.5	12.0	2.3	1.1	1.4	1.5	1.8	.8	.6	3.1
LPG	4.0	26.5	19.8	36.0	40.5	30.0	R24.6	38.1	17.4	13.4
Lubricants	15.6	32.9	36.7	31.8	29.3	32.4	30.3	31.4	32.3	38.2
Motor Gasoline	1.7	4.6	17.7	14.4	15.5	17.3	21.2	20.6	17.4	17.3
Residual Fuel	68.1	69.3	227.8	210.0	131.4	54.2	57.9	50.6	20.2	31.0
Other	11.2	100.5	100.5	69.3	77.6	65.4	72.8	83.0	76.1	87.0
Electricity	123.4	527.3	660.4	633.5	696.2	697.0	758.0	802.0	835.0	831.0
Transportation Sector	**824.4**	**3,214.8**	**3,350.9**	**2,679.3**	**2,835.3**	**3,045.5**	**3,253.9**	**3,582.2**	**R3,562.4**	**3,499.8**
Primary Energy	822.8	3,202.9	3,336.5	2,666.6	2,818.4	3,025.4	3,236.5	3,564.9	R3,542.1	3,480.5
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	822.8	3,202.9	3,336.5	2,666.6	2,818.4	3,025.4	3,236.5	3,564.9	R3,542.1	3,480.5
Aviation Gasoline	3.0	12.5	6.8	6.2	4.7	4.8	4.9	4.5	2.0	1.9
Distillate Fuel	25.2	211.1	405.4	321.4	324.0	316.8	342.3	409.8	390.5	378.7
Jet Fuel	33.3	315.5	238.4	163.4	182.9	212.1	260.8	323.3	R264.2	206.1
LPG	.2	.5	3.1	2.5	2.1	2.5	2.4	2.3	3.0	2.3
Lubricants	13.6	40.4	45.0	39.0	35.9	39.8	37.2	38.6	39.7	46.9
Motor Gasoline	740.6	2,604.7	2,617.1	2,126.1	2,261.4	2,440.9	2,571.6	2,765.1	R2,837.3	2,838.7
Residual Fuel	7.0	18.2	20.7	8.0	7.4	8.5	17.4	21.2	5.4	5.8
Electricity	1.6	11.9	14.4	12.7	16.8	20.1	17.4	17.4	R20.3	19.3
Total Energy	**2,286.3**	**8,212.4**	**9,496.0**	**8,380.5**	**8,763.6**	**8,941.8**	**R9,867.0**	**10,512.8**	**R10,623.6**	**10,847.6**
Primary Energy — Four Sectors	1,673.3	5,814.0	6,329.8	5,278.6	5,371.6	5,452.8	R6,066.0	R6,491.7	R6,352.7	6,500.6
Electricity	612.9	2,398.4	3,166.2	3,101.9	3,392.0	3,489.0	3,801.0	4,021.1	4,271.0	4,347.0
Electric Utility Sector [a]	**112.4**	**1,191.4**	**1,011.3**	**698.3**	**782.8**	**704.3**	**862.8**	**801.1**	**661.1**	**628.3**
Coal	4.2	35.2	202.4	169.0	180.8	180.0	186.5	190.3	196.7	178.3
Natural Gas	1.9	17.3	160.1	34.7	98.9	45.4	120.5	139.5	89.0	102.6
Petroleum	103.7	1,124.6	609.0	471.5	491.8	467.3	533.1	437.7	346.4	321.9
Heavy Oil [b]	100.8	1,103.1	581.3	450.3	470.7	434.9	492.5	422.3	333.8	312.1
Light Oil [b]	2.9	21.5	27.8	21.1	21.1	32.4	40.6	15.4	12.6	9.8
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	2.7	14.3	39.8	23.1	11.3	11.5	22.7	33.6	29.0	25.5
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1,785.8**	**7,005.4**	**7,341.1**	**5,976.9**	**6,154.4**	**6,157.1**	**R6,928.8**	**R7,292.8**	**R7,013.7**	**7,128.9**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Michigan 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.44	1.71	1.92	1.84	1.76	1.76	1.72	1.63	1.62	1.58
Coking Coal	.55	2.27	2.08	1.95	1.85	1.73	1.75	1.80	1.72	–
Steam Coal	.42	1.62	1.90	1.83	1.75	1.76	1.72	1.63	1.62	1.58
Natural Gas	.77	3.05	5.70	5.12	4.96	4.80	4.61	4.33	4.43	4.38
Petroleum	2.00	8.48	8.67	6.54	6.77	6.65	7.28	8.21	R7.87	7.68
Asphalt and Road Oil	.84	4.04	5.00	3.59	3.40	3.21	2.84	3.06	2.87	2.25
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.09	6.76	7.71	5.73	6.09	5.74	6.37	7.53	6.98	6.84
Jet Fuel	.74	6.38	6.09	4.20	4.09	3.85	4.39	5.65	4.94	4.57
Kerosene	.89	6.29	8.52	6.56	6.37	6.41	7.06	8.28	7.60	7.20
LPG	1.89	6.62	8.74	8.22	7.88	7.73	R9.77	10.26	10.13	9.50
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.71	10.09	9.10	6.79	7.13	7.15	7.77	8.78	8.37	8.16
Residual Fuel	.59	3.90	4.45	2.84	3.00	2.86	3.01	3.00	2.54	2.50
Other [a]	1.25	7.80	8.21	5.71	6.46	5.50	6.00	6.69	5.95	5.90
Nuclear Fuel	.36	.49	.80	.77	.77	.88	.78	.79	.65	.67
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.12	4.39	5.18	4.30	4.26	4.21	4.33	4.49	R4.36	4.47
Electric Utility Fuel [c]	.38	1.58	1.72	1.66	1.60	1.60	1.52	1.41	1.32	1.36
Electricity Purchased by End Users	5.55	15.40	19.88	20.35	19.26	19.39	19.91	20.85	21.18	21.24
Total Energy	1.70	6.61	8.48	7.50	7.60	7.44	7.72	8.07	R8.13	7.96
	Expenditures in Millions of Dollars									
Coal	363.6	1,299.2	1,499.0	1,496.4	1,475.4	1,458.6	1,375.0	1,283.4	1,231.9	1,108.6
Coking Coal	73.4	250.1	149.7	140.3	53.0	38.0	44.2	51.3	26.3	–
Steam Coal	290.3	1,049.1	1,349.3	1,356.1	1,422.4	1,420.6	1,330.8	1,232.1	1,205.6	1,108.6
Natural Gas	620.2	2,596.2	3,954.1	3,376.6	3,189.8	3,507.2	3,517.4	3,433.8	3,538.2	3,783.5
Petroleum	1,925.7	8,007.8	7,044.2	5,582.6	5,948.9	6,087.6	R6,602.8	R7,153.6	R6,964.1	6,849.4
Asphalt and Road Oil	21.5	94.0	92.2	80.6	79.0	61.2	72.8	80.1	66.0	53.0
Aviation Gasoline	7.9	22.2	10.1	10.6	9.2	9.0	11.2	10.1	9.0	7.8
Distillate Fuel	240.6	1,087.9	1,140.8	883.6	897.7	923.9	922.8	1,022.2	1,015.5	1,007.9
Jet Fuel	30.4	236.9	223.6	167.7	191.9	185.4	227.7	319.7	R283.9	260.5
Kerosene	15.7	44.0	24.5	15.6	15.2	17.2	20.7	12.7	15.5	10.2
LPG	43.9	163.6	440.4	462.2	501.6	482.0	R665.5	R542.2	R578.5	567.8
Lubricants	97.3	285.1	318.2	275.4	253.7	281.5	262.7	272.5	280.5	331.5
Motor Gasoline	1,378.2	5,144.7	4,465.3	3,423.8	3,706.1	3,848.7	4,127.1	4,581.8	R4,456.5	4,343.7
Residual Fuel	33.7	315.1	56.0	50.6	51.2	74.0	75.1	44.2	23.2	22.2
Other [a]	56.4	614.4	273.2	212.6	243.2	204.7	217.2	268.1	235.5	244.7
Nuclear Fuel	1.5	85.1	117.0	102.1	119.2	169.0	178.2	181.4	189.1	135.5
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	2,911.0	11,988.3	12,614.4	10,557.8	10,733.3	11,222.5	R11,673.4	R12,052.2	R11,923.3	11,877.0
Electric Utility Fuel [c]	-223.6	-1,246.3	-1,312.2	-1,294.4	-1,413.6	-1,448.5	-1,403.8	-1,280.4	-1,281.2	-1,142.1
Electricity Purchased by End Users	1,041.7	3,647.5	4,993.3	5,231.3	5,127.9	5,397.5	5,572.4	5,796.9	6,041.6	6,008.9
Total Energy	3,729.2	14,389.5	16,295.4	14,494.6	14,447.6	15,171.4	R15,841.9	R16,568.6	R16,683.7	16,743.8

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Michigan 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1.74**	**5.56**	**8.82**	**8.39**	**8.33**	**8.11**	**8.21**	**8.53**	**8.71**	**8.40**
Primary Energy	1.10	3.72	6.41	5.69	5.51	5.34	5.46	5.37	5.36	5.24
Coal	1.43	3.70	3.86	3.45	3.48	3.45	3.46	3.39	3.15	3.18
Natural Gas	1.00	3.13	6.14	5.53	5.29	5.14	4.93	4.80	4.88	4.88
Petroleum	1.35	7.25	8.30	6.81	6.79	6.61	9.10	9.43	8.56	7.89
Distillate Fuel	1.23	7.05	7.66	6.07	5.81	5.81	6.40	7.57	7.06	6.53
Kerosene	1.56	8.43	8.77	6.96	6.65	6.65	7.32	8.66	8.09	7.48
LPG	2.07	8.07	9.63	8.16	8.10	7.74	12.10	11.37	10.11	9.17
Electricity	6.99	16.76	21.62	22.13	21.45	21.68	22.17	22.94	23.64	23.77
Commercial Sector	**2.11**	**6.38**	**10.12**	**10.26**	**9.12**	**9.43**	**9.49**	**10.17**	**R10.21**	**10.09**
Primary Energy	.88	3.53	5.68	4.90	4.91	4.81	4.69	4.62	4.67	4.62
Coal	.53	1.82	1.99	1.93	1.73	1.73	1.68	1.77	1.80	1.73
Natural Gas	.83	3.13	5.61	5.03	4.88	4.81	4.61	4.43	4.53	4.48
Petroleum	1.23	6.86	6.84	4.66	5.58	5.17	5.77	6.93	6.63	6.48
Distillate Fuel	1.05	6.53	6.24	3.67	4.36	4.03	4.32	5.35	4.74	4.54
Kerosene	.74	6.14	7.21	4.70	5.39	5.11	6.24	6.66	5.90	5.93
LPG	1.39	5.16	8.32	8.25	7.76	7.73	8.30	9.36	10.15	9.77
Motor Gasoline	2.71	10.09	9.10	6.79	7.13	7.15	7.77	8.78	8.37	8.16
Residual Fuel	.64	3.97	4.39	3.02	2.90	3.20	3.13	3.15	2.79	2.66
Electricity	7.12	17.60	23.36	24.24	22.31	22.48	23.20	24.21	24.16	24.44
Industrial Sector	**1.01**	**5.00**	**7.02**	**6.49**	**6.92**	**6.53**	**R6.69**	**R6.42**	**R6.75**	**6.72**
Primary Energy	.71	3.68	4.75	4.08	4.25	4.10	R4.17	4.07	R4.27	4.29
Coal	.54	2.04	2.03	1.94	1.76	1.73	1.69	1.78	1.78	1.73
Coking Coal	.55	2.27	2.08	1.95	1.85	1.73	1.75	1.80	1.72	–
Steam Coal	.53	1.82	1.99	1.93	1.73	1.73	1.68	1.77	1.80	1.73
Natural Gas	.53	2.87	4.95	4.40	4.29	4.19	4.01	3.72	3.85	3.78
Petroleum	1.27	6.78	8.01	6.24	6.30	6.11	R6.42	R6.82	R6.84	6.84
Asphalt and Road Oil	.84	4.04	5.00	3.59	3.40	3.21	2.84	3.06	2.87	2.25
Distillate Fuel	.68	5.56	6.51	4.24	4.87	4.61	5.63	6.01	5.32	5.35
Kerosene	.74	6.14	7.21	4.70	5.39	5.11	6.24	6.66	5.90	5.93
LPG	1.39	5.16	8.32	8.25	7.76	7.73	8.30	9.36	10.15	9.77
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.71	10.09	9.10	6.79	7.13	7.15	7.77	8.78	8.37	8.16
Residual Fuel	.54	3.23	4.39	3.02	2.90	3.20	3.13	3.15	2.79	2.66
Other	1.25	7.80	8.21	5.71	6.46	5.50	6.00	6.69	5.95	5.90
Electricity	3.74	13.18	16.75	16.88	15.95	15.94	16.28	17.14	17.25	17.29
Transportation Sector	**2.50**	**9.63**	**8.96**	**6.73**	**6.96**	**6.93**	**7.48**	**8.51**	**R8.11**	**7.92**
Primary Energy	2.50	9.63	8.96	6.73	6.96	6.93	7.48	8.51	R8.11	7.92
Coal	.53	–	–	–	–	–	–	–	–	–
Petroleum	2.50	9.63	8.96	6.73	6.96	6.93	7.48	8.51	R8.11	7.92
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.27	7.19	8.55	6.69	6.86	6.50	6.94	8.24	7.88	7.74
Jet Fuel	.74	6.38	6.09	4.20	4.09	3.85	4.39	5.65	4.94	4.57
LPG	1.39	5.16	8.32	8.25	7.76	7.73	8.30	9.36	10.15	9.77
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.71	10.09	9.10	6.79	7.13	7.15	7.77	8.78	8.37	8.16
Residual Fuel	.57	3.49	4.38	2.45	2.90	2.26	2.49	2.42	2.09	2.15
Electricity	–	–	–	–	–	–	–	–	R26.87	27.20
Total Energy	**1.70**	**6.61**	**8.48**	**7.50**	**7.60**	**7.44**	**7.72**	**8.07**	**R8.13**	**7.96**
Primary Energy — Four Sectors	1.34	5.54	6.77	5.52	5.70	5.55	R5.80	6.07	R6.02	5.90
Electricity	5.55	15.40	19.88	20.35	19.26	19.39	19.91	20.85	21.18	21.24
Electric Utility Sector [a]	**.38**	**1.58**	**1.72**	**1.66**	**1.60**	**1.60**	**1.52**	**1.41**	**1.32**	**1.36**
Coal	.36	1.56	1.88	1.81	1.75	1.76	1.72	1.60	1.59	1.56
Natural Gas	.42	2.74	4.43	3.64	2.76	2.56	1.75	2.11	1.96	1.95
Petroleum	.63	4.24	5.15	2.83	3.35	2.79	3.15	3.26	2.89	2.92
Heavy Oil [b]	.63	4.10	4.64	2.58	3.14	2.64	2.97	2.89	2.44	2.44
Light Oil [b]	.65	6.07	5.60	3.44	3.98	3.59	4.21	4.60	4.51	4.39
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	.36	.49	.80	.77	.77	.88	.78	.79	.65	.67
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.12**	**4.39**	**5.18**	**4.30**	**4.26**	**4.21**	**4.33**	**4.49**	**R4.36**	**4.47**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Michigan 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**939.0**	**3,000.8**	**4,237.7**	**4,012.5**	**3,851.1**	**4,135.0**	**4,310.1**	**4,097.2**	**4,339.9**	**4,312.5**
Primary Energy	530.9	1,727.5	2,592.6	2,273.7	2,092.4	2,262.0	2,395.1	2,115.2	2,181.9	2,230.5
Coal	10.3	9.8	8.4	7.7	3.6	5.3	5.3	7.9	7.3	5.3
Natural Gas	345.1	1,236.0	2,143.5	1,894.5	1,716.0	1,861.1	1,877.1	1,643.5	1,709.6	1,811.9
Petroleum	175.5	481.8	440.7	371.4	372.8	395.6	512.8	463.8	465.0	413.3
Distillate Fuel	135.5	377.7	266.0	208.2	176.5	197.0	177.8	183.7	187.5	161.0
Kerosene	4.8	4.0	21.1	13.6	12.3	15.1	16.3	10.7	12.8	8.7
LPG	35.2	100.1	153.6	149.6	184.0	183.5	318.7	269.5	264.7	243.6
Electricity	408.1	1,273.3	1,645.1	1,738.9	1,758.7	1,873.0	1,915.0	1,982.0	2,158.0	2,082.0
Commercial Sector	**475.7**	**1,802.2**	**2,531.9**	**2,419.4**	**2,555.5**	**2,567.7**	**2,681.3**	**2,692.3**	**R2,788.2**	**2,806.7**
Primary Energy	159.3	795.3	1,063.7	836.5	1,044.3	966.6	981.2	876.3	912.6	930.0
Coal	7.0	8.8	8.0	8.0	3.3	4.9	4.8	7.7	7.7	5.3
Natural Gas	111.4	606.7	905.1	708.7	935.4	839.5	854.5	738.2	778.1	808.2
Petroleum	40.9	179.8	150.6	119.7	105.6	122.2	122.0	130.5	126.8	116.6
Distillate Fuel	21.4	118.8	85.7	63.1	44.4	57.1	52.3	53.9	53.5	46.7
Kerosene	1.7	.5	.5	.4	.4	.5	2.0	.7	.6	.2
LPG	4.2	11.3	23.4	26.7	31.1	32.4	38.6	39.2	46.9	45.8
Motor Gasoline	11.4	43.6	33.4	25.2	27.2	28.3	27.4	35.3	25.8	23.7
Residual Fuel	2.2	5.6	7.6	4.4	2.4	3.9	1.8	1.4	.1	.2
Electricity	316.4	1,006.9	1,468.2	1,582.9	1,511.3	1,601.0	1,700.0	1,816.0	R1,875.6	1,876.7
Industrial Sector	**858.9**	**3,733.4**	**4,154.6**	**3,904.8**	**3,531.9**	**3,831.1**	**R3,868.7**	**R4,157.1**	**R4,118.4**	**4,268.2**
Primary Energy	541.7	2,366.0	2,274.7	1,995.3	1,673.9	1,907.7	R1,911.4	R2,158.3	R2,110.7	2,218.3
Coal	172.7	448.3	344.4	331.2	217.5	225.5	201.4	209.7	164.9	131.8
Coking Coal	73.4	250.1	149.7	140.3	53.0	38.0	44.2	51.3	26.3	–
Steam Coal	99.3	198.2	194.6	190.9	164.6	187.6	157.2	158.4	138.7	131.8
Natural Gas	136.5	700.3	884.9	759.6	526.4	800.5	782.3	1,041.2	R1,032.4	1,143.2
Petroleum	232.5	1,217.4	1,045.4	904.5	929.9	881.6	R927.7	R907.3	R913.4	943.3
Asphalt and Road Oil	21.5	94.0	92.2	80.6	79.0	61.2	72.8	80.1	66.0	53.0
Distillate Fuel	33.3	155.7	160.5	113.2	120.6	133.6	123.6	119.2	141.8	144.2
Kerosene	9.2	39.5	2.9	1.6	2.5	1.6	2.4	1.3	2.1	1.4
LPG	4.3	49.7	254.6	277.3	276.8	256.3	R299.5	R223.8	R257.3	269.5
Lubricants	56.5	156.4	174.6	151.1	139.2	154.5	144.1	149.5	153.9	181.9
Motor Gasoline	39.2	51.3	56.9	41.1	42.8	40.0	43.8	44.8	48.8	40.7
Residual Fuel	12.0	56.3	30.5	26.9	25.8	29.6	24.2	20.4	7.9	7.9
Other	56.4	614.4	273.2	212.6	243.2	204.7	217.2	268.1	235.5	244.7
Electricity	317.2	1,367.4	1,880.0	1,909.5	1,858.0	1,923.4	1,957.3	1,998.9	2,007.6	2,049.9
Transportation Sector	**1,455.6**	**5,853.1**	**5,371.2**	**4,158.0**	**4,509.1**	**4,637.7**	**4,981.8**	**5,622.0**	**R5,437.2**	**5,356.4**
Primary Energy	1,455.6	5,853.1	5,371.2	4,158.0	4,509.1	4,637.7	4,981.8	5,622.0	R5,436.8	5,356.0
Coal	.3	–	–	–	–	–	–	–	–	–
Petroleum	1,455.3	5,853.1	5,371.2	4,158.0	4,509.1	4,637.7	4,981.8	5,622.0	R5,436.8	5,356.0
Aviation Gasoline	7.9	22.2	10.1	10.6	9.2	9.0	11.2	10.1	9.0	7.8
Distillate Fuel	46.9	408.1	607.5	488.8	546.8	525.7	558.0	656.3	625.2	648.5
Jet Fuel	30.4	236.9	223.6	167.7	191.9	185.4	227.7	319.7	R283.9	260.5
LPG	.3	2.4	8.7	8.5	9.6	9.7	8.7	9.7	9.6	8.9
Lubricants	40.8	128.6	143.6	124.3	114.5	127.0	118.5	123.0	126.6	149.6
Motor Gasoline	1,327.5	5,049.8	4,375.0	3,357.5	3,636.2	3,780.3	4,055.9	4,501.7	R4,381.9	4,279.3
Residual Fuel	1.5	5.1	2.7	.5	.9	.4	1.8	1.4	.7	1.3
Electricity	–	–	–	–	–	–	–	–	R.4	.4
Total Energy	**3,729.2**	**14,389.5**	**16,295.4**	**14,494.6**	**14,447.6**	**15,171.4**	**R15,841.9**	**R16,568.6**	**R16,683.7**	**16,743.8**
Primary Energy — Four Sectors	2,687.5	10,742.0	11,302.2	9,263.3	9,319.7	9,774.0	R10,269.5	R10,771.8	R10,642.1	10,734.9
Electricity	1,041.7	3,647.5	4,993.3	5,231.3	5,127.9	5,397.5	5,572.4	5,796.9	6,041.6	6,008.9
Electric Utility Sector [a]	**223.6**	**1,246.3**	**1,312.2**	**1,294.4**	**1,413.6**	**1,448.5**	**1,403.8**	**1,280.4**	**1,281.2**	**1,142.1**
Coal	173.4	832.3	1,138.3	1,149.5	1,250.9	1,222.8	1,163.5	1,058.2	1,052.0	966.2
Natural Gas	27.2	53.2	20.6	13.8	12.0	6.2	3.5	10.8	18.1	20.1
Petroleum	21.5	275.7	36.3	29.0	31.5	50.5	58.6	30.0	22.0	20.2
Heavy Oil [b]	17.9	248.2	15.2	18.8	22.1	40.1	47.4	20.9	14.5	12.8
Light Oil [b]	3.6	27.5	21.1	10.3	9.4	10.4	11.2	9.1	7.5	7.5
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	1.5	85.1	117.0	102.1	119.2	169.0	178.2	181.4	189.1	135.5
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**2,911.0**	**11,988.3**	**12,614.4**	**10,557.8**	**10,733.3**	**11,222.5**	**R11,673.4**	**R12,052.2**	**R11,923.3**	**11,877.0**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Minnesota 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.41	1.12	1.51	1.44	1.26	1.25	1.26	1.32	1.30	1.24
Coking Coal	.53	–	–	–	–	–	–	–	–	–
Steam Coal	.40	1.12	1.51	1.44	1.26	1.25	1.26	1.32	1.30	1.24
Natural Gas	.66	2.85	5.13	4.61	3.72	3.87	3.87	3.87	3.70	3.99
Petroleum	2.01	7.88	8.45	6.46	6.66	6.75	7.45	8.23	7.86	7.55
Asphalt and Road Oil	.68	3.31	4.99	3.86	3.53	3.60	3.01	3.31	3.19	2.71
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.08	6.72	7.55	5.62	5.98	5.81	6.54	7.89	7.06	6.84
Jet Fuel	.75	6.47	5.93	4.04	4.15	3.94	4.47	5.68	4.87	4.64
Kerosene	1.34	7.05	8.30	6.12	6.19	5.87	6.81	8.12	7.34	6.72
LPG	1.80	5.82	8.08	7.92	6.78	7.37	R8.65	8.85	7.89	7.05
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.97	9.55	9.73	7.42	7.71	7.81	8.72	9.56	9.31	9.11
Residual Fuel	.59	3.52	4.05	2.88	2.43	2.36	2.38	2.50	2.11	1.80
Other [a]	.74	3.82	4.75	6.09	5.17	3.59	2.37	2.32	1.85	1.73
Nuclear Fuel	–	.44	.50	.50	.51	.49	.49	.48	.47	.44
Biomass Fuels at Utilities	.65	1.74	([d])	–	.95	.87	1.02	.91	.98	.87
Primary Energy — Five Sectors [b]	1.27	4.42	5.27	4.36	4.02	3.97	4.23	4.51	4.42	4.44
Electric Utility Fuel [c]	.34	.91	1.09	1.03	.99	.99	1.01	1.03	1.02	.97
Electricity Purchased by End Users	6.10	13.26	15.81	16.07	15.72	15.80	15.57	15.68	16.07	16.23
Total Energy	1.86	6.91	8.42	7.30	7.29	7.36	7.62	8.10	7.94	7.86
	Expenditures in Millions of Dollars									
Coal	74.1	270.7	341.4	290.7	323.6	378.2	405.5	429.1	390.2	371.0
Coking Coal	8.6	–	–	–	–	–	–	–	–	–
Steam Coal	65.5	270.7	341.4	290.7	323.6	378.2	405.5	429.1	390.2	371.0
Natural Gas	220.6	785.0	1,283.0	1,084.8	856.2	1,051.7	1,108.8	1,066.5	1,110.6	1,170.0
Petroleum	988.1	3,784.8	3,928.6	3,044.9	3,067.0	3,198.3	R3,500.7	R3,855.0	R3,833.4	3,861.8
Asphalt and Road Oil	20.0	78.4	165.1	140.3	137.2	117.1	98.5	132.5	106.6	95.9
Aviation Gasoline	3.0	8.8	7.8	9.6	6.8	6.2	6.6	10.0	8.3	5.8
Distillate Fuel	140.5	837.2	852.5	617.2	636.3	672.8	730.9	849.2	872.2	861.3
Jet Fuel	14.7	188.3	261.4	178.6	132.8	114.7	118.0	164.0	R137.3	173.8
Kerosene	12.8	8.5	8.6	4.3	3.2	5.1	12.5	1.9	2.3	2.0
LPG	60.1	163.0	154.0	179.0	133.0	149.8	R189.9	R187.7	R185.8	202.3
Lubricants	28.5	97.5	108.8	94.2	86.8	96.3	89.8	93.2	95.9	113.4
Motor Gasoline	688.9	2,319.4	2,335.5	1,784.2	1,899.3	2,005.6	2,224.8	2,385.6	R2,398.2	2,379.8
Residual Fuel	14.9	56.3	15.8	22.2	13.6	14.4	12.4	12.2	10.0	9.2
Other [a]	4.6	27.5	19.1	15.4	18.1	16.2	17.3	18.5	17.0	18.3
Nuclear Fuel	–	48.6	62.5	59.2	63.1	64.2	57.4	61.7	60.7	52.0
Biomass Fuels at Utilities	.1	*	([d])	–	.4	1.4	2.6	3.7	4.1	3.6
Primary Energy — Five Sectors [b]	1,282.9	4,889.2	5,615.6	4,479.6	4,310.4	4,693.7	R5,075.0	R5,416.2	R5,399.0	5,458.4
Electric Utility Fuel [c]	-65.3	-311.3	-355.5	-307.0	-362.5	-419.5	-433.2	-454.0	-439.2	-402.9
Electricity Purchased by End Users	427.5	1,481.2	2,062.8	2,097.2	2,211.9	2,433.7	2,409.9	2,491.2	2,638.6	2,592.8
Total Energy	1,645.1	6,059.1	7,322.9	6,269.7	6,159.8	6,708.0	R7,051.7	R7,453.4	R7,598.3	7,648.3

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Utilities used biomass fuels at no charge or received a fee for accepting them.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
*Value less than 0.05 million dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Minnesota 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.17**	**6.92**	**9.34**	**8.98**	**8.98**	**8.76**	**8.74**	**9.25**	**8.97**	**9.20**
Primary Energy	1.29	4.47	6.22	5.57	5.01	4.95	5.24	5.32	5.07	5.32
Coal	1.55	4.32	4.10	3.89	3.81	3.51	3.49	3.46	3.81	3.47
Natural Gas	1.09	3.24	5.78	5.28	4.58	4.61	4.54	4.61	4.47	4.81
Petroleum	1.54	7.25	7.81	6.51	6.22	6.03	7.43	7.97	7.12	7.12
Distillate Fuel	1.26	7.20	7.79	6.05	5.70	5.62	6.30	7.75	6.96	6.32
Kerosene	1.52	8.02	8.82	6.85	6.45	6.36	7.13	8.77	7.88	7.15
LPG	2.03	7.34	7.79	7.53	7.39	7.03	10.03	8.35	7.42	8.37
Electricity	7.30	16.06	19.01	19.41	19.38	19.82	19.71	19.94	20.28	20.55
Commercial Sector	**1.42**	**5.37**	**7.84**	**7.61**	**7.43**	**7.22**	**7.09**	**7.66**	**7.33**	**7.64**
Primary Energy	.76	3.47	5.39	4.61	3.98	4.03	4.04	4.57	3.93	4.13
Coal	.47	1.77	2.04	1.96	1.85	1.85	1.86	2.05	1.87	1.93
Natural Gas	.69	2.89	5.18	4.62	3.89	4.00	3.98	3.96	3.76	4.06
Petroleum	1.13	6.73	6.62	5.08	4.96	4.74	5.18	7.65	5.52	4.95
Distillate Fuel	1.05	6.60	6.34	4.21	4.37	3.97	4.72	5.75	4.88	4.72
Kerosene	.89	–	6.81	4.32	4.96	4.40	5.20	6.44	5.74	5.61
LPG	1.20	4.87	8.32	8.25	6.15	7.73	7.13	9.36	8.34	5.97
Motor Gasoline	2.97	9.55	9.73	7.42	7.71	7.81	8.72	9.56	9.31	9.11
Residual Fuel	.58	4.48	4.10	2.86	2.43	2.37	2.38	2.50	2.11	1.80
Electricity	7.72	12.95	17.53	17.81	17.19	17.52	17.61	17.69	18.01	18.16
Industrial Sector	**1.11**	**5.08**	**6.97**	**6.27**	**5.97**	**6.16**	**6.07**	**6.22**	**6.33**	**6.15**
Primary Energy	.78	3.60	5.00	4.05	3.55	3.62	R3.59	3.91	3.83	3.73
Coal	.49	1.77	2.04	1.96	1.85	1.85	1.86	2.05	1.87	1.93
Coking Coal	.53	–	–	–	–	–	–	–	–	–
Steam Coal	.47	1.77	2.04	1.96	1.85	1.85	1.86	2.05	1.87	1.93
Natural Gas	.42	2.51	4.04	3.42	2.55	2.79	2.84	2.96	2.75	3.02
Petroleum	1.16	5.08	6.44	4.85	4.60	4.65	4.70	5.28	5.20	4.71
Asphalt and Road Oil	.68	3.31	4.99	3.86	3.53	3.60	3.01	3.31	3.19	2.71
Distillate Fuel	.83	5.66	6.18	3.92	4.50	4.00	4.72	5.85	5.21	5.09
Kerosene	.89	5.92	6.81	4.32	4.96	4.40	5.20	6.44	5.74	5.61
LPG	1.20	4.87	8.32	8.25	6.15	7.73	7.13	9.36	8.34	5.97
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.97	9.55	9.73	7.42	7.71	7.81	8.72	9.56	9.31	9.11
Residual Fuel	.55	2.97	4.10	2.86	2.43	2.37	2.38	2.50	2.11	1.80
Other	.82	3.82	4.75	6.09	5.17	4.36	4.40	4.22	3.74	3.34
Electricity	4.17	11.22	12.65	12.76	12.50	12.32	12.02	12.14	12.48	12.69
Transportation Sector	**2.64**	**8.88**	**9.16**	**6.98**	**7.34**	**7.48**	**8.31**	**9.21**	**8.84**	**8.58**
Primary Energy	2.64	8.88	9.16	6.98	7.34	7.48	8.31	9.21	8.84	8.58
Coal	.47	–	–	–	–	–	–	–	–	–
Petroleum	2.64	8.88	9.16	6.98	7.34	7.48	8.31	9.21	8.84	8.58
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.24	7.16	8.68	6.78	7.15	7.21	7.83	9.19	8.28	8.12
Jet Fuel	.75	6.47	5.93	4.04	4.15	3.94	4.47	5.68	4.87	4.64
LPG	1.20	4.87	8.32	8.25	6.15	7.73	7.13	9.36	8.34	5.97
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.97	9.55	9.73	7.42	7.71	7.81	8.72	9.56	9.31	9.11
Residual Fuel	.57	3.81	3.91	3.65	2.25	1.83	1.84	–	1.98	1.33
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.86**	**6.91**	**8.42**	**7.30**	**7.29**	**7.36**	**7.62**	**8.10**	**7.94**	**7.86**
Primary Energy — Four Sectors	1.50	5.98	7.12	5.73	5.60	5.64	6.02	6.52	6.26	6.22
Electricity	6.10	13.26	15.81	16.07	15.72	15.80	15.57	15.68	16.07	16.23
Electric Utility Sector [a]	**.34**	**.91**	**1.09**	**1.03**	**.99**	**.99**	**1.01**	**1.03**	**1.02**	**.97**
Coal	.34	1.04	1.43	1.36	1.21	1.20	1.20	1.25	1.26	1.19
Natural Gas	.26	1.99	3.69	2.95	2.08	1.98	2.15	1.92	1.70	1.84
Petroleum	.73	4.86	5.96	3.91	4.46	2.07	1.16	1.25	1.09	.90
Heavy Oil [b]	.74	4.46	3.99	–	2.39	2.06	2.12	1.85	2.16	1.47
Light Oil [b]	.85	5.80	5.97	3.91	4.47	3.69	4.42	5.33	4.63	4.51
Petroleum Coke	.28	–	–	–	–	.82	.77	.76	.77	.70
Nuclear Fuel	–	.44	.50	.50	.51	.49	.49	.48	.47	.44
Biomass Fuels	.65	1.74	([d])	–	.95	.87	1.02	.91	.98	.87
Primary Energy — Five Sectors [c]	**1.27**	**4.42**	**5.27**	**4.36**	**4.02**	**3.97**	**4.23**	**4.51**	**4.42**	**4.44**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[d] Utilities used biomass fuels at no charge or received a fee for accepting them.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Minnesota 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**455.3**	**1,315.8**	**1,732.8**	**1,649.1**	**1,535.7**	**1,748.4**	**1,825.3**	**1,745.8**	**R1,868.2**	**1,829.0**
Primary Energy	230.2	672.0	872.5	771.0	621.0	734.4	831.4	734.8	R785.2	788.1
Coal	6.5	4.5	6.0	5.0	4.1	5.2	5.9	3.9	2.2	.5
Natural Gas	111.5	333.8	618.7	545.1	411.9	508.9	534.3	495.3	529.5	551.9
Petroleum	112.2	333.7	247.8	221.0	205.0	220.3	291.2	235.7	R253.4	235.6
Distillate Fuel	52.9	249.5	173.6	141.0	129.1	143.2	164.9	145.5	166.2	126.1
Kerosene	10.3	5.2	6.8	3.4	2.7	4.1	10.9	1.5	1.8	1.6
LPG	48.9	79.0	67.4	76.6	73.2	73.0	115.4	88.8	R85.4	107.9
Electricity	225.0	643.8	860.3	878.1	914.7	1,014.0	994.0	1,011.0	1,083.0	1,041.0
Commercial Sector	**163.0**	**522.6**	**990.3**	**871.4**	**779.5**	**895.6**	**910.3**	**978.4**	**R948.7**	**938.9**
Primary Energy	79.2	269.7	543.4	408.1	308.4	381.5	402.3	446.4	R385.7	380.9
Coal	3.7	3.4	5.6	4.7	3.7	5.1	5.9	4.3	2.0	.5
Natural Gas	53.2	183.6	400.2	343.8	256.4	322.4	340.7	310.5	327.2	337.8
Petroleum	22.3	82.7	137.6	59.6	48.2	54.1	55.7	131.7	R56.5	42.6
Distillate Fuel	10.7	55.5	101.1	26.4	25.7	25.5	28.4	31.5	25.9	20.9
Kerosene	1.3	–	.9	.1	.2	.1	.1	.2	.1	.2
LPG	5.1	9.3	12.7	14.8	10.7	14.2	14.5	17.6	17.0	13.6
Motor Gasoline	3.7	17.1	17.1	12.7	9.7	9.9	8.7	78.3	9.7	5.6
Residual Fuel	1.4	.9	5.8	5.5	2.0	4.4	4.0	4.1	3.9	2.2
Electricity	83.7	252.8	446.9	463.3	471.2	514.0	508.0	532.0	563.0	558.0
Industrial Sector	**323.8**	**1,356.2**	**1,611.5**	**1,460.3**	**1,458.2**	**1,550.4**	**R1,559.1**	**R1,726.6**	**R1,740.6**	**1,783.4**
Primary Energy	205.0	771.6	855.9	704.6	632.1	644.7	R651.1	R778.3	R747.9	789.6
Coal	20.8	31.9	43.3	39.6	31.3	28.0	35.5	48.8	28.5	37.8
Coking Coal	8.6	–	–	–	–	–	–	–	–	–
Steam Coal	12.2	31.9	43.3	39.6	31.3	28.0	35.5	48.8	28.5	37.8
Natural Gas	40.6	251.7	259.4	190.8	176.0	210.1	224.2	250.7	243.8	271.2
Petroleum	143.6	488.1	553.2	474.1	424.8	406.6	R391.5	R478.8	R475.7	480.6
Asphalt and Road Oil	20.0	78.4	165.1	140.3	137.2	117.1	98.5	132.5	106.6	95.9
Distillate Fuel	37.5	188.2	172.5	128.8	124.2	122.7	127.4	160.6	170.2	183.4
Kerosene	1.2	3.3	.9	.8	.3	.8	1.5	.3	.3	.3
LPG	5.6	73.5	70.2	83.8	47.5	60.6	R58.4	R79.5	R81.8	79.6
Lubricants	9.1	28.2	31.4	27.2	25.1	27.8	26.0	26.9	27.7	32.8
Motor Gasoline	56.3	67.1	87.8	62.0	60.9	52.3	57.4	55.8	70.5	67.8
Residual Fuel	9.4	22.0	6.2	15.8	11.5	9.9	8.2	8.0	6.0	6.9
Other	4.4	27.5	19.1	15.4	18.1	15.4	14.1	15.2	12.5	13.8
Electricity	118.8	584.6	755.7	755.8	826.1	905.7	907.9	948.3	992.6	993.8
Transportation Sector	**703.1**	**2,864.5**	**2,988.3**	**2,288.9**	**2,386.3**	**2,513.5**	**2,757.0**	**3,002.6**	**R3,040.9**	**3,097.0**
Primary Energy	703.1	2,864.5	2,988.3	2,288.9	2,386.3	2,513.5	2,757.0	3,002.6	R3,040.9	3,097.0
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	703.1	2,864.5	2,988.3	2,288.9	2,386.3	2,513.5	2,757.0	3,002.6	R3,040.9	3,097.0
Aviation Gasoline	3.0	8.8	7.8	9.6	6.8	6.2	6.6	10.0	8.3	5.8
Distillate Fuel	36.6	338.4	403.6	319.6	354.7	378.6	408.2	508.9	507.6	529.2
Jet Fuel	14.7	188.3	261.4	178.6	132.8	114.7	118.0	164.0	R137.3	173.8
LPG	.4	1.2	3.7	3.8	1.6	2.1	1.6	1.9	1.6	1.2
Lubricants	19.3	69.3	77.4	67.0	61.7	68.4	63.9	66.3	68.2	80.6
Motor Gasoline	628.9	2,235.3	2,230.6	1,709.5	1,828.6	1,943.4	2,158.7	2,251.5	2,318.0	2,306.4
Residual Fuel	.1	23.2	3.8	.8	.1	.1	*	–	*	*
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1,645.1**	**6,059.1**	**7,322.9**	**6,269.7**	**6,159.8**	**6,708.0**	**R7,051.7**	**R7,453.4**	**R7,598.3**	**7,648.3**
Primary Energy — Four Sectors	1,217.6	4,577.9	5,260.1	4,172.5	3,947.8	4,274.2	R4,641.8	R4,962.2	R4,959.7	5,055.5
Electricity	427.5	1,481.2	2,062.8	2,097.2	2,211.9	2,433.7	2,409.9	2,491.2	2,638.6	2,592.8
Electric Utility Sector [a]	**65.3**	**311.3**	**355.5**	**307.0**	**362.5**	**419.5**	**433.2**	**454.0**	**439.2**	**402.9**
Coal	43.1	230.9	286.5	241.4	284.5	339.9	358.3	372.2	357.4	332.1
Natural Gas	15.3	16.0	4.7	5.1	11.8	10.4	9.5	10.1	10.1	9.1
Petroleum	6.9	15.8	1.7	1.4	2.6	3.7	5.4	6.2	6.9	6.1
Heavy Oil [b]	3.9	10.1	*	–	*	.1	.1	*	*	*
Light Oil [b]	2.7	5.6	1.7	1.4	2.6	2.8	2.1	2.8	2.4	1.6
Petroleum Coke	.2	–	–	–	–	.8	3.2	3.3	4.4	4.5
Nuclear Fuel	–	48.6	62.5	59.2	63.1	64.2	57.4	61.7	60.7	52.0
Biomass Fuels	.1	*	([d])	–	.4	1.4	2.6	3.7	4.1	3.6
Primary Energy — Five Sectors [c]	**1,282.9**	**4,889.2**	**5,615.6**	**4,479.6**	**4,310.4**	**4,693.7**	**R5,075.0**	**R5,416.2**	**R5,399.0**	**5,458.4**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[d] Utilities used biomass fuels at no charge or received a fee for accepting them.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Mississippi 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.26	1.83	2.50	2.27	1.94	1.81	1.67	1.66	1.67	1.60
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.26	1.83	2.50	2.27	1.94	1.81	1.67	1.66	1.67	1.60
Natural Gas	.38	2.55	3.76	3.40	3.33	3.19	2.89	2.76	2.59	2.71
Petroleum	2.12	7.04	7.59	5.56	5.92	5.86	6.51	R7.22	R6.85	6.70
Asphalt and Road Oil	.66	3.56	4.81	4.90	3.27	3.03	2.86	2.93	3.29	2.04
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.32	6.89	6.68	5.00	5.44	5.29	5.74	6.75	6.41	6.66
Jet Fuel	.73	6.39	5.84	3.41	3.97	3.43	3.92	5.16	4.59	4.33
Kerosene	.83	6.99	8.35	5.49	5.52	4.45	4.44	5.54	5.35	7.70
LPG	1.83	6.31	7.40	8.07	8.46	8.78	R9.04	6.38	R7.21	5.99
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.84	10.53	8.75	6.54	6.97	7.27	8.07	9.21	8.92	8.62
Residual Fuel	.45	2.84	4.06	2.01	1.94	2.79	2.41	2.33	1.75	1.71
Other [a]	.50	3.39	4.93	3.74	4.33	3.71	4.36	5.19	4.33	4.03
Nuclear Fuel	–	–	1.13	1.15	.89	1.40	1.17	1.11	.88	.70
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.15	4.92	5.17	4.14	4.06	4.01	4.30	4.57	4.31	4.37
Electric Utility Fuel [c]	.27	2.16	2.30	2.05	1.57	1.70	1.56	1.54	1.35	1.31
Electricity Purchased by End Users	4.44	13.69	17.05	18.01	17.87	18.21	18.25	18.05	17.79	17.84
Total Energy	1.71	7.32	8.20	7.25	7.37	7.29	7.75	8.25	R7.92	7.82
	Expenditures in Millions of Dollars									
Coal	3.5	137.6	273.2	246.5	237.6	234.1	161.3	172.3	159.4	139.2
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	3.5	137.6	273.2	246.5	237.6	234.1	161.3	172.3	159.4	139.2
Natural Gas	111.2	553.4	710.7	581.3	530.0	515.9	520.5	557.5	R524.1	529.3
Petroleum	518.8	2,475.0	2,336.5	1,805.1	2,031.1	2,181.6	R2,270.6	R2,578.7	R2,526.8	2,534.8
Asphalt and Road Oil	7.7	48.1	65.5	61.9	47.2	52.8	37.5	48.8	55.2	29.4
Aviation Gasoline	3.5	9.4	5.4	5.8	4.3	4.8	6.4	6.2	4.8	4.1
Distillate Fuel	46.2	383.8	619.3	431.5	530.5	586.0	571.9	633.8	576.4	594.0
Jet Fuel	6.3	53.3	134.1	93.8	171.0	154.5	144.6	201.1	R208.6	269.5
Kerosene	12.5	9.6	4.1	2.7	2.4	2.2	1.6	1.7	1.9	1.7
LPG	59.4	125.9	124.4	107.4	114.3	125.8	R163.4	R163.8	R158.8	134.5
Lubricants	16.2	57.1	63.7	55.1	50.8	56.3	52.6	54.5	56.1	66.4
Motor Gasoline	362.5	1,481.0	1,267.2	980.8	1,070.9	1,126.9	1,229.4	1,399.1	R1,396.1	1,382.8
Residual Fuel	1.9	284.7	33.5	53.0	24.8	59.2	48.8	50.2	51.3	35.7
Other [a]	2.7	22.3	19.2	13.1	14.9	12.9	14.5	19.3	17.5	16.8
Nuclear Fuel	–	–	53.1	50.6	74.1	143.8	97.9	87.9	86.7	61.3
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	633.5	3,166.1	3,373.5	2,683.5	2,872.8	3,075.5	R3,050.4	R3,396.4	R3,297.0	3,264.6
Electric Utility Fuel [c]	-31.7	-438.6	-476.1	-420.1	-381.2	-453.7	-355.7	-387.1	-346.5	-298.8
Electricity Purchased by End Users	225.9	1,075.9	1,455.8	1,582.5	1,606.2	1,694.2	1,786.8	1,914.5	1,940.5	1,958.2
Total Energy	827.7	3,803.3	4,353.2	3,846.0	4,097.8	4,316.0	R4,481.4	R4,923.8	R4,891.0	4,924.0

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Mississippi 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.39**	**9.08**	**12.18**	**13.06**	**13.10**	**13.14**	**13.38**	**13.93**	**14.03**	**13.85**
Primary Energy	1.31	4.45	5.85	6.09	6.62	6.49	6.08	6.17	6.20	5.56
Coal	–	2.97	2.74	2.89	2.88	2.62	2.64	2.70	2.81	2.69
Natural Gas	.86	3.36	5.33	5.47	6.01	5.76	4.95	5.16	5.06	4.70
Petroleum	2.14	8.41	7.78	8.58	8.82	9.11	9.69	9.47	10.61	9.31
Distillate Fuel	1.24	6.89	7.07	5.15	4.89	4.42	3.86	4.59	4.23	7.66
Kerosene	2.06	10.48	10.96	7.99	7.58	6.85	5.99	7.12	6.55	11.88
LPG	2.16	8.35	7.71	8.61	8.89	9.17	9.77	9.49	10.70	9.28
Electricity	5.06	14.38	18.12	19.13	19.01	19.15	20.00	20.19	20.16	20.55
Commercial Sector	**1.96**	**6.70**	**11.75**	**12.54**	**12.09**	**12.75**	**12.66**	**13.17**	**13.11**	**13.11**
Primary Energy	.70	3.17	5.37	4.83	5.15	4.92	4.58	4.52	4.26	4.28
Coal	–	1.65	1.85	1.78	1.70	1.68	1.70	1.74	1.74	1.71
Natural Gas	.57	2.97	4.95	4.88	5.21	4.94	4.59	4.34	4.15	3.92
Petroleum	1.39	3.36	6.23	4.69	5.04	4.94	4.57	5.09	4.65	5.61
Distillate Fuel	.96	6.27	5.74	3.26	3.86	3.08	2.88	4.08	3.80	5.04
Kerosene	–	–	7.17	3.51	4.38	3.34	3.61	5.08	4.64	5.22
LPG	1.33	4.92	7.19	7.60	7.94	8.34	8.42	5.02	5.67	4.71
Motor Gasoline	2.84	10.53	8.75	6.54	6.97	7.27	8.07	9.21	8.92	8.62
Residual Fuel	.49	3.02	4.33	2.12	2.18	1.94	2.71	–	2.03	2.08
Electricity	5.53	15.87	19.50	20.66	20.22	21.34	21.18	21.33	21.24	21.56
Industrial Sector	**.70**	**4.90**	**6.13**	**5.44**	**5.45**	**5.08**	**5.15**	**5.26**	**5.20**	**5.23**
Primary Energy	.50	3.61	4.72	3.57	3.43	3.07	R3.18	3.42	R3.27	3.24
Coal	.33	1.65	1.85	1.78	1.70	1.68	1.70	1.74	1.74	1.71
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.33	1.65	1.85	1.78	1.70	1.68	1.70	1.74	1.74	1.71
Natural Gas	.29	2.66	3.68	3.08	2.71	2.50	2.46	2.49	2.28	2.40
Petroleum	.94	4.61	6.45	4.39	4.48	3.90	R4.33	4.61	R4.74	4.58
Asphalt and Road Oil	.66	3.56	4.81	4.90	3.27	3.03	2.86	2.93	3.29	2.04
Distillate Fuel	.74	5.55	6.24	3.06	3.81	2.90	3.14	4.42	4.04	4.54
Kerosene	.79	6.21	7.17	3.51	4.38	3.34	3.61	5.08	4.64	5.22
LPG	1.33	4.92	7.19	7.60	7.94	8.34	8.42	5.02	5.67	4.71
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.84	10.53	8.75	6.54	6.97	7.27	8.07	9.21	8.92	8.62
Residual Fuel	.40	2.82	4.33	2.12	2.18	1.94	2.71	3.02	2.03	2.08
Other	.50	3.39	4.93	3.74	4.33	3.71	4.36	5.19	4.33	4.03
Electricity	2.94	11.42	13.94	14.63	14.74	14.84	14.18	13.63	13.16	12.93
Transportation Sector	**2.64**	**8.71**	**7.97**	**5.91**	**6.20**	**6.31**	**7.11**	**8.14**	**7.39**	**7.19**
Primary Energy	2.64	8.71	7.97	5.91	6.20	6.31	7.11	8.14	7.39	7.19
Coal	.33	–	–	–	–	–	–	–	–	–
Petroleum	2.64	8.71	7.97	5.91	6.20	6.31	7.11	8.14	7.39	7.19
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	2.02	7.67	7.05	5.96	6.44	6.42	7.12	8.25	7.73	7.63
Jet Fuel	.73	6.39	5.84	3.41	3.97	3.43	3.92	5.16	4.59	4.33
LPG	1.33	4.92	7.19	7.60	7.94	8.34	8.42	5.02	5.67	4.71
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.84	10.53	8.75	6.54	6.97	7.27	8.07	9.21	8.92	8.62
Residual Fuel	.43	2.55	4.03	1.90	1.92	2.79	2.15	2.01	1.71	1.66
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.71**	**7.32**	**8.20**	**7.25**	**7.37**	**7.29**	**7.75**	**8.25**	R**7.92**	**7.82**
Primary Energy — Four Sectors	1.39	6.18	6.50	5.11	5.35	5.25	5.61	6.13	5.80	5.71
Electricity	4.44	13.69	17.05	18.01	17.87	18.21	18.25	18.05	17.79	17.84
Electric Utility Sector [a]	**.27**	**2.16**	**2.30**	**2.05**	**1.57**	**1.70**	**1.56**	**1.54**	**1.35**	**1.31**
Coal	.26	1.84	2.54	2.29	1.96	1.81	1.67	1.65	1.67	1.60
Natural Gas	.27	2.11	2.79	2.31	1.85	1.85	1.83	1.76	1.57	1.80
Petroleum	.48	3.06	4.78	2.13	2.38	3.26	2.65	2.44	2.25	1.96
Heavy Oil [b]	.48	3.03	4.16	2.06	2.07	3.18	2.48	2.35	1.94	1.85
Light Oil [b]	.61	5.47	5.97	4.45	3.76	4.99	5.32	4.80	4.74	4.67
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	1.13	1.15	.89	1.40	1.17	1.11	.88	.70
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.15**	**4.92**	**5.17**	**4.14**	**4.06**	**4.01**	**4.30**	**4.57**	**4.31**	**4.37**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Mississippi 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**194.5**	**661.9**	**841.3**	**905.7**	**951.1**	**974.4**	**1,002.9**	**1,053.3**	R1,068.1	**1,061.8**
Primary Energy	75.9	173.0	195.3	196.3	229.3	228.5	216.9	208.3	207.1	190.8
Coal	–	*	*	.1	.1	.3	*	*	*	*
Natural Gas	32.4	102.6	140.4	141.4	162.3	157.3	134.2	133.5	134.2	131.1
Petroleum	43.5	70.4	54.9	54.9	66.9	70.9	82.6	74.8	72.9	59.6
Distillate Fuel	.6	.3	.1	.1	.5	.1	.1	*	*	.1
Kerosene	.9	2.6	1.7	1.7	1.2	1.1	.8	.5	.8	1.0
LPG	42.0	67.5	53.2	53.1	65.3	69.7	81.7	74.3	72.0	58.6
Electricity	118.7	488.9	646.0	709.4	721.8	746.0	786.0	845.0	861.0	871.0
Commercial Sector	**77.5**	**420.3**	**544.5**	**556.5**	**571.0**	**597.6**	**630.0**	**646.7**	**642.1**	**641.4**
Primary Energy	20.5	143.5	136.6	109.9	131.2	120.6	117.0	107.7	100.1	102.4
Coal	–	*	*	.1	.1	.3	*	*	*	*
Natural Gas	13.9	64.1	84.1	84.1	94.8	90.9	83.1	78.6	75.9	74.1
Petroleum	6.7	79.4	52.5	25.7	36.3	29.3	33.8	29.1	24.1	28.3
Distillate Fuel	.6	.9	35.7	8.4	17.9	10.7	14.3	14.0	13.4	15.0
Kerosene	–	–	1.6	.4	.2	.1	.1	.2	.2	.3
LPG	4.6	7.0	8.8	8.3	10.3	11.2	12.4	6.9	6.7	5.2
Motor Gasoline	1.4	6.8	6.2	7.5	7.7	7.1	6.8	8.0	3.8	7.8
Residual Fuel	.1	64.7	.3	1.2	.3	.2	.2	–	*	*
Electricity	57.0	276.8	407.9	446.7	439.8	477.0	513.0	539.0	542.0	539.0
Industrial Sector	**146.6**	**803.2**	**1,151.1**	**937.2**	**920.6**	**946.9**	R989.8	R1,132.3	R1,087.9	**1,076.9**
Primary Energy	96.4	492.9	749.2	510.8	476.0	475.6	R502.1	R601.8	R550.4	528.8
Coal	.4	2.0	10.7	10.3	11.3	10.5	10.5	10.9	9.8	9.9
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.4	2.0	10.7	10.3	11.3	10.5	10.5	10.9	9.8	9.9
Natural Gas	37.6	182.6	330.6	241.5	194.7	204.7	218.8	226.3	R213.4	223.9
Petroleum	58.4	308.3	407.8	259.0	270.0	260.4	R272.9	R364.5	R327.3	295.0
Asphalt and Road Oil	7.7	48.1	65.5	61.9	47.2	52.8	37.5	48.8	55.2	29.4
Distillate Fuel	13.3	111.3	196.0	79.5	122.7	93.1	90.8	145.9	113.6	114.7
Kerosene	11.6	7.0	.8	.6	1.1	1.1	.8	1.0	.9	.5
LPG	10.5	48.6	56.4	40.7	34.1	40.8	R65.8	R80.2	R77.8	69.1
Lubricants	7.5	29.7	33.1	28.7	26.4	29.3	27.3	28.4	29.2	34.5
Motor Gasoline	4.6	4.1	34.5	21.6	23.0	24.2	23.8	27.8	31.4	28.9
Residual Fuel	.5	37.3	2.2	13.0	.6	6.2	12.4	13.1	1.6	1.1
Other	2.7	22.3	19.2	13.1	14.9	12.9	14.5	19.3	17.5	16.8
Electricity	50.2	310.2	401.9	426.5	444.6	471.2	487.7	530.5	537.5	548.1
Transportation Sector	**409.1**	**1,918.0**	**1,816.3**	**1,446.5**	**1,655.1**	**1,797.1**	**1,858.7**	**2,091.5**	R2,092.9	**2,143.9**
Primary Energy	409.1	1,918.0	1,816.3	1,446.5	1,655.1	1,797.1	1,858.7	2,091.5	R2,092.9	2,143.9
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	409.1	1,918.0	1,816.3	1,446.5	1,655.1	1,797.1	1,858.7	2,091.5	R2,092.9	2,143.9
Aviation Gasoline	3.5	9.4	5.4	5.8	4.3	4.8	6.4	6.2	4.8	4.1
Distillate Fuel	31.6	269.0	385.5	342.3	388.7	480.4	463.9	472.5	447.1	463.4
Jet Fuel	6.3	53.3	134.1	93.8	171.0	154.5	144.6	201.1	R208.6	269.5
LPG	2.4	2.7	6.0	5.3	4.6	4.1	3.5	2.4	2.2	1.6
Lubricants	8.7	27.4	30.6	26.5	24.4	27.1	25.2	26.2	27.0	31.9
Motor Gasoline	356.5	1,470.2	1,226.6	951.8	1,040.3	1,095.6	1,198.8	1,363.4	1,360.9	1,346.1
Residual Fuel	*	86.0	28.1	21.1	21.9	30.7	16.2	19.7	42.3	27.3
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**827.7**	**3,803.3**	**4,353.2**	**3,846.0**	**4,097.8**	**4,316.0**	R4,481.4	R4,923.8	R4,891.0	**4,924.0**
Primary Energy — Four Sectors	601.9	2,727.5	2,897.4	2,263.5	2,491.6	2,621.8	R2,694.7	R3,009.2	R2,950.5	2,965.8
Electricity	225.9	1,075.9	1,455.8	1,582.5	1,606.2	1,694.2	1,786.8	1,914.5	1,940.5	1,958.2
Electric Utility Sector [a]	**31.7**	**438.6**	**476.1**	**420.1**	**381.2**	**453.7**	**355.7**	**387.1**	**346.5**	**298.8**
Coal	3.1	135.5	262.4	236.1	226.0	223.0	150.8	161.3	149.6	129.3
Natural Gas	27.3	204.2	155.6	114.4	78.2	63.0	84.5	119.1	100.6	100.2
Petroleum	1.3	98.9	4.9	18.9	2.8	23.8	22.6	18.8	9.5	8.0
Heavy Oil [b]	1.2	96.7	2.8	17.8	2.0	22.2	19.9	17.4	7.4	7.2
Light Oil [b]	*	2.2	2.1	1.2	.8	1.7	2.7	1.4	2.2	.8
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	53.1	50.6	74.1	143.8	97.9	87.9	86.7	61.3
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**633.5**	**3,166.1**	**3,373.5**	**2,683.5**	**2,872.8**	**3,075.5**	R3,050.4	R3,396.4	R3,297.0	**3,264.6**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Missouri 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.29	1.22	1.51	1.46	1.40	1.37	1.35	1.35	1.34	1.34
Coking Coal	.38	1.81	1.93	1.75	1.63	–	–	–	–	–
Steam Coal	.28	1.21	1.51	1.46	1.40	1.37	1.35	1.35	1.34	1.34
Natural Gas	.64	2.95	4.94	4.52	4.28	4.37	4.51	4.69	4.52	4.60
Petroleum	1.97	8.04	7.88	5.77	6.21	6.08	6.71	7.78	7.41	7.21
Asphalt and Road Oil	.71	3.59	4.77	3.81	3.70	3.53	3.12	3.11	3.22	2.46
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.05	6.61	6.70	5.26	5.61	5.37	6.19	7.49	6.94	6.69
Jet Fuel	.75	6.47	5.90	3.95	4.13	3.89	4.36	5.68	4.81	4.57
Kerosene	.89	6.43	7.78	5.80	5.48	5.14	6.65	8.34	7.42	5.86
LPG	1.79	6.32	8.12	6.61	6.71	7.00	7.34	8.91	R7.96	7.33
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.73	9.33	8.56	6.11	6.81	6.82	7.45	8.61	8.30	8.11
Residual Fuel	.56	3.33	4.09	2.25	2.60	2.14	2.35	2.54	2.15	2.22
Other[a]	1.44	7.23	7.85	5.14	5.42	4.62	5.62	5.90	5.53	5.55
Nuclear Fuel	–	–	.82	.82	.52	.73	.71	.74	.71	.58
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors[b]	1.16	4.38	4.58	3.72	3.84	3.77	4.04	4.52	4.30	4.34
Electric Utility Fuel[c]	.26	1.25	1.41	1.38	1.31	1.29	1.26	1.27	1.24	1.23
Electricity Purchased by End Users	6.17	13.91	17.16	18.45	18.90	18.94	18.92	18.94	18.95	18.79
Total Energy	1.84	7.20	8.30	7.34	7.68	7.62	8.04	8.83	R8.66	8.45
	Expenditures in Millions of Dollars									
Coal	80.3	647.4	800.8	750.1	741.4	751.9	740.3	728.0	717.7	699.3
Coking Coal	3.1	9.6	12.0	10.8	3.4	–	–	–	–	–
Steam Coal	77.2	637.7	788.8	739.3	738.0	751.9	740.3	728.0	717.7	699.3
Natural Gas	265.4	928.2	1,284.0	1,089.0	994.0	1,090.0	1,124.5	1,107.8	1,157.2	1,099.3
Petroleum	1,127.1	4,698.9	4,438.7	3,361.9	3,715.3	3,811.4	R4,179.3	R4,752.1	R4,562.8	4,615.5
Asphalt and Road Oil	26.8	95.3	135.9	116.9	106.8	132.6	94.1	92.2	86.7	62.6
Aviation Gasoline	2.0	7.4	6.8	6.9	5.1	6.1	8.4	5.9	5.1	4.9
Distillate Fuel	99.1	708.2	765.2	562.0	629.7	663.8	798.1	905.3	820.7	875.0
Jet Fuel	34.1	229.5	196.6	149.9	174.6	160.8	179.6	213.8	R204.2	194.6
Kerosene	3.2	11.5	6.6	2.5	2.3	2.9	4.3	2.1	2.7	1.4
LPG	79.5	211.7	163.3	142.1	152.9	167.6	R224.6	R222.1	R248.2	225.0
Lubricants	35.5	139.6	155.8	134.9	124.2	137.8	128.6	133.4	137.3	162.3
Motor Gasoline	803.2	2,889.0	2,699.9	2,034.0	2,274.5	2,326.8	2,492.9	2,879.3	R2,786.1	2,780.7
Residual Fuel	11.4	23.2	18.8	7.8	11.1	10.1	8.3	10.0	7.4	9.3
Other[a]	32.4	383.7	289.7	204.9	234.2	203.0	240.4	288.0	264.4	299.6
Nuclear Fuel	–	–	71.3	63.1	34.9	70.3	63.1	62.9	76.5	49.7
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors[b]	1,472.7	6,274.5	6,594.8	5,264.1	5,485.5	5,723.7	R6,107.3	R6,650.8	R6,514.2	6,463.8
Electric Utility Fuel[c]	-76.3	-639.6	-811.7	-761.7	-733.5	-781.9	-762.9	-754.7	-774.2	-715.7
Electricity Purchased by End Users	542.4	2,022.4	2,712.0	3,038.6	3,232.6	3,377.0	3,396.0	3,485.0	3,654.0	3,489.0
Total Energy	1,938.9	7,657.4	8,495.2	7,541.0	7,984.6	8,318.8	R8,740.3	R9,381.2	R9,394.0	9,237.1

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Missouri 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.09**	**6.88**	**9.66**	**10.09**	**10.44**	**10.34**	**10.37**	**11.22**	**11.24**	**10.98**
Primary Energy	1.13	3.80	5.60	5.04	4.85	4.89	5.17	5.63	5.55	5.40
Coal	.86	1.70	1.73	1.54	1.37	1.25	1.43	1.56	1.53	1.33
Natural Gas	.96	3.23	5.40	4.98	4.71	4.73	4.80	5.15	5.10	5.10
Petroleum	1.81	7.01	7.33	5.60	6.05	6.37	7.74	9.33	8.34	7.31
Distillate Fuel	1.19	6.85	6.70	4.95	4.66	4.71	5.88	7.27	6.75	5.37
Kerosene	1.43	7.95	8.45	6.24	5.87	5.94	7.41	9.16	8.51	6.77
LPG	1.95	7.06	7.53	5.81	6.41	6.82	8.02	9.61	8.54	7.52
Electricity	7.86	15.21	19.27	20.87	21.59	21.49	21.50	21.56	21.66	21.80
Commercial Sector	**1.66**	**6.87**	**10.26**	**10.43**	**10.48**	**10.58**	**10.98**	**11.38**	**11.15**	**11.20**
Primary Energy	.69	3.32	5.06	4.38	4.04	4.08	4.30	4.56	4.48	4.44
Coal	.49	1.58	1.56	1.38	1.27	1.27	1.29	1.31	1.34	1.35
Natural Gas	.62	2.88	4.88	4.35	4.06	4.17	4.31	4.48	4.46	4.46
Petroleum	.93	5.74	6.54	4.84	4.54	4.31	5.33	6.44	5.66	5.23
Distillate Fuel	1.03	6.49	5.75	3.86	3.66	3.35	4.41	5.47	4.79	4.06
Kerosene	.82	6.10	6.61	4.36	4.39	4.00	5.49	6.86	5.96	5.04
LPG	1.27	5.42	9.12	8.17	7.29	7.27	6.32	7.82	6.94	6.98
Motor Gasoline	2.73	9.33	8.56	6.11	6.81	6.82	7.45	8.61	8.30	8.11
Residual Fuel	.57	3.47	4.11	2.25	2.61	2.20	2.41	2.60	2.21	2.28
Electricity	7.00	14.33	17.94	19.02	19.04	19.06	19.03	18.98	18.79	18.80
Industrial Sector	**1.12**	**5.40**	**6.39**	**5.78**	**5.83**	**5.61**	**6.08**	**6.35**	**6.25**	**6.09**
Primary Energy	.77	4.53	5.04	3.96	3.98	3.83	4.23	4.54	4.40	4.28
Coal	.47	1.61	1.62	1.44	1.29	1.27	1.29	1.31	1.34	1.35
Coking Coal	.38	1.81	1.93	1.75	1.63	–	–	–	–	–
Steam Coal	.49	1.58	1.56	1.38	1.27	1.27	1.29	1.31	1.34	1.35
Natural Gas	.40	2.61	4.14	3.75	3.61	3.79	4.10	4.14	4.04	3.86
Petroleum	1.19	6.39	6.93	5.03	5.05	4.60	5.16	5.60	5.39	5.17
Asphalt and Road Oil	.71	3.59	4.77	3.81	3.70	3.53	3.12	3.11	3.22	2.46
Distillate Fuel	.77	5.83	6.00	3.96	3.99	3.64	4.99	6.23	5.42	4.58
Kerosene	.82	6.10	6.61	4.36	4.39	4.00	5.49	6.86	5.96	5.04
LPG	1.27	5.42	9.12	8.17	7.29	7.27	6.32	7.82	6.94	6.98
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.73	9.33	8.56	6.11	6.81	6.82	7.45	8.61	8.30	8.11
Residual Fuel	.53	3.09	4.11	2.25	2.61	2.20	2.41	2.60	2.21	2.28
Other	1.44	7.30	7.85	5.14	5.42	4.62	5.63	5.90	5.53	5.55
Electricity	4.01	11.21	13.14	14.02	14.36	14.45	14.50	14.50	14.37	14.02
Transportation Sector	**2.32**	**8.76**	**8.19**	**5.98**	**6.55**	**6.52**	**7.06**	**8.28**	**R7.89**	**7.74**
Primary Energy	2.32	8.76	8.19	5.98	6.55	6.52	7.06	8.28	R7.89	7.74
Coal	.49	–	–	–	–	–	–	–	–	–
Petroleum	2.32	8.76	8.19	5.98	6.55	6.52	7.06	8.28	R7.89	7.74
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.24	6.97	7.04	5.75	6.33	6.10	6.54	7.87	7.42	7.31
Jet Fuel	.75	6.47	5.90	3.95	4.13	3.89	4.36	5.68	4.81	4.57
LPG	1.27	5.42	9.12	8.17	7.29	7.27	6.32	7.82	6.94	6.98
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.73	9.33	8.56	6.11	6.81	6.82	7.45	8.61	8.30	8.11
Residual Fuel	.55	3.38	3.88	2.24	–	1.80	2.08	1.65	–	1.31
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.84**	**7.20**	**8.30**	**7.34**	**7.68**	**7.62**	**8.04**	**8.83**	**R8.66**	**8.45**
Primary Energy — Four Sectors	1.44	6.13	6.68	5.22	5.47	5.41	5.89	6.71	6.44	6.33
Electricity	6.17	13.91	17.16	18.45	18.90	18.94	18.92	18.94	18.95	18.79
Electric Utility Sector [a]	**.26**	**1.25**	**1.41**	**1.38**	**1.31**	**1.29**	**1.26**	**1.27**	**1.24**	**1.23**
Coal	.25	1.19	1.50	1.47	1.41	1.38	1.35	1.35	1.34	1.34
Natural Gas	.26	2.22	3.31	2.92	2.96	2.77	2.46	1.72	1.49	1.87
Petroleum	.62	5.07	5.60	3.38	3.93	3.35	3.90	4.99	4.23	3.92
Heavy Oil [b]	.55	3.45	3.99	2.32	2.41	1.83	2.12	1.80	1.33	1.45
Light Oil [b]	.69	6.01	5.76	3.48	4.14	3.55	4.45	5.11	4.78	4.26
Petroleum Coke	–	.67	1.38	–	–	.97	.80	–	–	–
Nuclear Fuel	–	–	.82	.82	.52	.73	.71	.74	.71	.58
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.16**	**4.38**	**4.58**	**3.72**	**3.84**	**3.77**	**4.04**	**4.52**	**4.30**	**4.34**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Missouri 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**486.6**	**1,622.0**	**2,052.0**	**2,102.6**	**2,167.1**	**2,293.5**	**2,339.4**	**2,363.1**	**2,539.4**	**2,345.4**
Primary Energy	227.1	654.0	836.7	716.4	670.6	728.5	794.3	770.1	811.3	761.4
Coal	.6	1.1	2.2	1.3	2.6	2.1	2.8	3.4	3.0	2.3
Natural Gas	150.9	471.2	703.3	606.9	552.4	610.8	625.1	604.1	620.3	596.1
Petroleum	75.5	181.7	131.2	108.3	115.6	115.6	166.5	162.6	188.1	163.0
Distillate Fuel	9.1	49.7	31.8	23.6	17.8	17.4	16.2	15.0	16.9	11.2
Kerosene	.6	2.6	4.5	2.0	1.8	2.0	2.9	1.5	1.8	.8
LPG	65.9	129.4	94.8	82.6	96.1	96.2	147.4	146.1	169.4	151.0
Electricity	259.5	967.9	1,215.3	1,386.2	1,496.5	1,565.0	1,545.0	1,593.0	1,728.0	1,584.0
Commercial Sector	**227.1**	**943.7**	**1,319.4**	**1,384.3**	**1,436.8**	**1,526.4**	**1,549.7**	**1,587.5**	**1,633.6**	**1,597.1**
Primary Energy	79.8	308.8	388.6	340.5	315.8	333.4	331.8	335.5	350.6	335.1
Coal	.6	1.8	3.6	2.1	4.4	4.1	4.7	5.3	4.8	4.4
Natural Gas	54.9	222.7	299.5	272.1	239.2	268.1	273.6	269.0	284.4	272.5
Petroleum	24.2	84.4	85.5	66.3	72.1	61.2	53.5	61.2	61.4	58.2
Distillate Fuel	6.5	37.9	49.1	33.3	39.6	32.5	23.8	28.2	31.0	27.8
Kerosene	2.0	5.9	1.2	.2	.2	.4	.4	.3	.1	.5
LPG	7.5	17.5	20.3	20.5	19.3	18.1	20.5	21.0	24.3	24.7
Motor Gasoline	2.2	10.9	11.8	10.4	11.2	8.9	8.3	10.7	5.6	5.1
Residual Fuel	6.0	12.1	3.1	1.8	2.0	1.4	.5	1.0	.4	*
Electricity	147.3	634.8	930.8	1,043.8	1,121.0	1,193.0	1,218.0	1,252.0	1,283.0	1,262.0
Industrial Sector	**346.6**	**1,543.2**	**1,646.7**	**1,383.5**	**1,401.9**	**1,434.2**	**R1,472.2**	**R1,544.1**	**R1,508.1**	**1,506.6**
Primary Energy	211.0	1,123.6	1,080.8	774.9	786.8	815.2	R839.2	R904.0	R865.1	863.6
Coal	20.4	58.0	66.7	56.3	45.2	45.3	42.5	39.9	38.6	35.9
Coking Coal	3.1	9.6	12.0	10.8	3.4	–	–	–	–	–
Steam Coal	17.3	48.4	54.7	45.5	41.8	45.3	42.5	39.9	38.6	35.9
Natural Gas	42.9	201.1	276.4	206.6	198.3	206.7	222.8	228.5	233.3	226.3
Petroleum	147.7	864.5	737.7	512.0	543.4	563.3	R573.9	R635.6	R593.2	601.5
Asphalt and Road Oil	26.8	95.3	135.9	116.9	106.8	132.6	94.1	92.2	86.7	62.6
Distillate Fuel	25.4	162.3	139.7	63.1	73.1	79.7	93.9	109.2	93.0	86.8
Kerosene	.7	3.0	.8	.2	.3	.6	1.0	.3	.8	.2
LPG	5.6	63.4	43.8	34.3	34.0	50.5	R54.0	R51.7	R51.3	47.0
Lubricants	12.8	58.4	65.2	56.4	52.0	57.6	53.8	55.8	57.4	67.9
Motor Gasoline	39.7	91.4	48.4	30.8	34.2	31.9	30.4	29.8	33.0	28.5
Residual Fuel	4.4	7.5	14.4	5.3	8.8	7.3	6.4	8.6	6.6	8.9
Other	32.4	383.3	289.7	204.9	234.2	203.0	240.3	288.0	264.4	299.6
Electricity	135.6	419.6	565.9	608.6	615.0	619.0	633.0	640.0	643.0	643.0
Transportation Sector	**878.6**	**3,548.5**	**3,477.1**	**2,670.6**	**2,978.8**	**3,064.6**	**3,379.1**	**3,886.5**	**R3,712.9**	**3,788.1**
Primary Energy	878.6	3,548.5	3,477.1	2,670.6	2,978.8	3,064.6	3,379.1	3,886.5	R3,712.9	3,788.1
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	878.5	3,548.5	3,477.1	2,670.6	2,978.8	3,064.6	3,379.1	3,886.5	R3,712.9	3,788.1
Aviation Gasoline	2.0	7.4	6.8	6.9	5.1	6.1	8.4	5.9	5.1	4.9
Distillate Fuel	57.5	439.5	537.8	437.4	494.3	528.0	658.5	746.7	673.0	744.6
Jet Fuel	34.1	229.5	196.6	149.9	174.6	160.8	179.6	213.8	R204.2	194.6
LPG	.4	1.3	4.5	4.7	3.5	2.7	2.7	3.4	3.3	2.2
Lubricants	22.7	81.2	90.6	78.4	72.3	80.2	74.8	77.6	79.9	94.4
Motor Gasoline	761.4	2,786.6	2,639.7	1,992.9	2,229.1	2,286.0	2,454.2	2,838.7	2,747.4	2,747.1
Residual Fuel	.6	3.0	.9	.4	–	1.0	.9	.4	–	.1
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1,938.9**	**7,657.4**	**8,495.2**	**7,541.0**	**7,984.6**	**8,318.8**	**R8,740.3**	**R9,381.2**	**R9,394.0**	**9,237.1**
Primary Energy — Four Sectors	1,396.4	5,635.0	5,783.1	4,502.4	4,752.0	4,941.8	R5,344.4	R5,896.1	R5,740.0	5,748.2
Electricity	542.4	2,022.4	2,712.0	3,038.6	3,232.6	3,377.0	3,396.0	3,485.0	3,654.0	3,489.0
Electric Utility Sector [a]	**76.3**	**639.6**	**811.7**	**761.7**	**733.5**	**781.9**	**762.9**	**754.7**	**774.2**	**715.7**
Coal	58.6	586.4	728.4	690.4	689.2	700.4	690.4	679.4	671.3	656.8
Natural Gas	16.6	33.3	4.8	3.4	4.0	4.5	3.1	6.2	19.2	4.4
Petroleum	1.1	19.9	7.2	4.8	5.4	6.7	6.3	6.3	7.2	4.8
Heavy Oil [b]	.5	.6	.4	.3	.4	.4	.5	.1	.4	.2
Light Oil [b]	.6	18.8	6.8	4.5	5.0	6.3	5.7	6.2	6.8	4.6
Petroleum Coke	–	.4	*	–	–	*	.1	–	–	–
Nuclear Fuel	–	–	71.3	63.1	34.9	70.3	63.1	62.9	76.5	49.7
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1,472.7**	**6,274.5**	**6,594.8**	**5,264.1**	**5,485.5**	**5,723.7**	**R6,107.3**	**R6,650.8**	**R6,514.2**	**6,463.8**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Montana 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.22	0.53	0.75	0.74	0.68	0.57	0.61	0.70	0.71	0.74
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.22	.53	.75	.74	.68	.57	.61	.70	.71	.74
Natural Gas	.57	3.14	4.84	4.32	4.05	3.92	3.95	4.16	4.06	4.42
Petroleum	1.89	7.13	7.37	6.00	6.39	6.51	R6.89	7.82	R7.64	7.63
Asphalt and Road Oil	.59	3.67	4.83	4.35	3.07	3.29	2.75	2.64	3.29	2.86
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.14	6.59	6.39	5.68	6.40	6.32	6.51	7.58	7.34	7.52
Jet Fuel	.76	6.59	6.64	4.81	4.38	4.33	4.79	6.26	5.47	5.46
Kerosene	.94	–	11.07	5.91	6.18	5.61	5.74	6.62	7.18	7.04
LPG	2.10	6.49	7.60	6.60	6.15	6.15	R7.33	R9.11	R9.87	8.72
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.89	9.99	9.16	6.74	7.57	7.75	8.59	9.56	9.07	9.39
Residual Fuel	.39	3.28	3.03	2.63	2.34	2.12	2.16	3.03	2.36	1.70
Other [a]	.52	2.38	2.17	1.53	1.50	1.45	1.74	2.02	1.72	1.29
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	.65	1.74	.79	.32	.95	.87	([d])	([d])	([d])	([d])
Primary Energy — Five Sectors [b]	1.26	4.79	4.69	3.39	3.47	3.03	R3.31	3.82	3.63	3.63
Electric Utility Fuel [c]	.23	.72	.72	.68	.66	.55	.58	.68	.68	.71
Electricity Purchased by End Users	2.88	5.80	10.72	11.18	11.81	12.09	12.00	11.67	12.22	12.39
Total Energy	1.56	6.02	7.48	6.74	7.05	7.12	7.24	7.81	7.74	7.85
	Expenditures in Millions of Dollars									
Coal	2.6	31.8	74.0	98.0	90.8	103.9	108.3	116.1	127.3	139.6
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	2.6	31.8	74.0	98.0	90.8	103.9	108.3	116.1	127.3	139.6
Natural Gas	45.1	166.0	204.7	157.7	140.4	149.0	164.9	162.9	169.1	179.8
Petroleum	204.2	1,050.4	1,062.3	738.5	769.7	775.7	R884.7	R990.7	R970.5	990.5
Asphalt and Road Oil	5.3	24.9	46.9	57.4	33.5	32.2	31.9	26.0	29.5	24.8
Aviation Gasoline	.5	7.3	4.6	4.4	3.1	4.0	4.0	5.2	4.8	3.3
Distillate Fuel	31.9	288.2	421.3	231.9	244.3	232.4	291.2	327.6	355.6	338.1
Jet Fuel	2.7	34.1	25.2	23.3	17.7	19.6	20.0	24.8	R19.0	26.3
Kerosene	2.0	–	.6	.7	.3	.1	.1	.3	.1	*
LPG	9.9	41.9	39.8	33.9	35.8	31.8	R42.0	R55.5	R36.7	31.1
Lubricants	6.2	21.5	24.0	20.8	19.2	21.3	19.9	20.6	21.2	25.1
Motor Gasoline	140.7	546.8	490.2	359.8	407.0	425.5	464.8	515.5	493.3	529.3
Residual Fuel	.7	68.3	2.4	.6	.2	.1	.2	.2	*	*
Other [a]	4.4	17.4	7.1	5.5	8.6	8.7	10.5	14.8	10.3	12.5
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	.5	.3	.5	.2	.5	.5	([d])	([d])	([d])	([d])
Primary Energy — Five Sectors [b]	252.4	1,248.6	1,341.5	994.4	1,001.4	1,029.1	R1,157.8	R1,269.7	R1,267.0	1,309.9
Electric Utility Fuel [c]	-3.4	-44.3	-69.2	-87.0	-85.9	-99.1	-102.2	-110.6	-119.3	-132.7
Electricity Purchased by End Users	84.1	207.7	488.6	515.8	488.8	521.6	519.2	510.4	545.8	542.0
Total Energy	333.1	1,412.0	1,760.9	1,423.2	1,404.3	1,451.6	R1,574.8	R1,669.5	R1,693.6	1,719.2

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Utilities used biomass fuels at no charge or received a fee for accepting them.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
*Value less than 0.05 million dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Montana 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1.87**	**5.36**	**8.27**	**8.13**	**8.74**	**8.44**	**8.44**	**8.91**	**9.02**	**9.38**
Primary Energy	1.06	3.91	5.40	4.77	4.69	4.51	4.85	5.28	5.14	5.16
Coal	.80	1.35	.98	.70	1.44	.95	1.25	.34	.28	.36
Natural Gas	.88	3.02	4.82	4.46	4.33	4.20	4.29	4.47	4.40	4.70
Petroleum	2.03	7.08	8.10	6.08	6.10	5.88	7.10	8.69	8.48	7.67
Distillate Fuel	1.28	6.92	7.92	4.87	5.15	4.61	5.08	6.42	6.11	5.99
Kerosene	–	–	11.40	7.00	7.41	6.62	7.31	9.23	8.79	8.61
LPG	2.35	7.21	8.18	7.12	6.62	6.54	8.51	9.98	10.42	8.65
Electricity	6.57	9.04	13.77	14.68	16.19	15.89	15.77	15.97	16.86	17.12
Commercial Sector	**1.51**	**5.12**	**8.25**	**8.92**	**8.52**	**8.23**	**7.88**	**8.41**	**8.57**	**9.28**
Primary Energy	.78	3.76	5.39	4.66	4.52	4.30	4.29	4.70	4.39	4.59
Coal	.48	2.04	1.66	2.05	1.96	1.78	1.76	1.72	1.81	1.77
Natural Gas	.60	3.12	5.10	4.48	4.26	4.20	4.28	4.52	4.23	4.36
Petroleum	1.64	6.87	6.09	5.48	5.65	5.02	5.16	6.93	6.16	6.58
Distillate Fuel	1.06	6.45	6.25	5.45	5.32	3.92	3.83	5.13	4.46	5.01
Kerosene	.94	–	6.85	4.14	5.93	5.02	5.08	6.20	6.58	6.18
LPG	1.49	5.85	7.19	6.17	5.77	5.75	5.98	8.30	8.68	8.82
Motor Gasoline	2.89	9.99	9.16	6.74	7.57	7.75	8.59	9.56	9.07	9.39
Residual Fuel	.34	4.42	3.03	2.63	2.34	2.12	2.16	3.03	2.36	1.70
Electricity	5.74	8.50	12.49	13.45	14.04	13.46	13.46	13.49	14.36	14.85
Industrial Sector	**.80**	**3.73**	**5.91**	**5.00**	**5.33**	**5.49**	**5.24**	**R5.41**	**5.55**	**5.27**
Primary Energy	.64	3.91	5.49	3.93	3.88	3.60	R3.67	R4.19	R4.37	4.01
Coal	.48	2.04	1.66	2.05	1.96	1.78	1.76	1.72	1.81	1.77
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.48	2.04	1.66	2.05	1.96	1.78	1.76	1.72	1.81	1.77
Natural Gas	.33	3.11	4.71	3.92	3.36	3.01	2.93	3.19	3.13	4.10
Petroleum	.95	4.23	5.89	4.24	4.19	3.98	R4.03	R4.67	R4.98	4.26
Asphalt and Road Oil	.59	3.67	4.83	4.35	3.07	3.29	2.75	2.64	3.29	2.86
Distillate Fuel	.87	5.19	6.02	3.64	5.21	4.41	4.46	5.45	5.79	5.44
Kerosene	.94	–	6.85	4.14	5.93	5.02	5.08	6.20	6.58	6.18
LPG	1.49	5.85	7.19	6.17	5.77	5.75	5.98	8.30	8.68	8.82
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.89	9.99	9.16	6.74	7.57	7.75	8.59	9.56	9.07	9.39
Residual Fuel	.45	3.28	3.03	2.63	2.34	2.12	2.16	3.03	2.36	1.70
Other	.52	2.38	2.17	1.53	1.50	1.45	1.74	2.02	1.72	1.29
Electricity	1.33	3.05	7.35	7.52	8.42	9.33	9.15	8.39	8.54	8.50
Transportation Sector	**2.34**	**8.92**	**8.42**	**6.78**	**7.34**	**7.52**	**8.31**	**9.33**	**R8.95**	**9.11**
Primary Energy	2.34	8.92	8.42	6.78	7.34	7.52	8.31	9.33	R8.95	9.11
Coal	.48	–	–	–	–	–	–	–	–	–
Petroleum	2.34	8.92	8.42	6.78	7.34	7.52	8.31	9.33	R8.95	9.11
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.24	7.15	6.80	6.84	7.09	7.31	8.13	9.18	8.94	8.85
Jet Fuel	.76	6.59	6.64	4.81	4.38	4.33	4.79	6.26	5.47	5.46
LPG	1.49	5.85	7.19	6.17	5.77	5.75	5.98	8.30	8.68	8.82
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.89	9.99	9.16	6.74	7.57	7.75	8.59	9.56	9.07	9.39
Residual Fuel	.34	–	4.01	–	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.56**	**6.02**	**7.48**	**6.74**	**7.05**	**7.12**	**7.24**	**7.81**	**7.74**	**7.85**
Primary Energy — Four Sectors	1.35	6.06	6.70	5.50	5.80	5.79	6.06	R6.81	6.59	6.72
Electricity	2.88	5.80	10.72	11.18	11.81	12.09	12.00	11.67	12.22	12.39
Electric Utility Sector [a]	**.23**	**.72**	**.72**	**.68**	**.66**	**.55**	**.58**	**.68**	**.68**	**.71**
Coal	.19	.44	.71	.67	.65	.55	.58	.67	.67	.71
Natural Gas	.27	3.87	.59	.86	.92	1.26	1.14	1.45	3.94	3.42
Petroleum	.33	5.01	6.11	4.28	4.11	4.03	4.31	5.43	4.72	5.09
Heavy Oil [b]	.33	–	–	–	–	–	–	–	–	–
Light Oil [b]	.36	5.01	6.11	4.28	4.11	4.03	4.31	5.43	4.72	5.09
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	.65	1.74	.79	.32	.95	.87	([d])	([d])	([d])	([d])
Primary Energy — Five Sectors [c]	**1.26**	**4.79**	**4.69**	**3.39**	**3.47**	**3.03**	**R3.31**	**3.82**	**3.63**	**3.63**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[d] Utilities used biomass fuels at no charge or received a fee for accepting them.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Montana 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**66.7**	**187.8**	**297.4**	**263.0**	**265.8**	**275.2**	**302.9**	**300.8**	**321.5**	**298.4**
Primary Energy	32.3	98.0	127.6	102.0	92.4	96.2	116.9	117.7	122.5	106.4
Coal	.1	.1	*	.1	.1	.1	.5	.1	.1	*
Natural Gas	22.5	58.9	93.2	74.8	67.7	72.7	79.5	77.3	83.2	80.0
Petroleum	9.7	38.9	34.3	27.1	24.6	23.4	36.9	40.3	39.2	26.3
Distillate Fuel	1.9	17.0	15.9	10.0	7.4	6.3	10.8	10.8	12.7	7.6
Kerosene	–	–	.6	.5	.1	.1	*	.1	*	*
LPG	7.9	21.9	17.8	16.6	17.2	17.1	26.0	29.4	26.5	18.7
Electricity	34.4	89.9	169.8	161.0	173.4	179.0	186.0	183.0	199.0	192.0
Commercial Sector	**41.3**	**127.1**	**296.5**	**280.0**	**206.1**	**209.4**	**210.9**	**219.9**	**232.1**	**235.1**
Primary Energy	18.0	66.4	115.7	75.4	63.3	62.4	69.9	70.9	69.1	63.1
Coal	.1	.4	.2	.5	.2	.2	1.2	1.2	1.0	.4
Natural Gas	11.5	44.9	75.5	56.1	47.7	51.8	57.3	56.4	55.9	51.6
Petroleum	6.5	21.2	40.0	18.8	15.5	10.4	11.4	13.3	12.2	11.1
Distillate Fuel	1.7	13.0	31.4	12.8	9.5	4.5	4.5	4.6	5.3	4.9
Kerosene	.5	–	*	.2	*	*	*	*	*	*
LPG	.9	3.1	2.8	2.5	2.6	2.6	3.2	4.3	3.9	3.4
Motor Gasoline	3.3	4.8	3.5	2.7	3.2	3.1	3.5	4.2	3.0	2.7
Residual Fuel	*	.2	2.4	.6	.2	.1	.2	.2	*	*
Electricity	23.3	60.7	180.8	204.5	142.7	147.0	141.0	149.0	163.0	172.0
Industrial Sector	**67.2**	**329.7**	**493.1**	**336.7**	**342.8**	**348.1**	**R385.1**	**R396.8**	**R420.2**	**394.2**
Primary Energy	40.7	272.6	355.2	186.5	170.1	152.5	R192.9	R218.4	R236.3	216.3
Coal	.3	6.0	6.8	11.6	6.7	7.0	6.4	6.9	9.4	8.4
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.3	6.0	6.8	11.6	6.7	7.0	6.4	6.9	9.4	8.4
Natural Gas	10.4	45.2	35.7	26.3	24.4	24.1	27.6	28.4	28.7	47.3
Petroleum	30.0	221.4	312.7	148.5	139.0	121.4	R158.9	R183.0	R198.2	160.6
Asphalt and Road Oil	5.3	24.9	46.9	57.4	33.5	32.2	31.9	26.0	29.5	24.8
Distillate Fuel	6.5	58.2	203.3	45.1	54.7	41.6	72.3	87.2	120.0	82.0
Kerosene	1.5	–	*	*	.2	.1	.1	.2	.1	*
LPG	.9	15.9	17.9	13.6	15.2	11.1	R11.6	R19.8	R4.8	7.8
Lubricants	1.4	4.4	5.0	4.3	4.0	4.4	4.1	4.3	4.4	5.2
Motor Gasoline	9.6	32.5	32.6	22.6	22.8	23.4	28.4	30.7	29.1	28.2
Residual Fuel	.4	68.1	*	*	*	*	*	*	*	*
Other	4.4	17.4	7.1	5.5	8.6	8.7	10.5	14.8	10.3	12.5
Electricity	26.5	57.1	138.0	150.2	172.7	195.6	192.2	178.4	183.9	177.9
Transportation Sector	**157.9**	**767.3**	**673.8**	**543.5**	**589.6**	**618.9**	**675.9**	**752.1**	**R719.8**	**791.5**
Primary Energy	157.9	767.3	673.8	543.5	589.6	618.9	675.9	752.1	R719.8	791.5
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	157.9	767.3	673.8	543.5	589.6	618.9	675.9	752.1	R719.8	791.5
Aviation Gasoline	.5	7.3	4.6	4.4	3.1	4.0	4.0	5.2	4.8	3.3
Distillate Fuel	21.9	198.3	169.4	163.5	171.7	178.4	202.0	223.1	216.6	242.6
Jet Fuel	2.7	34.1	25.2	23.3	17.7	19.6	20.0	24.8	R19.0	26.3
LPG	.2	1.0	1.3	1.2	.8	1.0	1.2	2.0	1.5	1.1
Lubricants	4.7	17.1	19.1	16.5	15.2	16.9	15.8	16.3	16.8	19.9
Motor Gasoline	127.7	509.5	454.2	334.6	381.1	398.9	432.9	480.6	461.2	498.4
Residual Fuel	.3	–	*	–	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**333.1**	**1,412.0**	**1,760.9**	**1,423.2**	**1,404.3**	**1,451.6**	**R1,574.8**	**R1,669.5**	**R1,693.6**	**1,719.2**
Primary Energy — Four Sectors	249.0	1,204.3	1,272.3	907.4	915.5	930.0	R1,055.6	R1,159.1	R1,147.7	1,177.2
Electricity	84.1	207.7	488.6	515.8	488.8	521.6	519.2	510.4	545.8	542.0
Electric Utility Sector [a]	**3.4**	**44.3**	**69.2**	**87.0**	**85.9**	**99.1**	**102.2**	**110.6**	**119.3**	**132.7**
Coal	2.2	25.3	67.1	85.7	83.8	96.7	100.2	107.9	116.9	130.8
Natural Gas	.7	17.0	.3	.4	.5	.4	.5	.7	1.3	.9
Petroleum	.1	1.7	1.4	.6	1.1	1.5	1.5	2.0	1.1	1.0
Heavy Oil [b]	.1	–	–	–	–	–	–	–	–	–
Light Oil [b]	*	1.7	1.4	.6	1.1	1.5	1.5	2.0	1.1	1.0
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	.5	.3	.5	.2	.5	.5	([d])	([d])	([d])	([d])
Primary Energy — Five Sectors [c]	**252.4**	**1,248.6**	**1,341.5**	**994.4**	**1,001.4**	**1,029.1**	**R1,157.8**	**R1,269.7**	**R1,267.0**	**1,309.9**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[d] Utilities used biomass fuels at no charge or received a fee for accepting them.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Nebraska 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.32	1.27	1.17	1.08	0.98	0.87	0.85	0.78	0.78	0.78
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.32	1.27	1.17	1.08	.98	.87	.85	.78	.78	.78
Natural Gas	.50	2.40	4.43	4.08	3.71	3.81	3.84	3.93	3.93	4.10
Petroleum	2.12	8.27	8.34	6.46	6.66	6.25	7.25	8.33	R8.04	7.84
Asphalt and Road Oil	.71	3.89	5.04	3.93	3.85	3.54	3.09	3.15	3.18	2.62
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	.95	6.24	6.86	5.53	5.87	5.37	6.37	7.60	7.12	6.87
Jet Fuel	.75	6.47	6.19	4.43	4.38	4.14	4.54	6.03	5.01	4.64
Kerosene	1.18	5.56	8.86	4.23	4.41	3.97	5.62	6.56	6.20	6.00
LPG	1.56	5.70	7.00	7.20	6.84	6.96	7.36	8.83	7.79	7.31
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.03	10.06	9.67	7.28	7.58	7.22	8.42	9.49	9.43	9.09
Residual Fuel	.48	3.21	4.28	2.71	2.53	2.17	2.04	2.22	2.02	1.97
Other [a]	.51	7.71	13.38	6.68	7.33	6.14	8.48	8.18	8.00	10.08
Nuclear Fuel	–	.44	.65	.64	.64	.63	.65	.61	.62	.57
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	.99
Primary Energy — Five Sectors [b]	1.21	4.18	4.85	3.76	3.68	3.60	3.90	4.27	4.05	4.05
Electric Utility Fuel [c]	.30	1.00	1.01	.89	.82	.79	.78	.73	.72	.69
Electricity Purchased by End Users	5.12	11.76	15.70	15.62	15.65	15.52	16.22	16.34	16.05	16.18
Total Energy	1.72	6.52	8.09	7.13	7.13	6.88	7.60	8.37	R8.12	8.10
	Expenditures in Millions of Dollars									
Coal	9.6	119.4	135.5	118.5	114.1	121.7	112.7	110.2	118.4	110.2
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	9.6	119.4	135.5	118.5	114.1	121.7	112.7	110.2	118.4	110.2
Natural Gas	104.1	354.1	523.7	408.4	383.6	439.0	436.6	415.4	438.4	418.8
Petroleum	404.8	1,564.1	1,576.8	1,246.1	1,328.1	1,351.1	R1,488.0	1,694.9	R1,629.0	1,618.3
Asphalt and Road Oil	5.3	18.6	15.8	24.9	31.7	29.7	23.2	29.0	29.9	15.6
Aviation Gasoline	2.2	9.7	4.9	5.0	3.4	3.6	3.9	3.9	3.7	3.5
Distillate Fuel	41.4	332.7	494.9	388.1	420.7	437.4	461.0	551.7	539.9	563.6
Jet Fuel	7.3	56.2	45.9	32.8	32.9	34.2	37.1	50.0	R33.1	30.7
Kerosene	3.9	2.0	3.7	4.0	2.6	1.7	.7	1.5	.6	.7
LPG	33.2	94.2	65.3	64.1	80.6	89.0	R98.2	R93.2	89.2	85.5
Lubricants	14.8	33.9	37.8	32.7	30.2	33.4	31.2	32.4	33.3	39.4
Motor Gasoline	294.4	1,008.9	901.2	679.4	710.3	706.3	814.2	914.9	881.7	857.8
Residual Fuel	2.3	4.3	1.7	4.3	4.2	5.6	4.8	3.6	2.5	2.3
Other [a]	.1	3.7	5.6	10.7	11.5	10.2	13.9	14.7	14.9	19.3
Nuclear Fuel	–	27.7	29.3	52.8	59.0	46.5	56.3	49.3	53.4	53.6
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	.1
Primary Energy — Five Sectors [b]	518.6	2,065.3	2,265.3	1,825.8	1,884.7	1,958.3	R2,093.7	R2,269.7	R2,239.2	2,201.0
Electric Utility Fuel [c]	-22.3	-164.7	-158.7	-167.8	-169.4	-166.5	-168.9	-161.1	-169.5	-159.2
Electricity Purchased by End Users	170.3	550.6	841.2	846.3	864.2	914.0	972.0	996.0	1,019.0	982.0
Total Energy	666.6	2,451.2	2,947.8	2,504.4	2,579.5	2,705.8	R2,896.8	3,104.7	R3,088.7	3,023.8

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Nebraska 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1.84**	**5.83**	**8.83**	**8.64**	**8.82**	**8.75**	**8.99**	**9.45**	**9.19**	**9.44**
Primary Energy	1.04	3.32	5.37	4.68	4.52	4.60	4.85	4.96	4.94	5.10
Coal	1.08	3.60	2.76	2.40	2.43	2.49	2.42	2.42	2.36	2.39
Natural Gas	.84	2.78	5.10	4.62	4.43	4.53	4.54	4.67	4.71	4.92
Petroleum	1.69	6.84	7.49	5.21	5.18	5.23	7.21	7.57	6.79	6.48
Distillate Fuel	1.19	6.85	7.92	4.88	4.50	4.27	5.37	6.74	6.25	5.52
Kerosene	1.39	7.55	9.74	6.00	5.54	5.25	6.61	8.28	7.69	6.78
LPG	1.78	6.82	7.12	5.34	5.35	5.48	7.82	7.79	6.92	6.65
Electricity	6.21	13.22	17.30	17.27	17.52	17.42	18.05	18.23	17.86	18.36
Commercial Sector	**1.36**	**5.01**	**8.34**	**8.22**	**8.31**	**8.04**	**8.57**	**8.87**	**8.57**	**9.03**
Primary Energy	.59	2.62	4.68	4.05	3.90	3.88	3.95	4.17	4.08	4.20
Coal	.16	1.69	2.46	1.70	1.63	1.56	1.47	1.48	1.54	1.57
Natural Gas	.52	2.33	4.29	3.95	3.76	3.81	3.82	3.92	3.93	4.07
Petroleum	1.09	6.81	7.21	5.18	5.28	5.00	5.60	7.01	6.51	5.67
Distillate Fuel	1.03	6.49	6.79	3.49	3.54	3.04	4.03	5.07	4.44	4.18
Kerosene	.79	5.17	7.81	4.01	4.24	3.63	5.02	6.36	5.53	5.18
LPG	1.09	5.19	6.92	8.25	7.76	7.73	7.13	9.36	8.34	7.73
Motor Gasoline	3.03	10.06	9.67	7.28	7.58	7.22	8.42	9.49	9.43	9.09
Residual Fuel	.50	3.22	–	–	2.60	2.13	2.02	2.22	2.03	1.97
Electricity	4.87	12.86	16.78	16.55	16.43	16.22	16.93	17.22	16.82	17.12
Industrial Sector	**.88**	**4.50**	**6.42**	**5.21**	**5.00**	**4.80**	**5.44**	**6.11**	**5.72**	**5.63**
Primary Energy	.69	3.87	5.59	4.12	3.99	3.76	4.20	4.85	4.45	4.36
Coal	.16	1.69	2.46	1.70	1.63	1.56	1.47	1.48	1.54	1.57
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.16	1.69	2.46	1.70	1.63	1.56	1.47	1.48	1.54	1.57
Natural Gas	.32	2.21	3.67	3.28	2.81	2.90	2.96	3.02	2.80	2.98
Petroleum	1.26	5.88	7.47	4.81	5.02	4.52	5.29	6.14	5.60	5.45
Asphalt and Road Oil	.71	3.89	5.04	3.93	3.85	3.54	3.09	3.15	3.18	2.62
Distillate Fuel	.73	4.94	7.09	3.64	3.85	3.30	4.56	5.78	5.02	4.70
Kerosene	.79	5.17	7.81	4.01	4.24	3.63	5.02	6.36	5.53	5.18
LPG	1.09	5.19	6.92	8.25	7.76	7.73	7.13	9.36	8.34	7.73
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.03	10.06	9.67	7.28	7.58	7.22	8.42	9.49	9.43	9.09
Residual Fuel	.40	3.13	4.28	2.81	2.60	2.13	2.02	2.22	2.03	1.97
Other	.51	7.71	13.38	6.68	7.33	6.14	8.48	8.18	8.00	10.08
Electricity	3.42	8.71	11.47	11.42	11.34	11.28	12.34	12.31	12.19	11.90
Transportation Sector	**2.51**	**9.20**	**8.70**	**7.10**	**7.31**	**6.90**	**7.95**	**9.10**	**R 8.98**	**8.70**
Primary Energy	2.51	9.20	8.70	7.10	7.31	6.90	7.95	9.10	R 8.98	8.70
Coal	.16	–	–	–	–	–	–	–	–	–
Petroleum	2.51	9.20	8.70	7.10	7.31	6.90	7.95	9.10	R 8.98	8.70
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.14	7.06	6.68	6.79	7.02	6.47	7.39	8.66	8.44	8.20
Jet Fuel	.75	6.47	6.19	4.43	4.38	4.14	4.54	6.03	5.01	4.64
LPG	1.09	5.19	6.92	8.25	7.76	7.73	7.13	9.36	8.34	7.73
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.03	10.06	9.67	7.28	7.58	7.22	8.42	9.49	9.43	9.09
Residual Fuel	.50	–	–	2.32	2.29	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.72**	**6.52**	**8.09**	**7.13**	**7.13**	**6.88**	**7.60**	**8.37**	**R 8.12**	**8.10**
Primary Energy — Four Sectors	1.40	5.77	6.78	5.58	5.60	5.36	5.99	6.80	6.53	6.53
Electricity	5.12	11.76	15.70	15.62	15.65	15.52	16.22	16.34	16.05	16.18
Electric Utility Sector [a]	**.30**	**1.00**	**1.01**	**.89**	**.82**	**.79**	**.78**	**.73**	**.72**	**.69**
Coal	.35	1.24	1.11	1.04	.94	.84	.83	.75	.74	.75
Natural Gas	.27	1.82	3.58	3.21	2.56	2.69	2.36	2.01	1.97	2.38
Petroleum	.54	4.14	5.89	3.05	2.87	2.83	3.09	6.89	4.20	4.65
Heavy Oil [b]	.49	3.21	–	2.32	2.29	2.34	2.15	1.85	1.41	–
Light Oil [b]	.63	6.19	5.89	3.87	3.98	3.47	4.35	7.03	4.57	4.65
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	.44	.65	.64	.64	.63	.65	.61	.62	.57
Biomass Fuels	–	–	–	–	–	–	–	–	–	.99
Primary Energy — Five Sectors [c]	**1.21**	**4.18**	**4.85**	**3.76**	**3.68**	**3.60**	**3.90**	**4.27**	**4.05**	**4.05**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Nebraska 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**167.4**	**433.0**	**643.2**	**592.6**	**580.5**	**629.1**	**657.8**	**648.4**	**680.7**	**645.9**
Primary Energy	80.3	184.0	277.7	220.0	199.1	224.1	243.8	225.4	245.7	234.8
Coal	.3	.4	.3	.1	.1	.7	.1	.1	.3	.1
Natural Gas	49.6	133.5	233.9	194.0	169.5	194.0	200.7	190.9	207.3	199.6
Petroleum	30.4	50.0	43.5	26.0	29.6	29.4	42.9	34.4	38.1	35.1
Distillate Fuel	1.4	14.4	15.7	8.0	5.3	4.9	7.8	6.6	7.2	4.7
Kerosene	3.0	.4	2.2	.6	.4	.5	.3	.2	.2	.4
LPG	26.1	35.2	25.6	17.3	23.9	23.9	34.8	27.6	30.7	30.0
Electricity	87.0	249.1	365.5	372.6	381.4	405.0	414.0	423.0	435.0	411.0
Commercial Sector	**89.9**	**298.5**	**538.2**	**487.3**	**479.5**	**516.1**	**532.1**	**541.9**	**561.8**	**533.4**
Primary Energy	31.7	120.0	211.0	160.0	145.7	165.1	158.1	162.9	172.8	155.4
Coal	.1	.4	.4	.1	.1	.8	.1	.1	.2	.1
Natural Gas	24.7	99.1	166.0	142.8	126.6	147.7	140.8	140.8	155.9	137.6
Petroleum	6.8	20.5	44.6	17.1	19.0	16.6	17.1	22.0	16.7	17.7
Distillate Fuel	1.2	6.8	31.7	6.8	7.3	5.3	5.3	7.3	4.7	6.6
Kerosene	.3	.6	.5	.2	.1	*	.1	.8	.1	*
LPG	2.8	4.7	4.4	4.7	6.1	6.0	5.6	5.9	6.5	6.2
Motor Gasoline	1.7	7.9	8.0	5.4	5.5	5.1	5.6	7.7	5.0	4.4
Residual Fuel	.8	.5	–	–	*	.2	.6	.3	.3	.5
Electricity	58.3	178.5	327.2	327.3	333.8	351.0	374.0	379.0	389.0	378.0
Industrial Sector	**92.3**	**486.6**	**589.9**	**446.1**	**479.4**	**488.3**	**R534.1**	**572.2**	**556.3**	**542.7**
Primary Energy	67.4	363.7	441.4	299.7	330.4	330.3	R350.1	378.2	361.3	349.7
Coal	.8	8.7	11.9	10.6	9.4	7.8	7.9	6.6	9.4	9.4
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.8	8.7	11.9	10.6	9.4	7.8	7.9	6.6	9.4	9.4
Natural Gas	17.0	101.1	119.4	66.3	83.2	92.1	89.2	76.5	68.3	77.2
Petroleum	49.6	253.9	310.0	222.7	237.8	230.5	R253.0	295.1	283.5	263.1
Asphalt and Road Oil	5.3	18.6	15.8	24.9	31.7	29.7	23.2	29.0	29.9	15.6
Distillate Fuel	14.0	98.1	177.4	90.4	87.1	83.5	106.1	139.3	136.1	134.6
Kerosene	.6	.9	1.0	3.2	2.1	1.2	.3	.5	.3	.2
LPG	3.4	51.0	33.9	41.0	49.2	57.6	R56.0	57.7	50.0	48.0
Lubricants	4.9	3.6	4.0	3.5	3.2	3.5	3.3	3.4	3.5	4.2
Motor Gasoline	21.0	77.7	70.7	45.5	49.6	40.4	46.8	47.1	46.6	39.4
Residual Fuel	.3	.3	1.7	3.5	3.4	4.3	3.4	3.3	2.2	1.8
Other	.1	3.7	5.6	10.7	11.5	10.2	13.9	14.7	14.9	19.3
Electricity	25.0	123.0	148.5	146.4	149.0	158.0	184.0	194.0	195.0	193.0
Transportation Sector	**317.0**	**1,233.0**	**1,176.5**	**978.4**	**1,040.1**	**1,072.3**	**1,172.8**	**1,342.2**	**R1,289.9**	**1,301.8**
Primary Energy	317.0	1,233.0	1,176.5	978.4	1,040.1	1,072.3	1,172.8	1,342.2	R1,289.9	1,301.8
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	317.0	1,233.0	1,176.5	978.4	1,040.1	1,072.3	1,172.8	1,342.2	R1,289.9	1,301.8
Aviation Gasoline	2.2	9.7	4.9	5.0	3.4	3.6	3.9	3.9	3.7	3.5
Distillate Fuel	24.4	210.2	268.1	281.8	320.3	342.3	340.4	397.2	391.2	417.1
Jet Fuel	7.3	56.2	45.9	32.8	32.9	34.2	37.1	50.0	R33.1	30.7
LPG	.9	3.3	1.4	1.1	1.4	1.4	1.7	2.1	1.9	1.3
Lubricants	9.8	30.3	33.8	29.3	27.0	29.9	27.9	29.0	29.8	35.2
Motor Gasoline	271.7	923.3	822.4	628.5	655.2	660.8	761.8	860.1	830.2	814.0
Residual Fuel	.7	–	–	*	*	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**666.6**	**2,451.2**	**2,947.8**	**2,504.4**	**2,579.5**	**2,705.8**	**R2,896.8**	**3,104.7**	**R3,088.7**	**3,023.8**
Primary Energy — Four Sectors	496.3	1,900.6	2,106.6	1,658.1	1,715.3	1,791.8	R1,924.8	2,108.7	R2,069.7	2,041.8
Electricity	170.3	550.6	841.2	846.3	864.2	914.0	972.0	996.0	1,019.0	982.0
Electric Utility Sector [a]	**22.3**	**164.7**	**158.7**	**167.8**	**169.4**	**166.5**	**168.9**	**161.1**	**169.5**	**159.2**
Coal	8.5	109.8	122.9	107.7	104.5	112.3	104.7	103.4	108.5	100.6
Natural Gas	12.8	20.5	4.4	5.3	4.4	5.2	5.9	7.2	6.8	4.3
Petroleum	1.0	6.7	2.1	1.9	1.6	2.4	2.1	1.3	.8	.7
Heavy Oil [b]	.6	3.6	–	.8	.8	1.1	.8	*	*	–
Light Oil [b]	.5	3.1	2.1	1.1	.8	1.3	1.2	1.3	.7	.7
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	27.7	29.3	52.8	59.0	46.5	56.3	49.3	53.4	53.6
Biomass Fuels	–	–	–	–	–	–	–	–	–	.1
Primary Energy — Five Sectors [c]	**518.6**	**2,065.3**	**2,265.3**	**1,825.8**	**1,884.7**	**1,958.3**	**R2,093.7**	**R2,269.7**	**R2,239.2**	**2,201.0**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Nevada 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.37	1.06	1.62	1.40	1.40	1.37	1.52	1.49	1.41	1.46
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.37	1.06	1.62	1.40	1.40	1.37	1.52	1.49	1.41	1.46
Natural Gas	.61	3.10	5.44	4.60	4.25	4.49	3.84	3.68	3.72	3.65
Petroleum	1.95	7.67	7.77	5.82	5.82	6.03	6.96	7.87	R 7.45	7.67
Asphalt and Road Oil	.59	3.69	4.78	4.34	3.27	3.28	2.73	2.60	3.27	2.91
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.29	6.97	7.32	5.44	5.70	5.83	6.92	7.59	7.33	7.30
Jet Fuel	.76	6.59	6.22	4.25	4.27	4.08	4.79	6.26	5.00	4.70
Kerosene	.77	–	14.41	12.71	8.60	9.20	12.05	10.02	9.48	10.27
LPG	2.91	7.07	11.46	10.85	10.13	10.07	12.60	11.36	R 12.20	12.75
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.07	9.96	8.77	6.75	6.79	7.32	8.19	9.10	8.83	9.30
Residual Fuel	.58	3.58	4.45	2.04	2.41	2.39	2.73	2.93	3.69	3.15
Other [a]	.43	4.04	3.39	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.32	4.69	4.89	3.58	3.69	3.69	R 4.21	4.56	4.27	4.39
Electric Utility Fuel [c]	.36	1.68	1.79	1.47	1.47	1.47	1.62	1.59	1.48	1.55
Electricity Purchased by End Users	3.89	13.18	16.75	17.16	15.45	15.93	15.46	15.77	16.47	16.69
Total Energy	1.96	8.18	9.03	7.81	7.37	7.73	8.24	8.99	R 8.78	9.07
	Expenditures in Millions of Dollars									
Coal	6.4	99.1	204.2	225.5	217.1	250.5	259.3	247.3	253.8	261.6
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	6.4	99.1	204.2	225.5	217.1	250.5	259.3	247.3	253.8	261.6
Natural Gas	34.5	191.5	222.8	162.3	173.6	213.0	245.9	243.0	245.1	252.7
Petroleum	176.6	1,125.9	1,055.0	821.8	905.0	1,003.6	R 1,212.8	1,349.6	R 1,291.9	1,343.6
Asphalt and Road Oil	2.4	15.0	26.8	16.3	18.7	20.3	25.3	18.7	23.3	16.2
Aviation Gasoline	2.0	9.4	5.3	5.2	3.8	4.5	4.9	5.2	4.9	4.5
Distillate Fuel	21.2	160.9	230.4	172.6	214.8	229.6	299.9	325.2	302.6	311.9
Jet Fuel	19.2	266.2	197.0	140.5	152.5	145.3	162.6	212.9	R 182.5	161.8
Kerosene	.1	–	4.3	3.7	1.7	1.5	1.8	1.1	1.2	1.4
LPG	9.2	22.9	40.6	33.5	32.1	36.8	72.2	58.9	R 45.9	41.6
Lubricants	3.2	9.4	10.5	9.1	8.4	9.3	8.7	9.0	9.3	11.0
Motor Gasoline	118.7	587.0	535.6	432.9	465.1	541.6	626.3	710.2	712.1	783.8
Residual Fuel	.5	55.0	4.4	8.0	7.8	14.8	11.1	8.4	10.2	11.4
Other [a]	*	.1	.1	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	217.5	1,416.5	1,481.9	1,209.6	1,295.7	1,467.1	R 1,717.9	1,839.9	R 1,790.8	1,857.9
Electric Utility Fuel [c]	-15.1	-226.1	-238.1	-249.1	-239.1	-290.8	-315.8	-301.8	-296.7	-314.8
Electricity Purchased by End Users	75.7	468.2	634.3	655.8	638.7	717.3	773.1	879.9	914.1	987.2
Total Energy	278.1	1,658.6	1,878.1	1,616.2	1,695.4	1,893.6	R 2,175.2	2,418.0	R 2,408.2	2,530.3

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
*Value less than 0.05 million dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Nevada 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.70**	**8.74**	**12.59**	**12.41**	**11.09**	**11.70**	**11.32**	**11.26**	**11.32**	**12.06**
Primary Energy	1.76	4.58	7.61	6.63	6.00	6.53	6.94	6.61	6.39	6.46
Coal	1.31	5.13	4.54	4.49	4.11	3.83	4.14	5.03	4.07	4.14
Natural Gas	1.39	3.87	6.63	5.62	5.29	5.89	5.38	5.49	5.41	5.40
Petroleum	2.51	8.31	10.68	10.22	8.59	8.93	12.70	11.10	11.21	11.98
Distillate Fuel	1.27	6.92	7.55	7.26	5.79	6.02	8.26	6.76	6.58	7.73
Kerosene	–	–	15.04	14.46	11.54	11.99	16.46	13.48	13.11	15.41
LPG	3.52	9.28	12.40	11.84	11.19	10.97	14.68	13.10	13.42	14.23
Electricity	4.46	14.21	18.83	19.28	17.05	17.58	16.78	16.72	17.28	18.12
Commercial Sector	**2.15**	**7.73**	**11.26**	**10.74**	**9.36**	**10.01**	**10.10**	**10.51**	**10.44**	**10.77**
Primary Energy	.77	4.29	6.17	4.89	4.47	4.84	4.84	4.77	4.58	4.60
Coal	.52	1.36	1.58	1.66	1.53	1.49	1.62	1.51	1.51	1.45
Natural Gas	.70	3.68	5.77	4.63	4.27	4.64	4.30	4.25	4.19	4.19
Petroleum	1.34	6.78	8.02	5.76	5.03	5.72	7.48	7.50	7.26	7.37
Distillate Fuel	1.12	6.60	7.76	5.32	4.60	5.09	6.73	6.79	6.38	6.54
Kerosene	.77	–	9.06	4.52	4.65	4.97	6.59	7.19	6.46	6.65
LPG	1.16	4.99	9.63	9.06	8.52	8.58	10.08	9.03	9.29	9.26
Motor Gasoline	3.07	9.96	8.77	6.75	6.79	7.32	8.19	9.10	8.83	9.30
Residual Fuel	.62	3.53	4.80	2.30	2.64	2.32	2.52	2.85	2.54	2.44
Electricity	4.74	15.39	18.24	18.66	16.59	16.94	16.85	17.39	17.88	17.85
Industrial Sector	**1.02**	**7.20**	**8.06**	**7.56**	**6.75**	**6.81**	**7.28**	**7.98**	**R8.03**	**8.22**
Primary Energy	.75	3.67	5.72	4.01	3.82	3.98	4.80	4.94	R4.58	4.64
Coal	.52	1.36	1.58	1.66	1.53	1.49	1.62	1.51	1.51	1.45
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.52	1.36	1.58	1.66	1.53	1.49	1.62	1.51	1.51	1.45
Natural Gas	.52	2.83	4.05	3.76	3.72	3.84	4.83	3.98	4.06	3.93
Petroleum	1.04	5.10	6.97	4.46	4.20	4.34	5.19	5.67	R5.23	5.40
Asphalt and Road Oil	.59	3.69	4.78	4.34	3.27	3.28	2.73	2.60	3.27	2.91
Distillate Fuel	.96	5.56	7.97	3.97	4.09	4.37	5.80	6.32	5.67	5.84
Kerosene	.77	–	9.06	4.52	4.65	4.97	6.59	7.19	6.46	6.65
LPG	1.16	4.99	9.63	9.06	8.52	8.58	10.08	9.03	9.29	9.26
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.07	9.96	8.77	6.75	6.79	7.32	8.19	9.10	8.83	9.30
Residual Fuel	.49	3.75	4.80	2.30	2.64	2.32	2.52	2.85	2.54	2.44
Other	.43	4.04	3.39	–	–	–	–	–	–	–
Electricity	2.14	11.63	12.91	13.36	12.46	13.01	12.99	13.76	14.53	14.43
Transportation Sector	**2.08**	**8.44**	**7.79**	**5.96**	**6.07**	**6.40**	**7.27**	**8.36**	**R7.85**	**8.08**
Primary Energy	2.08	8.44	7.79	5.96	6.07	6.40	7.27	8.36	R7.85	8.08
Coal	.52	–	–	–	–	–	–	–	–	–
Petroleum	2.08	8.44	7.79	5.96	6.07	6.40	7.27	8.36	R7.85	8.08
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.50	7.36	6.97	6.01	6.59	6.87	7.76	8.97	8.89	8.53
Jet Fuel	.76	6.59	6.22	4.25	4.27	4.08	4.79	6.26	5.00	4.70
LPG	1.16	4.99	9.63	9.06	8.52	8.58	10.08	9.03	9.29	9.26
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.07	9.96	8.77	6.75	6.79	7.32	8.19	9.10	8.83	9.30
Residual Fuel	.60	–	–	1.86	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.96**	**8.18**	**9.03**	**7.81**	**7.37**	**7.73**	**8.24**	**8.99**	**R8.78**	**9.07**
Primary Energy — Four Sectors	1.65	7.12	7.31	5.69	5.60	5.89	6.55	7.22	R6.83	7.02
Electricity	3.89	13.18	16.75	17.16	15.45	15.93	15.46	15.77	16.47	16.69
Electric Utility Sector [a]	**.36**	**1.68**	**1.79**	**1.47**	**1.47**	**1.47**	**1.62**	**1.59**	**1.48**	**1.55**
Coal	.30	1.05	1.62	1.39	1.40	1.36	1.52	1.49	1.41	1.46
Natural Gas	.38	2.59	4.07	3.04	2.58	2.72	2.11	1.96	1.73	1.87
Petroleum	.62	3.60	4.91	2.06	2.51	2.51	2.97	3.50	4.05	3.41
Heavy Oil [b]	.61	3.58	3.71	1.97	2.36	2.40	2.74	2.93	3.86	3.23
Light Oil [b]	.70	5.58	6.12	3.94	4.41	4.05	5.19	6.47	5.20	4.90
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.32**	**4.69**	**4.89**	**3.58**	**3.69**	**3.69**	**R4.21**	**4.56**	**4.27**	**4.39**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Nevada 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**52.6**	**255.1**	**399.4**	**380.0**	**372.8**	**424.0**	**448.7**	**462.1**	**493.2**	**519.9**
Primary Energy	22.4	75.9	134.3	110.4	108.9	126.0	152.7	146.1	152.2	144.9
Coal	.7	.2	.1	.1	.1	.1	.1	.2	.1	*
Natural Gas	10.9	53.6	88.7	72.9	75.1	89.7	93.0	97.1	107.3	101.6
Petroleum	10.7	22.1	45.6	37.4	33.7	36.3	59.6	48.9	44.8	43.2
Distillate Fuel	2.4	7.5	12.5	10.4	11.0	10.2	12.1	9.4	8.5	9.8
Kerosene	–	–	4.0	3.5	1.3	1.1	1.3	.6	.8	.8
LPG	8.3	14.6	29.1	23.5	21.4	25.0	46.1	38.8	35.6	32.6
Electricity	30.3	179.2	265.1	269.5	263.9	298.0	296.0	316.0	341.0	375.0
Commercial Sector	**43.7**	**151.1**	**310.4**	**297.9**	**296.0**	**322.1**	**338.3**	**358.8**	**377.7**	**387.4**
Primary Energy	10.3	57.9	98.4	78.0	84.4	89.1	91.3	88.8	92.7	88.4
Coal	.5	.1	*	.1	*	*	*	.1	*	*
Natural Gas	7.3	39.6	74.9	56.2	59.0	68.7	67.1	66.0	73.6	69.8
Petroleum	2.5	18.3	23.4	21.7	25.4	20.4	24.1	22.7	19.0	18.6
Distillate Fuel	1.0	13.6	14.6	15.3	19.2	13.5	14.8	13.8	10.9	11.3
Kerosene	*	–	.2	.1	.1	.2	.2	.1	.1	.2
LPG	.5	1.4	4.0	3.2	2.9	3.4	5.6	4.7	4.3	3.7
Motor Gasoline	.8	3.2	3.8	2.9	3.0	3.1	3.5	4.0	3.6	3.4
Residual Fuel	.1	.2	.8	.2	.2	.1	*	*	*	*
Electricity	33.4	93.2	212.0	219.9	211.6	233.0	247.0	270.0	285.0	299.0
Industrial Sector	**29.7**	**273.4**	**300.9**	**247.9**	**261.0**	**311.3**	**R425.7**	**494.6**	**R458.7**	**487.7**
Primary Energy	17.7	77.6	143.7	81.6	97.7	125.0	195.5	200.6	R170.5	174.5
Coal	.9	4.6	4.1	4.1	4.0	4.2	6.1	5.9	6.9	5.8
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.9	4.6	4.1	4.1	4.0	4.2	6.1	5.9	6.9	5.8
Natural Gas	5.8	21.9	24.2	12.1	20.7	24.8	35.3	30.8	25.5	34.7
Petroleum	11.0	51.1	115.4	65.4	73.1	96.0	R154.1	163.9	R138.2	134.0
Asphalt and Road Oil	2.4	15.0	26.8	16.3	18.7	20.3	25.3	18.7	23.3	16.2
Distillate Fuel	4.7	21.1	71.1	34.4	38.1	58.7	99.7	120.0	98.0	101.2
Kerosene	*	–	*	.1	.3	.1	.3	.3	.3	.4
LPG	.4	6.9	6.5	6.0	7.3	7.7	19.8	14.6	R5.3	4.4
Lubricants	.7	2.2	2.4	2.1	1.9	2.2	2.0	2.1	2.2	2.5
Motor Gasoline	2.7	5.8	6.0	4.9	5.5	5.6	6.4	8.1	8.3	8.4
Residual Fuel	.1	*	2.5	1.6	1.3	1.5	.7	.1	.9	.8
Other	*	.1	.1	–	–	–	–	–	–	–
Electricity	12.0	195.8	157.2	166.3	163.2	186.4	230.1	294.0	288.1	313.2
Transportation Sector	**152.1**	**978.9**	**867.5**	**690.5**	**765.7**	**836.1**	**962.6**	**1,102.6**	**R1,078.6**	**1,135.3**
Primary Energy	152.1	978.9	867.5	690.5	765.7	836.1	962.6	1,102.6	R1,078.6	1,135.3
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	152.1	978.9	867.5	690.5	765.7	836.1	962.6	1,102.6	R1,078.6	1,135.3
Aviation Gasoline	2.0	9.4	5.3	5.2	3.8	4.5	4.9	5.2	4.9	4.5
Distillate Fuel	13.0	118.0	130.3	111.9	145.7	145.5	171.2	178.7	183.1	187.7
Jet Fuel	19.2	266.2	197.0	140.5	152.5	145.3	162.6	212.9	R182.5	161.8
LPG	*	.1	1.1	.7	.5	.7	.7	.7	.7	.8
Lubricants	2.6	7.3	8.1	7.0	6.5	7.2	6.7	6.9	7.1	8.4
Motor Gasoline	115.3	578.0	525.7	425.0	456.6	532.9	616.5	698.1	700.2	772.0
Residual Fuel	*	–	–	*	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**278.1**	**1,658.6**	**1,878.1**	**1,616.2**	**1,695.4**	**1,893.6**	**R2,175.2**	**2,418.0**	**R2,408.2**	**2,530.3**
Primary Energy — Four Sectors	202.5	1,190.4	1,243.9	960.4	1,056.6	1,176.3	R1,402.1	1,538.1	R1,494.1	1,543.1
Electricity	75.7	468.2	634.3	655.8	638.7	717.3	773.1	879.9	914.1	987.2
Electric Utility Sector [a]	**15.1**	**226.1**	**238.1**	**249.1**	**239.1**	**290.8**	**315.8**	**301.8**	**296.7**	**314.8**
Coal	4.3	94.2	199.9	221.2	213.0	246.2	253.0	241.1	246.8	255.7
Natural Gas	10.5	76.4	35.0	21.1	18.9	29.8	50.4	49.1	38.6	46.6
Petroleum	.4	55.5	3.1	6.8	7.2	14.8	12.4	11.6	11.3	12.4
Heavy Oil [b]	.3	54.8	1.2	6.2	6.3	13.2	10.4	8.2	9.2	10.5
Light Oil [b]	.1	.7	1.9	.6	.9	1.6	2.0	3.4	2.0	1.9
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**217.5**	**1,416.5**	**1,481.9**	**1,209.6**	**1,295.7**	**1,467.1**	**R1,717.9**	**1,839.9**	**R1,790.8**	**1,857.9**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, New Hampshire 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.37	1.60	2.03	2.01	1.93	1.79	1.75	1.82	1.81	1.73
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.37	1.60	2.03	2.01	1.93	1.79	1.75	1.82	1.81	1.73
Natural Gas	1.65	4.27	6.44	6.53	5.75	5.50	6.06	6.38	6.12	6.23
Petroleum	1.60	7.29	7.78	5.44	5.92	5.82	6.43	7.24	R7.32	7.20
Asphalt and Road Oil	.70	4.00	5.20	4.86	3.54	3.34	3.17	3.34	3.05	2.78
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.38	6.97	7.51	5.52	5.54	5.66	6.33	7.30	6.69	6.30
Jet Fuel	.75	6.51	6.53	4.93	4.18	4.22	4.83	6.40	5.36	4.86
Kerosene	1.50	8.05	8.71	6.34	6.33	6.48	7.39	8.56	7.55	7.07
LPG	2.06	6.89	11.42	10.87	10.68	10.55	10.32	11.55	12.82	11.54
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.92	10.11	9.26	7.32	7.60	7.82	8.60	9.66	9.55	9.50
Residual Fuel	.42	3.82	3.81	2.02	2.67	1.94	2.33	2.43	1.90	1.93
Other [a]	1.76	8.04	10.67	9.89	10.07	8.53	12.52	10.75	11.29	16.01
Nuclear Fuel	–	–	–	–	–	–	–	1.03	.84	.95
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.41	6.16	6.41	5.05	5.30	5.17	5.72	5.37	4.74	4.57
Electric Utility Fuel [c]	.36	2.68	2.46	1.95	2.20	1.83	2.01	1.58	1.22	1.24
Electricity Purchased by End Users	6.74	19.55	23.28	22.14	23.25	24.24	24.49	26.67	26.76	29.23
Total Energy	2.20	9.59	10.68	8.89	9.08	9.63	10.17	11.28	R11.11	11.31
	Expenditures in Millions of Dollars									
Coal	10.1	46.9	80.5	50.4	60.9	58.7	55.3	57.2	62.7	60.1
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	10.1	46.9	80.5	50.4	60.9	58.7	55.3	57.2	62.7	60.1
Natural Gas	11.2	41.0	69.7	68.8	70.7	73.2	86.0	92.2	86.9	105.4
Petroleum	225.2	971.1	989.6	834.0	952.6	948.5	1,093.7	1,111.5	R1,039.8	1,026.7
Asphalt and Road Oil	2.5	6.7	29.5	17.8	18.3	9.5	15.6	26.6	13.3	14.6
Aviation Gasoline	.4	1.8	1.2	1.6	1.1	1.4	1.4	1.0	1.1	.8
Distillate Fuel	61.9	236.1	229.4	185.7	243.5	224.4	278.6	269.2	247.6	242.8
Jet Fuel	4.2	27.3	18.4	16.5	14.6	16.6	20.0	22.7	R13.9	10.2
Kerosene	6.6	15.5	44.5	13.7	16.7	18.1	22.5	12.9	13.8	11.7
LPG	6.5	31.3	65.3	66.5	80.3	80.3	93.8	88.9	76.5	73.7
Lubricants	2.2	7.3	8.1	7.0	6.5	7.2	6.7	6.9	7.1	8.4
Motor Gasoline	124.4	498.1	502.8	427.7	471.6	506.7	554.9	594.2	608.8	604.4
Residual Fuel	14.7	135.5	82.4	90.1	92.4	77.6	90.5	80.3	48.0	45.8
Other [a]	1.6	11.6	8.1	7.3	7.5	6.7	9.7	8.8	9.6	14.2
Nuclear Fuel	–	–	–	–	–	–	–	45.0	61.4	80.0
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	246.4	1,059.1	1,139.8	953.2	1,084.2	1,080.4	1,234.9	1,305.9	R1,250.8	1,272.2
Electric Utility Fuel [c]	-15.6	-150.9	-131.5	-104.3	-118.2	-115.5	-127.3	-156.9	-149.3	-163.0
Electricity Purchased by End Users	83.5	394.5	588.4	594.8	664.3	731.9	759.1	817.1	800.0	893.0
Total Energy	314.3	1,302.6	1,596.7	1,443.7	1,630.4	1,696.9	1,866.7	1,966.1	R1,901.5	2,002.3

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, New Hampshire 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.27**	**10.17**	**12.17**	**11.22**	**11.16**	**11.81**	**11.95**	**14.04**	**13.51**	**13.81**
Primary Energy	1.59	7.03	7.89	6.40	6.32	6.46	7.14	8.16	7.61	7.21
Coal	1.29	3.90	4.39	4.93	4.04	4.08	4.09	4.23	4.15	3.96
Natural Gas	1.97	4.57	6.96	6.88	6.32	6.13	6.72	7.31	7.09	7.20
Petroleum	1.56	7.48	8.07	6.30	6.33	6.54	7.23	8.38	7.76	7.24
Distillate Fuel	1.51	7.24	7.38	5.47	5.52	5.64	6.44	7.41	6.60	6.17
Kerosene	1.58	8.15	8.81	6.53	6.58	6.73	7.68	8.84	7.88	7.36
LPG	2.58	9.22	11.14	10.35	10.37	10.37	10.37	11.90	13.12	12.13
Electricity	8.29	20.93	26.15	25.02	26.68	27.75	27.97	30.30	30.38	33.26
Commercial Sector	**3.12**	**9.46**	**13.16**	**10.38**	**10.34**	**10.97**	**11.49**	**12.24**	**12.19**	**13.60**
Primary Energy	1.23	5.36	6.69	4.94	5.04	4.86	5.39	5.68	5.28	5.54
Coal	.95	1.69	2.40	2.13	2.39	2.56	2.60	2.62	2.62	2.62
Natural Gas	1.42	4.05	6.13	6.36	5.65	5.52	6.11	6.64	6.31	6.43
Petroleum	1.14	5.95	7.31	4.33	4.84	4.59	5.08	5.32	4.90	5.03
Distillate Fuel	1.11	6.44	6.71	4.29	4.51	4.50	5.00	5.67	5.53	5.15
Kerosene	.74	6.27	6.86	3.91	4.76	4.48	5.37	6.49	5.84	5.36
LPG	1.37	4.78	11.75	11.70	11.14	10.88	10.22	10.80	11.94	9.96
Motor Gasoline	2.92	10.11	9.26	7.32	7.60	7.82	8.60	9.66	9.55	9.50
Residual Fuel	.34	3.76	4.20	2.23	2.86	2.22	2.63	3.06	2.26	2.11
Electricity	8.80	24.30	25.55	24.03	25.01	25.78	26.23	28.38	28.62	31.01
Industrial Sector	**1.20**	**8.68**	**10.47**	**8.63**	**9.09**	**10.57**	**10.71**	**10.94**	**11.39**	**10.85**
Primary Energy	.67	4.94	5.87	4.01	4.47	4.32	4.86	4.70	4.48	4.10
Coal	.95	1.69	2.40	2.13	2.39	2.56	2.60	2.62	2.62	2.62
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.95	1.69	2.40	2.13	2.39	2.56	2.60	2.62	2.62	2.62
Natural Gas	.84	3.85	5.41	5.04	4.22	3.63	4.12	4.30	4.28	4.28
Petroleum	.67	5.07	6.09	3.98	4.50	4.42	5.02	4.87	4.73	4.15
Asphalt and Road Oil	.70	4.00	5.20	4.86	3.54	3.34	3.17	3.34	3.05	2.78
Distillate Fuel	.69	5.73	5.99	3.41	4.15	3.92	4.69	5.67	5.10	4.68
Kerosene	.74	6.27	6.86	3.91	4.76	4.48	5.37	6.49	5.84	5.36
LPG	1.37	4.78	11.75	11.70	11.14	10.88	10.22	10.80	11.94	9.96
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.92	10.11	9.26	7.32	7.60	7.82	8.60	9.66	9.55	9.50
Residual Fuel	.51	3.95	4.20	2.23	2.86	2.22	2.63	3.06	2.26	2.11
Other	1.76	8.04	10.67	9.89	10.07	8.53	12.52	10.75	11.29	16.01
Electricity	4.18	15.82	19.32	18.22	18.71	19.66	19.80	21.95	21.81	23.92
Transportation Sector	**2.60**	**9.62**	**9.16**	**7.20**	**7.36**	**7.55**	**8.32**	**9.42**	**R9.23**	**9.22**
Primary Energy	2.60	9.62	9.16	7.20	7.36	7.55	8.32	9.42	R9.23	9.22
Coal	.95	–	–	–	–	–	–	–	–	–
Petroleum	2.60	9.62	9.16	7.20	7.36	7.55	8.32	9.42	R9.23	9.22
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.32	7.38	8.95	7.11	7.48	7.39	7.76	9.17	8.75	8.41
Jet Fuel	.75	6.51	6.53	4.93	4.18	4.22	4.83	6.40	5.36	4.86
LPG	1.37	4.78	11.75	11.70	11.14	10.88	10.22	10.80	11.94	9.96
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.92	10.11	9.26	7.32	7.60	7.82	8.60	9.66	9.55	9.50
Residual Fuel	.01	3.18	–	1.97	2.69	1.90	2.36	2.32	1.84	1.91
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**2.20**	**9.59**	**10.68**	**8.89**	**9.08**	**9.63**	**10.17**	**11.28**	**R11.11**	**11.31**
Primary Energy — Four Sectors	1.77	7.85	8.11	6.26	6.40	6.61	7.26	7.99	R7.80	7.57
Electricity	6.74	19.55	23.28	22.14	23.25	24.24	24.49	26.67	26.76	29.23
Electric Utility Sector [a]	**.36**	**2.68**	**2.46**	**1.95**	**2.20**	**1.83**	**2.01**	**1.58**	**1.22**	**1.24**
Coal	.36	1.60	2.01	1.99	1.92	1.78	1.73	1.78	1.74	1.69
Natural Gas	–	–	–	–	2.93	2.41	3.08	–	–	–
Petroleum	.35	3.81	3.64	1.92	2.59	1.89	2.28	2.28	1.79	1.86
Heavy Oil [b]	.34	3.80	3.62	1.91	2.58	1.86	2.26	2.25	1.76	1.83
Light Oil [b]	.40	6.17	5.79	3.61	4.04	3.67	4.26	5.69	4.83	4.44
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	1.03	.84	.95
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.41**	**6.16**	**6.41**	**5.05**	**5.30**	**5.17**	**5.72**	**5.37**	**4.74**	**4.57**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, New Hampshire 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**113.1**	**380.5**	**504.9**	**454.7**	**522.2**	**555.1**	**625.3**	**621.3**	**596.9**	**637.9**
Primary Energy	71.3	203.6	250.5	192.2	225.3	227.2	287.2	265.3	248.9	248.9
Coal	.1	.2	.5	.9	.6	.7	.5	.7	1.4	.8
Natural Gas	7.3	20.2	33.6	36.1	36.4	37.2	43.1	43.7	40.0	48.7
Petroleum	63.9	183.2	216.4	155.3	188.2	189.3	243.6	220.8	207.5	199.3
Distillate Fuel	53.0	148.4	139.4	103.3	126.7	121.3	161.6	146.6	137.2	132.4
Kerosene	6.3	14.9	42.7	13.1	15.0	16.7	20.4	11.7	12.0	10.4
LPG	4.6	19.9	34.3	38.9	46.5	51.3	61.6	62.5	58.2	56.5
Electricity	41.8	177.0	254.4	262.5	296.9	328.0	338.0	356.0	348.0	389.0
Commercial Sector	**29.8**	**165.4**	**207.2**	**213.7**	**254.0**	**262.3**	**284.4**	**306.1**	**300.7**	**321.5**
Primary Energy	8.8	73.3	69.3	72.8	91.0	82.3	94.3	101.1	91.7	89.4
Coal	.1	*	.2	.3	.3	.3	.2	.3	.6	.5
Natural Gas	3.2	17.0	31.2	29.0	26.7	28.5	33.5	34.1	31.9	39.5
Petroleum	5.5	56.3	37.9	43.6	64.0	53.5	60.6	66.6	59.1	49.4
Distillate Fuel	4.1	39.2	21.5	22.4	44.0	30.2	34.6	39.3	36.7	33.9
Kerosene	.1	.3	1.6	.4	1.0	1.1	1.6	.9	.7	.7
LPG	.4	1.8	6.4	7.8	8.8	9.5	10.7	10.0	9.4	8.2
Motor Gasoline	.7	6.2	6.1	5.6	5.1	5.8	5.8	3.7	2.8	2.4
Residual Fuel	.2	8.8	2.3	7.3	5.1	6.8	7.9	12.6	9.6	4.3
Electricity	21.0	92.0	137.9	140.9	163.0	180.0	190.0	205.0	209.0	232.0
Industrial Sector	**39.6**	**200.4**	**310.4**	**278.8**	**306.1**	**295.6**	**318.9**	**352.8**	**318.1**	**362.4**
Primary Energy	18.8	75.0	114.3	87.4	101.7	71.6	87.9	96.8	75.1	90.4
Coal	.2	.4	2.4	.2	.2	.1	1.0	1.8	3.4	2.9
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.2	.4	2.4	.2	.2	.1	1.0	1.8	3.4	2.9
Natural Gas	.7	3.9	5.0	3.8	7.5	7.3	9.4	14.3	14.9	17.2
Petroleum	18.0	70.7	107.0	83.4	94.0	64.2	77.6	80.7	56.8	70.3
Asphalt and Road Oil	2.5	6.7	29.5	17.8	18.3	9.5	15.6	26.6	13.3	14.6
Distillate Fuel	2.0	18.6	13.4	6.8	12.9	11.3	14.7	14.4	13.3	13.6
Kerosene	.2	.3	.2	.2	.7	.3	.4	.3	1.0	.6
LPG	1.4	8.3	23.5	19.1	24.2	18.9	21.0	15.7	8.5	8.6
Lubricants	.5	2.0	2.3	2.0	1.8	2.0	1.9	1.9	2.0	2.4
Motor Gasoline	.6	1.4	3.0	2.6	2.6	2.8	4.1	2.8	2.5	2.5
Residual Fuel	9.1	21.7	27.0	27.7	25.9	12.7	10.1	10.2	6.5	13.7
Other	1.6	11.6	8.1	7.3	7.5	6.7	9.7	8.8	9.6	14.2
Electricity	20.7	125.5	196.1	191.4	204.4	224.0	231.0	256.0	243.0	272.0
Transportation Sector	**131.9**	**556.4**	**574.2**	**496.6**	**548.1**	**583.9**	**638.1**	**685.9**	R685.8	**680.5**
Primary Energy	131.9	556.4	574.2	496.6	548.1	583.9	638.1	685.9	R685.8	680.5
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	131.9	556.4	574.2	496.6	548.1	583.9	638.1	685.9	R685.8	680.5
Aviation Gasoline	.4	1.8	1.2	1.6	1.1	1.4	1.4	1.0	1.1	.8
Distillate Fuel	2.4	29.5	54.1	52.6	59.3	60.3	66.2	67.7	59.4	62.1
Jet Fuel	4.2	27.0	18.4	16.5	14.6	16.6	20.0	22.7	R13.9	10.2
LPG	*	1.3	1.0	.7	.8	.6	.5	.6	.4	.3
Lubricants	1.7	5.2	5.8	5.1	4.7	5.2	4.8	5.0	5.1	6.1
Motor Gasoline	123.1	490.5	493.6	419.5	463.9	498.1	545.0	587.7	603.5	599.5
Residual Fuel	*	1.0	–	.6	3.8	1.7	.3	1.2	2.3	1.5
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**314.3**	**1,302.6**	**1,596.7**	**1,443.7**	**1,630.4**	**1,696.9**	**1,866.7**	**1,966.1**	R1,901.5	**2,002.3**
Primary Energy — Four Sectors	230.9	908.2	1,008.3	848.9	966.0	964.9	1,107.7	1,149.0	R1,101.5	1,109.2
Electricity	83.5	394.5	588.4	594.8	664.3	731.9	759.1	817.1	800.0	893.0
Electric Utility Sector [a]	**15.6**	**150.9**	**131.5**	**104.3**	**118.2**	**115.5**	**127.3**	**156.9**	**149.3**	**163.0**
Coal	9.7	46.3	77.4	49.1	59.9	57.7	53.5	54.3	57.4	55.9
Natural Gas	–	–	–	–	*	.1	.1	–	–	–
Petroleum	5.9	104.6	54.1	55.2	58.3	57.7	73.7	57.5	30.5	27.1
Heavy Oil [b]	5.5	104.0	53.0	54.5	57.6	56.3	72.2	56.3	29.5	26.3
Light Oil [b]	.4	.7	1.1	.7	.7	1.3	1.5	1.2	1.0	.8
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	45.0	61.4	80.0
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**246.4**	**1,059.1**	**1,139.8**	**953.2**	**1,084.2**	**1,080.4**	**1,234.9**	**1,305.9**	R1,250.8	**1,272.2**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, New Jersey 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.45	1.81	1.92	1.80	1.76	1.71	1.75	1.79	1.77	1.72
Coking Coal	.58	–	–	–	–	–	–	–	–	–
Steam Coal	.44	1.81	1.92	1.80	1.76	1.71	1.75	1.79	1.77	1.72
Natural Gas	1.28	4.15	6.18	5.86	5.04	4.97	5.11	5.05	4.91	5.02
Petroleum	1.42	7.17	7.48	5.47	5.75	5.73	6.28	7.22	R6.83	6.70
Asphalt and Road Oil	.68	3.65	4.89	4.16	3.39	3.07	2.71	2.86	2.70	2.26
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.29	6.75	7.92	6.23	6.05	6.00	6.49	7.85	7.38	6.83
Jet Fuel	.72	6.26	5.76	3.84	4.01	3.79	4.34	5.60	4.79	4.44
Kerosene	1.18	6.35	8.91	6.74	6.12	5.79	6.58	8.15	8.09	6.55
LPG	1.63	5.72	11.86	11.50	11.03	10.64	9.41	R10.98	R10.26	10.90
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.99	9.94	8.95	6.89	7.25	7.58	8.48	9.03	8.91	9.04
Residual Fuel	.45	4.53	4.35	2.34	2.99	2.40	2.83	3.25	2.63	2.66
Other [a]	1.10	7.07	7.86	4.56	5.31	4.44	5.15	6.05	5.50	5.32
Nuclear Fuel	.20	.34	.71	.73	.81	.68	.66	.61	.61	.56
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.31	6.04	6.20	4.99	4.82	4.76	5.13	5.61	5.34	5.35
Electric Utility Fuel [c]	.42	2.67	1.90	1.47	1.49	1.30	1.45	1.20	1.12	1.04
Electricity Purchased by End Users	6.24	21.26	28.18	27.56	25.16	24.97	25.95	26.63	27.76	27.91
Total Energy	1.95	8.34	9.62	8.13	7.92	8.03	8.53	9.25	R9.16	8.77
	Expenditures in Millions of Dollars									
Coal	55.6	124.5	198.1	140.2	158.9	138.5	164.2	144.4	109.3	108.0
Coking Coal	5.3	–	–	–	–	–	–	–	–	–
Steam Coal	50.4	124.5	198.1	140.2	158.9	138.5	164.2	144.4	109.3	108.0
Natural Gas	413.8	1,434.3	2,371.8	2,097.3	2,150.0	2,087.1	2,360.1	2,184.4	2,295.8	2,757.9
Petroleum	2,001.4	8,945.0	8,834.9	6,934.9	7,230.2	7,103.4	R7,821.2	R8,184.6	R7,700.7	7,540.8
Asphalt and Road Oil	26.3	105.7	153.6	153.5	119.3	88.4	72.4	68.0	56.1	50.6
Aviation Gasoline	1.7	3.8	9.3	6.8	7.7	5.7	5.3	5.6	4.4	5.3
Distillate Fuel	468.7	2,072.7	1,861.2	1,629.6	1,542.6	1,612.5	1,700.8	1,595.2	1,427.9	1,336.4
Jet Fuel	26.9	308.7	1,430.6	852.8	984.5	876.3	1,084.9	1,470.6	R1,183.7	1,160.8
Kerosene	12.2	61.0	70.9	46.7	45.7	45.3	57.4	33.7	28.2	30.5
LPG	40.9	134.3	300.8	265.5	308.4	279.5	R208.7	R161.3	R218.9	256.1
Lubricants	60.2	206.5	230.4	199.5	183.8	203.9	190.3	197.4	203.1	240.1
Motor Gasoline	1,040.8	3,797.7	3,546.4	2,921.4	3,090.8	3,230.9	3,625.8	3,694.1	R3,728.0	3,641.0
Residual Fuel	215.4	1,419.1	644.1	441.1	457.5	339.0	392.2	303.1	278.4	255.7
Other [a]	108.3	835.5	587.5	417.9	489.9	422.0	483.4	655.6	571.8	564.2
Nuclear Fuel	7.6	27.9	135.8	117.2	197.0	175.7	162.2	155.8	162.9	129.6
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	2,478.5	10,531.7	11,540.6	9,289.5	9,736.2	9,504.7	R10,507.8	R10,669.2	R10,268.8	10,536.2
Electric Utility Fuel [c]	-182.1	-881.5	-730.2	-479.1	-655.2	-574.2	-654.6	-478.0	-454.0	-354.9
Electricity Purchased by End Users	799.5	3,538.5	5,148.3	5,228.8	5,017.5	5,265.5	5,583.2	5,688.7	6,088.4	5,974.9
Total Energy	3,096.0	13,188.7	15,958.8	14,039.2	14,098.5	14,196.1	R15,436.3	R15,879.9	R15,903.1	16,156.2

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, New Jersey 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.28**	**8.97**	**12.09**	**11.60**	**10.79**	**10.65**	**10.97**	**12.20**	**12.66**	**12.05**
Primary Energy	1.62	6.02	7.70	7.14	6.53	6.35	6.62	7.09	7.10	7.00
Coal	1.13	3.17	3.07	2.82	2.80	2.82	2.93	3.14	2.90	2.68
Natural Gas	1.84	4.90	7.33	7.17	6.44	6.17	6.35	6.44	6.57	6.77
Petroleum	1.46	7.14	8.27	7.14	6.68	6.69	7.16	8.69	8.48	7.69
Distillate Fuel	1.43	7.06	8.09	6.89	6.44	6.48	7.02	8.39	8.02	7.21
Kerosene	1.72	9.27	10.06	8.57	8.01	8.05	8.72	10.42	9.97	8.96
LPG	3.00	9.82	10.95	12.42	11.73	10.21	8.96	14.08	15.07	13.82
Electricity	7.83	24.08	32.24	31.19	29.01	28.70	29.53	30.35	31.69	31.85
Commercial Sector	**2.01**	**9.22**	**13.90**	**12.69**	**11.82**	**11.55**	**12.05**	**12.77**	**13.00**	**12.86**
Primary Energy	.99	5.14	6.37	5.36	5.01	4.78	5.18	5.43	5.26	5.33
Coal	.23	1.49	1.74	1.62	1.60	1.56	1.58	1.60	1.58	1.57
Natural Gas	1.38	4.45	6.49	6.17	5.41	5.11	5.17	5.07	5.08	5.40
Petroleum	.83	5.51	6.29	4.41	4.44	4.28	5.20	6.21	5.67	5.15
Distillate Fuel	1.14	6.47	6.94	4.73	4.55	4.59	5.41	6.50	6.09	5.28
Kerosene	.79	5.81	6.82	4.70	4.92	4.62	5.32	6.60	5.93	5.35
LPG	1.43	5.15	11.99	11.32	10.90	10.74	9.53	10.09	9.15	10.15
Motor Gasoline	2.99	9.94	8.95	6.89	7.25	7.58	8.48	9.03	8.91	9.04
Residual Fuel	.45	4.66	4.56	2.67	3.12	2.54	2.97	3.47	2.64	2.56
Electricity	7.62	22.49	29.02	28.40	25.49	25.00	25.96	26.50	27.43	27.66
Industrial Sector	**1.18**	**6.99**	**9.36**	**7.62**	**7.19**	**7.01**	**7.35**	**7.68**	**R7.55**	**6.73**
Primary Energy	.86	5.59	6.82	4.97	5.04	4.68	4.84	5.26	R4.95	4.59
Coal	.40	1.49	1.74	1.62	1.60	1.56	1.58	1.60	1.58	1.57
Coking Coal	.58	–	–	–	–	–	–	–	–	–
Steam Coal	.23	1.49	1.74	1.62	1.60	1.56	1.58	1.60	1.58	1.57
Natural Gas	.68	3.63	5.39	4.27	3.98	3.78	3.88	3.85	3.56	3.34
Petroleum	.93	5.97	7.68	5.31	5.55	5.11	5.37	R6.04	R5.81	5.83
Asphalt and Road Oil	.68	3.65	4.89	4.16	3.39	3.07	2.71	2.86	2.70	2.26
Distillate Fuel	.76	5.48	6.16	4.25	4.45	4.17	4.81	5.96	5.36	4.84
Kerosene	.79	5.81	6.82	4.70	4.92	4.62	5.32	6.60	5.93	5.35
LPG	1.43	5.15	11.99	11.32	10.90	10.74	9.53	10.09	9.15	10.15
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.99	9.94	8.95	6.89	7.25	7.58	8.48	9.03	8.91	9.04
Residual Fuel	.48	4.69	4.56	2.67	3.12	2.54	2.97	3.47	2.64	2.56
Other	1.10	7.07	7.86	4.56	5.31	4.44	5.15	6.05	5.50	5.32
Electricity	3.89	16.96	22.54	22.09	19.68	19.83	21.00	21.57	22.46	22.59
Transportation Sector	**2.39**	**8.60**	**7.54**	**5.60**	**5.90**	**6.12**	**6.72**	**7.54**	**R7.10**	**6.98**
Primary Energy	2.39	8.60	7.53	5.60	5.88	6.10	6.71	7.53	R7.08	6.96
Coal	.23	–	–	–	–	–	–	–	–	–
Petroleum	2.39	8.60	7.53	5.60	5.88	6.10	6.71	7.53	R7.08	6.96
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.57	7.34	8.51	6.96	6.83	6.80	7.22	8.64	8.00	7.59
Jet Fuel	.72	6.27	5.76	3.84	4.01	3.79	4.34	5.60	4.79	4.44
LPG	1.43	5.15	11.99	11.32	10.90	10.74	9.53	10.09	9.15	10.15
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.99	9.94	8.95	6.89	7.25	7.58	8.48	9.03	8.91	9.04
Residual Fuel	.41	3.94	4.18	2.16	2.86	2.16	2.57	2.99	2.55	2.63
Electricity	4.62	14.91	21.28	18.46	48.18	46.87	47.21	47.11	47.74	48.95
Total Energy	**1.95**	**8.34**	**9.62**	**8.13**	**7.92**	**8.03**	**8.53**	**9.25**	**R9.16**	**8.77**
Primary Energy — Four Sectors	1.57	6.82	7.32	5.73	5.75	5.74	6.18	6.78	R6.47	6.25
Electricity	6.24	21.26	28.18	27.56	25.16	24.97	25.95	26.63	27.76	27.91
Electric Utility Sector [a]	**.42**	**2.67**	**1.90**	**1.47**	**1.49**	**1.30**	**1.45**	**1.20**	**1.12**	**1.04**
Coal	.45	1.80	1.92	1.81	1.77	1.72	1.76	1.80	1.78	1.73
Natural Gas	.39	3.01	3.96	2.51	2.55	2.25	2.46	2.17	1.96	2.11
Petroleum	.45	4.98	4.62	2.44	3.29	2.68	3.24	3.87	3.26	3.23
Heavy Oil [b]	.45	4.79	4.41	2.38	3.12	2.51	3.02	3.56	2.96	3.02
Light Oil [b]	.45	5.93	6.24	3.20	4.10	3.53	4.08	5.45	4.81	4.51
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	.20	.34	.71	.73	.81	.68	.66	.61	.61	.56
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.31**	**6.04**	**6.20**	**4.99**	**4.82**	**4.76**	**5.13**	**5.61**	**5.34**	**5.35**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, New Jersey 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**882.8**	**3,062.8**	**3,964.8**	**3,862.0**	**3,751.0**	**3,903.1**	**4,080.7**	**3,881.6**	**4,114.5**	**4,161.2**
Primary Energy	558.7	1,721.3	2,075.2	1,937.0	1,839.7	1,880.0	1,995.8	1,758.6	1,785.5	1,928.2
Coal	2.4	2.4	4.4	2.5	1.3	1.1	.7	.6	.5	.6
Natural Gas	264.7	691.2	1,130.9	1,163.4	1,113.0	1,147.1	1,273.0	1,133.0	1,188.8	1,377.3
Petroleum	291.6	1,027.7	939.9	771.1	725.4	731.9	722.1	625.0	596.3	550.3
Distillate Fuel	274.6	985.9	852.0	693.4	654.5	659.9	650.9	561.7	517.3	470.4
Kerosene	7.5	13.8	51.7	31.3	23.3	21.5	28.2	17.4	18.6	13.9
LPG	9.5	28.0	36.2	46.4	47.6	50.4	43.0	45.9	60.3	66.0
Electricity	324.1	1,341.5	1,889.6	1,925.0	1,911.3	2,023.0	2,085.0	2,123.0	2,329.0	2,233.0
Commercial Sector	**478.8**	**2,259.8**	**2,984.5**	**3,017.9**	**2,872.7**	**3,003.9**	**3,337.0**	**3,404.3**	**R3,557.9**	**3,614.9**
Primary Energy	197.9	964.5	914.0	868.6	813.2	826.5	959.2	943.7	936.6	992.8
Coal	.3	.8	1.9	1.0	.5	.4	.3	.2	.2	.3
Natural Gas	79.3	278.0	553.5	543.1	523.3	530.9	622.1	601.1	631.7	725.1
Petroleum	118.2	685.8	358.6	324.5	289.4	295.1	336.8	342.4	304.8	267.4
Distillate Fuel	74.0	345.2	227.9	245.0	206.3	211.4	257.4	262.0	232.9	195.8
Kerosene	1.3	1.3	3.0	2.9	3.1	3.0	7.9	6.7	6.4	11.8
LPG	.8	2.6	7.0	7.5	7.8	9.4	8.1	5.8	6.5	8.6
Motor Gasoline	9.6	15.5	31.0	23.6	25.3	25.8	29.8	35.6	32.3	29.1
Residual Fuel	32.5	321.1	89.7	45.6	46.9	45.6	33.6	32.3	26.6	22.1
Electricity	280.9	1,295.3	2,070.5	2,149.3	2,059.6	2,177.4	2,377.7	2,460.6	R2,621.3	2,622.1
Industrial Sector	**560.5**	**3,002.0**	**3,038.6**	**2,558.5**	**2,565.5**	**2,411.0**	**R2,487.7**	**R2,612.0**	**R2,539.7**	**2,763.9**
Primary Energy	366.5	2,101.8	1,856.8	1,409.7	1,534.2	1,359.5	R1,383.5	R1,523.3	R1,418.3	1,661.0
Coal	7.5	1.2	15.0	10.6	13.0	10.2	11.3	11.1	9.2	8.5
Coking Coal	5.3	–	–	–	–	–	–	–	–	–
Steam Coal	2.2	1.2	15.0	10.6	13.0	10.2	11.3	11.1	9.2	8.5
Natural Gas	51.4	217.5	433.0	294.9	315.7	290.6	324.5	343.6	350.4	570.8
Petroleum	307.6	1,883.2	1,408.9	1,104.2	1,205.6	1,058.6	R1,047.7	R1,168.6	R1,058.7	1,081.7
Asphalt and Road Oil	26.3	105.7	153.6	153.5	119.3	88.4	72.4	68.0	56.1	50.6
Distillate Fuel	38.6	230.9	89.3	83.3	76.5	77.5	96.8	100.3	78.2	55.7
Kerosene	3.4	45.9	16.2	12.5	19.4	20.8	21.2	9.6	3.2	4.8
LPG	30.0	102.9	252.8	207.5	249.8	216.3	R154.8	R106.9	R149.8	178.8
Lubricants	42.5	144.4	161.2	139.5	128.5	142.6	133.1	138.0	142.1	167.9
Motor Gasoline	6.3	7.7	21.7	16.9	19.6	20.9	22.3	21.7	19.7	20.1
Residual Fuel	52.1	410.2	126.5	73.1	102.4	70.2	63.8	68.5	37.9	39.5
Other	108.3	835.5	587.5	417.9	489.9	422.0	483.4	655.6	571.8	564.2
Electricity	194.0	900.1	1,181.8	1,148.7	1,031.3	1,051.5	1,104.2	1,088.7	1,121.3	1,102.9
Transportation Sector	**1,173.9**	**4,864.2**	**5,970.8**	**4,600.9**	**4,909.3**	**4,878.2**	**5,531.0**	**5,982.0**	**R5,691.1**	**5,616.2**
Primary Energy	1,173.4	4,862.5	5,964.4	4,595.1	4,893.8	4,864.6	5,514.6	5,965.6	R5,674.3	5,599.4
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	1,173.4	4,862.5	5,964.4	4,595.1	4,893.8	4,864.6	5,514.6	5,965.6	R5,674.3	5,599.4
Aviation Gasoline	1.7	3.8	9.3	6.8	7.7	5.7	5.3	5.6	4.4	5.3
Distillate Fuel	78.3	438.1	667.6	595.0	580.8	629.6	645.2	651.7	583.4	606.1
Jet Fuel	26.9	284.6	1,430.6	852.8	984.5	876.3	1,084.9	1,470.6	R1,183.7	1,160.8
LPG	.6	.8	4.8	4.2	3.2	3.4	2.9	2.8	2.3	2.8
Lubricants	17.7	62.1	69.3	60.0	55.2	61.3	57.2	59.3	61.1	72.2
Motor Gasoline	1,024.9	3,774.5	3,493.6	2,880.9	3,045.9	3,184.2	3,573.7	3,636.8	R3,676.0	3,591.8
Residual Fuel	23.3	298.7	289.3	195.5	216.5	104.1	145.4	138.9	163.4	160.4
Electricity	.5	1.6	6.4	5.8	15.4	13.6	16.3	16.4	R16.7	16.9
Total Energy	**3,096.0**	**13,188.7**	**15,958.8**	**14,039.2**	**14,098.5**	**14,196.1**	**R15,436.3**	**R15,879.9**	**R15,903.1**	**16,156.2**
Primary Energy — Four Sectors	2,296.4	9,650.2	10,810.5	8,810.4	9,081.0	8,930.6	R9,853.1	R10,191.2	R9,814.8	10,181.3
Electricity	799.5	3,538.5	5,148.3	5,228.8	5,017.5	5,265.5	5,583.2	5,688.7	6,088.4	5,974.9
Electric Utility Sector [a]	**182.1**	**881.5**	**730.2**	**479.1**	**655.2**	**574.2**	**654.6**	**478.0**	**454.0**	**354.9**
Coal	45.4	120.2	176.8	126.1	144.2	126.9	151.9	132.5	99.4	98.7
Natural Gas	18.4	247.6	254.5	95.9	197.9	118.4	140.5	106.8	125.0	84.5
Petroleum	110.6	485.8	163.1	139.9	116.1	153.2	199.9	82.9	66.7	42.0
Heavy Oil [b]	107.5	389.1	138.7	126.9	91.6	119.1	149.5	63.5	50.6	33.7
Light Oil [b]	3.2	96.7	24.4	13.0	24.5	34.1	50.5	19.5	16.1	8.3
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	7.6	27.9	135.8	117.2	197.0	175.7	162.2	155.8	162.9	129.6
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**2,478.5**	**10,531.7**	**11,540.6**	**9,289.5**	**9,736.2**	**9,504.7**	**R10,507.8**	**R10,669.2**	**R10,268.8**	**10,536.2**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, New Mexico 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.14	0.56	1.09	1.14	1.21	1.18	1.24	1.32	1.38	1.32
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.14	.56	1.09	1.14	1.21	1.18	1.24	1.32	1.38	1.32
Natural Gas	.39	2.66	4.60	4.24	3.68	3.44	3.61	3.84	3.62	3.67
Petroleum	1.92	7.80	7.85	6.04	6.32	6.27	R7.03	8.01	R7.49	7.38
Asphalt and Road Oil	.58	3.67	4.79	4.35	3.19	3.39	2.87	2.76	3.45	2.99
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.07	6.80	6.53	4.87	5.50	5.31	6.34	7.27	6.89	7.32
Jet Fuel	.76	6.59	6.24	4.39	4.28	4.17	4.79	6.01	4.84	4.57
Kerosene	1.03	6.91	7.31	4.33	4.93	4.26	5.13	6.05	5.58	5.23
LPG	1.35	5.84	8.21	6.88	7.20	6.35	R6.47	R8.02	R6.08	4.45
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.94	9.58	9.14	7.02	7.46	7.44	8.24	9.23	9.10	9.33
Residual Fuel	.34	3.80	3.98	2.01	2.56	1.87	2.16	2.75	2.27	2.09
Other [a]	.50	2.65	2.59	2.84	3.26	2.85	3.53	4.30	3.53	3.14
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	.85	3.71	3.99	3.43	3.47	3.37	R3.63	R4.15	4.25	4.05
Electric Utility Fuel [c]	.20	1.02	1.33	1.31	1.29	1.25	1.32	1.37	1.42	1.38
Electricity Purchased by End Users	5.62	15.52	21.20	22.14	21.83	21.76	21.55	20.99	21.09	21.03
Total Energy	1.46	7.08	9.26	8.01	8.00	7.79	R8.45	R9.17	R8.72	8.61
	Expenditures in Millions of Dollars									
Coal	14.3	114.2	293.7	274.3	315.1	312.9	346.0	363.4	322.0	353.8
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	14.3	114.2	293.7	274.3	315.1	312.9	346.0	363.4	322.0	353.8
Natural Gas	80.7	394.1	350.8	303.8	280.8	320.8	355.4	348.8	R352.7	341.2
Petroleum	292.3	1,507.8	1,483.4	1,147.0	1,270.6	1,253.8	R1,384.6	R1,678.0	R1,690.4	1,697.9
Asphalt and Road Oil	4.6	27.7	47.7	46.7	43.7	47.6	31.7	26.6	34.9	37.2
Aviation Gasoline	1.2	7.6	4.8	4.4	3.3	2.1	4.0	4.0	4.1	4.0
Distillate Fuel	33.6	315.6	323.9	275.5	341.2	316.2	331.4	386.4	378.4	425.7
Jet Fuel	12.9	96.0	97.7	66.8	70.0	64.1	74.7	96.2	R65.2	71.3
Kerosene	5.8	52.5	7.9	1.7	1.7	1.2	2.0	1.9	2.0	.7
LPG	22.0	98.6	88.8	43.9	40.4	34.7	R92.2	R230.3	R257.4	168.4
Lubricants	8.3	28.9	32.2	27.9	25.7	28.5	26.6	27.6	28.4	33.6
Motor Gasoline	202.9	850.8	859.3	674.8	740.5	755.8	817.1	898.7	914.9	952.7
Residual Fuel	.4	23.5	19.0	2.7	1.2	1.2	1.8	2.0	1.1	.8
Other [a]	.5	6.6	2.0	2.6	2.9	2.6	3.0	4.3	4.0	3.6
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	387.3	2,016.1	2,127.9	1,725.1	1,866.5	1,887.5	R2,086.0	R2,390.2	R2,365.0	2,392.9
Electric Utility Fuel [c]	-32.0	-268.0	-392.6	-342.2	-359.9	-359.3	-407.0	-414.2	-371.1	-398.9
Electricity Purchased by End Users	106.6	460.2	836.0	874.2	893.3	923.0	958.2	963.6	987.1	1,009.6
Total Energy	461.8	2,208.2	2,571.3	2,257.1	2,400.0	2,451.2	R2,637.2	R2,939.6	R2,981.1	3,003.6

[a] Includes petroleum coke used at electric utilities.

[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, New Mexico 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1.78**	**6.66**	**11.10**	**11.01**	**10.34**	**10.54**	**11.23**	**11.13**	**11.24**	**10.74**
Primary Energy	1.00	3.78	6.33	5.50	4.96	5.03	5.73	6.04	5.89	5.18
Coal	.90	2.54	2.83	2.78	2.40	2.12	2.43	2.41	2.36	2.43
Natural Gas	.86	3.17	5.59	5.28	4.61	4.87	5.45	5.37	5.18	4.55
Petroleum	1.60	7.29	8.59	7.03	7.66	6.46	7.44	9.24	10.39	10.27
Distillate Fuel	.98	6.79	6.92	5.09	4.81	4.74	5.34	6.47	5.96	5.40
Kerosene	1.49	7.95	8.62	6.34	5.99	5.91	6.65	8.06	7.42	6.72
LPG	1.61	7.19	8.62	7.16	7.78	6.50	7.48	9.28	10.46	10.40
Electricity	8.15	18.89	25.48	26.43	26.39	26.42	26.41	26.22	26.63	26.59
Commercial Sector	**1.37**	**6.79**	**12.49**	**11.59**	**11.19**	**9.66**	**10.55**	**11.49**	**11.47**	**10.86**
Primary Energy	.50	3.50	5.58	4.08	3.83	3.22	3.71	4.49	4.16	3.38
Coal	.56	.88	1.41	1.38	1.40	1.33	1.18	1.30	1.36	1.46
Natural Gas	.44	2.79	5.34	4.04	3.67	3.08	3.54	4.19	3.98	3.22
Petroleum	1.34	6.85	6.58	4.43	4.49	4.25	4.90	5.88	5.31	5.19
Distillate Fuel	.92	6.57	5.62	3.23	3.78	3.34	3.89	4.74	4.41	4.37
Kerosene	1.01	6.80	6.95	3.44	4.32	3.78	4.87	5.89	5.38	4.86
LPG	1.12	5.36	7.27	6.51	6.06	6.11	6.00	7.67	5.51	3.75
Motor Gasoline	2.94	9.58	9.14	7.02	7.46	7.44	8.24	9.23	9.10	9.33
Residual Fuel	–	–	4.00	–	–	–	–	–	–	–
Electricity	5.78	15.95	22.57	23.41	22.49	23.10	22.68	22.22	22.56	22.45
Industrial Sector	**.65**	**4.95**	**7.66**	**6.57**	**6.32**	**6.06**	**R6.49**	**R7.27**	**R6.31**	**5.95**
Primary Energy	.49	4.06	5.45	3.74	3.81	3.63	R4.12	R5.52	R4.86	4.26
Coal	.56	.88	1.41	1.38	1.40	1.33	1.18	1.30	1.36	1.46
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.56	.88	1.41	1.38	1.40	1.33	1.18	1.30	1.36	1.46
Natural Gas	.25	2.46	3.67	3.04	3.30	3.16	2.97	3.49	3.39	6.58
Petroleum	1.01	5.34	5.87	3.90	3.94	3.79	R4.57	R6.02	R5.17	3.99
Asphalt and Road Oil	.58	3.67	4.79	4.35	3.19	3.39	2.87	2.76	3.45	2.99
Distillate Fuel	.95	6.42	6.11	3.02	3.80	3.32	4.28	5.18	4.73	4.27
Kerosene	1.01	6.80	6.95	3.44	4.32	3.78	4.87	5.89	5.38	4.86
LPG	1.12	5.36	7.27	6.51	6.06	6.11	6.00	7.67	5.51	3.75
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.94	9.58	9.14	7.02	7.46	7.44	8.24	9.23	9.10	9.33
Residual Fuel	.41	3.82	4.00	2.09	2.86	1.81	1.96	2.62	2.01	2.05
Other	.50	2.65	2.59	2.84	3.26	2.85	3.53	4.30	3.53	3.14
Electricity	3.44	12.11	16.01	16.64	16.56	15.56	15.53	14.61	14.18	14.05
Transportation Sector	**2.28**	**8.69**	**8.47**	**6.65**	**7.02**	**6.99**	**7.69**	**8.68**	**R8.45**	**8.61**
Primary Energy	2.28	8.69	8.47	6.65	7.02	6.99	7.69	8.68	R8.45	8.61
Coal	.56	–	–	–	–	–	–	–	–	–
Petroleum	2.28	8.69	8.47	6.65	7.02	6.99	7.69	8.68	R8.45	8.61
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.15	6.97	6.98	6.29	6.89	6.67	7.30	8.26	7.85	8.19
Jet Fuel	.76	6.59	6.24	4.39	4.28	4.17	4.79	6.01	4.84	4.57
LPG	1.12	5.36	7.27	6.51	6.06	6.11	6.00	7.67	5.51	3.75
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.94	9.58	9.14	7.02	7.46	7.44	8.24	9.23	9.10	9.33
Residual Fuel	.38	–	–	–	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.46**	**7.08**	**9.26**	**8.01**	**8.00**	**7.79**	**R8.45**	**R9.17**	**R8.72**	**8.61**
Primary Energy — Four Sectors	1.20	6.20	7.28	5.71	5.81	5.61	R6.27	7.20	R6.76	6.63
Electricity	5.62	15.52	21.20	22.14	21.83	21.76	21.55	20.99	21.09	21.03
Electric Utility Sector [a]	**.20**	**1.02**	**1.33**	**1.31**	**1.29**	**1.25**	**1.32**	**1.37**	**1.42**	**1.38**
Coal	.14	.56	1.09	1.13	1.21	1.18	1.24	1.32	1.38	1.32
Natural Gas	.30	2.47	3.48	3.31	2.36	2.14	2.13	1.91	1.70	1.95
Petroleum	.23	5.21	4.98	2.69	3.58	3.17	3.99	4.70	5.11	5.10
Heavy Oil [b]	.23	3.70	3.71	1.65	2.14	1.97	2.74	3.09	3.86	3.23
Light Oil [b]	.27	6.53	6.20	3.79	4.47	4.22	4.98	6.22	5.35	5.16
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**.85**	**3.71**	**3.99**	**3.43**	**3.47**	**3.37**	**R3.63**	**R4.15**	**4.25**	**4.05**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, New Mexico 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**82.0**	**292.1**	**470.7**	**448.7**	**465.0**	**473.8**	**498.9**	**536.6**	**545.4**	**535.4**
Primary Energy	41.0	134.1	201.3	165.3	167.2	167.8	186.9	217.7	212.4	191.4
Coal	*	.8	.2	.1	.1	*	.2	.1	.1	.2
Natural Gas	28.6	95.0	133.4	137.3	137.1	145.6	152.4	159.6	160.7	149.3
Petroleum	12.4	38.3	67.8	27.9	30.0	22.2	34.4	58.0	51.6	41.9
Distillate Fuel	*	.4	.8	1.0	.4	.3	.3	.5	.3	.5
Kerosene	.2	6.0	2.0	.8	.7	.4	.4	.2	.3	.2
LPG	12.2	31.9	64.9	26.1	28.9	21.4	33.7	57.4	51.0	41.3
Electricity	41.0	158.1	269.4	283.5	297.7	306.0	312.0	319.0	333.0	344.0
Commercial Sector	**62.7**	**296.3**	**488.9**	**494.5**	**500.8**	**542.5**	**568.8**	**580.3**	**578.4**	**569.8**
Primary Energy	19.0	112.4	129.7	106.7	104.0	122.5	127.8	137.3	126.5	107.8
Coal	*	.5	.1	.1	.1	.1	.1	.1	.1	.2
Natural Gas	15.7	71.7	97.2	90.2	79.2	102.7	105.9	105.0	103.7	93.7
Petroleum	3.2	40.1	32.4	16.4	24.7	19.7	21.8	32.3	22.6	13.9
Distillate Fuel	.6	5.1	14.8	7.6	15.6	10.9	11.5	17.3	11.9	6.1
Kerosene	*	25.4	2.4	.3	.4	.7	.4	.5	.6	.2
LPG	1.5	4.2	9.7	4.2	4.0	3.6	4.8	8.4	4.7	2.6
Motor Gasoline	1.1	5.5	5.4	4.3	4.8	4.6	5.2	6.1	5.4	4.9
Residual Fuel	–	–	.1	–	–	–	–	–	–	–
Electricity	43.7	184.0	359.2	387.8	396.8	420.0	441.0	443.0	452.0	462.0
Industrial Sector	**76.8**	**436.1**	**473.3**	**365.4**	**385.0**	**376.1**	**R412.1**	**R523.3**	**R576.4**	**498.9**
Primary Energy	54.9	318.0	265.9	162.5	186.2	179.2	R206.9	R321.7	R374.2	295.4
Coal	.1	.2	2.5	2.8	1.5	1.5	1.1	1.1	1.2	1.4
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.1	.2	2.5	2.8	1.5	1.5	1.1	1.1	1.2	1.4
Natural Gas	18.7	84.5	21.1	6.8	19.8	26.3	36.8	34.1	R39.6	53.5
Petroleum	36.0	233.4	242.3	153.0	164.9	151.4	R169.0	R286.4	R333.4	240.5
Asphalt and Road Oil	4.6	27.7	47.7	46.7	43.7	47.6	31.7	26.6	34.9	37.2
Distillate Fuel	11.7	82.1	130.5	66.7	89.0	69.1	55.9	65.9	65.1	47.5
Kerosene	5.5	21.1	3.5	.7	.6	.2	1.3	1.2	1.2	.3
LPG	7.3	61.9	11.7	11.5	5.9	8.1	R51.3	R161.3	R200.0	123.1
Lubricants	3.2	10.3	11.5	10.0	9.2	10.2	9.5	9.8	10.1	12.0
Motor Gasoline	3.0	4.2	17.3	12.6	12.9	13.0	15.0	15.9	17.2	16.1
Residual Fuel	.3	19.4	18.0	2.3	.8	.7	1.2	1.4	.8	.7
Other	.5	6.6	2.0	2.6	2.9	2.6	3.0	4.3	4.0	3.6
Electricity	21.9	118.1	207.5	202.9	198.8	197.0	205.2	201.6	202.2	203.6
Transportation Sector	**240.4**	**1,183.6**	**1,138.4**	**948.4**	**1,049.2**	**1,058.7**	**1,157.5**	**1,299.4**	**R1,280.8**	**1,399.4**
Primary Energy	240.4	1,183.6	1,138.4	948.4	1,049.2	1,058.7	1,157.5	1,299.4	R1,280.8	1,399.4
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	240.4	1,183.6	1,138.4	948.4	1,049.2	1,058.7	1,157.5	1,299.4	R1,280.8	1,399.4
Aviation Gasoline	1.2	7.6	4.8	4.4	3.3	2.1	4.0	4.0	4.1	4.0
Distillate Fuel	21.2	219.7	176.1	199.2	234.9	234.5	262.3	301.4	299.3	369.5
Jet Fuel	12.9	96.0	97.7	66.8	70.0	64.1	74.7	96.2	R65.2	71.3
LPG	1.0	.6	2.5	2.2	1.6	1.6	2.4	3.3	1.6	1.4
Lubricants	5.1	18.6	20.7	18.0	16.5	18.3	17.1	17.8	18.3	21.6
Motor Gasoline	198.9	841.2	836.6	657.9	722.8	738.1	796.9	876.7	892.3	931.6
Residual Fuel	*	–	–	–	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**461.8**	**2,208.2**	**2,571.3**	**2,257.1**	**2,400.0**	**2,451.2**	**R2,637.2**	**R2,939.6**	**R2,981.1**	**3,003.6**
Primary Energy — Four Sectors	355.2	1,748.0	1,735.3	1,382.9	1,506.6	1,528.3	R1,679.0	R1,976.1	R1,993.9	1,994.0
Electricity	106.6	460.2	836.0	874.2	893.3	923.0	958.2	963.6	987.1	1,009.6
Electric Utility Sector [a]	**32.0**	**268.0**	**392.6**	**342.2**	**359.9**	**359.3**	**407.0**	**414.2**	**371.1**	**398.9**
Coal	14.2	112.8	290.9	271.3	313.5	311.3	344.7	362.1	320.5	352.1
Natural Gas	17.7	142.9	99.1	69.5	44.6	46.2	60.3	50.2	48.6	44.7
Petroleum	.1	12.3	2.6	1.4	1.8	1.8	2.0	2.0	2.0	2.2
Heavy Oil [b]	.1	4.1	.9	.4	.4	.5	.6	.6	.3	*
Light Oil [b]	*	8.2	1.6	.9	1.4	1.3	1.4	1.3	1.8	2.1
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**387.3**	**2,016.1**	**2,127.9**	**1,725.1**	**1,866.5**	**1,887.5**	**R2,086.0**	**R2,390.2**	**R2,365.0**	**2,392.9**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, New York 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.51	1.78	1.81	1.72	1.61	1.62	1.63	1.66	1.65	1.56
Coking Coal	.58	2.38	1.88	1.76	1.59	1.61	1.67	1.71	1.72	1.73
Steam Coal	.49	1.56	1.80	1.71	1.62	1.62	1.62	1.66	1.64	1.54
Natural Gas	1.07	4.10	5.94	5.65	5.06	5.09	5.38	5.25	5.18	5.48
Petroleum	1.36	6.93	7.39	5.37	5.69	5.41	6.01	7.09	7.11	7.13
Asphalt and Road Oil	.70	3.67	4.81	4.34	3.73	3.18	2.81	2.96	2.76	2.30
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.24	6.78	7.92	6.25	6.09	6.11	6.64	8.13	7.98	7.52
Jet Fuel	.72	6.27	6.51	4.42	4.55	4.15	4.70	6.03	5.18	4.84
Kerosene	1.39	7.78	8.31	6.76	6.59	6.71	6.82	8.82	8.58	7.60
LPG	2.24	7.43	11.40	10.50	10.13	10.01	11.02	12.76	R 13.54	12.96
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.92	10.26	8.79	6.60	6.99	7.16	7.82	8.83	9.44	9.28
Residual Fuel	.43	4.10	4.38	2.61	3.10	2.52	2.99	3.64	2.73	2.71
Other [a]	1.17	7.05	6.57	4.41	5.77	4.89	5.66	6.10	4.52	4.11
Nuclear Fuel	.20	.56	.67	.61	.63	.57	.65	.65	.55	.45
Biomass Fuels at Utilities	–	1.74	([d])	–	.95	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.17	5.45	5.87	4.76	4.75	4.56	4.97	5.50	5.36	5.47
Electric Utility Fuel [c]	.42	2.68	2.54	1.79	2.01	1.80	2.06	2.20	1.74	1.65
Electricity Purchased by End Users	6.72	19.64	26.97	26.07	25.56	25.09	26.08	27.51	28.68	29.86
Total Energy	1.81	8.08	10.38	9.07	9.01	8.99	9.72	10.64	10.84	10.79
	Expenditures in Millions of Dollars									
Coal	308.4	558.6	546.0	435.5	473.5	539.2	589.7	574.9	566.9	525.4
Coking Coal	96.4	197.6	58.5	58.1	61.6	72.6	74.1	62.2	56.6	53.4
Steam Coal	212.0	361.0	487.6	377.4	411.9	466.6	515.6	512.7	510.4	472.0
Natural Gas	771.3	3,087.1	4,637.2	4,213.2	3,999.6	4,090.8	4,627.0	4,614.1	4,630.4	5,365.3
Petroleum	3,611.9	14,901.7	12,246.0	9,549.9	10,257.5	10,110.5	R 11,040.6	R 12,381.9	R 11,826.3	11,161.6
Asphalt and Road Oil	26.0	121.3	230.1	185.3	162.0	168.7	92.7	108.4	117.0	105.4
Aviation Gasoline	2.7	14.6	11.1	10.9	4.8	3.9	3.7	3.6	R 2.9	3.2
Distillate Fuel	803.3	2,862.3	2,861.6	2,568.6	2,590.2	2,684.5	2,963.2	3,141.0	2,861.6	2,877.9
Jet Fuel	155.5	1,275.3	139.0	91.8	72.8	113.6	158.9	183.5	R 153.0	144.6
Kerosene	55.3	101.8	250.5	117.3	155.4	200.3	185.5	114.2	128.8	80.2
LPG	37.2	139.0	202.3	186.4	202.6	190.2	R 224.2	R 256.9	R 352.7	332.4
Lubricants	67.8	182.1	203.2	176.0	162.1	179.8	167.8	174.1	179.2	211.8
Motor Gasoline	2,005.9	6,865.7	6,299.5	4,740.2	5,234.5	5,018.8	5,480.3	6,419.2	R 6,644.3	6,294.2
Residual Fuel	409.7	2,964.1	1,827.8	1,308.1	1,495.6	1,398.8	1,590.5	1,756.9	1,164.1	877.5
Other [a]	48.5	375.5	220.7	165.4	177.5	151.9	173.8	223.9	222.8	234.3
Nuclear Fuel	9.2	118.3	175.2	146.3	154.6	148.3	159.1	164.7	169.4	117.2
Biomass Fuels at Utilities	–	.2	([d])	–	*	–	–	–	–	–
Primary Energy — Five Sectors [b]	4,700.7	18,666.0	17,604.4	14,344.9	14,885.3	14,888.8	R 16,416.5	R 17,735.6	R 17,193.0	17,169.6
Electric Utility Fuel [c]	-335.3	-2,427.3	-2,320.5	-1,558.8	-1,917.7	-1,892.7	-2,303.0	-2,383.6	-1,848.0	-1,509.3
Electricity Purchased by End Users	2,006.4	7,044.4	10,369.9	10,220.2	10,328.0	10,706.6	11,352.8	12,087.5	12,665.0	13,090.9
Total Energy	6,371.7	23,283.2	25,653.8	23,006.3	23,295.6	23,702.7	R 25,466.2	27,439.5	R 28,010.0	28,751.1

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Utilities used biomass fuels at no charge or received a fee for accepting them.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
*Value less than 0.05 million dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, New York 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.19**	**8.42**	**11.98**	**11.11**	**10.72**	**10.59**	**11.52**	**12.88**	**13.29**	**13.00**
Primary Energy	1.43	5.80	7.91	7.14	6.63	6.46	7.18	7.75	7.77	7.67
Coal	1.43	3.26	3.61	3.39	3.27	3.29	3.36	3.59	3.44	3.21
Natural Gas	1.37	4.85	7.54	7.26	6.68	6.32	7.01	7.19	7.16	7.37
Petroleum	1.48	7.22	8.58	7.04	6.63	6.71	7.51	8.92	9.06	8.38
Distillate Fuel	1.43	7.08	8.35	6.83	6.39	6.47	7.18	8.44	8.35	7.71
Kerosene	1.56	8.49	9.30	7.61	7.12	7.21	8.00	9.40	9.30	8.59
LPG	2.70	9.12	11.12	9.96	9.64	9.53	11.54	13.63	14.59	14.43
Electricity	8.83	23.08	31.84	30.86	30.81	30.67	32.03	33.54	35.09	36.43
Commercial Sector	**1.99**	**9.27**	**13.68**	**12.08**	**11.89**	**11.72**	**12.32**	**13.10**	[R]**13.22**	**13.36**
Primary Energy	.80	4.70	5.84	4.72	4.55	4.52	4.93	5.26	4.91	5.00
Coal	.48	1.67	1.91	1.74	1.76	1.70	1.75	1.76	1.74	1.74
Natural Gas	1.17	4.17	5.95	5.61	5.02	5.24	5.46	5.43	5.33	5.59
Petroleum	.67	5.09	5.86	4.15	4.25	3.91	4.47	5.15	4.52	4.37
Distillate Fuel	1.14	6.48	7.03	5.34	5.24	5.12	5.53	6.70	6.42	5.76
Kerosene	.73	5.68	6.79	4.56	4.80	4.83	5.20	6.86	5.83	5.57
LPG	1.45	5.79	11.95	11.62	11.29	11.21	9.73	10.33	11.09	9.50
Motor Gasoline	2.92	10.26	8.79	6.60	6.99	7.16	7.82	8.83	9.44	9.28
Residual Fuel	.42	4.18	4.64	2.92	3.22	2.67	3.12	3.75	2.83	2.89
Electricity	7.80	23.21	30.86	29.62	27.96	27.13	27.99	29.44	[R]30.31	31.48
Industrial Sector	**.97**	**5.39**	**7.01**	**6.33**	**6.33**	**6.21**	**6.76**	**7.43**	**7.29**	**7.32**
Primary Energy	.69	3.98	4.77	3.95	3.84	3.72	3.91	4.22	3.98	4.05
Coal	.53	2.08	1.90	1.75	1.68	1.66	1.71	1.74	1.73	1.74
Coking Coal	.58	2.38	1.88	1.76	1.59	1.61	1.67	1.71	1.72	1.73
Steam Coal	.48	1.67	1.91	1.74	1.76	1.70	1.75	1.76	1.74	1.74
Natural Gas	.68	3.43	5.13	4.78	4.16	4.56	4.69	4.72	4.60	4.79
Petroleum	.81	5.33	6.17	4.64	4.89	4.45	4.89	5.36	[R]4.75	4.39
Asphalt and Road Oil	.70	3.67	4.81	4.34	3.73	3.18	2.81	2.96	2.76	2.30
Distillate Fuel	.70	5.36	6.13	4.12	4.33	4.36	4.70	6.20	5.27	5.03
Kerosene	.73	5.68	6.79	4.56	4.80	4.83	5.20	6.86	5.83	5.57
LPG	1.45	5.79	11.95	11.62	11.29	11.21	9.73	10.33	11.09	9.50
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.92	10.26	8.79	6.60	6.99	7.16	7.82	8.83	9.44	9.28
Residual Fuel	.49	3.78	4.64	2.92	3.22	2.67	3.12	3.75	2.83	2.89
Other	1.17	7.05	6.57	4.41	5.77	4.89	5.66	6.10	4.52	4.11
Electricity	3.51	12.11	15.34	14.43	14.74	14.47	15.52	16.94	18.07	19.05
Transportation Sector	**2.14**	**8.86**	**8.84**	**6.68**	**7.03**	**7.10**	**7.80**	**8.87**	[R]**9.21**	**9.09**
Primary Energy	2.12	8.82	8.74	6.56	6.89	6.96	7.66	8.74	9.09	8.94
Coal	.48	–	–	–	–	–	–	–	–	–
Petroleum	2.12	8.82	8.74	6.56	6.89	6.96	7.66	8.74	9.09	8.94
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.44	7.45	8.48	6.59	6.74	6.78	7.36	8.99	9.06	8.89
Jet Fuel	.72	6.27	6.51	4.42	4.55	4.15	4.70	6.03	5.18	4.84
LPG	1.45	5.79	11.95	11.62	11.29	11.21	9.73	10.33	11.09	9.50
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.92	10.26	8.79	6.60	6.99	7.16	7.82	8.83	9.44	9.28
Residual Fuel	.37	3.53	4.08	2.27	2.84	2.18	2.62	3.13	2.38	2.34
Electricity	4.82	15.02	19.65	19.51	22.59	21.39	22.65	23.32	23.13	25.53
Total Energy	**1.81**	**8.08**	**10.38**	**9.07**	**9.01**	**8.99**	**9.72**	**10.64**	**10.84**	**10.79**
Primary Energy — Four Sectors	1.36	6.44	7.32	5.96	5.95	5.88	6.46	7.17	7.16	7.04
Electricity	6.72	19.64	26.97	26.07	25.56	25.09	26.08	27.51	28.68	29.86
Electric Utility Sector [a]	**.42**	**2.68**	**2.54**	**1.79**	**2.01**	**1.80**	**2.06**	**2.20**	**1.74**	**1.65**
Coal	.47	1.47	1.72	1.65	1.54	1.58	1.57	1.61	1.59	1.49
Natural Gas	.38	2.67	3.48	2.24	2.44	2.24	2.35	2.38	2.23	2.41
Petroleum	.42	4.26	4.29	2.50	3.09	2.53	3.03	3.65	2.76	2.66
Heavy Oil [b]	.42	4.25	4.26	2.47	3.06	2.49	2.95	3.60	2.71	2.63
Light Oil [b]	.44	5.63	6.11	3.81	4.25	3.97	4.48	6.34	5.30	4.96
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	.20	.56	.67	.61	.63	.57	.65	.65	.55	.45
Biomass Fuels	–	1.74	([d])	–	.95	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.17**	**5.45**	**5.87**	**4.76**	**4.75**	**4.56**	**4.97**	**5.50**	**5.36**	**5.47**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[d] Utilities used biomass fuels at no charge or received a fee for accepting them.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, New York 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1,844.5**	**5,798.8**	**7,860.2**	**7,654.9**	**7,638.0**	**7,926.5**	**8,533.9**	**8,526.0**	**8,785.5**	**9,271.5**
Primary Energy	1,076.5	3,390.0	4,301.5	4,098.6	3,928.2	4,006.4	4,393.8	4,111.9	4,095.5	4,458.5
Coal	12.8	13.7	17.7	17.1	14.6	11.6	12.0	11.5	11.2	10.2
Natural Gas	484.5	1,654.8	2,478.1	2,511.7	2,300.8	2,322.2	2,633.2	2,501.1	2,490.9	2,870.5
Petroleum	579.2	1,721.5	1,805.7	1,569.8	1,612.8	1,672.6	1,748.6	1,599.3	1,593.4	1,577.8
Distillate Fuel	501.4	1,554.5	1,506.7	1,355.5	1,347.9	1,373.0	1,455.7	1,303.6	1,216.4	1,257.2
Kerosene	49.4	82.9	169.7	95.3	129.7	170.2	125.7	94.1	110.6	61.0
LPG	28.3	84.1	129.3	118.9	135.2	129.4	167.1	201.6	266.3	259.7
Electricity	768.0	2,408.8	3,558.6	3,556.3	3,709.8	3,920.1	4,140.1	4,414.0	4,690.1	4,813.0
Commercial Sector	**1,325.0**	**5,194.8**	**7,298.8**	**7,079.0**	**6,826.2**	**6,995.6**	**7,413.7**	**7,776.1**	**R7,831.0**	**8,149.6**
Primary Energy	439.9	1,982.8	2,138.1	1,951.2	1,795.3	1,839.4	2,016.6	2,111.3	1,957.7	2,087.7
Coal	3.2	7.0	10.4	11.1	8.8	7.3	7.2	6.3	6.4	6.3
Natural Gas	166.0	690.4	1,010.8	966.2	864.3	1,013.5	1,103.7	1,090.0	1,091.9	1,249.0
Petroleum	270.8	1,285.4	1,117.0	973.9	922.1	818.6	905.7	1,015.0	859.3	832.4
Distillate Fuel	135.5	546.7	484.4	512.3	451.3	439.2	498.8	506.1	477.0	466.3
Kerosene	2.6	5.4	33.2	5.9	8.6	5.7	15.3	10.5	7.0	12.9
LPG	2.7	9.4	24.5	24.5	28.0	26.9	24.9	27.0	35.7	30.2
Motor Gasoline	16.1	55.7	88.3	64.3	50.2	41.6	55.4	55.4	35.5	33.2
Residual Fuel	113.8	668.1	486.6	367.0	384.0	305.3	311.4	416.2	304.0	289.8
Electricity	885.0	3,212.0	5,160.7	5,127.8	5,031.0	5,156.2	5,397.1	5,664.8	R5,873.4	6,061.9
Industrial Sector	**903.2**	**3,374.0**	**3,238.1**	**2,673.8**	**2,662.8**	**2,702.4**	**R2,896.7**	**3,154.0**	**R3,295.2**	**3,557.7**
Primary Energy	581.2	2,056.0	1,737.7	1,289.9	1,246.4	1,241.8	R1,263.9	1,338.5	R1,377.3	1,540.7
Coal	164.5	304.2	180.4	143.1	141.3	150.7	160.9	143.0	142.4	124.0
Coking Coal	96.4	197.6	58.5	58.1	61.6	72.6	74.1	62.2	56.6	53.4
Steam Coal	68.1	106.6	121.9	85.0	79.6	78.1	86.8	80.8	85.9	70.7
Natural Gas	80.0	398.4	526.2	425.4	398.7	412.8	449.8	473.7	561.4	727.3
Petroleum	336.7	1,353.4	1,031.1	721.5	706.4	678.2	R653.1	721.8	R673.4	689.4
Asphalt and Road Oil	26.0	121.3	230.1	185.3	162.0	168.7	92.7	108.4	117.0	105.4
Distillate Fuel	68.8	289.8	172.1	75.5	97.2	93.9	104.8	123.0	93.4	91.3
Kerosene	3.3	13.4	47.6	16.1	17.1	24.4	44.5	9.7	11.1	6.4
LPG	5.6	43.8	42.2	38.5	35.8	28.9	R26.8	22.7	R44.3	37.6
Lubricants	30.9	89.5	99.8	86.4	79.6	88.3	82.4	85.5	88.0	104.0
Motor Gasoline	50.3	82.7	56.5	43.4	47.1	53.1	57.0	52.8	54.4	54.1
Residual Fuel	103.2	337.3	162.0	110.9	90.1	69.0	71.1	95.7	42.4	56.2
Other	48.5	375.5	220.7	165.4	177.5	151.9	173.8	223.9	222.8	234.3
Electricity	322.1	1,318.1	1,500.4	1,383.9	1,416.4	1,460.6	1,632.7	1,815.5	1,918.0	2,017.0
Transportation Sector	**2,299.1**	**8,915.6**	**7,256.8**	**5,598.6**	**6,168.7**	**6,078.2**	**6,622.0**	**7,983.5**	**R8,098.2**	**7,772.3**
Primary Energy	2,267.8	8,809.9	7,106.5	5,446.3	5,997.8	5,908.5	6,439.1	7,790.3	R7,914.5	7,573.3
Coal	.2	–	–	–	–	–	–	–	–	–
Petroleum	2,267.6	8,809.9	7,106.5	5,446.3	5,997.8	5,908.5	6,439.1	7,790.3	R7,914.5	7,573.3
Aviation Gasoline	2.7	14.6	11.1	10.9	4.8	3.9	3.7	3.6	R2.9	3.2
Distillate Fuel	89.5	447.5	669.3	595.4	658.1	728.4	809.0	1,170.8	1,047.4	1,051.1
Jet Fuel	155.5	1,274.5	139.0	91.8	72.8	113.6	158.9	183.5	R153.0	144.6
LPG	.6	1.7	6.3	4.6	3.6	5.0	5.5	5.7	6.3	5.0
Lubricants	36.9	92.7	103.4	89.5	82.5	91.5	85.4	88.6	91.2	107.8
Motor Gasoline	1,939.4	6,727.2	6,154.6	4,632.5	5,137.1	4,924.1	5,367.9	6,311.0	R6,554.4	6,206.9
Residual Fuel	43.0	251.7	22.7	21.8	38.9	42.0	8.8	27.1	59.3	54.8
Electricity	31.3	105.6	150.3	152.3	170.9	169.7	182.8	193.2	R183.6	199.1
Total Energy	**6,371.7**	**23,283.2**	**25,653.8**	**23,006.3**	**23,295.6**	**23,702.7**	**R25,466.2**	**27,439.5**	**R28,010.0**	**28,751.1**
Primary Energy — Four Sectors	4,365.4	16,238.8	15,283.9	12,786.1	12,967.6	12,996.1	R14,113.5	15,352.0	R15,344.9	15,660.2
Electricity	2,006.4	7,044.4	10,369.9	10,220.2	10,328.0	10,706.6	11,352.8	12,087.5	12,665.0	13,090.9
Electric Utility Sector [a]	**335.3**	**2,427.3**	**2,320.5**	**1,558.8**	**1,917.7**	**1,892.7**	**2,303.0**	**2,383.6**	**1,848.0**	**1,509.3**
Coal	127.6	233.8	337.5	264.2	308.9	369.5	409.5	414.1	406.8	384.8
Natural Gas	40.9	343.4	622.1	309.9	435.8	342.3	440.2	549.3	486.2	518.6
Petroleum	157.7	1,731.5	1,185.7	838.4	1,018.3	1,032.6	1,294.1	1,255.5	785.7	488.7
Heavy Oil [b]	149.6	1,706.9	1,156.5	808.5	982.7	982.6	1,199.2	1,218.0	758.4	476.7
Light Oil [b]	8.1	24.5	29.2	29.9	35.7	50.0	94.9	37.5	27.3	12.1
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	9.2	118.3	175.2	146.3	154.6	148.3	159.1	164.7	169.4	117.2
Biomass Fuels	–	.2	([d])	–	*	–	–	–	–	–
Primary Energy — Five Sectors [c]	**4,700.7**	**18,666.0**	**17,604.4**	**14,344.9**	**14,885.3**	**14,888.8**	**R16,416.5**	**R17,735.6**	**R17,193.0**	**17,169.6**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[d] Utilities used biomass fuels at no charge or received a fee for accepting them.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, North Carolina 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.43	1.58	1.97	1.85	1.79	1.77	1.77	1.79	1.77	1.73
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.43	1.58	1.97	1.85	1.79	1.77	1.77	1.79	1.77	1.73
Natural Gas	.69	3.55	5.29	4.77	4.66	4.46	4.56	4.19	4.09	4.29
Petroleum	1.94	8.15	8.21	6.12	6.46	6.32	7.11	8.41	R8.13	7.73
Asphalt and Road Oil	.67	3.57	4.94	4.22	3.23	3.18	2.89	2.95	3.08	2.32
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.13	6.80	7.52	5.75	5.71	5.60	6.37	8.05	7.56	7.15
Jet Fuel	.73	6.46	5.77	3.85	3.96	3.71	4.30	5.65	4.79	4.48
Kerosene	1.32	7.67	8.57	6.60	5.60	5.74	6.78	8.38	7.85	7.43
LPG	1.89	6.11	9.72	9.02	8.71	8.76	8.82	10.31	11.09	10.16
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.82	9.91	9.03	6.69	7.33	7.26	8.10	9.44	9.23	8.96
Residual Fuel	.46	3.72	4.45	2.72	2.94	2.34	2.70	3.11	2.37	2.46
Other [a]	1.10	7.44	7.23	4.78	5.90	4.96	5.76	6.38	5.10	4.84
Nuclear Fuel	–	.36	.54	.53	.56	.59	.55	.54	.52	.51
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.20	4.63	4.78	3.80	3.87	3.83	4.05	4.63	R4.39	4.36
Electric Utility Fuel [c]	.41	1.48	1.56	1.46	1.29	1.30	1.31	1.33	1.27	1.35
Electricity Purchased by End Users	4.17	11.72	17.46	18.16	18.05	18.03	18.33	18.74	18.96	19.33
Total Energy	2.02	8.02	9.55	8.38	8.61	8.49	9.17	10.01	R9.97	9.75
	Expenditures in Millions of Dollars									
Coal	210.3	985.6	1,084.5	1,077.4	894.0	912.8	982.3	945.7	925.6	1,038.0
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	210.3	985.6	1,084.5	1,077.4	894.0	912.8	982.3	945.7	925.6	1,038.0
Natural Gas	102.8	529.3	705.5	644.6	677.9	662.9	718.8	656.5	675.7	768.8
Petroleum	1,201.9	5,423.4	5,663.5	4,527.8	4,874.3	5,012.1	R5,302.4	R6,025.5	R5,835.7	5,786.6
Asphalt and Road Oil	16.1	73.3	113.2	127.0	86.3	94.8	72.3	82.4	78.2	65.4
Aviation Gasoline	1.7	9.8	8.8	9.6	8.3	8.8	9.6	10.0	7.5	6.6
Distillate Fuel	149.3	955.5	1,087.3	924.9	943.6	1,028.8	1,003.9	1,175.0	1,054.3	1,072.1
Jet Fuel	18.7	185.3	213.6	152.9	171.2	172.1	184.0	174.2	R116.3	116.4
Kerosene	86.6	141.7	231.9	147.5	116.3	156.3	129.6	77.2	86.2	85.4
LPG	39.1	179.1	264.4	239.4	278.6	245.8	R294.9	R321.7	R413.1	408.4
Lubricants	26.2	105.0	117.2	101.4	93.5	103.7	96.7	100.4	103.3	122.1
Motor Gasoline	835.7	3,448.9	3,362.0	2,601.7	2,947.9	3,015.8	3,306.4	3,823.8	R3,734.7	3,635.6
Residual Fuel	19.7	211.1	174.3	108.4	100.7	76.7	80.3	101.2	91.1	116.5
Other [a]	8.8	113.6	90.8	115.0	127.8	109.4	124.7	159.5	151.1	158.1
Nuclear Fuel	–	22.9	111.8	115.7	171.2	183.3	173.4	150.4	169.8	122.8
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1,515.0	6,961.2	7,565.3	6,365.6	6,617.4	6,771.2	R7,176.9	R7,778.2	R7,606.8	7,716.1
Electric Utility Fuel [c]	-190.7	-967.2	-1,097.2	-1,079.1	-960.0	-989.4	-1,058.0	-973.5	-992.1	-1,043.7
Electricity Purchased by End Users	576.2	2,553.8	4,305.3	4,797.8	5,051.7	5,228.3	5,479.4	5,715.3	5,973.0	6,213.0
Total Energy	1,900.4	8,547.8	10,773.4	10,084.3	10,709.1	11,010.0	R11,598.3	R12,520.0	R12,587.6	12,885.5

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, North Carolina 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.41**	**9.62**	**14.09**	**14.25**	**14.07**	**13.99**	**15.02**	**16.56**	**16.72**	**16.44**
Primary Energy	1.40	6.15	7.86	6.81	6.29	6.17	6.97	7.68	7.70	7.39
Coal	1.14	2.70	2.75	2.60	2.69	2.53	2.87	2.78	2.58	2.65
Natural Gas	1.27	4.06	6.38	6.41	6.46	6.07	6.35	5.98	6.05	6.38
Petroleum	1.44	7.30	8.69	7.13	6.27	6.32	7.45	9.22	9.21	8.44
Distillate Fuel	1.31	6.95	8.02	6.35	5.30	5.54	6.36	7.95	7.48	7.06
Kerosene	1.40	7.96	8.73	6.91	5.77	6.03	6.92	8.65	8.14	7.68
LPG	2.28	7.67	10.27	9.44	9.20	8.81	9.63	11.22	11.67	10.29
Electricity	5.45	13.91	20.48	21.17	21.59	21.89	22.45	22.98	23.29	23.78
Commercial Sector	**2.51**	**8.50**	**12.78**	**13.04**	**12.51**	**12.13**	**12.84**	**13.66**	**13.80**	**13.90**
Primary Energy	.98	4.73	6.15	5.00	4.80	4.45	5.01	5.28	4.93	4.81
Coal	.53	1.71	1.90	1.83	1.75	1.74	1.71	1.80	1.71	1.73
Natural Gas	.94	3.67	5.65	5.39	5.05	4.80	4.99	4.49	4.39	4.63
Petroleum	1.23	6.58	7.24	4.90	4.82	4.36	5.41	7.00	6.37	5.88
Distillate Fuel	1.02	6.33	6.90	4.14	3.81	3.44	4.45	6.04	4.92	4.10
Kerosene	.77	6.12	7.73	4.95	4.43	4.11	5.62	6.66	5.96	5.02
LPG	1.41	5.24	9.33	8.70	8.32	8.71	7.90	9.41	10.59	10.04
Motor Gasoline	2.82	9.91	9.03	6.69	7.33	7.26	8.10	9.44	9.23	8.96
Residual Fuel	.67	3.80	4.46	2.74	2.95	2.36	2.75	3.16	2.42	2.49
Electricity	4.60	12.28	18.18	18.79	18.45	18.35	18.44	18.94	19.11	19.50
Industrial Sector	**1.06**	**5.34**	**7.26**	**6.45**	**6.44**	**6.31**	**6.60**	**6.60**	**6.56**	**6.40**
Primary Energy	.68	4.03	4.89	3.82	3.73	3.49	3.68	3.81	3.72	3.55
Coal	.53	1.71	1.90	1.83	1.75	1.74	1.71	1.80	1.71	1.73
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.53	1.71	1.90	1.83	1.75	1.74	1.71	1.80	1.71	1.73
Natural Gas	.50	3.32	4.75	3.87	3.65	3.47	3.53	3.36	3.14	3.23
Petroleum	.86	5.03	6.44	4.69	4.79	4.40	4.89	5.39	5.15	4.63
Asphalt and Road Oil	.67	3.57	4.94	4.22	3.23	3.18	2.89	2.95	3.08	2.32
Distillate Fuel	.71	5.49	6.92	4.43	3.97	3.68	5.03	5.96	5.34	4.50
Kerosene	.77	6.12	7.73	4.95	4.43	4.11	5.62	6.66	5.96	5.02
LPG	1.41	5.24	9.33	8.70	8.32	8.71	7.90	9.41	10.59	10.04
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.82	9.91	9.03	6.69	7.33	7.26	8.10	9.44	9.23	8.96
Residual Fuel	.45	3.72	4.46	2.74	2.95	2.36	2.75	3.16	2.42	2.49
Other	1.10	7.44	7.23	4.78	5.90	4.96	5.76	6.38	5.10	4.84
Electricity	2.76	9.28	13.83	14.39	13.80	13.60	13.83	13.99	14.12	14.44
Transportation Sector	**2.52**	**9.35**	**8.62**	**6.46**	**6.96**	**6.84**	**7.61**	**9.09**	**R 8.85**	**8.58**
Primary Energy	2.52	9.35	8.62	6.46	6.96	6.84	7.61	9.09	R 8.85	8.58
Coal	.53	–	–	–	–	–	–	–	–	–
Petroleum	2.52	9.35	8.62	6.46	6.96	6.84	7.61	9.09	R 8.85	8.58
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.30	7.34	7.66	6.26	6.70	6.41	7.05	8.75	8.37	8.01
Jet Fuel	.73	6.46	5.77	3.85	3.96	3.71	4.30	5.65	4.79	4.48
LPG	1.41	5.24	9.33	8.70	8.32	8.71	7.90	9.41	10.59	10.04
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.82	9.91	9.03	6.69	7.33	7.26	8.10	9.44	9.23	8.96
Residual Fuel	.27	3.43	3.78	1.80	2.83	2.07	2.37	2.65	2.00	2.19
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**2.02**	**8.02**	**9.55**	**8.38**	**8.61**	**8.49**	**9.17**	**10.01**	**R 9.97**	**9.75**
Primary Energy — Four Sectors	1.65	7.07	7.34	5.63	5.87	5.74	6.33	7.19	R 6.98	6.67
Electricity	4.17	11.72	17.46	18.16	18.05	18.03	18.33	18.74	18.96	19.33
Electric Utility Sector [a]	**.41**	**1.48**	**1.56**	**1.46**	**1.29**	**1.30**	**1.31**	**1.33**	**1.27**	**1.35**
Coal	.41	1.57	1.98	1.85	1.79	1.77	1.77	1.78	1.78	1.73
Natural Gas	.37	3.15	4.78	2.74	3.09	3.37	3.46	3.10	2.67	2.86
Petroleum	.79	5.82	5.68	3.48	3.91	3.48	3.99	5.12	4.74	4.41
Heavy Oil [b]	.69	3.81	–	–	–	–	–	–	–	–
Light Oil [b]	.83	5.82	5.68	3.48	3.91	3.48	3.99	5.12	4.74	4.41
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	.36	.54	.53	.56	.59	.55	.54	.52	.51
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.20**	**4.63**	**4.78**	**3.80**	**3.87**	**3.83**	**4.05**	**4.63**	**R 4.39**	**4.36**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, North Carolina 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**483.8**	**1,789.6**	**2,614.2**	**2,768.3**	**2,975.1**	**3,090.4**	**3,230.4**	**3,226.4**	**3,390.9**	**3,530.2**
Primary Energy	211.3	633.0	737.7	636.9	653.9	684.4	719.4	627.4	657.9	710.2
Coal	4.1	3.9	4.7	3.5	3.8	4.5	3.8	3.8	2.2	4.7
Natural Gas	35.6	139.6	189.1	209.8	239.1	239.9	253.2	216.0	237.0	281.1
Petroleum	171.6	489.4	543.9	423.5	410.9	440.0	462.3	407.6	418.7	424.4
Distillate Fuel	65.9	285.2	228.0	184.1	175.5	185.0	173.1	164.6	139.6	144.0
Kerosene	79.8	124.0	197.7	130.1	105.0	139.4	118.1	69.0	77.3	79.9
LPG	25.9	80.2	118.2	109.3	130.5	115.6	171.1	173.9	201.9	200.5
Electricity	272.5	1,156.6	1,876.5	2,131.4	2,321.2	2,406.0	2,511.0	2,599.0	2,733.0	2,820.0
Commercial Sector	**196.5**	**827.5**	**1,516.2**	**1,591.3**	**1,671.4**	**1,731.5**	**1,823.5**	**1,938.3**	**1,987.7**	**2,063.2**
Primary Energy	44.3	230.1	327.3	254.2	279.4	284.5	296.5	289.3	265.8	272.2
Coal	3.6	4.6	6.0	4.6	4.6	5.8	4.2	4.6	2.7	5.7
Natural Gas	20.7	97.1	146.2	141.7	156.4	160.4	170.4	144.8	155.4	174.5
Petroleum	20.0	128.3	175.1	107.9	118.4	118.3	121.9	139.9	107.6	92.0
Distillate Fuel	10.1	61.7	106.4	58.4	65.1	61.9	61.0	68.1	52.2	39.2
Kerosene	1.0	4.1	10.7	4.8	3.5	6.0	5.6	3.0	3.2	1.3
LPG	2.8	9.7	18.9	17.8	20.8	20.1	24.8	25.7	32.3	34.5
Motor Gasoline	5.3	41.1	30.0	22.8	27.8	26.1	26.6	38.5	18.2	15.2
Residual Fuel	.8	11.7	9.0	4.1	1.2	4.2	3.9	4.5	1.8	1.8
Electricity	152.2	597.4	1,188.9	1,337.2	1,392.0	1,447.0	1,526.9	1,649.0	1,722.0	1,791.0
Industrial Sector	**319.4**	**1,838.7**	**2,450.3**	**2,394.5**	**2,324.6**	**2,288.0**	**R2,388.3**	**R2,528.3**	**R2,579.0**	**2,711.7**
Primary Energy	168.0	1,038.9	1,210.4	1,065.3	986.1	912.7	R946.8	R1,061.0	R1,061.0	1,109.7
Coal	28.7	57.3	106.1	116.2	110.3	109.4	108.5	133.2	116.3	124.0
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	28.7	57.3	106.1	116.2	110.3	109.4	108.5	133.2	116.3	124.0
Natural Gas	38.4	287.1	367.2	289.8	278.7	258.9	289.3	287.9	275.0	303.9
Petroleum	100.8	694.6	737.1	659.3	597.1	544.4	R549.0	R639.8	R669.8	681.8
Asphalt and Road Oil	16.1	73.3	113.2	127.0	86.3	94.8	72.3	82.4	78.2	65.4
Distillate Fuel	18.6	132.0	130.5	118.4	87.6	79.5	103.8	100.7	92.5	83.9
Kerosene	5.8	13.7	23.5	12.5	7.9	10.9	5.8	5.3	5.7	4.2
LPG	10.1	88.2	121.1	107.0	123.5	105.4	R94.6	R116.5	R171.7	168.1
Lubricants	10.1	49.7	55.5	48.0	44.3	49.1	45.8	47.5	48.9	57.8
Motor Gasoline	14.9	26.8	39.5	28.6	31.6	28.2	35.6	39.8	41.7	38.5
Residual Fuel	16.5	197.3	163.0	102.7	88.0	67.1	66.4	88.1	79.9	105.7
Other	8.8	113.6	90.8	115.0	127.8	109.4	124.7	159.5	151.1	158.1
Electricity	151.4	799.8	1,239.9	1,329.2	1,338.5	1,375.3	1,441.5	1,467.3	1,518.0	1,602.0
Transportation Sector	**900.7**	**4,092.0**	**4,192.7**	**3,330.0**	**3,738.0**	**3,900.1**	**4,156.2**	**4,827.1**	**R4,629.9**	**4,580.4**
Primary Energy	900.7	4,092.0	4,192.7	3,330.0	3,738.0	3,900.1	4,156.2	4,827.1	R4,629.9	4,580.4
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	900.7	4,092.0	4,192.7	3,330.0	3,738.0	3,900.1	4,156.2	4,827.1	R4,629.9	4,580.4
Aviation Gasoline	1.7	9.8	8.8	9.6	8.3	8.8	9.6	10.0	7.5	6.6
Distillate Fuel	47.8	457.5	607.6	556.9	605.5	693.0	653.0	830.4	760.4	797.0
Jet Fuel	18.7	185.3	213.6	152.9	171.2	172.1	184.0	174.2	R116.3	116.4
LPG	.3	1.0	6.2	5.4	3.8	4.7	4.5	5.5	7.1	5.2
Lubricants	16.1	55.3	61.7	53.4	49.2	54.6	50.9	52.8	54.4	64.3
Motor Gasoline	815.5	3,381.0	3,292.5	2,550.3	2,888.5	2,961.5	3,244.2	3,745.5	3,674.8	3,581.8
Residual Fuel	.6	2.1	2.3	1.5	11.6	5.4	10.0	8.7	9.4	9.1
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1,900.4**	**8,547.8**	**10,773.4**	**10,084.3**	**10,709.1**	**11,010.0**	**R11,598.3**	**R12,520.0**	**R12,587.6**	**12,885.5**
Primary Energy — Four Sectors	1,324.3	5,994.0	6,468.1	5,286.5	5,657.4	5,781.7	R6,118.9	R6,804.7	R6,614.6	6,672.4
Electricity	576.2	2,553.8	4,305.3	4,797.8	5,051.7	5,228.3	5,479.4	5,715.3	5,973.0	6,213.0
Electric Utility Sector [a]	**190.7**	**967.2**	**1,097.2**	**1,079.1**	**960.0**	**989.4**	**1,058.0**	**973.5**	**992.1**	**1,043.7**
Coal	173.8	919.7	967.8	953.1	775.2	793.1	865.7	804.0	804.4	903.5
Natural Gas	8.0	5.5	2.9	3.2	3.7	3.7	6.0	7.9	8.3	9.4
Petroleum	8.9	19.0	14.7	7.1	9.9	9.3	12.9	11.1	9.6	8.1
Heavy Oil [b]	1.9	*	–	–	–	–	–	–	–	–
Light Oil [b]	6.9	19.0	14.7	7.1	9.9	9.3	12.9	11.1	9.6	8.1
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	22.9	111.8	115.7	171.2	183.3	173.4	150.4	169.8	122.8
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1,515.0**	**6,961.2**	**7,565.3**	**6,365.6**	**6,617.4**	**6,771.2**	**R7,176.9**	**R7,778.2**	**R7,606.8**	**7,716.1**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, North Dakota 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.34	0.67	1.44	1.43	1.35	1.15	1.21	1.18	1.16	1.19
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.34	.67	1.44	1.43	1.35	1.15	1.21	1.18	1.16	1.19
Natural Gas	.78	3.41	4.97	4.73	4.65	4.34	4.08	4.12	4.15	4.24
Petroleum	1.83	7.70	7.94	5.84	6.27	6.33	6.94	8.06	R7.70	7.11
Asphalt and Road Oil	.79	3.85	5.17	4.07	3.74	3.53	3.13	3.32	3.36	2.58
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.07	6.59	6.96	4.90	5.73	5.39	6.12	7.41	6.72	6.29
Jet Fuel	.75	6.47	6.44	4.90	4.64	4.37	4.77	6.11	5.17	4.89
Kerosene	1.47	6.30	8.03	4.58	5.59	4.52	5.91	7.28	6.58	5.55
LPG	1.87	6.12	8.37	7.48	5.28	5.08	R5.43	7.01	7.73	7.29
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.83	9.97	9.64	6.92	7.53	8.05	8.88	9.87	9.57	9.29
Residual Fuel	.91	3.58	3.49	1.93	1.61	2.49	2.58	2.64	2.35	2.30
Other [a]	.51	2.48	2.31	1.53	1.50	1.45	1.74	2.02	1.72	1.29
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.26	3.66	3.30	2.71	2.69	2.41	2.61	2.73	2.69	2.57
Electric Utility Fuel [c]	.25	.57	.89	.83	.80	.71	.70	.69	.71	.73
Electricity Purchased by End Users	7.04	11.96	17.11	17.30	17.15	16.93	16.74	16.86	16.90	17.04
Total Energy	1.97	7.28	7.08	5.90	5.86	5.91	6.04	6.60	R6.49	6.12
	Expenditures in Millions of Dollars									
Coal	19.5	110.2	436.0	444.2	430.8	424.0	436.6	443.9	441.5	474.1
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	19.5	110.2	436.0	444.2	430.8	424.0	436.6	443.9	441.5	474.1
Natural Gas	14.9	77.6	118.4	103.3	89.4	103.4	105.4	98.9	110.1	109.8
Petroleum	201.2	938.4	887.8	657.0	682.5	681.3	R750.3	826.6	R826.3	791.7
Asphalt and Road Oil	7.3	19.2	35.9	23.7	22.0	22.4	19.2	17.9	17.3	25.1
Aviation Gasoline	1.0	2.9	.2	1.6	1.1	1.2	1.3	1.3	1.2	1.2
Distillate Fuel	30.9	312.6	303.8	210.9	227.5	212.4	249.9	291.9	290.1	257.6
Jet Fuel	8.3	59.7	58.3	43.5	31.5	31.0	34.5	39.0	R27.0	37.1
Kerosene	2.0	.5	.7	.4	.2	.4	.4	.2	.4	.2
LPG	12.1	29.0	16.3	46.4	33.8	29.5	R34.1	R35.5	R55.9	46.5
Lubricants	5.1	15.5	17.2	14.9	13.8	15.3	14.2	14.8	15.2	18.0
Motor Gasoline	130.2	480.1	446.7	311.7	348.8	363.7	391.7	420.1	414.9	401.9
Residual Fuel	3.2	13.6	6.2	3.1	2.6	4.0	3.5	4.0	2.8	2.7
Other [a]	.8	5.3	2.3	.8	1.3	1.4	1.5	1.8	1.4	1.4
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	235.6	1,126.3	1,442.2	1,204.5	1,202.7	1,208.7	R1,292.3	R1,369.4	R1,377.9	1,375.6
Electric Utility Fuel [c]	-12.3	-87.9	-203.4	-188.0	-183.8	-201.8	-189.4	-198.3	-209.5	-220.9
Electricity Purchased by End Users	67.3	210.2	407.5	401.2	383.2	407.3	400.6	400.8	415.8	411.7
Total Energy	290.6	1,248.6	1,646.2	1,417.7	1,402.1	1,414.2	R1,503.5	R1,571.9	R1,584.2	1,566.4

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, North Dakota 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.54**	**7.52**	**10.18**	**9.56**	**10.00**	**9.57**	**9.57**	**10.24**	**9.82**	**10.05**
Primary Energy	1.37	5.12	5.97	4.98	5.14	4.74	5.08	5.55	5.48	5.30
Coal	1.56	1.96	1.74	1.53	1.45	1.15	1.13	1.10	3.81	3.47
Natural Gas	.99	3.66	5.26	5.08	5.22	4.88	4.46	4.55	4.61	4.78
Petroleum	1.62	7.04	7.57	5.19	5.28	4.85	6.20	7.23	6.66	6.13
Distillate Fuel	1.28	6.92	7.48	4.84	5.34	4.66	5.55	6.87	6.38	5.21
Kerosene	1.65	7.39	8.09	5.24	5.77	5.04	6.00	7.42	6.89	5.64
LPG	2.07	7.48	8.46	6.13	5.13	5.24	7.32	7.98	7.09	7.01
Electricity	7.80	13.14	18.02	18.20	18.44	18.26	18.01	18.35	18.18	18.54
Commercial Sector	**1.74**	**5.39**	**8.78**	**8.67**	**9.14**	**8.55**	**8.05**	**8.93**	**8.98**	**9.16**
Primary Energy	.89	4.06	5.03	4.36	4.43	4.14	3.96	4.23	4.31	4.40
Coal	.74	2.63	3.21	3.11	2.80	2.66	2.74	2.82	2.70	2.68
Natural Gas	.67	3.26	4.81	4.59	4.53	4.25	3.99	4.06	4.15	4.33
Petroleum	1.45	5.63	6.47	4.26	4.70	4.46	4.61	6.16	6.40	5.82
Distillate Fuel	1.06	6.45	6.42	3.47	4.19	3.31	4.17	5.17	4.53	3.95
Kerosene	–	–	7.38	3.98	5.03	3.96	5.19	6.48	5.63	4.89
LPG	1.30	5.23	8.32	8.25	5.37	4.95	3.60	6.16	8.34	7.73
Motor Gasoline	2.83	9.97	9.64	6.92	7.53	8.05	8.88	9.87	9.57	9.29
Residual Fuel	.84	3.78	3.49	1.92	1.61	2.49	2.58	2.64	2.35	2.30
Electricity	6.62	12.16	17.54	17.53	17.25	17.41	16.95	17.07	17.12	17.28
Industrial Sector	**1.52**	**5.87**	**4.96**	**4.17**	**3.89**	**3.75**	**3.85**	**4.04**	**3.98**	**3.66**
Primary Energy	1.30	5.37	4.31	3.56	3.34	3.12	3.27	3.56	3.48	3.17
Coal	.74	2.63	3.21	3.11	2.80	2.66	2.74	2.82	2.70	2.68
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.74	2.63	3.21	3.11	2.80	2.66	2.74	2.82	2.70	2.68
Natural Gas	.38	2.58	4.19	3.92	3.09	3.23	3.38	3.24	3.05	3.11
Petroleum	1.45	6.07	6.72	4.60	4.83	4.33	R4.77	5.77	5.57	4.51
Asphalt and Road Oil	.79	3.85	5.17	4.07	3.74	3.53	3.13	3.32	3.36	2.58
Distillate Fuel	.79	5.50	6.70	3.61	4.57	3.60	4.71	5.89	5.12	4.44
Kerosene	.85	5.76	7.38	3.98	5.03	3.96	5.19	6.48	5.63	4.89
LPG	1.30	5.23	8.32	8.25	5.37	4.95	3.60	6.16	8.34	7.73
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.83	9.97	9.64	6.92	7.53	8.05	8.88	9.87	9.57	9.29
Residual Fuel	.94	3.19	3.49	1.92	1.61	2.49	2.58	2.64	2.35	2.30
Other	.51	2.48	2.31	1.53	1.50	1.45	1.74	2.02	1.72	1.29
Electricity	5.95	9.94	15.27	15.60	15.05	14.44	14.56	13.99	14.30	14.21
Transportation Sector	**2.19**	**8.74**	**8.65**	**6.64**	**7.16**	**7.49**	**8.17**	**9.28**	**R8.97**	**8.62**
Primary Energy	2.19	8.74	8.65	6.64	7.16	7.49	8.17	9.28	R8.97	8.62
Coal	.74	–	–	–	–	–	–	–	–	–
Petroleum	2.19	8.74	8.65	6.64	7.16	7.49	8.17	9.28	R8.97	8.62
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.33	7.23	7.12	6.46	6.97	7.14	7.73	8.96	8.50	8.32
Jet Fuel	.75	6.47	6.44	4.90	4.64	4.37	4.77	6.11	5.17	4.89
LPG	1.30	5.23	8.32	8.25	5.37	4.95	3.60	6.16	8.34	7.73
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.83	9.97	9.64	6.92	7.53	8.05	8.88	9.87	9.57	9.29
Residual Fuel	.83	–	–	2.34	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.97**	**7.28**	**7.08**	**5.90**	**5.86**	**5.91**	**6.04**	**6.60**	**R6.49**	**6.12**
Primary Energy — Four Sectors	1.62	6.75	5.93	4.68	4.70	4.67	4.90	5.46	5.32	4.98
Electricity	7.04	11.96	17.11	17.30	17.15	16.93	16.74	16.86	16.90	17.04
Electric Utility Sector [a]	**.25**	**.57**	**.89**	**.83**	**.80**	**.71**	**.70**	**.69**	**.71**	**.73**
Coal	.25	.56	.88	.82	.79	.70	.69	.69	.71	.72
Natural Gas	.35	2.47	4.74	5.22	4.43	4.29	4.39	3.86	4.34	4.03
Petroleum	.96	6.07	5.52	3.71	4.19	3.81	4.41	5.60	4.49	4.76
Heavy Oil [b]	.90	–	–	–	–	–	–	–	–	–
Light Oil [b]	1.23	6.07	5.52	3.71	4.19	3.81	4.41	5.60	4.49	4.76
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.26**	**3.66**	**3.30**	**2.71**	**2.69**	**2.41**	**2.61**	**2.73**	**2.69**	**2.57**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, North Dakota 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**66.8**	**210.1**	**299.1**	**278.1**	**260.2**	**278.7**	**287.4**	**281.8**	**303.2**	**288.8**
Primary Energy	29.6	100.0	114.0	94.7	84.8	88.6	99.3	96.8	111.1	97.8
Coal	1.2	1.3	1.6	1.2	.7	.7	.9	.7	2.5	2.1
Natural Gas	8.4	37.1	57.9	49.5	44.1	47.1	46.0	43.2	49.8	48.5
Petroleum	20.0	61.6	54.5	43.9	40.0	40.8	52.4	52.9	58.8	47.2
Distillate Fuel	8.2	47.3	48.8	29.8	27.8	26.2	29.5	33.8	33.5	19.5
Kerosene	1.8	.2	.6	.2	.2	.2	.3	.2	.3	.2
LPG	10.0	14.0	5.2	13.9	12.0	14.4	22.6	18.9	25.0	27.5
Electricity	37.2	110.1	185.1	183.5	175.4	190.0	188.0	185.0	192.0	191.0
Commercial Sector	**27.9**	**127.8**	**202.2**	**181.2**	**167.4**	**174.4**	**173.3**	**191.4**	**201.6**	**192.1**
Primary Energy	12.2	80.3	81.0	61.3	51.4	56.4	58.3	57.4	61.6	58.1
Coal	1.0	3.2	5.4	4.7	2.5	3.2	4.1	3.4	3.3	3.1
Natural Gas	5.8	37.8	51.7	43.5	37.6	44.0	44.5	42.9	46.6	44.1
Petroleum	5.4	39.2	23.9	13.2	11.4	9.2	9.8	11.1	11.7	10.9
Distillate Fuel	1.5	24.1	18.1	6.3	5.9	3.0	4.5	4.5	4.2	3.6
Kerosene	–	–	*	*	*	*	*	*	*	*
LPG	1.1	1.7	.9	3.3	2.2	2.4	2.0	2.6	5.2	5.3
Motor Gasoline	2.2	3.8	3.5	2.6	2.9	3.1	2.8	3.6	2.2	1.8
Residual Fuel	.5	9.5	1.4	.9	.3	.7	.4	.4	.1	.2
Electricity	15.7	47.5	121.2	119.9	116.0	118.0	115.0	133.9	140.0	134.0
Industrial Sector	**77.3**	**279.1**	**556.5**	**515.4**	**500.5**	**462.2**	**R506.2**	**507.4**	**R505.0**	**509.5**
Primary Energy	63.0	226.5	455.3	417.5	408.6	362.9	R408.7	425.6	R421.3	422.8
Coal	5.4	20.2	228.0	251.5	245.1	219.4	244.0	243.2	228.0	249.6
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	5.4	20.2	228.0	251.5	245.1	219.4	244.0	243.2	228.0	249.6
Natural Gas	.7	2.6	8.7	10.3	7.7	12.3	15.0	12.9	13.7	17.2
Petroleum	56.9	203.7	218.6	155.7	155.8	131.3	R149.7	169.5	R179.6	155.9
Asphalt and Road Oil	7.3	19.2	35.9	23.7	22.0	22.4	19.2	17.9	17.3	25.1
Distillate Fuel	10.0	78.8	108.4	64.6	68.4	51.5	76.3	89.0	91.2	76.0
Kerosene	.3	.3	.1	.2	*	.1	*	*	.1	*
LPG	1.0	13.0	9.9	28.5	19.3	12.4	R9.3	13.7	R25.3	13.2
Lubricants	.9	2.3	2.5	2.2	2.0	2.2	2.1	2.2	2.2	2.6
Motor Gasoline	34.4	80.7	54.7	33.6	40.6	37.9	38.2	41.2	39.4	35.1
Residual Fuel	2.3	4.1	4.8	2.2	2.3	3.3	3.0	3.7	2.7	2.5
Other	.8	5.3	2.3	.8	1.3	1.4	1.5	1.8	1.4	1.4
Electricity	14.3	52.6	101.1	97.9	91.8	99.3	97.5	81.9	83.8	86.7
Transportation Sector	**118.6**	**631.5**	**588.4**	**443.0**	**474.1**	**499.0**	**536.5**	**591.3**	**R574.4**	**576.0**
Primary Energy	118.6	631.5	588.4	443.0	474.1	499.0	536.5	591.3	R574.4	576.0
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	118.6	631.5	588.4	443.0	474.1	499.0	536.5	591.3	R574.4	576.0
Aviation Gasoline	1.0	2.9	.2	1.6	1.1	1.2	1.3	1.3	1.2	1.2
Distillate Fuel	11.1	159.9	126.3	108.9	124.1	130.8	137.7	162.7	159.4	156.9
Jet Fuel	8.3	59.7	58.3	43.5	31.5	31.0	34.5	39.0	R27.0	37.1
LPG	*	.2	.3	.7	.3	.3	.2	.3	.5	.5
Lubricants	4.2	13.2	14.7	12.7	11.7	13.0	12.2	12.6	13.0	15.3
Motor Gasoline	93.6	395.6	388.6	275.5	305.4	322.7	350.6	375.3	373.3	365.0
Residual Fuel	.2	–	–	*	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**290.6**	**1,248.6**	**1,646.2**	**1,417.7**	**1,402.1**	**1,414.2**	**R1,503.5**	**R1,571.9**	**R1,584.2**	**1,566.4**
Primary Energy — Four Sectors	223.3	1,038.3	1,238.7	1,016.5	1,018.9	1,006.9	R1,102.9	R1,171.1	R1,168.4	1,154.7
Electricity	67.3	210.2	407.5	401.2	383.2	407.3	400.6	400.8	415.8	411.7
Electric Utility Sector [a]	**12.3**	**87.9**	**203.4**	**188.0**	**183.8**	**201.8**	**189.4**	**198.3**	**209.5**	**220.9**
Coal	12.0	85.5	201.1	186.8	182.5	200.8	187.6	196.5	207.7	219.3
Natural Gas	.1	*	*	*	*	*	*	*	*	*
Petroleum	.2	2.4	2.4	1.2	1.2	1.0	1.9	1.8	1.8	1.6
Heavy Oil [b]	.1	–	–	–	–	–	–	–	–	–
Light Oil [b]	*	2.4	2.4	1.2	1.2	1.0	1.9	1.8	1.8	1.6
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**235.6**	**1,126.3**	**1,442.2**	**1,204.5**	**1,202.7**	**1,208.7**	**R1,292.3**	**R1,369.4**	**R1,377.9**	**1,375.6**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Ohio 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.35	1.56	1.72	1.66	1.56	1.53	1.51	1.54	1.49	1.46
Coking Coal	.42	2.00	2.05	2.04	1.72	1.73	1.75	1.80	1.72	1.74
Steam Coal	.33	1.47	1.68	1.62	1.55	1.51	1.48	1.51	1.48	1.44
Natural Gas	.74	3.27	5.32	5.11	4.70	4.55	4.65	4.53	4.53	4.55
Petroleum	2.17	7.70	8.63	6.49	6.77	6.80	7.32	8.34	8.17	7.88
Asphalt and Road Oil	.74	3.66	4.43	3.70	3.23	3.23	2.99	3.13	2.96	2.33
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.13	6.44	7.66	5.81	6.02	5.89	6.62	7.79	7.39	7.12
Jet Fuel	.74	6.38	6.04	3.85	4.04	3.92	4.49	5.73	4.95	4.64
Kerosene	1.11	6.87	7.76	6.07	5.96	5.80	6.41	7.72	7.05	6.73
LPG	1.73	5.48	9.51	8.83	8.37	8.44	R9.32	R10.42	10.04	9.39
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.93	9.45	9.15	6.78	7.36	7.43	8.18	9.35	9.23	8.98
Residual Fuel	.61	3.34	4.21	2.60	2.84	2.50	2.62	2.60	2.35	2.27
Other [a]	1.14	6.93	7.57	6.09	6.34	5.44	5.83	6.20	5.65	5.39
Nuclear Fuel	–	.28	1.09	.72	.73	1.33	1.32	1.24	1.14	1.12
Biomass Fuels at Utilities	.65	1.74	.79	.32	.95	.87	([d])	([d])	([d])	([d])
Primary Energy — Five Sectors [b]	.97	4.08	4.81	4.01	3.92	3.86	4.05	4.34	4.21	4.15
Electric Utility Fuel [c]	.30	1.50	1.70	1.63	1.51	1.52	1.48	1.50	1.45	1.40
Electricity Purchased by End Users	4.68	12.97	16.90	17.23	16.97	16.90	16.83	17.33	17.98	17.84
Total Energy	1.50	6.23	8.25	7.34	7.34	7.23	7.63	8.23	8.38	8.21
	Expenditures in Millions of Dollars									
Coal	556.1	2,390.1	2,383.9	2,373.3	2,239.8	2,260.2	2,208.0	2,194.3	2,109.9	2,073.3
Coking Coal	146.6	549.5	287.8	283.0	246.8	252.4	247.6	239.0	170.7	175.2
Steam Coal	409.5	1,840.7	2,096.1	2,090.3	1,993.0	2,007.8	1,960.4	1,955.3	1,939.3	1,898.0
Natural Gas	769.2	2,887.6	3,944.8	3,711.1	3,382.8	3,688.3	3,826.1	3,390.6	R3,509.2	3,705.9
Petroleum	2,223.4	9,908.7	9,047.6	6,767.6	7,292.4	7,231.7	R8,068.5	R8,747.9	R8,416.3	8,410.2
Asphalt and Road Oil	44.3	178.1	186.3	180.3	193.3	136.4	210.5	205.0	176.5	153.2
Aviation Gasoline	7.8	21.5	16.6	15.9	9.1	12.4	10.5	11.2	9.4	9.7
Distillate Fuel	224.5	1,828.0	1,605.0	1,211.8	1,175.1	1,271.1	1,473.4	1,663.1	1,534.9	1,589.0
Jet Fuel	24.4	259.2	245.3	215.8	246.2	203.8	263.6	343.5	R291.0	279.0
Kerosene	40.7	95.5	75.2	54.0	49.3	57.4	48.5	39.4	38.8	35.6
LPG	56.5	883.2	934.9	462.7	478.9	335.2	R439.4	R405.0	R397.8	490.4
Lubricants	111.9	332.7	371.3	321.4	296.1	328.5	306.6	318.0	327.3	386.9
Motor Gasoline	1,637.3	5,623.4	5,224.6	3,986.7	4,477.8	4,569.4	4,994.1	5,394.3	R5,326.0	5,127.9
Residual Fuel	17.6	122.1	33.6	24.5	27.0	32.7	29.1	20.5	13.3	15.4
Other [a]	58.5	565.1	354.7	294.5	339.5	284.9	292.8	347.9	301.3	323.1
Nuclear Fuel	–	6.4	23.0	.2	59.0	120.8	179.7	141.3	182.1	176.6
Biomass Fuels at Utilities	*	*	2.2	.9	3.5	3.2	([d])	([d])	([d])	([d])
Primary Energy — Five Sectors [b]	3,548.7	15,193.0	15,401.3	12,853.2	12,977.5	13,304.1	R14,282.4	R14,474.1	R14,217.5	14,366.0
Electric Utility Fuel [c]	-245.5	-1,729.9	-1,919.7	-1,870.3	-1,844.2	-1,915.4	-1,980.6	-1,920.0	-1,960.3	-1,927.6
Electricity Purchased by End Users	1,344.2	4,904.7	7,080.8	7,209.8	7,450.9	7,649.7	8,033.5	8,321.6	8,827.3	8,717.8
Total Energy	4,647.4	18,367.8	20,562.4	18,192.6	18,584.2	19,038.4	R20,335.2	R20,875.6	R21,084.5	21,156.3

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
[d] Utilities used biomass fuels at no charge or received a fee for accepting them.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
*Value less than 0.05 million dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Ohio 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1.69**	**6.37**	**9.77**	**9.56**	**9.45**	**9.25**	**9.53**	**10.21**	**10.34**	**9.99**
Primary Energy	.98	3.92	6.02	5.65	5.27	5.16	5.41	5.52	5.41	5.30
Coal	1.05	3.07	3.00	2.86	2.74	2.65	2.69	2.80	2.64	2.55
Natural Gas	.88	3.49	5.79	5.55	5.12	5.01	5.11	5.09	5.06	5.02
Petroleum	1.54	6.94	8.36	6.99	6.81	6.57	8.06	9.16	8.34	7.78
Distillate Fuel	1.41	6.63	7.55	5.88	5.66	5.66	6.18	7.43	6.89	6.33
Kerosene	1.42	8.07	8.43	6.57	6.32	6.32	6.90	8.30	7.70	7.07
LPG	2.14	7.66	10.09	9.59	8.88	8.40	11.42	12.05	10.71	10.72
Electricity	6.99	16.29	22.49	22.45	22.56	22.24	22.79	23.58	23.91	24.15
Commercial Sector	**1.87**	**7.07**	**10.76**	**10.47**	**10.25**	**10.00**	**10.63**	**11.28**	**11.53**	**11.25**
Primary Energy	.76	3.76	5.24	4.81	4.62	4.60	4.79	4.61	4.65	4.55
Coal	.40	1.34	1.49	1.45	1.39	1.39	1.39	1.44	1.41	1.44
Natural Gas	.75	3.26	5.34	5.11	4.68	4.57	4.70	4.50	4.56	4.56
Petroleum	1.26	7.13	6.98	5.25	5.82	5.87	6.49	7.19	6.74	6.17
Distillate Fuel	1.20	6.28	6.10	3.72	4.15	3.73	4.32	5.49	4.85	4.66
Kerosene	.84	6.01	6.93	4.56	4.98	4.47	5.47	6.41	5.57	5.52
LPG	1.39	5.34	9.43	8.60	8.20	8.46	8.17	9.36	9.59	8.88
Motor Gasoline	2.93	9.45	9.15	6.78	7.36	7.43	8.18	9.35	9.23	8.98
Residual Fuel	.69	3.58	4.18	2.60	2.83	2.51	2.60	2.54	2.30	2.23
Electricity	6.33	15.71	20.91	20.73	20.29	19.97	20.66	21.30	21.56	21.72
Industrial Sector	**.83**	**4.43**	**6.19**	**5.67**	**5.43**	**5.22**	**5.41**	**5.66**	**5.83**	**5.93**
Primary Energy	.60	3.56	4.69	3.89	3.61	3.41	3.59	3.69	R3.68	3.94
Coal	.41	1.79	1.78	1.75	1.56	1.56	1.59	1.63	1.55	1.59
Coking Coal	.42	2.00	2.05	2.04	1.72	1.73	1.75	1.80	1.72	1.74
Steam Coal	.40	1.34	1.49	1.45	1.39	1.39	1.39	1.44	1.41	1.44
Natural Gas	.57	3.01	4.66	4.48	4.09	3.94	4.02	3.92	3.92	4.01
Petroleum	1.21	5.73	7.94	6.11	5.85	5.66	R5.48	R5.93	5.82	5.86
Asphalt and Road Oil	.74	3.66	4.43	3.70	3.23	3.23	2.99	3.13	2.96	2.33
Distillate Fuel	.77	5.45	6.25	4.11	4.49	4.04	4.94	5.78	5.03	4.98
Kerosene	.84	6.01	6.93	4.56	4.98	4.47	5.47	6.41	5.57	5.52
LPG	1.39	5.34	9.43	8.60	8.20	8.46	8.17	9.36	9.59	8.88
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.93	9.45	9.15	6.78	7.36	7.43	8.18	9.35	9.23	8.98
Residual Fuel	.55	3.31	4.18	2.60	2.83	2.51	2.60	2.54	2.30	2.23
Other	1.14	6.93	7.57	6.09	6.34	5.44	5.83	6.20	5.65	5.39
Electricity	2.90	9.73	11.75	12.12	11.80	11.79	11.36	11.81	12.31	12.14
Transportation Sector	**2.66**	**8.87**	**8.92**	**6.61**	**7.06**	**7.13**	**7.79**	**8.95**	**R8.79**	**8.55**
Primary Energy	2.66	8.87	8.92	6.61	7.06	7.13	7.79	8.95	8.78	8.55
Coal	.40	–	–	–	–	–	–	–	–	–
Petroleum	2.66	8.87	8.92	6.61	7.06	7.13	7.79	8.95	8.78	8.55
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.26	6.95	8.28	6.47	6.70	6.57	7.22	8.44	8.22	8.02
Jet Fuel	.74	6.38	6.04	3.85	4.04	3.92	4.49	5.73	4.95	4.64
LPG	1.39	5.34	9.43	8.60	8.20	8.46	8.17	9.36	9.59	8.88
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.93	9.45	9.15	6.78	7.36	7.43	8.18	9.35	9.23	8.98
Residual Fuel	.64	3.02	–	2.51	2.84	2.16	2.32	2.70	2.26	2.42
Electricity	4.05	13.51	22.10	23.15	17.79	17.01	17.59	17.97	17.84	18.26
Total Energy	**1.50**	**6.23**	**8.25**	**7.34**	**7.34**	**7.23**	**7.63**	**8.23**	**8.38**	**8.21**
Primary Energy — Four Sectors	1.17	5.24	6.51	5.33	5.32	5.22	5.63	6.11	6.05	5.96
Electricity	4.68	12.97	16.90	17.23	16.97	16.90	16.83	17.33	17.98	17.84
Electric Utility Sector [a]	**.30**	**1.50**	**1.70**	**1.63**	**1.51**	**1.52**	**1.48**	**1.50**	**1.45**	**1.40**
Coal	.29	1.48	1.69	1.63	1.56	1.52	1.49	1.51	1.48	1.44
Natural Gas	.39	2.90	5.09	4.67	3.04	3.46	3.13	2.55	2.18	2.24
Petroleum	.72	5.11	5.71	3.56	3.93	3.19	3.43	4.84	4.35	4.27
Heavy Oil [b]	.69	3.58	4.43	2.73	3.00	2.45	2.66	3.12	2.58	2.72
Light Oil [b]	.75	5.72	6.09	3.71	4.10	3.77	4.26	5.39	4.91	4.51
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	.28	1.09	.72	.73	1.33	1.32	1.24	1.14	1.12
Biomass Fuels	.65	1.74	.79	.32	.95	.87	([d])	([d])	([d])	([d])
Primary Energy — Five Sectors [c]	**.97**	**4.08**	**4.81**	**4.01**	**3.92**	**3.86**	**4.05**	**4.34**	**4.21**	**4.15**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[d] Utilities used biomass fuels at no charge or received a fee for accepting them.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Ohio 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1,090.9**	**3,675.4**	**4,967.8**	**4,943.5**	**4,899.0**	**5,101.8**	**5,329.0**	**5,085.2**	**5,420.9**	**5,365.2**
Primary Energy	559.8	1,815.5	2,363.4	2,245.2	2,072.9	2,163.8	2,312.0	2,036.1	2,080.9	2,140.2
Coal	13.8	14.0	21.7	25.3	18.8	16.4	12.4	15.5	11.0	13.0
Natural Gas	414.0	1,396.3	1,978.7	1,898.7	1,746.7	1,826.7	1,910.7	1,631.0	1,698.7	1,771.3
Petroleum	132.0	405.3	363.0	321.2	307.4	320.6	388.9	389.6	371.2	355.9
Distillate Fuel	76.5	286.8	196.7	157.0	137.1	153.4	164.6	176.5	169.4	171.9
Kerosene	24.1	46.5	45.0	44.0	38.4	45.1	34.2	29.4	29.5	29.2
LPG	31.5	72.0	121.3	120.2	131.9	122.2	190.1	183.7	172.3	154.9
Electricity	531.1	1,859.9	2,604.3	2,698.4	2,826.2	2,938.0	3,017.0	3,049.0	3,340.0	3,225.0
Commercial Sector	**545.7**	**2,031.3**	**3,041.6**	**3,061.9**	**3,092.7**	**3,237.2**	**3,396.4**	**3,357.3**	**R3,559.3**	**3,554.7**
Primary Energy	176.6	781.1	959.5	906.4	893.1	966.5	965.8	823.7	850.7	875.1
Coal	9.5	11.2	19.7	23.7	17.6	15.9	11.7	14.8	10.8	13.3
Natural Gas	140.0	551.1	799.0	743.7	718.7	754.3	791.4	671.9	715.9	758.5
Petroleum	27.1	218.8	140.9	138.9	156.8	196.4	162.6	136.9	123.9	103.2
Distillate Fuel	13.0	94.8	72.4	46.1	51.1	48.5	42.4	52.8	45.6	45.7
Kerosene	.7	4.4	17.3	4.9	5.3	6.7	7.4	6.9	5.7	2.1
LPG	3.6	8.9	20.0	19.0	21.5	21.7	24.0	25.2	27.2	22.6
Motor Gasoline	6.2	102.2	29.0	66.3	77.9	118.2	88.5	51.7	44.8	31.7
Residual Fuel	3.6	8.5	2.2	2.6	.9	1.2	.3	.4	.6	1.0
Electricity	369.2	1,250.2	2,082.1	2,155.5	2,199.6	2,270.7	2,430.6	2,533.6	R2,708.6	2,679.6
Industrial Sector	**1,252.9**	**5,786.1**	**5,917.6**	**5,076.7**	**5,017.1**	**5,000.4**	**R5,242.8**	**R5,403.6**	**R5,285.0**	**5,652.8**
Primary Energy	809.5	3,993.6	3,526.4	2,723.9	2,594.2	2,561.8	R2,659.3	R2,667.0	R2,508.8	2,842.0
Coal	301.9	723.6	473.5	470.0	438.4	457.6	407.2	405.4	336.4	315.1
Coking Coal	146.6	549.5	287.8	283.0	246.8	252.4	247.6	239.0	170.7	175.2
Steam Coal	155.3	174.1	185.7	187.0	191.6	205.2	159.6	166.4	165.7	139.9
Natural Gas	206.6	926.5	1,163.5	1,065.9	914.7	1,103.9	1,120.9	1,084.4	1,087.4	1,169.3
Petroleum	301.1	2,343.4	1,889.4	1,188.0	1,241.1	1,000.3	R1,131.2	R1,177.2	R1,085.0	1,357.6
Asphalt and Road Oil	44.3	178.1	186.3	180.3	193.3	136.4	210.5	205.0	176.5	153.2
Distillate Fuel	50.5	396.8	243.0	139.2	138.3	121.7	150.9	173.1	153.7	185.3
Kerosene	15.9	44.5	12.9	5.1	5.6	5.6	6.9	3.2	3.6	4.3
LPG	20.7	797.9	780.7	310.6	315.0	180.5	R214.0	R183.8	R188.2	304.8
Lubricants	73.7	208.6	232.8	201.5	185.7	205.9	192.2	199.4	205.2	242.6
Motor Gasoline	29.7	57.3	51.6	36.3	39.8	40.1	43.7	47.5	46.7	131.8
Residual Fuel	7.9	95.1	27.5	20.4	23.9	25.3	20.1	17.4	9.9	12.5
Other	58.5	565.1	354.7	294.5	339.5	284.9	292.8	347.9	301.3	323.1
Electricity	443.4	1,792.6	2,391.2	2,352.8	2,422.9	2,438.6	2,583.4	2,736.6	2,776.2	2,810.8
Transportation Sector	**1,757.9**	**6,874.9**	**6,635.5**	**5,110.6**	**5,575.4**	**5,698.9**	**6,367.1**	**7,029.6**	**R6,819.2**	**6,583.6**
Primary Energy	1,757.3	6,872.9	6,632.3	5,107.4	5,573.1	5,696.6	6,364.6	7,027.2	R6,816.8	6,581.1
Coal	.4	–	–	–	–	–	–	–	–	–
Petroleum	1,756.8	6,872.9	6,632.3	5,107.4	5,573.1	5,696.6	6,364.6	7,027.2	R6,816.8	6,581.1
Aviation Gasoline	7.8	21.5	16.6	15.9	9.1	12.4	10.5	11.2	9.4	9.7
Distillate Fuel	81.2	994.9	1,074.9	858.8	836.2	935.9	1,102.9	1,246.5	1,149.6	1,174.9
Jet Fuel	24.4	259.2	245.3	215.8	246.2	203.8	263.6	343.5	R291.0	279.0
LPG	.7	4.4	12.9	12.9	10.5	10.8	11.2	12.2	10.1	8.1
Lubricants	38.3	124.1	138.5	119.9	110.5	122.5	114.4	118.6	122.1	144.3
Motor Gasoline	1,601.5	5,463.9	5,144.0	3,884.0	4,360.1	4,411.1	4,861.9	5,295.1	R5,234.4	4,964.3
Residual Fuel	3.1	4.8	–	.1	.5	.2	.1	.1	.1	.8
Electricity	.6	2.0	3.2	3.2	2.3	2.3	2.4	2.4	R2.4	2.4
Total Energy	**4,647.4**	**18,367.8**	**20,562.4**	**18,192.6**	**18,584.2**	**19,038.4**	**R20,335.2**	**R20,875.6**	**R21,084.5**	**21,156.3**
Primary Energy — Four Sectors	3,303.2	13,463.1	13,481.6	10,982.8	11,133.3	11,388.7	R12,301.7	R12,554.0	R12,257.1	12,438.4
Electricity	1,344.2	4,904.7	7,080.8	7,209.8	7,450.9	7,649.7	8,033.5	8,321.6	8,827.3	8,717.8
Electric Utility Sector [a]	**245.5**	**1,729.9**	**1,919.7**	**1,870.3**	**1,844.2**	**1,915.4**	**1,980.6**	**1,920.0**	**1,960.3**	**1,927.6**
Coal	230.5	1,641.4	1,869.0	1,854.3	1,764.9	1,770.4	1,776.7	1,758.7	1,751.8	1,731.8
Natural Gas	8.6	13.7	3.6	2.9	2.7	3.4	3.1	3.2	7.1	6.8
Petroleum	6.4	68.3	22.0	12.1	14.1	17.7	21.1	16.9	19.4	12.3
Heavy Oil [b]	3.0	13.6	3.9	1.4	1.7	6.0	8.5	2.7	2.7	1.1
Light Oil [b]	3.4	54.7	18.0	10.7	12.4	11.7	12.6	14.2	16.7	11.2
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	6.4	23.0	.2	59.0	120.8	179.7	141.3	182.1	176.6
Biomass Fuels	*	*	2.2	.9	3.5	3.2	([d])	([d])	([d])	([d])
Primary Energy — Five Sectors [c]	**3,548.7**	**15,193.0**	**15,401.3**	**12,853.2**	**12,977.5**	**13,304.1**	**R14,282.4**	**R14,474.1**	**R14,217.5**	**14,366.0**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

[d] Utilities used biomass fuels at no charge or received a fee for accepting them.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Oklahoma 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.57	1.25	1.69	1.65	1.58	1.50	1.36	1.40	1.32	1.24
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.57	1.25	1.69	1.65	1.58	1.50	1.36	1.40	1.32	1.24
Natural Gas	.35	1.96	3.41	3.11	2.76	2.80	2.86	2.80	2.78	3.02
Petroleum	1.97	7.97	7.43	6.02	6.31	6.15	6.68	R7.84	R7.38	6.99
Asphalt and Road Oil	.68	3.60	4.20	4.58	3.44	3.24	3.15	3.14	3.40	2.47
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	.90	6.77	5.54	5.36	5.63	5.52	6.21	7.49	6.93	6.69
Jet Fuel	.72	6.34	5.87	3.94	3.90	3.75	4.27	5.93	4.73	4.42
Kerosene	.66	6.52	4.07	4.81	3.91	4.76	5.98	7.46	6.75	6.50
LPG	1.42	6.03	7.21	7.92	7.40	5.45	5.70	R6.50	R6.46	5.38
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.82	9.79	8.76	6.30	7.08	7.12	7.79	9.00	8.72	8.37
Residual Fuel	.50	3.23	3.41	2.09	2.18	1.81	2.04	2.46	1.77	2.29
Other [a]	.58	2.90	3.36	3.04	2.89	2.44	2.87	3.32	2.93	2.41
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.03	4.04	4.56	3.87	3.73	3.65	3.84	4.20	4.02	4.02
Electric Utility Fuel [c]	.19	1.63	2.30	2.17	2.08	2.04	2.02	2.05	1.92	1.88
Electricity Purchased by End Users	5.76	11.80	17.23	17.83	16.48	16.20	16.28	16.08	16.99	17.04
Total Energy	1.83	6.43	7.58	6.96	6.59	6.48	6.68	7.37	R7.24	7.14
	Expenditures in Millions of Dollars									
Coal	0.1	132.5	400.2	360.2	379.9	404.1	366.5	388.1	384.4	381.7
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.1	132.5	400.2	360.2	379.9	404.1	366.5	388.1	384.4	381.7
Natural Gas	152.7	1,209.5	1,633.3	1,416.3	1,305.6	1,307.5	1,363.3	1,307.5	1,262.6	1,281.6
Petroleum	636.9	3,202.7	3,206.5	2,317.5	2,396.2	2,402.3	R2,656.8	R3,080.6	R2,961.9	3,012.6
Asphalt and Road Oil	20.7	115.1	111.7	99.8	62.4	76.7	57.5	73.1	77.5	47.9
Aviation Gasoline	4.9	14.9	11.0	10.6	6.8	6.5	6.9	6.9	4.9	5.3
Distillate Fuel	28.7	478.2	592.0	434.6	457.6	479.1	533.6	669.9	572.5	634.4
Jet Fuel	17.2	170.5	190.6	129.8	161.8	150.7	220.5	259.8	R279.1	321.7
Kerosene	4.1	12.6	2.6	2.1	1.4	2.4	4.1	1.6	1.2	1.1
LPG	50.3	196.2	204.8	168.5	145.9	96.2	R115.0	R75.6	R111.7	86.5
Lubricants	19.2	118.1	131.8	114.1	105.1	116.6	108.8	112.9	116.2	137.3
Motor Gasoline	481.9	2,038.2	1,940.7	1,342.7	1,436.3	1,454.1	1,590.1	1,851.0	R1,778.1	1,754.2
Residual Fuel	2.2	13.1	2.4	3.2	3.3	5.2	3.7	7.6	2.0	5.9
Other [a]	7.7	45.7	18.9	12.2	15.7	14.9	16.7	22.3	18.8	18.2
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	789.7	4,544.7	5,240.0	4,094.0	4,081.7	4,113.8	R4,386.6	R4,776.2	R4,608.9	4,675.9
Electric Utility Fuel [c]	-46.8	-727.3	-988.5	-883.8	-882.1	-900.4	-891.0	-904.7	-862.2	-835.3
Electricity Purchased by End Users	311.7	1,211.3	2,141.2	2,158.5	2,014.1	2,047.7	2,040.0	2,316.2	2,266.6	2,207.4
Total Energy	1,054.5	5,028.7	6,392.8	5,368.7	5,213.7	5,261.1	R5,535.6	R6,187.7	R6,013.3	6,048.0

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Oklahoma 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.24**	**6.40**	**10.09**	**11.17**	**10.71**	**10.33**	**10.41**	**11.38**	**11.31**	**11.51**
Primary Energy	.99	2.84	4.76	5.05	4.62	4.51	4.57	4.94	4.84	5.04
Coal	.90	2.54	2.83	2.78	2.40	2.12	2.43	2.41	2.36	2.43
Natural Gas	.81	2.46	4.49	4.90	4.49	4.36	4.40	4.71	4.66	4.85
Petroleum	1.60	7.29	7.47	6.90	6.26	6.71	6.71	8.28	7.36	8.09
Distillate Fuel	.89	6.60	3.73	5.41	3.64	4.81	6.14	7.37	6.84	6.25
Kerosene	1.41	7.95	4.57	6.63	4.45	5.89	7.52	9.02	8.38	7.65
LPG	1.60	7.29	7.78	6.95	6.33	6.80	6.70	8.27	7.35	8.11
Electricity	7.42	13.50	19.37	20.69	19.76	19.74	20.02	19.29	20.62	21.01
Commercial Sector	**1.68**	**6.12**	**10.56**	**11.29**	**10.74**	**9.37**	**10.04**	**10.57**	**10.65**	**11.15**
Primary Energy	.61	2.74	4.46	4.46	4.20	4.00	4.09	4.20	4.07	4.25
Coal	.45	1.39	1.79	1.84	1.96	1.88	1.42	1.33	1.32	1.39
Natural Gas	.51	2.29	4.32	4.31	4.05	3.92	3.86	3.84	3.86	4.14
Petroleum	1.18	7.20	5.24	5.79	5.17	4.65	5.37	6.29	5.61	5.26
Distillate Fuel	.82	6.31	3.20	3.83	2.86	3.42	4.53	5.48	4.79	4.59
Kerosene	.62	6.42	3.89	4.57	3.62	4.32	5.68	6.89	5.99	5.90
LPG	1.12	5.72	7.01	8.25	7.76	4.95	5.33	5.33	6.10	4.47
Motor Gasoline	2.82	9.79	8.76	6.30	7.08	7.12	7.79	9.00	8.72	8.37
Residual Fuel	.47	3.42	–	–	2.18	1.80	2.01	2.38	1.66	2.29
Electricity	5.50	11.91	18.02	18.48	17.13	16.67	16.87	16.65	17.59	17.68
Industrial Sector	**.76**	**3.86**	**4.90**	**4.68**	**3.73**	**3.53**	**3.65**	**R3.57**	**3.73**	**3.84**
Primary Energy	.53	3.23	3.80	3.45	2.71	2.46	2.64	R2.52	R2.59	2.71
Coal	–	1.39	1.79	1.84	1.96	1.88	1.42	1.33	1.32	1.39
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	–	1.39	1.79	1.84	1.96	1.88	1.42	1.33	1.32	1.39
Natural Gas	.25	2.11	3.23	2.57	1.96	1.70	1.93	1.71	1.67	1.98
Petroleum	.82	4.92	5.00	5.62	4.96	4.30	4.91	R5.09	R5.21	4.70
Asphalt and Road Oil	.68	3.60	4.20	4.58	3.44	3.24	3.15	3.14	3.40	2.47
Distillate Fuel	.54	5.68	3.34	3.92	3.11	3.71	4.88	5.92	5.15	5.07
Kerosene	.62	6.42	3.89	4.57	3.62	4.32	5.68	6.89	5.99	5.90
LPG	1.12	5.72	7.01	8.25	7.76	4.95	5.33	5.33	6.10	4.47
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.82	9.79	8.76	6.30	7.08	7.12	7.79	9.00	8.72	8.37
Residual Fuel	.53	3.22	3.39	2.11	2.18	1.80	2.01	2.38	1.66	2.29
Other	.58	2.90	3.36	3.04	2.89	2.44	2.87	3.32	2.93	2.41
Electricity	3.13	9.31	13.33	13.05	11.19	10.75	10.73	10.64	11.30	11.32
Transportation Sector	**2.44**	**9.12**	**8.27**	**6.11**	**6.61**	**6.59**	**7.06**	**8.42**	**R7.86**	**7.47**
Primary Energy	2.44	9.12	8.27	6.11	6.61	6.59	7.06	8.42	R7.86	7.47
Coal	–	–	–	–	–	–	–	–	–	–
Petroleum	2.44	9.12	8.27	6.11	6.61	6.59	7.06	8.42	R7.86	7.47
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.11	7.30	7.15	5.92	6.45	6.17	6.64	8.00	7.59	7.34
Jet Fuel	.72	6.34	5.87	3.94	3.90	3.75	4.27	5.93	4.73	4.42
LPG	1.12	5.72	7.01	8.25	7.76	4.95	5.33	5.33	6.10	4.47
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.82	9.79	8.76	6.30	7.08	7.12	7.79	9.00	8.72	8.37
Residual Fuel	.46	–	–	–	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.83**	**6.43**	**7.58**	**6.96**	**6.59**	**6.48**	**6.68**	**7.37**	**R7.24**	**7.14**
Primary Energy — Four Sectors	1.42	5.62	5.91	4.94	4.78	4.69	4.97	5.57	R5.37	5.35
Electricity	5.76	11.80	17.23	17.83	16.48	16.20	16.28	16.08	16.99	17.04
Electric Utility Sector [a]	**.19**	**1.63**	**2.30**	**2.17**	**2.08**	**2.04**	**2.02**	**2.05**	**1.92**	**1.88**
Coal	.39	1.23	1.68	1.64	1.56	1.48	1.36	1.40	1.32	1.23
Natural Gas	.19	1.74	2.95	2.68	2.67	2.81	2.92	3.01	2.87	3.08
Petroleum	.50	5.29	5.34	2.81	3.89	3.35	3.94	4.34	3.84	3.54
Heavy Oil [b]	.46	3.44	3.73	1.50	2.76	2.50	2.91	3.02	3.33	2.16
Light Oil [b]	.56	5.29	5.54	2.90	3.91	3.42	4.15	7.28	4.09	4.36
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.03**	**4.04**	**4.56**	**3.87**	**3.73**	**3.65**	**3.84**	**4.20**	**4.02**	**4.02**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Oklahoma 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**285.3**	**804.6**	**1,359.4**	**1,353.9**	**1,279.0**	**1,334.9**	**1,323.1**	**1,477.7**	**1,441.6**	**1,381.6**
Primary Energy	100.7	237.8	407.8	372.4	329.5	359.9	361.1	353.7	363.6	359.6
Coal	*	.6	.1	.1	*	.1	*	*	*	*
Natural Gas	65.1	188.5	348.3	333.7	297.1	325.3	323.1	315.0	326.6	326.4
Petroleum	35.5	48.6	59.4	38.7	32.3	34.5	38.1	38.7	36.9	33.2
Distillate Fuel	*	.6	1.8	.9	.2	.8	*	*	*	.1
Kerosene	.4	.9	.8	.3	.6	.8	.8	.5	.5	.5
LPG	35.1	47.1	56.8	37.4	31.6	32.9	37.2	38.2	36.5	32.6
Electricity	184.6	566.8	951.6	981.5	949.6	975.0	962.0	1,124.0	1,078.0	1,022.0
Commercial Sector	**115.4**	**509.6**	**937.9**	**921.4**	**840.5**	**915.6**	**874.0**	**962.7**	**945.4**	**919.6**
Primary Energy	32.5	143.8	218.0	186.7	162.9	225.6	190.0	186.7	185.4	170.6
Coal	*	.6	.1	.1	.1	.2	*	*	*	*
Natural Gas	22.9	108.4	179.8	160.9	135.5	194.8	151.7	145.9	154.8	149.0
Petroleum	9.6	34.8	38.2	25.7	27.2	30.5	38.2	40.8	30.6	21.5
Distillate Fuel	.5	11.6	13.1	6.3	6.8	12.4	16.8	17.2	13.5	10.0
Kerosene	.8	.5	.4	.1	.1	1.0	2.8	.5	.3	.1
LPG	4.3	6.5	9.0	7.8	6.8	4.2	5.2	4.3	5.3	3.2
Motor Gasoline	3.4	15.5	15.6	11.4	13.3	12.8	12.8	17.6	10.6	7.6
Residual Fuel	.6	.6	–	–	.2	.1	.6	1.2	.8	.6
Electricity	82.9	365.8	719.9	734.7	677.6	690.0	684.0	776.0	760.0	749.0
Industrial Sector	**122.6**	**1,110.5**	**1,495.1**	**1,236.9**	**1,074.1**	**976.5**	**R1,070.4**	**R1,074.9**	**R1,084.4**	**1,129.8**
Primary Energy	78.3	831.9	1,025.4	794.6	687.2	593.8	R676.4	R658.7	R655.8	693.3
Coal	–	7.8	32.6	30.2	25.3	22.5	20.0	16.8	21.3	23.1
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	–	7.8	32.6	30.2	25.3	22.5	20.0	16.8	21.3	23.1
Natural Gas	18.1	310.6	486.9	369.8	346.9	269.4	345.4	315.5	282.9	330.0
Petroleum	60.2	513.5	505.8	394.7	315.0	302.0	R310.9	R326.3	R351.6	340.3
Asphalt and Road Oil	20.7	115.1	111.7	99.8	62.4	76.7	57.5	73.1	77.5	47.9
Distillate Fuel	6.3	122.5	134.9	79.2	53.0	68.2	78.9	106.6	95.8	123.9
Kerosene	2.9	11.1	1.4	1.6	.7	.5	.4	.6	.4	.6
LPG	8.7	137.7	135.5	120.1	104.8	57.3	R70.9	R31.1	R67.5	49.3
Lubricants	5.1	50.4	56.3	48.7	44.9	49.8	46.5	48.2	49.6	58.6
Motor Gasoline	7.6	18.4	44.9	30.0	30.5	29.7	37.1	39.2	41.0	36.5
Residual Fuel	1.2	12.5	2.2	3.1	3.0	5.0	3.0	5.3	1.0	5.1
Other	7.7	45.7	18.9	12.2	15.7	14.9	16.7	22.3	18.8	18.2
Electricity	44.2	278.6	469.7	442.2	386.9	382.7	394.0	416.1	428.6	436.5
Transportation Sector	**531.2**	**2,604.0**	**2,600.4**	**1,856.5**	**2,020.1**	**2,034.1**	**2,268.1**	**2,672.5**	**R2,541.9**	**2,617.1**
Primary Energy	531.2	2,604.0	2,600.4	1,856.5	2,020.1	2,034.1	2,268.1	2,672.5	R2,541.9	2,617.1
Coal	–	–	–	–	–	–	–	–	–	–
Petroleum	531.2	2,604.0	2,600.4	1,856.5	2,020.1	2,034.1	2,268.1	2,672.5	R2,541.9	2,617.1
Aviation Gasoline	4.9	14.9	11.0	10.6	6.8	6.5	6.9	6.9	4.9	5.3
Distillate Fuel	21.7	341.7	439.7	346.3	396.1	396.7	436.5	545.0	462.5	499.9
Jet Fuel	17.2	170.5	190.6	129.8	161.8	150.7	220.5	259.8	R279.1	321.7
LPG	2.2	4.9	3.4	3.2	2.6	1.8	1.7	1.9	2.4	1.3
Lubricants	14.1	67.7	75.5	65.4	60.2	66.8	62.4	64.7	66.6	78.7
Motor Gasoline	470.9	2,004.2	1,880.2	1,301.2	1,392.6	1,411.7	1,540.2	1,794.2	1,726.5	1,710.1
Residual Fuel	.2	–	–	–	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1,054.5**	**5,028.7**	**6,392.8**	**5,368.7**	**5,213.7**	**5,261.1**	**R5,535.6**	**R6,187.7**	**R6,013.3**	**6,048.0**
Primary Energy — Four Sectors	742.8	3,817.4	4,251.6	3,210.2	3,199.6	3,213.4	R3,495.6	R3,871.5	R3,746.7	3,840.6
Electricity	311.7	1,211.3	2,141.2	2,158.5	2,014.1	2,047.7	2,040.0	2,316.2	2,266.6	2,207.4
Electric Utility Sector [a]	**46.8**	**727.3**	**988.5**	**883.8**	**882.1**	**900.4**	**891.0**	**904.7**	**862.2**	**835.3**
Coal	*	123.5	367.4	329.8	354.5	381.3	346.5	371.3	363.1	358.6
Natural Gas	46.5	602.0	618.3	551.9	526.0	518.0	543.1	531.1	498.2	476.1
Petroleum	.4	1.8	2.7	2.0	1.6	1.2	1.5	2.3	.9	.6
Heavy Oil [b]	.2	*	.2	.1	*	.1	.2	1.1	.3	.1
Light Oil [b]	.2	1.8	2.5	1.9	1.5	1.1	1.3	1.2	.6	.5
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**789.7**	**4,544.7**	**5,240.0**	**4,094.0**	**4,081.7**	**4,113.8**	**R4,386.6**	**R4,776.2**	**R4,608.9**	**4,675.9**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Oregon 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.57	1.72	2.15	2.47	2.43	2.43	1.76	1.22	1.17	1.18
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.57	1.72	2.15	2.47	2.43	2.43	1.76	1.22	1.17	1.18
Natural Gas	.81	4.69	5.60	4.94	4.55	4.80	4.17	4.28	4.01	3.85
Petroleum	1.88	7.86	7.96	5.86	6.01	6.12	6.90	7.77	R7.42	7.63
Asphalt and Road Oil	.58	3.60	4.42	4.47	4.27	3.95	3.19	3.15	3.28	2.81
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.21	6.62	7.98	5.32	5.75	5.88	6.77	7.72	7.78	7.80
Jet Fuel	.73	6.21	6.16	4.24	4.33	4.04	4.76	5.93	5.01	4.67
Kerosene	1.48	7.61	9.85	5.98	6.31	5.79	7.48	8.35	8.21	7.57
LPG	2.21	7.09	9.18	9.58	8.71	8.54	10.19	10.37	10.84	10.35
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.83	9.75	8.87	6.92	7.12	7.48	8.50	9.45	9.14	10.03
Residual Fuel	.51	3.92	4.70	2.52	2.62	2.35	2.55	3.50	2.56	2.52
Other [a]	.78	4.04	6.43	2.80	2.43	2.19	2.39	2.50	2.19	1.72
Nuclear Fuel	–	.36	.54	.52	.45	.46	.46	.44	.43	.53
Biomass Fuels at Utilities	.65	1.74	–	–	–	.87	.33	.85	1.63	1.61
Primary Energy — Five Sectors [b]	1.63	6.28	6.29	4.84	5.19	5.12	5.59	6.03	6.07	5.79
Electric Utility Fuel [c]	.48	.59	.67	.52	.45	.47	.99	.78	1.01	.95
Electricity Purchased by End Users	2.90	7.59	13.08	12.95	12.88	12.61	12.49	12.25	12.45	12.64
Total Energy	1.87	7.34	8.77	7.36	7.41	7.42	7.85	8.32	8.07	8.19
	Expenditures in Millions of Dollars									
Coal	1.7	20.8	21.6	7.2	8.9	7.6	12.0	19.1	38.5	48.1
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	1.7	20.8	21.6	7.2	8.9	7.6	12.0	19.1	38.5	48.1
Natural Gas	68.7	320.9	432.9	340.2	337.2	388.0	429.7	438.3	472.4	459.7
Petroleum	541.1	2,584.6	2,507.2	1,909.8	2,040.8	2,196.3	2,452.2	2,760.5	R2,695.5	2,814.3
Asphalt and Road Oil	8.3	59.2	83.3	65.9	60.6	63.5	59.4	63.3	57.9	61.4
Aviation Gasoline	3.3	11.8	7.1	8.2	4.8	3.7	4.2	5.7	5.5	5.6
Distillate Fuel	89.2	643.9	715.0	461.1	543.0	563.9	640.6	767.2	731.8	697.8
Jet Fuel	8.6	86.5	74.3	62.5	71.4	72.7	90.9	111.3	R105.8	105.9
Kerosene	1.8	4.8	3.8	1.0	.6	.7	2.1	1.2	1.0	1.3
LPG	10.2	31.7	44.7	52.9	47.5	49.3	60.5	52.1	61.1	53.7
Lubricants	23.7	65.4	73.0	63.2	58.2	64.6	60.3	62.5	64.4	76.1
Motor Gasoline	371.2	1,562.9	1,353.9	1,088.0	1,144.3	1,263.3	1,423.0	1,566.3	1,541.7	1,681.6
Residual Fuel	18.5	100.0	142.9	86.9	83.8	91.0	86.4	98.9	101.7	104.2
Other [a]	6.3	18.1	9.2	20.0	26.6	23.8	24.8	32.1	24.6	26.8
Nuclear Fuel	–	21.4	40.6	39.5	21.1	31.4	26.1	28.6	6.8	26.0
Biomass Fuels at Utilities	.3	2.9	–	–	–	.9	.1	*	*	.1
Primary Energy — Five Sectors [b]	611.8	2,950.6	3,002.3	2,296.7	2,408.1	2,624.1	2,920.1	3,246.5	R3,213.2	3,348.2
Electric Utility Fuel [c]	-.8	-41.1	-54.5	-39.6	-21.1	-32.3	-75.5	-67.9	-58.1	-96.9
Electricity Purchased by End Users	248.3	950.4	1,573.1	1,549.2	1,657.4	1,692.0	1,774.0	1,797.0	1,855.0	1,850.1
Total Energy	859.3	3,860.0	4,520.9	3,806.3	4,044.3	4,283.8	4,618.6	4,975.6	R5,010.1	5,101.4

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
*Value less than 0.05 million dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Oregon 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.47**	**8.04**	**10.78**	**10.67**	**10.93**	**10.87**	**10.82**	**10.95**	**11.01**	**11.38**
Primary Energy	1.53	6.20	6.94	6.18	6.21	6.23	6.30	6.69	6.52	6.37
Coal	.95	4.26	3.67	3.79	3.76	3.37	3.66	3.77	5.21	3.76
Natural Gas	1.45	5.36	6.73	6.47	6.44	6.64	5.98	6.13	5.95	5.94
Petroleum	1.63	7.35	7.24	5.77	5.84	5.51	6.89	7.82	8.01	7.66
Distillate Fuel	1.41	7.02	7.00	5.08	5.23	5.11	5.78	6.99	6.73	6.33
Kerosene	2.79	9.80	9.85	7.14	7.36	7.19	8.14	9.84	9.47	8.91
LPG	2.66	9.00	8.73	10.89	9.83	9.16	15.93	13.92	14.26	12.88
Electricity	3.65	9.37	13.72	13.84	14.07	14.02	13.97	13.85	14.11	14.46
Commercial Sector	**2.29**	**7.29**	**10.91**	**10.46**	**10.44**	**10.01**	**10.07**	**10.15**	**10.23**	**10.59**
Primary Energy	1.16	5.66	6.24	5.08	4.77	4.86	4.71	5.17	4.79	4.80
Coal	.53	2.24	2.48	2.47	2.42	2.42	2.37	2.54	2.65	2.45
Natural Gas	1.22	4.88	6.06	5.47	5.17	5.24	4.64	4.74	4.61	4.56
Petroleum	1.14	6.39	6.58	4.49	4.23	4.30	4.91	5.96	5.29	5.49
Distillate Fuel	1.22	6.71	6.42	4.59	3.96	4.16	4.77	5.91	5.28	5.46
Kerosene	.93	6.54	9.86	3.21	4.72	4.52	5.25	6.74	6.05	5.91
LPG	1.12	5.40	9.45	9.06	8.28	8.38	8.55	9.03	9.29	9.26
Motor Gasoline	2.83	9.75	8.87	6.92	7.12	7.48	8.50	9.45	9.14	10.03
Residual Fuel	.79	4.90	4.12	2.10	2.65	2.55	2.39	3.03	2.36	2.30
Electricity	3.90	8.86	14.96	14.82	15.00	14.19	14.17	14.05	14.29	14.30
Industrial Sector	**.78**	**4.56**	**6.93**	**5.61**	**5.66**	**5.68**	**5.80**	**5.71**	**5.58**	**5.26**
Primary Energy	.67	4.53	5.58	3.78	3.77	3.84	3.87	4.00	3.84	3.51
Coal	.53	2.24	2.48	2.47	2.42	2.42	2.37	2.54	2.65	2.45
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.53	2.24	2.48	2.47	2.42	2.42	2.37	2.54	2.65	2.45
Natural Gas	.46	4.21	4.65	3.73	3.30	3.64	3.40	3.39	3.31	3.24
Petroleum	.83	4.84	6.42	3.88	4.15	4.04	4.29	4.55	4.48	3.82
Asphalt and Road Oil	.58	3.60	4.42	4.47	4.27	3.95	3.19	3.15	3.28	2.81
Distillate Fuel	.80	5.62	8.72	2.84	4.18	4.00	4.64	5.96	5.35	5.22
Kerosene	.93	6.54	9.86	3.21	4.72	4.52	5.25	6.74	6.05	5.91
LPG	1.12	5.40	9.45	9.06	8.28	8.38	8.55	9.03	9.29	9.26
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.83	9.75	8.87	6.92	7.12	7.48	8.50	9.45	9.14	10.03
Residual Fuel	.33	3.39	4.12	2.10	2.65	2.55	2.39	3.03	2.36	2.30
Other	.78	4.04	6.43	2.80	2.43	2.19	2.39	2.50	2.19	1.72
Electricity	1.26	4.65	10.32	10.08	9.91	9.82	9.69	9.27	9.23	9.42
Transportation Sector	**2.41**	**8.81**	**8.40**	**6.39**	**6.54**	**6.69**	**7.50**	**8.54**	**R7.98**	**8.45**
Primary Energy	2.41	8.81	8.40	6.39	6.54	6.69	7.50	8.54	R7.98	8.45
Coal	.53	–	–	–	–	–	–	–	–	–
Petroleum	2.41	8.81	8.40	6.39	6.54	6.69	7.50	8.54	R7.98	8.45
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.34	6.96	8.27	6.16	6.63	6.81	7.77	8.54	8.63	8.63
Jet Fuel	.73	6.21	6.16	4.24	4.33	4.04	4.76	5.93	5.01	4.67
LPG	1.12	5.40	9.45	9.06	8.28	8.38	8.55	9.03	9.29	9.26
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.83	9.75	8.87	6.92	7.12	7.48	8.50	9.45	9.14	10.03
Residual Fuel	.71	4.14	5.02	2.86	2.60	2.26	2.57	3.59	2.58	2.55
Electricity	–	–	–	–	17.04	13.54	14.24	13.90	15.56	14.54
Total Energy	**1.87**	**7.34**	**8.77**	**7.36**	**7.41**	**7.42**	**7.85**	**8.32**	**8.07**	**8.19**
Primary Energy — Four Sectors	1.63	7.26	7.46	5.68	5.72	5.85	6.38	7.04	6.69	6.83
Electricity	2.90	7.59	13.08	12.95	12.88	12.61	12.49	12.25	12.45	12.64
Electric Utility Sector [a]	**.48**	**.59**	**.67**	**.52**	**.45**	**.47**	**.99**	**.78**	**1.01**	**.95**
Coal	–	1.41	2.00	–	–	–	1.56	1.08	1.08	1.10
Natural Gas	.37	4.29	–	2.81	–	–	2.92	3.03	1.57	1.94
Petroleum	.80	6.53	5.67	3.24	4.10	4.03	4.53	3.47	4.75	4.49
Heavy Oil [b]	.80	–	–	–	–	–	–	–	–	–
Light Oil [b]	.83	6.53	5.67	3.24	4.10	4.03	4.53	3.47	4.75	4.49
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	.36	.54	.52	.45	.46	.46	.44	.43	.53
Biomass Fuels	.65	1.74	–	–	–	.87	.33	.85	1.63	1.61
Primary Energy — Five Sectors [c]	**1.63**	**6.28**	**6.29**	**4.84**	**5.19**	**5.12**	**5.59**	**6.03**	**6.07**	**5.79**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Oregon 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**188.1**	**640.2**	**944.3**	**852.5**	**851.2**	**893.4**	**944.9**	**966.2**	**1,013.6**	**953.0**
Primary Energy	65.4	207.3	264.2	204.6	192.9	207.3	225.9	239.3	245.6	203.0
Coal	.2	.6	.1	*	.1	.1	.2	.1	*	*
Natural Gas	29.8	103.1	148.8	126.1	124.1	141.4	139.3	146.6	161.4	142.6
Petroleum	35.3	103.5	115.4	78.6	68.7	65.8	86.4	92.6	84.2	60.4
Distillate Fuel	25.6	82.5	96.8	60.5	53.2	54.9	63.6	72.7	58.3	39.4
Kerosene	1.0	2.1	2.3	.9	.4	.4	1.8	.7	.7	.9
LPG	8.7	19.0	16.3	17.2	15.1	10.6	21.0	19.2	25.2	20.2
Electricity	122.8	432.9	680.0	647.8	658.3	686.0	719.0	727.0	768.0	750.0
Commercial Sector	**126.1**	**509.3**	**718.7**	**668.8**	**693.3**	**700.9**	**705.0**	**746.3**	**756.4**	**745.6**
Primary Energy	37.4	193.4	191.1	145.6	141.4	152.3	143.3	166.6	151.9	132.0
Coal	.3	.6	.1	*	.1	.2	.2	.1	*	*
Natural Gas	14.5	77.5	118.9	94.2	88.8	98.7	97.2	99.2	106.1	92.6
Petroleum	22.6	115.3	72.0	51.3	52.5	53.4	45.9	67.4	45.8	39.3
Distillate Fuel	11.5	70.0	51.8	35.8	37.4	36.8	29.9	46.0	30.6	24.4
Kerosene	.2	1.4	1.4	.1	.1	.2	.2	.3	.1	.2
LPG	.6	2.0	3.1	2.5	2.2	1.7	2.0	2.2	2.9	2.6
Motor Gasoline	3.7	14.9	10.8	8.5	9.1	9.3	9.8	13.4	8.4	8.7
Residual Fuel	6.6	27.0	4.9	4.3	3.7	5.3	4.0	5.5	3.8	3.5
Electricity	88.7	316.0	527.6	523.2	552.0	548.6	561.7	579.7	R604.5	613.6
Industrial Sector	**119.1**	**650.4**	**862.3**	**725.4**	**827.3**	**859.5**	**889.5**	**930.4**	**904.0**	**915.0**
Primary Energy	82.2	448.7	496.9	347.3	380.6	402.5	396.5	440.4	422.0	429.0
Coal	1.2	8.5	7.5	7.1	8.8	7.2	3.5	3.6	5.0	5.7
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	1.2	8.5	7.5	7.1	8.8	7.2	3.5	3.6	5.0	5.7
Natural Gas	23.9	138.8	165.2	119.9	124.3	147.9	154.0	169.6	187.7	196.6
Petroleum	57.1	301.5	324.2	220.2	247.6	247.3	238.9	267.1	229.3	226.7
Asphalt and Road Oil	8.3	59.2	83.3	65.9	60.6	63.5	59.4	63.3	57.9	61.4
Distillate Fuel	14.8	128.4	128.5	41.0	74.1	67.9	78.4	98.7	71.4	69.1
Kerosene	.6	1.4	.1	*	*	*	.1	.2	.1	.3
LPG	.8	9.5	18.9	28.0	24.9	30.9	31.7	24.7	27.7	26.0
Lubricants	8.7	19.3	21.5	18.6	17.2	19.0	17.8	18.4	19.0	22.4
Motor Gasoline	10.7	21.4	22.4	18.2	18.0	16.4	21.3	21.0	23.5	13.4
Residual Fuel	7.0	44.2	40.3	28.5	26.2	25.8	5.5	8.6	5.2	7.3
Other	6.3	18.1	9.2	20.0	26.6	23.8	24.8	32.1	24.6	26.8
Electricity	36.8	201.6	365.4	378.2	446.7	457.0	493.0	490.0	482.0	486.0
Transportation Sector	**426.0**	**2,060.1**	**1,995.5**	**1,559.6**	**1,672.4**	**1,830.1**	**2,079.3**	**2,332.7**	R2,336.1	**2,487.8**
Primary Energy	426.0	2,060.1	1,995.5	1,559.6	1,672.0	1,829.7	2,078.9	2,332.3	R2,335.6	2,487.3
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	426.0	2,060.1	1,995.5	1,559.6	1,672.0	1,829.7	2,078.9	2,332.3	R2,335.6	2,487.3
Aviation Gasoline	3.3	11.8	7.1	8.2	4.8	3.7	4.2	5.7	5.5	5.6
Distillate Fuel	37.4	358.9	437.8	323.8	378.3	404.2	466.7	548.7	570.9	564.4
Jet Fuel	8.6	86.5	74.3	62.5	71.4	72.7	90.9	111.3	R105.8	105.9
LPG	.1	1.3	6.5	5.1	5.3	6.2	5.8	6.0	5.3	4.9
Lubricants	15.0	46.1	51.5	44.6	41.1	45.5	42.5	44.1	45.4	53.6
Motor Gasoline	356.7	1,526.7	1,320.7	1,061.3	1,117.2	1,237.5	1,391.9	1,531.8	R1,509.9	1,659.5
Residual Fuel	4.8	28.8	97.6	54.1	53.9	59.9	76.9	84.8	92.8	93.3
Electricity	–	–	–	–	.4	.4	.4	.4	R.5	.4
Total Energy	**859.3**	**3,860.0**	**4,520.9**	**3,806.3**	**4,044.3**	**4,283.8**	**4,618.6**	**4,975.6**	R5,010.1	**5,101.4**
Primary Energy — Four Sectors	611.0	2,909.5	2,947.8	2,257.1	2,387.0	2,591.8	2,844.6	3,178.6	R3,155.1	3,251.3
Electricity	248.3	950.4	1,573.1	1,549.2	1,657.4	1,692.0	1,774.0	1,797.0	1,855.0	1,850.1
Electric Utility Sector [a]	**.8**	**41.1**	**54.5**	**39.6**	**21.1**	**32.3**	**75.5**	**67.9**	**58.1**	**96.9**
Coal	–	11.2	13.9	–	–	–	8.1	15.3	33.5	42.3
Natural Gas	.4	1.4	–	*	–	–	39.2	22.9	17.2	27.9
Petroleum	.1	4.2	.1	.1	*	*	2.0	1.1	.6	.5
Heavy Oil [b]	.1	–	–	–	–	–	–	–	–	–
Light Oil [b]	*	4.2	.1	.1	*	*	2.0	1.1	.6	.5
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	21.4	40.6	39.5	21.1	31.4	26.1	28.6	6.8	26.0
Biomass Fuels	.3	2.9	–	–	–	.9	.1	*	*	.1
Primary Energy — Five Sectors [c]	**611.8**	**2,950.6**	**3,002.3**	**2,296.7**	**2,408.1**	**2,624.1**	**2,920.1**	**3,246.5**	R3,213.2	**3,348.2**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Pennsylvania 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.39	1.59	1.64	1.55	1.49	1.50	1.50	1.57	1.59	1.54
Coking Coal	.44	2.20	1.88	1.76	1.59	1.61	1.67	1.71	1.75	1.73
Steam Coal	.35	1.35	1.58	1.52	1.47	1.47	1.47	1.54	1.55	1.50
Natural Gas	.87	3.37	5.74	5.38	4.84	4.70	4.96	5.34	5.38	5.22
Petroleum	1.71	7.67	8.06	5.87	6.07	6.02	R6.60	7.91	7.96	7.82
Asphalt and Road Oil	.78	3.72	4.95	4.01	3.25	3.04	2.81	2.83	2.76	2.31
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.17	6.70	7.73	5.87	5.88	5.84	6.32	7.79	7.61	7.20
Jet Fuel	.72	6.27	5.84	3.91	4.02	3.85	4.44	5.59	4.81	4.49
Kerosene	1.39	7.75	8.37	6.41	6.13	6.22	6.92	8.32	8.08	7.29
LPG	1.82	6.16	9.75	8.86	8.49	8.86	R9.28	R11.42	R12.18	10.31
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.92	9.71	9.01	6.54	7.03	7.01	7.79	9.35	9.44	9.33
Residual Fuel	.47	4.30	4.38	2.45	2.95	2.34	2.83	3.20	2.31	2.34
Other [a]	1.15	6.54	7.15	5.52	5.54	4.74	5.44	5.64	5.80	6.35
Nuclear Fuel	.21	.42	.92	.78	.78	.84	.88	.83	.77	.68
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	.97	4.04	4.45	3.56	3.56	3.48	3.72	4.02	4.04	3.92
Electric Utility Fuel [c]	.34	1.55	1.61	1.35	1.36	1.35	1.38	1.32	1.28	1.19
Electricity Purchased by End Users	5.23	15.17	21.24	21.86	21.48	20.92	21.68	22.46	23.51	23.61
Total Energy	1.47	6.41	8.48	7.66	7.45	7.31	7.77	8.58	8.94	8.65
	Expenditures in Millions of Dollars									
Coal	656.6	2,594.6	2,307.2	2,042.7	2,051.5	2,193.0	2,199.6	2,244.7	2,163.0	2,169.0
Coking Coal	317.5	1,005.0	492.9	330.9	357.1	437.4	442.2	480.0	412.9	458.8
Steam Coal	339.1	1,589.6	1,814.3	1,711.8	1,694.3	1,755.6	1,757.4	1,764.7	1,750.1	1,710.2
Natural Gas	653.4	2,489.5	3,444.8	3,147.9	2,944.4	3,012.8	3,293.4	3,291.5	3,285.9	3,404.8
Petroleum	2,447.5	10,484.8	9,331.7	7,082.5	7,587.5	7,603.6	R8,320.2	R9,440.3	R9,245.8	9,195.6
Asphalt and Road Oil	34.0	127.1	161.3	158.5	141.9	110.4	125.1	140.3	113.6	92.4
Aviation Gasoline	7.3	15.3	10.5	10.7	5.6	7.1	7.4	6.8	5.1	7.0
Distillate Fuel	429.1	2,665.1	2,418.9	1,850.0	1,976.3	1,996.8	2,258.4	2,444.5	2,346.4	2,304.5
Jet Fuel	36.9	360.1	334.6	219.3	239.6	255.1	242.5	380.7	R309.5	277.8
Kerosene	33.6	121.5	168.9	138.5	101.3	130.2	120.4	78.0	81.7	75.6
LPG	32.7	163.8	262.3	269.5	258.6	192.4	R229.6	R251.3	R327.9	338.5
Lubricants	118.5	354.3	395.4	342.3	315.4	349.8	326.5	338.7	348.6	412.0
Motor Gasoline	1,559.6	5,507.0	4,825.9	3,576.6	3,927.4	4,084.0	4,453.3	5,246.8	R5,310.9	5,267.8
Residual Fuel	157.4	798.1	483.8	348.8	427.8	312.7	372.1	338.3	214.3	205.9
Other [a]	38.6	372.4	270.1	168.3	193.5	165.2	185.0	214.8	187.9	214.1
Nuclear Fuel	1.1	55.4	262.2	336.6	293.8	342.6	369.7	511.5	474.0	436.0
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	3,758.7	15,624.2	15,345.9	12,609.7	12,877.2	13,152.0	R14,182.9	R15,488.0	R15,168.7	15,205.4
Electric Utility Fuel [c]	-296.5	-1,997.2	-2,233.1	-2,058.5	-2,014.1	-2,092.5	-2,169.5	-2,215.1	-2,122.4	-1,992.9
Electricity Purchased by End Users	1,330.2	5,096.8	7,203.2	7,568.9	7,789.5	7,994.3	8,360.8	8,736.6	9,235.0	9,274.4
Total Energy	4,792.4	18,723.9	20,315.9	18,120.1	18,652.6	19,053.8	R20,374.2	R22,009.5	R22,281.2	22,486.9

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Pennsylvania 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1.98**	**7.17**	**10.75**	**10.48**	**10.41**	**10.19**	**10.57**	**11.94**	**12.34**	**11.77**
Primary Energy	1.26	4.92	6.95	6.13	5.80	5.68	6.10	6.80	6.88	6.48
Coal	1.03	2.70	2.83	2.76	2.72	2.69	2.79	2.96	2.64	2.69
Natural Gas	1.20	3.73	6.50	6.17	5.82	5.59	5.92	6.37	6.53	6.37
Petroleum	1.41	7.10	8.12	6.50	6.21	6.23	6.85	8.30	8.23	7.31
Distillate Fuel	1.35	6.95	7.82	6.22	5.88	5.95	6.50	7.84	7.62	6.79
Kerosene	1.57	8.05	8.68	6.90	6.52	6.60	7.22	8.70	8.46	7.54
LPG	2.47	9.00	11.63	9.88	10.30	9.26	11.08	12.94	13.85	11.87
Electricity	7.15	17.42	25.05	25.96	25.96	25.44	26.09	27.02	28.09	28.33
Commercial Sector	**1.90**	**7.57**	**11.38**	**11.06**	**10.68**	**10.38**	**10.79**	**12.06**	**12.45**	**12.17**
Primary Energy	.90	3.95	5.76	4.97	4.68	4.46	4.82	5.54	5.46	5.19
Coal	.32	1.33	1.61	1.52	1.46	1.45	1.44	1.47	1.43	1.42
Natural Gas	.93	3.49	5.99	5.61	5.23	4.91	5.16	5.79	5.80	5.67
Petroleum	1.12	6.08	6.56	4.66	4.66	4.34	5.15	6.23	6.13	5.51
Distillate Fuel	1.09	6.39	6.78	4.72	4.69	4.31	5.16	6.11	5.98	5.57
Kerosene	.74	6.01	7.14	4.64	5.02	4.78	5.50	6.39	6.04	5.66
LPG	1.40	5.36	8.92	8.54	7.82	8.59	8.20	10.33	11.09	9.50
Motor Gasoline	2.92	9.71	9.01	6.54	7.03	7.01	7.79	9.35	9.44	9.33
Residual Fuel	.47	4.43	4.70	2.71	3.05	2.54	3.02	3.46	2.51	2.51
Electricity	6.71	16.63	23.28	23.66	22.76	22.37	23.26	24.01	24.65	25.10
Industrial Sector	**.78**	**4.30**	**6.08**	**5.94**	**5.41**	**5.20**	**5.39**	**5.60**	**5.93**	**5.70**
Primary Energy	.55	3.13	3.96	3.54	3.16	2.98	3.14	R3.30	3.35	3.28
Coal	.41	2.03	1.81	1.68	1.55	1.57	1.61	1.65	1.65	1.65
Coking Coal	.44	2.20	1.88	1.76	1.59	1.61	1.67	1.71	1.75	1.73
Steam Coal	.32	1.33	1.61	1.52	1.46	1.45	1.44	1.47	1.43	1.42
Natural Gas	.57	3.00	4.77	4.21	3.52	3.50	3.76	4.02	3.88	3.62
Petroleum	.98	6.03	7.78	5.86	5.47	5.46	5.49	R5.82	R6.26	6.40
Asphalt and Road Oil	.78	3.72	4.95	4.01	3.25	3.04	2.81	2.83	2.76	2.31
Distillate Fuel	.70	5.67	6.45	4.20	4.53	4.32	4.97	5.78	5.46	5.11
Kerosene	.74	6.01	7.14	4.64	5.02	4.78	5.50	6.39	6.04	5.66
LPG	1.40	5.36	8.92	8.54	7.82	8.59	8.20	10.33	11.09	9.50
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.92	9.71	9.01	6.54	7.03	7.01	7.79	9.35	9.44	9.33
Residual Fuel	.50	4.07	4.70	2.71	3.05	2.54	3.02	3.46	2.51	2.51
Other	1.15	6.74	7.98	6.46	6.57	5.74	6.58	6.54	6.91	7.59
Electricity	3.55	12.87	17.07	17.31	16.91	16.18	16.86	17.51	18.43	18.21
Transportation Sector	**2.48**	**8.86**	**8.67**	**6.29**	**6.64**	**6.60**	**7.34**	**8.72**	**8.68**	**8.53**
Primary Energy	2.48	8.85	8.65	6.27	6.61	6.57	7.31	8.69	R8.65	8.50
Coal	.32	–	–	–	–	–	–	–	–	–
Petroleum	2.48	8.85	8.65	6.27	6.61	6.57	7.31	8.69	R8.65	8.50
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.35	7.05	8.35	6.52	6.73	6.66	7.05	8.79	8.56	8.43
Jet Fuel	.72	6.27	5.84	3.91	4.02	3.85	4.44	5.59	4.81	4.49
LPG	1.40	5.36	8.92	8.54	7.82	8.59	8.20	10.33	11.09	9.50
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.92	9.71	9.01	6.54	7.03	7.01	7.79	9.35	9.44	9.33
Residual Fuel	.42	3.76	4.14	2.23	2.78	2.08	2.47	2.82	2.10	2.18
Electricity	3.66	15.14	21.08	20.55	29.63	29.15	29.79	31.66	32.74	33.43
Total Energy	**1.47**	**6.41**	**8.48**	**7.66**	**7.45**	**7.31**	**7.77**	**8.58**	**8.94**	**8.65**
Primary Energy — Four Sectors	1.15	5.27	6.37	5.23	5.08	4.97	5.37	6.10	6.22	5.99
Electricity	5.23	15.17	21.24	21.86	21.48	20.92	21.68	22.46	23.51	23.61
Electric Utility Sector [a]	**.34**	**1.55**	**1.61**	**1.35**	**1.36**	**1.35**	**1.38**	**1.32**	**1.28**	**1.19**
Coal	.31	1.33	1.56	1.49	1.44	1.45	1.45	1.52	1.55	1.48
Natural Gas	.41	3.60	5.08	3.61	3.35	3.33	3.48	2.95	2.95	2.97
Petroleum	.47	4.60	4.30	2.47	2.95	2.39	2.87	3.32	2.48	2.36
Heavy Oil [b]	.47	4.52	4.32	2.42	2.99	2.37	2.87	3.31	2.40	2.45
Light Oil [b]	.49	5.85	5.85	3.79	4.01	3.56	4.07	5.48	4.76	4.31
Petroleum Coke	–	.72	1.27	1.09	1.05	1.01	.94	.90	.84	.78
Nuclear Fuel	.21	.42	.92	.78	.78	.84	.88	.83	.77	.68
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**.97**	**4.04**	**4.45**	**3.56**	**3.56**	**3.48**	**3.72**	**4.02**	**4.04**	**3.92**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Pennsylvania 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1,269.9**	**4,325.2**	**5,704.2**	**5,581.6**	**5,551.9**	**5,757.2**	**6,151.6**	**6,121.4**	**6,478.3**	**6,504.2**
Primary Energy	708.4	2,437.1	2,910.7	2,549.2	2,384.9	2,474.2	2,756.7	2,602.4	2,683.3	2,711.2
Coal	48.4	51.3	42.7	48.5	53.5	48.1	52.3	52.2	47.0	52.5
Natural Gas	367.4	1,098.2	1,644.9	1,629.4	1,514.6	1,551.9	1,662.4	1,586.5	1,640.8	1,759.1
Petroleum	292.7	1,287.5	1,223.1	871.3	816.9	874.2	1,042.0	963.6	995.4	899.6
Distillate Fuel	245.1	1,127.1	986.4	683.8	652.8	685.1	835.2	776.8	776.0	698.2
Kerosene	29.9	107.8	140.4	116.4	79.5	109.2	103.7	68.0	72.3	67.7
LPG	17.6	52.6	96.3	71.2	84.6	79.8	103.1	118.8	147.2	133.7
Electricity	561.5	1,888.1	2,793.4	3,032.4	3,166.9	3,283.0	3,395.0	3,519.0	3,795.0	3,793.0
Commercial Sector	**507.0**	**1,969.1**	**2,979.5**	**3,003.1**	**2,969.6**	**3,044.9**	**3,353.9**	**3,527.0**	**R3,694.9**	**3,772.6**
Primary Energy	198.6	734.4	1,024.2	910.7	868.1	875.1	1,013.1	1,049.1	1,031.2	1,045.9
Coal	12.3	23.0	24.3	27.0	29.8	26.3	27.2	22.4	25.2	29.7
Natural Gas	95.9	422.8	714.6	665.6	622.2	648.4	708.5	754.1	753.3	788.1
Petroleum	90.4	288.6	285.3	218.1	216.0	200.5	277.4	272.7	252.7	228.1
Distillate Fuel	34.4	218.2	194.8	164.9	154.4	140.2	219.3	198.8	190.0	175.6
Kerosene	1.2	6.6	14.5	10.4	9.3	11.4	8.9	5.4	4.5	3.3
LPG	1.8	5.5	13.0	10.9	11.3	13.1	13.5	16.7	20.8	18.9
Motor Gasoline	37.6	16.0	21.2	15.8	17.9	17.4	18.5	34.2	27.5	16.4
Residual Fuel	15.4	42.4	41.8	16.1	23.1	18.3	17.3	17.5	10.0	14.0
Electricity	308.4	1,234.7	1,955.3	2,092.4	2,101.5	2,169.7	2,340.9	2,477.9	R2,663.7	2,726.7
Industrial Sector	**1,309.6**	**5,468.1**	**5,350.4**	**4,771.7**	**4,853.1**	**4,784.7**	**R5,054.5**	**R5,345.6**	**R5,151.8**	**5,237.3**
Primary Energy	851.1	3,503.3	2,920.1	2,351.8	2,364.8	2,277.4	R2,464.7	R2,643.0	R2,413.7	2,520.9
Coal	381.8	1,155.8	647.4	483.4	509.3	583.8	590.3	629.4	556.5	605.7
Coking Coal	317.5	1,005.0	492.9	330.9	357.1	437.4	442.2	480.0	412.9	458.8
Steam Coal	64.3	150.8	154.6	152.5	152.2	146.4	148.0	149.3	143.6	146.9
Natural Gas	186.2	957.9	1,077.2	850.2	800.7	803.4	908.2	943.7	885.5	848.2
Petroleum	283.1	1,389.6	1,195.4	1,018.1	1,054.7	890.2	R966.2	R1,069.9	R971.6	1,067.1
Asphalt and Road Oil	34.0	127.1	161.3	158.5	141.9	110.4	125.1	140.3	113.6	92.4
Distillate Fuel	38.9	358.4	212.3	158.0	202.6	171.5	182.3	210.8	168.5	184.0
Kerosene	2.5	7.1	14.0	11.7	12.5	9.6	7.9	4.6	4.9	4.5
LPG	12.6	102.8	145.0	181.5	158.4	94.0	R107.9	R109.9	R152.4	179.4
Lubricants	77.6	240.0	267.9	231.9	213.7	237.0	221.2	229.5	236.1	279.1
Motor Gasoline	18.1	29.9	60.4	43.2	48.4	51.1	54.9	57.6	62.2	65.8
Residual Fuel	60.9	153.1	70.5	70.8	90.6	59.1	88.4	107.9	51.1	52.4
Other	38.6	371.0	264.1	162.4	186.6	157.7	178.6	209.4	182.9	209.3
Electricity	458.4	1,964.8	2,430.3	2,419.9	2,488.3	2,507.3	2,589.8	2,702.6	2,738.1	2,716.3
Transportation Sector	**1,705.9**	**6,961.5**	**6,281.9**	**4,763.7**	**5,278.1**	**5,467.1**	**5,814.1**	**7,015.6**	**R6,956.2**	**6,972.9**
Primary Energy	1,704.0	6,952.3	6,257.7	4,739.5	5,245.4	5,432.8	5,779.0	6,978.4	R6,918.0	6,934.6
Coal	.4	–	–	–	–	–	–	–	–	–
Petroleum	1,703.6	6,952.3	6,257.7	4,739.5	5,245.4	5,432.8	5,779.0	6,978.4	R6,918.0	6,934.6
Aviation Gasoline	7.3	15.3	10.5	10.7	5.6	7.1	7.4	6.8	5.1	7.0
Distillate Fuel	99.5	885.1	977.0	811.7	929.9	965.3	974.6	1,220.2	1,186.8	1,228.7
Jet Fuel	36.9	360.1	334.6	219.3	239.6	255.1	242.5	380.7	R309.5	277.8
LPG	.7	2.9	8.0	5.9	4.3	5.5	5.1	5.9	7.5	6.5
Lubricants	40.9	114.3	127.5	110.4	101.7	112.8	105.3	109.2	112.4	132.9
Motor Gasoline	1,503.8	5,461.1	4,744.3	3,517.6	3,861.1	4,015.4	4,379.9	5,155.0	R5,221.2	5,185.6
Residual Fuel	14.6	113.4	55.7	63.8	103.0	71.6	64.1	100.5	75.4	96.1
Electricity	1.9	9.2	24.1	24.2	32.8	34.3	35.1	37.2	R38.2	38.3
Total Energy	**4,792.4**	**18,723.9**	**20,315.9**	**18,120.1**	**18,652.6**	**19,053.8**	**R20,374.2**	**R22,009.5**	**R22,281.2**	**22,486.9**
Primary Energy — Four Sectors	3,462.2	13,627.1	13,112.8	10,551.2	10,863.1	11,059.5	R12,013.4	R13,272.9	R13,046.3	13,212.5
Electricity	1,330.2	5,096.8	7,203.2	7,568.9	7,789.5	7,994.3	8,360.8	8,736.6	9,235.0	9,274.4
Electric Utility Sector [a]	**296.5**	**1,997.2**	**2,233.1**	**2,058.5**	**2,014.1**	**2,092.5**	**2,169.5**	**2,215.1**	**2,122.4**	**1,992.9**
Coal	213.6	1,364.4	1,592.7	1,483.7	1,458.8	1,534.8	1,529.8	1,540.7	1,534.3	1,481.1
Natural Gas	4.0	10.5	8.0	2.7	6.9	9.1	14.4	7.2	6.2	9.5
Petroleum	77.8	566.8	370.2	235.5	254.5	206.0	255.6	155.8	108.0	66.3
Heavy Oil [b]	66.6	489.2	315.7	198.0	211.0	163.7	202.2	112.5	77.8	43.5
Light Oil [b]	11.3	76.2	48.5	31.7	36.6	34.7	47.0	37.8	25.1	18.0
Petroleum Coke	–	1.4	6.0	5.8	6.8	7.5	6.4	5.4	5.0	4.8
Nuclear Fuel	1.1	55.4	262.2	336.6	293.8	342.6	369.7	511.5	474.0	436.0
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**3,758.7**	**15,624.2**	**15,345.9**	**12,609.7**	**12,877.2**	**13,152.0**	**R14,182.9**	**R15,488.0**	**R15,168.7**	**15,205.4**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

–=No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Rhode Island 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	**0.94**	**2.37**	**3.03**	**2.30**	**3.09**	**2.54**	**2.70**	**3.56**	**3.51**	**3.43**
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.94	2.37	3.03	2.30	3.09	2.54	2.70	3.56	3.51	3.43
Natural Gas	**1.38**	**5.09**	**6.66**	**6.77**	**5.49**	**5.94**	**6.21**	**5.83**	**5.94**	**5.52**
Petroleum	**1.41**	**7.59**	**7.64**	**6.01**	**6.40**	**6.36**	**R7.16**	**8.20**	**8.50**	**7.72**
Asphalt and Road Oil	.66	3.58	5.18	4.86	3.54	3.34	3.17	3.34	3.05	2.78
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.35	7.06	8.08	6.37	6.24	6.37	7.06	8.53	7.85	7.23
Jet Fuel	.75	6.51	6.10	4.25	4.18	4.04	4.75	6.03	5.23	4.79
Kerosene	1.50	7.44	8.91	6.90	6.84	6.76	7.69	8.90	7.85	7.19
LPG	1.77	6.57	11.70	10.62	11.19	11.00	R9.29	12.46	13.91	12.21
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.90	9.72	9.13	7.36	7.96	8.40	9.11	10.03	10.09	9.83
Residual Fuel	.43	4.03	4.66	2.67	3.10	2.47	2.89	3.40	2.86	2.57
Other [a]	1.86	8.20	7.37	10.73	10.73	10.84	10.00	9.71	9.71	9.71
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	**1.40**	**7.06**	**7.43**	**6.13**	**6.18**	**6.17**	**6.91**	**7.56**	**7.53**	**6.75**
Electric Utility Fuel [c]	.43	3.91	3.82	2.39	2.50	2.28	2.65	2.60	2.23	2.16
Electricity Purchased by End Users	6.85	20.67	24.73	23.40	23.93	23.28	24.24	26.85	29.75	30.12
Total Energy	**1.91**	**9.06**	**9.67**	**8.50**	**8.62**	**8.54**	**9.43**	**10.61**	**10.52**	**9.34**
	Expenditures in Millions of Dollars									
Coal	**0.2**	**0.4**	**0.6**	**1.6**	**0.4**	**11.1**	**1.8**	**0.5**	**0.4**	**0.4**
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.2	.4	.6	1.6	.4	11.1	1.8	.5	.4	.4
Natural Gas	**35.2**	**142.7**	**204.6**	**182.9**	**202.3**	**187.0**	**215.8**	**213.7**	**330.8**	**435.4**
Petroleum	**234.1**	**794.4**	**856.3**	**708.0**	**748.4**	**773.9**	**R786.7**	**824.2**	**R780.8**	**777.4**
Asphalt and Road Oil	4.1	24.7	102.3	47.7	41.7	38.6	33.7	36.3	9.3	27.7
Aviation Gasoline	1.6	12.2	1.5	1.5	1.6	1.7	1.9	2.0	1.3	1.3
Distillate Fuel	67.9	207.0	209.6	196.7	220.1	220.3	242.8	230.4	231.7	223.4
Jet Fuel	.6	12.8	17.1	9.3	12.5	14.5	19.4	26.4	R19.4	15.1
Kerosene	3.7	3.5	6.8	6.6	4.3	4.4	2.7	2.7	2.3	2.1
LPG	2.5	7.1	21.1	22.6	27.4	22.7	R17.2	22.6	23.4	20.2
Lubricants	3.9	11.5	12.8	11.1	10.2	11.3	10.6	11.0	11.3	13.3
Motor Gasoline	122.0	429.7	415.5	345.4	381.1	409.6	424.3	459.0	459.8	452.0
Residual Fuel	25.7	63.9	65.5	63.2	45.2	47.2	31.0	30.8	19.8	19.4
Other [a]	2.2	22.0	4.1	4.0	4.4	3.5	3.1	3.0	2.4	2.9
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	**269.6**	**937.5**	**1,061.5**	**892.6**	**951.1**	**972.1**	**R1,004.3**	**1,038.3**	**R1,112.0**	**1,213.2**
Electric Utility Fuel [c]	-9.3	-47.5	-27.4	-22.3	-26.8	-22.4	-17.7	-20.6	-5.7	-3.4
Electricity Purchased by End Users	90.7	361.9	458.2	451.6	485.1	494.0	526.0	588.1	650.0	657.0
Total Energy	**350.9**	**1,252.0**	**1,492.3**	**1,321.9**	**1,409.4**	**1,443.6**	**R1,512.6**	**1,605.9**	**R1,756.2**	**1,866.7**

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Rhode Island 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.19**	**9.08**	**10.90**	**9.90**	**9.81**	**9.58**	**10.43**	**11.84**	**12.38**	**11.64**
Primary Energy	1.59	6.60	8.03	6.86	6.60	6.52	7.10	7.82	7.78	7.45
Coal	.98	4.47	4.39	4.19	3.85	3.99	3.96	4.21	4.07	3.94
Natural Gas	1.79	5.58	7.62	7.25	6.63	6.43	6.94	7.03	7.42	7.54
Petroleum	1.52	7.33	8.33	6.53	6.59	6.61	7.25	8.73	8.17	7.37
Distillate Fuel	1.49	7.29	8.15	6.33	6.31	6.39	7.18	8.38	7.71	7.04
Kerosene	1.70	8.15	8.93	6.93	6.91	7.00	7.86	9.18	8.44	7.71
LPG	2.55	8.57	11.44	9.82	11.24	11.13	8.50	13.81	15.22	13.79
Electricity	8.44	22.64	26.77	25.42	25.93	25.28	26.34	28.86	32.17	32.74
Commercial Sector	**2.08**	**10.70**	**12.55**	**10.08**	**10.72**	**10.84**	**11.88**	**13.12**	**R13.63**	**14.06**
Primary Energy	1.00	5.44	6.36	4.87	5.18	5.04	5.68	5.79	5.47	5.56
Coal	.90	1.67	2.38	2.08	2.36	2.53	2.60	2.62	2.65	2.67
Natural Gas	1.44	5.00	6.45	6.21	5.38	5.65	6.24	6.04	R5.87	6.21
Petroleum	.85	6.05	6.28	4.13	4.97	4.47	5.05	5.57	5.09	4.74
Distillate Fuel	1.10	6.46	7.45	5.69	5.57	5.45	5.93	7.25	6.39	6.14
Kerosene	.78	–	8.34	6.06	6.01	5.59	5.95	8.26	6.57	5.87
LPG	1.20	5.29	12.03	11.25	11.14	10.88	10.22	10.80	11.94	9.96
Motor Gasoline	2.90	9.72	9.13	7.36	7.96	8.40	9.11	10.03	10.09	9.83
Residual Fuel	.44	3.96	4.96	2.85	3.42	2.83	3.06	3.35	2.92	2.71
Electricity	7.02	20.45	24.56	23.01	23.26	22.62	23.52	26.28	28.97	29.41
Industrial Sector	**1.06**	**7.27**	**7.48**	**7.31**	**7.14**	**6.41**	**7.25**	**8.11**	**7.69**	**5.89**
Primary Energy	.66	4.91	5.59	4.83	4.58	3.96	4.20	4.54	5.16	4.38
Coal	.90	1.67	2.38	2.08	2.36	2.53	2.60	2.59	–	–
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.90	1.67	2.38	2.08	2.36	2.53	2.60	2.59	–	–
Natural Gas	.85	4.45	5.70	5.58	5.23	4.70	5.03	5.18	5.25	4.58
Petroleum	.62	5.07	5.58	4.78	4.46	4.10	4.02	4.36	4.84	3.76
Asphalt and Road Oil	.66	3.58	5.18	4.86	3.54	3.34	3.17	3.34	3.05	2.78
Distillate Fuel	.71	5.65	7.28	5.29	5.25	4.88	5.20	7.21	5.74	5.12
Kerosene	.78	6.18	8.34	6.06	6.01	5.59	5.95	8.26	6.57	5.87
LPG	1.20	5.29	12.03	11.25	11.14	10.88	10.22	10.80	11.94	9.96
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.90	9.72	9.13	7.36	7.96	8.40	9.11	10.03	10.09	9.83
Residual Fuel	.42	4.24	4.96	2.85	3.42	2.83	3.06	3.35	2.92	2.71
Other	1.86	8.20	7.37	10.73	10.73	10.84	10.00	9.71	9.71	9.71
Electricity	4.83	18.39	21.93	20.90	21.89	21.10	21.98	24.46	27.09	26.96
Transportation Sector	**2.17**	**9.40**	**9.03**	**7.28**	**7.57**	**7.87**	**8.60**	**9.71**	**R9.70**	**9.44**
Primary Energy	2.17	9.40	9.03	7.28	7.57	7.87	8.60	9.71	R9.70	9.44
Coal	–	–	–	–	–	–	–	–	–	–
Petroleum	2.17	9.40	9.03	7.28	7.57	7.87	8.60	9.71	R9.70	9.44
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.36	7.41	8.89	7.26	6.96	7.36	7.81	9.93	9.39	8.91
Jet Fuel	.75	6.51	6.10	4.25	4.18	4.04	4.75	6.03	5.23	4.79
LPG	1.20	5.29	12.03	11.25	11.14	10.88	10.22	10.80	11.94	9.96
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.90	9.72	9.13	7.36	7.96	8.40	9.11	10.03	10.09	9.83
Residual Fuel	.41	3.34	–	2.20	2.55	2.05	2.50	3.42	2.16	1.86
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.91**	**9.06**	**9.67**	**8.50**	**8.62**	**8.54**	**9.43**	**10.61**	**10.52**	**9.34**
Primary Energy — Four Sectors	1.53	7.37	7.62	6.39	6.45	6.43	7.11	7.87	7.63	6.79
Electricity	6.85	20.67	24.73	23.40	23.93	23.28	24.24	26.85	29.75	30.12
Electric Utility Sector [a]	**.43**	**3.91**	**3.82**	**2.39**	**2.50**	**2.28**	**2.65**	**2.60**	**2.23**	**2.16**
Coal	–	–	–	–	–	–	–	–	–	–
Natural Gas	.39	3.32	3.37	–	2.32	2.09	2.41	2.17	1.98	2.13
Petroleum	.44	4.00	4.08	2.39	2.70	2.28	2.77	3.68	2.70	2.17
Heavy Oil [b]	.44	3.97	4.03	2.37	2.68	2.25	2.70	3.59	2.41	1.95
Light Oil [b]	.48	6.03	5.83	3.55	3.38	3.71	4.23	5.53	4.70	4.43
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.40**	**7.06**	**7.43**	**6.13**	**6.18**	**6.17**	**6.91**	**7.56**	**7.53**	**6.75**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Rhode Island 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**117.5**	**367.9**	**478.8**	**425.5**	**441.5**	**465.5**	**487.5**	**502.8**	**530.5**	**566.9**
Primary Energy	77.5	225.8	298.8	246.5	248.1	265.4	274.5	268.8	270.5	302.9
Coal	.1	.2	.3	.3	.2	.2	.2	.3	.2	.3
Natural Gas	21.9	79.5	118.0	120.2	114.0	116.7	130.4	128.0	132.5	153.6
Petroleum	55.5	146.1	180.5	126.3	133.8	148.6	143.9	140.5	137.7	149.0
Distillate Fuel	50.7	140.0	162.4	110.5	117.4	134.1	132.9	124.6	120.7	134.0
Kerosene	3.2	2.5	6.6	6.4	4.0	3.8	2.5	2.0	1.7	1.6
LPG	1.5	3.6	11.5	9.2	12.5	10.7	8.5	13.9	15.4	13.4
Electricity	40.0	142.1	180.0	179.0	193.4	200.0	213.0	234.0	260.0	264.0
Commercial Sector	**51.1**	**197.1**	**271.9**	**271.6**	**285.9**	**284.6**	**306.8**	**336.4**	**R357.8**	**359.4**
Primary Energy	20.3	65.1	90.9	93.6	95.8	88.7	95.8	95.4	**R93.8**	91.5
Coal	.1	*	.1	.1	.1	.1	.1	.1	.1	.1
Natural Gas	7.5	34.5	50.6	42.9	52.0	48.4	56.2	50.1	**R49.9**	57.4
Petroleum	12.8	30.6	40.2	50.6	43.7	40.1	39.5	45.2	43.8	33.9
Distillate Fuel	9.4	23.2	19.2	26.7	28.9	25.6	26.9	28.4	28.9	21.6
Kerosene	*	–	.2	.1	.2	.1	.2	.1	*	.1
LPG	.1	.4	2.1	1.8	2.2	1.8	1.8	1.9	2.1	1.7
Motor Gasoline	.6	2.5	1.5	1.3	1.5	1.6	1.8	2.0	1.9	1.7
Residual Fuel	2.7	4.5	17.2	20.5	10.9	11.0	8.8	12.7	10.8	8.9
Electricity	30.8	132.0	181.0	178.1	190.2	196.0	211.0	241.0	264.0	267.9
Industrial Sector	**45.0**	**198.3**	**285.7**	**214.4**	**224.4**	**208.1**	**196.0**	**208.8**	**310.0**	**407.8**
Primary Energy	25.1	110.5	188.5	119.9	122.8	110.1	94.0	95.8	184.0	282.8
Coal	*	.2	.2	1.2	.1	10.9	1.6	*	–	–
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	*	.2	.2	1.2	.1	10.9	1.6	*	–	–
Natural Gas	5.0	23.1	27.2	19.8	23.6	21.5	23.9	23.3	145.1	223.3
Petroleum	20.1	87.2	161.0	98.8	99.1	77.7	68.6	72.5	38.9	59.5
Asphalt and Road Oil	4.1	24.7	102.3	47.7	41.7	38.6	33.7	36.3	9.3	27.7
Distillate Fuel	2.8	13.6	10.5	8.8	16.6	7.7	9.4	9.9	7.7	8.4
Kerosene	.4	1.1	*	.1	.1	.5	*	.7	.6	.4
LPG	.7	2.9	6.5	10.9	12.3	9.3	6.1	6.1	5.3	4.6
Lubricants	1.5	5.4	6.0	5.2	4.8	5.3	5.0	5.1	5.3	6.3
Motor Gasoline	*	.1	1.3	1.2	1.2	1.5	1.7	1.8	1.4	1.4
Residual Fuel	8.3	17.4	30.3	20.9	18.0	11.3	9.6	9.7	7.0	7.8
Other	2.2	22.0	4.1	4.0	4.4	3.5	3.1	3.0	2.4	2.9
Electricity	19.9	87.8	97.3	94.6	101.6	98.0	102.0	113.0	126.0	125.0
Transportation Sector	**137.4**	**488.7**	**455.9**	**410.3**	**457.6**	**485.5**	**522.2**	**557.8**	**R557.9**	**532.6**
Primary Energy	137.4	488.7	455.9	410.3	457.6	485.5	522.2	557.8	**R557.9**	532.6
Coal	–	–	–	–	–	–	–	–	–	–
Petroleum	137.4	488.7	455.9	410.3	457.6	485.5	522.2	557.8	**R557.9**	532.6
Aviation Gasoline	1.6	12.2	1.5	1.5	1.6	1.7	1.9	2.0	1.3	1.3
Distillate Fuel	4.8	29.2	16.9	50.0	56.7	52.0	72.7	66.9	74.0	59.0
Jet Fuel	.6	12.8	17.1	9.3	12.5	14.5	19.4	26.4	**R19.4**	15.1
LPG	.1	.2	1.0	.7	.3	.8	.7	.8	.6	.5
Lubricants	2.4	6.1	6.8	5.9	5.4	6.0	5.6	5.8	6.0	7.1
Motor Gasoline	121.4	427.1	412.7	342.8	378.4	406.6	420.8	455.2	456.5	449.0
Residual Fuel	6.5	1.2	–	.1	2.7	3.8	1.1	.7	.1	.7
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**350.9**	**1,252.0**	**1,492.3**	**1,321.9**	**1,409.4**	**1,443.6**	**R1,512.6**	**1,605.9**	**R1,756.2**	**1,866.7**
Primary Energy — Four Sectors	260.3	890.1	1,034.1	870.3	924.2	949.6	986.5	1,017.8	**R1,106.2**	1,209.8
Electricity	90.7	361.9	458.2	451.6	485.1	494.0	526.0	588.1	650.0	657.0
Electric Utility Sector [a]	**9.3**	**47.5**	**27.4**	**22.3**	**26.8**	**22.4**	**17.7**	**20.6**	**5.7**	**3.4**
Coal	–	–	–	–	–	–	–	–	–	–
Natural Gas	.9	5.7	8.8	–	12.8	.4	5.3	12.3	3.3	1.0
Petroleum	8.4	41.8	18.6	22.3	14.1	22.0	12.4	8.3	2.4	2.4
Heavy Oil [b]	8.2	40.8	17.9	21.7	13.6	21.1	11.5	7.7	1.9	2.0
Light Oil [b]	.2	1.0	.7	.6	.5	.9	.9	.6	.5	.4
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**269.6**	**937.5**	**1,061.5**	**892.6**	**951.1**	**972.1**	**R1,004.3**	**1,038.3**	**R1,112.0**	**1,213.2**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, South Carolina 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.47	1.60	1.88	1.82	1.74	1.75	1.71	1.73	1.64	1.57
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.47	1.60	1.88	1.82	1.74	1.75	1.71	1.73	1.64	1.57
Natural Gas	.57	3.07	5.06	4.40	4.60	4.25	4.22	4.01	3.66	3.96
Petroleum	1.89	8.07	7.98	5.98	6.25	6.12	6.83	7.83	R7.54	7.15
Asphalt and Road Oil	.67	3.58	4.99	4.18	3.20	3.17	2.90	2.90	3.06	2.27
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.03	6.84	7.06	5.76	5.82	5.69	6.15	7.68	7.21	6.62
Jet Fuel	.73	6.46	6.11	4.23	4.35	4.19	4.74	6.07	5.12	4.82
Kerosene	1.43	7.92	8.01	7.25	5.82	6.56	6.51	8.30	7.75	6.33
LPG	2.04	5.77	9.87	9.78	8.31	10.16	9.26	10.35	10.82	9.35
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.75	10.18	8.84	6.40	7.08	7.08	7.84	8.80	8.56	8.25
Residual Fuel	.42	3.43	4.36	2.50	2.93	2.30	2.70	3.11	2.42	2.50
Other [a]	1.58	6.70	6.03	3.74	3.91	3.35	4.23	4.72	4.35	3.99
Nuclear Fuel	.19	.44	.62	.61	.64	.59	.58	.53	.52	.50
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.20	4.09	3.80	2.98	3.00	2.91	3.17	3.45	R3.31	3.13
Electric Utility Fuel [c]	.42	1.14	1.11	1.03	1.03	1.00	.99	.94	.90	.84
Electricity Purchased by End Users	3.98	11.11	15.99	16.25	16.41	16.40	16.53	16.39	16.50	16.21
Total Energy	1.83	7.25	8.85	7.86	8.09	7.95	8.39	8.89	R8.76	8.51
	Expenditures in Millions of Dollars									
Coal	65.3	392.2	493.6	480.7	513.0	526.9	514.1	499.0	478.2	451.3
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	65.3	392.2	493.6	480.7	513.0	526.9	514.1	499.0	478.2	451.3
Natural Gas	91.4	441.2	495.3	435.6	488.0	479.3	495.2	525.9	492.8	549.8
Petroleum	569.7	2,937.1	2,808.2	2,161.0	2,314.1	2,319.4	R2,698.4	R3,141.7	R3,075.7	2,864.8
Asphalt and Road Oil	9.9	36.4	45.3	57.4	51.6	69.3	44.5	38.1	39.4	31.1
Aviation Gasoline	2.5	6.8	6.9	6.6	4.6	4.7	5.0	4.8	7.9	9.7
Distillate Fuel	56.7	424.9	482.8	392.7	401.8	417.9	447.8	650.4	642.3	529.5
Jet Fuel	12.4	107.1	105.3	72.7	75.4	73.4	80.3	97.4	R95.8	68.0
Kerosene	19.3	60.7	67.4	48.5	44.9	55.2	52.6	31.0	37.4	18.8
LPG	22.6	67.4	112.4	102.6	110.0	131.2	R125.3	R109.3	141.0	121.8
Lubricants	11.9	47.3	52.8	45.7	42.1	46.7	43.6	45.2	46.5	55.0
Motor Gasoline	415.8	1,899.0	1,751.7	1,321.6	1,448.6	1,393.6	1,754.5	1,987.6	R1,912.1	1,869.9
Residual Fuel	14.2	155.3	80.0	37.8	45.3	47.3	46.5	47.9	37.0	37.7
Other [a]	4.4	132.2	103.7	75.4	89.9	80.1	98.2	130.0	116.4	123.2
Nuclear Fuel	*	83.4	214.5	233.9	269.0	257.5	251.7	242.8	240.5	241.2
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	726.5	3,854.0	4,011.6	3,311.2	3,584.2	3,583.1	R3,959.4	R4,409.4	R4,287.1	4,107.0
Electric Utility Fuel [c]	-65.0	-467.6	-601.3	-598.7	-670.6	-677.1	-672.7	-656.9	-640.7	-603.7
Electricity Purchased by End Users	294.7	1,412.5	2,523.7	2,741.1	2,909.0	2,955.0	3,038.0	3,113.0	3,212.0	3,230.0
Total Energy	956.2	4,798.9	5,934.0	5,453.6	5,822.7	5,861.0	R6,324.7	R6,865.4	R6,858.4	6,733.3

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
*Value less than 0.05 million dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, South Carolina 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.82**	**9.73**	**14.90**	**15.20**	**14.69**	**15.03**	**15.21**	**16.32**	**16.21**	**15.95**
Primary Energy	1.51	5.76	7.44	7.06	6.32	7.12	7.09	7.87	7.76	7.12
Coal	1.20	3.19	3.48	3.31	3.20	3.26	3.34	3.34	3.15	3.11
Natural Gas	1.32	4.06	6.44	6.35	6.41	6.55	6.56	6.97	6.80	6.84
Petroleum	1.64	7.50	8.38	8.14	6.39	7.90	7.62	9.01	8.95	7.64
Distillate Fuel	1.30	6.95	7.19	6.66	5.29	6.01	5.90	7.57	7.06	5.87
Kerosene	1.58	8.27	8.25	7.64	6.07	6.90	6.77	8.69	8.10	6.73
LPG	2.46	7.47	9.72	10.26	7.93	10.62	10.02	10.57	11.00	8.87
Electricity	5.64	13.69	20.54	20.89	21.03	20.89	21.08	20.95	21.17	21.06
Commercial Sector	**2.35**	**7.65**	**12.85**	**12.63**	**12.70**	**12.51**	**13.23**	**13.93**	**14.02**	**13.62**
Primary Energy	.93	3.57	5.92	4.97	5.08	5.03	5.39	6.11	5.61	5.36
Coal	.50	1.70	1.77	1.77	1.70	1.67	1.69	1.74	1.71	1.72
Natural Gas	.86	3.11	5.60	5.47	5.45	5.44	5.51	5.74	5.41	5.50
Petroleum	1.28	6.70	7.07	5.45	5.10	4.98	5.29	7.13	6.52	5.24
Distillate Fuel	1.01	6.33	6.18	4.35	3.80	3.74	4.14	5.75	4.64	3.41
Kerosene	.63	5.15	6.93	5.20	4.43	4.46	5.22	6.35	5.62	4.18
LPG	1.39	4.24	10.09	9.12	8.76	9.59	8.27	10.05	10.60	10.04
Motor Gasoline	2.75	10.18	8.84	6.40	7.08	7.08	7.84	8.80	8.56	8.25
Residual Fuel	.46	3.41	4.50	2.67	2.97	2.40	2.81	3.25	2.59	2.61
Electricity	4.85	12.07	18.01	18.37	18.33	18.03	18.11	17.92	18.15	18.00
Industrial Sector	**.87**	**4.40**	**6.40**	**5.85**	**5.91**	**5.63**	**5.84**	**5.86**	**5.79**	**5.58**
Primary Energy	.57	3.35	4.17	3.30	3.31	3.05	3.24	3.42	3.22	3.12
Coal	.50	1.70	1.77	1.77	1.70	1.67	1.69	1.74	1.71	1.72
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.50	1.70	1.77	1.77	1.70	1.67	1.69	1.74	1.71	1.72
Natural Gas	.45	2.89	4.57	3.62	3.82	3.34	3.37	3.26	2.87	3.05
Petroleum	.83	4.88	6.24	4.49	4.30	3.91	4.42	4.95	4.82	4.24
Asphalt and Road Oil	.67	3.58	4.99	4.18	3.20	3.17	2.90	2.90	3.06	2.27
Distillate Fuel	.58	4.62	6.21	4.65	3.96	4.00	4.67	5.68	5.03	3.74
Kerosene	.63	5.15	6.93	5.20	4.43	4.46	5.22	6.35	5.62	4.18
LPG	1.39	4.24	10.09	9.12	8.76	9.59	8.27	10.05	10.60	10.04
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.75	10.18	8.84	6.40	7.08	7.08	7.84	8.80	8.56	8.25
Residual Fuel	.40	3.53	4.50	2.67	2.97	2.40	2.81	3.25	2.59	2.61
Other	1.58	6.70	6.03	3.74	3.91	3.35	4.23	4.72	4.35	3.99
Electricity	2.41	8.56	12.02	12.00	12.27	12.42	12.48	12.24	12.20	11.82
Transportation Sector	**2.34**	**9.42**	**8.39**	**6.19**	**6.77**	**6.69**	**7.44**	**8.49**	**R 8.11**	**7.90**
Primary Energy	2.34	9.42	8.39	6.19	6.77	6.69	7.44	8.49	R 8.11	7.90
Coal	.50	–	–	–	–	–	–	–	–	–
Petroleum	2.34	9.42	8.39	6.19	6.77	6.69	7.44	8.49	R 8.11	7.90
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.32	7.63	7.36	6.00	6.48	6.27	6.82	8.17	7.77	7.39
Jet Fuel	.73	6.46	6.11	4.23	4.35	4.19	4.74	6.07	5.12	4.82
LPG	1.39	4.24	10.09	9.12	8.76	9.59	8.27	10.05	10.60	10.04
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.75	10.18	8.84	6.40	7.08	7.08	7.84	8.80	8.56	8.25
Residual Fuel	.41	2.90	3.82	2.01	2.80	1.98	2.38	2.58	2.06	2.15
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.83**	**7.25**	**8.85**	**7.86**	**8.09**	**7.95**	**8.39**	**8.89**	**R 8.76**	**8.51**
Primary Energy — Four Sectors	1.47	6.34	6.65	5.16	5.37	5.22	5.76	6.44	R 6.20	5.92
Electricity	3.98	11.11	15.99	16.25	16.41	16.40	16.53	16.39	16.50	16.21
Electric Utility Sector [a]	**.42**	**1.14**	**1.11**	**1.03**	**1.03**	**1.00**	**.99**	**.94**	**.90**	**.84**
Coal	.43	1.56	1.91	1.82	1.74	1.76	1.71	1.72	1.63	1.53
Natural Gas	.37	2.41	4.54	2.03	3.35	1.81	2.22	1.72	1.49	1.69
Petroleum	.52	3.91	5.72	3.61	3.98	3.72	4.07	6.00	4.54	4.39
Heavy Oil [b]	.46	3.44	3.94	2.16	2.93	2.22	2.71	3.02	2.22	2.38
Light Oil [b]	.70	5.78	5.73	3.64	4.00	3.74	4.26	6.22	4.75	4.62
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	.19	.44	.62	.61	.64	.59	.58	.53	.52	.50
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.20**	**4.09**	**3.80**	**2.98**	**3.00**	**2.91**	**3.17**	**3.45**	**R 3.31**	**3.13**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, South Carolina 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**222.0**	**833.8**	**1,308.2**	**1,420.6**	**1,490.3**	**1,533.2**	**1,560.9**	**1,573.1**	**1,641.4**	**1,627.7**
Primary Energy	80.7	246.2	280.8	271.6	276.5	309.2	304.9	268.2	290.4	266.7
Coal	2.5	5.4	2.0	6.3	3.4	3.6	.5	.2	.6	.8
Natural Gas	25.6	79.1	108.7	114.1	133.1	139.9	137.8	131.9	136.9	157.4
Petroleum	52.6	161.7	170.0	151.2	140.0	165.7	166.7	136.1	152.9	108.4
Distillate Fuel	18.2	64.0	48.3	45.6	43.2	39.2	44.1	44.5	41.1	23.6
Kerosene	18.0	56.3	56.6	42.9	39.7	50.1	45.5	27.1	33.6	16.8
LPG	16.5	41.5	65.1	62.7	57.1	76.4	77.1	64.5	78.3	68.0
Electricity	141.3	587.6	1,027.5	1,149.0	1,213.8	1,224.0	1,256.0	1,305.0	1,351.0	1,361.0
Commercial Sector	**93.5**	**473.4**	**747.7**	**792.0**	**830.3**	**855.4**	**885.6**	**910.7**	**927.0**	**935.5**
Primary Energy	23.4	115.0	146.9	133.6	141.2	146.3	138.6	134.7	122.0	127.5
Coal	1.9	5.3	1.9	6.3	3.3	3.4	.5	.2	.6	.9
Natural Gas	12.3	73.5	88.0	89.5	96.3	97.7	93.4	90.8	87.8	94.0
Petroleum	9.2	36.2	57.1	37.9	41.5	45.2	44.7	43.7	33.6	32.6
Distillate Fuel	4.2	17.8	30.3	17.8	19.2	23.0	22.3	20.3	14.1	13.3
Kerosene	.2	.7	1.9	1.6	1.3	.7	2.1	.4	.4	.3
LPG	1.6	4.1	11.9	9.8	11.1	12.2	11.2	10.8	13.3	13.6
Motor Gasoline	3.0	12.8	10.7	8.1	9.2	8.7	8.5	11.8	5.4	4.5
Residual Fuel	.2	.7	2.3	.6	.6	.7	.7	.4	.4	.9
Electricity	70.1	358.4	600.8	658.4	689.1	709.0	747.0	776.0	805.0	808.0
Industrial Sector	**183.5**	**1,184.6**	**1,675.8**	**1,551.8**	**1,670.1**	**1,685.8**	**R1,720.0**	**R1,786.0**	**1,751.7**	**1,771.3**
Primary Energy	100.2	718.1	780.4	618.1	664.0	663.8	R685.0	R754.0	695.7	710.3
Coal	22.0	74.9	111.3	108.6	109.3	108.9	105.1	101.2	95.5	94.2
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	22.0	74.9	111.3	108.6	109.3	108.9	105.1	101.2	95.5	94.2
Natural Gas	36.4	275.2	296.3	229.1	256.8	237.3	257.9	290.9	253.1	295.2
Petroleum	41.8	367.9	372.8	280.4	297.9	317.6	R322.0	R361.9	347.1	320.8
Asphalt and Road Oil	9.9	36.4	45.3	57.4	51.6	69.3	44.5	38.1	39.4	31.1
Distillate Fuel	8.9	50.4	61.4	41.5	32.2	38.9	51.9	64.5	61.6	38.7
Kerosene	1.1	3.7	8.8	4.0	3.8	4.5	5.0	3.5	3.5	1.6
LPG	4.1	21.3	30.3	27.5	39.6	39.6	R34.3	R30.9	45.7	37.1
Lubricants	4.6	24.6	27.4	23.8	21.9	24.3	22.7	23.5	24.2	28.6
Motor Gasoline	4.8	5.1	32.6	21.3	24.7	23.9	30.2	32.3	30.2	31.0
Residual Fuel	4.0	94.2	63.1	29.6	34.3	37.0	35.3	39.1	26.1	29.4
Other	4.4	132.2	103.7	75.4	89.9	80.1	98.2	130.0	116.4	123.2
Electricity	83.3	466.5	895.4	933.7	1,006.1	1,022.0	1,035.0	1,032.0	1,056.0	1,061.0
Transportation Sector	**457.0**	**2,307.1**	**2,202.3**	**1,689.1**	**1,832.0**	**1,786.7**	**2,158.2**	**2,595.6**	**R2,538.3**	**2,398.9**
Primary Energy	457.0	2,307.1	2,202.3	1,689.1	1,832.0	1,786.7	2,158.2	2,595.6	R2,538.3	2,398.9
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	457.0	2,307.1	2,202.3	1,689.1	1,832.0	1,786.7	2,158.2	2,595.6	R2,538.3	2,398.9
Aviation Gasoline	2.5	6.8	6.9	6.6	4.6	4.7	5.0	4.8	7.9	9.7
Distillate Fuel	22.3	273.6	336.7	285.4	304.5	312.6	323.2	516.8	521.8	450.0
Jet Fuel	12.4	107.1	105.3	72.7	75.4	73.4	80.3	97.4	R95.8	68.0
LPG	.3	.5	5.1	2.5	2.2	3.0	2.7	3.2	3.7	3.2
Lubricants	7.3	22.7	25.4	21.9	20.2	22.4	20.9	21.7	22.3	26.4
Motor Gasoline	408.0	1,881.0	1,708.4	1,292.2	1,414.7	1,360.9	1,715.9	1,943.5	1,876.5	1,834.4
Residual Fuel	4.1	15.4	14.6	7.7	10.3	9.6	10.0	8.3	10.3	7.2
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**956.2**	**4,798.9**	**5,934.0**	**5,453.6**	**5,822.7**	**5,861.0**	**R6,324.7**	**R6,865.4**	**R6,858.4**	**6,733.3**
Primary Energy — Four Sectors	661.4	3,386.4	3,410.3	2,712.5	2,913.6	2,906.1	R3,286.7	R3,752.5	R3,646.4	3,503.3
Electricity	294.7	1,412.5	2,523.7	2,741.1	2,909.0	2,955.0	3,038.0	3,113.0	3,212.0	3,230.0
Electric Utility Sector [a]	**65.0**	**467.6**	**601.3**	**598.7**	**670.6**	**677.1**	**672.7**	**656.9**	**640.7**	**603.7**
Coal	39.0	306.6	378.4	359.5	397.0	410.9	408.0	397.5	381.4	355.3
Natural Gas	17.1	13.4	2.3	2.9	1.8	4.4	6.1	12.3	15.0	3.1
Petroleum	9.0	64.1	6.1	2.5	2.7	4.2	6.8	4.4	3.8	4.1
Heavy Oil [b]	5.9	45.0	*	*	*	*	.6	.2	.2	.2
Light Oil [b]	3.1	19.1	6.1	2.4	2.7	4.2	6.3	4.3	3.7	3.9
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	*	83.4	214.5	233.9	269.0	257.5	251.7	242.8	240.5	241.2
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**726.5**	**3,854.0**	**4,011.6**	**3,311.2**	**3,584.2**	**3,583.1**	**R3,959.4**	**R4,409.4**	**R4,287.1**	**4,107.0**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, South Dakota 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	**0.41**	**0.85**	**1.37**	**1.36**	**1.41**	**1.27**	**1.31**	**1.22**	**1.22**	**1.21**
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.41	.85	1.37	1.36	1.41	1.27	1.31	1.22	1.22	1.21
Natural Gas	**.69**	**2.83**	**5.01**	**4.62**	**4.27**	**4.18**	**4.12**	**4.41**	**4.21**	**4.44**
Petroleum	**2.05**	**8.19**	**8.15**	**6.08**	**6.18**	**6.02**	**7.26**	**7.92**	**R7.45**	**7.39**
Asphalt and Road Oil	.76	3.82	5.06	3.99	3.73	3.58	3.14	3.24	3.24	2.71
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	.97	6.53	6.98	5.07	5.12	4.48	5.85	6.52	6.04	6.56
Jet Fuel	.75	6.47	6.29	4.57	4.39	4.36	4.76	6.21	5.36	5.16
Kerosene	1.47	7.20	9.03	5.83	5.34	4.37	5.89	6.03	5.57	6.17
LPG	1.61	5.50	7.89	7.54	6.41	6.48	8.47	8.35	7.19	7.81
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.97	10.14	9.26	6.83	7.16	7.46	8.51	9.40	8.92	8.65
Residual Fuel	.70	3.28	4.43	2.33	2.83	2.31	2.15	2.61	2.33	2.28
Other [a]	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	**1.65**	**5.74**	**6.13**	**4.94**	**5.37**	**4.75**	**5.59**	**6.04**	**5.51**	**5.66**
Electric Utility Fuel [c]	.41	.83	1.22	1.27	1.28	1.25	1.27	1.19	1.16	1.15
Electricity Purchased by End Users	7.38	12.95	17.38	17.35	17.64	17.54	17.71	17.95	17.93	18.23
Total Energy	**2.13**	**7.77**	**8.63**	**7.22**	**7.33**	**7.25**	**8.04**	**8.60**	**R8.30**	**8.30**
	Expenditures in Millions of Dollars									
Coal	**2.3**	**30.9**	**47.3**	**39.8**	**20.5**	**43.0**	**42.7**	**39.8**	**44.0**	**40.6**
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	2.3	30.9	47.3	39.8	20.5	43.0	42.7	39.8	44.0	40.6
Natural Gas	**25.2**	**67.7**	**125.9**	**107.4**	**90.1**	**102.3**	**105.9**	**111.0**	**109.4**	**110.2**
Petroleum	**212.9**	**833.6**	**775.7**	**598.6**	**620.0**	**619.7**	**766.4**	**835.8**	**R725.0**	**765.7**
Asphalt and Road Oil	4.5	16.1	28.3	21.6	16.7	20.8	16.2	17.0	16.5	15.9
Aviation Gasoline	1.1	4.4	4.4	3.6	3.1	3.3	3.7	4.4	2.7	2.7
Distillate Fuel	24.8	182.6	203.4	179.1	176.5	162.3	185.4	210.0	206.2	213.7
Jet Fuel	4.7	46.0	34.6	12.9	16.0	20.6	26.3	36.8	R10.8	35.4
Kerosene	.1	.6	2.1	1.2	.6	.5	.5	.3	.2	.3
LPG	16.5	51.2	35.3	43.0	55.3	37.4	113.1	111.7	46.6	54.6
Lubricants	5.1	13.9	15.5	13.4	12.4	13.7	12.8	13.3	13.7	16.2
Motor Gasoline	154.6	516.3	451.2	323.0	338.5	359.8	407.6	441.3	427.3	424.8
Residual Fuel	1.4	2.5	1.0	.9	1.0	1.2	.9	1.0	1.0	2.1
Other [a]	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	**240.5**	**932.1**	**949.0**	**745.8**	**730.6**	**765.0**	**915.0**	**986.5**	**R878.4**	**916.5**
Electric Utility Fuel [c]	-4.7	-28.7	-36.2	-31.5	-13.7	-38.5	-36.0	-34.4	-36.4	-33.5
Electricity Purchased by End Users	70.6	224.7	335.0	335.9	343.8	373.0	383.1	388.0	409.0	404.0
Total Energy	**306.4**	**1,128.1**	**1,247.7**	**1,050.2**	**1,060.6**	**1,099.5**	**1,262.1**	**1,340.1**	**R1,251.0**	**1,287.0**

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, South Dakota 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.41**	**7.89**	**10.69**	**9.99**	**9.73**	**9.70**	**10.54**	**10.36**	**10.35**	**11.16**
Primary Energy	1.30	4.84	6.42	5.55	4.89	4.72	6.28	5.79	5.21	5.78
Coal	1.75	3.48	2.65	3.05	2.97	2.58	2.65	2.62	2.97	2.63
Natural Gas	1.04	3.14	5.69	5.24	4.81	4.81	4.77	5.06	4.85	5.07
Petroleum	1.60	6.89	7.66	5.96	4.97	4.61	7.95	6.48	5.70	6.97
Distillate Fuel	1.28	6.92	7.64	5.45	4.64	3.95	5.35	5.52	5.13	5.78
Kerosene	1.57	7.83	9.27	6.61	5.63	4.78	6.49	6.70	6.22	7.00
LPG	1.78	6.84	7.56	6.92	5.31	5.64	10.56	7.20	6.40	7.88
Electricity	7.76	14.52	19.13	19.44	19.93	19.62	19.95	20.35	20.25	20.82
Commercial Sector	**1.94**	**5.99**	**9.17**	**8.53**	**8.52**	**8.66**	**8.86**	**9.42**	**9.18**	**9.39**
Primary Energy	.76	3.69	5.09	4.53	4.46	4.17	4.39	4.79	4.26	4.42
Coal	.49	1.79	2.42	1.96	1.85	1.76	1.76	1.79	1.73	1.67
Natural Gas	.63	2.72	4.56	4.32	4.17	4.02	3.92	4.13	3.97	4.13
Petroleum	1.22	6.24	7.27	5.43	5.10	4.56	5.83	6.81	5.55	5.50
Distillate Fuel	1.06	6.45	6.56	3.85	3.65	2.80	4.02	4.16	3.64	4.37
Kerosene	–	–	7.54	4.35	4.37	3.35	5.00	5.22	4.53	5.42
LPG	1.13	4.36	8.32	8.25	7.76	7.73	7.13	9.36	8.34	7.73
Motor Gasoline	2.97	10.14	9.26	6.83	7.16	7.46	8.51	9.40	8.92	8.65
Residual Fuel	.66	3.08	4.44	2.33	2.84	2.35	2.15	2.61	2.33	2.28
Electricity	7.53	13.11	17.53	17.68	17.52	17.66	17.57	18.13	18.17	18.61
Industrial Sector	**1.42**	**6.02**	**6.51**	**5.19**	**5.42**	**4.93**	**5.79**	**6.29**	**5.53**	**5.76**
Primary Energy	1.34	5.53	5.80	4.19	4.24	3.60	4.60	5.13	4.10	4.32
Coal	.49	1.79	2.42	1.96	1.85	1.76	1.76	1.79	1.73	1.67
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.49	1.79	2.42	1.96	1.85	1.76	1.76	1.79	1.73	1.67
Natural Gas	.32	2.35	4.11	3.53	3.04	3.12	3.04	3.73	3.25	3.58
Petroleum	1.56	6.44	6.89	4.63	4.78	3.94	5.35	5.94	4.79	4.97
Asphalt and Road Oil	.76	3.82	5.06	3.99	3.73	3.58	3.14	3.24	3.24	2.71
Distillate Fuel	.73	5.65	6.85	3.95	3.97	3.04	4.54	4.74	4.12	4.92
Kerosene	.78	5.92	7.54	4.35	4.37	3.35	5.00	5.22	4.53	5.42
LPG	1.13	4.36	8.32	8.25	7.76	7.73	7.13	9.36	8.34	7.73
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.97	10.14	9.26	6.83	7.16	7.46	8.51	9.40	8.92	8.65
Residual Fuel	.70	3.34	4.44	2.33	2.84	2.35	2.15	2.61	2.33	2.28
Other	–	–	–	–	–	–	–	–	–	–
Electricity	4.72	9.70	12.34	12.59	13.41	13.51	13.82	13.62	13.58	13.69
Transportation Sector	**2.56**	**9.21**	**8.64**	**6.77**	**7.02**	**7.17**	**8.04**	**8.99**	**R8.76**	**8.33**
Primary Energy	2.56	9.21	8.64	6.77	7.02	7.17	8.04	8.99	R8.76	8.33
Coal	.49	–	–	–	–	–	–	–	–	–
Petroleum	2.56	9.21	8.64	6.77	7.02	7.17	8.04	8.99	R8.76	8.33
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.32	7.12	6.93	6.38	6.83	6.66	7.44	8.57	8.34	8.25
Jet Fuel	.75	6.47	6.29	4.57	4.39	4.36	4.76	6.21	5.36	5.16
LPG	1.13	4.36	8.32	8.25	7.76	7.73	7.13	9.36	8.34	7.73
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.97	10.14	9.26	6.83	7.16	7.46	8.51	9.40	8.92	8.65
Residual Fuel	.65	–	–	–	–	–	2.07	1.82	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**2.13**	**7.77**	**8.63**	**7.22**	**7.33**	**7.25**	**8.04**	**8.60**	**R8.30**	**8.30**
Primary Energy — Four Sectors	1.75	7.07	7.29	5.67	5.72	5.58	6.49	7.09	R6.58	6.64
Electricity	7.38	12.95	17.38	17.35	17.64	17.54	17.71	17.95	17.93	18.23
Electric Utility Sector [a]	**.41**	**.83**	**1.22**	**1.27**	**1.28**	**1.25**	**1.27**	**1.19**	**1.16**	**1.15**
Coal	.35	.76	1.18	1.24	1.23	1.21	1.24	1.15	1.13	1.13
Natural Gas	.33	1.97	3.73	3.49	2.43	2.28	2.58	2.60	1.76	2.83
Petroleum	.74	6.03	5.75	3.64	4.23	3.65	4.50	5.65	4.88	4.40
Heavy Oil [b]	.70	3.07	3.99	2.33	2.39	2.06	–	–	–	–
Light Oil [b]	.97	6.50	5.81	3.68	4.34	4.02	4.50	5.65	4.88	4.40
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.65**	**5.74**	**6.13**	**4.94**	**5.37**	**4.75**	**5.59**	**6.04**	**5.51**	**5.66**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, South Dakota 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**76.0**	**223.8**	**300.4**	**293.9**	**276.4**	**288.5**	**337.7**	**322.8**	**314.2**	**302.4**
Primary Energy	34.0	93.9	119.7	111.2	94.2	93.5	138.7	123.8	104.2	100.4
Coal	.4	.4	.3	.5	.1	.1	.1	.1	.1	*
Natural Gas	14.3	33.1	65.3	55.6	45.2	52.5	55.0	52.4	55.4	55.6
Petroleum	19.4	60.5	54.1	55.1	48.9	41.0	83.6	71.3	48.7	44.8
Distillate Fuel	5.7	30.7	33.1	33.0	23.1	21.1	28.1	25.9	24.0	15.9
Kerosene	.1	.4	1.8	.9	.5	.4	.3	.2	.2	.1
LPG	13.5	29.3	19.1	21.2	25.2	19.5	55.2	45.2	24.5	28.7
Electricity	42.0	129.9	180.7	182.7	182.3	195.0	199.0	199.0	210.0	202.0
Commercial Sector	**35.7**	**95.3**	**177.6**	**153.2**	**152.4**	**156.1**	**160.6**	**167.6**	**170.1**	**171.5**
Primary Energy	11.6	44.4	66.2	56.5	55.0	50.1	52.6	55.6	51.1	52.5
Coal	.2	.4	.5	.6	.1	.1	.1	.1	.1	*
Natural Gas	7.2	23.1	46.0	39.8	34.6	34.4	35.2	35.9	38.3	38.2
Petroleum	4.2	20.9	19.7	16.1	20.3	15.6	17.3	19.6	12.8	14.2
Distillate Fuel	1.9	13.7	10.6	6.1	8.8	5.6	5.2	5.0	4.1	6.3
Kerosene	–	–	*	*	*	*	*	*	*	*
LPG	1.5	3.3	3.7	4.5	6.5	4.7	6.6	10.4	5.6	5.0
Motor Gasoline	.8	3.5	4.8	5.4	4.9	4.9	5.3	3.8	2.5	2.5
Residual Fuel	.1	.4	.5	.1	.1	.3	.3	.4	.5	.5
Electricity	24.1	51.0	111.5	96.7	97.4	106.0	108.1	112.0	119.0	119.0
Industrial Sector	**57.5**	**227.6**	**210.4**	**195.9**	**200.8**	**196.2**	**245.4**	**259.7**	**216.3**	**227.4**
Primary Energy	53.0	183.9	167.6	139.4	136.7	124.2	169.4	182.7	136.3	144.4
Coal	*	4.4	11.7	8.2	7.4	6.1	7.8	6.9	8.7	7.7
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	*	4.4	11.7	8.2	7.4	6.1	7.8	6.9	8.7	7.7
Natural Gas	2.2	11.0	14.6	11.9	10.1	14.8	15.3	22.0	15.4	16.3
Petroleum	50.7	168.5	141.3	119.3	119.2	103.3	146.2	153.8	112.2	120.4
Asphalt and Road Oil	4.5	16.1	28.3	21.6	16.7	20.8	16.2	17.0	16.5	15.9
Distillate Fuel	9.9	54.0	66.6	58.6	55.4	47.3	54.1	56.5	56.1	62.5
Kerosene	*	.2	.2	.3	.1	.1	.2	.1	.1	.1
LPG	1.3	17.5	11.7	16.6	22.2	12.6	50.7	55.4	16.0	20.4
Lubricants	.4	.3	.3	.3	.3	.3	.3	.3	.3	.4
Motor Gasoline	34.5	78.5	33.8	21.3	23.7	21.3	24.2	24.0	22.7	19.5
Residual Fuel	.2	2.0	.4	.8	.8	.8	.6	.6	.5	1.6
Other	–	–	–	–	–	–	–	–	–	–
Electricity	4.5	43.8	42.9	56.5	64.1	72.0	76.0	77.0	80.0	83.0
Transportation Sector	**137.2**	**581.3**	**559.3**	**407.3**	**431.0**	**458.6**	**518.4**	**590.0**	R550.4	**585.8**
Primary Energy	137.2	581.3	559.3	407.3	431.0	458.6	518.4	590.0	R550.4	585.8
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	137.2	581.3	559.3	407.3	431.0	458.6	518.4	590.0	R550.4	585.8
Aviation Gasoline	1.1	4.4	4.4	3.6	3.1	3.3	3.7	4.4	2.7	2.7
Distillate Fuel	7.1	82.0	91.8	80.6	88.7	87.2	97.2	121.5	121.0	128.5
Jet Fuel	4.7	46.0	34.6	12.9	16.0	20.6	26.3	36.8	R10.8	35.4
LPG	.2	1.1	.7	.8	1.3	.5	.5	.8	.4	.5
Lubricants	4.7	13.6	15.2	13.1	12.1	13.4	12.5	13.0	13.4	15.8
Motor Gasoline	119.3	434.3	412.7	296.3	310.0	333.6	378.2	413.5	402.1	402.8
Residual Fuel	*	–	–	–	–	–	*	*	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**306.4**	**1,128.1**	**1,247.7**	**1,050.2**	**1,060.6**	**1,099.5**	**1,262.1**	**1,340.1**	R1,251.0	**1,287.0**
Primary Energy — Four Sectors	235.8	903.5	912.7	714.3	716.9	726.5	879.0	952.1	R842.0	883.0
Electricity	70.6	224.7	335.0	335.9	343.8	373.0	383.1	388.0	409.0	404.0
Electric Utility Sector [a]	**4.7**	**28.7**	**36.2**	**31.5**	**13.7**	**38.5**	**36.0**	**34.4**	**36.4**	**33.5**
Coal	1.8	25.8	34.8	30.5	12.9	36.7	34.7	32.8	35.1	32.8
Natural Gas	1.5	.5	.1	.1	.2	.5	.3	.6	.3	.1
Petroleum	1.5	2.4	1.3	.8	.6	1.3	.9	1.1	1.0	.5
Heavy Oil [b]	1.2	.2	*	*	*	.1	–	–	–	–
Light Oil [b]	.3	2.2	1.3	.8	.5	1.1	.9	1.1	1.0	.5
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**240.5**	**932.1**	**949.0**	**745.8**	**730.6**	**765.0**	**915.0**	**986.5**	R878.4	**916.5**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Tennessee 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.26	1.54	1.55	1.44	1.38	1.35	1.36	1.35	1.28	1.30
Coking Coal	.38	1.81	1.93	1.75	1.63	1.70	1.74	1.83	1.80	–
Steam Coal	.25	1.54	1.55	1.44	1.38	1.35	1.35	1.35	1.28	1.30
Natural Gas	.54	2.69	4.46	4.20	3.69	3.75	3.87	3.98	3.91	4.14
Petroleum	2.06	8.37	7.89	6.38	6.66	6.58	7.19	8.22	7.84	7.60
Asphalt and Road Oil	.67	3.56	4.76	4.89	3.24	3.05	2.86	2.94	3.30	2.03
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.11	6.80	6.44	5.85	6.23	6.00	6.63	7.89	7.34	7.08
Jet Fuel	.73	6.39	5.83	3.81	4.01	3.82	4.34	5.58	4.82	4.56
Kerosene	1.19	7.21	6.99	5.35	5.48	5.55	6.21	6.93	6.38	5.52
LPG	1.92	6.42	8.97	8.65	8.70	8.91	9.40	10.88	R9.70	8.47
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.84	9.89	8.85	7.01	7.44	7.43	8.25	9.40	9.00	8.92
Residual Fuel	.36	3.36	4.80	2.83	2.88	2.64	2.68	3.14	2.34	2.49
Other [a]	.81	6.24	6.79	4.06	4.74	3.91	4.69	5.64	4.92	4.46
Nuclear Fuel	–	.38	.78	–	–	.83	.89	.84	.85	.94
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.02	4.43	4.26	3.88	3.95	3.75	3.87	4.22	3.98	4.01
Electric Utility Fuel [c]	.23	1.57	1.41	1.43	1.38	1.30	1.23	1.24	1.15	1.20
Electricity Purchased by End Users	2.85	10.67	14.65	15.59	15.98	16.19	15.91	15.59	15.29	15.28
Total Energy	1.71	7.30	8.16	7.52	7.67	7.72	8.00	8.55	8.30	8.16
	Expenditures in Millions of Dollars									
Coal	103.1	888.2	929.3	873.1	822.3	822.4	765.2	812.8	725.0	765.0
Coking Coal	2.5	5.0	8.0	5.1	3.3	3.6	3.6	3.3	.9	–
Steam Coal	100.7	883.2	921.3	867.9	819.0	818.8	761.6	809.6	724.2	765.0
Natural Gas	123.6	570.9	813.4	742.6	689.5	747.2	797.6	804.8	829.9	938.5
Petroleum	831.6	4,365.1	4,235.0	3,608.1	3,875.3	3,702.6	R4,137.2	R4,657.7	R4,270.7	4,421.8
Asphalt and Road Oil	16.2	79.8	139.3	134.9	98.3	81.8	108.1	113.0	117.3	71.2
Aviation Gasoline	1.3	13.2	7.8	8.5	7.1	6.8	7.6	8.2	6.4	14.8
Distillate Fuel	70.8	759.3	835.9	771.9	818.9	823.4	901.5	1,097.0	966.9	991.3
Jet Fuel	13.6	149.8	160.1	127.8	129.0	91.3	106.8	131.7	R92.9	115.3
Kerosene	27.9	62.7	43.9	14.5	20.9	31.5	28.4	17.2	12.4	13.8
LPG	23.0	65.3	73.1	83.7	82.5	100.4	R118.5	113.2	R111.6	145.5
Lubricants	25.4	108.0	120.6	104.4	96.2	106.7	99.6	103.3	106.3	125.6
Motor Gasoline	625.1	2,853.4	2,698.2	2,221.8	2,460.3	2,316.9	2,600.6	2,846.3	R2,655.2	2,746.7
Residual Fuel	1.1	28.2	9.6	7.1	4.4	5.5	5.7	4.6	4.0	4.5
Other [a]	27.2	245.4	146.6	133.4	157.7	138.4	160.4	223.3	197.8	193.1
Nuclear Fuel	–	2.1	81.1	–	–	34.9	149.2	125.9	151.1	156.4
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1,058.3	5,826.4	6,058.7	5,223.7	5,387.1	5,307.1	R5,849.3	R6,401.3	R5,976.7	6,281.7
Electric Utility Fuel [c]	-80.9	-804.8	-846.9	-716.0	-682.9	-718.6	-773.6	-803.6	-745.1	-791.8
Electricity Purchased by End Users	504.6	2,656.5	3,409.7	3,559.5	3,754.3	3,975.4	4,030.7	4,054.9	4,041.4	4,039.6
Total Energy	1,482.0	7,678.1	8,621.5	8,067.2	8,458.4	8,563.9	R9,106.4	R9,652.6	R9,273.0	9,529.4

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Tennessee 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.15**	**7.79**	**10.97**	**11.63**	**11.96**	**12.11**	**12.11**	**12.53**	**12.36**	**12.35**
Primary Energy	1.15	3.73	5.44	5.24	4.99	5.00	5.33	5.67	5.63	5.73
Coal	.74	1.97	1.85	1.67	1.79	1.52	1.61	1.77	1.75	1.61
Natural Gas	.89	2.85	4.96	4.81	4.53	4.51	4.68	4.94	5.02	5.33
Petroleum	1.82	7.95	7.95	7.76	7.55	7.67	8.63	10.19	9.28	8.15
Distillate Fuel	1.24	6.89	6.59	5.30	5.25	5.53	5.90	6.59	6.12	5.21
Kerosene	1.62	9.09	7.09	5.71	5.65	5.95	6.35	7.09	6.58	5.61
LPG	2.16	7.65	9.23	8.96	9.09	9.06	10.25	11.90	10.57	9.41
Electricity	3.34	10.43	14.28	15.26	16.03	16.74	16.65	16.68	16.54	16.71
Commercial Sector	**1.87**	**7.97**	**8.95**	**9.40**	**9.31**	**9.30**	**9.94**	**10.62**	**10.51**	**9.11**
Primary Energy	.75	3.57	5.04	4.49	4.29	4.30	4.45	4.76	4.69	4.84
Coal	.35	1.39	1.60	1.54	1.43	1.40	1.40	1.40	1.42	1.41
Natural Gas	.70	2.95	4.75	4.53	4.20	4.25	4.35	4.64	4.61	4.91
Petroleum	1.46	7.05	6.04	4.63	5.09	5.22	6.17	6.98	6.45	5.36
Distillate Fuel	1.06	6.49	5.66	3.80	4.12	3.93	4.43	4.96	4.34	3.95
Kerosene	.78	6.16	6.78	4.55	5.16	4.90	5.75	6.49	5.64	5.10
LPG	1.27	4.96	8.66	8.30	8.25	8.71	8.23	9.36	8.34	7.73
Motor Gasoline	2.84	9.89	8.85	7.01	7.44	7.43	8.25	9.40	9.00	8.92
Residual Fuel	.42	3.44	4.80	2.83	2.88	2.62	2.69	3.16	2.48	2.64
Electricity	4.97	13.29	17.05	17.96	17.67	18.03	18.03	18.02	17.99	19.35
Industrial Sector	**.93**	**5.10**	**6.81**	**6.54**	**6.35**	**6.36**	**6.20**	**6.18**	**5.96**	**6.21**
Primary Energy	.54	3.36	3.87	3.33	3.04	2.95	3.06	3.32	3.18	3.17
Coal	.35	1.41	1.61	1.55	1.43	1.40	1.41	1.41	1.42	1.41
Coking Coal	.38	1.81	1.93	1.75	1.63	1.70	1.74	1.83	1.80	–
Steam Coal	.35	1.39	1.60	1.54	1.43	1.40	1.40	1.40	1.42	1.41
Natural Gas	.38	2.54	4.11	3.77	3.05	3.16	3.27	3.29	3.12	3.34
Petroleum	.86	5.51	6.37	4.87	4.68	4.38	4.53	5.09	4.86	4.41
Asphalt and Road Oil	.67	3.56	4.76	4.89	3.24	3.05	2.86	2.94	3.30	2.03
Distillate Fuel	.72	5.50	5.91	3.96	4.49	4.26	5.01	5.65	4.91	4.44
Kerosene	.78	6.16	6.78	4.55	5.16	4.90	5.75	6.49	5.64	5.10
LPG	1.27	4.96	8.66	8.30	8.25	8.71	8.23	9.36	8.34	7.73
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.84	9.89	8.85	7.01	7.44	7.43	8.25	9.40	9.00	8.92
Residual Fuel	.36	3.36	4.80	2.83	2.88	2.62	2.69	3.16	2.48	2.64
Other	.81	6.24	6.79	4.06	4.74	3.91	4.69	5.64	4.92	4.46
Electricity	2.05	9.71	14.22	15.12	15.39	15.15	14.51	13.74	13.21	13.49
Transportation Sector	**2.49**	**9.20**	**8.29**	**6.73**	**7.10**	**7.07**	**7.76**	**8.96**	**8.56**	**8.47**
Primary Energy	2.49	9.20	8.29	6.73	7.10	7.07	7.76	8.96	8.56	8.47
Coal	.35	–	–	–	–	–	–	–	–	–
Petroleum	2.49	9.20	8.29	6.73	7.10	7.07	7.76	8.96	8.56	8.47
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.28	7.25	6.73	6.47	6.75	6.49	6.96	8.36	7.84	7.82
Jet Fuel	.73	6.39	5.83	3.81	4.01	3.82	4.34	5.58	4.82	4.56
LPG	1.27	4.96	8.66	8.30	8.25	8.71	8.23	9.36	8.34	7.73
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.84	9.89	8.85	7.01	7.44	7.43	8.25	9.40	9.00	8.92
Residual Fuel	.42	3.45	–	–	1.92	3.01	2.37	2.22	1.71	1.66
Electricity	4.97	13.29	17.05	17.96	19.96	20.34	19.95	20.12	20.09	21.62
Total Energy	**1.71**	**7.30**	**8.16**	**7.52**	**7.67**	**7.72**	**8.00**	**8.55**	**8.30**	**8.16**
Primary Energy — Four Sectors	1.42	6.25	6.32	5.34	5.42	5.31	5.73	6.44	6.13	6.08
Electricity	2.85	10.67	14.65	15.59	15.98	16.19	15.91	15.59	15.29	15.28
Electric Utility Sector [a]	**.23**	**1.57**	**1.41**	**1.43**	**1.38**	**1.30**	**1.23**	**1.24**	**1.15**	**1.20**
Coal	.23	1.56	1.54	1.42	1.37	1.33	1.34	1.34	1.25	1.27
Natural Gas	.25	2.33	–	–	–	2.39	2.74	2.72	2.44	2.42
Petroleum	–	6.39	5.85	3.37	3.93	3.51	3.95	5.61	4.98	4.80
Heavy Oil [b]	–	–	–	–	–	–	–	–	–	–
Light Oil [b]	–	6.39	5.85	3.37	3.93	3.51	3.95	5.61	4.98	4.80
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	.38	.78	–	–	.83	.89	.84	.85	.94
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.02**	**4.43**	**4.26**	**3.88**	**3.95**	**3.75**	**3.87**	**4.22**	**3.98**	**4.01**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Tennessee 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**288.7**	**1,149.1**	**1,529.1**	**1,610.8**	**1,774.6**	**1,907.5**	**1,957.0**	**1,973.3**	**R2,023.4**	**2,062.2**
Primary Energy	84.5	216.5	284.5	263.2	273.1	310.5	346.0	336.3	352.4	380.2
Coal	3.3	3.9	2.7	1.1	1.5	2.5	3.1	3.4	2.8	2.2
Natural Gas	42.5	129.8	202.0	199.9	203.5	221.7	237.6	236.8	256.2	287.2
Petroleum	38.7	82.8	79.8	62.2	68.1	86.4	105.3	96.1	93.5	90.8
Distillate Fuel	1.2	12.4	9.9	5.1	7.0	7.3	8.4	9.1	9.6	7.9
Kerosene	18.6	28.3	29.7	10.7	14.4	21.1	22.2	13.0	10.0	11.5
LPG	18.9	42.2	40.2	46.5	46.7	58.0	74.7	74.0	74.0	71.5
Electricity	204.2	932.6	1,244.6	1,347.6	1,501.5	1,597.0	1,611.0	1,637.0	1,671.0	1,682.0
Commercial Sector	**153.4**	**853.7**	**924.1**	**855.1**	**863.1**	**913.2**	**1,027.2**	**1,072.5**	**1,074.1**	**780.3**
Primary Energy	45.6	209.2	350.9	259.1	248.2	268.3	274.2	268.5	269.2	292.4
Coal	2.9	5.1	4.3	1.9	2.2	4.2	4.8	4.8	3.9	3.5
Natural Gas	30.4	132.1	213.2	199.0	191.1	200.8	213.3	209.1	218.7	235.5
Petroleum	12.2	72.0	133.4	58.2	54.9	63.2	56.0	54.6	46.5	53.4
Distillate Fuel	2.6	38.4	101.7	31.2	27.9	25.2	17.1	18.4	15.2	24.0
Kerosene	1.8	3.6	6.4	2.3	3.7	6.7	5.0	2.5	1.0	2.0
LPG	2.0	4.8	6.7	7.6	7.5	9.8	10.6	10.3	10.3	10.4
Motor Gasoline	5.9	24.2	15.6	14.8	14.6	20.2	22.3	22.7	19.8	16.2
Residual Fuel	*	1.0	2.9	2.3	1.2	1.3	.9	.7	.3	1.0
Electricity	107.8	644.5	573.3	595.9	614.9	644.9	753.0	804.0	805.0	487.9
Industrial Sector	**340.0**	**2,067.7**	**2,680.1**	**2,569.9**	**2,518.4**	**2,607.8**	**R2,597.6**	**R2,645.5**	**R2,547.5**	**2,922.4**
Primary Energy	147.4	988.3	1,088.3	954.0	880.5	874.3	R930.9	R1,031.6	R982.1	1,052.8
Coal	20.3	94.4	164.6	158.6	140.8	140.0	141.2	136.1	132.9	130.9
Coking Coal	2.5	5.0	8.0	5.1	3.3	3.6	3.6	3.3	.9	–
Steam Coal	17.8	89.4	156.6	153.5	137.5	136.4	137.6	132.8	132.0	130.9
Natural Gas	46.3	306.4	398.1	343.7	294.8	324.1	346.6	357.4	354.4	415.1
Petroleum	80.8	587.5	525.6	451.6	445.0	410.2	R443.1	R538.2	R494.8	506.7
Asphalt and Road Oil	16.2	79.8	139.3	134.9	98.3	81.8	108.1	113.0	117.3	71.2
Distillate Fuel	13.3	136.3	119.5	84.5	90.8	83.9	68.7	96.2	77.2	94.6
Kerosene	7.5	30.8	7.8	1.5	2.8	3.6	1.2	1.7	1.4	.4
LPG	1.7	17.1	21.0	23.6	24.7	27.9	R28.5	24.6	R23.3	60.3
Lubricants	10.3	49.2	54.9	47.5	43.8	48.6	45.3	47.0	48.4	57.2
Motor Gasoline	3.5	1.9	29.9	21.3	23.8	21.9	26.2	28.6	26.3	26.9
Residual Fuel	1.1	27.0	6.6	4.9	3.2	4.0	4.7	3.9	3.2	3.0
Other	27.2	245.4	146.6	133.4	157.7	138.4	160.4	223.3	197.8	193.1
Electricity	192.6	1,079.4	1,591.8	1,616.0	1,637.9	1,733.5	1,666.7	1,613.9	1,565.4	1,869.6
Transportation Sector	**699.9**	**3,607.6**	**3,488.2**	**3,031.4**	**3,302.3**	**3,135.4**	**3,524.7**	**3,961.3**	**R3,627.9**	**3,764.5**
Primary Energy	699.9	3,607.6	3,488.2	3,031.4	3,302.3	3,135.4	3,524.7	3,961.3	R3,627.9	3,764.5
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	699.8	3,607.6	3,488.2	3,031.4	3,302.3	3,135.4	3,524.7	3,961.3	R3,627.9	3,764.5
Aviation Gasoline	1.3	13.2	7.8	8.5	7.1	6.8	7.6	8.2	6.4	14.8
Distillate Fuel	53.6	557.1	596.7	646.5	688.2	699.5	799.1	965.8	857.0	858.6
Jet Fuel	13.6	149.8	160.1	127.8	129.0	91.3	106.8	131.7	R92.9	115.3
LPG	.5	1.1	5.2	6.1	3.6	4.7	4.7	4.3	4.1	3.4
Lubricants	15.1	58.9	65.7	56.9	52.4	58.1	54.2	56.3	57.9	68.4
Motor Gasoline	615.7	2,827.3	2,652.7	2,185.7	2,422.0	2,274.8	2,552.1	2,794.9	R2,609.1	2,703.6
Residual Fuel	*	.1	–	–	*	.2	.2	.1	.5	.5
Electricity	*	*	*	*	*	*	*	*	*	*
Total Energy	**1,482.0**	**7,678.1**	**8,621.5**	**8,067.2**	**8,458.4**	**8,563.9**	**R9,106.4**	**R9,652.6**	**R9,273.0**	**9,529.4**
Primary Energy — Four Sectors	977.4	5,021.6	5,211.8	4,507.8	4,704.2	4,588.5	R5,075.7	R5,597.7	R5,231.6	5,489.8
Electricity	504.6	2,656.5	3,409.7	3,559.5	3,754.3	3,975.4	4,030.7	4,054.9	4,041.4	4,039.6
Electric Utility Sector [a]	**80.9**	**804.8**	**846.9**	**716.0**	**682.9**	**718.6**	**773.6**	**803.6**	**745.1**	**791.8**
Coal	76.5	784.9	757.7	711.4	677.8	675.7	616.1	668.5	585.5	628.5
Natural Gas	4.4	2.6	–	–	–	.6	.1	1.6	.5	.7
Petroleum	–	15.1	8.1	4.5	5.1	7.5	8.2	7.6	7.9	6.3
Heavy Oil [b]	–	–	–	–	–	–	–	–	–	–
Light Oil [b]	–	15.1	8.1	4.5	5.1	7.5	8.2	7.6	7.9	6.3
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	2.1	81.1	–	–	34.9	149.2	125.9	151.1	156.4
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1,058.3**	**5,826.4**	**6,058.7**	**5,223.7**	**5,387.1**	**5,307.1**	**R5,849.3**	**R6,401.3**	**R5,976.7**	**6,281.7**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Texas 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.39	1.22	1.60	1.55	1.54	1.47	1.44	1.44	1.49	1.48
Coking Coal	.38	1.81	1.93	1.75	–	–	–	–	–	–
Steam Coal	.86	1.19	1.59	1.55	1.54	1.47	1.44	1.44	1.49	1.48
Natural Gas	.29	2.17	3.38	2.62	2.38	2.44	2.51	2.47	2.30	2.47
Petroleum	1.55	6.63	6.53	4.84	5.12	4.88	R5.06	R6.22	R5.97	5.79
Asphalt and Road Oil	.74	3.79	4.20	4.58	3.35	3.21	2.84	2.94	3.33	2.33
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	.94	6.73	6.43	4.74	5.44	5.07	6.04	6.74	6.58	6.92
Jet Fuel	.72	6.34	5.67	3.56	3.85	3.57	4.16	5.41	4.64	4.32
Kerosene	.76	6.91	7.57	3.59	4.39	3.85	5.22	4.89	4.56	5.23
LPG	1.07	5.29	4.42	4.26	3.70	3.57	2.69	4.13	4.21	3.97
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.66	9.26	8.79	6.47	7.19	7.32	7.92	9.16	9.09	9.05
Residual Fuel	.42	2.49	4.00	1.45	2.59	1.84	2.43	2.93	2.97	1.91
Other [a]	.79	6.59	7.00	4.00	4.83	4.02	4.86	5.95	5.13	4.91
Nuclear Fuel	–	–	–	–	–	.37	.42	.56	.49	.52
Biomass Fuels at Utilities	.65	1.74	.79	.32	.95	–	.35	.35	.35	.35
Primary Energy — Five Sectors [b]	.85	4.22	4.61	3.54	3.58	3.45	3.50	4.02	3.83	3.83
Electric Utility Fuel [c]	.25	1.65	2.44	1.92	1.80	1.74	1.73	1.67	1.61	1.67
Electricity Purchased by End Users	4.52	12.69	18.58	16.91	16.32	16.58	16.79	17.09	17.91	18.21
Total Energy	1.28	6.00	7.04	5.72	5.70	5.53	R5.64	6.43	R6.30	6.28
	Expenditures in Millions of Dollars									
Coal	11.9	892.5	1,832.9	1,798.1	1,850.9	1,852.4	1,910.4	1,918.8	1,981.4	1,961.2
Coking Coal	11.6	47.9	20.9	3.6	–	–	–	–	–	–
Steam Coal	.2	844.6	1,812.0	1,794.5	1,850.9	1,852.4	1,910.4	1,918.8	1,981.4	1,961.2
Natural Gas	804.9	6,838.0	9,815.8	7,021.2	6,513.9	7,247.2	7,783.9	7,311.4	R6,953.6	7,289.1
Petroleum	3,376.3	23,998.1	24,077.8	17,866.1	19,126.5	19,122.5	R19,909.0	R24,469.0	R23,745.7	23,755.9
Asphalt and Road Oil	58.0	274.5	329.2	414.4	279.8	307.9	182.7	273.0	206.8	182.3
Aviation Gasoline	22.0	57.5	66.4	65.4	43.8	37.9	34.3	39.4	28.8	33.8
Distillate Fuel	176.6	2,823.7	3,522.2	2,382.8	2,796.5	2,550.8	3,090.2	3,230.1	3,244.5	3,637.3
Jet Fuel	97.4	1,098.5	2,383.1	1,614.0	1,839.5	1,911.9	2,189.7	2,931.6	R2,377.9	2,198.6
Kerosene	32.5	601.2	33.3	13.8	14.6	5.1	20.8	5.5	2.4	5.1
LPG	611.9	3,670.4	4,077.4	3,859.8	3,675.5	3,807.1	R3,023.5	R4,376.3	R4,873.8	4,783.0
Lubricants	129.6	465.0	519.0	449.3	413.9	459.1	428.5	444.5	457.5	540.8
Motor Gasoline	1,976.0	8,805.7	9,479.5	7,119.0	7,735.2	8,038.9	8,458.3	9,831.0	R9,485.4	9,543.5
Residual Fuel	36.0	969.9	710.5	251.2	351.5	278.0	437.5	505.9	524.9	365.2
Other [a]	236.4	5,231.6	2,957.1	1,696.4	1,976.1	1,725.8	2,043.4	2,831.6	2,543.5	2,466.3
Nuclear Fuel	–	–	–	–	–	15.1	44.6	94.9	103.3	135.9
Biomass Fuels at Utilities	.7	1.4	2.5	1.0	2.3	–	.7	1.0	1.0	1.0
Primary Energy — Five Sectors [b]	4,193.8	31,730.0	35,729.0	26,686.5	27,493.6	28,237.2	R29,648.6	R33,795.0	R32,785.0	33,143.2
Electric Utility Fuel [c]	-267.6	-3,576.1	-5,652.8	-4,302.1	-4,036.5	-4,073.9	-4,245.4	-4,165.2	-4,063.1	-4,210.8
Electricity Purchased by End Users	1,421.0	7,434.5	13,119.7	11,920.6	11,645.3	12,325.7	12,782.0	13,431.1	14,270.8	14,457.3
Total Energy	5,347.2	35,588.4	43,195.9	34,304.9	35,102.4	36,489.0	R38,185.2	R43,060.9	R42,992.7	43,389.7

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Texas 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.48**	**8.55**	**13.88**	**13.10**	**12.61**	**13.10**	**13.22**	**14.13**	**14.64**	**14.90**
Primary Energy	1.06	3.69	5.87	5.41	5.27	5.41	5.77	5.99	5.86	5.75
Coal	.90	2.54	2.83	2.78	2.40	2.12	2.43	2.41	2.36	2.43
Natural Gas	.90	3.31	5.55	5.09	5.00	5.16	5.34	5.55	5.49	5.51
Petroleum	1.70	7.43	8.52	8.03	7.52	7.82	9.97	10.36	11.61	10.03
Distillate Fuel	.98	6.51	6.99	4.57	4.69	4.41	5.42	4.32	3.98	5.46
Kerosene	1.29	8.35	8.40	5.50	5.63	5.30	6.51	5.20	4.78	6.57
LPG	1.71	7.39	8.53	8.08	7.60	7.88	10.02	10.39	11.71	10.07
Electricity	6.31	14.92	21.99	20.18	19.74	20.16	20.45	21.11	22.17	22.69
Commercial Sector	**1.91**	**7.77**	**12.20**	**11.25**	**10.52**	**10.71**	**10.98**	**11.58**	**R12.03**	**12.23**
Primary Energy	.56	3.89	5.23	3.98	4.13	4.03	4.14	4.25	4.03	4.12
Coal	.86	.89	1.60	1.50	1.27	1.31	1.27	1.14	1.23	1.27
Natural Gas	.44	2.90	4.70	4.00	4.09	4.03	3.95	3.97	3.86	3.90
Petroleum	1.01	6.24	6.38	3.93	4.26	4.06	4.97	5.64	5.13	5.62
Distillate Fuel	.90	6.23	6.15	3.13	3.70	3.07	4.04	3.84	3.57	4.42
Kerosene	.76	6.89	7.43	3.45	4.25	3.37	5.12	4.85	4.43	5.03
LPG	1.00	5.22	4.30	4.15	3.59	3.47	2.53	4.00	4.11	3.91
Motor Gasoline	2.66	9.26	8.79	6.47	7.19	7.32	7.92	9.16	9.09	9.05
Residual Fuel	.48	2.53	3.87	2.00	2.67	1.90	2.33	2.60	1.95	2.07
Electricity	5.19	14.12	20.06	18.28	17.45	17.76	17.92	18.12	19.11	19.56
Industrial Sector	**.63**	**4.74**	**5.08**	**4.09**	**3.78**	**3.59**	**R3.45**	**4.04**	**3.88**	**3.91**
Primary Energy	.53	4.34	4.31	3.36	3.11	2.95	2.80	3.43	R3.26	3.27
Coal	.38	1.28	1.64	1.51	1.27	1.31	1.27	1.14	1.23	1.27
Coking Coal	.38	1.81	1.93	1.75	–	–	–	–	–	–
Steam Coal	.86	.89	1.60	1.50	1.27	1.31	1.27	1.14	1.23	1.27
Natural Gas	.20	2.24	3.07	2.36	1.98	2.11	2.15	2.09	1.86	2.02
Petroleum	.96	5.92	5.42	4.17	4.05	3.71	3.45	R4.64	R4.51	4.33
Asphalt and Road Oil	.74	3.79	4.20	4.58	3.35	3.21	2.84	2.94	3.33	2.33
Distillate Fuel	.66	6.09	6.39	2.97	3.65	2.90	4.40	4.17	3.81	4.32
Kerosene	.76	6.89	7.43	3.45	4.25	3.37	5.12	4.85	4.43	5.03
LPG	1.00	5.22	4.30	4.15	3.59	3.47	2.53	4.00	4.11	3.91
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.66	9.26	8.79	6.47	7.19	7.32	7.92	9.16	9.09	9.05
Residual Fuel	.37	3.69	3.87	2.00	2.67	1.90	2.33	2.60	1.95	2.07
Other	.79	6.59	7.00	4.00	4.83	4.02	4.86	5.95	5.13	4.91
Electricity	2.51	9.99	14.15	12.51	11.82	11.87	11.96	11.82	12.16	12.31
Transportation Sector	**2.07**	**7.42**	**7.44**	**5.36**	**6.03**	**5.89**	**6.40**	**7.56**	**R7.29**	**7.13**
Primary Energy	2.07	7.42	7.44	5.36	6.03	5.89	6.40	7.56	R7.29	7.13
Coal	.86	–	–	–	–	–	–	–	–	–
Petroleum	2.07	7.42	7.44	5.36	6.03	5.89	6.40	7.56	R7.29	7.13
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.05	7.09	6.50	5.84	6.60	6.44	6.97	8.20	7.84	7.99
Jet Fuel	.72	6.34	5.67	3.56	3.85	3.57	4.16	5.41	4.64	4.32
LPG	1.00	5.22	4.30	4.15	3.59	3.47	2.53	4.00	4.11	3.91
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.66	9.26	8.79	6.47	7.19	7.32	7.92	9.16	9.09	9.05
Residual Fuel	.42	2.15	4.03	1.42	2.57	1.83	2.41	2.94	3.00	1.90
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.28**	**6.00**	**7.04**	**5.72**	**5.70**	**5.53**	**R5.64**	**6.43**	**R6.30**	**6.28**
Primary Energy — Four Sectors	1.02	5.27	5.54	4.23	4.31	4.13	4.22	5.01	4.77	4.73
Electricity	4.52	12.69	18.58	16.91	16.32	16.58	16.79	17.09	17.91	18.21
Electric Utility Sector [a]	**.25**	**1.65**	**2.44**	**1.92**	**1.80**	**1.74**	**1.73**	**1.67**	**1.61**	**1.67**
Coal	–	1.21	1.59	1.55	1.55	1.47	1.45	1.45	1.50	1.49
Natural Gas	.24	1.84	3.15	2.27	2.06	2.09	2.15	2.10	1.97	2.19
Petroleum	.51	3.35	4.90	2.35	3.26	2.69	3.51	5.14	4.56	3.35
Heavy Oil [b]	.47	2.59	4.36	1.55	2.76	2.08	2.74	3.50	3.47	2.16
Light Oil [b]	.63	3.83	5.57	3.03	3.87	3.43	4.20	5.78	4.91	4.11
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	.37	.42	.56	.49	.52
Biomass Fuels	.65	1.74	.79	.32	.95	–	.35	.35	.35	.35
Primary Energy — Five Sectors [c]	**.85**	**4.22**	**4.61**	**3.54**	**3.58**	**3.45**	**3.50**	**4.02**	**3.83**	**3.83**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Texas 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1,015.6**	**3,852.3**	**6,839.0**	**6,214.2**	**6,307.3**	**6,623.5**	**7,076.7**	**7,396.7**	**7,802.0**	**7,710.8**
Primary Energy	314.3	942.0	1,457.1	1,229.5	1,298.3	1,309.5	1,520.7	1,449.7	1,441.0	1,367.8
Coal	*	*	.2	.3	.6	.8	.3	.2	.2	.2
Natural Gas	213.8	765.9	1,226.8	1,032.8	1,097.7	1,127.5	1,277.0	1,217.6	1,268.8	1,240.9
Petroleum	100.5	176.1	230.2	196.4	200.1	181.2	243.4	231.9	172.0	126.8
Distillate Fuel	.8	.3	1.6	.6	2.2	.8	.4	.1	.1	.1
Kerosene	.2	9.4	5.4	1.4	1.9	1.8	1.8	.8	.9	.8
LPG	99.5	166.4	223.3	194.4	195.9	178.6	241.2	231.1	171.0	125.9
Electricity	701.2	2,910.3	5,381.8	4,984.7	5,009.0	5,314.0	5,556.0	5,947.0	6,361.0	6,343.0
Commercial Sector	**511.7**	**3,079.0**	**5,327.5**	**4,634.1**	**4,677.1**	**4,920.7**	**5,089.5**	**5,291.4**	**R5,582.4**	**5,724.9**
Primary Energy	106.4	956.5	1,211.5	807.2	957.4	950.8	966.5	914.3	R878.4	915.0
Coal	*	*	.2	.3	.6	.9	.2	.2	.2	.2
Natural Gas	66.3	504.3	741.3	613.0	666.7	734.8	750.8	713.5	R725.7	755.3
Petroleum	40.1	452.2	470.0	193.8	290.1	215.1	215.4	200.6	152.4	159.4
Distillate Fuel	4.4	103.1	343.3	98.7	176.2	99.9	91.6	73.3	61.4	79.9
Kerosene	15.6	126.9	10.6	3.5	2.0	.8	11.8	.7	.3	1.9
LPG	10.3	20.7	19.9	17.6	16.3	13.9	10.8	15.7	10.6	8.6
Motor Gasoline	9.7	160.5	90.2	70.9	86.5	94.0	97.0	109.8	77.5	68.8
Residual Fuel	.2	40.9	6.1	3.1	9.0	6.5	4.4	1.2	2.7	.2
Electricity	405.2	2,122.5	4,116.0	3,827.0	3,719.8	3,970.0	4,123.0	4,377.0	4,704.0	4,810.0
Industrial Sector	**1,514.4**	**16,088.6**	**16,529.5**	**12,682.6**	**12,226.7**	**12,815.1**	**R12,771.9**	**R14,732.7**	**R14,671.7**	**14,926.7**
Primary Energy	1,199.9	13,687.0	12,907.7	9,573.8	9,310.2	9,773.4	R9,668.9	R11,625.6	R11,466.0	11,622.4
Coal	11.8	80.9	138.5	108.7	78.4	68.3	79.1	69.9	77.8	76.9
Coking Coal	11.6	47.9	20.9	3.6	–	–	–	–	–	–
Steam Coal	.2	32.9	117.6	105.1	78.4	68.3	79.1	69.9	77.8	76.9
Natural Gas	258.3	2,840.6	3,940.8	2,775.0	2,507.9	3,131.1	3,476.9	3,188.7	R2,915.7	3,112.5
Petroleum	929.8	10,765.5	8,828.4	6,690.0	6,723.8	6,574.0	R6,113.0	R8,367.1	R8,472.5	8,432.9
Asphalt and Road Oil	58.0	274.5	329.2	414.4	279.8	307.9	182.7	273.0	206.8	182.3
Distillate Fuel	33.9	701.9	1,016.2	474.3	558.1	466.0	644.2	627.6	512.4	579.3
Kerosene	16.7	464.9	17.4	8.9	10.7	2.6	7.2	4.1	1.2	2.3
LPG	481.0	3,470.9	3,824.9	3,636.3	3,457.3	3,608.6	R2,767.4	R4,122.5	R4,687.0	4,644.1
Lubricants	79.6	298.7	333.4	288.6	265.9	295.0	275.3	285.6	293.9	347.4
Motor Gasoline	19.7	22.9	217.1	154.3	159.1	158.8	187.7	207.5	220.4	206.3
Residual Fuel	4.5	300.1	133.2	16.7	16.8	9.3	5.0	15.2	7.2	4.7
Other	236.4	5,231.6	2,957.1	1,696.4	1,976.1	1,725.8	2,043.4	2,831.6	2,543.5	2,466.3
Electricity	314.5	2,401.7	3,621.9	3,108.9	2,916.5	3,041.7	3,103.0	3,107.1	3,205.7	3,304.4
Transportation Sector	**2,305.6**	**12,568.4**	**14,499.9**	**10,773.9**	**11,891.3**	**12,129.6**	**13,247.1**	**15,640.2**	**R14,936.5**	**15,027.2**
Primary Energy	2,305.6	12,568.4	14,499.9	10,773.9	11,891.3	12,129.6	13,247.1	15,640.2	R14,936.5	15,027.2
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	2,305.5	12,568.4	14,499.9	10,773.9	11,891.3	12,129.6	13,247.1	15,640.2	R14,936.5	15,027.2
Aviation Gasoline	22.0	57.5	66.4	65.4	43.8	37.9	34.3	39.4	28.8	33.8
Distillate Fuel	137.5	1,993.2	2,136.1	1,800.9	2,048.6	1,971.0	2,297.4	2,505.6	2,660.7	2,970.9
Jet Fuel	97.4	1,098.5	2,383.1	1,614.0	1,839.5	1,911.9	2,189.7	2,931.6	R2,377.9	2,198.6
LPG	21.1	12.4	9.4	11.6	5.9	5.9	4.2	7.0	5.1	4.4
Lubricants	50.0	166.3	185.6	160.6	148.0	164.2	153.2	158.9	163.6	193.4
Motor Gasoline	1,946.6	8,622.3	9,172.2	6,893.7	7,489.6	7,786.0	8,173.6	9,513.7	R9,187.6	9,268.4
Residual Fuel	30.9	618.1	547.0	227.7	315.8	252.7	394.7	484.0	512.8	357.8
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**5,347.2**	**35,588.4**	**43,195.9**	**34,304.9**	**35,102.4**	**36,489.0**	**R38,185.2**	**R43,060.9**	**R42,992.7**	**43,389.7**
Primary Energy — Four Sectors	3,926.2	28,153.9	30,076.2	22,384.4	23,457.1	24,163.3	R25,403.2	R29,629.9	R28,721.9	28,932.4
Electricity	1,421.0	7,434.5	13,119.7	11,920.6	11,645.3	12,325.7	12,782.0	13,431.1	14,270.8	14,457.3
Electric Utility Sector [a]	**267.6**	**3,576.1**	**5,652.8**	**4,302.1**	**4,036.5**	**4,073.9**	**4,245.4**	**4,165.2**	**4,063.1**	**4,210.8**
Coal	–	811.7	1,694.0	1,688.7	1,771.4	1,782.4	1,830.8	1,848.5	1,903.1	1,884.0
Natural Gas	266.5	2,727.1	3,907.0	2,600.4	2,241.5	2,253.8	2,279.2	2,191.6	2,043.5	2,180.4
Petroleum	.5	35.9	49.3	12.0	21.3	22.6	90.0	29.2	12.2	9.5
Heavy Oil [b]	.3	10.7	24.2	3.6	9.9	9.6	33.4	5.6	2.3	2.4
Light Oil [b]	.2	25.1	25.1	8.3	11.4	13.1	56.6	23.6	10.0	7.1
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	15.1	44.6	94.9	103.3	135.9
Biomass Fuels	.7	1.4	2.5	1.0	2.3	–	.7	1.0	1.0	1.0
Primary Energy — Five Sectors [c]	**4,193.8**	**31,730.0**	**35,729.0**	**26,686.5**	**27,493.6**	**28,237.2**	**R29,648.6**	**R33,795.0**	**R32,785.0**	**33,143.2**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Utah 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	**0.38**	**1.35**	**1.48**	**1.46**	**1.25**	**1.34**	**1.31**	**1.24**	**1.28**	**1.28**
Coking Coal	.43	1.97	1.93	1.75	–	2.02	1.92	1.84	1.99	2.00
Steam Coal	.28	1.16	1.39	1.42	1.25	1.26	1.25	1.18	1.21	1.21
Natural Gas	**.57**	**2.33**	**4.01**	**4.41**	**4.16**	**3.94**	**3.99**	**4.17**	**4.21**	**4.18**
Petroleum	**1.67**	**7.48**	**7.91**	**5.99**	**6.28**	**6.48**	**6.95**	**7.85**	R7.33	**7.58**
Asphalt and Road Oil	.57	3.65	4.85	4.38	3.23	3.32	2.73	2.70	3.25	2.96
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.09	6.54	6.69	5.43	5.78	5.85	6.67	8.00	7.60	7.60
Jet Fuel	.76	6.59	6.25	4.05	4.19	3.95	4.60	5.75	5.13	4.96
Kerosene	.76	5.82	9.95	4.46	5.49	5.30	8.65	10.07	9.76	11.94
LPG	2.12	5.68	8.69	6.83	6.70	6.82	R8.65	R8.66	R9.21	9.44
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.75	9.80	9.09	6.78	7.44	7.71	8.24	9.09	8.81	8.95
Residual Fuel	.39	3.70	3.86	2.36	2.16	1.98	1.67	2.67	2.31	1.78
Other [a]	.51	2.85	3.68	1.53	1.50	1.45	1.74	2.02	1.72	1.29
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	**1.02**	**4.05**	**4.28**	**3.79**	**3.39**	**3.27**	**3.34**	**3.53**	**3.60**	**3.58**
Electric Utility Fuel [c]	.25	1.20	1.39	1.42	1.27	1.27	1.25	1.18	1.21	1.22
Electricity Purchased by End Users	5.31	13.11	19.05	19.56	19.15	18.41	17.10	16.09	16.08	15.61
Total Energy	**1.31**	**5.77**	**7.24**	**6.93**	**7.32**	**6.76**	**6.78**	**7.12**	R6.94	**7.15**
	Expenditures in Millions of Dollars									
Coal	**30.1**	**227.1**	**295.0**	**275.0**	**342.0**	**451.3**	**452.0**	**455.0**	**441.1**	**463.2**
Coking Coal	22.7	77.9	64.8	36.9	–	63.8	60.6	60.8	63.5	59.8
Steam Coal	7.4	149.2	230.2	238.1	342.0	387.5	391.4	394.2	377.6	403.4
Natural Gas	**61.5**	**255.6**	**439.9**	**365.0**	**348.4**	**376.3**	**406.0**	**419.4**	**512.8**	**474.7**
Petroleum	**252.9**	**1,399.3**	**1,281.0**	**1,062.2**	**1,132.9**	**1,187.0**	R1,226.7	R1,402.5	R1,432.4	**1,450.9**
Asphalt and Road Oil	6.0	35.8	50.8	37.7	30.6	23.5	30.3	24.7	61.9	32.1
Aviation Gasoline	1.9	6.3	4.7	4.7	3.8	4.2	4.4	5.0	5.2	5.7
Distillate Fuel	32.4	319.7	231.5	231.3	227.9	249.6	239.9	342.1	344.7	356.7
Jet Fuel	7.6	96.4	133.0	98.4	116.8	110.4	131.7	171.0	R170.3	156.3
Kerosene	1.1	3.4	1.8	.6	.9	.8	.5	.8	.9	.3
LPG	6.7	23.8	43.4	36.0	37.5	33.2	R41.9	R32.4	R23.9	22.7
Lubricants	7.9	26.1	29.1	25.2	23.2	25.7	24.0	24.9	25.7	30.3
Motor Gasoline	177.5	799.6	775.3	624.7	687.1	735.7	749.2	794.2	795.4	842.4
Residual Fuel	10.3	74.8	1.7	.7	1.5	.6	.2	2.1	.3	.2
Other [a]	1.5	13.4	9.7	3.0	3.5	3.3	4.4	5.4	4.0	4.1
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	**344.5**	**1,882.0**	**2,015.9**	**1,702.2**	**1,823.2**	**2,014.6**	R2,084.7	R2,277.0	R2,386.3	**2,388.8**
Electric Utility Fuel [c]	-6.4	-141.2	-208.0	-222.5	-331.1	-367.6	-367.7	-370.7	-362.7	-395.5
Electricity Purchased by End Users	92.0	469.3	830.7	852.9	861.6	895.9	853.9	830.9	857.3	868.1
Total Energy	**430.2**	**2,210.1**	**2,638.6**	**2,332.6**	**2,353.7**	**2,542.8**	R2,571.0	R2,737.1	R2,881.0	**2,861.4**

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Note: Expenditure totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Utah 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	1.62	4.64	7.69	8.37	8.73	8.75	8.43	8.43	8.34	8.61
Primary Energy	.99	2.69	4.67	4.93	4.69	4.78	4.93	4.94	5.13	5.11
Coal	.76	3.02	3.46	3.42	2.62	2.63	3.01	3.02	3.06	2.80
Natural Gas	.91	2.51	4.52	4.89	4.60	4.73	4.73	4.85	5.07	5.05
Petroleum	2.06	8.08	9.07	6.49	6.65	6.61	9.66	8.59	8.62	9.04
Distillate Fuel	1.28	6.89	7.25	4.04	3.73	3.86	5.43	7.20	6.86	7.08
Kerosene	2.62	–	16.24	9.06	8.35	8.63	12.17	16.13	15.36	15.85
LPG	2.31	8.68	9.25	6.93	7.34	7.49	12.23	9.19	9.59	10.06
Electricity	6.69	16.92	22.80	23.27	23.28	22.88	21.68	20.91	20.83	20.43
Commercial Sector	1.78	7.70	11.83	12.91	10.71	9.80	9.93	9.53	9.13	9.70
Primary Energy	.70	4.30	4.38	4.09	4.21	3.50	3.61	3.79	3.89	3.98
Coal	.29	1.07	1.28	1.29	1.08	1.12	1.19	1.23	1.14	1.09
Natural Gas	.63	5.12	4.57	4.99	4.61	3.77	3.83	3.95	4.19	4.08
Petroleum	.84	5.14	6.72	4.73	4.12	3.83	4.81	6.02	5.65	6.28
Distillate Fuel	1.06	6.42	6.42	4.52	3.85	3.28	4.09	5.76	5.01	5.92
Kerosene	.71	5.82	7.22	3.44	4.29	4.20	5.43	6.96	7.39	7.31
LPG	1.20	4.36	8.22	6.76	6.22	6.21	6.68	8.30	8.68	8.82
Motor Gasoline	2.75	9.80	9.09	6.78	7.44	7.71	8.24	9.09	8.81	8.95
Residual Fuel	.27	3.69	3.94	2.40	2.16	1.98	1.66	2.51	2.31	1.78
Electricity	5.32	13.22	20.09	20.49	20.06	19.91	18.87	17.35	17.10	16.78
Industrial Sector	.56	3.46	4.50	4.72	5.32	4.22	4.03	4.13	R4.30	4.41
Primary Energy	.46	2.74	3.15	2.91	3.05	2.65	R2.73	R2.90	3.18	3.23
Coal	.40	1.77	1.77	1.62	1.08	1.75	1.68	1.64	1.76	1.74
Coking Coal	.43	1.97	1.93	1.75	–	2.02	1.92	1.84	1.99	2.00
Steam Coal	.29	1.07	1.28	1.29	1.08	1.12	1.19	1.23	1.14	1.09
Natural Gas	.32	2.08	3.01	3.16	2.96	2.87	3.04	3.33	3.44	3.63
Petroleum	.76	4.44	5.96	4.13	3.99	4.03	R4.16	R4.85	4.66	4.91
Asphalt and Road Oil	.57	3.65	4.85	4.38	3.23	3.32	2.73	2.70	3.25	2.96
Distillate Fuel	.66	5.49	6.34	3.02	3.77	3.69	4.77	6.11	6.49	6.42
Kerosene	.71	5.82	7.22	3.44	4.29	4.20	5.43	6.96	7.39	7.31
LPG	1.20	4.36	8.22	6.76	6.22	6.21	6.68	8.30	8.68	8.82
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.75	9.80	9.09	6.78	7.44	7.71	8.24	9.09	8.81	8.95
Residual Fuel	.60	3.71	3.94	2.40	2.16	1.98	1.66	2.51	2.31	1.78
Other	.51	2.85	3.68	1.53	1.50	1.45	1.74	2.02	1.72	1.29
Electricity	3.75	10.22	14.36	14.90	14.35	13.27	11.77	11.13	11.27	10.80
Transportation Sector	2.28	8.82	8.28	6.39	6.78	6.98	7.48	8.38	R7.96	8.07
Primary Energy	2.28	8.82	8.28	6.39	6.78	6.98	7.48	8.38	R7.96	8.07
Coal	.29	–	–	–	–	–	–	–	–	–
Petroleum	2.28	8.82	8.28	6.39	6.78	6.98	7.48	8.38	R7.96	8.07
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.32	7.02	6.82	6.80	6.97	7.27	7.82	8.76	8.30	8.20
Jet Fuel	.76	6.59	6.25	4.05	4.19	3.95	4.60	5.75	5.13	4.96
LPG	1.20	4.36	8.22	6.76	6.22	6.21	6.68	8.30	8.68	8.82
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.75	9.80	9.09	6.78	7.44	7.71	8.24	9.09	8.81	8.95
Residual Fuel	.26	–	–	–	–	–	2.73	2.92	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	1.31	5.77	7.24	6.93	7.32	6.76	6.78	7.12	R6.94	7.15
Primary Energy — Four Sectors	1.08	5.01	5.63	5.05	5.39	5.03	R5.21	5.73	5.59	5.78
Electricity	5.31	13.11	19.05	19.56	19.15	18.41	17.10	16.09	16.08	15.61
Electric Utility Sector [a]	.25	1.20	1.39	1.42	1.27	1.27	1.25	1.18	1.21	1.22
Coal	.23	1.14	1.37	1.41	1.25	1.26	1.24	1.17	1.19	1.21
Natural Gas	.31	2.00	4.12	5.10	5.07	2.83	3.14	5.04	1.61	1.75
Petroleum	.26	5.00	5.02	3.54	4.12	3.98	4.45	5.42	4.90	4.84
Heavy Oil [b]	.26	3.69	3.71	2.09	–	–	–	–	–	–
Light Oil [b]	.32	6.23	5.67	3.62	4.12	3.98	4.45	5.42	4.90	4.84
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	1.02	4.05	4.28	3.79	3.39	3.27	3.34	3.53	3.60	3.58

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Utah 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**84.4**	**359.4**	**627.6**	**607.1**	**545.3**	**564.6**	**572.9**	**559.1**	**620.9**	**579.4**
Primary Energy	45.9	179.4	317.5	290.4	229.1	240.6	264.9	256.1	303.9	265.4
Coal	.7	5.8	7.2	5.3	2.7	4.2	5.6	6.5	7.6	5.0
Natural Gas	37.9	158.0	285.3	267.4	206.4	215.9	232.2	229.3	275.1	243.2
Petroleum	7.2	15.6	25.0	17.7	20.0	20.6	27.2	20.3	21.3	17.1
Distillate Fuel	1.1	4.5	3.1	1.8	2.2	3.0	5.8	5.7	6.4	4.8
Kerosene	.1	–	.9	.2	.4	.3	.4	.4	.4	.2
LPG	6.0	11.1	21.0	15.7	17.4	17.3	21.0	14.1	14.4	12.2
Electricity	38.5	179.9	310.1	316.7	316.1	324.0	308.0	303.0	317.0	314.0
Commercial Sector	**49.0**	**216.4**	**391.3**	**383.6**	**433.4**	**438.5**	**422.9**	**413.9**	**437.5**	**433.5**
Primary Energy	14.8	74.7	76.3	56.3	100.6	96.6	89.9	94.9	112.5	98.5
Coal	.5	3.8	4.9	3.7	2.0	3.3	4.1	4.9	5.2	3.7
Natural Gas	6.0	1.8	41.7	21.9	73.8	73.1	68.7	69.8	86.8	73.0
Petroleum	8.2	69.0	29.6	30.6	24.8	20.2	17.1	20.3	20.5	21.8
Distillate Fuel	3.2	38.4	20.2	24.0	16.5	13.3	10.9	12.1	13.7	16.2
Kerosene	.2	1.1	.8	.1	.4	.1	.1	.2	.4	*
LPG	.6	1.0	3.3	2.7	2.6	2.5	2.0	2.3	2.3	1.9
Motor Gasoline	2.9	4.1	4.2	3.2	3.6	3.6	3.9	4.6	3.8	3.4
Residual Fuel	1.4	24.4	1.1	.6	1.5	.6	.1	1.2	.3	.2
Electricity	34.3	141.7	315.0	327.3	332.9	342.0	333.0	319.0	325.0	335.0
Industrial Sector	**89.2**	**524.1**	**534.8**	**438.0**	**391.7**	**493.6**	**R507.0**	**R521.3**	**R596.5**	**575.2**
Primary Energy	70.0	376.4	329.1	229.1	179.1	263.7	R294.1	R312.4	R381.2	356.1
Coal	26.4	89.9	78.3	47.6	12.1	79.1	79.1	80.1	77.0	73.1
Coking Coal	22.7	77.9	64.8	36.9	–	63.8	60.6	60.8	63.5	59.8
Steam Coal	3.6	12.0	13.5	10.7	12.1	15.3	18.4	19.3	13.4	13.2
Natural Gas	16.5	86.0	111.8	74.4	66.7	86.8	103.0	115.8	141.9	146.2
Petroleum	27.1	200.6	139.0	107.1	100.3	97.8	R112.0	R116.5	R162.3	136.9
Asphalt and Road Oil	6.0	35.8	50.8	37.7	30.6	23.5	30.3	24.7	61.9	32.1
Distillate Fuel	6.0	70.9	40.8	34.2	33.7	41.2	42.8	53.6	71.6	72.9
Kerosene	.8	2.2	.1	.3	.1	.3	.1	.2	.1	*
LPG	.1	11.5	16.8	15.6	16.1	11.9	R17.5	R14.4	R5.8	7.4
Lubricants	2.9	9.2	10.3	8.9	8.2	9.1	8.5	8.8	9.1	10.7
Motor Gasoline	3.8	8.5	10.5	7.5	7.9	8.5	8.4	9.4	9.7	9.7
Residual Fuel	6.0	49.1	*	*	*	*	*	*	*	*
Other	1.5	13.4	9.7	3.0	3.5	3.3	4.4	5.4	4.0	4.1
Electricity	19.2	147.7	205.7	208.9	212.6	229.9	212.9	208.9	215.3	219.1
Transportation Sector	**207.5**	**1,110.3**	**1,085.0**	**903.9**	**983.4**	**1,046.0**	**1,068.1**	**1,242.8**	**R1,226.0**	**1,273.4**
Primary Energy	207.5	1,110.3	1,085.0	903.9	983.4	1,046.0	1,068.1	1,242.8	R1,226.0	1,273.4
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	207.5	1,110.3	1,085.0	903.9	983.4	1,046.0	1,068.1	1,242.8	R1,226.0	1,273.4
Aviation Gasoline	1.9	6.3	4.7	4.7	3.8	4.2	4.4	5.0	5.2	5.7
Distillate Fuel	22.1	203.5	165.5	168.6	170.9	189.7	178.1	268.1	250.7	261.1
Jet Fuel	7.6	96.4	133.0	98.4	116.8	110.4	131.7	171.0	R170.3	156.3
LPG	*	.2	2.2	1.9	1.3	1.5	1.4	1.5	1.4	1.3
Lubricants	5.0	16.9	18.8	16.3	15.0	16.6	15.5	16.1	16.6	19.6
Motor Gasoline	170.9	787.0	760.7	614.0	675.5	723.6	736.9	780.2	781.9	829.3
Residual Fuel	*	–	–	–	–	–	*	.9	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**430.2**	**2,210.1**	**2,638.6**	**2,332.6**	**2,353.7**	**2,542.8**	**R2,571.0**	**R2,737.1**	**R2,881.0**	**2,861.4**
Primary Energy — Four Sectors	338.2	1,740.8	1,807.9	1,479.7	1,492.2	1,646.9	R1,717.1	R1,906.3	R2,023.6	1,993.3
Electricity	92.0	469.3	830.7	852.9	861.6	895.9	853.9	830.9	857.3	868.1
Electric Utility Sector [a]	**6.4**	**141.2**	**208.0**	**222.5**	**331.1**	**367.6**	**367.7**	**370.7**	**362.7**	**395.5**
Coal	2.5	127.6	204.6	218.4	325.1	364.7	363.3	363.5	351.4	381.5
Natural Gas	1.0	9.8	1.0	1.3	1.4	.6	2.2	4.6	8.9	12.3
Petroleum	2.9	3.8	2.4	2.8	4.5	2.4	2.2	2.6	2.3	1.7
Heavy Oil [b]	2.8	1.4	.6	.1	–	–	–	–	–	–
Light Oil [b]	*	2.4	1.8	2.7	4.5	2.4	2.2	2.6	2.3	1.7
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**344.5**	**1,882.0**	**2,015.9**	**1,702.2**	**1,823.2**	**2,014.6**	**R2,084.7**	**R2,277.0**	**R2,386.3**	**2,388.8**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Vermont 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.72	2.46	2.84	2.62	3.37	3.40	3.12	3.73	3.07	2.91
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.72	2.46	2.84	2.62	3.37	3.40	3.12	3.73	3.07	2.91
Natural Gas	1.41	5.62	5.59	5.00	4.92	4.51	4.56	4.65	4.51	5.03
Petroleum	1.97	8.42	8.88	6.95	6.95	7.07	7.99	9.23	R8.80	8.49
Asphalt and Road Oil	.68	3.66	5.20	4.86	3.55	3.39	3.17	3.34	3.05	2.79
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.37	7.01	8.13	6.36	6.22	6.23	6.74	8.15	7.66	7.11
Jet Fuel	.75	6.55	6.10	4.25	4.18	4.04	5.33	6.60	5.07	4.72
Kerosene	1.53	7.82	8.83	6.69	6.63	6.35	7.19	8.72	8.40	7.62
LPG	2.15	7.56	11.71	10.39	10.38	9.37	12.19	13.14	14.29	11.75
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.09	10.12	9.53	7.47	7.58	7.87	8.84	9.66	9.48	9.39
Residual Fuel	.66	4.05	4.54	2.92	3.15	2.54	2.83	3.32	2.51	2.53
Other[a]	4.14	12.01	13.38	14.34	13.55	11.82	17.61	14.39	15.96	23.81
Nuclear Fuel	–	.58	.64	.70	.69	.71	.62	.57	.56	.53
Biomass Fuels at Utilities	–	1.74	.79	.32	.95	.87	2.92	2.82	2.60	2.74
Primary Energy — Five Sectors[b]	1.92	5.67	5.93	5.31	4.75	4.68	5.40	6.00	5.64	5.74
Electric Utility Fuel[c]	.72	.69	.72	.73	.73	.74	.76	.66	.65	.62
Electricity Purchased by End Users	6.05	14.33	20.81	22.51	24.16	23.69	23.46	24.24	25.30	25.86
Total Energy	2.40	9.29	10.53	9.16	9.46	9.54	10.27	11.60	R11.28	11.10
	Expenditures in Millions of Dollars									
Coal	1.5	1.3	5.6	1.7	1.1	1.0	0.7	0.8	0.9	1.5
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	1.5	1.3	5.6	1.7	1.1	1.0	.7	.8	.9	1.5
Natural Gas	3.8	22.2	27.7	24.7	25.1	24.8	27.6	31.0	31.5	38.1
Petroleum	145.6	518.8	586.5	466.9	506.4	534.8	602.2	632.9	R658.5	671.3
Asphalt and Road Oil	1.2	1.0	11.4	13.5	11.6	8.9	9.5	.6	10.7	6.2
Aviation Gasoline	.2	1.1	1.1	1.2	.8	.6	.7	.7	.7	.6
Distillate Fuel	45.7	167.3	198.5	147.1	158.4	169.5	181.7	192.0	190.1	206.9
Jet Fuel	.5	5.6	6.7	3.1	4.2	3.2	6.6	6.6	R4.6	3.0
Kerosene	4.4	12.5	28.9	14.4	11.9	16.4	14.8	11.0	13.1	9.9
LPG	4.4	18.5	33.4	32.8	41.8	39.6	67.5	66.8	84.4	81.5
Lubricants	2.0	5.9	6.5	5.7	5.2	5.8	5.4	5.6	5.8	6.8
Motor Gasoline	82.5	288.9	290.9	234.0	259.4	281.3	304.2	337.8	337.2	339.3
Residual Fuel	3.7	12.0	3.5	8.7	6.7	3.8	3.4	5.0	4.2	4.5
Other[a]	1.0	5.9	5.6	6.4	6.5	5.8	8.4	6.8	7.9	12.6
Nuclear Fuel	–	18.7	20.8	15.5	26.3	31.3	24.1	22.1	24.9	21.2
Biomass Fuels at Utilities	–	.9	2.3	.3	1.5	.9	5.5	2.7	2.9	2.6
Primary Energy — Five Sectors[b]	150.9	561.9	642.9	509.1	560.5	592.8	660.2	689.6	R718.7	734.7
Electric Utility Fuel[c]	-2.2	-23.4	-26.1	-17.3	-29.2	-33.9	-31.0	-26.8	-30.1	-25.7
Electricity Purchased by End Users	53.9	193.1	285.1	286.2	337.8	357.0	366.0	390.0	406.1	436.0
Total Energy	202.6	731.7	901.9	778.1	869.0	915.9	995.2	1,052.8	R1,094.7	1,145.0

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Vermont 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.24**	**9.65**	**11.08**	**10.15**	**11.51**	**11.21**	**11.91**	**13.58**	**13.62**	**12.85**
Primary Energy	1.58	7.43	8.41	7.01	6.91	6.70	7.97	9.05	9.22	8.26
Coal	1.37	4.42	4.91	4.71	4.37	4.51	4.48	4.73	4.59	4.46
Natural Gas	1.97	6.30	6.33	6.36	6.31	5.71	5.70	5.87	6.31	6.73
Petroleum	1.57	7.56	8.67	7.11	7.00	6.83	8.24	9.49	9.61	8.48
Distillate Fuel	1.51	7.32	8.08	6.49	6.23	6.19	6.79	8.02	7.71	6.98
Kerosene	1.63	8.15	8.98	7.22	6.92	6.88	7.54	8.92	8.57	7.76
LPG	2.55	9.28	11.79	10.02	10.04	8.95	12.77	13.76	15.17	12.37
Electricity	6.68	15.76	21.20	23.15	27.72	26.66	26.24	27.22	27.94	27.99
Commercial Sector	**2.18**	**9.00**	**12.72**	**12.30**	**13.16**	**13.17**	**13.10**	**14.40**	**14.27**	**14.00**
Primary Energy	1.06	5.90	6.80	5.54	5.47	5.55	5.89	6.54	6.31	5.98
Coal	.87	1.65	2.38	2.12	2.36	2.53	2.60	2.62	2.57	2.58
Natural Gas	1.43	6.22	5.76	5.19	4.94	4.72	4.81	5.12	5.30	5.69
Petroleum	1.04	5.93	7.93	5.73	5.71	5.88	6.28	7.16	6.69	6.12
Distillate Fuel	1.11	6.48	7.56	5.77	5.29	5.42	5.91	7.09	6.47	5.76
Kerosene	.92	6.39	7.67	4.99	5.52	5.25	6.03	7.41	6.79	6.18
LPG	1.37	5.59	11.46	11.25	11.14	10.88	10.22	10.80	11.94	9.96
Motor Gasoline	3.09	10.12	9.53	7.47	7.58	7.87	8.84	9.66	9.48	9.39
Residual Fuel	.79	4.09	4.54	2.92	3.15	2.54	2.84	3.33	2.51	2.54
Electricity	6.78	15.56	24.02	25.65	24.53	24.44	24.23	25.16	26.42	27.37
Industrial Sector	**1.71**	**7.69**	**10.87**	**9.84**	**9.08**	**9.00**	**9.53**	**11.58**	**10.06**	**10.65**
Primary Energy	.96	5.73	6.50	5.05	5.02	4.62	5.18	6.31	5.36	5.63
Coal	.87	1.65	2.38	2.12	2.36	2.53	2.60	2.62	2.57	2.58
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.87	1.65	2.38	2.12	2.36	2.53	2.60	2.62	2.57	2.58
Natural Gas	.85	4.94	4.91	3.57	3.52	3.00	3.05	3.56	3.03	3.29
Petroleum	.97	5.96	7.01	5.33	5.29	4.94	5.69	7.34	5.87	6.32
Asphalt and Road Oil	.68	3.66	5.20	4.86	3.55	3.39	3.17	3.34	3.05	2.79
Distillate Fuel	.84	5.84	6.70	4.36	4.82	4.58	5.26	6.47	5.93	5.40
Kerosene	.92	6.39	7.67	4.99	5.52	5.25	6.03	7.41	6.79	6.18
LPG	1.37	5.59	11.46	11.25	11.14	10.88	10.22	10.80	11.94	9.96
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.09	10.12	9.53	7.47	7.58	7.87	8.84	9.66	9.48	9.39
Residual Fuel	.53	4.01	4.54	2.92	3.15	2.54	2.84	3.33	2.51	2.54
Other	4.14	12.01	13.38	14.34	13.55	11.82	17.61	14.39	15.96	23.81
Electricity	4.52	11.37	18.40	20.05	19.79	19.39	19.21	19.31	20.66	21.37
Transportation Sector	**2.94**	**9.72**	**9.46**	**7.48**	**7.50**	**7.78**	**8.61**	**9.61**	**R9.38**	**9.24**
Primary Energy	2.94	9.72	9.46	7.48	7.50	7.78	8.61	9.61	R9.38	9.24
Coal	.87	–	–	–	–	–	–	–	–	–
Petroleum	2.94	9.72	9.46	7.48	7.50	7.78	8.61	9.61	R9.38	9.24
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.43	7.41	9.30	7.51	7.35	7.51	7.88	9.66	9.14	8.67
Jet Fuel	.75	6.51	6.10	4.25	4.18	4.04	5.33	6.60	5.07	4.72
LPG	1.37	5.59	11.46	11.25	11.14	10.88	10.22	10.80	11.94	9.96
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	3.09	10.12	9.53	7.47	7.58	7.87	8.84	9.66	9.48	9.39
Residual Fuel	.76	–	–	–	2.64	–	2.60	2.76	2.16	2.24
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**2.40**	**9.29**	**10.53**	**9.16**	**9.46**	**9.54**	**10.27**	**11.60**	**R11.28**	**11.10**
Primary Energy — Four Sectors	1.97	8.25	8.57	6.81	6.82	6.90	7.73	8.88	8.51	8.22
Electricity	6.05	14.33	20.81	22.51	24.16	23.69	23.46	24.24	25.30	25.86
Electric Utility Sector [a]	**.72**	**.69**	**.72**	**.73**	**.73**	**.74**	**.76**	**.66**	**.65**	**.62**
Coal	.49	1.73	2.03	1.88	–	–	–	–	–	–
Natural Gas	–	4.50	4.84	2.26	–	–	R2.64	2.42	1.74	2.02
Petroleum	.91	6.28	5.83	3.55	3.38	3.71	4.23	5.53	4.70	4.43
Heavy Oil [b]	.83	–	–	–	–	–	–	–	–	–
Light Oil [b]	.92	6.28	5.83	3.55	3.38	3.71	4.23	5.53	4.70	4.43
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	.58	.64	.70	.69	.71	.62	.57	.56	.53
Biomass Fuels	–	1.74	.79	.32	.95	.87	2.92	2.82	2.60	2.74
Primary Energy — Five Sectors [c]	**1.92**	**5.67**	**5.93**	**5.31**	**4.75**	**4.68**	**5.40**	**6.00**	**5.64**	**5.74**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Vermont 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**71.8**	**219.8**	**278.9**	**206.0**	**250.3**	**265.8**	**313.2**	**336.2**	**352.8**	**363.4**
Primary Energy	44.1	124.1	167.7	114.7	117.0	122.8	164.2	168.2	182.7	179.4
Coal	.6	.7	2.3	.7	.7	.6	.3	.5	.3	.4
Natural Gas	2.1	8.1	9.1	10.0	10.4	10.6	11.9	12.4	13.7	16.9
Petroleum	41.4	115.3	156.3	104.0	106.0	111.7	152.0	155.3	168.6	162.1
Distillate Fuel	34.0	92.5	104.5	69.9	68.1	70.0	85.5	90.2	91.5	89.1
Kerosene	4.0	10.6	26.2	11.9	9.8	12.0	11.9	9.8	12.0	9.2
LPG	3.4	12.1	25.5	22.2	28.1	29.6	54.6	55.3	65.1	63.8
Electricity	27.7	95.8	111.2	91.3	133.3	143.0	149.0	168.0	170.0	184.0
Commercial Sector	**23.2**	**88.3**	**121.1**	**124.2**	**158.4**	**166.9**	**174.7**	**177.6**	**188.4**	**200.6**
Primary Energy	9.1	39.3	42.5	37.1	39.3	41.9	47.7	46.5	50.4	53.6
Coal	.2	.2	1.6	.2	.2	.2	.1	.2	.1	.2
Natural Gas	.8	5.1	9.0	8.6	8.9	9.1	9.9	10.3	10.8	13.1
Petroleum	8.1	34.1	31.9	28.2	30.1	32.6	37.7	36.0	39.4	40.3
Distillate Fuel	5.1	23.4	23.3	18.1	20.1	21.8	24.9	23.2	26.4	27.4
Kerosene	.1	1.6	1.6	1.7	1.0	1.9	2.0	.5	.6	.5
LPG	.3	1.3	4.4	4.4	5.5	6.4	7.7	7.7	9.0	9.1
Motor Gasoline	.4	1.7	2.0	1.6	1.6	1.6	1.7	2.1	1.4	1.7
Residual Fuel	2.1	6.1	.7	2.5	1.8	1.0	1.5	2.5	2.1	1.7
Electricity	14.1	49.0	78.6	87.1	119.2	125.0	127.1	131.0	138.0	147.0
Industrial Sector	**21.7**	**94.0**	**153.4**	**165.6**	**142.3**	**139.3**	**144.1**	**134.5**	**155.5**	**164.2**
Primary Energy	9.5	45.6	58.0	57.8	57.0	50.3	54.1	43.5	57.5	59.2
Coal	.1	.1	.3	.2	.1	.2	.3	.1	.5	.9
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.1	.1	.3	.2	.1	.2	.3	.1	.5	.9
Natural Gas	.9	7.9	9.1	6.1	5.8	5.2	5.7	6.6	5.1	6.4
Petroleum	8.5	37.6	48.6	51.5	51.0	45.0	48.0	36.9	51.9	51.8
Asphalt and Road Oil	1.2	1.0	11.4	13.5	11.6	8.9	9.5	.6	10.7	6.2
Distillate Fuel	2.3	17.1	17.5	12.8	13.3	15.4	15.4	17.6	15.4	16.0
Kerosene	.2	.3	1.1	.8	1.0	2.5	.9	.7	.4	.2
LPG	.6	5.0	2.9	5.8	7.8	3.1	4.8	3.3	9.7	8.2
Lubricants	.5	1.3	1.5	1.3	1.2	1.3	1.2	1.3	1.3	1.5
Motor Gasoline	1.1	1.0	5.8	4.7	4.8	5.1	5.9	4.1	4.4	4.4
Residual Fuel	1.5	5.9	2.8	6.2	4.8	2.8	1.8	2.4	2.1	2.7
Other	1.0	5.9	5.6	6.4	6.5	5.8	8.4	6.8	7.9	12.6
Electricity	12.1	48.4	95.3	107.8	85.3	89.0	90.0	91.0	98.0	105.0
Transportation Sector	**86.0**	**329.5**	**348.5**	**282.2**	**318.0**	**343.9**	**363.3**	**404.5**	**R398.0**	**416.8**
Primary Energy	86.0	329.5	348.5	282.2	318.0	343.9	363.3	404.5	R398.0	416.8
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	86.0	329.5	348.5	282.2	318.0	343.9	363.3	404.5	R398.0	416.8
Aviation Gasoline	.2	1.1	1.1	1.2	.8	.6	.7	.7	.7	.6
Distillate Fuel	2.9	32.7	52.0	45.4	55.5	60.6	54.7	60.7	56.4	74.3
Jet Fuel	.5	4.9	6.7	3.1	4.2	3.2	6.6	6.6	R4.6	3.0
LPG	*	*	.6	.4	.4	.4	.4	.4	.5	.4
Lubricants	1.5	4.5	5.1	4.4	4.0	4.5	4.2	4.3	4.5	5.3
Motor Gasoline	81.0	286.2	283.1	227.7	253.0	274.6	296.6	331.7	331.5	333.2
Residual Fuel	*	–	–	–	*	–	.1	.1	*	.1
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**202.6**	**731.7**	**901.9**	**778.1**	**869.0**	**915.9**	**995.2**	**1,052.8**	**R1,094.7**	**1,145.0**
Primary Energy — Four Sectors	148.7	538.5	616.7	491.8	531.2	558.9	629.2	662.8	R688.6	709.0
Electricity	53.9	193.1	285.1	286.2	337.8	357.0	366.0	390.0	406.1	436.0
Electric Utility Sector [a]	**2.2**	**23.4**	**26.1**	**17.3**	**29.2**	**33.9**	**31.0**	**26.8**	**30.1**	**25.7**
Coal	.7	.4	1.4	.6	–	–	–	–	–	–
Natural Gas	–	1.1	.5	*	–	–	.1	1.7	1.9	1.6
Petroleum	1.6	2.3	1.1	.9	1.4	1.6	1.2	.2	.4	.2
Heavy Oil [b]	.1	–	–	–	–	–	–	–	–	–
Light Oil [b]	1.4	2.3	1.1	.9	1.4	1.6	1.2	.2	.4	.2
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	18.7	20.8	15.5	26.3	31.3	24.1	22.1	24.9	21.2
Biomass Fuels	–	.9	2.3	.3	1.5	.9	5.5	2.7	2.9	2.6
Primary Energy — Five Sectors [c]	**150.9**	**561.9**	**642.9**	**509.1**	**560.5**	**592.8**	**660.2**	**689.6**	**R718.7**	**734.7**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Virginia 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.41	1.72	1.80	1.70	1.60	1.57	1.57	1.60	1.57	1.54
Coking Coal	.40	1.86	1.93	1.75	1.72	1.73	1.75	1.80	1.72	1.74
Steam Coal	.41	1.71	1.78	1.69	1.59	1.56	1.56	1.59	1.56	1.53
Natural Gas	.96	3.62	5.68	5.06	4.53	4.40	4.95	4.67	4.76	4.77
Petroleum	1.49	7.47	8.12	5.88	6.34	6.37	6.84	7.96	R7.58	7.52
Asphalt and Road Oil	.68	3.60	4.93	4.21	3.29	3.25	2.96	2.99	3.10	2.35
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.14	6.84	7.77	5.91	6.09	6.00	6.54	7.85	7.42	7.15
Jet Fuel	.73	6.46	5.79	3.83	4.05	3.77	4.34	5.53	4.78	4.47
Kerosene	1.36	7.59	8.15	6.52	6.02	6.05	6.60	8.33	7.58	7.10
LPG	1.95	6.33	9.87	9.24	9.19	9.06	8.42	11.25	11.70	9.34
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.85	9.97	9.33	6.97	7.60	7.85	8.55	9.46	9.02	9.04
Residual Fuel	.31	3.75	4.26	2.15	2.99	2.21	2.67	3.24	2.03	2.25
Other [a]	.75	7.25	8.23	5.62	6.36	5.42	5.85	6.56	5.94	5.82
Nuclear Fuel	–	.74	.55	.53	.56	.53	.39	.47	.53	.43
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1.17	5.31	5.14	4.03	4.27	4.21	4.65	4.90	4.63	4.63
Electric Utility Fuel [c]	.35	2.00	1.18	1.14	1.23	1.11	1.28	1.06	1.05	1.01
Electricity Purchased by End Users	4.91	15.77	17.06	16.97	17.03	16.64	17.26	17.70	17.89	18.43
Total Energy	1.80	8.02	8.79	7.52	7.68	7.65	8.29	8.85	R8.77	8.87
	Expenditures in Millions of Dollars									
Coal	113.6	398.1	531.3	512.1	538.9	537.5	569.1	532.6	557.8	529.1
Coking Coal	.3	33.0	45.7	42.1	43.4	42.8	44.0	42.7	44.9	45.4
Steam Coal	113.3	365.1	485.5	470.0	495.5	494.7	525.1	489.9	512.9	483.7
Natural Gas	126.6	548.0	783.7	706.0	707.2	701.7	851.4	830.8	818.0	941.8
Petroleum	1,105.6	5,723.8	5,516.5	4,316.4	4,837.2	5,024.2	R5,346.3	R5,903.0	R5,442.0	5,397.6
Asphalt and Road Oil	10.2	62.6	132.0	124.2	96.2	77.6	82.4	93.3	76.9	58.5
Aviation Gasoline	3.9	9.9	6.6	6.6	2.8	2.8	3.1	3.3	R5.1	4.4
Distillate Fuel	163.6	980.1	1,139.9	976.9	1,039.6	1,138.9	1,106.3	1,276.8	1,158.0	1,099.6
Jet Fuel	44.9	444.2	357.1	283.6	327.8	331.6	383.1	489.8	R318.7	294.4
Kerosene	38.9	73.9	186.2	103.8	85.4	104.5	100.8	64.9	67.1	59.0
LPG	17.8	70.2	138.4	113.0	138.0	137.2	R134.8	R162.0	R193.6	185.9
Lubricants	22.2	82.9	92.5	80.1	73.8	81.8	76.4	79.2	81.6	96.4
Motor Gasoline	727.8	3,092.9	3,086.1	2,387.4	2,782.4	2,936.2	3,183.1	3,475.0	R3,340.2	3,400.3
Residual Fuel	65.0	575.1	221.1	158.2	196.1	133.6	191.8	152.2	108.8	105.6
Other [a]	11.3	332.0	156.4	82.6	95.2	80.0	84.4	106.5	91.9	93.5
Nuclear Fuel	–	92.8	131.5	120.4	108.9	119.0	60.1	119.6	135.2	108.2
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	1,345.8	6,762.6	6,962.9	5,655.0	6,192.2	6,382.4	R6,826.9	R7,386.0	R6,953.0	6,976.7
Electric Utility Fuel [c]	-101.4	-726.4	-514.6	-510.6	-538.8	-522.4	-568.3	-508.9	-532.0	-500.1
Electricity Purchased by End Users	494.4	2,581.5	3,343.0	3,643.1	3,868.1	3,964.8	4,307.7	4,374.4	4,558.0	4,781.6
Total Energy	1,738.8	8,617.8	9,791.3	8,787.5	9,521.5	9,824.9	R10,566.3	11,251.5	R10,978.9	11,258.2

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Virginia 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.45**	**10.23**	**12.45**	**12.11**	**11.95**	**11.76**	**12.79**	**14.29**	**14.50**	**14.31**
Primary Energy	1.45	5.75	7.51	6.50	6.00	5.98	6.69	7.60	7.45	6.90
Coal	1.34	3.85	3.92	3.59	3.53	3.49	3.59	3.48	3.35	3.32
Natural Gas	1.45	4.20	6.76	6.24	5.63	5.58	6.33	6.48	6.53	6.44
Petroleum	1.45	7.32	8.34	6.84	6.49	6.48	7.18	9.15	8.79	7.72
Distillate Fuel	1.37	7.10	7.89	6.43	5.93	6.01	6.49	8.25	7.54	6.93
Kerosene	1.44	7.96	8.30	6.76	6.24	6.32	6.83	8.68	7.93	7.28
LPG	2.27	8.07	10.48	9.86	10.07	9.81	11.03	13.03	13.55	10.59
Electricity	6.11	17.80	19.49	19.48	19.62	19.29	20.33	21.24	21.51	22.37
Commercial Sector	**2.53**	**10.06**	**12.09**	**11.46**	**11.21**	**11.05**	**11.74**	**12.21**	**12.32**	**12.36**
Primary Energy	.94	4.30	5.81	4.62	4.28	4.19	4.74	5.10	4.91	4.82
Coal	.42	1.64	1.69	1.61	1.55	1.53	1.56	1.64	1.61	1.63
Natural Gas	.94	3.71	5.76	5.07	4.46	4.28	4.74	4.73	4.66	4.79
Petroleum	1.18	6.32	6.72	4.45	4.54	4.58	5.22	6.56	6.02	5.53
Distillate Fuel	1.08	6.46	6.54	4.62	4.31	4.12	4.72	6.11	5.38	4.99
Kerosene	.65	5.94	6.81	4.71	4.54	4.34	5.40	6.45	5.64	5.79
LPG	1.48	4.60	9.35	8.72	8.45	8.49	6.02	9.21	9.80	8.34
Motor Gasoline	2.85	9.97	9.33	6.97	7.60	7.85	8.55	9.46	9.02	9.04
Residual Fuel	.32	3.91	4.29	2.40	3.05	2.32	2.72	3.31	2.32	2.41
Electricity	4.84	15.79	17.35	17.21	17.12	16.55	16.89	17.14	17.16	17.73
Industrial Sector	**.81**	**4.83**	**5.38**	**4.65**	**4.52**	**4.44**	**4.70**	**4.77**	**4.61**	**4.76**
Primary Energy	.57	3.77	4.10	3.22	3.10	2.93	3.11	3.28	3.10	3.16
Coal	.42	1.69	1.74	1.64	1.59	1.57	1.60	1.67	1.63	1.65
Coking Coal	.40	1.86	1.93	1.75	1.72	1.73	1.75	1.80	1.72	1.74
Steam Coal	.42	1.64	1.69	1.61	1.55	1.53	1.56	1.64	1.61	1.63
Natural Gas	.49	2.99	4.60	3.81	3.50	3.22	3.76	3.52	3.66	3.58
Petroleum	.79	5.58	6.44	4.70	4.73	4.53	4.56	5.11	5.09	4.86
Asphalt and Road Oil	.68	3.60	4.93	4.21	3.29	3.25	2.96	2.99	3.10	2.35
Distillate Fuel	.60	5.33	6.10	4.22	4.06	3.89	4.84	5.78	5.04	5.18
Kerosene	.65	5.94	6.81	4.71	4.54	4.34	5.40	6.45	5.64	5.79
LPG	1.48	4.60	9.35	8.72	8.45	8.49	6.02	9.21	9.80	8.34
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.85	9.97	9.33	6.97	7.60	7.85	8.55	9.46	9.02	9.04
Residual Fuel	.34	3.58	4.29	2.40	3.05	2.32	2.72	3.31	2.32	2.41
Other	.96	7.25	8.23	5.62	6.36	5.42	5.85	6.56	5.94	5.82
Electricity	3.08	12.19	12.47	12.07	12.12	11.95	12.33	12.51	12.40	12.54
Transportation Sector	**1.95**	**8.73**	**8.55**	**6.29**	**6.85**	**6.90**	**7.53**	**8.46**	**R 8.08**	**8.10**
Primary Energy	1.95	8.72	8.55	6.29	6.85	6.89	7.53	8.46	R 8.08	8.10
Coal	.42	–	–	–	–	–	–	–	–	–
Petroleum	1.95	8.72	8.55	6.29	6.85	6.89	7.53	8.46	R 8.08	8.10
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.25	7.27	8.34	6.34	6.93	6.74	7.26	8.40	8.10	7.79
Jet Fuel	.73	6.46	5.79	3.83	4.05	3.77	4.34	5.53	4.78	4.47
LPG	1.48	4.60	9.35	8.72	8.45	8.49	6.02	9.21	9.80	8.34
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.85	9.97	9.33	6.97	7.60	7.85	8.55	9.46	9.02	9.04
Residual Fuel	.30	3.32	4.18	1.91	2.81	1.99	2.34	3.03	1.82	2.05
Electricity	–	14.65	17.33	18.20	16.57	16.10	15.09	15.55	15.68	16.33
Total Energy	**1.80**	**8.02**	**8.79**	**7.52**	**7.68**	**7.65**	**8.29**	**8.85**	**R 8.77**	**8.87**
Primary Energy — Four Sectors	1.44	6.62	7.02	5.39	5.58	5.61	6.10	6.72	R 6.44	6.41
Electricity	4.91	15.77	17.06	16.97	17.03	16.64	17.26	17.70	17.89	18.43
Electric Utility Sector [a]	**.35**	**2.00**	**1.18**	**1.14**	**1.23**	**1.11**	**1.28**	**1.06**	**1.05**	**1.01**
Coal	.38	1.71	1.80	1.71	1.58	1.55	1.55	1.54	1.52	1.47
Natural Gas	.29	2.89	3.44	1.93	2.42	2.05	2.48	2.58	1.82	2.37
Petroleum	.32	4.03	4.60	2.16	3.11	2.38	2.88	4.14	2.36	2.59
Heavy Oil [b]	.31	3.94	4.37	2.09	3.06	2.30	2.78	3.60	2.13	2.33
Light Oil [b]	.35	5.86	5.57	3.39	3.73	3.38	4.01	5.83	4.64	4.71
Petroleum Coke	.35	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	.74	.55	.53	.56	.53	.39	.47	.53	.43
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1.17**	**5.31**	**5.14**	**4.03**	**4.27**	**4.21**	**4.65**	**4.90**	**4.63**	**4.63**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Virginia 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**446.8**	**1,851.9**	**2,326.7**	**2,412.7**	**2,509.7**	**2,607.2**	**2,850.1**	**2,796.4**	**2,920.6**	**3,035.5**
Primary Energy	206.2	653.6	826.1	735.1	710.4	751.2	823.1	757.4	747.6	762.5
Coal	5.3	6.4	9.3	7.7	10.1	9.0	6.1	7.2	4.1	5.7
Natural Gas	73.8	233.9	342.4	334.3	324.8	340.1	406.7	347.2	368.6	417.7
Petroleum	127.1	413.3	474.4	393.1	375.5	402.1	410.3	403.0	374.9	339.1
Distillate Fuel	77.7	305.3	236.3	243.3	229.4	243.9	237.7	245.6	201.9	192.9
Kerosene	37.1	63.4	170.0	94.9	77.2	94.2	87.9	57.1	59.5	53.0
LPG	12.3	44.7	68.1	54.9	68.9	63.9	84.6	100.3	113.6	93.2
Electricity	240.5	1,198.3	1,500.6	1,677.6	1,799.3	1,856.0	2,027.0	2,039.0	2,173.0	2,273.0
Commercial Sector	**228.6**	**1,161.9**	**1,630.4**	**1,691.8**	**1,771.2**	**1,775.4**	**1,930.6**	**1,981.8**	**R2,042.2**	**2,157.7**
Primary Energy	50.2	247.7	357.6	311.1	310.8	299.6	330.4	338.8	321.3	349.8
Coal	3.1	5.0	7.4	6.4	8.2	7.3	4.9	6.3	3.6	5.1
Natural Gas	28.9	144.9	203.3	186.8	182.8	187.0	217.8	202.3	213.8	252.3
Petroleum	18.2	97.8	146.9	117.8	119.8	105.4	107.7	130.2	103.9	92.5
Distillate Fuel	13.1	61.5	93.7	76.1	65.2	62.4	64.7	84.4	66.8	56.8
Kerosene	.3	1.5	8.3	3.8	5.1	6.7	8.6	5.1	4.7	4.2
LPG	1.4	4.5	10.7	8.6	10.2	9.8	8.2	12.5	14.5	13.0
Motor Gasoline	3.1	19.4	22.4	14.5	20.3	20.7	22.6	23.6	16.1	15.1
Residual Fuel	.2	10.9	11.9	14.7	19.0	5.9	3.6	4.6	1.7	3.4
Electricity	178.4	914.2	1,272.8	1,380.7	1,460.4	1,476.8	1,600.2	1,643.0	1,721.0	1,807.8
Industrial Sector	**207.8**	**1,474.8**	**1,599.0**	**1,387.2**	**1,425.3**	**1,394.1**	**R1,493.6**	**R1,620.8**	**R1,508.0**	**1,547.7**
Primary Energy	132.2	1,007.3	1,032.6	806.6	821.2	766.3	R817.0	R932.4	R848.1	851.1
Coal	42.1	148.4	183.7	175.8	184.4	185.0	181.9	195.8	217.1	191.0
Coking Coal	.3	33.0	45.7	42.1	43.4	42.8	44.0	42.7	44.9	45.4
Steam Coal	41.8	115.4	138.0	133.8	141.0	142.2	137.9	153.1	172.2	145.6
Natural Gas	22.5	161.9	232.5	183.2	195.3	172.3	217.1	263.7	217.6	244.6
Petroleum	67.6	697.0	616.4	447.6	441.5	409.0	R417.9	R472.9	R413.4	415.5
Asphalt and Road Oil	10.2	62.6	132.0	124.2	96.2	77.6	82.4	93.3	76.9	58.5
Distillate Fuel	15.3	111.0	105.7	80.7	82.3	87.8	97.1	102.0	85.4	75.2
Kerosene	1.5	9.0	8.0	5.1	3.2	3.7	4.3	2.7	2.9	1.8
LPG	3.8	20.3	56.1	47.7	56.3	60.5	R40.0	47.1	R61.9	76.6
Lubricants	8.9	36.8	41.0	35.5	32.7	36.3	33.9	35.1	36.2	42.8
Motor Gasoline	9.8	14.6	33.6	25.2	29.5	28.5	34.5	34.8	31.8	31.8
Residual Fuel	8.6	110.9	83.5	46.5	46.1	34.7	41.4	51.3	26.3	35.2
Other	9.6	332.0	156.4	82.6	95.2	80.0	84.4	106.5	91.9	93.5
Electricity	75.5	467.5	566.4	580.5	604.1	627.8	676.6	688.4	659.9	696.6
Transportation Sector	**855.7**	**4,129.1**	**4,235.2**	**3,295.8**	**3,815.2**	**4,047.2**	**4,292.0**	**4,852.5**	**R4,508.0**	**4,517.4**
Primary Energy	855.7	4,127.6	4,232.0	3,291.6	3,811.0	4,043.0	4,288.2	4,848.5	R4,503.9	4,513.3
Coal	.1	–	–	–	–	–	–	–	–	–
Petroleum	855.7	4,127.6	4,232.0	3,291.6	3,811.0	4,043.0	4,288.2	4,848.5	R4,503.9	4,513.3
Aviation Gasoline	3.9	9.9	6.6	6.6	2.8	2.8	3.1	3.3	R5.1	4.4
Distillate Fuel	56.0	475.3	693.2	571.4	655.5	738.2	692.9	828.5	795.7	767.3
Jet Fuel	44.9	444.2	357.1	283.6	327.8	331.6	383.1	489.8	R318.7	294.4
LPG	.3	.8	3.4	1.8	2.5	3.0	2.0	2.1	3.6	3.1
Lubricants	13.3	46.1	51.5	44.6	41.1	45.5	42.5	44.1	45.4	53.6
Motor Gasoline	714.9	3,058.9	3,030.1	2,347.6	2,732.6	2,887.0	3,126.0	3,416.5	3,292.2	3,353.5
Residual Fuel	22.4	92.3	89.9	36.1	48.7	34.9	38.5	64.1	43.2	37.1
Electricity	–	1.5	3.2	4.2	4.2	4.2	3.8	4.0	4.0	4.1
Total Energy	**1,738.8**	**8,617.8**	**9,791.3**	**8,787.5**	**9,521.5**	**9,824.9**	**R10,566.3**	**11,251.5**	**R10,978.9**	**11,258.2**
Primary Energy — Four Sectors	1,244.4	6,036.3	6,448.3	5,144.4	5,653.4	5,860.1	R6,258.6	6,877.1	R6,420.9	6,476.7
Electricity	494.4	2,581.5	3,343.0	3,643.1	3,868.1	3,964.8	4,307.7	4,374.4	4,558.0	4,781.6
Electric Utility Sector [a]	**101.4**	**726.4**	**514.6**	**510.6**	**538.8**	**522.4**	**568.3**	**508.9**	**532.0**	**500.1**
Coal	63.1	238.2	330.9	322.1	336.2	336.3	376.2	323.2	333.0	327.4
Natural Gas	1.3	7.3	5.5	1.7	4.3	2.4	9.8	17.6	18.0	27.2
Petroleum	37.0	388.1	46.7	66.3	89.4	64.8	122.2	48.5	45.8	37.3
Heavy Oil [b]	33.8	361.0	35.7	60.8	82.3	58.2	108.3	32.2	37.6	29.9
Light Oil [b]	1.5	27.1	11.0	5.4	7.0	6.6	13.9	16.4	8.2	7.4
Petroleum Coke	1.8	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	92.8	131.5	120.4	108.9	119.0	60.1	119.6	135.2	108.2
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**1,345.8**	**6,762.6**	**6,962.9**	**5,655.0**	**6,192.2**	**6,382.4**	**R6,826.9**	**R7,386.0**	**R6,953.0**	**6,976.7**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Washington 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.54	1.15	1.74	1.78	1.73	1.62	1.62	1.65	1.65	1.45
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.54	1.15	1.74	1.78	1.73	1.62	1.62	1.65	1.65	1.45
Natural Gas	.71	4.48	5.23	4.53	3.81	3.96	4.02	3.60	3.55	3.70
Petroleum	1.71	7.11	7.64	5.67	5.75	5.57	6.14	7.06	7.16	6.94
Asphalt and Road Oil	.66	3.70	4.17	3.94	3.21	3.41	3.29	3.18	3.40	2.85
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.18	6.68	7.80	5.95	6.22	6.31	7.06	7.98	7.78	7.75
Jet Fuel	.73	6.21	6.03	4.01	4.02	3.79	4.50	5.68	4.76	4.56
Kerosene	1.62	8.53	7.22	4.49	4.76	4.89	6.04	8.97	8.58	8.00
LPG	2.50	6.78	9.11	9.21	8.93	8.98	R9.37	R10.14	R10.74	10.58
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.92	9.92	9.31	7.29	7.36	7.40	8.03	9.45	9.14	9.47
Residual Fuel	.32	3.24	4.53	2.55	2.59	2.17	2.19	2.70	5.18	5.33
Other [a]	.60	2.97	3.43	3.05	2.15	1.95	2.17	2.28	2.09	1.56
Nuclear Fuel	.18	.43	.71	.70	.70	.49	.48	.47	.45	.38
Biomass Fuels at Utilities	.65	–	.79	.32	.95	.87	.79	.61	.76	.83
Primary Energy — Five Sectors [b]	1.42	5.83	5.92	4.72	4.72	4.57	4.98	5.64	5.73	5.53
Electric Utility Fuel [c]	.18	.91	1.17	1.06	1.28	1.13	1.31	1.09	1.16	1.07
Electricity Purchased by End Users	2.02	4.16	9.18	9.41	9.80	10.13	10.34	10.03	9.96	10.13
Total Energy	1.59	5.98	7.67	6.45	6.48	6.52	6.92	7.35	R7.37	7.28
	Expenditures in Millions of Dollars									
Coal	3.2	104.2	163.4	112.7	165.3	160.9	157.5	141.3	147.0	153.6
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	3.2	104.2	163.4	112.7	165.3	160.9	157.5	141.3	147.0	153.6
Natural Gas	97.2	530.5	686.4	510.2	476.0	551.3	627.7	554.3	590.0	610.5
Petroleum	812.2	3,938.8	4,205.7	3,463.7	3,648.8	3,652.0	R4,156.6	R4,917.9	R4,903.7	5,265.8
Asphalt and Road Oil	10.2	50.3	56.4	62.9	48.3	43.5	57.1	52.4	67.0	57.2
Aviation Gasoline	3.8	16.2	10.2	9.7	10.5	8.0	7.9	14.7	11.8	12.5
Distillate Fuel	123.0	715.7	923.8	801.8	766.2	772.8	864.4	1,012.1	902.9	832.0
Jet Fuel	43.3	419.5	522.2	385.1	421.2	440.3	522.5	716.0	R572.7	619.4
Kerosene	2.2	5.8	49.6	19.1	23.2	26.2	24.4	3.8	3.4	2.1
LPG	15.3	33.4	69.3	67.5	91.4	74.8	R93.9	R71.9	R79.3	75.2
Lubricants	20.5	61.2	68.3	59.1	54.5	60.4	56.4	58.5	60.2	71.2
Motor Gasoline	553.3	2,222.4	2,151.5	1,798.4	1,977.9	1,974.4	2,268.1	2,639.3	R2,604.1	2,747.7
Residual Fuel	17.9	327.7	314.2	236.4	213.1	210.7	208.5	269.6	552.2	774.5
Other [a]	22.7	86.5	40.2	23.7	42.5	40.9	53.3	79.6	50.1	74.1
Nuclear Fuel	5.2	9.6	61.4	63.7	41.8	31.6	31.7	29.1	20.4	23.2
Biomass Fuels at Utilities	*	–	2.3	.6	3.4	3.4	3.0	2.1	2.2	3.1
Primary Energy — Five Sectors [b]	917.9	4,583.0	5,119.2	4,151.0	4,335.4	4,399.1	R4,976.5	R5,644.7	R5,663.3	6,056.2
Electric Utility Fuel [c]	-5.2	-95.7	-203.6	-155.9	-194.0	-182.6	-221.5	-157.2	-152.5	-182.7
Electricity Purchased by End Users	316.8	953.4	2,331.7	2,312.1	2,427.3	2,800.5	2,983.8	3,033.7	3,069.4	3,014.8
Total Energy	1,229.4	5,440.7	7,247.3	6,307.1	6,568.6	7,017.0	R7,738.8	R8,521.3	R8,580.1	8,888.3

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
*Value less than 0.05 million dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Washington 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.12**	**5.73**	**9.53**	**9.45**	**9.83**	**9.90**	**10.19**	**10.22**	**9.99**	**10.27**
Primary Energy	1.47	5.99	6.82	5.93	5.78	5.72	6.02	6.02	5.67	5.67
Coal	.95	4.26	3.67	3.79	3.76	3.37	3.66	3.77	5.21	3.76
Natural Gas	1.33	5.05	6.35	5.76	5.25	5.36	5.32	4.87	4.54	4.84
Petroleum	1.57	7.40	7.88	6.28	6.62	6.47	7.61	8.45	8.70	8.40
Distillate Fuel	1.40	7.27	7.76	5.95	6.10	6.03	6.71	7.90	7.80	7.24
Kerosene	2.47	9.80	9.92	7.61	7.80	7.70	8.58	10.10	9.97	9.25
LPG	3.05	8.12	8.46	9.77	10.26	10.31	13.86	12.32	12.62	12.21
Electricity	3.12	5.56	11.14	11.45	12.20	12.45	12.69	12.88	12.79	13.07
Commercial Sector	**1.90**	**5.35**	**7.94**	**8.22**	**8.04**	**7.94**	**8.49**	**8.63**	**8.57**	**9.21**
Primary Energy	1.12	5.03	5.62	4.81	4.51	4.49	4.80	4.65	4.29	4.38
Coal	.52	2.28	2.30	2.22	2.36	2.34	2.38	2.45	2.73	2.72
Natural Gas	1.05	4.59	5.24	4.91	4.36	4.47	4.54	4.02	3.94	4.18
Petroleum	1.21	6.76	6.38	4.82	4.84	4.66	5.65	6.52	5.72	5.91
Distillate Fuel	1.21	6.90	6.53	4.63	4.55	4.53	5.31	6.17	5.38	5.27
Kerosene	.84	7.04	7.02	4.27	4.61	4.71	5.83	6.80	5.93	5.91
LPG	1.19	5.60	9.34	9.06	8.52	8.58	8.09	9.03	9.29	9.26
Motor Gasoline	2.92	9.92	9.31	7.29	7.36	7.40	8.03	9.45	9.14	9.47
Residual Fuel	.33	3.61	4.05	2.07	2.58	2.01	2.33	2.84	2.30	2.26
Electricity	3.21	5.67	10.57	10.95	10.92	11.01	11.47	11.63	11.77	12.15
Industrial Sector	**.67**	**3.40**	**5.40**	**4.58**	**4.50**	**4.96**	**5.35**	**5.00**	**R4.91**	**4.51**
Primary Energy	.55	4.08	4.88	3.52	3.27	3.09	R3.48	R3.47	R3.42	3.09
Coal	.52	2.28	2.30	2.22	2.36	2.34	2.38	2.45	2.73	2.72
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.52	2.28	2.30	2.22	2.36	2.34	2.38	2.45	2.73	2.72
Natural Gas	.38	4.09	4.58	3.49	2.78	2.89	2.84	2.64	2.71	2.82
Petroleum	.67	4.19	5.22	3.65	3.62	3.27	R4.07	R4.16	R4.12	3.30
Asphalt and Road Oil	.66	3.70	4.17	3.94	3.21	3.41	3.29	3.18	3.40	2.85
Distillate Fuel	.73	6.06	6.20	3.78	4.08	4.16	5.16	6.01	5.24	5.23
Kerosene	.84	7.04	7.02	4.27	4.61	4.71	5.83	6.80	5.93	5.91
LPG	1.19	5.60	9.34	9.06	8.52	8.58	8.09	9.03	9.29	9.26
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.92	9.92	9.31	7.29	7.36	7.40	8.03	9.45	9.14	9.47
Residual Fuel	.33	3.36	4.05	2.07	2.58	2.01	2.33	2.84	2.30	2.26
Other	.60	2.97	3.43	3.05	2.15	1.95	2.17	2.28	2.09	1.56
Electricity	.97	2.26	6.23	6.29	6.71	7.68	7.77	7.00	6.72	6.56
Transportation Sector	**2.23**	**7.86**	**8.24**	**6.07**	**6.18**	**6.00**	**6.42**	**7.50**	**R7.57**	**7.48**
Primary Energy	2.23	7.86	8.24	6.07	6.18	6.00	6.42	7.50	R7.57	7.48
Coal	.52	–	–	–	–	–	–	–	–	–
Petroleum	2.23	7.86	8.24	6.07	6.18	6.00	6.42	7.50	R7.57	7.48
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.32	6.72	8.77	6.71	7.22	7.24	7.92	9.04	8.94	8.68
Jet Fuel	.73	6.21	6.03	4.01	4.02	3.79	4.50	5.68	4.76	4.56
LPG	1.19	5.60	9.34	9.06	8.52	8.58	8.09	9.03	9.29	9.26
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.92	9.92	9.31	7.29	7.36	7.40	8.03	9.45	9.14	9.47
Residual Fuel	.30	3.15	5.02	2.86	2.60	2.26	2.18	2.69	5.36	5.43
Electricity	2.16	4.26	8.28	8.39	7.63	8.49	9.19	9.15	9.38	9.81
Total Energy	**1.59**	**5.98**	**7.67**	**6.45**	**6.48**	**6.52**	**6.92**	**7.35**	**R7.37**	**7.28**
Primary Energy — Four Sectors	1.48	6.59	7.11	5.46	5.41	5.27	5.73	6.41	6.43	6.36
Electricity	2.02	4.16	9.18	9.41	9.80	10.13	10.34	10.03	9.96	10.13
Electric Utility Sector [a]	**.18**	**.91**	**1.17**	**1.06**	**1.28**	**1.13**	**1.31**	**1.09**	**1.16**	**1.07**
Coal	–	.96	1.65	1.69	1.67	1.55	1.56	1.58	1.55	1.37
Natural Gas	–	3.43	4.54	2.81	2.50	3.05	5.02	3.03	3.83	3.15
Petroleum	.33	3.93	5.72	2.79	4.03	3.98	2.95	5.09	5.74	4.78
Heavy Oil [b]	.32	3.58	–	3.16	2.82	2.66	2.54	3.05	6.19	6.19
Light Oil [b]	.37	6.40	5.72	2.76	4.10	4.03	4.52	5.14	5.72	4.66
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	.18	.43	.71	.70	.70	.49	.48	.47	.45	.38
Biomass Fuels	.65	–	.79	.32	.95	.87	.79	.61	.76	.83
Primary Energy — Five Sectors [c]	**1.42**	**5.83**	**5.92**	**4.72**	**4.72**	**4.57**	**4.98**	**5.64**	**5.73**	**5.53**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Washington 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**280.8**	**794.5**	**1,447.8**	**1,340.9**	**1,370.4**	**1,480.2**	**1,595.1**	**1,640.6**	**1,679.6**	**1,603.4**
Primary Energy	117.3	330.6	386.0	305.5	297.6	324.2	354.1	374.6	375.6	335.5
Coal	.3	5.5	6.5	2.6	1.5	3.0	2.5	1.9	3.3	2.7
Natural Gas	44.8	158.0	217.8	179.1	161.5	192.4	210.6	202.5	216.3	215.2
Petroleum	72.2	167.2	161.7	123.8	134.5	128.8	140.9	170.1	156.1	117.5
Distillate Fuel	57.4	144.9	140.0	106.4	107.7	106.2	107.3	138.0	112.8	77.1
Kerosene	1.6	3.6	4.8	2.2	1.8	2.6	2.6	2.8	2.6	1.5
LPG	13.2	18.7	16.8	15.2	25.0	20.0	31.0	29.3	40.7	38.9
Electricity	163.5	463.8	1,061.8	1,035.3	1,072.8	1,156.0	1,241.0	1,266.0	1,304.0	1,268.0
Commercial Sector	**116.7**	**502.6**	**1,095.0**	**950.1**	**981.0**	**1,059.4**	**1,080.4**	**1,110.5**	**R1,122.2**	**1,139.7**
Primary Energy	43.0	234.8	411.2	247.2	246.9	281.7	272.8	256.9	239.7	205.3
Coal	.3	5.4	7.6	2.8	1.8	3.9	3.1	2.3	3.2	3.6
Natural Gas	20.4	148.7	193.3	161.7	145.6	168.3	180.2	160.3	169.7	163.7
Petroleum	22.3	80.7	210.4	82.7	99.5	109.5	89.5	94.3	66.8	38.0
Distillate Fuel	15.7	43.1	162.4	65.2	61.7	69.8	52.8	75.2	50.4	25.0
Kerosene	.1	.7	8.2	1.3	21.1	23.2	21.5	.6	.6	.4
LPG	.9	2.3	3.3	2.5	3.7	2.9	3.2	3.8	5.3	5.2
Motor Gasoline	4.7	24.9	17.4	11.8	12.1	10.8	11.0	13.9	9.1	6.5
Residual Fuel	1.0	9.7	19.0	1.8	.9	2.8	1.0	1.0	1.5	.8
Electricity	73.6	267.8	683.8	702.9	734.1	777.7	807.6	853.6	R882.5	934.5
Industrial Sector	**198.1**	**903.4**	**1,316.9**	**1,096.5**	**1,158.6**	**1,374.1**	**R1,478.5**	**R1,508.1**	**R1,429.3**	**1,363.3**
Primary Energy	118.4	681.7	731.1	523.0	538.6	507.6	R543.8	R594.4	R547.0	551.6
Coal	2.7	16.2	10.3	16.4	13.9	12.3	11.8	12.7	11.7	9.2
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	2.7	16.2	10.3	16.4	13.9	12.3	11.8	12.7	11.7	9.2
Natural Gas	32.0	220.5	274.9	169.0	168.6	185.1	193.8	190.8	203.4	213.7
Petroleum	83.7	445.0	445.8	337.6	356.1	310.2	R338.2	R390.8	R331.9	328.7
Asphalt and Road Oil	10.2	50.3	56.4	62.9	48.3	43.5	57.1	52.4	67.0	57.2
Distillate Fuel	19.6	150.7	99.4	75.3	86.6	68.6	110.1	155.2	121.0	102.8
Kerosene	.5	1.5	36.6	15.7	.4	.4	.2	.4	.2	.2
LPG	1.1	10.5	38.0	40.4	55.1	43.2	R52.3	R29.2	R25.1	24.1
Lubricants	8.2	17.6	19.6	17.0	15.6	17.3	16.2	16.8	17.3	20.4
Motor Gasoline	8.4	14.5	33.8	28.4	28.4	26.3	29.4	32.5	38.1	40.1
Residual Fuel	13.1	113.3	121.8	74.1	79.2	70.0	19.5	24.7	13.1	9.7
Other	22.7	86.5	40.2	23.7	42.5	40.9	53.3	79.6	50.1	74.1
Electricity	79.7	221.7	585.8	573.5	620.0	866.5	934.8	913.7	882.3	811.8
Transportation Sector	**633.9**	**3,240.3**	**3,387.6**	**2,919.7**	**3,058.6**	**3,103.3**	**3,584.8**	**4,262.1**	**R4,348.9**	**4,781.8**
Primary Energy	633.9	3,240.3	3,387.3	2,919.3	3,058.3	3,103.0	3,584.4	4,261.7	R4,348.4	4,781.2
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	633.9	3,240.3	3,387.3	2,919.3	3,058.3	3,103.0	3,584.4	4,261.7	R4,348.4	4,781.2
Aviation Gasoline	3.8	16.2	10.2	9.7	10.5	8.0	7.9	14.7	11.8	12.5
Distillate Fuel	30.3	375.8	521.4	554.4	509.7	527.9	593.1	642.8	618.2	626.7
Jet Fuel	43.3	419.5	522.2	385.1	421.2	440.3	522.5	716.0	R572.7	619.4
LPG	.2	1.9	11.1	9.4	7.6	8.7	7.4	9.6	8.2	7.0
Lubricants	12.3	43.6	48.7	42.2	38.8	43.1	40.2	41.7	42.9	50.7
Motor Gasoline	540.2	2,183.1	2,100.2	1,758.2	1,937.4	1,937.2	2,227.8	2,592.9	2,556.9	2,701.1
Residual Fuel	3.8	200.3	173.4	160.5	133.0	137.9	185.5	243.9	537.6	763.9
Electricity	*	*	.4	.3	.3	.3	.4	.4	R.5	.5
Total Energy	**1,229.4**	**5,440.7**	**7,247.3**	**6,307.1**	**6,568.6**	**7,017.0**	**R7,738.8**	**R8,521.3**	**R8,580.1**	**8,888.3**
Primary Energy — Four Sectors	912.6	4,487.4	4,915.6	3,995.0	4,141.3	4,216.6	R4,755.0	R5,487.6	R5,510.7	5,873.5
Electricity	316.8	953.4	2,331.7	2,312.1	2,427.3	2,800.5	2,983.8	3,033.7	3,069.4	3,014.8
Electric Utility Sector [a]	**5.2**	**95.7**	**203.6**	**155.9**	**194.0**	**182.6**	**221.5**	**157.2**	**152.5**	**182.7**
Coal	–	77.1	139.0	90.9	148.1	141.6	140.0	124.4	128.9	138.2
Natural Gas	–	3.3	.4	.4	.2	5.5	43.2	.6	.6	17.8
Petroleum	*	5.7	.6	.3	.4	.4	3.5	.9	.5	.4
Heavy Oil [b]	*	4.5	–	*	*	*	2.4	*	*	*
Light Oil [b]	*	1.1	.6	.3	.4	.4	1.1	.9	.5	.3
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	5.2	9.6	61.4	63.7	41.8	31.6	31.7	29.1	20.4	23.2
Biomass Fuels	*	–	2.3	.6	3.4	3.4	3.0	2.1	2.2	3.1
Primary Energy — Five Sectors [c]	**917.9**	**4,583.0**	**5,119.2**	**4,151.0**	**4,335.4**	**4,399.1**	**R4,976.5**	**R5,644.7**	**R5,663.3**	**6,056.2**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, West Virginia 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Prices in Dollars per Million Btu										
Coal	0.31	1.46	1.61	1.50	1.43	1.44	1.43	1.47	1.51	1.47
Coking Coal	.40	1.86	1.93	1.75	1.72	1.73	1.75	1.80	1.72	1.74
Steam Coal	.28	1.41	1.59	1.49	1.41	1.42	1.41	1.45	1.50	1.46
Natural Gas	.62	3.18	5.28	4.99	4.48	4.08	4.08	4.40	4.59	4.41
Petroleum	1.77	8.06	8.38	5.85	6.29	6.11	6.84	8.03	7.67	7.50
Asphalt and Road Oil	.68	3.58	4.91	4.19	3.23	3.35	3.13	3.07	3.11	2.35
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	–
Distillate Fuel	1.40	7.24	8.01	5.87	5.97	5.88	6.62	8.04	7.16	7.38
Jet Fuel	.73	6.46	6.87	5.14	4.72	4.45	4.99	6.41	5.58	5.31
Kerosene	1.49	8.19	8.10	6.41	6.18	6.17	7.00	8.59	7.62	7.28
LPG	1.67	6.16	9.02	8.02	8.36	10.13	7.84	10.79	11.12	10.79
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.86	9.96	9.19	7.00	7.34	7.52	8.52	9.96	9.92	9.49
Residual Fuel	.58	3.33	4.01	2.57	2.81	2.38	2.65	2.68	1.92	2.18
Other [a]	.87	7.19	7.37	3.95	4.81	3.98	4.82	5.92	5.23	4.96
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	.65	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	.68	3.16	3.22	2.62	2.64	2.59	2.74	3.13	3.17	3.08
Electric Utility Fuel [c]	.26	1.43	1.62	1.50	1.43	1.45	1.43	1.48	1.53	1.48
Electricity Purchased by End Users	3.96	10.58	14.19	14.81	14.77	14.10	14.04	13.90	14.22	14.84
Total Energy	1.13	5.78	7.34	5.99	6.09	5.78	6.08	6.71	6.84	6.86
Expenditures in Millions of Dollars										
Coal	187.2	1,253.8	1,399.0	1,315.2	1,241.9	1,319.5	1,326.2	1,286.3	1,208.8	1,183.9
Coking Coal	55.3	190.2	72.4	89.0	81.0	94.3	91.5	93.1	86.8	75.4
Steam Coal	131.9	1,063.6	1,326.6	1,226.2	1,160.8	1,225.2	1,234.7	1,193.2	1,122.0	1,108.5
Natural Gas	108.3	415.1	510.6	472.4	444.9	434.9	475.4	471.2	R454.7	478.3
Petroleum	383.5	2,380.6	1,950.0	1,376.7	1,518.0	1,537.2	R1,765.0	R2,143.4	R2,012.3	1,949.4
Asphalt and Road Oil	3.9	17.0	14.0	15.7	11.5	19.5	16.9	14.8	10.9	8.6
Aviation Gasoline	.9	3.0	1.9	2.1	1.3	1.4	1.6	1.7	1.5	–
Distillate Fuel	31.9	441.1	451.7	261.1	312.3	310.6	388.4	456.3	400.2	405.4
Jet Fuel	1.2	12.9	9.0	6.3	5.6	6.2	10.6	9.8	R7.3	8.0
Kerosene	2.7	23.0	32.0	21.3	18.2	20.4	20.2	14.4	13.0	13.9
LPG	7.8	77.7	36.9	33.2	36.5	44.0	R42.3	R59.8	R71.3	33.7
Lubricants	21.1	58.4	65.2	56.4	52.0	57.6	53.8	55.8	57.4	67.9
Motor Gasoline	237.6	1,014.2	894.0	686.3	743.9	781.3	871.5	1,021.8	1,007.4	989.9
Residual Fuel	7.5	24.8	22.2	15.5	8.1	8.3	14.9	18.7	9.5	6.4
Other [a]	69.0	708.4	423.1	278.8	328.6	287.8	344.8	490.3	433.7	415.5
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	*	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	679.1	4,049.5	3,859.5	3,164.4	3,204.7	3,291.6	R3,566.7	R3,900.9	R3,675.9	3,611.5
Electric Utility Fuel [c]	-89.9	-997.7	-1,261.8	-1,156.2	-1,093.2	-1,148.1	-1,155.4	-1,108.0	-1,056.7	-1,043.6
Electricity Purchased by End Users	204.3	748.8	1,000.4	1,029.6	1,053.0	1,068.2	1,084.9	1,088.8	1,133.0	1,192.8
Total Energy	793.5	3,800.5	3,598.1	3,037.8	3,164.6	3,211.7	R3,496.2	R3,881.7	R3,752.2	3,760.7

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
*Value less than 0.05 million dollars.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, West Virginia 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1.76**	**6.39**	**9.94**	**9.91**	**9.84**	**9.50**	**9.59**	**10.45**	**R10.73**	**10.75**
Primary Energy	.91	4.11	6.20	5.85	5.53	5.29	5.45	6.30	6.35	6.14
Coal	.66	1.59	1.66	1.37	1.23	1.24	1.29	1.43	1.31	1.15
Natural Gas	.87	3.48	5.99	5.90	5.57	5.11	5.34	6.03	6.06	5.92
Petroleum	1.75	7.36	8.27	6.26	6.15	6.99	6.80	9.09	8.88	8.30
Distillate Fuel	1.37	6.65	7.42	5.65	5.78	5.67	6.34	7.57	7.14	6.60
Kerosene	1.64	8.48	8.82	6.72	6.88	6.74	7.54	9.01	8.49	7.85
LPG	2.49	8.94	9.61	7.26	6.08	11.03	6.99	12.50	13.00	11.46
Electricity	6.41	12.64	17.38	17.84	17.87	17.39	17.31	17.29	17.32	18.08
Commercial Sector	**1.83**	**6.28**	**9.86**	**9.61**	**9.48**	**8.63**	**8.65**	**9.16**	**9.60**	**9.39**
Primary Energy	.69	3.44	5.85	5.11	4.88	4.68	4.84	5.42	5.66	5.15
Coal	.35	1.44	1.43	1.33	1.25	1.23	1.23	1.28	1.29	1.28
Natural Gas	.69	3.24	5.64	5.47	5.10	4.81	4.88	5.44	5.69	5.15
Petroleum	1.57	7.04	7.41	5.20	5.81	5.24	6.15	7.60	6.78	6.58
Distillate Fuel	1.08	6.24	6.62	4.42	4.75	4.56	5.34	6.55	5.64	5.15
Kerosene	.77	6.85	7.18	5.35	4.84	4.93	5.87	7.54	5.95	5.73
LPG	1.45	5.80	8.87	8.22	9.03	9.78	8.15	10.15	10.59	10.04
Motor Gasoline	2.86	9.96	9.19	7.00	7.34	7.52	8.52	9.96	9.92	9.49
Residual Fuel	.86	4.02	4.01	2.57	2.81	2.38	2.65	2.68	1.92	2.18
Electricity	5.81	12.59	16.64	16.95	16.61	16.04	16.06	15.85	16.00	16.68
Industrial Sector	**.66**	**4.32**	**5.22**	**3.95**	**4.05**	**3.66**	**3.87**	**4.31**	**4.27**	**4.26**
Primary Energy	.53	3.90	4.38	3.05	3.16	2.80	3.05	3.56	3.44	3.30
Coal	.38	1.70	1.64	1.53	1.46	1.46	1.46	1.50	1.49	1.48
Coking Coal	.40	1.86	1.93	1.75	1.72	1.73	1.75	1.80	1.72	1.74
Steam Coal	.35	1.44	1.43	1.33	1.25	1.23	1.23	1.28	1.29	1.28
Natural Gas	.45	2.91	4.39	3.85	3.24	2.66	2.71	2.75	2.75	2.71
Petroleum	.96	6.75	7.30	4.41	5.00	4.43	5.06	6.08	5.52	5.22
Asphalt and Road Oil	.68	3.58	4.91	4.19	3.23	3.35	3.13	3.07	3.11	2.35
Distillate Fuel	.71	6.15	6.43	4.78	4.33	4.41	5.25	6.75	5.33	5.13
Kerosene	.77	6.85	7.18	5.35	4.84	4.93	5.87	7.54	5.95	5.73
LPG	1.45	5.80	8.87	8.22	9.03	9.78	8.15	10.15	10.59	10.04
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.86	9.96	9.19	7.00	7.34	7.52	8.52	9.96	9.92	9.49
Residual Fuel	.48	3.33	4.01	2.57	2.81	2.38	2.65	2.68	1.92	2.18
Other	.87	7.19	7.37	3.95	4.81	3.98	4.82	5.92	5.23	4.96
Electricity	2.63	8.58	10.77	11.26	11.26	10.57	10.52	10.44	10.74	11.25
Transportation Sector	**2.67**	**9.61**	**9.14**	**7.05**	**7.31**	**7.42**	**8.26**	**9.71**	**9.52**	**9.27**
Primary Energy	2.67	9.61	9.14	7.05	7.31	7.42	8.26	9.71	9.52	9.27
Coal	.35	–	–	–	–	–	–	–	–	–
Petroleum	2.68	9.61	9.14	7.05	7.31	7.42	8.26	9.71	9.52	9.27
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	–
Distillate Fuel	1.72	8.36	8.76	6.85	7.04	6.86	7.50	8.95	8.23	8.48
Jet Fuel	.73	6.46	6.87	5.14	4.72	4.45	4.99	6.41	5.58	5.31
LPG	1.45	5.80	8.87	8.22	9.03	9.78	8.15	10.15	10.59	10.04
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.86	9.96	9.19	7.00	7.34	7.52	8.52	9.96	9.92	9.49
Residual Fuel	.85	–	4.29	–	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.13**	**5.78**	**7.34**	**5.99**	**6.09**	**5.78**	**6.08**	**6.71**	**6.84**	**6.86**
Primary Energy — Four Sectors	.90	5.20	6.19	4.58	4.71	4.47	4.85	5.59	5.58	5.49
Electricity	3.96	10.58	14.19	14.81	14.77	14.10	14.04	13.90	14.22	14.84
Electric Utility Sector [a]	**.26**	**1.43**	**1.62**	**1.50**	**1.43**	**1.45**	**1.43**	**1.48**	**1.53**	**1.48**
Coal	.25	1.41	1.60	1.50	1.42	1.44	1.43	1.47	1.52	1.47
Natural Gas	.32	2.98	4.78	4.03	3.94	3.89	4.59	5.13	3.63	3.52
Petroleum	.94	6.30	6.00	3.71	4.36	3.96	4.50	5.72	5.37	4.84
Heavy Oil [b]	.94	–	–	–	–	–	–	–	–	–
Light Oil [b]	.94	6.30	6.00	3.71	4.36	3.96	4.50	5.72	5.37	4.84
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	.65	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**.68**	**3.16**	**3.22**	**2.62**	**2.64**	**2.59**	**2.74**	**3.13**	**3.17**	**3.08**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, West Virginia 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**135.3**	**538.5**	**681.3**	**698.0**	**697.3**	**704.1**	**715.0**	**714.8**	**R742.3**	**773.2**
Primary Energy	59.7	253.6	283.2	272.9	255.3	256.2	264.0	267.8	R263.3	271.2
Coal	1.1	2.1	1.2	1.4	1.5	1.2	1.7	2.2	1.1	.9
Natural Gas	51.7	173.6	234.7	229.8	213.1	207.3	213.5	210.6	R211.8	222.7
Petroleum	7.0	77.9	47.3	41.7	40.7	47.6	48.8	54.9	50.3	47.6
Distillate Fuel	2.0	45.3	20.0	18.4	21.4	18.9	23.8	25.3	22.3	17.8
Kerosene	2.5	19.6	19.5	17.3	13.4	15.2	14.8	10.7	9.5	10.9
LPG	2.5	13.0	7.8	6.0	6.0	13.5	10.2	18.9	18.5	18.9
Electricity	75.6	284.9	398.1	425.1	442.0	448.0	451.0	447.0	479.0	502.0
Commercial Sector	**62.5**	**252.4**	**403.6**	**398.0**	**392.7**	**416.0**	**435.6**	**443.3**	**R456.7**	**463.8**
Primary Energy	18.1	95.2	150.2	130.9	123.1	147.0	160.7	168.3	R166.7	160.8
Coal	1.0	3.5	1.8	2.4	2.9	2.2	3.0	3.7	2.0	1.7
Natural Gas	15.3	73.4	103.7	94.2	92.0	116.1	122.3	124.7	R128.6	133.8
Petroleum	1.8	18.3	44.7	34.3	28.2	28.6	35.3	39.9	36.1	25.3
Distillate Fuel	.6	9.5	23.3	19.3	12.5	9.5	15.4	16.9	17.0	9.6
Kerosene	.1	1.4	5.2	1.7	1.6	2.2	2.5	2.0	2.2	1.0
LPG	.3	1.5	1.3	1.2	1.6	2.1	2.1	2.7	2.7	2.9
Motor Gasoline	.8	5.7	14.8	12.0	12.4	12.2	13.8	17.2	13.7	10.9
Residual Fuel	*	.1	.1	.2	.1	2.6	1.5	1.1	.6	.8
Electricity	44.4	157.1	253.4	267.0	269.6	269.0	275.0	275.0	290.0	303.0
Industrial Sector	**327.8**	**1,731.5**	**1,283.3**	**1,082.2**	**1,120.3**	**1,094.1**	**R1,206.2**	**R1,401.5**	**R1,271.1**	**1,218.3**
Primary Energy	243.5	1,424.8	934.4	744.7	778.8	743.0	R847.3	R1,034.6	R907.1	830.5
Coal	97.9	275.7	147.6	164.7	155.0	176.4	177.3	185.3	160.1	147.0
Coking Coal	55.3	190.2	72.4	89.0	81.0	94.3	91.5	93.1	86.8	75.4
Steam Coal	42.6	85.6	75.2	75.7	73.9	82.1	85.7	92.2	73.4	71.6
Natural Gas	41.2	167.9	171.6	147.3	138.8	111.2	139.0	135.2	113.8	121.0
Petroleum	104.5	981.2	615.1	432.8	485.0	455.3	R531.0	R714.2	R633.1	562.4
Asphalt and Road Oil	3.9	17.0	14.0	15.7	11.5	19.5	16.9	14.8	10.9	8.6
Distillate Fuel	4.5	125.3	69.7	51.4	63.6	66.2	78.8	104.3	79.2	64.6
Kerosene	.2	2.0	7.2	2.3	3.2	2.9	2.9	1.7	1.3	1.9
LPG	5.0	62.9	27.2	25.4	28.4	27.6	R29.4	R37.5	R49.5	11.1
Lubricants	15.4	36.6	40.9	35.4	32.6	36.1	33.7	35.0	36.0	42.6
Motor Gasoline	1.7	4.3	11.1	8.4	9.1	9.3	11.1	13.0	13.5	12.4
Residual Fuel	4.8	24.7	22.1	15.4	8.1	5.7	13.4	17.6	8.9	5.7
Other	69.0	708.4	423.1	278.8	328.6	287.8	344.8	490.3	433.7	415.5
Electricity	84.3	306.7	348.9	337.5	341.4	351.2	358.9	366.8	364.0	387.8
Transportation Sector	**267.9**	**1,278.1**	**1,229.9**	**859.7**	**954.3**	**997.4**	**1,139.4**	**1,322.2**	**R1,282.2**	**1,305.4**
Primary Energy	267.9	1,278.1	1,229.9	859.7	954.3	997.4	1,139.4	1,322.2	R1,282.2	1,305.4
Coal	.1	–	–	–	–	–	–	–	–	–
Petroleum	267.7	1,278.1	1,229.9	859.7	954.3	997.4	1,139.4	1,322.2	R1,282.2	1,305.4
Aviation Gasoline	.9	3.0	1.9	2.1	1.3	1.4	1.6	1.7	1.5	–
Distillate Fuel	24.8	236.1	325.9	163.8	205.2	207.7	259.9	297.6	271.0	304.7
Jet Fuel	1.2	12.8	9.0	6.3	5.6	6.2	10.6	9.8	R7.3	8.0
LPG	.1	.3	.7	.6	.5	.8	.6	.7	.7	.8
Lubricants	5.7	21.8	24.3	21.0	19.4	21.5	20.1	20.8	21.4	25.3
Motor Gasoline	235.1	1,004.2	868.1	665.9	722.3	759.8	846.6	991.6	R980.3	966.6
Residual Fuel	*	–	*	–	–	–	–	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**793.5**	**3,800.5**	**3,598.1**	**3,037.8**	**3,164.6**	**3,211.7**	**R3,496.2**	**R3,881.7**	**R3,752.2**	**3,760.7**
Primary Energy — Four Sectors	589.2	3,051.8	2,597.7	2,008.2	2,111.5	2,143.5	R2,411.3	R2,792.9	R2,619.2	2,567.9
Electricity	204.3	748.8	1,000.4	1,029.6	1,053.0	1,068.2	1,084.9	1,088.8	1,133.0	1,192.8
Electric Utility Sector [a]	**89.9**	**997.7**	**1,261.8**	**1,156.2**	**1,093.2**	**1,148.1**	**1,155.4**	**1,108.0**	**1,056.7**	**1,043.6**
Coal	87.1	972.5	1,248.3	1,146.7	1,082.5	1,139.6	1,144.3	1,095.1	1,045.6	1,034.2
Natural Gas	.2	.2	.6	1.2	.9	.3	.6	.7	.5	.7
Petroleum	2.6	25.1	12.9	8.2	9.7	8.2	10.6	12.3	10.6	8.7
Heavy Oil [b]	2.5	–	–	–	–	–	–	–	–	–
Light Oil [b]	*	25.1	12.9	8.2	9.7	8.2	10.6	12.3	10.6	8.7
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	*	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**679.1**	**4,049.5**	**3,859.5**	**3,164.4**	**3,204.7**	**3,291.6**	**R3,566.7**	**R3,900.9**	**R3,675.9**	**3,611.5**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Wisconsin 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.51	1.44	1.76	1.68	1.53	1.53	1.50	1.41	1.41	1.38
Coking Coal	.53	2.27	2.08	–	–	–	–	–	–	–
Steam Coal	.51	1.43	1.76	1.68	1.53	1.53	1.50	1.41	1.41	1.38
Natural Gas	.79	3.43	5.37	5.14	5.03	4.88	4.61	4.56	4.40	4.60
Petroleum	1.89	8.13	8.68	6.63	6.92	6.82	7.56	8.51	8.22	8.01
Asphalt and Road Oil	.76	3.85	4.87	4.09	3.37	3.34	2.94	3.13	3.10	2.59
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.07	6.59	7.66	5.78	6.15	5.96	6.66	7.81	7.21	6.99
Jet Fuel	.74	6.38	6.19	4.45	4.28	4.11	4.63	5.99	5.26	4.64
Kerosene	1.17	7.05	8.20	6.01	6.29	5.90	6.52	7.68	7.11	6.48
LPG	1.88	6.51	8.55	8.14	7.34	7.04	10.18	9.78	8.42	7.97
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.65	9.43	9.33	7.00	7.49	7.55	8.29	9.38	9.18	8.94
Residual Fuel	.57	3.48	4.59	2.99	2.55	2.45	2.40	2.41	2.35	2.23
Other [a]	1.65	8.73	8.73	7.37	7.90	6.86	7.73	7.79	7.38	8.01
Nuclear Fuel	.15	.47	.58	.51	.48	.43	.45	.48	.45	.40
Biomass Fuels at Utilities	.65	1.74	.79	.32	.95	.87	.75	.68	.73	.24
Primary Energy — Five Sectors [b]	1.16	4.42	5.01	4.15	4.14	4.14	4.38	4.63	4.49	4.47
Electric Utility Fuel [c]	.39	1.25	1.42	1.33	1.23	1.21	1.21	1.15	1.15	1.10
Electricity Purchased by End Users	6.02	13.34	16.87	16.97	16.41	16.14	15.99	15.77	16.01	16.12
Total Energy	1.75	6.85	8.61	7.71	7.68	7.51	7.73	8.22	8.05	8.04
	Expenditures in Millions of Dollars									
Coal	196.2	472.2	636.0	623.8	590.9	601.6	589.5	560.2	573.5	550.5
Coking Coal	5.0	12.3	.1	–	–	–	–	–	–	–
Steam Coal	191.2	459.9	635.9	623.8	590.9	601.6	589.5	560.2	573.5	550.5
Natural Gas	267.1	1,184.8	1,634.5	1,408.5	1,374.5	1,515.0	1,491.3	1,371.6	1,420.9	1,494.7
Petroleum	952.8	3,832.2	3,776.2	2,905.3	3,029.5	3,231.3	R3,612.3	R3,971.5	R3,901.6	3,804.3
Asphalt and Road Oil	23.6	77.1	54.6	55.8	53.5	75.8	74.3	76.4	68.5	53.3
Aviation Gasoline	3.6	5.6	5.1	4.6	3.2	3.5	5.4	5.7	4.6	5.2
Distillate Fuel	161.6	863.2	1,007.8	738.9	756.9	838.7	942.2	1,048.6	966.2	926.8
Jet Fuel	6.7	86.1	57.8	39.1	34.8	30.9	34.9	47.9	R39.8	44.9
Kerosene	19.9	8.9	10.9	3.2	4.1	2.3	2.3	2.1	2.0	1.9
LPG	54.3	143.2	164.3	157.5	150.1	153.9	256.6	R233.6	R255.9	223.5
Lubricants	30.6	88.8	99.1	85.8	79.0	87.6	81.8	84.8	87.3	103.2
Motor Gasoline	633.6	2,457.8	2,280.9	1,743.8	1,864.8	1,967.6	2,139.3	2,390.6	R2,405.7	2,361.7
Residual Fuel	8.8	27.6	9.3	14.5	13.8	12.8	12.2	13.2	8.6	8.7
Other [a]	10.0	73.8	86.4	62.3	69.3	58.2	63.4	68.6	63.0	75.1
Nuclear Fuel	.3	50.3	69.2	62.2	59.1	52.7	52.1	57.9	53.4	47.5
Biomass Fuels at Utilities	.1	1.1	.7	.4	1.5	1.5	1.4	1.2	1.2	.4
Primary Energy — Five Sectors [b]	1,416.4	5,540.7	6,116.6	5,000.2	5,055.6	5,402.1	R5,746.7	R5,962.4	R5,950.6	5,897.3
Electric Utility Fuel [c]	-109.2	-494.9	-612.9	-595.6	-571.4	-574.9	-565.7	-544.4	-557.3	-529.2
Electricity Purchased by End Users	501.0	1,669.5	2,601.0	2,674.4	2,491.2	2,609.1	2,613.8	2,620.3	2,760.5	2,772.0
Total Energy	1,808.2	6,715.3	8,104.7	7,078.9	6,975.3	7,436.3	7,794.9	R8,038.3	R8,153.7	8,140.1

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Wisconsin 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**2.06**	**6.85**	**10.03**	**9.78**	**9.55**	**9.20**	**9.49**	**9.80**	**9.59**	**9.64**
Primary Energy	1.33	4.78	6.80	6.17	6.02	5.89	6.31	6.37	6.14	6.11
Coal	1.63	3.92	4.26	3.86	3.72	3.83	3.84	3.37	3.43	3.41
Natural Gas	1.22	3.81	6.41	6.14	5.94	5.84	5.61	5.71	5.57	5.82
Petroleum	1.42	6.82	7.75	6.26	6.23	6.02	8.18	8.17	7.60	6.90
Distillate Fuel	1.21	6.60	7.44	5.72	5.69	5.59	6.14	7.13	6.78	6.19
Kerosene	1.47	8.11	8.45	6.50	6.45	6.35	6.97	8.09	7.69	7.03
LPG	2.07	7.69	8.72	8.05	7.69	7.29	12.12	10.03	8.91	7.99
Electricity	6.75	15.04	19.73	20.07	19.69	19.52	19.56	19.44	19.73	20.25
Commercial Sector	**2.05**	**6.92**	**9.51**	**10.06**	**9.47**	**9.09**	**8.87**	**9.29**	**9.09**	**9.34**
Primary Energy	.84	3.80	5.50	4.93	4.76	4.64	4.60	5.04	4.77	4.90
Coal	.66	1.47	2.11	2.02	1.90	1.95	1.87	1.80	1.78	1.74
Natural Gas	.82	3.43	5.14	4.96	4.74	4.64	4.42	4.72	4.59	4.77
Petroleum	1.08	6.21	6.73	4.92	5.13	4.83	5.35	6.36	5.57	5.56
Distillate Fuel	1.04	6.30	6.43	4.29	4.63	4.40	5.15	5.65	4.88	4.85
Kerosene	.83	5.72	6.98	4.57	5.16	4.37	5.75	7.06	6.17	5.76
LPG	1.35	5.33	8.32	8.25	6.78	6.69	6.59	9.36	7.61	7.93
Motor Gasoline	2.65	9.43	9.33	7.00	7.49	7.55	8.29	9.38	9.18	8.94
Residual Fuel	.59	4.31	4.50	2.90	2.55	2.46	2.40	2.41	2.35	2.23
Electricity	7.28	15.25	18.90	18.78	17.93	17.63	17.33	17.03	17.17	17.46
Industrial Sector	**1.00**	**4.56**	**6.35**	**5.97**	**5.85**	**5.60**	**5.49**	**5.51**	**5.41**	**5.50**
Primary Energy	.76	3.61	4.69	4.10	4.13	3.91	3.79	3.82	3.67	3.74
Coal	.65	1.55	2.11	2.02	1.90	1.95	1.87	1.80	1.78	1.74
Coking Coal	.53	2.27	2.08	–	–	–	–	–	–	–
Steam Coal	.66	1.47	2.11	2.02	1.90	1.95	1.87	1.80	1.78	1.74
Natural Gas	.54	3.12	4.44	4.18	4.32	4.05	3.71	3.37	3.14	3.35
Petroleum	1.14	5.95	7.57	5.73	5.46	4.97	5.21	5.92	R5.76	5.71
Asphalt and Road Oil	.76	3.85	4.87	4.09	3.37	3.34	2.94	3.13	3.10	2.59
Distillate Fuel	.76	5.18	6.30	4.13	4.66	3.94	5.19	6.37	5.56	5.19
Kerosene	.83	5.72	6.98	4.57	5.16	4.37	5.75	7.06	6.17	5.76
LPG	1.35	5.33	8.32	8.25	6.78	6.69	6.59	9.36	7.61	7.93
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.65	9.43	9.33	7.00	7.49	7.55	8.29	9.38	9.18	8.94
Residual Fuel	.57	3.31	4.50	2.90	2.55	2.46	2.40	2.41	2.35	2.23
Other	2.05	8.78	8.84	7.37	7.90	6.86	7.73	7.79	7.38	8.21
Electricity	4.23	10.10	12.64	12.71	12.31	12.01	11.91	11.69	11.81	11.72
Transportation Sector	**2.49**	**8.99**	**9.18**	**6.95**	**7.40**	**7.42**	**8.08**	**9.21**	**R8.98**	**8.74**
Primary Energy	2.49	8.99	9.18	6.95	7.40	7.42	8.08	9.21	R8.98	8.74
Coal	.66	–	–	–	–	–	–	–	–	–
Petroleum	2.49	8.99	9.18	6.95	7.40	7.42	8.08	9.21	R8.98	8.74
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.33	7.28	8.69	6.69	7.15	7.00	7.51	8.79	8.40	8.21
Jet Fuel	.74	6.38	6.19	4.45	4.28	4.11	4.63	5.99	5.26	4.64
LPG	1.35	5.33	8.32	8.25	6.78	6.69	6.59	9.36	7.61	7.93
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.65	9.43	9.33	7.00	7.49	7.55	8.29	9.38	9.18	8.94
Residual Fuel	.55	3.80	4.71	3.60	–	2.37	2.66	2.80	2.29	2.42
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.75**	**6.85**	**8.61**	**7.71**	**7.68**	**7.51**	**7.73**	**8.22**	**8.05**	**8.04**
Primary Energy — Four Sectors	1.38	5.90	6.99	5.80	5.93	5.83	6.13	6.67	6.42	6.38
Electricity	6.02	13.34	16.87	16.97	16.41	16.14	15.99	15.77	16.01	16.12
Electric Utility Sector [a]	**.39**	**1.25**	**1.42**	**1.33**	**1.23**	**1.21**	**1.21**	**1.15**	**1.15**	**1.10**
Coal	.39	1.42	1.71	1.62	1.47	1.46	1.45	1.36	1.36	1.33
Natural Gas	.42	2.94	4.11	3.73	3.92	3.25	3.10	2.93	2.70	2.40
Petroleum	.54	5.35	5.12	3.60	3.97	3.65	4.10	5.26	4.46	3.31
Heavy Oil [b]	.56	4.28	–	–	–	–	–	–	–	–
Light Oil [b]	.67	5.58	5.48	3.60	3.97	3.65	4.10	5.26	4.46	4.64
Petroleum Coke	.36	1.17	1.38	–	–	–	–	–	–	.83
Nuclear Fuel	.15	.47	.58	.51	.48	.43	.45	.48	.45	.40
Biomass Fuels	.65	1.74	.79	.32	.95	.87	.75	.68	.73	.24
Primary Energy — Five Sectors [c]	**1.16**	**4.42**	**5.01**	**4.15**	**4.14**	**4.14**	**4.38**	**4.63**	**4.49**	**4.47**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Wisconsin 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**512.5**	**1,575.9**	**2,233.8**	**2,128.4**	**1,948.2**	**2,115.4**	**2,194.8**	**2,087.9**	**2,236.9**	**2,188.5**
Primary Energy	286.3	878.3	1,136.1	994.8	911.5	1,024.4	1,109.9	1,000.9	1,068.8	1,040.5
Coal	15.5	1.7	1.0	1.1	2.9	2.6	.6	.2	.3	.1
Natural Gas	131.2	473.2	751.6	687.3	617.9	714.7	716.3	654.6	696.1	724.4
Petroleum	139.5	403.4	383.5	306.5	290.7	307.2	392.9	346.0	372.4	316.0
Distillate Fuel	82.3	313.4	278.4	214.2	191.5	212.4	193.0	192.5	202.4	171.5
Kerosene	13.4	5.7	9.3	2.6	3.7	1.9	1.6	1.3	1.3	1.2
LPG	43.9	84.3	95.7	89.6	95.5	92.9	198.4	152.2	168.7	143.4
Electricity	226.2	697.6	1,097.7	1,133.5	1,036.7	1,091.0	1,085.0	1,087.0	1,168.0	1,148.0
Commercial Sector	**229.6**	**868.0**	**1,311.2**	**1,142.3**	**1,100.0**	**1,170.3**	**1,184.1**	**1,199.0**	**1,246.8**	**1,255.7**
Primary Energy	76.1	346.5	531.6	352.5	355.2	392.3	408.1	420.0	426.8	425.7
Coal	11.7	1.2	.9	1.1	2.8	2.4	.5	.1	.3	.1
Natural Gas	45.5	266.9	378.3	277.1	276.0	313.3	311.2	315.2	330.5	343.2
Petroleum	18.8	78.5	152.5	74.3	76.4	76.6	96.3	104.7	96.0	82.5
Distillate Fuel	11.5	61.8	118.8	43.1	48.4	46.2	60.5	60.3	55.7	43.9
Kerosene	.6	1.8	.7	.1	.1	.2	.2	.3	.3	.3
LPG	5.0	10.3	16.1	16.2	14.9	15.0	19.0	25.1	25.4	25.1
Motor Gasoline	.8	3.8	13.9	10.3	11.2	11.4	12.1	15.7	11.9	9.9
Residual Fuel	.9	.8	3.0	4.6	1.9	3.8	4.5	3.3	2.6	3.2
Electricity	153.5	521.5	779.6	789.8	744.8	778.0	776.0	779.0	820.0	830.0
Industrial Sector	**407.6**	**1,390.1**	**1,735.0**	**1,626.4**	**1,602.0**	**1,650.7**	**1,658.1**	**R1,654.7**	**R1,659.8**	**1,692.8**
Primary Energy	286.3	939.7	1,011.4	875.4	892.3	910.5	905.2	R900.3	R887.4	898.8
Coal	78.0	84.6	104.7	100.6	86.9	89.7	86.7	85.0	81.3	77.6
Coking Coal	5.0	12.3	.1	–	–	–	–	–	–	–
Steam Coal	73.0	72.3	104.6	100.6	86.9	89.7	86.7	85.0	81.3	77.6
Natural Gas	77.3	404.2	499.2	437.5	472.1	478.2	457.4	394.8	386.9	420.9
Petroleum	131.0	450.9	407.5	337.3	333.4	342.7	361.2	R420.5	R419.2	400.4
Asphalt and Road Oil	23.6	77.1	54.6	55.8	53.5	75.8	74.3	76.4	68.5	53.3
Distillate Fuel	35.1	108.3	112.5	82.5	83.8	79.6	101.5	133.4	132.8	126.3
Kerosene	5.9	1.3	.8	.5	.3	.2	.5	.4	.3	.4
LPG	5.0	47.0	47.0	47.5	36.7	42.7	R36.2	R52.3	R57.9	51.5
Lubricants	13.6	43.2	48.3	41.8	38.5	42.7	39.8	41.3	42.5	50.3
Motor Gasoline	34.4	80.9	55.7	39.2	39.3	34.5	37.8	38.2	48.1	38.3
Residual Fuel	3.9	19.4	2.2	7.7	12.0	8.9	7.6	9.8	6.0	5.4
Other	9.5	73.7	86.2	62.3	69.3	58.2	63.4	68.6	63.0	74.8
Electricity	121.3	450.4	723.7	751.0	709.7	740.1	752.9	754.3	772.5	794.0
Transportation Sector	**658.5**	**2,881.3**	**2,824.7**	**2,181.8**	**2,325.1**	**2,499.9**	**2,757.9**	**3,096.8**	**R3,010.2**	**3,003.0**
Primary Energy	658.5	2,881.3	2,824.7	2,181.8	2,325.1	2,499.9	2,757.9	3,096.8	R3,010.2	3,003.0
Coal	.1	–	–	–	–	–	–	–	–	–
Petroleum	658.4	2,881.3	2,824.7	2,181.8	2,325.1	2,499.9	2,757.9	3,096.8	R3,010.2	3,003.0
Aviation Gasoline	3.6	5.6	5.1	4.6	3.2	3.5	5.4	5.7	4.6	5.2
Distillate Fuel	32.3	363.6	490.1	393.6	429.2	495.5	583.3	658.9	571.4	583.0
Jet Fuel	6.7	86.1	57.8	39.1	34.8	30.9	34.9	47.9	R39.8	44.9
LPG	.4	1.6	5.5	4.2	3.1	3.3	2.9	4.0	3.8	3.5
Lubricants	17.0	45.5	50.8	44.0	40.5	44.9	41.9	43.5	44.8	52.9
Motor Gasoline	598.4	2,373.2	2,211.3	1,694.2	1,814.3	1,921.7	2,089.4	2,336.7	2,345.7	2,313.4
Residual Fuel	*	5.6	4.1	2.2	–	.1	.1	*	*	.1
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1,808.2**	**6,715.3**	**8,104.7**	**7,078.9**	**6,975.3**	**7,436.3**	**7,794.9**	**R8,038.3**	**R8,153.7**	**8,140.1**
Primary Energy — Four Sectors	1,307.2	5,045.8	5,503.7	4,404.5	4,484.1	4,827.2	R5,181.0	R5,418.0	R5,393.2	5,368.1
Electricity	501.0	1,669.5	2,601.0	2,674.4	2,491.2	2,609.1	2,613.8	2,620.3	2,760.5	2,772.0
Electric Utility Sector [a]	**109.2**	**494.9**	**612.9**	**595.6**	**571.4**	**574.9**	**565.7**	**544.4**	**557.3**	**529.2**
Coal	90.8	384.7	529.4	520.9	498.4	506.9	501.7	474.9	491.6	472.7
Natural Gas	13.1	40.6	5.4	6.7	8.5	8.9	6.4	7.0	7.4	6.3
Petroleum	5.0	18.1	8.2	5.4	4.0	4.9	4.0	3.5	3.8	2.4
Heavy Oil [b]	4.0	1.8	–	–	–	–	–	–	–	–
Light Oil [b]	.5	16.2	8.0	5.4	4.0	4.9	4.0	3.5	3.8	2.2
Petroleum Coke	.5	.1	.2	–	–	–	–	–	–	.2
Nuclear Fuel	.3	50.3	69.2	62.2	59.1	52.7	52.1	57.9	53.4	47.5
Biomass Fuels	.1	1.1	.7	.4	1.5	1.5	1.4	1.2	1.2	.4
Primary Energy — Five Sectors [c]	**1,416.4**	**5,540.7**	**6,116.6**	**5,000.2**	**5,055.6**	**5,402.1**	**R5,746.7**	**R5,962.4**	**R5,950.6**	**5,897.3**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price and Expenditure Estimates by Source, Wyoming 1970, 1980, and 1985-1992

Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Coal	0.16	0.70	1.00	0.98	0.91	0.88	0.89	0.86	0.86	0.79
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.16	.70	1.00	.98	.91	.88	.89	.86	.86	.79
Natural Gas	.38	2.45	4.28	4.01	3.93	3.75	3.82	3.57	3.48	3.17
Petroleum	1.73	7.16	7.67	6.08	5.82	5.98	R6.85	7.58	7.42	7.28
Asphalt and Road Oil	.58	3.66	4.82	4.36	3.21	3.40	2.88	2.71	3.43	3.07
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.11	6.44	7.32	5.81	5.53	5.80	6.66	7.56	7.10	6.76
Jet Fuel	.76	6.59	6.53	4.56	4.61	4.62	5.06	6.45	6.05	5.88
Kerosene	.96	5.76	10.22	5.27	4.37	4.79	5.68	6.66	6.86	5.14
LPG	1.64	5.77	8.13	7.22	6.33	6.21	R7.49	R8.10	R9.68	7.19
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.93	10.28	8.87	6.72	6.88	6.84	7.79	8.66	8.40	8.73
Residual Fuel	.55	3.56	3.14	2.06	1.83	1.65	1.88	2.46	2.26	1.75
Other [a]	.51	2.53	2.37	1.53	1.50	1.45	1.74	2.02	1.72	1.29
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	.84	3.00	2.54	2.30	2.05	2.03	2.28	2.26	R2.21	2.09
Electric Utility Fuel [c]	.14	.59	.93	.93	.88	.85	.85	.84	.84	.76
Electricity Purchased by End Users	4.53	7.45	12.54	13.13	12.91	12.81	12.66	12.37	12.53	12.56
Total Energy	1.31	5.79	6.87	6.12	5.97	6.07	6.45	6.41	6.23	5.85
	Expenditures in Millions of Dollars									
Coal	10.2	187.2	406.6	328.3	389.3	390.5	374.6	395.9	387.8	389.9
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	10.2	187.2	406.6	328.3	389.3	390.5	374.6	395.9	387.8	389.9
Natural Gas	28.4	91.6	176.5	148.5	125.2	131.2	135.2	162.9	179.9	230.6
Petroleum	152.0	1,097.6	825.5	613.3	664.1	682.8	R797.9	R827.3	R773.5	782.5
Asphalt and Road Oil	4.2	28.2	53.6	46.5	31.3	23.6	17.6	17.1	23.1	15.7
Aviation Gasoline	2.8	4.9	2.6	2.1	1.9	2.0	1.6	1.7	1.2	1.1
Distillate Fuel	32.7	496.4	326.9	233.4	282.4	318.0	379.4	422.8	364.6	365.7
Jet Fuel	.5	6.0	5.6	3.7	5.2	5.0	4.5	5.1	R4.1	5.0
Kerosene	1.8	2.0	1.2	.3	.3	.3	.2	.2	.4	.2
LPG	10.8	42.7	51.1	52.8	59.9	43.6	R63.7	R35.5	R40.7	29.1
Lubricants	3.5	18.1	20.2	17.5	16.1	17.9	16.7	17.3	17.8	21.1
Motor Gasoline	90.8	458.9	357.2	252.3	262.6	267.0	309.1	321.4	317.9	340.8
Residual Fuel	2.7	24.0	1.4	1.4	.3	1.2	*	*	*	*
Other [a]	2.1	16.4	5.8	3.3	4.0	4.1	5.0	6.1	3.6	3.8
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels at Utilities	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [b]	190.6	1,376.3	1,408.6	1,090.1	1,178.5	1,204.5	R1,307.7	R1,386.1	R1,341.2	1,402.9
Electric Utility Fuel [c]	-8.9	-140.7	-346.3	-283.5	-345.3	-350.0	-328.6	-349.8	-340.2	-340.1
Electricity Purchased by End Users	46.9	176.1	427.3	433.6	449.3	465.3	466.9	481.6	487.6	487.6
Total Energy	228.5	1,411.7	1,489.7	1,240.2	1,282.6	1,319.8	R1,446.1	R1,517.8	R1,488.7	1,550.4

[a] Includes petroleum coke used at electric utilities.
[b] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.
[c] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.
R=Revised data.
—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Price Estimates by Sector, Wyoming 1970, 1980, and 1985-1992

(Dollars per Million Btu)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**1.45**	**5.58**	**8.12**	**8.13**	**8.12**	**7.84**	**8.57**	**8.43**	**8.56**	**8.62**
Primary Energy	.89	3.42	5.18	4.93	4.90	4.46	5.14	4.96	5.17	4.79
Coal	.66	.87	2.29	1.37	1.44	.95	1.25	1.32	1.16	1.26
Natural Gas	.67	2.66	4.92	4.69	4.45	4.25	4.46	4.40	4.47	4.46
Petroleum	1.93	7.23	7.97	6.69	6.33	6.10	10.05	10.39	10.19	7.57
Distillate Fuel	1.28	6.94	10.07	5.72	3.73	4.29	5.43	6.35	6.05	4.79
Kerosene	1.70	–	12.67	7.20	4.69	5.40	6.83	7.98	7.60	6.02
LPG	1.96	7.25	7.50	6.75	6.44	6.20	10.47	10.72	11.18	8.10
Electricity	7.52	11.66	16.60	17.66	17.90	17.11	17.71	17.55	17.56	17.79
Commercial Sector	**1.10**	**5.94**	**8.84**	**8.71**	**8.30**	**7.91**	**8.23**	**8.37**	**8.24**	**8.71**
Primary Energy	.55	3.95	5.27	4.61	4.10	3.63	3.94	3.97	3.92	3.95
Coal	.42	1.72	1.89	1.47	1.35	1.34	1.36	1.12	1.14	1.13
Natural Gas	.43	2.50	4.83	4.43	4.23	3.90	4.10	4.07	4.07	4.03
Petroleum	1.32	6.70	7.52	5.86	4.78	4.00	5.08	5.98	5.84	5.35
Distillate Fuel	1.06	6.47	7.95	6.40	3.85	3.65	4.09	5.08	4.41	4.01
Kerosene	.86	5.76	8.71	4.87	4.29	4.68	5.43	6.13	6.51	4.95
LPG	1.22	5.07	8.38	7.52	6.22	6.21	6.47	6.34	8.10	6.43
Motor Gasoline	2.93	10.28	8.87	6.72	6.88	6.84	7.79	8.66	8.40	8.73
Residual Fuel	.55	3.59	3.14	2.06	1.83	1.65	1.62	2.46	2.26	–
Electricity	5.28	11.21	15.38	16.02	15.72	15.84	15.45	15.54	15.50	15.26
Industrial Sector	**.75**	**3.79**	**5.34**	**4.67**	**4.49**	**4.70**	**R4.72**	**R4.29**	**R4.31**	**3.82**
Primary Energy	.54	3.62	4.23	3.20	2.77	2.83	3.01	R2.69	R2.86	2.57
Coal	.42	1.72	1.89	1.47	1.35	1.34	1.36	1.12	1.14	1.13
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	.42	1.72	1.89	1.47	1.35	1.34	1.36	1.12	1.14	1.13
Natural Gas	.24	2.32	3.38	3.17	3.20	3.19	3.06	2.94	2.86	2.75
Petroleum	.95	4.91	6.70	4.79	4.00	4.25	R4.77	R4.83	R5.37	4.48
Asphalt and Road Oil	.58	3.66	4.82	4.36	3.21	3.40	2.88	2.71	3.43	3.07
Distillate Fuel	.80	5.44	7.65	4.28	3.77	4.11	4.77	5.39	5.72	4.35
Kerosene	.86	5.76	8.71	4.87	4.29	4.68	5.43	6.13	6.51	4.95
LPG	1.22	5.07	8.38	7.52	6.22	6.21	6.47	6.34	8.10	6.43
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.93	10.28	8.87	6.72	6.88	6.84	7.79	8.66	8.40	8.73
Residual Fuel	.55	3.55	3.14	2.06	1.83	1.65	1.62	2.46	2.26	1.75
Other	.51	2.53	2.37	1.53	1.50	1.45	1.74	2.02	1.72	1.29
Electricity	3.23	5.12	10.15	10.68	10.68	10.67	10.49	10.16	10.24	10.32
Transportation Sector	**2.19**	**8.94**	**8.25**	**6.84**	**6.73**	**6.72**	**7.62**	**8.54**	**8.23**	**8.43**
Primary Energy	2.19	8.94	8.25	6.84	6.73	6.72	7.62	8.54	8.23	8.43
Coal	.42	–	–	–	–	–	–	–	–	–
Petroleum	2.19	8.94	8.25	6.84	6.73	6.72	7.62	8.54	8.23	8.43
Aviation Gasoline	2.17	9.02	9.99	8.41	7.55	7.41	8.28	9.32	8.71	8.54
Distillate Fuel	1.31	7.39	7.05	6.77	6.46	6.48	7.41	8.38	7.92	7.97
Jet Fuel	.76	6.59	6.53	4.56	4.61	4.62	5.06	6.45	6.05	5.88
LPG	1.22	5.07	8.38	7.52	6.22	6.21	6.47	6.34	8.10	6.43
Lubricants	5.08	14.36	17.61	15.59	12.70	14.61	13.30	13.40	15.42	17.88
Motor Gasoline	2.93	10.28	8.87	6.72	6.88	6.84	7.79	8.66	8.40	8.73
Residual Fuel	.54	–	4.01	–	–	–	2.73	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**1.31**	**5.79**	**6.87**	**6.12**	**5.97**	**6.07**	**6.45**	**6.41**	**6.23**	**5.85**
Primary Energy — Four Sectors	1.11	5.61	5.82	4.75	4.63	4.72	R5.22	5.24	R5.00	4.70
Electricity	4.53	7.45	12.54	13.13	12.91	12.81	12.66	12.37	12.53	12.56
Electric Utility Sector [a]	**.14**	**.59**	**.93**	**.93**	**.88**	**.85**	**.85**	**.84**	**.84**	**.76**
Coal	.14	.57	.92	.92	.87	.84	.84	.84	.83	.76
Natural Gas	.22	4.61	4.33	3.80	3.26	3.68	3.48	3.15	3.34	3.20
Petroleum	.67	6.98	6.00	3.87	4.09	3.80	4.15	5.27	4.94	4.79
Heavy Oil [b]	.58	–	–	–	–	–	–	–	–	–
Light Oil [b]	.76	6.98	6.00	3.87	4.09	3.80	4.15	5.27	4.94	4.79
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**.84**	**3.00**	**2.54**	**2.30**	**2.05**	**2.03**	**2.28**	**2.26**	**R2.21**	**2.09**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel oil nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Energy Expenditure Estimates by Sector, Wyoming 1970, 1980, and 1985-1992

(Million Dollars)

Sector and Energy Source	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
Residential Sector	**35.7**	**102.2**	**195.4**	**184.8**	**182.6**	**176.8**	**184.4**	**179.7**	**194.4**	**175.8**
Primary Energy	20.2	46.1	92.6	83.7	82.8	73.8	80.4	76.7	85.4	68.8
Coal	.1	.6	1.5	.8	.9	.8	1.0	1.2	1.3	.8
Natural Gas	12.3	27.5	74.2	62.8	49.9	52.2	55.5	55.6	56.8	51.4
Petroleum	7.9	18.1	17.0	20.1	32.0	20.8	23.9	19.9	27.2	16.5
Distillate Fuel	.1	.9	3.0	.9	.7	.8	1.1	.9	3.1	1.6
Kerosene	.4	–	.6	.1	.1	*	*	.1	.1	*
LPG	7.4	17.1	13.4	19.1	31.2	20.0	22.8	18.9	24.1	14.9
Electricity	15.5	56.1	102.8	101.1	99.8	103.0	104.0	103.0	109.0	107.0
Commercial Sector	**21.2**	**84.0**	**198.3**	**186.0**	**170.6**	**171.0**	**167.3**	**174.4**	**183.8**	**176.4**
Primary Energy	9.4	40.4	76.5	63.2	53.8	51.0	50.2	51.4	54.8	46.4
Coal	.1	2.1	2.3	1.7	1.6	2.2	2.1	1.9	2.4	1.4
Natural Gas	6.1	13.2	46.4	37.4	37.7	35.8	37.0	37.7	39.2	34.2
Petroleum	3.2	25.1	27.8	24.0	14.5	13.0	11.1	11.8	13.2	10.9
Distillate Fuel	.2	16.1	20.4	14.6	6.1	5.7	5.9	6.4	6.2	5.2
Kerosene	.7	.8	.3	*	.1	.1	.1	*	.1	*
LPG	.8	2.1	2.6	3.8	5.3	3.5	2.5	2.0	3.1	2.1
Motor Gasoline	1.3	5.5	3.1	4.3	2.6	2.4	2.6	3.4	3.8	3.6
Residual Fuel	.2	.6	1.4	1.4	.3	1.2	*	*	*	–
Electricity	11.8	43.5	121.8	122.9	116.8	120.0	117.0	123.0	129.0	130.0
Industrial Sector	**59.2**	**490.1**	**566.2**	**465.2**	**451.2**	**447.3**	**R482.6**	**R503.5**	**R535.6**	**574.2**
Primary Energy	39.7	413.6	363.5	255.5	218.5	205.0	R236.7	R247.9	R286.0	323.6
Coal	1.7	49.6	62.2	45.6	44.6	41.0	46.1	46.3	47.7	50.6
Coking Coal	–	–	–	–	–	–	–	–	–	–
Steam Coal	1.7	49.6	62.2	45.6	44.6	41.0	46.1	46.3	47.7	50.6
Natural Gas	9.5	50.0	55.3	47.8	37.3	42.5	42.4	69.3	83.6	144.7
Petroleum	28.5	314.0	246.1	162.2	136.7	121.5	R148.3	R132.3	R154.7	128.3
Asphalt and Road Oil	4.2	28.2	53.6	46.5	31.3	23.6	17.6	17.1	23.1	15.7
Distillate Fuel	8.9	198.0	122.6	61.2	58.3	53.2	63.6	71.3	88.6	68.8
Kerosene	.8	1.3	.3	.2	.2	.1	.1	.1	.1	.2
LPG	2.1	22.0	33.6	28.5	22.3	18.9	R37.6	R14.0	R12.1	11.5
Lubricants	.9	5.0	5.6	4.8	4.4	4.9	4.6	4.8	4.9	5.8
Motor Gasoline	8.5	19.7	24.7	17.7	16.3	16.6	19.7	18.9	22.1	22.5
Residual Fuel	.9	23.4	*	*	*	*	*	*	*	*
Other	2.1	16.4	5.8	3.3	4.0	4.1	5.0	6.1	3.6	3.8
Electricity	19.6	76.5	202.7	209.6	232.7	242.3	245.9	255.6	249.6	250.6
Transportation Sector	**112.4**	**735.4**	**529.6**	**404.2**	**478.1**	**524.7**	**611.8**	**660.3**	**R574.8**	**624.0**
Primary Energy	112.4	735.4	529.6	404.2	478.1	524.7	611.8	660.3	R574.8	624.0
Coal	*	–	–	–	–	–	–	–	–	–
Petroleum	112.3	735.4	529.6	404.2	478.1	524.7	611.8	660.3	R574.8	624.0
Aviation Gasoline	2.8	4.9	2.6	2.1	1.9	2.0	1.6	1.7	1.2	1.1
Distillate Fuel	23.4	276.4	176.1	154.0	214.5	255.6	305.9	341.2	263.2	287.3
Jet Fuel	.5	6.0	5.6	3.7	5.2	5.0	4.5	5.1	R4.1	5.0
LPG	.4	1.4	1.4	1.4	1.1	1.2	.8	.6	1.4	.6
Lubricants	2.6	13.1	14.6	12.7	11.7	12.9	12.1	12.5	12.9	15.3
Motor Gasoline	81.0	433.7	329.4	230.3	243.7	248.0	286.8	299.1	292.0	314.8
Residual Fuel	1.6	–	*	–	–	–	*	–	–	–
Electricity	–	–	–	–	–	–	–	–	–	–
Total Energy	**228.5**	**1,411.7**	**1,489.7**	**1,240.2**	**1,282.6**	**1,319.8**	**R1,446.1**	**R1,517.8**	**R1,488.7**	**1,550.4**
Primary Energy — Four Sectors	181.7	1,235.6	1,062.3	806.6	833.3	854.5	R979.2	R1,036.2	R1,001.0	1,062.8
Electricity	46.9	176.1	427.3	433.6	449.3	465.3	466.9	481.6	487.6	487.6
Electric Utility Sector [a]	**8.9**	**140.7**	**346.3**	**283.5**	**345.3**	**350.0**	**328.6**	**349.8**	**340.2**	**340.1**
Coal	8.3	134.9	340.7	280.2	342.2	346.6	325.4	346.6	336.4	337.0
Natural Gas	.5	.9	.6	.5	.3	.7	.3	.2	.3	.3
Petroleum	.1	5.0	5.0	2.8	2.8	2.7	2.9	3.0	3.5	2.8
Heavy Oil [b]	*	–	–	–	–	–	–	–	–	–
Light Oil [b]	.1	5.0	5.0	2.8	2.8	2.7	2.9	3.0	3.5	2.8
Petroleum Coke	–	–	–	–	–	–	–	–	–	–
Nuclear Fuel	–	–	–	–	–	–	–	–	–	–
Biomass Fuels	–	–	–	–	–	–	–	–	–	–
Primary Energy — Five Sectors [c]	**190.6**	**1,376.3**	**1,408.6**	**1,090.1**	**1,178.5**	**1,204.5**	**R1,307.7**	**R1,386.1**	**R1,341.2**	**1,402.9**

[a] There are no direct fuel costs for hydroelectric, geothermal, wind, photovoltaic, or solar thermal energy.

[b] Heavy oil includes fuel oil nos. 4, 5, and 6, and residual fuel oils. Light oil includes fuel nos. 1 and 2, kerosene, and jet fuel.

[c] Biomass fuels are not included, except those consumed at electric utilities and those added to motor gasoline.

R=Revised data.

—No consumption, including cases where adjustments were made. See explanation of adjustments in Section 6 of Appendix A.

*Value less than 0.05 million dollars.

Note: Totals may not equal sum of components due to independent rounding.

Sources: Data sources, estimation procedures, and assumptions are described in Appendix A.

Appendix A

Documentation

Documentation

Section 1. Overview

This appendix documents data sources and procedures used to develop the estimates in the State Energy Price and Expenditure Data System (SEPEDS) that are presented in the "Statistical Tables" of this report. Information is provided for each of the four major energy sources: coal, natural gas, petroleum, and electricity. The last section describes adjustments for consumption of process fuel and intermediate products. Many of the price estimates used in SEPEDS were developed by the Battelle Pacific Northwest Laboratories under contract to EIA.

Price Estimation Methodologies

Price data in the *State Energy Price and Expenditure Report* are expressed in dollars per million Btu. If the source data are in physical units, they are divided by the appropriate conversion factors to create the Btu prices. Estimated prices are used only when specific State-level prices are not available for a given energy source and sector. In some cases, prices for energy consumed in one sector in a State are assigned to another sector in the same State. Specific examples are: industrial steam coal prices are assigned to the commercial and transportation sectors' steam coal use; industrial kerosene prices are assigned to commercial kerosene uses; industrial liquefied petroleum gases (LPG) prices are assigned to LPG used by the commercial and transportation sectors; industrial lubricants prices are assigned to transportation lubricants uses; and transportation motor gasoline prices are assigned to commercial and industrial use of motor gasoline.

In addition, there are a few cases where State-level prices could not be identified for any economic sector for a given energy source for some or all years. In these instances, a national-level price is used for all States for a given year. The procedures for estimating these national-level prices are presented in the body of the documentation under each energy source as appropriate. The cases where a national-level price is assigned to all States in all years are: transportation use of aviation gasoline; industrial and transportation use of lubricants; and the components of other petroleum products used in the industrial sector.

Finally, within a given energy source and sector where price data are usually available, there are some cases of missing prices. Two general approaches are used to assign or estimate prices in cases where consumption occurs but no price is directly available from the data sources. The first approach is to assign an adjacent State price or the simple average of adjacent States' prices. When this approach is not feasible, the consumption-weighted price from the Census division or region or the Petroleum Administration for Defense district or subdistrict in which the State is located is assigned.

Three State groupings used in the report—U.S. Census regions and divisions, Federal regions, and Petroleum Administration for Defense districts—are shown in Figures A1, A2, and A3, respectively, on the following pages. Throughout the documentation, the term "State" includes the District of Columbia. States are often designated by the two-letter postal code abbreviations shown in the map legends.

Expenditures

Energy consumption estimates used to calculate expenditures in SEPEDS are taken from the Energy Information Administration (EIA) *State Energy Data Report 1992, Consumption Estimates*, DOE/EIA-0214(92), published in May 1994. The data system from which the consumption report is developed is called the State Energy Data System (SEDS). Full documentation of SEDS data sources and the meth-

Note: Throughout this report, the term "State" includes the District of Columbia.

ods used to estimate energy consumption are described in the consumption report.

To calculate energy expenditures, SEDS consumption is adjusted to remove quantities of process fuel and intermediate products used in the industrial and transportation sectors that are not purchased directly by end users. Energy expenditures, in million dollars, are calculated by multiplying SEPEDS prices for each fuel in dollars per million Btu times the SEDS adjusted consumption for the fuel in billion Btu.

End-Use Sector, State, and National Consumption-Weighted Average Prices

Aggregated prices shown in this report are the consumption-weighted averages of the various energy sources included in the aggregation. The SEPEDS calculation is performed by summing the expenditures for the energy sources and dividing by the sum of the corresponding consumption values. For example, the average price for residential petroleum is the sum of residential expenditures for distillate fuel oil, kerosene, and liquefied petroleum gas divided by the sum of residential consumption of those fuels.

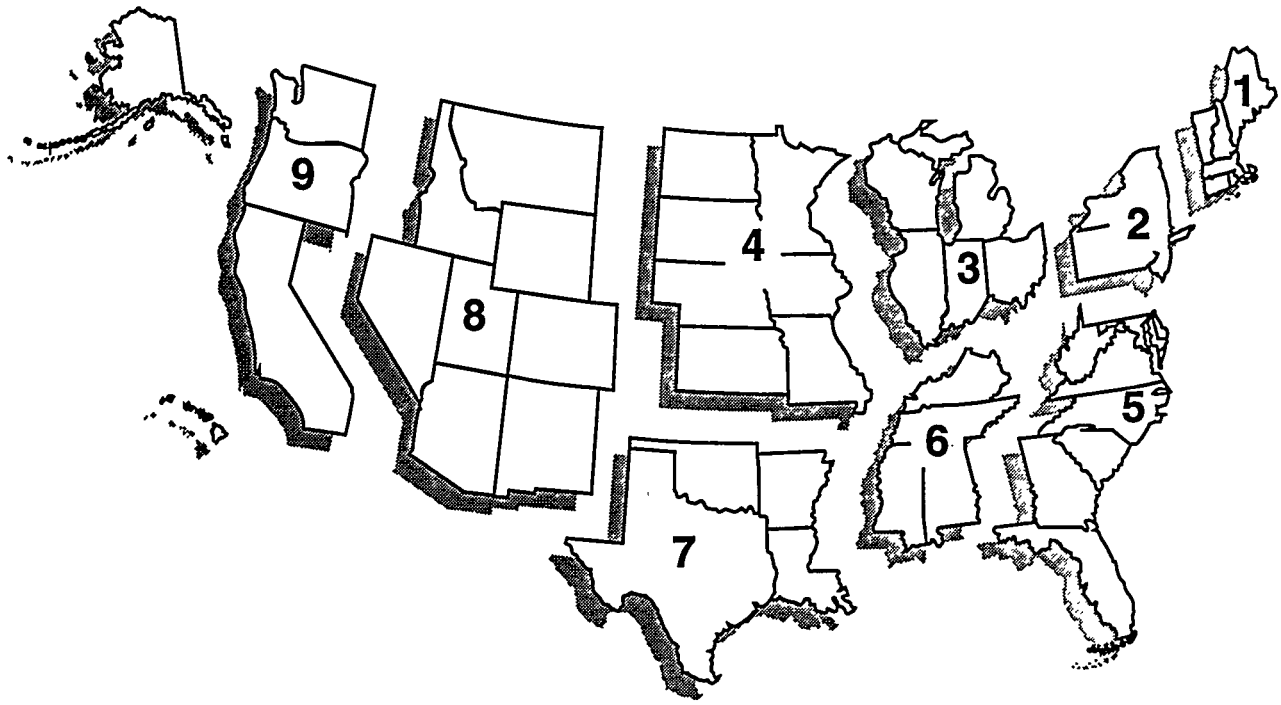
Primary Energy and Electricity. Within each end-use sector, the sum of all fuels used directly as energy, i.e., coal, natural gas, and petroleum products, is called primary energy. Electricity is considered a secondary energy source because it is generated from the primary energy sources consumed by electric utilities. Within each sector, the primary energy price is calculated by summing the expenditures for coal (the sum of coking coal and steam coal), natural gas, and petroleum (the sum of all petroleum products used by the sector) and dividing by the sum of all the consumption for those fuels. The average price of all energy consumed by each sector is the sum of the expenditures for primary energy and electricity divided by the sum of the consumption of the primary energy sources and electricity.

State and National Totals. The price for "Primary Energy – Four Sectors" is the sum of the residential, commercial, industrial, and transportation sectors' expenditures for primary energy fuels divided by the sum of the end-use sectors' consumption of the primary energy sources. The total electricity price is the sum of electricity expenditures for the four sectors divided by the four sectors' electricity consumption. The "Total Energy" average price, then, is the sum of the four sectors' primary energy and electricity expenditures divided by the corresponding consumption values.

Electric Utility Sector. Electric utilities comprise a fifth energy consuming sector, although they are not considered an end-use sector. The average price paid by electric utilities for primary energy sources is the sum of their expenditures for coal, natural gas, petroleum products, nuclear fuel, and biomass fuels divided by the quantities consumed.

Primary Energy – Five Sectors. The average price for the "Primary Energy – Five Sectors" shown in the *SEPER* tables is the sum of the four end-use sectors' and electric utility sector expenditures for coal, natural gas, petroleum, and other fuels divided by the sum of five sectors' consumption of those fuels. The distinction between this average price and the "Total Energy" average price is that this price includes all fossil and other fuels consumed, including those used to generate electricity. The "Total Energy" price is the average price of fuels consumed directly as energy by the four end-use sectors and the much higher price of the four sectors' electricity consumption.

Figure A1. U.S. Census Regions and Divisions



Region 1
Northeast

Division 1
(New England)
Connecticut (CT)
Maine (ME)
Massachusetts (MA)
New Hampshire (NH)
Rhode Island (RI)
Vermont (VT)

Division 2
(Middle Atlantic)
New Jersey (NJ)
New York (NY)
Pennsylvania (PA)

Region 2
Midwest

Division 3
(East North Central)
Illinois (IL)
Indiana (IN)
Michigan (MI)
Ohio (OH)
Wisconsin (WI)

Division 4
(West North Central)
Iowa (IA)
Kansas (KS)
Minnesota (MN)
Missouri (MO)
Nebraska (NE)
North Dakota (ND)
South Dakota (SD)

Region 3
South

Division 5
(South Atlantic)
Delaware (DE)
District of Columbia (DC)
Florida (FL)
Georgia (GA)
Maryland (MD)
North Carolina (NC)
South Carolina (SC)
Virginia (VA)
West Virginia (WV)

Division 6
(East South Central)
Alabama (AL)
Kentucky (KY)
Mississippi (MS)
Tennessee (TN)

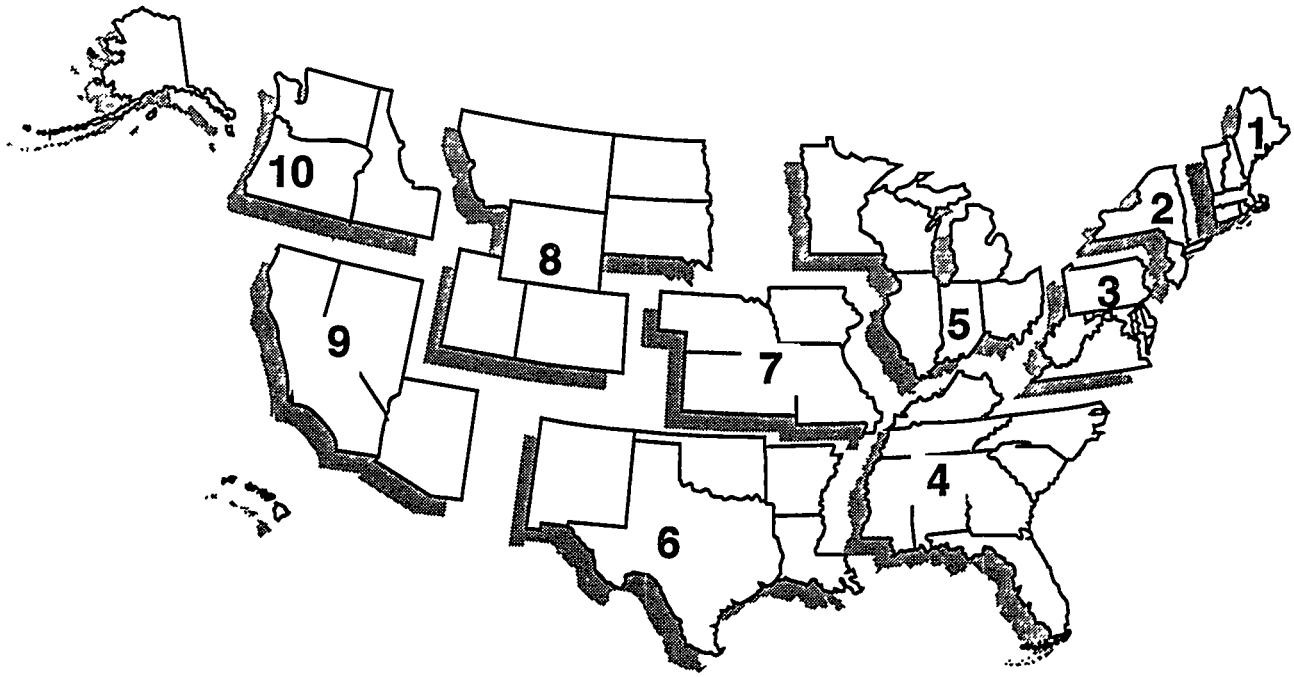
Division 7
(West South Central)
Arkansas (AR)
Louisiana (LA)
Oklahoma (OK)
Texas (TX)

Region 4
West

Division 8
(Mountain)
Arizona (AZ)
Colorado (CO)
Idaho (ID)
Montana (MT)
Nevada (NV)
New Mexico (NM)
Utah (UT)
Wyoming (WY)

Division 9
(Pacific)
Alaska (AK)
California (CA)
Hawaii (HI)
Oregon (OR)
Washington (WA)

Figure A2. Federal Regions



Region 1
New England
Connecticut (CT)
Maine (ME)
Massachusetts (MA)
New Hampshire (NH)
Rhode Island (RI)
Vermont (VT)

Region 2
New York/New Jersey
New Jersey (NJ)
New York (NY)

Region 3
Mid Atlantic
Delaware (DE)
District of Columbia (DC)
Maryland (MD)
Pennsylvania (PA)
Virginia (VA)
West Virginia (WV)

Region 4
South Atlantic
Alabama (AL)
Florida (FL)
Georgia (GA)
Kentucky (KY)
Mississippi (MS)
North Carolina (NC)
South Carolina (SC)
Tennessee (TN)

Region 5
Midwest
Illinois (IL)
Indiana (IN)
Michigan (MI)
Minnesota (MN)
Ohio (OH)
Wisconsin (WI)

Region 6
Southwest
Arkansas (AR)
Louisiana (LA)
New Mexico (NM)
Oklahoma (OK)
Texas (TX)

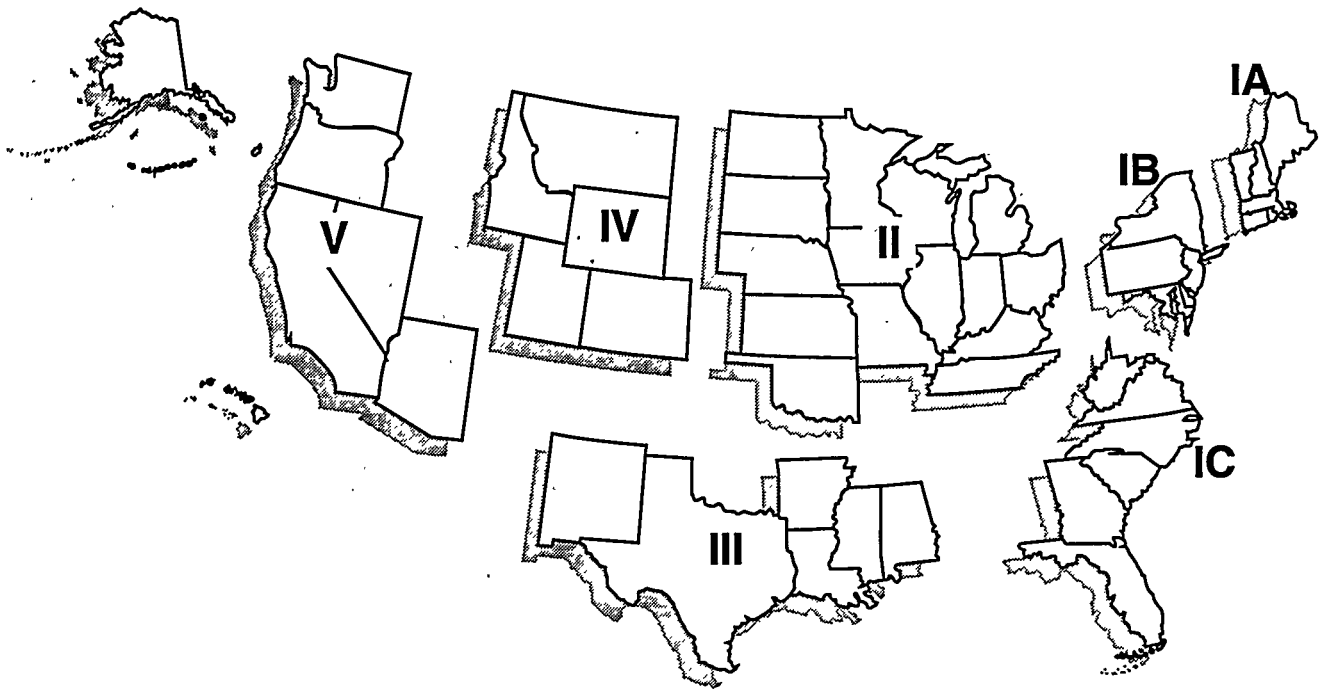
Region 7
Central
Iowa (IA)
Kansas (KS)
Missouri (MS)
Nebraska (NE)

Region 8
North Central
Colorado (CO)
Montana (MT)
North Dakota (ND)
South Dakota (SD)
Utah (UT)
Wyoming (WY)

Region 9
West
Arizona
California (CA)
Hawaii (HI)
Nevada (NV)

Region 10
Northwest
Alaska (AK)
Idaho (ID)
Oregon (OR)
Washington (WA)

Figure A3. Petroleum Administration for Defense Districts



District IA

Connecticut (CT)
Maine (ME)
Massachusetts (MA)
New Hampshire (NH)
Rhode Island (RI)
Vermont (VT)

District IB

Delaware (DE)
District of Columbia (DC)
Maryland (MD)
New Jersey (NJ)
New York (NY)
Pennsylvania (PA)

District IC

Florida (FL)
Georgia (GA)
North Carolina (NC)
South Carolina (SC)
Virginia (VA)
West Virginia (WV)

District II

Illinois (IL)
Indiana (IN)
Iowa (IA)
Kansas (KS)
Kentucky (KY)
Michigan (MI)
Minnesota (MN)
Missouri (MO)
Nebraska (NE)
North Dakota (ND)
Ohio (OH)
Oklahoma (OK)
South Dakota (SD)
Tennessee (TN)
Wisconsin (WI)

District III

Alabama (AL)
Arkansas (AR)
Louisiana (LA)
Mississippi (MS)
New Mexico (NM)
Texas (TX)

District IV

Colorado (CO)
Idaho (ID)
Montana (MT)
Utah (UT)
Wyoming (WY)

District V

Alaska (AK)
Arizona (AZ)
California (CA)
Hawaii (HI)
Nevada (NV)
Oregon (OR)
Washington (WA)

Section 2. Coal

Coal prices are developed for the following categories: coking coal; steam coal (all noncoking coal); and coal coke, imports and exports.

Coking coal, used in the industrial sector only, is a high-quality bituminous coal that is used to make coal coke. Steam coal, which may be used by all sectors, includes anthracite, bituminous coal, subbituminous coal, and lignite. In the industrial sector, coal consumption is the sum of coking coal and steam coal. The industrial coal price is the quantity-weighted average price of these two components.

Imports and exports of coal coke are confined to the national level and are accounted for in the industrial sector. Coal coke imports and exports are reported separately, and their prices and expenditures are not merged with other coal prices and expenditures.

Coking Coal

Coking coal is generally more expensive than steam coal; therefore, it is identified separately in developing the price estimates. Coking coal prices are those paid at coke plants for coal received, and probably include taxes, although it is not clear from the source data collection forms. Analysts familiar with the survey believe that respondents would report the total cost of the coal (including cost, insurance, freight, and taxes) because that value is typically carried as the total expense in their bookkeeping systems.

Physical Unit Prices: All Years

Source publications contain physical unit prices for States or for groups of States. Individual State prices are used directly for their respective States. Group prices are assigned to each State within the group. Wherever individual State prices or State group prices are unavailable, prices are assigned from adjacent or nearby States or from States with similar coal use patterns as shown in Table A1.

Table A1. Coking Coal State Group Price and Adjacent State Price Assignments

State	Years	State Prices Assigned
CA	1970-1982	CA, CO, UT
CO	1970-1982	CA, CO, UT
IL	1986-1992	IN
KY	1970-1987	KY, MO, TN, TX
	1988-1992	OH
MD	1970, 1971	MD, NJ, NY
	1983-1991	PA
MI	1979	MI, MN, WI
	1980-1985, 1987	MI, WI
	1988-1991	OH
MN	1970-1978	MN, WI
	1979	MI, MN, WI
MO	1970-1987	KY, MO, TN, TX
	1988	AL
NJ	1970, 1971	MD, NJ, NY
NY	1970, 1971	MD, NJ, NY
	1972-1982	MD, NY
	1983-1992	PA
TN	1970-1987	KY, MO, TN, TX
	1988-1991	AL
TX	1970-1987	KY, MO, TN, TX
UT	1970-1982	CA, CO, UT
	1983-1986	TX
	1988-1992	IN
VA	1970, 1971, 1976, 1977	WV
	1978-1982	VA, WV
	1983-1986	KY
	1987-1992	OH
WI	1970-1978	MN, WI
	1979	MI, MN, WI
	1980-1985, 1987	MI, WI
WV	1978-1982	VA, WV
	1983-1986	KY
	1987-1992	OH

Btu Prices: All Years

Btu prices for States are calculated from the physical unit prices and the constant conversion factor for coking coal. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from the State Energy Data System (SEDS).

Data Sources

Prices

1981 forward: Energy Information Administration, *Quarterly Coal Report*, October- December issue, Table A3 (1981-1991) and Table 39 (1992).

1977-1980: Energy Information Administration, *Coke and Coal Chemicals*, Table 19 (1977), Table 15 (1978), and Table 7 (1979, 1980).

1970-1976: Bureau of Mines, U.S. Department of the Interior, *Minerals Yearbook*, "Coke and Coal Chemicals" chapter, Table 22.

Consumption

1970 forward: Energy Information Administration, State Energy Data System, coking coal consumption.

Conversion Factor: All Years

26.80 million Btu per short ton.

Steam Coal

Steam coal is used in all sectors. Price data are generally available in the electric utility, residential, and industrial sectors. However, no price data are directly available in the transportation and commercial sectors. The industrial sector steam coal prices are assigned as price estimates in these two sectors. Data sources and computational procedures for estimating coal prices are discussed by sector. Estimates of the amount of steam coal consumed by sector are taken from SEDS and are adjusted for process fuel consumption in the industrial sector. (See the "Consumption Adjustments for Calculating Expenditures" section on page 253.)

Electric Utility Sector

Btu Prices: 1973 Forward

State Btu prices, including all taxes, are taken from *Cost and Quality of Fuels for Electric Utility Plants (C&Q)* for 1973 forward and are converted from cents to dollars per million Btu. Where individual State prices are unavailable, quantity-weighted Census division prices are assigned as shown in Table A2.

Btu Prices: 1970 Through 1972

Btu prices for States are taken from the *Statistical Yearbook* and are converted from cents to dollars. DE, DC, and MD are each assigned the combined price for the three States. The steam coal electric utility sector AK price for 1971 is estimated as discussed below.

Alaska Prices: All Years

Since *C&Q* data do not cover AK, Btu prices for AK are taken from other sources or estimated for 1971 and for 1973 forward. For the years 1970, 1972, 1974, 1976, 1977, and 1979 through 1992, prices are taken directly from the *Statistical Yearbook*. Prices for 1971, 1973, 1975, and 1978 are estimated from the *Statistical Yearbook* prices for the United States and the average ratio of AK-to-U.S. prices for the years when AK prices are available. The 1971 and 1973 estimated prices are based on the average ratio for 1970 and 1972, while the 1975 and 1978 estimated prices are based on the average ratio for 1974, 1976, 1977, and 1979.

U.S. Prices: All Years

U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Data Sources

Prices

1973 forward: Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants*, Table 3 (1973-1979), Table 51 (1980-1982), Table 50

Table A2. Electric Utility Sector Price Assignments, 1973 Forward

State	Years	State/Census Division Prices Assigned
CT	1975-1979	New England
DC	1976	MD, VA
OK	1973, 1974	West South Central
	1975	CO, KS, MO, NM, TX
OR	1983, 1989	Pacific Contiguous
RI	1974	MA
VT	1980, 1983-1986	New England

(1983, 1984), Table 40 (1985-1989), Table 7 (1990, 1991), and Table 2 (1992).

1970 forward: Edison Electric Institute, *Statistical Yearbook of the Electric Utility Industry*, table titled, "Analysis of Fuel for Electric Generation: Total Electric Utility Industry" (1970-1988), Table 29 (1989 forward).

Consumption

1970 forward: Energy Information Administration, State Energy Data System, electric utility sector coal consumption.

Conversion Factors: All Years

Btu prices are taken directly from the data sources; no explicit conversion factors are used.

Residential Sector

Residential sector steam coal prices are the average delivered prices for coal purchased by residential customers and include taxes.

Prices: 1979 Forward

Residential steam coal Btu prices for 1979 forward are not available. The residential steam coal prices calculated for 1974 through 1978 from *Gas Househeating Survey (GHS)* and the average Btu spot prices from the *Cost and Quality of Fuels for Electric Utility Plants (C&Q)* for 1974 through 1978 are used to estimate a regression equation. Electric utility coal spot prices from *C&Q* for 1979 forward are converted from cents per million Btu to dollars per million Btu and are used in the regression equation to estimate residential steam coal prices for 1979 forward. AK residential coal prices are estimated by using a different methodology, described on page 188.

Several States are missing *C&Q* spot prices, both in the 1974 through 1978 data and in the 1979 forward data used to calculate prices. For these missing data, *C&Q* prices are assigned from other States for use in the regression as shown in Table A3.

Price estimates for 1974 through 1978 for some States are not available because there was no consumption. To calculate prices for 1979 forward, these States are assigned the final prices from selected States as shown in Table A4. Because the *C&Q* spot price for ND in 1991 and 1992, when used in the regression, results in a negative number, the MN final price is assigned to ND.

Table A3. Residential Sector Coal Spot Price Assignments from *C&Q*, 1979 Forward

State	Years	State Prices Assigned
CO	1979, 1981	KS
CT	1975	NY
	1976-1979	NH
	1980-1987	MA
DC	1976-1992	MD
ID	1974, 1979-1982	NV
	1975-1977	SD
	1978	ND
	1983-1992	CO
MA	1975	VT
	1976-1979	NH
ME	1974, 1975, 1981, 1983	VT
	1976-1980, 1982	NH
	1984-1992	MA
MT	1974, 1975, 1978	ND
	1976, 1977	SD
	1979-1982	NV
	1986, 1990, 1992	CO
ND	1976, 1977	SD
	1979-1988, 1990	MN
NH	1974, 1975, 1981, 1983	VT
	1984, 1985	MA
NV	1975-1978, 1983-1989, 1992	CO
RI	1974	CT
	1975	VT
	1976-1979	NH
	1980-1992	MA
SD	1978, 1984	ND
	1979-1983, 1986, 1987, 1989, 1991, 1992	MN
UT	1975-1978, 1980, 1983	CO
	1979	NV
VT	1976, 1980	NH
	1984-1992	MA
WA	1970	OR
	1974-1978, 1983-1985	CO
	1979-1982	NV
WY	1974-1976, 1978, 1982, 1983, 1985	CO

In addition, several States are assigned the simple average of the final prices of adjacent States as shown in Table A4.

Prices: 1971 Through 1978

For 1971 through 1978, Btu steam coal prices are calculated by using data from *GHS*. The price for a State is equal to the simple average of the city/utility

Table A4. Residential Sector Spot Coal Final Price Assignments, 1979 Forward

State	Years	State and Averaged Final Prices Assigned
AR	1980, 1982, 1984, 1985, 1987-1992	AL
	1981	MO, OK, TN, TX
	1983	MO, MS, OK, TN
AZ	1982, 1984, 1985	CA, NM, NV, UT
	1987, 1988, 1990-1992	UT
CA	1979-1985	NV
	1987-1992	WA
FL	1980-1992	GA
LA	1980, 1982, 1984, 1986, 1988, 1991	AL
MS	1979, 1980, 1983, 1984, 1986-1992	AL
	1985	AL, AR, TN
MT	1986-1989	WY
NM	1979-1992	CO
OK	1979-1992	CO
OR	1979, 1980, 1982-1992	WA
	1981	CA, ID, NV, WA
TX	1980-1982, 1985-1992	CO

Table A5. Residential Sector Spot Coal Price Assignments, 1971-1978

State	Years	State Assigned or Averaged Prices
AL	1971	TN
AR	1977, 1978	AL
CA	1971, 1972, 1974, 1978	NV
DC	1971-1978	MD
DE	1971, 1972, 1974, 1976, 1977	MD
GA	1971	NC, TN
	1972	AL, NC, TN
ID	1977	MT, UT, WY
KS	1971, 1972	CO, MO
MN	1971	IA, ND, WI
	1972	IA, WI
MS	1978	AL
MT	1971	ID, ND, WY
	1972, 1973	ID, WY
ND	1972	IA, WI
	1973	MN, SD
	1974	MN, MT, SD
NE	1971, 1972	CO, IA, MO, WY
	1975	CO, IA, KS, MO, SD, WY
NJ	1971, 1972, 1974, 1977, 1978	DE, NY, PA
NM	1971	CO
NV	1971, 1972, 1975	ID, UT
	1973	ID, OR, UT
OK	1971-1978	CO
OR	1971-1978	WA
SC	1971, 1972	NC
SD	1971	IA, ND, WY
	1972	IA, WY
TX	1971-1974, 1977	CO
UT	1974, 1978	CO, ID, NV, WY
WA	1971, 1972, 1974	ID
	1977	MT, UT, WY
WV	1971, 1972	KY, MD, OH, PA, VA

price observations for that State. For 1971 and 1972, *GHS* reports physical unit prices rather than Btu prices (as published for 1973 through 1978) and, therefore, the State-level conversion factors for this sector from SEDS are used to convert to Btu prices for those years. AK residential coal prices are estimated by using a different methodology described on page 188.

A simple average of price observations in CT, MA, ME, NH, RI, and VT is assigned to each of these States. To impute other missing prices in the 1971 through 1978 period, States are assigned simple averages of adjacent State prices or are directly assigned the single price of an adjacent or nearby State as listed in Table A5.

Prices: 1970

Since State-level coal price data for 1970 are not available from either *GHS* or *C&Q*, the 1970 residential sector coal prices are calculated by using the 1971 through 1978 data from the *Statistical Yearbook* for the 39 States with some reported coal use from 1971 through 1983 and regression analysis.

For estimating the 1970 prices, States missing *Statistical Yearbook* data are assigned prices as follows: ID/1970 through 1978 from MT; MA/1976 through 1978 from CT; ME/1970 through 1978 from NH; RI/1973, 1975 through 1978 from CT; and WA/1970 through 1972 from OR. DC, DE, and MD are all assigned the combined *Statistical Yearbook* price for those States. Wherever individual State prices are unavailable, prices are assigned from an adjacent or nearby State as follows: CA from NV; NM from CO; OK from CO; OR from WA; and TX from CO. AK residential coal prices are estimated by using a different methodology described below.

Alaska Prices: All Years

AK's Btu prices for 1981 through 1986 and 1990 forward are estimated from the WA State prices during that period. The average ratio of AK-to-WA prices during 1970 through 1977 is applied to the WA price each year to estimate the AK price for the year. There is no price for AK in 1978 through 1980 and 1987 through 1989 because the State had no reported consumption during those years.

AK physical unit prices for 1970 through 1977 are estimated by using the ratio of AK-to-U.S. utility sector prices.

U.S. Prices: All Years

U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Data Sources

Prices

1974 forward: Energy Information Administration, *Cost and Quality of Fuels for Electric Plants*, average spot coal prices, Table 2 (1974-1979), Table 44 (1980-1982), Table 49 (1983, 1984), Table 39 (1985-1989), Table 8 (1990, 1991), and Table 3 (1992).

1971-1978: American Gas Association, *Gas Househeating Survey*, table titled, "Competitive Fuel Prices."

1970-1978: Edison Electric Institute, *Statistical Yearbook of the Electric Utility Industry*, Table 43S.

Consumption

1970 forward: Energy Information Administration, State Energy Data System, residential sector coal consumption.

Conversion Factors: 1971, 1972

Energy Information Administration, *State Energy Data Report 1992, Consumption Estimates*, Table D8.

Commercial Sector

Commercial sector prices are assigned from industrial steam coal prices. States without physical unit industrial steam coal prices were assigned the prices from adjacent States as shown in Table A6. The Btu price for RI/1982 is calculated by using the RI/1981 conversion factor and for RI/1990 by using the U.S. average anthracite factor. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Table A6. Commercial Sector Final Price Assignments 1980 Forward

State	Years	State Prices Assigned
CT	1980	MA
DC	1980-1992	MD
OK	1990	KS
RI	1982, 1983, 1990-1992	MA

Industrial Sector

For 1980 forward, prices are based on the average price of coal receipts at manufacturing plants. For 1970 through 1979, prices are based on the average cost of coal sold to manufacturing firms.

Physical Unit Prices: 1980 Forward

For 1984 forward, State prices are taken from the *Quarterly Coal Report* (*QCR*). The annual price is estimated as the average of the quarterly prices weighted by the quarterly receipts. For 1980 through 1983, prices are taken directly from EIA-3 data. Published prices in average cost per ton are used directly when available, while missing prices are estimated by using simple averages or price assignments from adjacent States. Although it is not clear from the source data collection forms, it is assumed that the prices include taxes. Analysts familiar with the survey believe that respondents would report the total cost of the coal (including cost, insurance, freight, and taxes) because that value is typically carried as the total expense in their bookkeeping systems.

Missing State data are estimated by using simple averages of the published data for adjacent States. In a few cases, only a single adjacent State or Census division price is available for the estimation. The adjacent State and Census division price assignments used for estimations are shown in Table A7.

Table A7. Industrial Sector Steam Coal Price Estimates for 1980 Forward

State	Years	Prices Used in the Estimation
AZ	1980	CA, UT
	1981, 1984, 1985	CA, CO, UT
CO	1980	KS, UT
CT	1981-1992	New England
DC	1980, 1981	MD
DE	1980-1992	MD
FL	1980	AL, GA
HI	1982-1992	CA
LA	1980-1985, 1989-1992	AR, TX
MA	1980-1983	NY
	1984-1992	New England
ME	1980-1983	NY
	1984-1992	New England
MS	1980-1992	AL, AR, TN
MT	1983	ID, WY
	1984-1992	ID
ND	1980-1982	MN, MT
	1983-1992	MN
NE	1980	IA, KS, MO
	1982, 1983, 1986-1992	CO, IA, KS, MO, WY
NH	1980-1983	NY
	1984-1992	New England
NJ	1980-1992	NY, PA
NM	1980	TX, UT
	1981, 1984-1988	CO, OK, TX
	1982, 1983	AZ, CO, OK, TX
	1989-1992	AZ, CO, TX
NV	1980, 1981, 1984-1992	CA, ID, UT
	1983	AZ, CA, ID, UT
OK	1980, 1989-1992	AR, KS, MO, TX
OR	1980, 1981, 1983-1992	CA, ID, WA
	1982	CA, ID, NV, WA
RI	1980, 1981	NY
	1984-1989, 1992	New England
SD	1980	IA, MN, MT
	1981	IA, MN, MT, NE
	1982	IA, MN, MT, WY
	1983, 1986-1992	IA, MN, WY
	1984, 1985	IA, MN, NE
VT	1980-1983	NY
	1984-1992	New England
WV	1980	KY, MD, OH, PA, VA
WY	1980	ID, MT, UT
	1981	CO, ID, MT, NE, UT
	1984, 1985	CO, ID, NE, UT

Physical Unit Prices: 1971, 1974 Through 1979

For 1971 and 1974 through 1979, available cost and quantity of bituminous coal, lignite, and anthracite from *Annual Survey of Manufactures (ASM)* or *Census of Manufactures (CM)* are used to calculate prices as average cost per unit of sales for covered States. (States with undisclosed data are not considered covered). Although it is not clear from the data sources, the prices probably include taxes as explained for prices in the 1980 forward period.

For States with industrial steam coal use and for which *ASM* or *CM* data are not available in 1971 and 1974 through 1979, adjacent State simple averages of available *ASM/CM* data are used to impute prices. The assigned prices from adjacent States are shown in Table A8.

Physical Unit Prices: 1970, 1972, 1973

Steam coal industrial sector prices for 1970, 1972, and 1973 (years for which no *ASM/CM* prices are available) are estimated by using regression techniques. Values for the independent variable are steam coal electric utility sector physical unit prices and values for the dependent variable are the steam coal industrial physical unit prices (from *ASM* or estimated as described above) for 1971, and 1974 through 1977. A few States are assigned electric utility prices for the dependent variable in the regression as shown in Table A10.

Wherever individual State prices remain unavailable after the estimation using the above regression techniques, prices are assigned from adjacent or nearby States as shown in Table A9.

Physical Unit Prices: Alaska, All Years

Steam coal industrial sector prices are estimated for Alaska on the basis of the assumption that the ratio of the Alaska price to the U.S. price in the industrial sector is the same as the ratio of the AK price to the U.S. price in the electric utility sector for each year.

Btu Prices: All Years

Btu prices for States are calculated from the physical unit prices and the conversion factors, which vary by State and by year. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS, adjusted for process fuel and coking coal consumption.

Table A8. Industrial Sector Steam Coal Price Estimates for 1971 and 1974-1979

State	Years	State Prices Used in the Estimation
AR	1971, 1972, 1974, 1975	MO, TN
	1979	MO, TN, TX
AZ	1971	CA, NV, UT
	1974-1978	CA, UT
CO	1974-1978	KS, NE, UT
	1979	UT
CT	1974-1978	MA, NY
	1979	NY
DC	1971, 1974-1979	MD, VA
DE	1971, 1974-1979	MD, NJ, PA
FL	1979	AL, GA
ID	1974	OR, UT
	1975-1978	UT
	1979	UT, WA
KS	1979	MO
LA	1978	AR
	1979	TX
MA	1979	NY
ME	1975-1978	MA
	1979	NY
MS	1971, 1974, 1975, 1979	AL, TN
	1976-1978	AL, AR, TN
MT	1974-1978	MN, NE, UT
	1979	MN, UT
ND	1974-1979	MN
NE	1979	IA, MO
NH	1971, 1974-1979	MA
NM	1971	CO, OK, TX, UT
	1974, 1976-1978	KS, UT
	1979	UT
NV	1974	CA, OR, UT
	1975-1979	CA, UT
OK	1974, 1975	KS, MO
	1976-1978	AR, KS, MO
	1979	MO, TX
OR	1975-1978	CA
	1979	CA, WA
RI	1971, 1974-1976, 1978	MA
	1979	NY
SD	1971, 1974	IA
	1975-1978	IA, MN, NE
	1979	IA, MN
TX	1974, 1975	KS
	1976-1978	AR, KS
VT	1971, 1974-1978	MA
	1979	NY
WA	1974	CA, OR
	1975-1978	CA
WY	1974-1978	NE, UT
	1979	UT

Table A9. Industrial Sector Final Price Assignments for 1970, 1972 and 1973

State	Years	State Prices Assigned
AR	1972	MO, TN
NH	1970, 1972, 1973	MA
RI	1970, 1972, 1973	MA
SD	1970, 1972, 1973	IA
VT	1970, 1972, 1973	MA

Data Sources

Prices

1984 forward: Energy Information Administration, *Quarterly Coal Report,* Tables 16 and 17 (1984 1st quarter through 1985 2d quarter and 1986, 1987, and 1988 1st quarters); Tables 18 and 19 (1985 3d and 4th quarters, 1986, 1987, and 1988 2d through 4th quarters, 1989-1991 1st through 4th quarters); and Table 40 and 41 (1992 1st through 4th quarters).

1980-1983: Energy Information Administration, "Quarterly Coal Consumption Report: Manufacturing Plants" (Form EIA-3). Only published data are used from Table 25 (1980), Table 11 (1981, 1982), and Table 2 (1983).

1971, 1974-1979: Bureau of the Census, U.S. Department of Commerce, *Annual Survey of Manufactures and Census of Manufactures,* Table 4 (1971) and Table 3 (1974-1979).

Table A10. Industrial Sector Price Assignments Used in the Regression Equation for 1971, and 1974-1979

State	Years	State Prices Assigned
AR	1973-1977	MO
CA	1970-1977	NV
CT	1975-1977	NY
DC	1976, 1977	MD
ID	1970-1977	MT
MA	1976, 1977	NH
ME	1970-1977	NH
OK	1973-1975	KS
OR	1973-1977	WA
TX	1970	NM
WA	1970-1972	OR

1970, 1972, 1973: Steam coal electric utility physical unit prices.

Consumption

1970 forward: Energy Information Administration, State Energy Data System, industrial sector coal consumption.

Conversion Factors: All Years

Energy Information Administration, *State Energy Data Report 1992, Consumption Estimates,* Tables D10 and D11.

The conversion factor for CT/1990 is assigned from CT/1989; the NH/1976 conversion factor is assigned from NH/1975; the RI/1977 conversion factor is assigned from RI/1976; and the VT/1986 conversion factor is assigned from VT/1985.

Transportation Sector

Transportation sector steam coal prices are assigned from industrial sector steam coal prices. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by SEDS consumption data.

Coal Coke, Imports and Exports

Imports and exports of coal coke are components of total U.S. energy consumption and are accounted for in the industrial sector. Prices and values of imports and exports are developed only for the United States; no attempt is made to estimate State-level prices or expenditures. Prices are f.a.s. (free alongside ship) values and do not include taxes. The quantities of U.S. coal coke imports and exports are taken from SEDS.

Physical Unit Prices: All Years

For 1980 forward, the *Coke Plant Report,* the *Quarterly Coal Report,* and Bureau of the Census computer tapes provide physical unit coal coke import and export prices in dollars per short ton. For 1970 through 1979, *Coke and Coal Chemicals, International Coal,* and the *Minerals Yearbook* provide coal coke import and export physical unit quantities and values in short tons and dollars, respectively. Values are equivalent to expenditures.

Btu Prices: All Years

For 1980 forward, Btu prices are computed by dividing the physical unit prices by the conversion factor. For 1970 through 1979, physical unit prices are computed by dividing the import and export values by their respective quantities, and Btu prices are computed by dividing the physical unit prices by the conversion factor.

Data Sources

Prices

1989 forward: Bureau of the Census, U.S. Department of Commerce, electronic data from "Monthly Report IM 145" and "Monthly Report EM 522."

1981-1988: Energy Information Administration, *Quarterly Coal Report,* October-December issues, Tables A11 and A13 (1981-1985) and Tables A10 and A12 (1986-1988).

1980: Energy Information Administration, *Coke Plant Report,* Tables 7 and 8.

1978-1979: Energy Information Administration, *Coke and Coal Chemicals* 1979, Tables 5 and 6.

1977: National Coal Association, *International Coal 1980,* tables titled, "U.S. Imports of Solid Fuels and Customs Value" and "U.S. Exports of Coke and Value."

1976: Energy Information Administration, *Coke and Coal Chemicals,* Tables 19 and 20.

1970-1975: Bureau of Mines, U.S. Department of the Interior, *Minerals Yearbook,* "Coke and Coal Chemicals" chapter, Tables 19 and 20.

Consumption

1970 forward: Energy Information Administration, State Energy Data System, U.S. imports and exports of coal coke.

Conversion Factor: All Years

24.8 million Btu per short ton.

Section 3. Natural Gas

Natural gas prices are developed for the residential, commercial, industrial, and electric utility sectors. Natural gas used for transportation is consumed solely in pipeline operations and is discussed in Section 6, "Consumption Adjustments for Calculating Expenditures," on page 253. Reported natural gas prices are retail prices for sales of natural gas to ultimate users.

In general, taxes are included in the prices. However, taxes collected by a utility from an end user and turned over to a Government authority frequently are not included in the revenues reported in the *Natural Gas Annual* or *Natural Gas Production and Consumption* and, therefore, are not included in the prices. Taxes paid by the utility (rather than the end user) are considered operating costs and are passed on to the end user as part of the rate. Therefore, Federal, State, business, and property taxes are typically included in the prices, while sales and other point-of-purchase taxes typically are not.

Estimates of the amount of natural gas consumed by the residential, commercial, industrial, and electric utility sectors are taken from the State Energy Data System (SEDS). Estimates for the industrial sector are adjusted to remove estimated refinery consumption and lease and plant use of natural gas in each State. (See the discussion in Section 6, "Consumption Adjustments for Calculating Expenditures," on page 253.)

Residential, Commercial, and Industrial Sectors

Prices: 1987 Forward

All natural gas physical unit prices by State for the residential, commercial, and industrial sectors are taken from the *Natural Gas Annual (NGA).*

Prices: 1970 Through 1986

All natural gas physical unit prices for the residential, commercial, and industrial sectors are calculated from value and quantity of sales data from the *Natural Gas Annual* or its predecessor report, *Natural Gas Production and Consumption.* State prices are calculated directly from the data sources as average revenue per unit of sales by natural gas utilities. Prices for each of the three sectors are calculated by dividing the value of natural gas, reported in thousands of dollars, by the quantity of natural gas sold, as reported in million cubic feet.

For 1970 through 1979, both the value and quantity of sales data from the *NGA* are reported as composites for MD and DC and for ME, NH, and VT. In each case, the combined prices are assigned to each of the States in the composite.

Btu Prices: All Years

State Btu prices for all years are calculated by using the physical unit price series and the State-level non-electric utility conversion factors. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS, adjusted for process fuel consumption in the industrial sector.

Data Sources

Prices

1980 forward: Energy Information Administration, *Natural Gas Annual, Volume 1,* Table 11 (1980), Table 14 (1981-1985), Table 15 (1986), Table 19 (1987), and Table 22 (1988 forward).

1970-1979: Bureau of Mines, U.S. Department of the Interior, *Natural Gas Production and Consumption,* Table 6 (1970, 1979) and Table 7 (1971-1978).

Consumption

1970 forward: Energy Information Administration, State Energy Data System, residential, commercial, and industrial natural gas consumption.

Conversion Factors: All Years

Energy Information Administration, *State Energy Data Report 1992, Consumption Estimates*, Tables D4 and D5.

Electric Utility Sector

Prices: 1973, 1974, 1983 Forward

Prices for States are reported by *Cost and Quality of Fuels for Electric Utility Plants (C&Q)* for gas consumed at steam-electric plants only. Btu prices are taken from *C&Q*, converted from cents to dollars per million Btu.

Where individual State prices are unavailable from *C&Q*, they are developed from the *NGA*. Physical unit prices prior to 1987 are calculated by dividing the value of natural gas, reported in thousands of dollars, by the quantity of natural gas sold, reported in million cubic feet. For 1987 forward, physical unit prices are taken directly from the *NGA*. Table A11 lists the States and years for which *NGA* data are used. Btu prices are calculated from the physical unit prices by using State-level electric utility conversion factors.

Prices are not available from either *C&Q* or *NGA* for CT/1973; ID/1974, 1987; NH/1983; and OR/1983, 1984, 1986, 1989, 1990. In these cases, quantity-weighted Census division prices from *C&Q* are assigned. In addition, prices for VT/1986 and WA/1986, 1987, 1990 use quantity-weighted Census division prices from *C&Q* for more consistent prices than those available from the *NGA*.

Prices: 1980 Through 1982

State Btu and physical unit prices for 1980 through 1982 are taken from *C&Q* for all reporting plants. Physical unit prices are taken directly from the data source, while Btu prices are converted from cents to dollars per million Btu.

Table A11. Natural Gas Electric Utility Sector Prices from *NGA*, 1973 Forward

State	Years
AK	1973-1990
CT	1974-1976
ID	1983-1986
MD	1973, 1974, 1983-1985
NC	1983-1990
ND	1973, 1974, 1976-1986
NH	1973, 1974, 1977, 1987-1989
PA	1973
RI	1976, 1980
SC	1977
SD	1983-1990
TN	1976, 1980, 1981, 1983, 1988-1992
UT	1988, 1989
VT	1983-1985, 1989, 1990
WA	1978, 1983-1985, 1988, 1989
WY	1973, 1975

Note: *NGA* includes predecessor publications.

Prices: 1975 Through 1979

State prices are reported separately by *C&Q* for gas consumed at steam-electric plants and gas consumed at combustion turbine and internal combustion units. Weighted-average Btu prices are calculated by using the two *C&Q* prices and the respective gas deliveries for steam-electric and combustion use. The NH/1977 price is not available from *C&Q*. A combined price is computed from value and quantity of sales data from the *NGA* for ME, NH, and VT and assigned to NH/1977.

Prices: 1970 Through 1972

State prices for 1970 through 1972 are taken from *Natural Gas Production and Consumption* and are calculated similarly to the way prices for the residential, commercial, and industrial sectors are calculated. Prices, as average revenue per unit of sales, are computed from value and quantity of sales data from the source reports. A combined price is reported for NH and VT for 1971 and 1972, and each of these States is assigned the combined price. State Btu prices are calculated from the physical unit prices by using the State-level electric utility conversion factors.

U.S. Prices: All Years

U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Data Sources

Prices

1973 forward: Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants,* tables numbered as follows:

Years	Price Data	Volume Data
1973, 1974	Table 10	Table 9
1975-1979	Table 10, 16	Table 9, 15
1980-1982	Table 48	-
1983, 1984	Table 53	-
1985-1987	Table 43	-
1988, 1989	Table 44	-
1990, 1991	Table 19	-
1992	Table 12	-

1980 forward: Energy Information Administration, *Natural Gas Annual 1992, Volume 2,* Table 23.

1976-1979: Energy Information Administration, Energy Data Reports, *Natural Gas Production and Consumption,* Table 7 (1976-1978) and Table 6 (1979).

1970-1975: Bureau of Mines, U.S. Department of the Interior, *Natural Gas Production and Consumption,* Table 6 (1970) and Table 7 (1971-1975).

Consumption

1970 forward: Energy Information Administration, State Energy Data System, electric utility natural gas consumption.

Conversion Factors

Btu prices that are calculated directly from *Cost and Quality of Fuels for Electric Utility Plants (C&Q)* require no conversion factors. When *Natural Gas Annual (NGA)* data are used to develop prices that are missing from *C&Q,* conversion factors are used from the following source.

1970 forward: Energy Information Administration, *State Energy Data Report 1992, Consumption Estimates,* Tables D2 and D3.

Section 4. Petroleum

Asphalt and Road Oil

Asphalt and road oil prices are developed for the industrial sector only because SEDS assumes that all asphalt and road oil consumption occurs in the industrial sector. Asphalt and road oil are used primarily for paving (79 percent of consumption in 1970 and 86 percent in 1992), with the remaining products used for roofing and sealing. Taxes are not included in the prices because most street and highway paving is done under contract to State, county, and other public authorities who are typically exempted from paying taxes.

Physical Unit Prices: All Years

Asphalt prices in physical units are developed from monthly reports in the *Engineering News Record*, a construction industry weekly magazine published by McGraw-Hill, Inc. The source data consist of monthly reports from correspondents in 20 U.S. cities with price quotes for tank cars, drums, or both, for the three major types of asphalt products: asphalt cement (AC-20), asphalt emulsion (rapid set and slow set), and asphalt cutback.

For 1986 forward, the tank car price is used. However, for 1986 and 1987, the drum price is used if a tank car price is not available. For 1970 through 1985, when both tank car and drum prices are available, a simple average of the two prices is used. When only one price is available, that price is used.

Asphalt prices are developed by calculating a simple average annual price from the monthly prices for each city for the three products. City prices are assigned to States. CA, OH (1970 through 1985), and PA have prices from two cities; in these cases, simple averages of the two city prices are used. No States have prices from more than two cities. States with no prices are assigned a Census division simple average price. State average asphalt prices are calculated as the quantity-weighted average prices of the three products for each State. If there is no Census division price, the simple average of the prices for the other Census divisions within that Census region is used. Quantity data for 1970 through 1980 are taken from the Bureau of Mines and EIA reports on sales of asphalt. Quantity data for 1981 forward are taken from the *Report on Sales of Asphalt in the U.S.*, published by the Asphalt Institute. Non-paving asphalts are assumed to have the price of paving asphalt cement.

For 1970 through 1982, asphalt and road oil are estimated as separate data series. Asphalt prices are estimated as discussed above. Road oil prices are assumed to equal asphalt emulsion prices because specific prices are not available from any source.

Btu Prices: All Years

Asphalt prices in dollars per ton are converted to dollars per gallon by dividing by 235 gallons per ton for asphalt cement, 241 gallons per ton for emulsion, or 248.6 gallons per ton for cutback. These prices are then multiplied by 42 gallons per barrel and divided by 6.636 million Btu per barrel to get dollars per million Btu. Road oil unit prices of dollars per ton are converted to dollars per million Btu by using the constant conversion factors of 5.5 barrels per ton and 6.636 million Btu per barrel. The average price of all asphalt and road oil is the consumption-weighted average of the individual product prices.

U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Data Sources

Prices

1970 forward: McGraw-Hill, Inc., *Engineering News Record.*

Quantities for Calculating Weighted Average Prices

1981 forward: Asphalt Institute, *Asphalt Usage, United States and Canada.*

1978-1980: Energy Information Administration, Energy Data Reports, *Sales of Asphalt*, Table 2.

1977: Energy Information Administration, Energy Data Reports, *Asphalt Sales, Annual*, Table 2.

1971-1976: Bureau of Mines, U.S. Department of the Interior, Mineral Industry Survey, *Asphalt Sales, Annual*, Table 2.

1970: Bureau of Mines, U.S. Department of the Interior, Mineral Industry Survey, *Asphalt Shipments, Annual*, Table 2.

Consumption

1970 forward: Energy Information Administration, State Energy Data System, industrial sector, asphalt and road oil consumption.

Conversion Factors: All Years

235 gallons per ton of asphalt cement; 241 gallons per ton of emulsion; 248.6 gallons per ton of cutback; 42 gallons per barrel; 5.5 barrels per ton of road oil; 6.636 million Btu per barrel.

Aviation Gasoline

Aviation gasoline prices are developed for the transportation sector. Estimates of the amount of aviation gasoline consumed by the transportation sector are taken from SEDS. Aviation gasoline prices are national averages, excluding taxes, developed from several sources, depending on the years. In all cases, physical unit prices are developed and then converted to Btu prices. Federal and State excise taxes, as well as State and local sales taxes, are not included.

Physical Unit Prices: 1976 Forward

Aviation gasoline prices for 1978 forward are assumed to be the national average refiners sales prices to end users published in the EIA's *Annual Energy Review*. The 1976 and 1977 prices are assumed to be the national average retail prices published in the EIA's *Monthly Energy Review*.

Physical Unit Prices: 1970 Through 1975

For 1970 through 1975, aviation gasoline prices are not available. Prices are derived by dividing the national motor gasoline prices for those years by the 1976 national motor gasoline price and applying those percent changes to the 1976 the national aviation gasoline price.

Btu Prices: All Years

Aviation gasoline Btu prices are calculated by converting the physical unit prices from cents per gallon to dollars per barrel (42 gallons per barrel) and then to dollars per million Btu (5.048 million Btu per barrel).

Data Sources

Prices

1978 forward: Energy Information Administration, *Annual Energy Review 1993*, Table 5.21, row titled "Sales Prices to End Users: Aviation Gasoline."

1976, 1977: Energy Information Administration, *Monthly Energy Review*, April 1984, page 106, column titled "Aviation Gasoline, Retail."

1970-1975: Energy Information Administration, *Annual Energy Review 1989*, Table 70, column titled "Motor Gasoline, Leaded Regular, Nominal."

Consumption

1970 forward: Energy Information Administration, State Energy Data System, transportation sector, aviation gasoline consumption.

Conversion Factor: All Years

5.048 million Btu per barrel.

Distillate Fuel

Distillate fuel prices are developed for all sectors. Distillate fuel in the transportation sector is assumed to be diesel fuel. Estimates of the amount of distillate fuel consumed in each sector are taken from the State Energy Data System (SEDS). Estimated consumption for the industrial sector is adjusted to remove the estimated refinery consumption of

distillate fuel in each State. (See the discussion in Section 6, "Consumption Adjustments for Calculating Expenditures," on page 253.)

Residential Sector

Residential distillate prices are developed by using a variety of data sources and several estimation methods, depending on the years involved. In all cases, physical unit prices for States are developed first, then Btu prices are calculated by using the physical unit prices and the conversion factor. The prices contained in this series are the retail prices paid by consumers for residential heating oil, including taxes.

Physical Unit Prices: 1983 Through 1990, 1992

For 1983 through 1990 and 1992, physical unit distillate prices in cents per gallon (excluding taxes) are generally available for 24 States from the *Petroleum Marketing Annual (PMA)*. State-level prices for the States without *PMA* prices are estimated by using price data from the American Gas Association (AGA), SEDS consumption data, and *PMA* Petroleum Administration for Defense (PAD) district prices. The estimation procedures are described below and include the addition of State general sales taxes.

1. State prices in cents per gallon are generally available from the *PMA* for the following 24 States: AK, CT, DC, DE, ID, IL, IN, MA, MD, ME, MI, MN, NH, NJ, NY, OH, OR, PA, RI, VA, VT, WA, WI, and WV. Prices for these States are converted from cents to dollars per gallon, and State general sales taxes from the Bureau of the Census publication, *State Government Tax Collections (SGTC)* are added.

2. For the States that do not have prices in the *PMA*, prices are estimated by using AGA fuel oil prices, SEDS consumption data, and *PMA* PAD district prices for Districts II, III, IV, and V and Subdistrict IC (all the States in PAD Subdistricts IA and IB have published prices). The following steps are used to estimate the prices:

   a. Distillate prices from the *PMA* for PAD Districts II, III, IV, and V and Subdistrict IC are converted from cents per gallon to dollars per gallon.

   b. The AGA lists fuel oil prices by company for the principal city served in dollars per million Btu, including State sales taxes. A simple average of the city-level prices is used to derive a State-level price for each of the States without *PMA* prices. These AGA State averages are converted from dollars per million Btu to dollars per gallon by using the AGA conversion factor of 7.194 gallons per million Btu. State general sales taxes from *SGTC* are subtracted to give State averages comparable to the *PMA* prices.

   c. The AGA State prices derived in step 2b are combined into PAD district averages by using SEDS consumption to weight each State's values. This procedure gives AGA consumption-weighted average prices for PAD Districts II, III, IV, and V and Subdistrict IC that are comparable to the volume-weighted PAD district prices published in the *PMA*. The AGA PAD district averages are calculated by using only the available States; if a State does not appear in the survey, it is not included in the PAD calculation.

   d. Adjustment factors, ratios of the *PMA* PAD district price divided by the AGA derived PAD district price, are calculated for PAD Districts II, III, IV, and V, and Subdistrict IC.

   e. Prices for the States not published in the *PMA* are calculated by multiplying the AGA State prices derived in step 2b by the appropriate PAD district adjustment factor from step 2d and adding State general sales taxes from the *SGTC*.

Table A12. Distillate Residential Sector Price Assignments, 1983–1990, 1992

State	Years	Prices Assigned
AR	1988	PAD District III
AZ	1992	PAD District V
CA	1984, 1992	PAD District V
HI	1983-1990, 1992	PAD District V
IL	1986	PAD District II
KS	1986, 1989	PAD District II
LA	1986	PAD District III
MS	1983, 1985, 1986	PAD District III
NM	1984-1990, 1992	PAD District III
OK	1986, 1989, 1990, 1992	PAD District II
SD	1986	PAD District II
TX	1992	PAD District III
UT	1985	PAD District IV

f. States that do not have prices in either the *PMA* or the AGA are assigned a *PMA* PAD district price, and State general sales taxes from the *SGTC* are added. The States with assigned PAD prices are as shown in Table A12.

Physical Unit Prices: 1991

Physical unit distillate prices in cents per gallon (excluding taxes) are available for 24 States from the *PMA*. Because prices are not available from AGA for 1991, State-level prices for the remaining 27 States are estimated by using physical unit prices derived for 1990 in SEPEDS (described below) and the 1991 *PMA* Petroleum Administration for Defense (PAD) district prices. The estimation procedures are described below and include the addition of State general sales taxes.

1. State prices in cents per gallon are available from the *PMA* for the following 24 States: AK, CT, DC, DE, ID, IL, IN, MA, MD, ME, MI, MN, NH, NJ, NY, OH, OR, PA, RI, VA, VT, WA, WI, and WV. Prices for these States are converted from cents to dollars per gallon, and State general sales taxes from the Bureau of the Census' *State Government Tax Collections (SGTC)* are added.

2. For the remaining 27 States that do not have prices in the *PMA*, prices are estimated by using the 1990 SEPEDS physical unit and *PMA* PAD district prices for 1990 and 1991. The following steps are used to estimate the prices:

   a. For 1990, the Subdistrict IC price is withheld in the *PMA* and the average of the VA and WV prices is used as the Subdistrict IC price.

   b. The 1990 State prices derived from AGA and *PMA*, as described below, are adjusted by the percentage change in the 1990 and 1991 prices for each State's *PMA* PAD district or subdistrict.

   c. The State general sales taxes from *SGTC* are added.

Physical Unit Prices: 1978 Through 1982

Procedures for the 1978 through 1982 period are similar to those for 1983 forward except for changes in data sources. Annual physical unit prices are taken either directly from the *Monthly Energy Review (MER)* or are calculated from monthly regional price data, also from the *MER*. These data were collected on Form EIA-9A (formerly EIA Form 9 and FEA Form P112-M-1) and include taxes. Price data from *Platt's Oil Price Handbook and Oilmanac (Platt's)* and SEDS consumption data for 1978 through 1982 are used to compute State prices when only regional data are available. These calculations are described step-by-step below.

1. Annual State physical unit prices are generally available from the *MER* for the same 24 States covered by the *PMA* in 1983 and forward. These 24 States compose all of Federal Regions 1, 2, 3, 5, and 10 (see Figure A2 on page 182). Prices for these States exclude taxes and are converted to dollars per gallon.

2. Of the States without *MER* prices, the 22 in Federal Regions 4, 7, 8, and 9 have annual prices estimated from the monthly Federal regional prices published in the *MER*. No regional prices are available for Federal Region 6 for the 1978 through 1982 period, and some monthly prices are missing in regions 7, 8, and 9 in 1980, 1981, and 1982.

   a. Missing monthly prices for Federal regions are estimated with assigned prices as follows: the Region 9 November 1980 price is assigned for December 1980; an average of the Region 7 July and October 1982 prices is assigned to August and September 1982; an average of Region 8 June and September 1982 prices is assigned to July and August 1982; and an average of Region 3 August and October 1982 prices is assigned for the missing September 1982 price. Imputation of missing Region 6 prices for 1978 through 1982 and missing Region 9 prices for 1981 and 1982 is discussed later.

   b. The simple average of monthly State-level normal heating degree-day data is averaged for all the States within each of the 10 Federal regions and used to estimate average Federal region heating degree-days. AK, DC, and HI are assigned the monthly heating degree-days from MN, MD, and FL, respectively.

   c. Weighted average annual physical unit distillate prices for the residential sector are calculated for Federal Regions 4, 7, 8, and 9 (except for Region 9 in 1981 and 1982) by using the regional normal heating degree-days and the monthly regional prices from the *MER*.

d. In 1981, only March and May prices are available for Federal Region 9. To estimate the average annual price for this region, the relationship between the U.S. annual heating oil price (from the *MER*) and the U.S. March and May prices is expressed as a ratio and used with the Region 9 March and May prices to estimate the 1981 annual Region 9 price.

e. City-level prices from *Platt's* are assigned to States as shown in Table A13. The assigned State-level *Platt's* prices for States are consumption-weighted into Federal regions by using residential sector consumption data from SEDS.

f. Adjustment factors, ratios of the regional *MER* distillate prices to the regional *Platt's*-based distillate prices, are calculated for Federal Regions 4, 7, 8, and 9 (except for 1982).

g. Since there are no monthly regional distillate prices from the *MER* for Federal Region 6 for 1978 through 1982 and Federal Region 9 for 1982, the adjustment factors for these regions are based on the adjustment factors for previous time periods. The Region 6 adjustment factor for each of the years in the 1978 through 1982 period is equal to 1.1313, which is the average of the adjustment factor for the West South Central Census Division for 1976 and 1977. The Region 9 adjustment factor for 1982 is equal to 1.1995, which is the average adjustment factor for Region 9 from 1978 through 1981.

h. The residential sector distillate State prices for the 27 States in Federal Regions 4, 6, 7, 8, and 9 are calculated by multiplying the regional adjustment factors for each year and the State-level assigned *Platt's* prices.

Physical Unit Prices: 1975 Through 1977

For the years 1975 through 1977, no State-level data are available, and regional data from Form EIA-9A are available only at the Census division level, except for Federal region prices for November and December of 1977. Using a methodology similar to that described above for the allocation of regional data to States, adjustment factors are calculated at the regional level and applied to *Platt's* price data assigned to States. The resulting prices implicitly include average regional taxes but do not reflect individual State differences.

1. Monthly regional price data for 1975 and 1976 are reported in the *MER* only for Census divisions. In 1977, however, monthly price data are reported for Census divisions for January through October and for Federal regions for November and December. The Federal region prices for November and December are assigned to their respective States and reaggregated into Census divisions in order to create a consistent set of monthly Census division prices for 1977. Annual residential sector distillate consumption data from SEDS are used to do the reaggregation.

2. The Census division monthly price data from the *MER* for 1975, 1976, and the first 10 months of 1977 are used with the estimated Census division price data for November and December 1977 to estimate State-level prices.

   a. Missing monthly prices in the East South Central Division for June and November 1975 and the Mountain Division for March and July 1975 are estimated by using an average of the prices for the month preceding and the month following the missing month. Missing November and December West South Central Division prices in 1977 are estimated with the assignment of the October price to both months. No monthly price data are available for the West South Central Division in 1975; step 2f below discusses how the calculations are handled for this division.

   b. The monthly State-level normal heating degree-day data are averaged for the States within each Census division to estimate regional monthly heating degree-days. AK, DC, and HI are assigned the monthly heating degree-days from MN, MD, and FL, respectively.

   c. Weighted average annual distillate prices for Census divisions are calculated by using the monthly Census division price data from the *MER* and the normal heating degree-days estimated for Census divisions.

   d. City-level No. 2 fuel oil refinery and terminal prices from *Platt's* for 1975 through 1977 are assigned to States as shown in Table A13. The assigned *Platt's* prices for States are consumption-weighted into Census divisions by using residential sector consumption data from SEDS.

Table A13. Platt's Prices for No. 2 Fuel Assigned to States, 1970-1982

State	Assigned City or State Prices
AK	Los Angeles/San Francisco, CA, 1970-1976; Portland, OR, 1977, 1978; Seattle, WA, 1979, 1980; Seattle-Tacoma/Spokane, WA, 1981, 1982
AL	Birmingham/Mobile/Montgomery, 1970-1974; Mobile/Birmingham, 1975-1977; Birmingham, 1978-1982
AR	Arkansas, 1970-1982
AZ	Los Angeles/San Francisco, CA, 1970-1978; Phoenix, 1979-1982
CA	Los Angeles/San Francisco, 1970-1982
CO	Minneapolis-St. Paul, MN, 1970-1976; Denver, 1977-1982
CT	New Haven, 1970-1982
DC	Baltimore, MD, 1970-1982
DE	Baltimore, MD, 1970-1982
FL	Jacksonville/Miami/Tampa/Pensacola/Panama City/Port Everglades, 1970-1972; Miami/Tampa/Pensacola, 1973; Miami/Tampa, 1974-1975, 1981-1982; Miami, 1976-1980
GA	Atlanta/Savannah/Albany/Athens/Bainbridge/Columbus/Macon, 1970-1973; Atlanta/Savannah, 1974-1982
HI	Los Angeles/ San Francisco, CA, 1970-1982
IA	Chicago, IL, 1970-1981; Des Moines, 1982
ID	Los Angeles/San Francisco, CA, 1970-1976; Portland, OR, 1977-1982
IL	Chicago, 1970-1982
IN	Chicago, IL, 1970-1982
KS	Los Angeles/San Francisco, CA, 1970-1973; St. Louis, MO 1974-1982
KY	Baton Rouge/New Orleans, LA, 1970; New Orleans, LA, 1971-1982
LA	Baton Rouge/New Orleans, 1970; New Orleans, 1971-1982
MA	Boston, 1970-1982
MD	Baltimore, 1970-1982
ME	Portland, 1970-1982
MI	Detroit, 1970-1982
MN	Minneapolis-St. Paul, 1970-1982
MO	Baton Rouge/New Orleans, LA, 1970; New Orleans, LA, 1971-1973; St. Louis, 1974-1982
MS	Greenville/Meridian, 1970-1973; New Orleans, LA, 1974-1982
MT	Minneapolis-St. Paul, MN, 1970-1976; Billings, 1977-1982
NC	Greensboro/Wilmington/Charlotte/Salisbury/Selma, 1970-1973; Greensboro/Wilmington/Charlotte, 1974-1975; Greensboro/Wilmington, 1976-1982
ND	Minneapolis-St. Paul, MN, 1970-1982
NE	Baton Rouge/New Orleans, LA, 1970; New Orleans, LA, 1971-1973; St. Louis, MO, 1974-1982
NH	Portland, ME, 1970-1982
NJ	New York/Albany/Buffalo, NY, 1970-1975; New York/Albany, NY, 1976-1982
NM	New Mexico-West Texas, 1970-1972; Los Angeles/San Francisco, CA, 1973-1976; Albuquerque, 1977-1980; Albuquerque/Farmington, 1981, 1982
NV	Los Angeles/San Francisco, CA, 1970-1982
NY	New York/Albany/Buffalo, 1970-1975; New York/Albany, 1976-1982
OH	Toledo/Cleveland/Zanesville/Columbus/Dayton, 1970-1972; Detroit, MI, 1973-1982
OK	Oklahoma (Group 3), 1970-1982
OR	Los Angeles/San Francisco, CA, 1970-1976; Portland, 1977-1982
PA	Philadelphia, 1970-1978; Philadelphia/Pittsburgh, 1979-1982
RI	Providence, 1970-1975; New Haven, CT, 1976-1982
SC	Charleston/Spartanburg/Belton, 1970-1975; Charleston/Spartanburg, 1976-1982
SD	Minneapolis-St. Paul, MN, 1970-1982
TN	Chattanooga, 1970-1973; New Orleans, LA, 1974-1982
TX	New Mexico-West Texas, 1970-1972; New Orleans, LA, 1973-1978; Houston, 1979, 1980; Dallas-Fort Worth/Houston, 1981; Amarillo/Corpus Christi/Dallas-Fort Worth/Houston, 1982
UT	Minneapolis-St. Paul, MN, 1970-1976; Salt Lake City, 1977-1982
VA	Norfolk/Roanoke, 1970-1973; Norfolk, 1974-1982
VT	Portland, ME, 1970-1982
WA	Los Angeles/San Francisco, CA, 1970-1976; Seattle, 1977, 1979, 1980; Portland, OR, 1978; Seattle-Tacoma/Spokane, 1981-1982
WI	Chicago, IL, 1970-1982
WV	Norfolk/Roanoke, VA, 1970-1973; Norfolk, VA, 1974-1982
WY	Minneapolis-St. Paul, MN, 1970-1976; Cheyenne, 1977-1982

e. Adjustment factors are calculated as the ratios of the *MER* distillate Census division prices to the *Platt's* distillate Census division prices.

f. Since there are no 1975 *MER* price data for the West South Central Division from which to calculate an adjustment factor, the 1975 adjustment factor for this region is assumed to be equal to the simple average of the West South Central adjustment factors for 1976 and 1977 (i.e., 1.1313).

g. The residential sector distillate State prices for all States are calculated by multiplying the regional adjustment factors for each year by the State-level assigned *Platt's* prices.

Physical Unit Prices: 1970 Through 1974

There are no regional or State-level distillate price data directly available for the 1970 through 1974 period. To estimate State prices, regional average prices are first derived from the relationship between U.S. prices and Federal region prices for 1975 through 1980. State prices are then estimated from the regional prices by using a methodology similar to that described for 1978 through 1982. The resulting prices implicitly include average regional taxes but do not reflect individual State differences.

1. The first step in the estimation of residential distillate prices for the 1970 through 1974 time period is to develop an equation that uses U.S. prices to estimate prices for Federal regions. Regression techniques are used for this purpose. U.S. prices for 1975 through 1980 from the *Annual Energy Review (AER)* are used as the independent variable for developing the equation; annual Federal region prices are used as the dependent variable. Federal region prices for 1978 through 1980 are calculated above, but *MER* prices for 1975 through 1977 are for Census divisions. To convert these annual Census division prices into Federal region prices, the estimated State prices for 1975 through 1977 are aggregated into Federal regions by using SEDS consumption data.

2. Regression techniques are applied to the pooled Federal region price data (dependent variable) and the U.S. prices from the *AER* (independent variable) for 1975 through 1980. U.S. prices for 1970 through 1974 are input to estimate annual Federal region prices for 1970 through 1974.

3. City-level prices from *Platt's* for 1970 through 1974 are assigned to States as shown in Table A13. The assigned State-level *Platt's* prices are consumption-weighted into Federal regions by using residential sector distillate consumption data from SEDS.

4. Adjustment factors, ratios of the regional *MER* distillate Federal region prices to the *Platt's*-based distillate Federal region prices, are calculated.

5. The residential sector distillate prices for all States are calculated by multiplying the regional adjustment factors for each year by the State-level assigned *Platt's* prices.

Btu Prices: All Years

Btu prices for States are calculated by converting the physical unit prices from dollars per gallon to dollars per barrel (42 gallons per barrel) and then to dollars per million Btu (5.825 million Btu per barrel). U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Data Sources

Prices

1986 forward: Energy Information Administration, *Petroleum Marketing Annual*, Table 37 (1986-1988) and Table 39 (1989 forward), column titled, "To Residential Consumers."

1983-1990, 1992: American Gas Association, *Residential Natural Gas Market Survey* (1989, 1990, 1992), *Gas Househeating Survey* (1983-1988), Appendix 2, "Competitive Fuel Prices," column titled, "Fuel Oil."

1983 forward: Bureau of the Census, U.S. Department of Commerce, *State Government Tax Collections*, table titled, "State Government Excises on General Sales, Motor Fuel, and Cigarettes, Beginning and End of Fiscal Year."

1983-1985: Energy Information Administration, *Petroleum Marketing Annual 1985*, Volume 1, Table 26.

1970-1982: McGraw-Hill, Inc., *Platt's Oil Price Handbook and Oilmanac*, refinery and terminal prices for No. 2 fuel oil, average of highs and lows.

1975-1982: National Oceanic and Atmospheric Administration, U.S. Department of Commerce, *State, Regional, and National Monthly and Seasonal Heating Degree-Days Weighted by Population (1980 Census)*, Historical Climatology Series 5-1, table titled, "1951-80 State Pop. Wgt'd Heating Degree-Days."

1975-1982: Energy Information Administration, *Monthly Energy Review*, table titled, "Residential Heating Oil Prices by Region," February 1978, page 67 (1975, 1976); April 1980, page 83 (1977, 1978); July 1982, page 87 (1979-1982).

1970-1982: Energy Information Administration, *Annual Energy Review 1988*. Table 67, "Motor Gasoline and Residential Heating Oil Prices, 1949-1988."

Consumption

1970 forward: Energy Information Administration, State Energy Data System, residential sector distillate consumption.

Conversion Factor: All years

5.825 million Btu per barrel

Commercial Sector

Commercial sector distillate prices are estimated by using several different data sources and estimation methodologies, depending on the years involved. For 1983 forward, retail prices paid by commercial/institutional establishments (excluding taxes) from *Petroleum Marketing Annual (PMA)* are supplemented with prices derived from the American Gas Association (AGA) *Residential Gas Market Survey* (except for 1991, when AGA data are not available). State general sales taxes from the Bureau of the Census are added. For 1970 through 1982, commercial distillate prices are based on refinery and terminal (wholesale) prices from *Platt's* and markups from *Energy Prices: 1960-73* that include taxes. For both time periods, physical unit prices are calculated from the data sources, and Btu prices are computed by using the physical unit prices and the conversion factor.

Physical Unit Prices: 1983 Through 1990, 1992

For 1983 through 1990 and 1992, physical unit distillate prices in cents per gallon (excluding taxes) are available for approximately 24 States from the *PMA*. State-level prices for the remaining 27 States are estimated by using price data from the American Gas Association (AGA), SEDS consumption data, and *PMA* Petroleum Administration for Defense (PAD) district prices. The estimation procedures are described below.

1. State prices in cents per gallon are generally available from the *PMA* for the following 24 States: AK, CT, DC, DE, ID, IL, IN, MA, MD, ME, MI, MN, NH, NJ, NY, OH, OR, PA, RI, VA, VT, WA, WI, and WV. Prices for these States are converted from cents to dollars per gallon, and State general sales taxes from the Bureau of the Census' *State Government Tax Collections (SGTC)* are added.

2. For the remaining 27 States that do not have prices in the *PMA*, prices are estimated by using AGA fuel oil prices, SEDS consumption data, and *PMA* PAD district prices for Districts II, III, IV, and V and Subdistrict IC (all the States in PAD Subdistricts IA and IB have published prices). For 1990, the Subdistrict IC price is withheld in the *PMA* and the average of the VA and WV prices is used as the Subdistrict IC price. The following steps are used to estimate the prices:

   a. Distillate prices from the *PMA* for PAD Districts II, III, IV, and V and Subdistrict IC are converted from cents per gallon to dollars per gallon.

   b. The AGA lists fuel oil prices by company for the principal city served in dollars per million Btu, including State sales taxes. A simple average of the city-level prices is used to derive a State-level price for each of the 27 States without *PMA* prices. These AGA State averages are converted from dollars per million Btu to dollars per gallon by using the AGA conversion factor of 7.194 gallons per million Btu. State general sales taxes from *SGTC* are subtracted to give State averages comparable to the *PMA* prices.

   c. The AGA State prices derived in step 2b are combined into PAD district averages by using SEDS consumption to weight each State's values. This procedure gives AGA consumption-weighted average prices for PAD Districts II, III, IV, and V and Subdistrict IC that are comparable to the volume-weighted PAD district prices published in the *PMA*. The AGA PAD district averages are calculated by using only the available States; if a State

does not appear in the survey, it is not included in the PAD district calculation.

d. Adjustment factors, ratios of the *PMA* PAD district price divided by the AGA derived PAD district price, are calculated for PAD Districts II, III, IV, and V, and Subdistrict IC.

e. Prices for the 27 States not published in the *PMA* are calculated by multiplying the AGA State prices derived in step 2b by the appropriate PAD district adjustment factor from step 2d and adding State general sales taxes from the *SGTC*.

f. States that do not have prices in either the *PMA* or the AGA are assigned a *PMA* PAD district price, and State general sales taxes from the *SGTC* are added. The States with assigned prices are as shown in Table A14.

Table A14. Distillate Commercial Sector Price Assignments, 1983–1990, 1992

State	Years	Prices Assigned
AR	1988	PAD District III
AZ	1992	PAD District V
CA	1984, 1992	PAD District V
HI	1983-1990, 1992	PAD District V
KS	1986, 1989	PAD District II
LA	1986	PAD District III
MO	1986	PAD District II
MS	1983, 1985, 1986	PAD District III
NM	1984-1990, 1992	PAD District III
OK	1986, 1989, 1990, 1992	PAD District II
SD	1986	PAD District II
TX	1992	PAD District III
UT	1985	PAD District IV

Physical Unit Prices: 1991

Physical unit distillate prices in cents per gallon (excluding taxes) are available for 24 States from the *PMA*. Because prices are not available from AGA for 1991, State-level prices for the remaining 27 States are estimated by using physical unit prices derived for 1990 in SEPEDS (described below) and the 1991 *PMA* Petroleum Administration for Defense (PAD) district prices. The estimation procedures are described below.

1. State prices in cents per gallon are available from the *PMA* for the following 24 States: AK, CT, DC, DE, ID, IL, IN, MA, MD, ME, MI, MN, NH, NJ, NY, OH, OR, PA, RI, VA, VT, WA, WI, and WV. Prices for these States are converted from cents to dollars per gallon, and State general sales taxes from the Bureau of the Census' *State Government Tax Collections (SGTC)* are added.

2. For the remaining 27 States that do not have prices in the *PMA*, prices are estimated by using the 1990 SEPEDS physical unit and *PMA* PAD district prices for 1990 and 1991. The following steps are used to estimate the prices:

   a. For 1990, the Subdistrict IC price is withheld in the *PMA* and the average of the VA and WV prices is used as the Subdistrict IC price. For 1991, the PAD District III price is withheld in the *PMA*. The ratio of the PAD District II commercial consumers price to the PAD District II industrial price is applied to the PAD District III industrial price to estimate the withheld commercial price.

   b. The 1990 State prices derived from AGA and *PMA*, as described below, are adjusted by the percentage change in the 1990 and 1991 prices for each State's *PMA* PAD district or subdistrict.

   c. The State general sales taxes from *SGTC* are added.

Physical Unit Prices: 1970 Through 1982

Commercial sector distillate physical unit prices for 1970 through 1982 are calculated by using *Platt's* prices assigned to States and commercial sector markups estimated from *Energy Prices: 1960-73*. The resulting estimates implicitly include State-specific taxes.

1. The first step is to compute the markups. *Energy Prices* contains single price estimates for small commercial users and two price estimates for large commercial users for 10 cities: Boston, MA; Albany, NY; New York, NY; Charlotte, NC; Washington, DC; Chicago, IL; Detroit MI; Minneapolis/St. Paul, MN; St. Louis, MO; and Seattle, WA. First, a simple average of the two large commercial prices is calculated for each city except for Albany and New York. In this case, all four large commercial prices are averaged together, since cities are assigned to their respective States.

2. For the nine States covered by the *Energy Prices* data (noted in step 1), the markup of the

reported prices from *Energy Prices* over the assigned *Platt's* prices (Table A13 on page 202) and the markup of the residential prices calculated above for 1970 through 1972 over the *Platt's* prices are calculated.

3. At this point, residential and commercial sector retail markups have been computed for nine States for each of the years 1970 through 1972. The next step is to calculate the average retail markup for the 3-year period for each sector. A simple average of the markup ratios is calculated.

4. The average commercial and residential sector retail markups for the nine available States are assigned as shown in Table A15.

5. To translate the average commercial and residential markups for 1970 through 1972 into the estimated commercial sector retail markups to be used for 1970 through 1982, the relationship between these two markups is used, with the residential markups calculated for all States for each year. The calculation of the residential markups is the same procedure used in step 2 above.

6. The commercial sector adjustment factors for each State for each of the years 1970 through 1982 are multiplied by the corresponding *Platt's* prices for 1970 through 1982 to calculate the final commercial sector physical unit prices.

Btu Prices: All Years

Btu prices for States are calculated by converting the physical unit prices from cents to dollars per gallon, then to dollars per barrel (42 gallons per barrel), and finally, to dollars per million Btu (5.825 million Btu per barrel). U.S. prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Data Sources

Prices

1986 forward: Energy Information Administration, *Petroleum Marketing Annual*, Table 37 (1986-1988) and Table 39 (1989 forward), column titled, "To Commercial/Institutional Consumers."

1983-1990, 1992: American Gas Association, *Residential Natual Gas Market Survey* (1989, 1990, 1992), *Gas*

Table A15. Distillate Fuel Commercial Sector Average Retail Markup Price Assignments, 1970-1972

State	City Price Assignments
AK	Seattle, WA
AL	Charlotte, NC
AR	St. Louis, MO
AZ	Seattle, WA
CA	Seattle, WA
CO	Minneapolis, MN
CT	Boston, MA
DC	Washington, DC
DE	Washington, DC
FL	Charlotte, NC
GA	Charlotte, NC
HI	Seattle, WA
IA	St. Louis, MO
ID	Seattle, WA
IL	Chicago, IL
IN	Chicago, IL
KS	St. Louis, MO
KY	Chicago, IL
LA	St. Louis, MO
MA	Boston, MA
MD	Washington, DC
ME	Boston, MA
MI	Detroit, MI
MN	Minneapolis/St. Paul, MN
MO	St. Louis, MO
MS	Charlotte, NC
MT	Minneapolis, MN
NC	Charlotte, NC
ND	Minneapolis, MN
NE	St. Louis, MO
NH	Boston, MA
NJ	Albany and New York, NY
NM	Seattle, WA
NV	Seattle, WA
NY	Albany and New York, NY
OH	Detroit, MI
OK	St. Louis, MO
OR	Seattle, WA
PA	Albany and New York, NY
RI	Boston, MA
SC	Charlotte, NC
SD	Minneapolis/St. Paul, MN
TN	Chicago, IL
TX	St. Louis, MO
UT	Minneapolis/St. Paul, MN
VA	Washington, DC
VT	Boston, MA
WA	Seattle, WA
WI	Chicago, IL
WV	Washington, DC
WY	Minneapolis/St. Paul, MN

Householding Survey (1983-1988), Appendix 2, "Competitive Fuel Prices," column titled, "Fuel Oil."

1983 forward: Bureau of the Census, U.S. Department of Commerce, *State Government Tax Collections*, table titled, "State Government Excises on General Sales, Motor Fuel, and Cigarettes: Beginning and End of Fiscal Year."

1983-1985: Energy Information Administration, *Petroleum Marketing Annual 1985, Volume 1*, Table 26.

1970-1982: McGraw-Hill, Inc., *Platt's Oil Price Handbook and Oilmanac*, refinery and terminal prices for No. 2 fuel oil, average of highs and lows.

1970-1982: Foster Associates, Inc., 1974, *Energy Prices 1960-73*, Tables 4-c and 5-b.

Consumption

1970 forward: Energy Information Administration, State Energy Data System, commercial sector distillate consumption.

Conversion Factor: All Years

5.825 million Btu per barrel

Electric Utility Sector

The electric utility price for distillate fuel is the average delivered cost of No. 2 fuel oil receipts at electric utilities (See **Light Oil (Utilities)** on page 218). For 1973 forward, these prices are taken from *Cost and Quality of Fuels for Electric Utility Plants;* for 1970 through 1972, prices from the *Statistical Yearbook of the Electric Utility Industry* are used with regression analysis. Btu prices are developed directly from the data sources and include all applicable taxes.

Prices: 1973 Forward

Btu prices for the years 1973 forward are based directly on the Btu prices reported in *Cost and Quality of Fuels (C&Q).* For 1973, 1974, and 1980 forward, Btu prices are taken directly from the data source. For 1975 through 1979, weighted average Btu prices are calculated from prices and consumption data reported separately for steam-electric plants and for combustion turbine and internal combustion units. Because 1973 was the first year *C&Q* was published, there are many States with missing data for that year. The estimation of the missing 1973 State prices follows the same procedure as prices for 1970 through 1972 and is discussed under that section.

Table A16. Distillate Electric Utility Census Division Price Assignments from *C&Q*, 1973 Forward

State	Years	Census Division
CA	1983-1985, 1987, 1988, 1990-1992	Pacific
CT	1973	New England
DC	1973	South Atlantic
DE	1973	South Atlantic
ID	1973, 1974, 1976, 1980-1992	Mountain
MD	1973	South Atlantic
ME	1973, 1974	New England
MT	1973-1975, 1977, 1983	Mountain
NH	1973, 1974	New England
NJ	1973, 1974	Mid-Atlantic
OR	1987, 1988	Pacific
RI	1976-1992	New England
SD	1973, 1974, 1992	W. North Central
TN	1973	E. South Central
VT	1973, 1974, 1978, 1983-1992	New England
WA	1973-1977	Pacific
WV	1973	South Atlantic
WY	1973	Mountain

Wherever individual State prices are unavailable, quantity-weighted Census division prices from *C&Q* are assigned as shown in Table A16.

For 1973, 1974, and 1983 forward, Btu prices in cents per million Btu are taken from *C&Q* and converted to dollars per million Btu. For 1975 through 1979, Btu prices in cents per million Btu are taken from *C&Q*, with their corresponding delivered quantities, weighted into overall prices, and converted to dollars per million Btu. For 1980 through 1982, Btu prices are reported in *C&Q* for all reporting plants and are converted to dollars per million Btu. U.S. Btu prices for all years are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Prices: 1970 Through 1972

Btu prices for 1970 through 1972 (and AK and HI for 1973) are estimated by using data from *Statistical Yearbook of the Electric Utility Industry.* U.S. prices are then computed by using the State-level prices and the electric utility distillate consumption data from SEDS.

1. Regression techniques are used to arrive at the equation for estimating electric utility sector distillate prices for the 1970 through 1972 (or 1973) period. AL is treated as the reference State. The regression equation uses *Statistical Yearbook* State-level prices for 1974 through 1980 as the independent variable and the State-level prices calculated above for 1974 through 1980 as the dependent variable. Substituting Btu prices for 1970 through 1972 (or 1973) from the *Statistical Yearbook* into the regression equation yields the estimated electric utility sector State-level distillate prices.

2. Wherever individual State prices are unavailable, quantity-weighted Census division prices are assigned as follows: ID/1970 through 1972; TN/1970; and WA/1970, 1971.

3. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Alaska and Hawaii Prices

Since *C&Q* does not cover AK/1973 forward or HI/1973 through 1982 and 1992, prices for these States are estimated. The ratio of the reported *C&Q* U.S. price and the *Statistical Yearbook* U.S. price is multiplied by the *Statistical Yearbook* State price for each year to estimate the price. AK prices for 1971, 1975, and 1978, for which *Statistical Yearbook* data are missing, are estimated from the average ratio of AK prices to U.S. prices in adjacent years (e.g., 1975 is calculated as the average of the 1974 and 1976 prices). Prices for 1970 through 1973 are calculated as described in the "Prices: 1970-1972" section. Prices for HI/1983 through 1991 are taken from *C&Q*.

Data Sources

Prices

1973 forward: Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants*; Table 6 (1973, 1974); Tables 5, 6, 12, 13 (1975-1979); Table 45 (1980-1982); Table 51 (1983, 1984); Table 41 (1985-1989); and Table 14 (1990 forward).

1970 forward: Edison Electric Institute, *Statistical Yearbook of the Electric Utility Industry*, table titled, "Analysis of Fuel for Electric Generation-Total Electric Utility Industry," (1970-1988); and table titled, "Fossil Fuels Used for Electric Generation Total Electric Utility Industry," (1990 forward).

Consumption

1970 forward: Energy Information Administration, State Energy Data System, electric utility sector distillate consumption.

Conversion Factors

Btu prices are calculated directly from data sources; no explicit conversion factors are needed for any years for the electric utility sector.

Industrial Sector

The industrial sector distillate prices are developed by using a variety of data sources and several estimation methods, depending on the years involved. For 1983 forward, prices of No. 2 fuel oil (excluding taxes) from the *Petroleum Marketing Annual (PMA)* are supplemented with prices derived from the American Gas Association (AGA) *Residential Gas Market Survey* (except for 1991, when AGA data are not available). State general sales taxes from the Bureau of the Census are added. For 1970 through 1982, prices are the average cost of distillate to manufacturing firms and implicitly include taxes that reflect individual State differences.

Physical Unit Prices: 1983 Through 1990, 1992

For 1983 through 1990 and 1992, physical unit distillate prices in cents per gallon (excluding taxes) are generally available for 24 States from the *PMA*. State-level prices for the remaining 27 States are estimated by using price data from the American Gas Association (AGA), SEDS consumption data, and *PMA* Petroleum Administration for Defense (PAD) district prices. The estimation procedures are described below.

1. State prices in cents per gallon are generally available from the *PMA* for the following 24 States: AK, CT, DC, DE, ID, IL, IN, MA, MD, ME, MI, MN, NH, NJ, NY, OH, OR, PA, RI, VA, VT, WA, WI, and WV. Prices for these States are converted from cents to dollars per gallon, and State general sales taxes from the Bureau of the Census' *State Government Tax Collections (SGTC)* are added.

2. For the remaining 27 States that do not have prices in the *PMA*, prices are estimated by using AGA fuel oil prices, SEDS consumption data, and *PMA* PAD district prices for Districts II, III,

IV, and V and Subdistrict IC (all the States in PAD Subdistricts IA and IB have published prices). The following steps are used to estimate the prices:

a. Distillate prices from the *PMA* for PAD Districts II, III, IV, and V and Subdistrict IC are converted from cents per gallon to dollars per gallon.

b. The AGA lists fuel oil prices by company for the principal city served in dollars per million Btu, including State sales taxes. A simple average of the city-level prices is used to derive a State-level price for each of the 27 States without *PMA* prices. These AGA State averages are converted from dollars per million Btu to dollars per gallon by using the AGA conversion factor of 7.194 gallons per million Btu. State general sales taxes from *SGTC* are subtracted to give State averages comparable to the *PMA* prices.

c. The AGA State prices derived in step 2b are combined into PAD district averages using SEDS consumption to weight each State's values. This procedure gives AGA consumption-weighted average prices for PAD Districts II, III, IV, and V and Subdistrict IC that are comparable to the volume-weighted PAD district prices published in the *PMA*. The AGA PAD district averages are calculated by using only the available States; if a State does not appear in the survey, it is not included in the PAD calculation.

d. Adjustment factors, ratios of the *PMA* PAD district price divided by the AGA derived PAD district price, are calculated for PAD Districts II, III, IV, and V, and Subdistrict IC.

e. Prices for the 27 States not published in the *PMA* are calculated by multiplying the AGA State prices derived in step 2b by the appropriate PAD district adjustment factor from step 2d and adding State general sales taxes from the *SGTC*.

f. States that do not have prices in either the *PMA* or the AGA are assigned a *PMA* PAD district price, and State general sales taxes from the *SGTC* are added. The States with assigned prices are shown in Table A17.

Table A17. Distillate Industrial Sector PADD Price Assignments, 1983–1990, 1992

State	Years	Prices Assigned
AK	1988	PAD District V
AR	1988	PAD District III
AZ	1992	PAD District V
CA	1984, 1992	PAD District V
HI	1983-1990, 1992	PAD District V
KS	1986, 1989	PAD District II
LA	1986	PAD District III
MS	1983, 1985, 1986	PAD District III
NM	1984-1990, 1992	PAD District III
OK	1986, 1989, 1990, 1992	PAD District II
SD	1986	PAD District II
TX	1992	PAD District III
UT	1985	PAD District IV
WY	1991	PAD District IV

Physical Unit Prices: 1991

Physical unit distillate prices in cents per gallon (excluding taxes) are available for 21 States from the *PMA*. Because prices are not available from AGA for 1991, State-level prices for the remaining 30 States are estimated by using physical unit prices derived for 1990 in SEPEDS (described below) and the 1991 *PMA* Petroleum Administration for Defense (PAD) district prices. The estimation procedures are described below.

1. State prices in cents per gallon are available from the *PMA* for the following 21 States: AK, CT, DE, IL, IN, MA, MD, ME, MI, MN, NH, NJ, NY, OH, PA, RI, VA, VT, WA, WI, and WV. Prices for these States are converted from cents to dollars per gallon, and State general sales taxes from the Bureau of the Census, *State Government Tax Collections (SGTC)* are added.

2. For the remaining 30 States that do not have prices in the *PMA*, prices are estimated by using the 1990 SEPEDS physical unit and *PMA* PAD district prices for 1990 and 1991. The following steps are used to estimate the prices:

   a. The 1990 State prices derived from AGA and *PMA*, as described below, are adjusted by the percentage change in the 1990 and 1991 prices for each State's *PMA* PAD district or subdistrict.

   b. The State general sales taxes from *SGTC* are added.

Physical Unit Prices: 1982

In 1984, the Bureau of the Census announced that State-level fuel cost and quantity information would no longer be published in either the *Annual Survey of Manufactures (ASM)* or *Census of Manufactures (CM)*. In addition, the *PMA*, the source for 1983 forward industrial sector distillate price data, did not contain 1982 prices. Because of this lack of price data, the 1982 industrial sector distillate prices are estimated, based on the relationship of industrial sector prices to electric utility sector prices for 1978 through 1981. The 1983 prices are not used in the estimation because they exclude taxes, while the 1978 through 1981 prices include taxes.

1. In order to calculate the average ratios of industrial-to-electric utility distillate prices, electric utility price assignments are made for: AK/1978 through 1982 from WA; ID/1979 through 1982 from MT; RI/1978 through 1982 from CT; and VT/1978 from ME.

2. The average 1978 through 1981 ratios of industrial-to-electric utility sector distillate prices are calculated for each State.

3. Prices for 1982 are estimated by multiplying the average ratios by the electric utility data for 1982.

Physical Unit Prices: 1971, 1974 Through 1981

For the years 1971 and 1974 through 1981, industrial sector distillate prices are calculated directly from cost and quantity data from the *Annual Survey of Manufactures (ASM)* or *Census of Manufactures (CM)* for all States where data are available. Taxes are included in the prices. There are no missing prices for 1971. Six States are missing some *ASM* cost and quantity data for the 1974 through 1981 period. Cost and quantity data for these States are estimated as the simple average of the cost and quantity data for their adjacent States. The States, the years for which data are estimated, and the adjacent States used to make the estimation are shown in Table A18.

Physical Unit Prices: 1970, 1972, 1973

Since *ASM* and *CM* data are not available for these years, the prices must be estimated. Physical unit prices are based on the ratio of 1971 *CM* prices to the 1971 assigned *Platt's* prices (Table A13 on page 202). The resulting ratios for each State are used with the *Platt's* assigned prices for 1970, 1972, and 1973 to impute prices.

Table A18. Distillate Industrial Sector Price Assignments, 1974-1981

State	Years	State Prices Used
HI	1979-1981	CA
ND	1979-1981	MN, MT, SD
NM	1974-1979	AZ, CO, TX
NV	1974-1981	AZ, CA, ID, OR, UT
OK	1974-1978	AR, CO, KS, MO, TX
WY	1974-1981	CO, ID, MT, NE, SD, UT

1. The first step is to calculate State-level ratios between prices calculated from the 1971 *CM* cost and quantity data and the 1971 assigned *Platt's* prices. There are no missing States in either of these two sets of prices.

2. State-level physical unit prices for 1970, 1972, and 1973 are estimated by multiplying the 1971 ratio by the assigned State-level *Platt's* prices for each respective year.

Btu Prices: All Years

Btu prices for States are calculated by converting the physical unit prices from cents to dollars per gallon, then to dollars per barrel (42 gallons per barrel) and, finally, to dollars per million Btu (5.825 million Btu per barrel). U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS, adjusted for process fuel consumption.

Data Sources

Prices

1986 forward: Energy Information Administration, *Petroleum Marketing Annual*, Table 37 (1986-1988) and Table 39 (1989 forward), column titled, "To Industrial Consumers."

1983-1990, 1992: American Gas Association, *Residential Natural Gas Market Survey* (1989, 1990, 1992), *Gas Househeating Survey* (1983-1988), Appendix 2, "Competitive Fuel Prices," column titled, "Fuel Oil."

1983 forward: Bureau of the Census, U.S. Department of Commerce, *State Government Tax Collections*, table titled, "State Government Excises on General

Sales, Motor Fuel, and Cigarettes: Beginning and End of Fiscal Year."

1983-1985: Energy Information Administration, *Petroleum Marketing Annual 1985*, Volume 1, Table 26.

1970-1982: McGraw-Hill, Inc., *Platt's Oil Price Handbook and Oilmanac*, refinery and terminal prices for No. 2 fuel oil, average of highs and lows.

1971, 1977, and 1981: Bureau of the Census, U.S. Department of Commerce, *Census of Manufactures*, Table 4 (1971) and Table 3 (1977, 1981).

1974-1976 and 1978-1980: Bureau of the Census, U.S. Department of Commerce, *Annual Survey of Manufactures*, Table 3.

Consumption

1970 forward: Energy Information Administration, State Energy Data System, industrial sector distillate consumption.

Conversion Factor: All Years

5.825 million Btu per barrel

Transportation Sector

Consumption of distillate fuel in the transportation sector includes distillate fuel used for vessel bunkering and for military and railroad use, plus on-highway diesel fuel use. Since on-highway diesel fuel use accounts for the largest portion of this sector—increasing from 55 percent in 1970 to 78 percent in 1992—prices and expenditures are calculated by using diesel prices. State physical unit prices for 1986 forward are taken from the *Petroleum Marketing Annual (PMA)*. Physical unit prices for earlier years are calculated by using *PMA* prices and consumption data from *Highway Statistics* to weight monthly or quarterly prices from *Agricultural Prices* into annual prices. For all years, physical unit prices are calculated from the data sources, while Btu prices are calculated from the physical unit prices and the conversion factor.

Physical Unit Prices: 1986 Forward

Diesel fuel physical unit prices for 1986 forward are based on the annual State-level price data available from the *PMA* for approximately 24 States and monthly tax rate information from *Highway Statistics*. Generally, the *PMA* provides physical unit prices, excluding taxes, for AK, CT, DC, DE, ID, IL, IN, MA, MD, ME, MI, MN, NH, NJ, NY, OH, OR, PA, RI, VA, VT, WA, WI, and WV. State and Federal excise taxes on diesel fuel are added to *PMA* prices to derive final physical unit prices, which are converted to dollars per gallon. In cases where the tax rate is not constant through the year, the months' rates are averaged, weighted by the number of months each rate was in effect. State and local sales and other general taxes are not included.

For the remaining States for which no State-level physical unit prices are published, the *PMA* PAD district prices for diesel fuel and motor gasoline and State motor gasoline prices are used. The State diesel fuel price is estimated as the ratio of the PAD district diesel fuel price to the PAD district motor gasoline price times the State motor gasoline price. The use of the ratio assumes that the relationship between the motor gasoline State and PAD district prices is similar to that of the diesel fuel State and PAD district prices. Motor gasoline prices to end users at all refiners' company outlets are used. When a State has no price available in that data series, the motor gasoline price to end users by all types of sellers through company outlets is used. States with no published diesel fuel or motor gasoline prices are assigned the motor gasoline price of an adjacent State. For 1991 and 1992, DC is assigned the MD price. State and Federal excise taxes are added as described above.

Physical Unit Prices: 1983 Through 1985

Diesel fuel physical unit prices for 1983 through 1985 are based on the annual State-level price data available from the *PMA* and monthly State and Federal tax rate information from *Highway Statistics* for 24 States. The prices for the remaining 27 States are calculated by using *Agricultural Prices* as outlined in the 1977 through 1982 methodology.

For the 24 States of AK, CT, DC, DE, ID, IL, IN, MA, MD, ME, MI, MN, NH, NJ, NY, OH, OR, PA, RI, VA, VT, WA, WI, and WV, the *PMA* provides physical unit prices, excluding taxes. In 1983 through 1985, the DC price is missing, and the MD price is assigned. In 1983, RI has no price and the PAD District IA average is assigned. A simple average of monthly State and Federal excise taxes is calculated as a combined average tax and added to the *PMA* price for a final physical unit price. State and local sales and other general taxes are not included.

Physical Unit Prices: 1977 Through 1982

Monthly prices from *Agricultural Prices* and monthly special fuels consumption data from *Highway Statistics* are collected for the States. MD prices are assigned to DC. Prices include State and local per gallon taxes. Federal taxes and State and local sales and other general taxes are not included.

The volume-weighted annual diesel physical unit prices for States and the United States are calculated by using the monthly *Agricultural Prices* price data, weighted by the monthly *Highway Statistics* consumption data. AK/1977 through 1982 prices are estimated based on the assumption that the ratio of AK-to-U.S. diesel fuel price is the same as the ratio of the AK-to-U.S. motor gasoline price each year.

Physical Unit Prices: 1970 Through 1976

Quarterly prices from *Agricultural Prices* and monthly special fuels consumption data from *Highway Statistics* are collected for the States. Prices include State and local per gallon taxes. Federal taxes and State and local sales taxes and other general taxes are not included.

1. Prices for 1970 through 1972 are reported in cents per gallon and must be converted to dollars per gallon. Prices for 1973 through 1976 are already reported in dollars per gallon.

2. For 1971 through 1973, State-level prices are not available for CT, MA, ME, NH, RI, and VT. Each is assigned the New England price for the 3 years.

3. The third quarter DE price is assigned to the missing fourth quarter DE price in 1972.

4. The combined MD/DE prices reported in 1973 are assigned to each of the States.

5. For 1970 through 1976, MD (or MD/DE) prices are assigned to DC.

The monthly special fuels consumption for 1970 through 1976 are converted into quarterly consumption by summing the months for each quarter.

The consumption-weighted annual diesel physical unit prices for the States are calculated by using the quarterly weights and quarterly prices. For 1970 through 1972, the quarterly prices from *Agriculture Prices* are converted from cents per gallon to dollars per gallon. For 1973 forward, the prices are already in dollars per gallon in the source. AK/1970 through 1976 prices are estimated based on the assumption that the ratio of AK-to-U.S. diesel fuel price is the same as the ratio of AK-to-U.S. motor gasoline price each year.

Btu Prices: All Years

Btu prices for States are calculated by converting the physical unit prices from cents per gallon to dollars per barrel (42 gallons per barrel) and then to dollars per million Btu (5.825 million Btu per barrel). U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption from SEDS.

Data Sources

Prices

1986 forward: Energy Information Administration, *Petroleum Marketing Annual*, Table 36 (1986-1988) and Table 38 (1989 forward), column titled, "Sales to End Users, Through Company-Operated Retail Outlets," for diesel fuel prices; Table 29 (1986-1988) and Table 30 (1989 forward), column titled "All Refiners, Sales to End Users, Through Company Outlets," for motor gasoline prices; and Table 28 (1986-1988) and Table 29 (1989 forward), column titled "Motor Gasoline Average, Through Company Outlets," for additional motor gasoline prices.

1983-1985: Energy Information Administration, *Petroleum Marketing Annual 1985*, Volume 1, Table 25, column titled, "Sales to End Users, Sales Through Company-Operated Retail Outlets."

1970-1985: Crop Reporting Board, U.S. Department of Agriculture, Agriculture Prices, tables generally titled, "Motor Supplies: Average Price Paid by Farmers for Motor Fuel" for 1970-1979, and "Diesel Fuel: Average Price Paid by States" for 1980-1985.

1970 forward: Federal Highway Administration, U.S. Department of Transportation, *Highway Statistics*, Table MF-121T for State tax rates, Table FE-101 for Federal tax rates, and Table MF-25 for special fuels consumption data. Table MF-25 is not included in the 1976 volume but is publicly available directly from the Federal Highway Administration.

Consumption

1970 forward: Energy Information Administration, State Energy Data System, transportation sector distillate consumption.

Conversion Factor: All Years

5.825 million Btu per barrel

Heavy Oil (Utilities)

For all years, the price of heavy oil consumed at electric utilities is the average cost of No. 6 fuel oil (residual fuel oil) as reported in *Cost and Quality of Fuels for Electric Utility Plants*. (See **Residual Fuel Electric Utility Sector** on page 234.)

Jet Fuel

Jet fuel prices are estimated for all years for the transportation sector and for 1972 through 1982 for the electric utility sector. After 1982, electric utility use of jet fuel is reported as light oil. (See **Light Oil (Utilities)** on page 218).

Transportation Sector

Consumption estimates from SEDS are developed for two types of jet fuel: kerosene-type (used primarily by commercial aircraft and accounting for 90 percent of all jet fuel in 1992) and naphtha-type (used primarily by military aircraft and accounting for the remaining 10 percent in 1992). Prices are developed for kerosene-type jet fuel and are used as the price for both types of jet fuel. Taxes are not included in the prices.

Physical Unit Prices: 1985 Forward

Transportation sector jet fuel prices for 1985 forward are based on data from EIA's *Petroleum Marketing Annual (PMA)*. Annual prices to end users are available for all States in most cases. Prices are converted to dollars per gallon. States without prices are assigned adjacent State or PAD subdistrict prices as shown in Table A19.

Physical Unit Prices: 1983, 1984

Prices for 1983 and 1984 are based on data from EIA's *Petroleum Marketing Monthly (PMM)*. Monthly jet fuel prices in cents per gallon (excluding taxes) are available from the *PMM* for the PAD districts and subdistricts for January 1983 through August 1984. The monthly prices for each of the PAD districts or subdistricts (IA, IB, IC, II, III, IV, and V) are assigned to each State within a district whenever the State monthly price is unavailable. State-level data are available from September 1984 through December 1984. Annual prices are the simple averages of the monthly prices and are assigned directly to their respective States. These prices are converted to dollars per gallon. Missing 1984 prices are assigned values as shown in Table A20.

Table A19. Jet Fuel Transportation Sector Price Assignments, 1985 Forward

State	Years	PAD District or State Prices Assigned
DC	1985-1988, 1990	MD
DE	1987	PAD Subdistrict IB
ME	1985, 1990, 1991	PAD Subdistrict IA
NH	1987	PAD Subdistrict IA
RI	1985-1988	PAD Subdistrict IA
VT	1985-1988, 1991, 1992	PAD Subdistrict IA

Physical Unit Prices: 1976 Through 1982

State-level jet fuel prices for 1976 through 1982 are calculated from the *Producer Prices and Price Indexes (PPI)* monthly indices for Census divisions and the jet fuel base prices by State for July 1975. The monthly price for each Census division is equal to

Table A20. Jet Fuel Transportation Sector Price Assignments, 1983 and 1984

State	Months	PAD District or State Prices Assigned
CT	September	PAD Subdistrict IA
DC	September-December	MD
ID	September	PAD District IV
KS	November, December	PAD District II
ME	September-December	PAD Subdistrict IA
MS	October	PAD District III
ND	December	PAD District II
NE	October	PAD District II
NH	September, November, December	PAD Subdistrict IA
NM	October-December	PAD District III
OR	November	PAD District V
RI	September-December	PAD Subdistrict IA
VT	September-December	PAD Subdistrict IA
WV	September	PAD Subdistrict IC

the *PPI* monthly index times the jet fuel base price for July 1975 for that Census division. Census division monthly prices are assigned to each State within the Census division, and annual jet fuel prices are computed as simple averages of the monthly State prices.

Physical Unit Prices: 1970 Through 1975

Jet fuel physical unit State-level prices for the 1970 through 1975 period are based on U.S. annual wholesale prices from the *PPI* and the relationship of these prices to wholesale kerosene prices reported in *Platt's*. The U.S. prices are converted to Census division prices which are then assigned directly to States.

Preliminary U.S. jet fuel prices from the *PPI* for 1973 through 1980 are calculated by using the annual jet fuel price indices, the jet fuel U.S. base price for July 1975 (0.276 dollars per gallon), and the U.S. index for July 1975 (235.8). The index for 1973 is assumed to be equal to a simple average of the 11 available monthly indices.

The calculated preliminary U.S. jet fuel prices from the *PPI* are used as the dependent variable in a regression equation for 1973 through 1980 where the wholesale kerosene prices from *Platt's* are the independent variable. The regression equation is used to estimate U.S. annual jet fuel prices for 1970 through 1972.

Jet fuel prices for Census divisions are estimated by using the preliminary U.S. prices derived above for 1970 through 1975 (calculated directly from the *PPI* data for 1973 through 1975 and estimated for 1970 through 1972). These prices are used as inputs to a regression equation which establishes a linear relationship between preliminary U.S. prices and Census division prices for the years 1970 through 1975. Census division prices are assigned to each State within the Census division.

Btu Prices: All Years

Btu prices for States are calculated from the physical unit prices and the Btu conversion factor. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Data Sources

Prices

1985 forward: Energy Information Administration, *Petroleum Marketing Annual*, Table 21, column titled, "Kerosene-Type Jet Fuel" (1985); and Table 33 (1986-1988) and Table 35 (1989 forward), column titled, "Kerosene-Type Jet Fuel, Sales to End Users."

1983, 1984: Energy Information Administration, *Petroleum Marketing Monthly*, Table 14 (January 1984), Table 19 (February-September 1984), and Table 25 (October 1984-January 1985).

1973-1982: Bureau of Labor Statistics, U.S. Department of Labor, *Producer Prices and Price Indexes, Supplement*, table titled, "Producer price indexes for refined petroleum products by region."

1970-1975: McGraw Hill, Inc., *Platt's Oil Price Handbook and Oilmanac*, 57th Edition, page 480.

Consumption

1970 forward: Energy Information Administration, State Energy Data System, transportation sector jet fuel consumption.

Conversion Factor: All Years

5.670 million Btu per barrel

Electric Utility Sector

Jet fuel electric utility consumption estimates are taken from SEDS for 1972 through 1982 only. For 1970 and 1971, no parallel series is available, and for the years after 1982, the series is a part of light oil. All applicable taxes are included in the prices.

Btu Prices: 1975 Through 1982

For the States that consumed kerosene-type jet fuel at electric utilities during these years, the Btu prices are taken directly from *Cost and Quality of Fuels for Electric Utility Plants (C&Q)*.

Btu Prices: 1972 Through 1974

Because C&Q prices are not available for 1972 through 1974, prices are estimated from C&Q prices

for 1975 and 1976 and *Agricultural Prices* data for 1972 through 1976.

1. Simple annual averages of *Agricultural Prices* quarterly values are calculated for 1972 through 1976. New England Census Division prices are assigned to CT, MA, ME, NH, RI, and VT.

2. The average annual prices based on *Agricultural Prices* values for 1975 and 1976 are used as the independent variables in a regression where the dependent variables are State-level prices based on *C&Q* prices for 1975 and 1976.

3. State-level price estimates for 1972 through 1974 are derived from the results of the regression analysis and the *Agricultural Prices* values for 1972 through 1974.

U.S. Btu Prices: All Years

U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Data Sources

Prices

1975-1982: Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants*, Tables 6 and 13 (1975), Table 13 (1976-1979), and Table 47 (1980-1982).

1972-1976: Crop Reporting Board, U.S. Department of Agriculture, *Agriculture Prices*, table titled, "Household Supplies: Average Prices Paid by Farmers for Lawn Mowers and Petroleum Products."

Consumption

1972-1982: Energy Information Administration, State Energy Data System, electric utility sector kerosene-type jet fuel consumption.

Conversion Factors: All Years

Because Btu prices are available directly from the data sources, no conversion factors are used.

Kerosene

Kerosene prices are developed for the residential and industrial sectors, and the industrial sector prices are assigned to the commercial sector. Estimates of the amount of kerosene consumed by the residential, commercial, and industrial sectors are taken from the State Energy Data System (SEDS).

Residential Sector

Physical Unit Prices: 1985 Forward

In July 1985, the Bureau of Labor Statistics ceased publication of the *Producer Prices and Price Indexes (PPI)* data series that is used to estimate State Energy Price and Expenditure Data System residential kerosene prices for earlier years. An alternative approach is therefore applied that maintains continuity with the previously published prices. This approach is used to estimate physical unit prices for all States with residential kerosene consumption.

The approach used to estimate residential kerosene prices for 1985 forward is based on the fact that average U.S. kerosene and distillate fuel prices from 1980 through 1984 are highly correlated. Residential kerosene prices for 1985 forward are estimated by applying the percentage changes in residential distillate fuel prices for each year to the residential kerosene prices for the previous year in each State. Taxes are included in the distillate fuel oil prices and are, therefore, reflected in the kerosene price estimates.

Physical Unit Prices: 1977 Through 1984

Because *Agricultural Prices* kerosene price data are not available after 1976, monthly Census division *PPI* prices and price indices are used as the basis for the residential kerosene series from 1977 through 1984. To maintain consistency in the series, the *PPI* prices are multiplied by an adjustment factor that accounts for the relationship between *PPI* and *Agricultural Prices* data for quarters in which the two series overlap. In the description of computational procedures below, the adjustment factor is derived first, the PPI prices for 1977 through 1984 are estimated, and the final kerosene physical unit and Btu prices for States are calculated. The final residential sector kerosene prices approximate the average prices paid by farmers. Taxes are included in the source data from

Agricultural Prices and are, therefore, reflected in the final price estimates.

The first step is to compute the adjustment factor relating *PPI* and *Agricultural Prices* data.

1. Monthly *PPI* prices for the 18 months covered from July 1975 through December 1976 are calculated from the July 1975 base prices and monthly indices for Census divisions.

2. The calculated Census division monthly prices are assigned to each State within the respective Census division.

3. Volume-weighted quarterly *PPI*- based prices for States are calculated by using the monthly volume weights developed from *Retail Sales and Inventories* sales data for "other distillate fuel oil."

4. The adjustment factor relating *PPI* and *Agricultural Prices* data is calculated as the simple average of the ratios of the quarterly kerosene price by State from *Agricultural Prices* to the calculated quarterly *PPI* -based kerosene prices by State.

The next step is the calculation of monthly State-level prices from *PPI* kerosene Census division data for 1977 through 1984.

1. Monthly Census division *PPI* prices are calculated by using the July 1975 base prices and the monthly price indices for 1977 through 1984. The missing monthly indices for February, June, July, and October 1980 for the East South Central Division are assumed to be equal to the index for the preceding month.

2. Census division monthly prices are assigned to each State within the respective Census division.

The next step is the calculation of annual physical unit State prices.

1. Annual *PPI*-based physical unit prices for States are computed from the monthly *PPI* prices and the monthly consumption weights.

2. Final residential kerosene prices for States are estimated as the product of the annual *PPI*-based State price and the adjustment factor calculated above.

Physical Unit Prices: 1970 Through 1976

Physical unit prices for States are calculated from quarterly price data in *Agricultural Prices* and consumption weights derived from *Retail Sales and Inventories of Fuel Oil.* Taxes are included in the source data.

The quarterly physical unit price data from *Agricultural Prices* for 1970 through 1976 are published in several different forms. The first step in the calculation of prices for these years is to organize the published *Agricultural Prices* data into a consistent form.

1. For 1971 through 1973, no quarterly prices are available for CT, MA, ME, NH, RI, and VT. Each of these States is assigned the quarterly prices reported for the New England Census Division.

2. For 1973, combined MD/DE quarterly prices are reported instead of separate State prices. For this year, the combined prices are assigned to both States.

3. No prices are reported for AK, DC/1970 through 1976. Quarterly weighted Census division prices are assigned to AK, and MD prices are assigned to DC for all 7 years.

In order to weight the quarterly prices from *Agricultural Prices* into annual State prices, monthly quantity weights are calculated from *Retail Sales and Inventories of Fuel Oil.* This assumes that the "other distillate oil" consumption data by PAD districts is kerosene.

1. Monthly weights are computed by using simple averaging of all available "other distillate oil" sales data for each month for each PAD district. Since data are available from November 1978 to March 1981, some months have averages based on three data points while others are based on one or two data points. For example, the average weight for March is the simple average of the 1979, 1980, and 1981 March volumes published in *Retail Sales and Inventories of Fuel Oil.*

2. Each month's share of average annual sales is calculated by PAD district from the average monthly sales figures. These shares, which become the monthly weights, are then assigned to each State within its respective district.

Final State annual kerosene physical unit prices are calculated as the weighted average of the *Agricultural*

Prices quarterly prices. The monthly weights (shares) are converted to quarterly weights by summing the shares for months within a particular quarter. These same weights are used with the State-level price data for each year from 1970 to 1976.

Alaska Btu Prices: 1970 Through 1979, 1983, 1984

Kerosene residential prices for AK are estimated based on the assumption that the ratio of AK-to-U.S. kerosene residential prices is the same as the ratio of AK-to-U.S. distillate fuel residential prices.

Btu Prices: All Years

Btu prices for States are calculated from the physical unit prices and the conversion factor. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Data Sources

Prices

1985 forward: Residential sector distillate fuel price estimates (in physical units) from the State Energy Price and Expenditure Data System.

1975-1984: Bureau of Labor Statistics, U.S. Department of Labor, *Producer Prices and Price Indexes, Supplement,* table titled, "Producer price indexes for refined petroleum products by region."

1978-1981: Energy Information Administration, *Retail Sales and Inventories of Fuel Oil,* Table 2.

1970-1976: Crop Reporting Board, U.S. Department of Agriculture, *Agricultural Prices,* table titled, "Household Supplies: Average Price Paid by Farmers for Lawn Mowers and Petroleum Products."

Consumption

1970 forward: Energy Information Administration, State Energy Data System, residential sector kerosene consumption.

Conversion Factor: All Years

5.670 million Btu per barrel

Commercial Sector

State prices from the industrial sector are assigned to the commercial sector. Although there is no industrial consumption of kerosene in DC in 1989, 1990, and 1992, an industrial price is calculated to be assigned to the commercial sector consumption.

Industrial Sector

The industrial sector kerosene prices are based on wholesale price and price index data and on the industrial sector distillate prices. The procedures vary slightly for 1985 forward, 1975 through 1984, and 1970 through 1974. In all years, physical unit prices are calculated first; then Btu prices are computed by using the physical unit prices and the conversion factor. Prices approximate an average kerosene price for the manufacturing sector. Taxes are included in the distillate fuel oil prices and are, therefore, reflected in the kerosene price estimates.

Physical Unit Prices: 1985 Forward

The discontinuation of the published *PPI* data from the Bureau of Labor Statistics affected the estimation of industrial sector kerosene prices. To estimate prices for 1985 forward, the percentage change in industrial sector distillate fuel prices for each year is applied to the industrial sector kerosene prices for the previous year on a State-by-State basis.

Physical Unit Prices: 1975 Through 1984

Physical unit industrial kerosene prices for 1975 through 1984 are estimated from *PPI* base prices and indices for kerosene and No. 2 distillate oil, and from the industrial sector distillate prices in physical units. The ratio of *PPI* kerosene prices to *PPI* distillate prices is used as an adjustment factor to estimate kerosene prices.

Annual wholesale prices are calculated from *PPI* annual indices for kerosene and No. 2 distillate fuel oil and their respective July 1975 base prices for Census divisions. Annual average distillate price indices for 1976 are estimated as the simple average of monthly indices. Census division prices for both kerosene and fuel oil No. 2 are assigned to each State within the respective Census divisions. The industrial sector physical unit kerosene prices for States are computed by using the distillate industrial physical unit prices and the ratio of *PPI* kerosene prices to *PPI* fuel oil No. 2 prices.

Physical Unit Prices: 1970 Through 1974

Physical unit State-level for 1970 through 1974 are estimated from the distillate industrial prices and the average ratio of kerosene to distillate prices from *PPI* for 1975 through 1978. The average annual wholesale price ratio between kerosene and fuel oil No. 2 (distillate) is calculated from *PPI*-based data for the years 1975 through 1978. State-level kerosene industrial physical unit prices are calculated as the product of the ratios and the industrial sector distillate prices for 1970 through 1974.

Btu Prices: All Years

Btu prices for States are computed by converting the physical unit prices in dollars per gallon to dollars per barrel (42 gallons per barrel) and then to dollars per million Btu (5.670 million Btu per barrel). U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Data Sources

Prices

1970 forward: Industrial sector distillate fuel price estimates (in physical units) from the State Energy Price and Expenditure Data System.

1975-1985: Bureau of Labor Statistics, U.S. Department of Labor, *Producer Prices and Price Indexes, Supplement*, table titled "Producer price indexes for refined petroleum products by region."

Consumption

1970 forward: Energy Information Administration, State Energy Data System, industrial sector kerosene consumption.

Conversion Factor: All Years

5.670 million Btu per barrel

Light Oil (Utilities)

Beginning with 1980, the price of light oil consumed at electric utilities is the average delivered cost of No. 2 fuel oil as reported in *Cost and Quality of Fuels for Electric Utility Plants*. For earlier years, the price is the consumption-weighted average of the kerosene-type jet fuel price and No. 2 fuel oil. (See also **Distillate Fuel Electric Utility Sector** on page 207 and **Jet Fuel Electric Utility Sector** on page 214).

Liquefied Petroleum Gases

Liquefied petroleum gases (LPG) prices are developed for the residential and the industrial sectors. State prices for the commercial and transportation sectors are assigned from the industrial sector. Estimates of the amount of LPG consumed by sector are taken from the State Energy Data System (SEDS) and are adjusted for process fuel and intermediate product consumption in the industrial sector. (See the discussion under "Consumption Adjustments for Calculating Expenditures" on page 253.)

Residential Sector

Residential sector LPG prices are estimated as the average delivered prices of propane to residential consumers in areas where natural gas is available as a competing fuel. Taxes are included in the prices. For 1973 forward, Btu prices are reported in the data source. For 1970 through 1972, physical unit prices are calculated first and Btu prices are calculated by using the physical unit prices and Btu conversion factors. Prices for AK and HI in all years are estimated by a different methodology described in a separate section on page 220.

Btu Prices: 1973 Through 1990, 1992

Propane prices by city are reported by the American Gas Association (AGA) directly in dollars per million Btu including taxes. The simple average of available city prices is used as the State annual average. Prices that fall outside a reasonable range are omitted from consideration for Arkansas Louisiana Gas for AR in 1989; City of Long Beach for CA in 1989 and 1990; Public Service Electric & Gas for NJ in 1989; Central Hudson Gas and Electric for NY in1979 through 1981; Orange & Rockland Utilities for NY in 1989 and 1990; Pike County Light & Power for PA in 1989 and 1990; and Northwestern Public Service for SD in 1989.

To estimate missing prices (other than AK and HI, which are described in a separate section that follows), simple averages of adjacent States' prices are used as shown in Table A21. Estimated data for

Table A21. LPG Residential Sector Price Assignments, 1973 Forward

State	Years	State Prices Used in the Estimation
AR	1977	MO, MS, OK, TN, TX
CT	1990	MA, NY, RI
DC	1973-1983, 1990	MD
DE	1976, 1984	MD, NJ, PA
ID	1977	MT, NV, OR, UT, WA, WY
LA	1977	MS, TX
ME	1973-1977, 1985, 1986, 1992	MA, NH, VT
MO	1986	IA, IL, KS
ND	1973	MN, MT, SD
NM	1987, 1988	AZ, CO, UT
NV	1973, 1975	AZ, CA, ID, OR, UT, WY
OR	1976	CA, ID, NV, WA
SD	1986	MN, MT, ND
UT	1974, 1978, 1985	AZ, CO, ID, NV, WY
VT	1979	MA, NH, NY
WV	1992	KY, MD, OH, PA, VA

one State are not used to estimate prices for another State.

Btu Prices: 1991

Propane prices from the American Gas Association (AGA) are not available for 1991. Propane prices from the EIA *Petroleum Marketing Annual (PMA)* are used to calculate the percentage change in propane prices between 1990 and 1991 for each PAD district or subdistrict. These percentages are applied to the 1990 State residential LPG prices from the State Energy Price and Expenditure Data System (SEPEDS) to estimate 1991 prices for the contiguous 48 States and the District of Columbia. Prices for LPG in AK and HI are developed by using the methodology described on page 220.

Prices for PAD Subdistricts IA and IB and PAD District V are not available for 1990 in the *PMA*, and prices for PAD Subdistrict IA and PAD District V for 1991 are not available. To estimate the missing PAD district prices, a ratio of the end-users price to the resale price for propane published for an adjacent district is calculated and applied to the known resale price for the PAD districts and subdistricts without an end-users price. For 1990, the PAD District I end-users-to-resale ratio is multiplied by the PAD Subdistricts IA and IB resale prices to estimate an end-users price for those Subdistricts. For 1991, the PAD Subdistrict IB end-users-to-resale ratio is multiplied by the PAD Subdistrict IA resale prices to estimate an end-users price. For both years, the U.S. end-users-to-resale price ratio is applied to the PAD District V resale price to estimate a PAD District V end-users price.

Physical Unit Prices: 1971, 1972

Physical unit residential LPG prices are based on the city-level propane prices reported by AGA in cents per gallon. Prices for missing States are estimated. The AGA prices are the average delivered prices for propane purchased by residential consumers as of December 31.

1. City-level propane prices from AGA are assigned to their respective States. The AL/1971 price for the Phoenix City Utilities System is omitted because it falls outside a reasonable range.

2. Physical unit prices for a State are calculated directly from the available city/utility price observations reported by AGA. Final physical unit prices are equal to the simple average of the price observations for each State.

3. MD prices are assigned for missing DC prices. AK and HI prices are discussed in a separate section that follows.

Physical Unit Prices: 1970

Since AGA did not publish LPG prices prior to 1971, the residential sector LPG prices for 1970 are estimated. To maintain continuity with the AGA prices for 1971 forward, prices for 1970 are estimated by using simple regression analysis. The relationship between AGA data for 1971 and 1972 and corresponding *Agricultural Prices* data is the basis for the estimation.

1. Before regression analysis can be applied, *Agricultural Prices* data for 1970 through 1972 are prepared for 49 States (no AK or HI prices are available). These prices include taxes. Development of AK and HI prices are described in a separate section on page 220.

   a. State-level prices for small purchases, representing residential end users, for 1970 through 1972 are published by *Agricultural Prices* in cents per pound. When price per pound data are not available, price per gallon data, representing larger volume purchases, are used.

These prices per gallon are multiplied by 0.543, the average ratio of price per pound to price per gallon for the United States for 1970 through 1972, to create uniform input data in price per pound.

b. For 1971 and 1972, the price reported for the New England Region is assigned to CT, MA, ME, NH, RI, and VT.

c. Data in cents per pound are converted to dollars per gallon by multiplying by the propane conversion factor of 4.2 pounds per gallon, from the *Petroleum Products Handbook* and dividing by 100.

d. Missing prices use adjacent States' average prices as shown in Table A22.

2. The physical unit AGA prices and *Agricultural Prices* data for 1971 through 1972 (excluding AK and HI) are used with simple regression analysis to estimate final physical unit LPG residential prices.

Alaska and Hawaii Prices: All Years

Prices cannot be estimated for AK and HI by using adjacent State price assignments. Missing prices for these two States are estimated by computing ratios of the AK or HI prices to the simple average U.S. prices calculated from the AGA data for years when AK or HI prices are available and applying these ratios to the U.S. simple average prices in years when prices need to be estimated.

1. AGA prices for AK are available in 1972 and 1980. The 1972 AK-to-US ratio is used to estimate prices for 1970, 1971, and 1973 through 1979. The 1980 AK-to-US price ratio is used to estimate prices for 1981 through 1992.

Table A22. LPG Residential *Agricultural Prices* Assigned to Estimate 1970 Prices

State	Years	State Prices Used
DC	1970-1972	MD
NV	1970, 1971	AZ, CA, ID, UT
OR	1971-1972	CA, ID
UT	1972	AZ, CO, ID, NV, WY
WA	1970-1972	CA, ID

2. AGA prices for HI are available in 1971, 1977 through 1979, and 1989. The 1971 HI-to-US AGA is used to estimate prices for 1970 and 1972 through 1974. The average ratio of the HI-to-US prices for 1977 through 1979 is used to estimate prices for 1975, 1976, and 1980 through 1984. The 1989 HI-to-US ratio is used to estimate prices for 1985 through 1988 and 1990 through 1992.

Btu Prices: All Years

For 1973 forward, Btu prices for States are taken directly from the data sources. For 1970 through 1972, Btu prices for States are calculated by converting the physical unit prices by using the factors cited in Table A27 on page 224. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Data Sources

Prices

1971-1990, 1992: American Gas Association (AGA), *Gas Househeating Survey* (1971-1988), *Residential Gas Market Survey* (1989 and 1990), and *Residential Natural Gas Market Survey* (1992), Appendix 2, "Competitive Fuel Prices."

1991: Energy Information Administration, State Energy Price and Expenditure Data System, 1990 residential sector LPG prices.

1991: Energy Information Administration, *Petroleum Marketing Annual*, Table 35 (1990 and 1991), columns titled, "Propane (Consumer Grade)."

1970-1972: Crop Reporting Board, U.S. Department of Agriculture, *Agricultural Prices*, table titled, "Average Price Paid by Farmers for Lawn Mowers and Petroleum Products, Specified Dates, by State," column titled, "L.P. Gas."

Consumption

1970 forward: Energy Information Administration, State Energy Data System, residential sector LPG consumption.

Conversion Factors

1970-1972: Energy Information Administration, *State Energy Data Report 1992, Consumption Estimates,* Table D1, as shown in Table A27 on page 224.

1970-1972: 4.2 pounds per gallon from Guthrie, Virgil, ed., 1960. *Petroleum Products Handbook.* John Wiley and Sons, Inc., New York, New York: pages 3-5.

Conversion factors are not necessary for other years because Btu prices are available directly from the data sources.

Commercial Sector

State prices from the industrial sector are assigned to the commercial sector.

Industrial Sector

The industrial sector LPG prices are estimated from average LPG prices to manufacturing firms, average LPG prices to farmers, or refiner and gas plant operator sales to end users, depending on the data sources for the different years. Prices for 1985 forward are taken from the *Petroleum Marketing Annual (PMA).* Prices for 1978 through 1981 are taken from the *Annual Survey of Manufactures (ASM)* or the *Census of Manufactures (CM)* and prices for 1970 through 1977 and 1982 through 1984 are derived from *Agricultural Prices* and scaled to the *ASM/CM* prices by using the ratio of *ASM/CM* to *Agricultural Prices* LPG prices for the years 1978 through 1981, when both price series were available. Taxes are included in the 1970 through 1984 estimates but are not included in the prices for 1985 forward.

Physical Unit Prices: 1985 Forward

Industrial sector LPG physical unit State prices for 1985 forward are estimated by using physical unit annual prices in the *Petroleum Marketing Annual (PMA)* for consumer grade propane sales to end-users. Where prices are not available, the PAD district price is assigned to the State as shown in Table A23. One exception occurs in the 1992 price for AR. Because the neighboring States in PADD III are LPG producers, the PADD III price is uncharacteristically lower than previously reported prices for AR. Therefore, the 3 monthly prices available for AR in 1992 are averaged to derive an annual price.

Table A23. LPG Industrial Sector PAD District Price Assignments, 1985 Forward

State	Years	PAD Assignments
AK	1986-1988, 1990-1992	District V
AL	1985-1988	District III
AZ	1985-1992	District V
CA	1990-1992	District V
CO	1991	District IV
CT	1990-1992	Subdistrict IA
DC	1985-1992	Subdistrict IB
DE	1986-1992	Subdistrict IB
FL	1990-1992	Subdistrict IC
GA	1985, 1990-1992	Subdistrict IC
HI	1985-1992	District V
IA	1986, 1991, 1992	District II
ID	1986, 1990-1992	District IV
IN	1990	District II
KS	1986-1989, 1992	District II
MA	1986, 1990-1992	Subdistrict IA
MD	1988, 1990-1992	Subdistrict IB
ME	1986-1992	Subdistrict IA
MI	1985-1988, 1990	District II
MN	1985, 1986, 1988-1991	District II
MS	1990-1992	District III
MT	1990-1992	District IV
NC	1991, 1992	Subdistrict IC
ND	1985, 1986, 1991, 1992	District II
NE	1986-1992	District II
NH	1987-1992	Subdistrict IA
NV	1985-1988, 1990-1992	District V
NY	1990-1992	Subdistrict IB
OH	1990	District II
OK	1986, 1987	District II
OR	1986, 1990-1992	District V
PA	1990-1992	Subdistrict IB
RI	1986-1992	Subdistrict IA
SC	1992	Subdistrict IC
SD	1985-1992	District II
TN	1990-1992	District II
UT	1986-1988, 1990-1992	District IV
VT	1986-1992	Subdistrict IA
WA	1986-1992	District V
WI	1985, 1986, 1990	District II
WV	1989-1992	Subdistrict IC
WY	1987, 1988	District IV

When a PAD district price is not available, a consumption-weighted average price is calculated by using available prices for States within the district and the SEDS industrial sector LPG consumption for those States. A PAD District V price for 1985 is calculated as a consumption-weighted average of AK, CA, OR, and WA prices; a PAD Subdistrict IA calculated average price for 1986 uses CT and NH prices;

and PAD Subdistrict IA average prices for 1987 through 1988 use CT and MA prices.

When a PAD district price is not available and there are no State data within the PAD district to develop a consumption-weighted average, a different methodology is used. The source table also contains resale prices. To estimate the missing sales to end-users PAD district price, a ratio of the end-users price to the resale price for an adjacent PAD district or subdistrict is calculated and applied to the known resale price for the PAD district or subdistrict that does not have an end-users price. PAD prices used in the estimations are shown in Table A24.

Physical Unit Prices: 1982 Through 1984, 1970 Through 1977

Industrial sector LPG physical unit prices for 1982 through 1984 and 1970 through 1977 are estimated on the basis of the relationship between State-level LPG prices from *Agricultural Prices* and the prices calculated from *Annual Survey of Manufactures (ASM)* or *Census of Manufactures (CM)* for 1978 through 1981.

1. Before the adjustment factor relating *Agricultural Prices and ASM/CM* data is computed, monthly *Agricultural Prices* data are converted into annual prices and missing data are estimated.

   a. Annual LPG prices are calculated as simple averages of the monthly prices from *Agricultural Prices* for the years 1977 through 1984. The only States missing data are WV in 1977 through 1981 and AK, DC, and HI in 1977 through 1984. WV is assigned the simple average of the KY, MD, OH, PA, and VA prices. AK, DC, and HI prices are discussed below.

   b. The average ratio of *ASM/CM*-based final prices for 1978 through 1981 and the 1978 through 1981 *Agricultural Prices* annual prices is calculated for 48 States (excluding AK, DC, and HI) as the simple average of the ratio over the 4 years. This average ratio is used as an adjustment factor.

2. Final industrial sector LPG prices for 1982 through 1984 and 1970 through 1977 are estimated by using the State-level adjustment factors and annual average LPG prices from *Agricultural Prices* for these years.

   a. Annual average LPG prices are calculated for 1982 through 1984 and 1970 through 1977 as the simple average of the monthly prices.

   b. *Agricultural Prices* published annual average prices in dollars per gallon for all States in 1975 and 1976. For DE in 1970 through 1974, MD in 1970 through 1974, VA in 1970 through 1974, and WV in 1970 through 1972, only prices for small volume purchases in cents per pound were published. These are converted to cents per gallon by multiplying by 1.96, the average ratio of cents per gallon to cents per pound for the United States for 1970 through 1974.

   c. For 1970 through 1972, *Agricultural Prices* are converted from cents per gallon to dollars per gallon.

   d. For 1971 through 1973, the New England price per gallon reported by *Agricultural Prices* is assigned to CT, MA, ME, NH, RI, and VT.

   e. MD prices are assigned to DC in 1970 through 1972, 1974 through 1977, and 1982 through 1984. The combined MD/DE price in 1973 is assigned to MD, DE, and DC.

   f. Excluding AK and HI, States missing *Agricultural Prices* LPG prices are assigned the simple average price of adjacent States. The States with missing data and the adjacent State assignments are shown in Table A25.

   g. Industrial sector LPG physical unit prices for 1970 through 1977 and 1982 through 1984 for all States (except AK, DC, and HI) are calculated by using the estimated annual *Agricultural Prices* data for the respective year and the State-level average ratios as adjustment factors.

Table A24. LPG Industrial Sector, PAD District Price Estimates, 1990 Forward

Year	Missing PAD Prices	Prices Used in Estimation
1990	Subdistrict IA	PAD District I
	Subdistrict IB	PAD District I
	District V	U.S.
1991	Subdistrict IA	PAD Subdistrict IB
	District V	U.S.
1992	Subdistrict IA	PAD Subdistrict IC
	Subdistrict IB	PAD Subdistrict IC

3. AK prices for 1970 through 1977 and 1982 through 1984 and HI prices for, 1970 through 1977 and 1982 through 1984 are estimated by using the relationship between *ASM/CM* based prices for these States and the U.S. price reported by *Agricultural Prices* (1979 through 1981 for AK and 1978 through 1981 for HI). The average ratio for the available years for the two States is calculated and used with the *Agricultural Prices* U.S. prices for the years to be estimated.

Physical Unit Prices: 1978 Through 1981

For 1978 through 1981, the industrial sector LPG prices are either calculated directly from cost and quantity data from the *ASM* or the *CM* or are estimated by using the relationship of *ASM/CM* data to LPG price data from *Agricultural Prices*.

1. For 1978 through 1981, industrial sector physical unit prices for LPG are calculated as the average cost per unit from cost and quantity data published in *ASM/CM*. Since sales are reported in pounds, the prices are converted to dollars per gallon. The conversion factor of 4.5 pounds per gallon is from *ASM/CM*.

2. The AK price for 1978 is the consumption-weighted average Census division price. In addition, four States have prices estimated as the simple average of the prices of adjacent States, and DC is assigned the MD price as shown in Table A26.

Table A25. LPG Industrial Sector Price Assignments, 1970-1976

State	Years	State Prices Used in the Estimation
CT	1974	NY
MA	1974	NY
ME	1974	NY
NH	1974	NY
NV	1970-1971	AZ, CA, ID, UT
	1973-1974	AZ, CA, ID
OR	1970-1974	CA, ID
RI	1974	NY
	1975-1976	CT, MA, NY
UT	1972	AZ, CO, ID, NV, WY
	1973-1974	AZ, CO, ID, WY
VT	1974	NY
WA	1970-1974	CA, ID

Btu Prices: All Years

Btu prices for States and the United States are calculated from the physical unit prices and the conversion factors shown in Table A27. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS, adjusted for process fuel and intermediate product consumption.

Data Sources

Prices

1985 forward: Energy Information Administration, *Petroleum Marketing Annual*, Table 21 (1985), Table 33 (1986-1988), and Table 35 (1989 forward), columns titled "Propane (Consumer Grade)", "Sales to End Users" and "Sales for Resale."

1970-1984: Crop Reporting Board, U.S. Department of Agriculture, *Agricultural Prices*, tables titled, "Average Price Paid by Farmers for Lawn Mowers and Petroleum Products, Specified Dates, by State," column titled, "L.P. Gas," (1970-1976); "Household Supplies: Average Price Paid by Farmers" (1977-1979); "L.P. Gas: Average Price Paid by States" (1980); and "L.P. Gas: Average Price Paid by Months by States" (1981-1984).

1981: Bureau of the Census, U.S. Department of Commerce, *1982 Census of Manufactures, Fuels and Electric Energy Consumed, Part 2, States and Standard Metropolitan Statistical Areas by Major Industry Groups*, Table 3, State-level quantity and cost of liquefied petroleum gases.

1978-1980: Bureau of the Census, U.S. Department of Commerce, *Annual Survey of Manufactures, Fuels and Electric Energy Consumed, States by Industry Group and Standard Metropolitan Statistical Areas by Major Industry Group*, Table 3, State-level quantity and cost of liquefied petroleum gases.

Table A26. LPG Industrial Sector Price Assignments, 1978-1981

State	Years	State Prices Used
AR	1978	LA, MO, MS, OK, TX
DC	1978-1981	MD
LA	1980	AR, MS, TX
NM	1979-1981	AZ, CO, OK, TX
WY	1978-1981	CO, ID, MT, ND, NE, SD, UT

Table A27. LPG Btu Conversion Factors 1970 Forward
(Million Btu per Barrel)

Year	Conversion Factor	Year	Conversion Factor
1970	3.779	1982	3.615
1971	3.772	1983	3.614
1972	3.760	1984	3.599
1973	3.746	1985	3.603
1974	3.730	1986	3.640
1975	3.715	1987	3.659
1976	3.711	1988	3.652
1977	3.677	1989	3.683
1978	3.669	1990	3.625
1979	3.680	1991	3.614
1980	3.674	1992	3.624
1981	3.643		

Consumption

1970 forward: Energy Information Administration, State Energy Data System, industrial sector LPG consumption.

Conversion Factors

1970 forward: Energy Information Administration, *State Energy Data Report 1992, Consumption Estimates,* Table D1, as shown in Table A27.

1978-1981: 4.5 pounds per gallon from *Annual Survey of Manufactures,* Appendix C.

Transportation Sector

State prices from the industrial sector are assigned to the transportation sector.

Lubricants

Lubricant prices are developed for the industrial sector and assigned to the transportation sector. State-level prices are not available for either sector; national-level prices are assigned to all States and do not include end-user taxes paid at the time of sale. Estimates of lubricant consumption by the industrial and transportation sectors are taken from the State Energy Data System (SEDS).

Physical Unit Prices: 1992

Data from the U.S. Department of Commerce, Bureau of the Census, used to estimate lubricants prices were not available. The 1992 lubricants price is estimated by assuming that the change in lubricants prices in 1992 was proportional to the change in crude oil prices. The ratio of the 1992 U.S. average crude oil price to the 1991 crude oil price, as published in EIA's *Annual Energy Review 1993,* is applied to the 1991 SEPEDS lubricants price to derive a 1992 lubricants price.

Physical Unit Prices: 1970 Through 1991

Prices of lubricants are estimated from U.S. Department of Commerce, Bureau of the Census, data for three product categories:

1. Lubricating oils made in refineries (SIC 29117.21) and not made in refineries (SIC 29920.21).

2. Lubricating greases made in refineries (SIC 29117.31) and not made in refineries (SIC 29920.31).

3. Lubricating oils and greases, not specifically known (n.s.k.), made in refineries (SIC 29117.00) and not made in refineries (SIC 29920.00 for establishments with 10 employees or more and SIC 29920.02 for establishments with fewer than 10 employees).

For the years where *Census of Manufactures (CM)* data are available (1967, 1972, 1977, and 1982), total shipments are calculated by adding the shipments for the three product categories. Shipments for the third product category are withheld and estimated by dividing their value of shipments sum by the weighted average cost of the product categories 29920.21 and 29920.31.

Total shipments in each year for which *CM* data are available is divided by the estimated SEDS total lubricants consumption (in physical units) for that year to establish a shipments-to-consumption ratio. Ratios for the years not covered by the *CM* (i.e., 1968 through 1971, 1973 through 1976, and 1978 through 1981) are estimated by linear interpolation, and the 1982 value is used for 1983 forward. Total shipments for the years not covered by the *CM* are estimated by multiplying SEDS consumption by the appropriate shipment-to-consumption ratio.

Estimated shipment prices are calculated by dividing the value of shipments shown in the *CM* or the

Annual Survey of Manufactures by the estimated shipments for each product category. The shipment prices are used to represent wholesale prices.

End-user prices in dollars per barrel are estimated by multiplying the shipment prices by trade ratio factors that represent the wholesale-to-retail markup. The trade ratio factors are developed from Bureau of Economic Analysis (BEA) data for 1972 and 1977. For 1972, the sum of data called "purchasers value" for the three product categories is divided by the sum of the "producers value" for the three categories to derive a trade ratio. A similar calculation is made for 1977, but the terms "purchase value" and "basic value" are used in the source data.

The 1972 ratio is used for 1970 through 1972 and the 1977 ratio is used for 1977 forward. The values for 1973 through 1976 are estimated by linear interpolation by using the 1972 and 1977 values. The trade ratios for 1982 and later years are not used because the range of petroleum products included in the ratios was expanded by BEA and the ratios no longer represent the specific mark-up for lubricants.

Btu Prices: All Years

Btu prices are obtained by dividing the prices in dollars per barrel by the conversion factor 6.065 million Btu per barrel.

Data Sources

Prices

1992: Lubricant price estimate for 1991 from the Energy Information Administration (EIA), State Energy Price and Expenditure Data System.

1992: EIA, *Annual Energy Review 1993*, Table 5.20, column titled, "Composite, Nominal."

1970, 1971, 1973-1976, 1978-1981, and 1983 through 1991: Bureau of the Census, U.S. Department of Commerce, *Annual Survey of Manufactures; Lubricating Oils and Greases* (Industries 29117 and 29920).

1972, 1977, and 1982: Bureau of the Census, U.S. Department of Commerce, *Census of Manufactures, Petroleum Refining; Lubricating Oils and Greases* (Industries 29117 and 29920).

1972 and 1977: Bureau of Economic Analysis, U.S. Department of Commerce, Input-Output Table Work Tapes for SIC Codes 29117 and 29920).

Consumption

1970 forward: Energy Information Administration, State Energy Data System, lubricants consumption.

Conversion Factor: All Years

6.065 million Btu per barrel

Motor Gasoline

Motor gasoline prices are developed for the transportation sector, and the transportation sector prices are assigned to the commercial and industrial sectors. Motor gasoline consumed in privately-owned vehicles is accounted for in the transportation sector. Estimates of motor gasoline consumed by the transportation, commercial, and industrial sectors used in calculating expenditures are taken from SEDS. Prices in this series are retail prices (usually service station prices), including taxes.

Physical Unit Prices: 1983 Forward

Motor gasoline physical unit prices for 1983 forward are based on annual State-level prices from the *Petroleum Marketing Annual (PMA)* except for prices for certain States and years, noted below, that are derived from the *Consumer Prices: Energy (CPI)*. State and Federal motor gasoline taxes are added to the prices from the *PMA;* all taxes are included in the *CPI* data. In cases where the tax rate is not constant through the year, the months' rates are averaged, weighted by the number of months each rate was in

Table A28. Motor Gasoline Price Assignments, 1983 Forward

State	Years	Source
AK	1983-1986	*CPI*
CT	1989-1992	*PMA*, PAD Subdistrict IA
DC	1983-1992	*CPI*
DE	1991, 1992	*PMA*, PAD Subdistrict IB
HI	1983-1986	*CPI*
HI	1987-1990	See text
MD	1985-1992	*CPI* (Baltimore)
ME	1985-1988, 1990-1992	*PMA*, PAD Subdistrict IA
MT	1991, 1992	*PMA*, PAD Subdistrict IV
SD	1987, 1991, 1992	*PMA*, PAD District II
VT	1989-1992	*PMA*, PAD Subdistrict IA
WY	1985	*PMA*, PAD District IV

Table A29. Summary of Motor Gasoline Price Data by Year, 1970-1982

Years	Source	Grades Covered	Composite Price	Missing States All Sources
1982	*Platt's*	leaded	no	none
		unleaded	no	
	CPI	leaded regular	yes	
		leaded premium	yes	
		unleaded regular	yes	
1979-1981	*Platt's*	leaded regular	no	AR, DE, ME, MS, MT, ND, NH,
		leaded premium	no	OK, RI, SC, SD, VT, WV, WY
		unleaded regular	no	
		unleaded premium	no	
	CPI	leaded regular	yes	
		leaded premium	yes	
		unleaded regular	yes	
1978	*Platt's*	leaded regular	no	none
	CPI	leaded regular	yes	
		leaded premium	yes	
		unleaded regular	yes	
1976, 1977	*Platt's*	leaded regular	no	AK
	CPI	leaded regular	no	
		leaded premium	no	
		unleaded regular	no	
1974, 1975	*Platt's*	leaded regular	no	AK
	CPI	leaded regular	no	
		leaded premium	no	
1970-1973	*Platt's*	leaded regular	no	AK, HI

effect. Due to the lack of uniformity in application, State and local general Sales taxes are not included.

The average sales price (excluding taxes) of finished motor gasoline to end users through company outlets is used, under the assumption that this price most closely approximates retail motor gasoline prices. Finished motor gasoline includes leaded and unleaded motor gasoline and gasohol.

State-level prices that are not available from the *PMA* are assigned as listed in Table A28.

Monthly State tax information and Federal tax information are taken from *Highway Statistics*. The monthly State taxes are averaged to create an average annual tax for each State which is combined with the Federal tax to adjust the *PMA* price.

Monthly *CPI* city prices weighted by monthly consumption from *Highway Statistics* for AK/1983 through 1986, HI/1983 through 1986, DC/1983 forward, and MD/1985 forward are used to calculate annual prices for those States. *CPI* prices already include taxes.

Collection of motor gasoline price data for HI by the Bureau of Labor Statistics stopped in December 1986. The HI/1987 through 1990 prices are derived as follows: the average ratio of the HI *CPI* price (with HI State and Federal taxes subtracted) to the PAD District V price (with HI State and Federal taxes added) for the years 1983 through 1986 is multiplied by the PAD District V price for the current year and then taxes are added to estimate the HI/1987 through 1990 prices.

Physical Unit Prices: 1982

Monthly physical unit motor gasoline prices for 1982 are taken from the *Platt's Oil Price Handbook and Oilmanac (Platt's)* table, "AAA 'Fuel Gauge' Report," the *CPI*, or both. Table A29 summarizes price data

Table A30. Motor Gasoline Price Assignments from *Consumer Prices: Energy, 1978-1982*

State	City Price Assignments
AK	Anchorage
CA	Los Angeles-Long Beach-Anaheim, San Diego, San Francisco, Oakland
CO	Denver-Boulder
DC	Washington
FL	Miami
GA	Atlanta
HI	Honolulu
IL	Chicago-Northwestern Indiana, St. Louis
IN	Chicago-Northwestern Indiana, Cincinnati
KS	Kansas City
KY	Cincinnati
MA	Boston
MD	Baltimore, Washington
MI	Detroit
MN	Minneapolis-St. Paul
MO	St. Louis, Kansas City
NJ	New York-Northeastern NJ, Philadelphia
NY	New York-Northeastern NJ, Buffalo
OH	Cincinnati, Cleveland
OR	Portland
PA	Philadelphia, Northeastern PA, Pittsburgh
TX	Dallas-Ft. Worth, Houston
VA	Washington
WA	Seattle-Everett, Portland
WI	Milwaukee, Minneapolis-St. Paul

Note: All types of motor gasoline are included.

availability by source. The *Platt's* prices are reported for both leaded and unleaded motor gasoline and for both full-service and self-service for all States except AK and HI. All available *Platt's* prices for 1982 are used in the calculation of motor gasoline prices. The continuity of these prices with prices published by *Platt's* in previous years suggests that taxes are included.

The available *CPI* monthly physical unit motor gasoline prices for 1982 are for all types of motor gasoline and cover 25 States as shown in Table A30. The *CPI* prices are assigned to any State that has a county included in the Standard Metropolitan Statistical Area (SMSA) definitions used by the Bureau of Labor Statistics. These "all types" prices cover leaded regular, unleaded regular, and leaded premium, including taxes. All the available *CPI* prices for 1982 are also used in the calculation of motor gasoline prices. Complete monthly data exist for the 25 States covered by the *CPI*. The *CPI Detailed Report* of April 1986 explicitly states that Federal, State, and local taxes are included.

To combine the product-specific *Platt's* prices with the "all types" prices published in the *CPI*, the *Platt's* prices are weighted into "all types" prices by using annual U.S. share data for leaded and unleaded motor gasoline (no breakdowns for regular and premium are possible with current data limitations). The share data come from the *Monthly Energy Review (MER)*.

Motor gasoline price data reported by *Platt's* for 1982 cover the following months: February, April, June, August, November, and December. The missing 6 months are assigned prices as follows: January is assigned the February price, and the other missing months are assigned the average price of the preceding and succeeding months. A missing February price for MO is assumed to be equal to the April price, and a missing price for OR is assumed to be equal to the average of the April and August prices.

For States with data from *Platt's* only, prices by product type (leaded and unleaded) are first calculated as the simple average of full-service and self-service prices for that product for each month and State. The resulting prices are then weighted into monthly composite prices by using U.S. leaded and unleaded shares of motor gasoline product supplied from the *MER*. The following 26 States have data only from *Platt's*: AL, AR, AZ, CT, DE, IA, ID, LA, ME, MS, MT, NC, ND, NE, NH, NM, NV, OK, RI, SC, SD, TN, UT, VT, WV, and WY.

Platt's reports two prices for each motor gasoline product for each year: one full-service price and one self-service price. These two prices are combined by using a simple average into a single product price for each State for each month.

The unleaded U.S. share of total motor gasoline consumption is reported in the *MER* as 52.1 percent in 1982. Assuming that the remaining motor gasoline consumption is leaded, the leaded portion of total consumption is 47.9 percent. These shares are used for all States and months to calculate the composite prices from the leaded and unleaded prices.

For AK and HI, the only States with data only from the *CPI*, the "all types" monthly prices reported are used directly as monthly composite prices.

For States with price data from both *Platt's* and the *CPI*, the *Platt's* data are first combined into product type prices and weighted with the *MER* shares. The

resulting combined prices for all motor gasoline types are averaged together with the combined *CPI* city prices assigned to the respective month and State. The following 23 States have monthly composite prices computed in this way: CA, CO, DC, FL, GA, IL, IN, KS, KY, MA, MD, MI, MN, MO, NJ, NY, OH, OR, PA, TX, VA, WA, and WI.

1. Leaded and unleaded gasoline prices are calculated as simple averages of full-service and self-service prices from *Platt's*, and are then weighted into a composite price using *MER* shares of leaded and unleaded motor gasoline consumption.

2. Monthly "all types" motor gasoline prices covering leaded regular, leaded premium, and unleaded regular are taken directly from the *CPI*. If there is more than one *CPI* price observation for a month and State, the *CPI* prices are simple averages.

3. Using a simple average, the composite *Platt's* prices are combined with the "all types" *CPI* prices for that State. The resulting prices are the monthly composite prices for 1982.

Annual physical unit prices for all States are calculated from the monthly motor gasoline prices calculated above and weighted by the monthly motor gasoline consumption volumes for States from *Highway Statistics*.

Physical Unit Prices: 1979 Through 1981

For 1979 through 1981, *Platt's* monthly motor gasoline prices are taken from a table titled "Platt's/Lundberg Summary." Prices are available for cities by product-type, by grade, and by type of service (full service, self service). Four products and grades of motor gasoline are covered: leaded regular, unleaded regular, leaded premium, and unleaded premium. These data cover 37 States and taxes are included. The *CPI* reports "all types" prices, including taxes, for the cities listed in Table A30. *Platt's* city price assignments to States for 1979 through 1981 are shown in Table A31.

The computation of monthly composite prices for 1979 through 1981 varies, depending on the available data sources for each State. Monthly composite prices are estimated for the 14 States which do not have reported price data from either data source. If both *Platt's* and the *CPI* report prices for a city, the *CPI* price is used.

Table A31. Motor Gasoline Price Assignments from *Platt's*, 1979-1981

State	City Price Assignments
AL	Birmingham
AZ	Phoenix, Tucson
CA	Bakersfield, Fresno, Los Angeles, Sacramento, San Diego, San Francisco, Stockton
CO	Denver
CT	New Haven
DC	Washington
FL	Miami, Tampa-St. Petersburg
GA	Atlanta
IA	Des Moines
ID	Boise
IL	Chicago
IN	Indianapolis
KY	Louisville
LA	New Orleans
MA	Boston
MD	Baltimore
MI	Detroit
MN	Minneapolis
MO	Kansas City, St. Louis
NC	Charlotte
NE	Omaha
NJ	Newark
NM	Albuquerque
NV	Las Vegas, Reno
NY	Long Island, Rochester
OH	Cincinnati
OR	Portland
PA	Philadelphia, Pittsburgh
TN	Memphis
TX	El Paso, Houston
UT	Salt Lake City
VA	Norfolk
WA	Seattle, Spokane
WI	Milwaukee

1. For States with city price observations only from *Platt's*, prices for leaded and unleaded motor gasoline are combined using simple averaging, regardless of the type of service, and converted to dollars per gallon. The leaded and unleaded prices are then weighted together into a monthly composite price. The following 12 States have prices only from *Platt's* for 1979 through 1981: AL, AZ, CT, IA, ID, LA, NC, NE, NM, NV, TN, and UT.

   a. The *Platt's* prices for 1981 end in September of that year; monthly prices by grade and service type for October, November, and December are assumed to be equal to the corresponding September prices.

b. Leaded and unleaded prices are calculated for each State by simple averaging of all prices available for each product (leaded, unleaded), regardless of service type or grade of motor gasoline (regular, premium). All city prices for each State are averaged together.

c. Leaded and unleaded shares of total motor gasoline consumption for the United States are calculated from the *MER* for each year 1979 through 1981. The monthly product type prices are weighted into composite prices by using the national leaded and unleaded shares as weights.

2. For States with city price observations only from the *CPI*, the monthly "all types" prices are used directly for States with only one price observation per month. For States with multiple observations, monthly prices are combined by simple averaging. States with *CPI* data only are: AK, CO, DC, GA, HI, IL, KS, MA, MD, MI, MN, MO, NJ, OH, OR, PA, and WI.

3. For the eight States with price observations from both *Platt's* and the *CPI* (CA, FL, IN, KY, NY, TX, VA, and WA), monthly composite prices for 1979 through 1981 are calculated by using three steps:

   a. The *Platt's* prices are combined into single "all types" prices as described above by using leaded and unleaded grades of motor gasoline shares as weights.

   b. The *CPI* prices are combined by State.

   c. Using simple averaging, the composite *Platt's* price for each State is combined with the "all types" *CPI* price for that State. The resulting prices are the monthly composite prices for 1979 through 1981.

4. Fourteen States are not covered by price data from either *Platt's* or the *CPI* in1979 through 1981. These States are AR, DE, ME, MS, MT, ND, NH, OK, RI, SC, SD, VT, WV, and WY. Monthly composite prices for these States are estimated by using the monthly State-level composite prices for 1982 and Census region monthly prices from the *CPI* for 1979 through 1982.

   a. The ratio between the 1982 State prices and the 1982 *CPI* Census region prices corresponding to each State is calculated for use as an adjustment factor in 1979, 1980, and 1981.

Table A32. Motor Gasoline Price Assignments from *Platt's*, 1970-1978

State	City Price Assignments
AL	Birmingham
AR	Little Rock
AZ	Phoenix
CA	Los Angeles, San Francisco
CO	Denver
CT	Hartford
DC	Washington
DE	Wilmington
FL	Miami
GA	Atlanta
IA	Des Moines
ID	Boise
IL	Chicago
IN	Indianapolis
KS	Wichita
KY	Louisville
LA	New Orleans
MA	Boston
MD	Baltimore
ME	Portland
MI	Detroit
MN	Twin Cities
MO	St. Louis
MS	Jackson
MT	Great Falls
NC	Charlotte
ND	Fargo
NE	Omaha
NH	Manchester
NJ	Newark
NM	Albuquerque
NV	Reno
NY	Buffalo, New York
OH	Cincinnati, Cleveland
OK	Tulsa
OR	Portland
PA	Philadelphia
RI	Providence
SC	Charleston
SD	Huron
TN	Memphis
TX	Dallas, El Paso, Houston
UT	Salt Lake City
VA	Norfolk
VT	Burlington
WA	Seattle, Spokane
WI	Milwaukee
WV	Charleston
WY	Cheyenne

b. The monthly price for each of the 14 missing States is assumed to be the product of the 1982 Census region adjustment factor for that

State times the monthly motor gasoline price for that Census region from the *CPI*.

Annual physical unit prices for all States are calculated from the monthly motor gasoline prices calculated above and weighted by the monthly motor gasoline consumption volumes for States from *Highway Statistics*.

Physical Unit Prices: 1978

The *Platt's* monthly leaded regular motor gasoline prices cover all States except AK and HI. The *Platt's* city assignments to States are shown in Table A32. In 1978, the *CPI* motor gasoline coverage was expanded from 21 States to 25 States (28 SMSAs) and an "all types" price was published that covers leaded regular, leaded premium, and unleaded regular. The *CPI* SMSA assignments to States for 1978 through 1982 are shown in Table A30 on page 227. Both the *CPI* and the *Platt's* prices include taxes.

Since both sources report a single price for each city or SMSA, product weights are not needed to compute monthly composite prices. Instead, city price observations are assigned to States as shown in Table A30 and Table A32. Price observations are combined by using simple averaging by State and month. If both *Platt's* and the *CPI* cover a city/SMSA, the *CPI* price is used. *Platt's* prices are converted to dollars per gallon; the *CPI* prices are already expressed in dollars. All States are covered by the data sources, so no imputation is required for 1978. The following 26 States have prices only from *Platt's*: AL, AR, AZ, CT, DE, IA, ID, LA, ME, MS, MT, NC, ND, NE, NH, NM, NV, OK, RI, SC, SD, TN, UT, VT, WV, and WY. The following 19 States are covered only by the *CPI*: AK, CA, CO, DC, FL, GA, HI, IL, MA, MD, MI, MN, MO, NJ, NY, OH, OR, PA, and WI. Six States have price data from both sources: IN, KS, KY, TX, VA, and WA.

Annual physical unit prices for all States are calculated from the monthly motor gasoline prices calculated above and weighted by the monthly motor gasoline consumption volumes for States from *Highway Statistics*.

Physical Unit Prices: 1976, 1977

The calculation of monthly composite State prices for 1976 and 1977 depends upon the source of data. Different procedures are used for States with only *Platt's* data, States with only *CPI* data, and States with both *Platt's* and *CPI* data. If both data sources cover a city, only the *CPI* price is used for that city. City price assignments to States are given in Table A32 for *Platt's* and in Table A33 for the *CPI*. Prices from both sources include taxes. AK is the only State for which prices need to be estimated.

Table A33. Motor Gasoline Price Assignments from *Consumer Prices: Energy* 1974-1977

State	City Price Assignments
CA	Los Angeles-Long Beach, San Diego, San Francisco-Oakland
DC	Washington
GA	Atlanta
HI	Honolulu
IL	Chicago, St. Louis
IN	Cincinnati, Chicago
KS	Kansas City
KY	Cincinnati
MA	Boston
MD	Baltimore, Washington
MI	Detroit
MN	Minneapolis-St. Paul
MO	St. Louis, Kansas City
NJ	New York-Northeastern NJ, Philadephia
NY	Buffalo, New York-Northeastern NJ
OH	Cincinnati, Cleveland
PA	Philadelphia, Pittsburgh
TX	Dallas, Houston
VA	Washington
WA	Seattle
WI	Milwaukee, Minneapolis-St. Paul

Note: Prices are available separately for leaded regular, leaded premium, and unleaded regular (1976, 1977); "all types" prices are not available.

For States with data from *Platt's* only, the monthly prices reported in *Platt's* are either used directly or combined by simple averaging if there is more than one price observation for a State in a given month. The reported prices in cents per gallon are converted to dollars per gallon. Prices for the following 29 States are calculated by using this procedure and cover only leaded regular motor gasoline: AL, AR, AZ, CO, CT, DE, FL, IA, ID, LA, ME, MS, MT, NC, ND, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VT, WV, and WY.

If State-level motor gasoline prices for 1976 and 1977 are available only from the *CPI*, monthly composite prices are calculated as weighted averages of leaded and unleaded prices. Prices for 15 States are calculated by using data only from the *CPI*: CA, DC, GA, HI, IL, MA, MD, MI, MN, MO, NJ, NY, OH, PA, and WI.

1. The weights used in this process are national-level shares of leaded and unleaded motor gasoline product supplied. For 1977, the leaded and unleaded share of 0.725 and 0.275, respectively, are taken from the *MER*. For 1976, *MER* data for 1977 through 1984 are used to estimate the unleaded share by using simple regression. The unleaded percentages for 1977 through 1984 are converted to shares and used to estimate leaded and unleaded shares of motor gasoline. The resulting 1976 leaded share is 0.744 and the unleaded share is 0.256.

2. The next step is to calculate monthly composite leaded and unleaded prices for each State. If more than one *CPI* price observation is available for a particular grade of motor gasoline (leaded or unleaded) for a State in a given month, the *CPI* observations are combined by grade by using simple averaging. Regular and premium prices are averaged for an estimate of State-level leaded prices.

3. Final monthly composite prices for 1976 and 1977 are calculated by using the leaded and unleaded composite prices calculated above and the *MER*-based leaded and unleaded shares as volume weights.

For States with price data from both *Platt's* and the *CPI*, all price observations are averaged together by product type. If both sources report prices for a city, the *CPI* price is used. Once composite leaded and unleaded prices have been calculated separately for each State, the leaded and unleaded consumption shares are used to weight the product-type prices into the final monthly composite motor gasoline prices. Six States are calculated with data from both *Platt's* and the *CPI*: IN, KS, KY, TX, VA, and WA.

1. Monthly leaded composite prices are calculated by combining *Platt's* prices with the *CPI* prices for leaded regular and premium motor gasoline by month, since the *Platt's* prices cover only regular leaded fuel. If both data sources cover a city, the *CPI* prices are used.

2. Since the *CPI* is the only source of unleaded gasoline price data for 1976 through 1977, monthly unleaded composite prices are calculated from *CPI* data only.

3. Final monthly composite prices for the six States with price data from both *Platt's* and the *CPI* are calculated by using annual U.S. leaded and unleaded shares and leaded and unleaded monthly composite prices.

Prices for 1976 and 1977 for AK, the only State not covered by price data from either data source, are estimated based on the average relationship between the State and the national average price for years in which data are available. The national average price used for these estimations is a simple average of the prices of the 49 States for which data are available in all years (i.e., excluding AK and HI for all years). Annual prices for AK are estimated based on the average AK-to-U.S. price relationship for 1978 and 1979.

Annual physical unit prices (excluding AK) are calculated from the monthly motor gasoline prices calculated above and weighted by the monthly motor gasoline consumption volumes for States from *Highway Statistics*.

Physical Unit Prices: 1974, 1975

The *Platt's* price data for 1974 through 1975 cover only leaded regular motor gasoline. Beginning in 1974, motor gasoline price data are also available from the *CPI* for selected SMSAs. An SMSA price is assigned to each State with counties included in the definition of that SMSA; for the years 1974 through 1977, prices for 23 SMSAs cover 21 States. The State assignments of SMSA prices for 1974 through 1977 are given in Table A33 on page 230. For 1974 and 1975, *CPI* prices are reported separately for leaded regular and leaded premium motor gasoline. According to the *CPI Detailed Report*, April 1986, these prices include taxes; the *Platt's* prices also include taxes. AK is the only State not covered by either of these two data sources; prices for AK are imputed for 1974 and 1975.

The *Platt's* regular leaded prices and the *CPI* regular and premium leaded motor gasoline prices, including taxes, are assigned to their respective States as shown in Table A32 and Table A33. If both sources cover a city, the *CPI* price is used. The following 29 States are covered only by *Platt's*: AL, AR, AZ, CO, CT, DE, FL, IA, ID, LA, ME, MS, MT, NC, ND, NE, NH, NM, NV, OK, OR, RI, SC, SD, TN, UT, VT, WV, and WY. The following 15 States are covered only by *CPI*: CA, DC, GA, HI, IL, MA, MD, MI, MN, MO, NJ, NY, OH, PA, and WI. The following six States have both *Platt's* and *CPI* data for a particular city: IN, KS, KY, TX, VA, and WA.

All price observations assigned to a State, regardless of grade or data source, are added together and

divided by the number of observations. As part of this calculation, *Platt's* prices are converted from cents per gallon to dollars per gallon.

Neither *Platt's* nor the *CPI* reports price data for AK. The methodology of the estimation of annual AK prices is the same as used in 1976 and 1977.

Annual physical unit prices for the remaining 50 States (excluding AK) are calculated from the monthly motor gasoline prices calculated above and weighted by the monthly motor gasoline consumption volumes for States from *Highway Statistics*.

Physical Unit Prices: 1970 Through 1973

Monthly motor gasoline physical unit prices for 1970 through 1973 are available only from *Platt's*, where city prices covering 49 States are reported in a table titled, "Service Station Prices: Gasoline (Including Taxes)." These prices, as shown in Table A29, are for leaded regular gasoline only and include taxes.

Monthly average city prices from *Platt's* are assigned to the State in which the city is located. *Platt's* city price assignments to States are given in Table A32.

Monthly composite prices for 1970 through 1973 are equal to the reported monthly *Platt's* prices or, if more than one city is available for a given State in a certain month, are a simple average of the assigned city prices. The reported prices are converted from cents to dollars per gallon.

Platt's does not report data for either AK or HI for 1970 through 1973. The methodology of the estimation of AK and HI prices is the same as that used for 1976 and 1977.

Annual physical unit prices (excluding AK and HI) are calculated from the monthly motor gasoline prices weighted by the monthly motor gasoline consumption volumes for States from *Highway Statistics*.

Btu Prices: All Years

Btu prices for States are computed by converting the physical unit prices in dollars per gallon to dollars per barrel (42 gallons per barrel) and then to dollars per million Btu (5.253 million Btu per barrel). U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Data Sources

Prices

1986 forward: Energy Information Administration, *Petroleum Marketing Annual*, Table 29 (1986-1988) and Table 30 (1989 forward), column titled, "All Refiners, Sales to End Users, Through Company Outlets."

1983-1985: Energy Information Administration, *Petroleum Marketing Annual*, 1985, Volume 1, Table 16, column titled, "All Refiners and Gas Plant Operators, Sales to End-users, Through Company Outlets."

1974 forward: Bureau of Labor Statistics, U.S. Department of Labor, *Consumer Prices: Energy*, computer printouts of monthly gasoline prices.

1970-1982: McGraw-Hill, Inc., *Platt's Oil Price Handbook and Oilmanac*;: table titled "AAA 'Fuel-gauge' Report" (1982); table titled, "Platt's/Lundberg Summary," (1979-1981); and table titled, "Service Station Prices: Gasoline (Including Taxes)," (1970-1978).

1974-1982: Bureau of Labor Statistics, *CPI Detailed Report*, April 1986, Technical Notes, page 110.

1982: Energy Information Administration, Form EIA-25 "Prime Supplier Monthly Report" computer tape, unpublished data.

1976-1984: Energy Information Administration, *Monthly Energy Review*, January 1985, table titled, "Petroleum: Finished Motor Gasoline Supply and Disposition."

Taxes

1983 forward (State Taxes): Federal Highway Administration, U.S. Department of Transportation, *Highway Statistics*, Tables MF-26 and MF-121T.

1983 through 1990 (Federal Taxes): Energy Information Administration, *Petroleum Marketing Annual, 1990* , Table EN1.

1991 forward (Federal Taxes): Energy Information Administration, *Petroleum Marketing Annual*, Table EN1.

Consumption

1970 forward: Energy Information Administration, State Energy Data System, transportation sector, motor gasoline consumption.

Conversion Factor: All Years

5.253 million Btu per barrel

Petroleum Coke (Utilities)

Petroleum coke is consumed by the electric utility and industrial sectors. The portion of petroleum coke consumed by the industrial sector (96 percent in 1992) is included in the category "other petroleum products," which is discussed in the "Consumption Adjustments for Calculating Expenditures" section on page 253. The remaining petroleum coke is used for electricity generation in 12 States over the period 1970 forward. A maximum of seven States reported consumption in any single year. Estimates of the annual consumption of petroleum coke by electric utilities are taken from SEDS. Estimates of the deliveries of petroleum coke, used in the price calculation described below, are taken from the *Cost and Quality of Fuels for Electric Utility Plants (C&Q)*. The *C&Q* prices are the delivered costs of the fuels and include all taxes, transportation, and other charges paid by the utilities.

Btu Prices: 1972 Forward

The principal data source for petroleum coke used by electric utilities is an EIA public use computer tape covering the period 1972 forward. From 1972 through 1982, steam plants with a maximum capacity of 25 megawatts were included. For 1983 and subsequent years, the reporting threshold was raised to 50 megawatts capacity. In addition to the computer tape, the data are also published, but not for the full period. From 1978 through 1982, *C&Q* was published monthly and annually; data for calculating petroleum coke prices are in only the monthly reports. For 1983 and subsequent years, *C&Q* was published annually and includes petroleum coke prices for individual States and for the Nation.

The computer tape, Cost and Quality of Fuels for Electric Utility Plants (Form 423) Historic Files, shows quantity in short tons, estimated Btu per pound, and price in dollars per million Btu. The data are presented by plant, by State, and by month. The Btu price is calculated as the annual sum of the unit prices, weighted by the total Btu in each reported delivery, divided by the annual sum of the Btu delivered to all electric utility plants within the State.

Some States have electric utility petroleum coke consumption in SEDS but no deliveries or price data in the *C&Q*. Those States are assigned prices from neighboring States as shown in Table A34. The petroleum coke consumed in LA in 1992 was obtained with no cost to the electric utility. The SEDS consumption is included with a zero price in calculating the electricity utility sector average price for LA and the US. The high DE prices prior to 1981 are actual reported prices.

Table A34. Petroleum Coke Electric Utility Price Assignments, 1972 Forward

State	Years	State Prices Assigned
DE	1981-1991	PA
KS	1975	MO
MO	1983, 1985	MN
NY	1974	PA
WI	1985	MN

Btu Prices: 1970, 1971

For the years 1970 and 1971, prices are estimated by using the gross domestic product implicit price deflator. The deflator for 1970 or 1971 is divided by the 1972 deflator and the quotient is multiplied by the 1972 price for each State to develop the price estimates for 1970 and 1971. The deflators are 35.1 in 1970, 37.1 in 1971, and 38.8 in 1972.

Although SEDS has a consumption estimate for NJ in 1971, there are no NJ price data for any year in the Form 423 Historic Files. Form 423 data for PA in 1972 are used to estimate a PA price for 1971, which is assigned to NJ. The Form 423 PA prices for 1972 and 1971 do not appear in SEPEDS since SEDS has no petroleum coke consumption in PA for those years.

U.S. Btu Prices: All Years

U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Data Sources

Prices

1972 forward: Energy Information Administration, electronic data from "Cost and Quality of Fuels for Electric Utility Plants (Form 423) Historic Files," as published in the following reports:

- 1983 forward: Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants*, Table 20 (1983, 1984), Table 12 (1985-1989), Table 40 (1990, 1991), and Table 28 (1992).
- 1978-1982: Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants*, table titled, "Wood Chips, Refuse, and Petroleum Coke Used as Fuel by Steam-Electric Units."

1970-1972: Energy Information Administration, *Annual Energy Review 1992*, Appendix C. Gross Domestic Product and Implicit Price Deflator.

Consumption

1970 forward: Energy Information Administration, State Energy Data System, electric utility petroleum coke consumption.

Conversion Factors: All Years

No conversion factors are required; Btu prices are calculated directly from data sources.

Table A35. Residual Fuel Electric Utility Census Division Price Assignments, 1970 Forward

State	Years of Assigned Prices	Census Division
AL	1975-1979	New England
AR	1987, 1992	West South Central
AZ	1984, 1985, 1991, 1992	Mountain
CO	1982, 1987, 1989-1992	Mountain
DC	1982-1992	South Atlantic
GA	1991	South Atlantic
IA	1970-1985	West North Central
IN	1970-1979	East North Central
KS	1980, 1981, 1985-1987, 1989-1992	West North Central
KY	1970-1979	East South Central
MN	1984, 1985, 1987-1990, 1992	West North Central
MT	1970-1979	Mountain
NC	1976, 1977, 1979, 1980, 1982, 1984	South Atlantic
ND	1970-1979	West North Central
NE	1981-1983, 1990, 1991	West North Central
NM	1979-1982, 1989-1992	Mountain
NV	1983, 1985	Mountain
OH	1992	East North Central
OK	1977, 1978, 1980, 1982-1987, 1989, 1991, 1992	West South Central
OR	1970, 1973, 1974	Pacific
SC	1983, 1985-1992	South Atlantic
SD	1981-1988	West North Central
TN	1979	East South Central
TX	1992	West South Central
UT	1982, 1983, 1986	Mountain
VT	1970-1979	New England
WA	1970, 1971, 1975-1978, 1981-1983, 1986-1988	Pacific
WV	1970-1977, 1979	South Atlantic
WY	1970-1979	Mountain

Residual Fuel

Residual fuel prices are developed for the electric utility, industrial, commercial, and transportation sectors. Estimates of the amount of residual fuel consumed by sector are taken from SEDS and are adjusted for process fuel consumption in the industrial sector. (See the "Consumption Adjustments for Calculating Expenditures" section on page 253.)

Electric Utility Sector

The electric utility price for residual fuel (heavy oil) is the average delivered cost of No. 6 fuel oil receipts at electric utilities. For 1973 forward, Btu prices are developed directly from the data sources. For 1970 through 1972, prices are estimated by using simple regression analysis. All taxes, transportation, and other charges paid by utilities are included in the prices for all years.

Btu Prices: 1973 Forward

Electric utility sector residual fuel prices for 1973 forward are taken from *Cost and Quality of Fuels for Electric Utility Plants (C&Q)*. For 1973 through 1979, Btu prices are calculated as the weighted average of contract and spot prices for No. 6 fuel oil. Table A35 lists the States and years for which consumption is indicated by SEDS but no price is shown in *C&Q*. For these States, the Census division price, as shown in *C&Q*, is assigned as the State price.

For 1983 forward, *C&Q* reports prices for steam electric plants of 50 megawatt capacity or greater. For 1980 through 1982, *C&Q* prices cover all reporting plants of 25 megawatt capacity or greater.

Prices for AK in 1973 forward and for HI in 1973 through 1982 are developed by using the ratio of the *C&Q* U.S. price and the *Statistical Yearbook* U.S. price multiplied by the *Statistical Yearbook* State price. In 1973, 1975, and 1978, there was no AK pricein the *Statistical Yearbook*. AK prices for 1973, 1975, and 1978 are based on the ratio of U.S. to AK prices for 1974, the average ratio for 1976 and 1977, and the average ratio for 1979 and 1980, respectively.

Btu Prices: 1970 Through 1972

State-level Btu prices for 1970 through 1972 are estimated by using regression techniques and price data from the *Statistical Yearbook*. The regression equations use *Statistical Yearbook* State-level prices for 1973 through 1980 as the independent variable and the State-level prices calculated above (including the estimations for AK and HI) as the dependent variable. Pacific regional price averages are assigned for the missing WA prices in 1970 and 1971. The average of 1970 and 1972 AK *Statistical Yearbook* prices is substituted for the missing 1971 AK price, and a similar calculation is made for the 1973, 1975, and 1978 prices.

U.S. Btu Prices: All Years

U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Data Sources

Prices

1973 forward: Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants*, Table 6 (1973-1979), Table 45 (1980-1982), Table 51 (1983, 1984), Table 41 (1985-1989), Table 14 (1990, 1991), and Table 8 (1992).

1970 forward: Edison Electric Institute, *Statistical Yearbook of the Electric Utility Industry*, Table 43 (1970-1979), Table 26 (1980-1983), Table 28 (1984-1986), and Table 29 (1987 forward).

Consumption

1970 forward: Energy Information Administration, State Energy Data System, electric utility sector heavy oil consumption.

Conversion Factors: All Years

Because Btu prices are available directly from the data sources, no conversion factors are used.

Industrial Sector

The industrial sector residual fuel prices for 1984 forward are developed from refiner/reseller prices of residual fuel as published in the *Petroleum Marketing Annual*. Residual fuel prices for 1970 through 1983 are calculated or estimated by using average costs of residual fuel to manufacturing firms published in two Bureau of the Census reports and *Platt's Oil Price Handbook and Oilmanac*. Price data in these sources are available for the years 1971 and 1974 through 1981; prices for 1970, 1972, 1973, 1982, and 1983 are estimated. Prices for all years include taxes.

Physical Unit Prices: 1984 Forward

Residual fuel industrial sector physical unit prices are calculated by using refiner/reseller prices to end users from the *Petroleum Marketing Annual (PMA)*. The States that do not have *PMA* prices are assigned

Table A36. Residual Fuel Industrial Sector Price Assignments, 1984 Forward

State	Years	PAD District Prices Assigned
AR	1985	PAD District III
AZ	1984-1991	PAD District V
CO	1986, 1988, 1991, 1992	PAD District IV
ID	1985, 1986, 1989-1992	PAD District IV
MS	1988, 1991, 1992	PAD District III
MT	1992	PAD District IV
ND	1988-1992	PAD District II
NM	1984-1986, 1990, 1991	PAD District III
NV	1986, 1988, 1991, 1992	PAD District V
OK	1992	PAD District II
OR	1989	PAD District V
SD	1990-1992	PAD District II
UT	1989-1992	PAD District IV
WV	1984	PAD Subdistrict IC
WY	1989-1991	PAD District IV

Table A37. No. 6 Fuel Oil Price Assignments from Platt's, 1970-1983

State	Years	City or State Prices Assigned
AK	1970-1972, 1975, 1977-1980	Los Angeles, CA
	1973-1974, 1976	Los Angeles/San Francisco, CA
	1981-1983	Los Angeles, CA; San Francisco, CA
AL	1970-1983	Savannah, GA
AR	1970-1983	Arkansas
AZ	1970-1972, 1975, 1977-1980	Los Angeles, CA
	1973-1974, 1976	Los Angeles/San Francisco
	1981-1983	Los Angeles, CA; San Francisco
CA	1970-1972, 1975, 1977-1980	Los Angeles
	1973-1974, 1976	Los Angeles/San Francisco
	1981-1983	Los Angeles; San Francisco
CO[1]	1970-1983	Minneapolis/St. Paul, MN
CT	1970-1983	New Haven
DC	1970-1983	Baltimore, MD
DE	1970-1983	Baltimore, MD
FL	1970-1972	Jacksonville; Miami; Tampa; Port Everglades
	1973-1975	Jacksonville; Miami; Tampa
	1976-1983	Jacksonville/Miami
GA	1970-1983	Savannah
HI	1970-1972, 1975, 1977-1980	Los Angeles, CA
	1973, 1974, 1976	Los Angeles/San Francisco, CA
	1981-1983	Los Angeles, CA; San Francisco, CA
IA[1]	1970-1983	Chicago, IL
ID	1970-1972, 1975, 1977-1980	Los Angeles, CA
	1973, 1974, 1976	Los Angeles/San Francisco, CA
	1981-1983	Los Angeles, CA; San Francisco, CA
IL[1]	1970-1983	Chicago
IN[1]	1970-1983	Chicago, IL
KS	1970	Baton Rouge, LA; New Orleans, LA
	1971-1983	New Orleans, LA
KY	1970	Baton Rouge, LA; New Orleans, LA
	1971-1983	New Orleans, LA
LA	1970	Baton Rouge; New Orleans
	1971-1983	New Orleans
MA	1970-1983	Boston
MD	1970-1983	Baltimore
ME	1970-1983	Portland
MI[1]	1970-1983	Detroit
MN[1]	1970-1983	Minneapolis/St. Paul
MO[1]	1970-1973	Chicago, IL
	1974-1983	St. Louis
MS	1970	Baton Rouge, LA; New Orleans, LA
	1971-1983	New Orleans, LA
MT	1970-1983	Minneapolis/St. Paul, MN
NC	1970-1983	Wilmington
ND[1]	1970-1983	Minneapolis/St. Paul, MN
NE	1970-1972, 1975, 1977-1980	Los Angeles, CA
	1973, 1974, 1976	Los Angeles/San Francisco, CA
	1981-1983	Los Angeles, CA; San Francisco, CA
NH	1970-1983	Portland, ME
NJ	1970-1972	New Jersey
	1974, 1975	New York, NY; Albany, NY; Buffalo, NY
	1976-1983	New York, NY; Albany, NY
NM	1970-1972, 1975, 1977-1980	Los Angeles, CA
	1973, 1974, 1976	Los Angeles/San Francisco, CA
	1981-1983	Los Angeles, CA; San Francisco, CA

See footnotes at end of table.

Table A37. No. 6 Fuel Oil Price Assignments from Platt's, 1970-1983 (Continued)

State	Years	City or State Prices Assigned
NV	1970-1972, 1975, 1977-1980	Los Angeles, CA
	1973, 1974, 1976	Los Angeles/San Francisco, CA
	1981-1983	Los Angeles, CA; San Francisco, CA
NY	1970-1975	New York; Albany; Buffalo
	1976-1983	New York; Albany
OH[1]	1970	Toledo
	1971-1983	Detroit, MI
OK[2]	1970-1977, 1979	Group 3 (Oklahoma)
	1978, 1980-1983	New Orleans, LA
OR	1970-1972, 1975, 1977-1980	Los Angeles, CA
	1973, 1974, 1976	Los Angeles/San Francisco, CA
	1981-1983	Los Angeles, CA; San Francisco, CA
PA	1970-1983	Philadelphia
RI	1970-1975	Providence
	1976-1983	New Haven, CT
SC	1970-1983	Charleston
SD[1]	1970-1983	Minneapolis/St. Paul, MN
TN	1970	Baton Rouge, LA; New Orleans, LA
	1971-1983	New Orleans, LA
TX	1970-1972	New Mexico/West Texas
	1973-1983	New Orleans, LA
UT[1]	1970-1983	Minneapolis/St. Paul, MN
VA	1970-1983	Norfolk
VT	1970-1983	Portland, ME
WA	1970-1972, 1975, 1978, 1979	Los Angeles, CA
	1973, 1974, 1976	Los Angeles/San Francisco, CA
	1980-1983	Seattle/Tacoma
WI[1]	1970-1983	Chicago, IL
WV	1970-1983	Norfolk, VA
WY[1]	1970-1983	Minneapolis/St. Paul, MN

[1]Raw data from *Platt's* must be converted from cents per gallon to dollars per barrel.
[2]As shown in *Platt's*.

their PAD district or subdistrict price as shown in Table A36, with the exception of AK. AK industrial residual fuel price for 1984 forward is based on the WA industrial residual fuel price and the ratio of the AK-to-WA industrial distillate fuel prices for each year. Tax data from Bureau of the Census publications are added to develop final sector prices.

Physical Unit Prices: 1982, 1983

After 1981, the U.S. Department of Commerce's *Annual Survey of Manufacturers* and the *Census of Manufacturers (ASM/CM)* ceased publication of fuel-specific State-level residual fuel data from which prices can be calculated. Prices for 1982 and 1983 are estimated from the average relationship between the *ASM/CM*-based prices generated for 1978 through 1981 and the assigned *Platt's* No. 6 fuel oil prices for 1978 through 1981 (Table A37). These average ratios are calculated at the State-level for all States except AK, which shows no industrial sector residual fuel

Table A38. Residual Fuel Industrial Sector Price Assignments, 1971, 1974-1981

State	Years	State Prices Used
AK	1980, 1981	HI, WA
DC	1979-1981	MD, VA
MT	1974-1979	ID, ND, SD
ND	1980	MN, MT, SD
NM	1971, 1974-1981	AZ, CO, TX
NV	1974-1978	AZ, CA, ID, OR, UT
OK	1974-1978, 1980	AR, CO, KS, MO, TX
SD	1981	IA, MN, MT, ND, NE
WY	1971, 1974-1981	CO, NE, UT

use reported in SEDS for 1982 and 1983. Physical unit residual fuel industrial prices for 1982 and 1983 are calculated by using the assigned *Platt's* prices for 1982 and 1983 (Table A37) and the State-level average ratios. The resulting estimates implicitly include taxes that reflect individual State differences.

Physical Unit Prices: 1971, 1974 Through 1981

For the years 1971 and 1974 through 1981, industrial sector residual prices are calculated directly from cost and quantity data reported by the *ASM/CM*. For all States with available cost and quantity data, prices are equal to the average cost of residual fuel to manufacturers. Taxes are included in the published cost data. Missing data for these years are assigned from the average prices of adjacent States as shown in Table A38.

Physical Unit Prices: 1970, 1972, 1973

Since *ASM/CM* data are not available for 1970, 1972, or 1973, prices for these years must be estimated. Physical unit prices are based on the ratio of the 1971 *CM* prices to the 1971 assigned No. 6 fuel oil prices from *Platt's Oil Price Handbook and Oilmanac* (Table A37). The estimated 1971 *CM* prices for NM and WY are used in the calculations. The resulting ratios for each State are used with the *Platt's* assigned prices for 1970, 1972, and 1973 to estimate prices. The final estimates implicitly include State-specific taxes.

Btu Prices: All Years

Btu prices for States are calculated from the physical unit prices and the conversion factor. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS, which are adjusted for process fuel consumption.

Data Sources

Prices

1984 forward: Energy Information Administration, *Petroleum Marketing Annual*, Table A4 (1984-1990), Table A3 (1991, 1992).

1984 forward: Industrial sector distillate fuel price estimates from the *SEPER* data system (AK and WA only).

1970-1983: McGraw-Hill, Inc., *Platt's Oil Price Handbook and Oilmanac*, refinery and terminal prices for No. 6 fuel oil, average of highs and lows.

1971, 1977, 1981: Bureau of the Census, U.S. Department of Commerce, *Census of Manufactures, Fuels and Electric Energy Consumed*, Part 2, Table 3. (Dates shown on the report covers are, respectively, 1972, 1977, and 1982.)

1974-1976 and 1978-1980: Bureau of the Census, U.S. Department of Commerce, *Annual Survey of Manufactures, Fuels and Electric Energy Consumed, States by Industry Group*, Table 3.

Taxes

1987 forward: Bureau of the Census, U.S. Department of Commerce, *State Government Tax Collections*, Table 8, column titled, "Percentage rate, September 1."

1984-1986: Bureau of the Census, U.S. Department of Commerce, *Statistical Abstract of the United States*, table titled, "State Government Tax Collections and Excise Taxes," column titled, "Excise Taxes, General sales and gross receipts."

Consumption

1970 forward: Energy Information Administration, State Energy Data System, industrial sector residual consumption.

Table A39. Residual Fuel Commercial Sector Price Assignments, 1984 Forward

State	Years	PAD District Prices Assigned
AZ	1984, 1985, 1988, 1991–	PAD District V
CO	1986, 1992	PAD District IV
ID	1985, 1986, 1989-1992	PAD District IV
MS	1988, 1991, 1992	PAD District III
MT	1992	PAD District IV
ND	1988, 1989-1992	PAD District II
NM	1984, 1985	PAD District III
NV	1986, 1988, 1991, 1992	PAD District V
OK	1992	PAD District II
OR	1989	PAD District V
SD	1990-1992	PAD District II
UT	1989-1992	PAD District IV
WV	1984	PAD Subdistrict IC
WY	1989-1991	PAD District IV

Conversion Factor: All Years

6.287 million Btu per barrel

Commercial Sector

For 1984 forward, State-level commercial sector residual fuel prices are developed from refiner/reseller prices of residual fuel to end users published in the *PMA*. For 1970 through 1983, commercial sector residual fuel prices are estimated for all States from national-level residual fuel prices and the State-level electric utility sector residual fuel prices. State and Federal taxes are included in the final prices for all years.

Physical Unit Prices: 1984 Forward

Commercial sector residual fuel physical unit prices are calculated by using refiner/reseller prices to end users from the *PMA*. The States that do not have *PMA* prices are assigned their PAD district or subdistrict price (Table A39), with the exception of AK. The AK commercial residual fuel prices for 1984 forward are based on the WA commercial residual fuel price and the ratio of the AK-to-WA commercial distillate fuel prices for each year. Tax data from Bureau of the Census publications are added to develop final sector prices.

Physical Unit Prices: 1976 Through 1983

The commercial sector residual fuel physical unit prices for 1976 through 1983 are estimated from the electric utility sector residual prices for corresponding years and the tax-adjusted U.S. average retail residual fuel prices. The resulting price estimates implicitly include taxes that reflect individual State differences.

1. The first step in the estimation of the commercial residual fuel physical unit State prices is to convert the State-level tax rates reported in the Bureau of the Census publications into the volume-weighted average U.S. sales tax rate by using commercial residual consumption data from SEDS.

2. A preliminary U.S. residual fuel oil price, including taxes, is computed by using the average U.S. tax rate estimated above and the annual average U.S. residual fuel price to end users (average retail price excluding taxes) from the *Monthly Energy Review (MER)*.

3. Commercial sector physical unit residual fuel prices for States are computed by using the electric utility sector residual fuel prices. To do this calculation, the ratio of the State-level and U.S. prices in the commercial sector is assumed to be the same as the ratio of State and U.S. prices in the electric utility sector. Some States are missing electric utility prices for 1976 through 1983; these are estimated by using adjacent States' average prices (Table A40).

Physical Unit Prices: 1970 Through 1975

Since no national or State-level retail residual prices are available from published data sources, commercial sector residual prices for 1970 through 1975 are estimated. The estimation method is based on the assumption that the average ratio of State-to-U.S. prices is the same in the commercial and electric utility sectors. The average ratio for 1976 through 1979 of the *MER* U.S. tax-adjusted prices to the electric utility sector U.S. prices is calculated and used as an adjustment factor with State-level electric utility sector prices for 1970 through 1975. The resulting price estimates implicitly include taxes that reflect individual State differences.

Table A40. Residual Fuel Commercial Sector Price Assignments, 1970-1983

State	Years	State Prices Used in the Estimation
AL	1970-1974, 1980, 1982, 1983	FL, GA, MS
ID	1980, 1981, 1983	CA, CO
	1982	CA
IN	1980-1983	IL, MI, OH
KY	1980-1983	IL, MO, OH, VA
MT	1980, 1983	CO, MN
	1982	MN
NC	1981, 1983	GA, VA
ND	1980, 1983	MN, SD
	1981, 1982	MN
OR	1975-1983	CA
TN	1970-1978, 1980-1983	AR, GA, MO, MS, VA
VT	1980-1983	ME, NH, NY
WI	1982, 1983	IL, MI, MN
WV	1980-1983	MD, OH, PA, VA
WY	1980	CO, NE, SD, UT
	1981, 1983	CO
	1982	MN

1. The average ratio of the *MER* tax-adjusted U.S. prices and the electric utility sector U.S. prices is calculated for 1976 through 1979.

2. State-level commercial sector residual fuel prices are calculated by using the electric utility sector physical unit price series for 1970 through 1975 and the average ratio computed above. Price assignments for States missing electric utility sector data are shown in Table A40.

Btu Prices: All Years

Btu prices for States are calculated from the physical unit prices and the conversion factor. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Data Sources

Prices

1984 forward: Energy Information Administration, *Petroleum Marketing Annual*, Table A4 (1984-1990), Table A3 (1991, 1992).

1984 forward: Commercial sector distillate fuel price estimates from the *SEPER* data system (AK and WA only).

1978-1983: Energy Information Administration, *Monthly Energy Review, December 1988*, table titled, "Refiner Sales Prices of Residual Fuel Oil," column titled, "Average Sales to End Users."

1976, 1977: Energy Information Administration, *Monthly Energy Review, December 1983*, table titled, "Average No. 6 Residual Fuel Oil Prices," column titled, "Average, Retail."

1970-1983: Electric utility sector residual fuel price estimates (in physical units) from the *SEPER* data system.

Taxes

1987 forward: Bureau of the Census, U.S. Department of Commerce, *State Government Tax Collections*, Table 8, column titled, "Percentage rate, September 1."

1976-1986: Bureau of the Census, U.S. Department of Commerce, *Statistical Abstract of the United States*, table titled, "State Government Tax Collections and Excise Taxes," column titled, "Excise Taxes, General sales and gross receipts."

Consumption

1970 forward: Energy Information Administration, State Energy Data System, commercial sector residual fuel consumption.

Conversion Factor: All Years

6.287 million Btu per barrel

Transportation Sector

Residual fuel is consumed in the transportation sector for vessel bunkering, military use, and railroads. In 1970, vessels consumed 74 percent of the transportation use of residual fuel, and the military and railroads accounted for 24 percent and 2 percent, respectively. By 1992, vessel use had grown to 99 percent, military use had dropped to 1 percent, and the railroads' share was insignificant. Prices are developed for vessel bunkering, and electric utility prices are assigned to the military and railroad uses. Tax adjustments are made as described below. The transportation sector average price for each State and year is the consumption-weighted average of the prices of the three uses.

Physical Unit Prices: All Years

Vessel Bunkering. Physical unit prices are calculated from actual or estimated U.S. bunker C prices and corresponding residual fuel electric utility sector State and U.S. prices. The ratio of U.S. bunker C price to U.S. residual fuel electric utility sector price is multiplied by the State residual fuel electric utility sector price to obtain the State bunker C price. Taxes are calculated as described for the commercial sector (1976 through 1983) and added, so that final State vessel bunkering price estimates implicitly include State-specific taxes. Other procedures are described separately by groups of years.

1. For 1982 forward, national average prices for residual fuel with sulfur content greater than 1 percent are taken from the *Annual Energy Review* and used as proxies for bunker C prices.

2. For 1975 through 1981, national average bunker C prices are available from the *Monthly Petroleum Product Price Report (MPPPR)*. Annual average

U.S. prices for 1975 and 1976 are calculated as the simple average of the monthly prices for each respective year because annual average prices are not shown in the *MPPPR*.

3. For 1970 through 1974, no U.S. bunker C prices are available. To estimate State-level prices for these years, the average ratio of published bunker C prices and electric utility sector prices for 1975 through 1979 is calculated and multiplied by the State-level electric utility prices for 1970 through 1974.

Table A41. Residual Fuel Transportation Sector Price Assignments, 1970-1986

State	Years	State Prices Used in the Estimation
AL	1970-1974, 1980-1986	FL, GA, MS
CO	1986	KS, NM, UT
CT	1978	NH, VT
DC	1975	MD
	1978	PA
GA	1978	KY, MS
ID	1970, 1979	CA, CO
IL	1975	IA, IN, WI
IN	1980-1986	IL, MI, OH
KS	1975	MO, NE
KY	1980-1984	IL, MO, OH, VA
MD	1978	DE, PA
ME	1975	VT
MN	1986	IL, MI
MT	1983-1985	CO, MN, SD
NC	1975	GA
	1978	KY
	1981, 1983, 1985, 1986	GA, VA
ND	1982-1984	MN, SD
	1986	SD
NH	1975	VT
NM	1983, 1984	CO
NV	1975, 1978	CA
OH	1975	IN, MI
OK	1975	MO, TX
OR	1972	CA, WA
	1975-1986	CA
SC	1975, 1984	GA
	1978	AL, FL
SD	1975, 1978	MN, ND
TN	1970, 1971, 1973, 1974, 1976, 1977, 1980-1982	AR, GA, MO, MS, VA
	1975	AR, GA, MO, MS
	1978	AR, MO, MS
UT	1984	AZ, CO, NV
	1975	CO
VA	1975	GA
	1978	KY
WA	1984, 1985	CA
WI	1978, 1982-1985	IL, MI, MN
	1986	IL, MI
WV	1985	MD, OH, PA, VA
WY	1981, 1982, 1985	CO, MN, SD

Missing State prices are assigned adjacent States' average prices as shown in Table A41.

Military and Railroad Use. For all years, electric utility sector residual fuel prices are assigned to military and railroad uses. The electric utility prices include taxes. Since the military does not pay State taxes, their prices are adjusted to remove taxes. Estimation of the tax adjustment is described under the commercial sector.

In some cases, States have no reported consumption of residual fuel oil in the electric utility sector and, therefore, no final price in that sector. Since the electric utilities sector prices are used as a base in the calculation of prices in the other sectors, intermediate prices are calculated for OR in 1971 and for all States that need prices for 1987 forward.

Average Prices. Transportation sector prices are the average of bunker fuel, military, and railroad prices, weighted by each category's share of total transportation consumption from SEDS.

Btu Prices: All Years

Btu prices for States are calculated from the physical unit prices and the residual fuel conversion factor. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS.

Data Sources

Prices

1982 forward: Energy Information Administration, *Annual Energy Review 1992*, Table 5.21, row titled, "Sales Prices to End Users, Residual Fuel Oil, Greater Than 1 Percent Sulfur Content."

1976-1981: Energy Information Administration, *Monthly Petroleum Product Price Report*, Table 3.

1975: Federal Energy Administration, *Monthly Petroleum Product Price Report*, Table 3.

1970-1986: Electric utility sector residual fuel price estimates (in physical units) from SEPEDS.

Taxes

1987 forward: Bureau of the Census, U.S. Department of Commerce, *State Government Tax Collections*, Table 8, column titled, "Percentage rate, September 1."

1976-1986: Bureau of the Census, U.S. Department of Commerce, *Statistical Abstract of the United States*, table titled, "State Government Tax Collections and Excise Taxes," column titled, "Excise Taxes, General sales and gross receipts."

Consumption

1970 forward: Energy Information Administration, State Energy Data System, transportation sector residual fuel consumption, including the subcategories for vessel bunkering, military, and railroad uses.

Conversion Factor: All Years

6.287 million Btu per barrel.

Other Petroleum

Sixteen separate products are included in the category called other petroleum:

1. Aviation gasoline blending components
2. Crude oil
3. Miscellaneous products (*)
4. Motor gasoline blending components
5. Natural gasoline, including isopentane (1970-1983)
6. Pentanes plus (1984 forward)
7. Petrochemical feedstocks, naphtha (*)
8. Petrochemical feedstocks, other oils (*)
9. Petrochemical feedstocks, still gas (1970-1985) (*)
10. Petroleum coke (*)
11. Plant condensate (1970-1983)
12. Special naphthas (*)
13. Still gas
14. Unfinished oils
15. Unfractionated stream (1970-1983)
16. Waxes (*)

Physical Unit Prices: All Years

Of the 16 products, national-level prices are developed for the 7 noted with asterisks (*) above and described in the following paragraphs. All of these products are assigned to the industrial sector. Only national-level prices are developed because State-level price information is not available, and taxes are not included in any of the estimates. Consumption for the other nine products are completely removed as process fuel or intermediate products. (See the "Consumption Adjustments for Calculating Expenditures" section on page 253.)

Starting in 1984, three products—natural gasoline, plant condensate, and unfractionated stream—are dropped, and pentanes plus is added in the Energy Information Administration (EIA) reporting system that is the basis of the consumption estimates. Natural gasoline (including isopentane) and plant condensate are reported together as the new product, pentanes plus. Unfractionated stream is dropped because its components are reported separately as liquefied petroleum gases.

Miscellaneous Products

The products in this category vary from inexpensive (absorption oils similar to kerosene) to very expensive (hydraulic fluids). The price estimates are based on the evidence presented in the *Minerals Yearbooks* of the 1970's indicating that the greater part of the miscellaneous product line consists of finished petrochemicals, especially the aromatic hydrocarbons: benzene, toluene, and the xylenes.

Price estimates for 1972, 1977, 1982, and 1987 are taken from *Census of Manufactures (CM)* data on quantity and value of aromatics (product codes 2911054 and 2911056) and "other finished petroleum products" (product code 2911098) shipped by industries in Standard Industrial Code (SIC) 2911. The ratio of miscellaneous-products-to- crude-oil price for these 4 years varies widely. The ratio equals 1.91 for 1972, 2.15 for 1977, 1.56 for 1982, and 1.99 for 1987. Thus, to estimate miscellaneous products prices, the following ratios are used:

1970 - 1974: 1.91 times the crude oil price
1975 - 1979: 2.15 times the crude oil price
1980 - 1984: 1.56 times the crude oil price.
1985 forward: 1.99 times the crude oil price.

Price Data Sources

1970 Forward: Energy Information Administration, *Annual Energy Review 1993*, Table 5.20, column titled, "Composite, Nominal."

1972, 1977, 1982, 1987: Bureau of the Census, U.S. Department of Commerce, *Census of Manufactures*,

data for Standard Industrial Code (SIC) 2911 on "Quantity and Value of Shipments by All Producers" as shown in Table 6a from MC77-I-29A, Product Codes 2911054, 2911056, and 2911098 (1972 and 1977); and Table 6a from MC87-I-29A, Product Codes 2911D55 and 2911D57 (1982 and 1987).

Petrochemical Feedstocks, Naphtha

Naphthas for petrochemical feedstock use are those oils with boiling points less than 401° F. Consumer prices for 1978 through 1980 are derived from the special *Annual Survey of Manufactures (ASM)* series on "Hydrocarbon, Coal, and Coke Materials Consumed," by using data for industries in SIC 2869 (industrial organic chemicals) and SIC 2821 (plastics materials, synthetic resins, and nonvulcanizable elastomers). A price estimate for 1982 is obtained from the *CM*, based on data for SIC 2869 only. Since the ratio of petrochemical-naphtha-to-crude-oil price is reasonably constant in 1978, 1979, 1980, and 1982, the simple average of the four ratios, 1.23, is used to estimate prices for petrochemical feedstocks, naphthas, for all other years.

Price Data Sources

1970-1977, 1981, 1983 forward: Energy Information Administration, *Annual Energy Review 1993*, Table 5.20, column titled, "Composite, Nominal."

1982: Bureau of the Census, U.S. Department of Commerce, *1982 Census of Manufactures*, M82-I-28F-3(P), page 6, SIC 2869.

1980: Bureau of the Census, U.S. Department of Commerce, *1980 Annual Survey of Manufactures*, M80(AS)-4.3, page 9, SIC 2821.

1978, 1979: Bureau of the Census, U.S. Department of Commerce, *1979 Annual Survey of Manufactures*, M79(AS)-4.3, page 8, SIC 2821 and 2869.

Petrochemical Feedstocks, Other Oils

Petrochemical feedstocks referred to as "other oils" or "gas oils" are those oils with boiling points equal to or greater than 401° F. Consumer prices for 3 years are obtained from the data on gas oils presented in the special *ASM* series on hydrocarbons consumed, by using data for industries in SIC 2865 (cyclic crudes and intermediates). The other-oils-to-crude-oil price ratio is quite stable, and the average ratio for the 3-year period, 1.607, is used to estimate prices for petrochemical feedstocks, other oils, for all other years.

Price Data Sources

1970-1977, 1981 forward: Energy Information Administration, *Annual Energy Review 1993*, Table 5.20, column titled, "Composite, Nominal."

1979, 1980: Bureau of the Census, U.S. Department of Commerce, *1980 Annual Survey of Manufactures*, M80(AS)-4.3, page 9, SIC 2865.

1978: Bureau of the Census, U.S. Department of Commerce, *1979 Annual Survey of Manufactures*, M79(AS)-4.3, page 8, SIC 2865.

Petrochemical Feedstocks, Still Gas (1970 Through 1985)

The source data for still gas is a mixture of consumer prices and producer prices for industries in SIC 2869 and SIC 2911 (petroleum refining). The still-gas-to-crude-oil price ratio is somewhat variable because still gas is a highly variable gaseous mixture. Value and quantity are available for 1972, 1977 through 1980, and 1982. In imputing prices for years when data from the *CM* or *ASM* are not available, the average still-gas-to-crude-oil price ratio, 0.759, is used. After 1985, EIA data series no longer report feedstock and refinery use of still gas separately and all SEDS industrial consumption is removed from *SEPER*. (See the "Consumption Adjustments for Calculating Expenditures" section on page 253.)

Price Data Sources

1970, 1971, 1981, 1983-1985: Energy Information Administration, *Annual Energy Review 1993*, Table 5.20, "Composite, Nominal."

1982: Bureau of the Census, U.S. Department of Commerce, *1987 Census of Manufactures*, MC87-I-29A, Table 6a, SIC 2911.

1979, 1980: Bureau of the Census, U.S. Department of Commerce, *1980 Annual Survey of Manufactures*, M80(AS)-4.3, page 9, SIC 2869.

1978: Bureau of the Census, U.S. Department of Commerce, *1979 Annual Survey of Manufactures*, M79(AS)-4.3, page 28, SIC 2869.

1972, 1977: Bureau of the Census, U.S. Department of Commerce, *1977 Census of Manufactures*, MC77-1-29A, page 29A-20, SIC 2911.

Petroleum Coke

Petroleum coke is consumed by the industrial and electric utility sectors. The portion of petroleum coke consumed by the electric utility sector (about 4 percent in 1992) is described in the **Petroleum Coke (Utilities)** section on page 233. The remaining petroleum coke is marketed to industrial consumers in two forms, calcined and uncalcined. Calcined coke is about three times as expensive as uncalcined. A quantity-weighted U.S. average price is calculated by using U.S. Department of Commerce exports data and is assigned to all States with industrial petroleum coke consumption. The weighted average price is calculated by dividing the sum of the values of calcined and uncalcined petroleum coke exports by the sum of the two quantities exported. The physical unit conversion factor for petroleum coke is 5 barrels per short ton.

Price Data Sources

1989 forward: Bureau of the Census, U.S. Department of Commerce, December issues of EM-545, *Foreign and Domestic Exports*, for Petroleum Coke, Not Calcined (Commodity 2713110000) and Petroleum Coke, Calcined, (Commodity 2713120000).

1988: Bureau of the Census, U.S. Department of Commerce, December issue of EM-522, *U.S. Exports, Schedule B, Community by Country*, Petroleum Coke, Except Calcined, Commodity 5213150, and Petroleum Coke, Calcined, Commodity 5175120.

1987: Bureau of the Census, U.S. Department of Commerce, December issue of EM-622, *U.S. Exports, Schedule B, Commodity by Country*, Petroleum Coke, Except Calcined, Commodity 5213150, and Petroleum Coke, Calcined, Commodity 5175120.

1986: Bureau of the Census, U.S. Department of Commerce, December issue of EM-546, *U.S. Exports, Schedule B, Commodity by Country*, Petroleum Coke, Except Calcined, Commodity 5213150, and Petroleum Coke, Calcined, Commodity 5175120.

1978-1985: Bureau of the Census, U.S. Department of Commerce, FT-446, *U.S. Exports, Schedule B, Commodity by Country*, Petroleum Coke, Except Calcined, Commodity 5213150, and Petroleum Coke, Calcined, Commodity 5175120.

1970-1977: Bureau of the Census, U.S. Department of Commerce, December issues of FT-410, *U.S. Exports, Schedule B, Commodity by Country*, Petroleum Coke, Except Calcined, Commodity 3329420, and Petroleum Coke, Calcined, Commodity 3329410.

Special Naphthas

Prices for special naphthas are developed as the simple averages of the city prices for "varnish makers and painters naphtha" and two types of "solvent naphtha" that are published in the *Chemical Marketing Reporter*. For 1984 forward, the prices are averaged from the first issue of each month; for 1974, 1979, and 1980, when petroleum prices were increasing rapidly, prices are averaged from 10 randomly-selected issues; and for all other years, prices are averaged from at least 5 randomly-selected issues.

Price Data Source

1970 forward: Schnell Publishing Co., Inc., *Chemical Marketing Reporter*, selected monthly issues.

Waxes

Waxes data include fully refined crystalline wax, other refined crystalline wax, and microcrystalline wax. Price estimates for 1970 through 1973, and 1986 forward are obtained by dividing the value of exports by the quantity exported. For 1974 through 1985, prices are estimated by applying price indices to a representative base price. Producer prices for 1967 for the three waxes are available from data in the 1967 *Census of Manufactures*. A weighted-average price for 1967 of $15.75 per barrel is obtained by summing the values of shipments of the three waxes and dividing the sum by the total quantity shipped. An annual composite price index for these three waxes is listed in the Bureau of Labor Statistics publication *Producer Prices and Producer Price Indexes* for April 1974 through June 1985. Price estimates for 1975 through 1984 are derived by multiplying the published price indices by the estimated 1967 base price. The indices for 1974 and 1985 are estimated as the simple average of monthly price indices that are available for that year. The physical unit conversion factors for wax are 280 pounds per barrel and 1 pounds equals 0.45359237 kilograms.

Price Data Sources

1989 forward: Bureau of the Census, U.S. Department of Commerce, December issues of Report No. EM-545, titled *Foreign and Domestic Exports* for Paraffin Wax Less Than 0.75 Percent Oil (Commodity

2712200000) and Other Mineral Waxes NESOI (Commodity 2712900000).

1987, 1988: Bureau of the Census, U.S. Department of Commerce, December issues of Report No. EM-546 (1987) and EM-522 (1988), titled *U.S. Exports, Schedule B, Commodity by Country* for Paraffin Wax and Other Petroleum Waxes Unblended incl Microcrystalline Wax (Commodity 4925200).

1986: Bureau of the Census, U.S. Department of Commerce, December issue of EM-546, *U.S. Exports, Schedule B, Commodity by Country* for Paraffin Wax, Crystalline, Fully Refined (Commodity 4925210), Paraffin Wax, Crystalline, Except Fully Refined (Commodity 4925220), and Petroleum Waxes, NSPF incl Microcrystalline Wax (Commodity 4925240).

1974-1985: Bureau of Labor Statistics, U.S. Department of Labor, *Producer Prices and Producer Price Indexes, Annual Supplement*, Commodity Code 0577.

1974-1985: Bureau of the Census, U.S. Department of Commerce, *Census of Manufactures*, 1967, page 29 A-15, quantity and value of shipments of waxes in 1967.

1970-1973: Bureau of the Census, U.S. Department of Commerce, December issues of FT-410, *U.S. Exports, Schedule B, Commodity by Country* for Paraffin Wax, Crystalline, Fully Refined (Commodity 3326220), Paraffin Wax, Crystalline, Except Fully Refined (Commodity 3326230), and Microcrystalline Wax (Commodity 3326210).

Table A42. Other Petroleum Products Conversion Factors

Petroleum Product	Heat Rate
Miscellaneous Products	5.796
Petrochemical Feedstocks	
Naphtha	5.248
Other Oils	5.825
Still Gas	6.000
Petroleum Coke	6.024
Special Naphthas	5.248
Waxes	5.537

Btu Prices: All Years

Btu prices for the seven petroleum products are calculated by converting physical unit prices from dollars per barrel to dollars per million Btu by using the conversion factors shown in Table A42. The U.S. average price that is developed for each product is assigned to the industrial sector of States in years where there is consumption. The State-level and U.S. "other petroleum" average price are the average of the seven petroleum products, weighted by SEDS consumption data. The variable State average prices reflect the different mix of products consumed.

Table A43 shows national-level estimated prices and expenditures by the other petroleum product components for the years 1970, 1980, and 1985 forward.

Table A43. Other Petroleum Price and Expenditure Estimates for the Industrial Sector, United States, 1970, 1980, 1985-1992

Petroleum Product	1970	1980	1985	1986	1987	1988	1989	1990	1991	1992
	Prices in Dollars per Million Btu									
Miscellaneous Products	1.12	7.57	9.17	4.99	6.14	5.03	6.16	7.62	6.54	6.32
Petrochemical Feedstocks										
Naphtha	.80	6.68	6.27	3.41	4.20	3.44	4.21	5.21	4.47	4.32
Other Oils	.94	7.64	7.38	4.01	4.94	4.05	4.96	6.13	5.26	5.08
Still Gas	.43	4.04	3.39	–	–	–	–	–	–	–
Petroleum Coke	.53	2.19	1.86	1.53	1.50	1.45	1.74	2.02	1.72	1.29
Special Naphthas	1.96	10.48	10.87	10.73	10.73	10.84	10.00	9.71	9.71	9.71
Waxes	4.14	12.01	13.38	14.70	13.85	11.89	18.19	14.74	16.33	24.75
Average Price	**.96**	**6.58**	**7.16**	**4.61**	**5.22**	**4.38**	**5.16**	**5.87**	**5.25**	**5.03**
	Expenditures in Millions of Dollars									
Miscellaneous Products	96.3	1,798.6	1,308.2	682.4	843.0	837.9	944.2	1,050.3	997.6	632.4
Petrochemical Feedstocks										
Naphtha	239.3	3,173.1	1,478.5	1,164.1	1,459.4	1,222.6	1,636.6	1,811.3	1,335.5	1,629.0
Other Oils	171.1	6,564.0	3,728.8	2,449.3	2,742.1	2,360.0	2,704.1	4,621.6	4,350.1	4,141.4
Still Gas	32.4	371.0	256.2	–	–	–	–	–	–	–
Petroleum Coke	203.5	947.2	241.2	189.9	282.9	283.1	324.3	477.7	368.2	391.9
Special Naphthas	323.0	2,022.4	1,732.8	1,393.8	1,553.9	1,236.5	1,072.7	1,040.4	854.8	1,015.8
Waxes	105.6	395.3	419.9	449.7	453.2	403.8	608.5	491.0	573.7	922.0
Total	**1,171.2**	**15,271.5**	**9,165.7**	**6,329.3**	**7,334.5**	**6,343.8**	**7,290.5**	**9,492.2**	**8,479.9**	**8,732.6**

–Consumption data for this series are not available after 1985. See text.
Note: Expenditure totals may not equal sum of components due to independent rounding.
Source: State Energy Price and Expenditure Data System 1992.

Section 5. Electricity

Electricity Consumed by End-Use Sectors

Electricity prices are retail prices for sales to ultimate users. Prices are developed for the residential, commercial, industrial, and transportation sectors. In general, taxes are included in the prices. However, taxes collected by a utility from an end user and turned over to a government authority are generally not included in the revenues reported in the *Electric Power Annual* or the *Statistical Yearbook* and are not included in the prices. Taxes paid by the utility (rather than the end user) are considered operating costs and are passed on to the end user as part of the rate. Therefore, Federal, State, business, and property taxes are typically included in the prices, while sales and other point-of-purchase taxes usually are not.

Consumption is based on sales by electric utilities to ultimate users. Electricity consumption data by State for the residential, commercial, industrial, and transportation sectors are obtained from the State Energy Data System (SEDS). Consumption of electricity in the industrial sector is adjusted for estimated refinery use in each State. (See the discussion in Section 6 "Consumption Adjustments for Calculating Expenditures," on page 253.)

Conversion Factor: All Years

3,412 Btu per kilowatthour

Physical Unit Prices: 1987 Forward

For 1987 forward, physical unit prices for States are calculated for all four sectors as the average revenue per unit of sales for all electric utilities reported in a State. Revenues and sales data from the *Electric Power Annual* are used to calculate physical unit prices. Data for the residential and industrial sectors are drawn from their respective columns. Data for the transportation sector are taken from the column titled "Other" that includes sales to railroads and railways. SEDS consumption is used to determine the portion of the data in the column titled "Other" that is not sold to the transportation sector. These data are added to the column titled "Commercial" to arrive at the revenues and sales data for the commercial sector.

For 1987 forward, prices are based on preliminary revenues and sales data in the given year and are replaced with revised data in the following year. There are no missing prices in any of the four sectors.

Physical Unit Prices: 1970 Through 1986

For 1970 through 1986, preliminary physical unit prices for States are calculated for all four sectors as the average revenue per unit of sales for all electric utilities reported in a State. The calculation of physical prices uses the revenues and sales data from the *Statistical Yearbook* for each year in the series. Data for the residential sector and industrial sector are drawn from their respective columns. The commercial sector is the sum of the columns titled "Commercial," "Street and Highway Lighting," "Other Public Authorities," and "Interdepartmental." The transportation sector is the column titled "Railroads and Railways."

For 1980 through 1986, prices are based on preliminary revenues and sales data in the given year, and are replaced with revised data in the following year. The only exception to this rule is the revenues data for AR in 1981; preliminary data are used in this case because of an apparent error in the revised data.

For 1970 through 1981, MD prices are assigned to DC. There are no other missing prices for the residential, commercial, and industrial sectors.

In the transportation sector, numerous price assignments are made due to the lack of sector-specific price data. Generally, electricity usage in the transportation sector is small; the sector's electricity use ranged from 0.1 percent to 0.2 percent of total U.S. electricity consumption in 1970 through 1986. From 1970 through 1986, only 15 States used measurable amounts of electricity in the transportation sector (CA, DC, FL, GA, IL, LA, MA, MD, NJ, NY, OH, PA,

TN, VA, and WA). A few individual State prices are unavailable and are assigned the commercial sector prices: LA/1970 through 1986, and TN/1970 through 1986. (Prices are available for LA/1970, 1972, 1973, but those prices are replaced by commercial sector prices to maintain a consistent series for the State.) In addition, MA/1985, 1986 transportation prices are estimated by multiplying the MA/1985, 1986 commercial prices by the average of the ratios of the commercial-to-transportation sector prices for 1980 through 1984. Similarly, the VA/1977 transportation price is estimated by multiplying the VA/1977 commercial price by the average of the ratios of the commercial-to-transportation sectors prices for 1978 through 1982.

In order to reconcile national-level electricity prices based on the *Statistical Yearbook* with the EIA national-level electricity prices published in the *Annual Energy Review (AER)*, yearly adjustment factors are calculated for the residential, commercial, and industrial sectors as follows: a preliminary U.S. price for each sector is calculated as the average of the State prices, weighted by SEDS consumption. These preliminary U.S. prices are divided by the national-level electricity prices published in the *AER*, and the quotient is used as an adjustment factor. The preliminary State prices are multiplied by the adjustment factor to produce the final physical unit State prices in those sectors. Since no transportation sector prices are published in the *AER*, no adjustments are made to that sector and the final physical unit prices are derived solely from the *Statistical Yearbook* sales and revenue data. The annual adjustment factors for the residential, commercial, and industrial sectors are shown in Table A44.

Table A44. Annual Electricity Price Adjustment Factors

Year	Residential	Commercial	Industrial
1970	1.05121	1.05712	1.06832
1971	1.05632	1.05926	1.05504
1972	1.05271	1.05514	1.05765
1973	1.06626	1.06188	1.05991
1974	1.09572	1.08098	1.08732
1975	1.09257	1.08098	1.08732
1976	1.07753	1.07755	1.06891
1977	1.06746	1.07675	1.06820
1978	1.06654	1.08273	1.06861
1979	1.06986	1.08349	1.06441
1980	1.04457	1.06109	1.06781
1981	1.05821	1.06943	1.06523
1982	1.06654	1.06351	1.05597
1983	1.05421	1.05301	1.05537
1984	0.99693	1.01924	0.99015
1985	1.00010	1.02008	0.98355
1986	0.99854	1.01518	0.98618

Source: EIA calculations based on data from the *Annual Energy Review* and the *Statistical Yearbook of the Electric Utility Industry.*

Btu Prices: All Years

Btu prices for States are calculated by dividing the physical unit prices by the conversion factor. U.S. Btu prices are calculated as the average of the State Btu prices, weighted by consumption data from SEDS, adjusted for process fuel consumption in the industrial sector.

Data Sources

Prices

1987 forward: Energy Information Administration, *Electric Power Annual 1988*, Tables 19 and 21 (1987 data); *Electric Power Annual*, Tables 27 and 29 (1988-1990) and Tables 26 and 28 (1991 and 1992).

1970-1986: Edison Electric Institute, *Statistical Yearbook of the Electric Utility Industry*, tables titled, "Revenues: Total Electric Utility Industry" and "Energy Sales: Total Electric Utility Industry."

1970-1986: Energy Information Administration, *Annual Energy Review 1989*, Table 95, "Retail Prices of Electricity Sold by Electric Utilities, 1960-1989."

Consumption

1970 forward: Energy Information Administration, State Energy Data System, electricity consumption by end-use sector.

Nuclear Fuel for Generation of Electricity

Nuclear fuel prices are developed for the electric utility sector. State-level data on the amount of electricity generated from nuclear power plants are taken from SEDS. Utilities operating nuclear plants report fuel costs per kilowatthour to the U.S. Department of Energy annually. These data are collected on a plant-by-plant basis and include all taxes, transportation, and handling costs paid by the utilities. The

State where the nuclear power plant is located is assigned the reported nuclear fuel cost. For States with two or more nuclear power plants, the average fuel cost, weighted by generation, is attributed to the State.

Physical Unit and Btu Prices: All Years

State-level nuclear fuel prices are estimated in two steps: (1) the total cost of fuels consumed at all nuclear power plants in a State is divided by their total generation of electricity, and (2) the cost per output created in step 1 is divided by an annual U.S. average thermal conversion factor to create the price in dollars per million Btu. Occasionally, the fuel costs at nuclear power plants include small amounts of nonnuclear fuels, which are necessary to continue essential plant operations during refueling or maintenance of the reactor.

A price is estimated by another method for States where generation and fuel cost data are not available for years in which the *State Energy Data Report (SEDR)* shows nuclear electric power generation. The ratio of the change in the national nuclear fuel price is used to estimate nuclear fuel prices for missing years within a State. The ratio of national prices used in the estimation is the ratio before missing prices are assigned. The States and years for which nuclear prices are estimated are shown in Table A45.

Nuclear electricity generation levels are negative for CO in 1985 and for TN in 1986 and 1987, indicating that the nuclear power plants used more energy than they supplied. In these cases the fuel prices and expenditures are set to zero. In 1986, there is generation in CO but price data are not available. The price for CO in 1986 is estimated by using the ratio of the 1984-to-1986 U.S. average prices and applying that ratio to the 1984 CO price.

For MO in 1985, a large credit resulting from litigation is assigned to fuel costs, creating an artificially low price. The 1986 MO uranium price, which is in the range of the prices of other nuclear fuel plants, is used to estimate the 1985 price by applying the ratio of the 1986-to-1985 national prices.

The 1985 *Historical Plant Costs and Annual Production Expenses for Selected Electric Plants* has a footnote for the Duke Power Catawba plant in SC stating that the reported production expenses represent only 12.5 percent of the actual production expenses. The production expenses used in the calculation for the Catawba plant are adjusted accordingly.

Prices for GA in 1978, NC in 1982, and OH in 1986 are assigned because the prices calculated by using reported data are significantly different from prices for other years for these States.

There are no prices available for WA in 1970 through 1987 and national prices are assigned for those years.

Table A45. Nuclear Electricity Fuel Price Estimates, 1970 Forward

State	Years
Alabama	1973, 1974, 1976
Arizona	1985
Arkansas	1980
Colorado	1977, 1978, 1982-1984, 1986-1989
Georgia	1974
Maine	1972
Mississippi	1984
Missouri	1984, 1985
North Carolina	1982
Ohio	1986
Oregon	1975
South Carolina	1970, 1985
Tennessee	1980
Washington	1970-1987
Wisconsin	1970

Data Sources

Prices

1992: Prices are developed by the Energy Information Administration, Office of Coal, Nuclear, and Alternate Fuels from data compiled by the Utility Data Institute/McGraw-Hill. The data are collected on Federal Energy Regulatory Commission, FERC Form 1, "Annual Report of Major Electric Utilities, Licensees, and Others" and Energy Information Administration, Form EIA-412, "Annual Report of Public Electric Utilities."

1988-1991: Energy Information Administration, *Electric Plant Cost and Power Production Expenses*, Table 16 (1988-1990) and Table 14 (1991).

1982-1987: Energy Information Administration, *Historical Plant Costs and Annual Production Expenses for Selected Electric Plants*, Table 18 (1982-1984), and Table 20 (1985-1987).

1979-1981: Energy Information Administration, *Thermal Electric Plant Construction Cost and Annual*

Production Expenses, pages 267-279 (1979), Table 11 (1980 and 1981).

1975-1978: Energy Information Administration, *Steam Electric Plant Construction Cost and Annual Production Expenses*, "Section II-Nuclear Plants."

1970-1974: Federal Power Commission, *Steam Electric Plant Construction Costs and Annual Production Expenses*, data sheets for Nuclear Plants (1970-1973), and "Section II-Nuclear Plants" (1974).

Consumption

1970 forward: Energy Information Administration, State Energy Data System, electricity generated by nuclear power.

Conversion Factors

1970 forward: Energy Information Administration, *State Energy Data Report 1992, Consumption Estimates*, Table D1, as shown in Table A46.

Biomass Fuels for Generation of Electricity

Biomass fuels prices are developed for the electric utility sector; data for biomass fuels consumed by other sectors are not available, except for ethanol added to motor gasoline. State-level data on the amount of electricity generated at electric utilities from biomass fuels are taken from SEDS and are collected on Form EIA-759 (formerly, FPC-4). All electric utilities are required to report on EIA-759 but no price data are collected. State and national biomass fuels prices are developed for the electric utility sector from data reported on other EIA and Federal Energy Regulatory Commission (FERC) forms and from telephone surveys. Taxes are included in the prices for all years.

Prices: All Years

1989 Forward. State-level prices for biomass fuels used at electric utilities, in dollars per million Btu, are calculated from data obtained from FERC Form 1 and Form EIA-412 and by follow-up telephone surveys of the electric utilities that are not required to submit those forms. For States with more than one utility using biomass fuels, a consumption-weighted average price is calculated. There are anomalies that are unique to biomass fuels used at utilities. In some cases, there is no charge for the fuel. In other cases of municipal and industrial waste, the electric utilities charge a "tipping fee" for accepting the waste. That is, instead of paying for the fuel, the electric utilities are paid to take the fuel. For States where all utilities pay nothing for the fuel or charge a fee for receiving it (see Table A47) a price of zero is assigned. Although the corresponding consumption is included in calculating the average price for fuels consumed by electric utilities in the State and the United States, the expenditure included is zero. The State and U.S. average electric utility fuel prices are, therefore, slightly lower because some of the fuel did not cost anything.

1983 Through 1988. A U.S. average price in dollars per million Btu is calculated and assigned to all States. The national price is a consumption-weighted average price based on data obtained from FERC Form 1 and Form EIA-412 and by follow up

Table A46. Nuclear Steam-Electric Thermal Conversion Factors
(Thousand Btu per Kilowatthour)

Year	Conversion Factor	Year	Conversion Factor
1970	10.977	1982	11.073
1971	10.837	1983	10.905
1972	10.792	1984	10.843
1973	10.903	1985	10.813
1974	11.161	1986	10.799
1975	11.013	1987	10.776
1976	11.047	1988	10.743
1977	10.769	1989	10.724
1978	10.941	1990	10.680
1979	10.879	1991	10.740
1980	10.908	1992	10.678
1981	11.030		

Table A47. Biomass Fuels Used at Electric Utilities at No Cost or For a Fee, 1989 Forward

State	Years
California	1989-1992
Connecticut	1989-1992
Hawaii	1989, 1990
Montana	1989-1992
Ohio	1989-1992

telephone surveys of the electric utilities that report use of biomass fuels for generating electricity.

Prices are erratic for biomass fuels used at utilities. In addition to the anomalies of no charge for the fuel and the "tipping fee" mentioned above, handling refuse-derived fuel is more labor intensive than handling conventional fossil fuels. The labor expenses are included in the plant's operating costs, not the fuel costs. Biomass fuels prices are also erratic because the demand is relatively small and the pricing mechanism, even for a single facility, may change from year to year. A price or quantity change by a single major user affects the national price more significantly than for any other fuel.

1978 Through 1982. National average prices are derived from data collected on FPC Form 423 and published monthly by EIA in *Cost and Quality of Fuels for Electric Utility Plants (C&Q)*. For these years, fossil-fueled plants with a combined capacity of 25 megawatts or greater were required to report on FPC Form 423. Annual prices of biomass fuels sold to electric utilities are developed as quantity-weighted monthly prices for those plants where wood chips and refuse were used as fuel. Beginning in 1983, the reporting threshold was raised to 50 megawatts, and very few plants reported use of biomass fuels on the Form 423 in 1983 and subsequent years.

A detailed review of data in *C&Q* showed that some entries were in error by factors of 10, 100, or 1,000. Accordingly, the following corrections were made. For 1982, the February, March, and April quantities for the Florida Power Corporation were divided by 1,000 to make them 80, 40, and 60 short tons, respectively. The March, April, and May costs for Northern State Power were multiplied by 100 to make them $0.70 per million Btu. For the 5 months from November 1979 through March 1980, the reported quantities of wood delivered to Burlington Electric Co. were divided by 10, to place them in the range of 7,980 to 9,390 short tons. For the 8 months from June 1978 through January 1979, seed corn delivered to the Logansport Indiana Electric Department were included in the biomass fuel. For February 1978, the reported quantity of wood delivered to the United Power Associates was divided by 1,000 to make it 90 short tons.

1970 Through 1977. The annual prices for wood chips are derived by deflating the 1978 price using the gross domestic product implicit price deflator based on 1987 dollars. The deflators are shown in Table A48.

Table A48. Price Deflators Used for Biomass Fuels Prices, 1970–1977

Years	Deflator	Years	Deflator
1970	35.1	1975	49.2
1971	37.1	1976	52.3
1972	38.8	1977	55.9
1973	41.3	1978	60.3
1974	44.9		

Data Sources

Prices

1983 forward: Energy Information Administration, data reported on FERC Form 1, "Annual Report of Major Electric Utilities, Licensees and Others" and Form EIA-412, "Annual Report of Public Electric Utilities" and follow-up telephone surveys of the electric utilities that report use of biomass fuels for generating electricity.

1978-1982: Energy Information Administration, *Cost and Quality of Fuels for Electric Utility Plants*, table titled, "Wood Chips, Refuse, and Petroleum Coke Used as Fuel by Steam-Electric Plants."

1970-1978: Energy Information Administration, *Annual Energy Review 1991*, Appendix C, Gross Domestic Product and Implicit Price Deflator.

Consumption

1970 forward: Energy Information Administration, State Energy Data System, electricity generated from consumption of wood and waste.

Section 6. Consumption Adjustments for Calculating Expenditures

Expenditures developed in the State Energy Price and Expenditure Data System (SEPEDS) and published in this report are calculated using consumption estimates from the EIA State Energy Data System (SEDS). Since almost all aspects of energy production, processing, and distribution consume energy as an inherent part of those activities, SEDS industrial and transportation sector consumption estimates include energy consumed in the process of providing energy to the end-use consumer. Familiar examples include drilling for oil and gas, refining crude oil into finished petroleum products, transporting natural gas and petroleum by pipeline, and generating and delivering electricity to end users. Energy that is consumed to make energy more useable to the end user is called "process fuel." Energy products that are subsequently incorporated into another energy product for end-use consumption are called "intermediate products." Motor gasoline blending components are familiar examples of intermediate products that are consumed as part of the finished motor gasoline sold at service stations and other outlets.

Process fuel and intermediate products are not purchased by the end user and, therefore, do not have prices. Although the end user does not consume either process fuel or intermediate products directly, he does pay for them, because the cost to the processor or distributor is passed on to the end user in the price of the final end-user product. Hydroelectric power generated by industries and consumed onsite is another form of energy consumption that has no price to the consumer. To estimate energy expenditures, the consumption of process fuel, intermediate products, and industrial hydroelectricity are not assigned prices and are subtracted from the end-use sector in which they are included in SEDS, either the industrial or transportation sector. If their use was left in the consumption estimates and was assigned prices, the expenditures would be counted twice, first as paid by the "processor" (producer, processor, or transporter) and again as included in the price to the end user.

Process fuel consumption adjustments include:

1. Fuel (petroleum, natural gas, coal) and electricity consumed at refineries
2. Crude oil lease, plant, and pipeline fuel
3. Natural gas lease and plant fuel
4. Natural gas pipeline fue
5. Hydroelectricity generated and used within the industrial sector
6. Electrical system energy losses (i.e., energy consumed in the generation, transmission, and distribution of electricity)

Intermediate product consumption adjustments include:

1. Aviation gasoline blending components
2. Motor gasoline blending components
3. Natural gasoline (1970 through 1983)
4. Pentanes plus (1984 forward)
5. Plant condensate (1970 through 1983)
6. Unfinished oils
7. Unfractionated stream (1970 through 1983)

Starting in 1984, natural gasoline (including isopentane) and plant condensate are reported together as the new product, pentanes plus, and the components of unfractionated stream are reported separately under liquefied petroleum gases.

Table A49 shows estimates of the quantities of energy consumed by State as process fuel and intermediate products in 1992. Estimates for 1970 through 1992 are available on the State Energy Price and Expenditure Data System personal computer diskettes.

Table A50 shows the adjustments made to SEDS national consumption estimates for 1970 through 1992 to derive the net consumption data used to calculate the expenditures in this report.

Adjustment Procedures

Refinery Fuel. Refinery fuel consumption of distillate fuel, residual fuel, liquefied petroleum gases,

Table A49. Estimates of Energy Consumed as Process Fuel and Intermediate Products, 1992
(Billion Btu)

	Refinery Use							
	Distillate	Residual	LPG	Other Petroleum [a]	Natural Gas	Coal	Electricity [b]	Total
AK	96	593	23	20,258	25,120	–	93	46,182
AL	40	1,297	11	14,235	24,516	–	7,923	48,023
AR	33	94	10	7,011	16,456	–	3,025	26,628
AZ	116	185	1,526	790	1,622	–	2,032	6,272
CA	538	3,711	24,153	185,108	56,036	–	10,494	280,040
CO	2	23	489	7,868	5,272	–	1,014	14,669
CT	–	–	–	1,679	–	–	–	1,679
DC	–	–	–	–	–	–	–	–
DE	26	1,648	15	18,977	819	39	285	21,808
FL	–	–	–	3,758	–	–	–	3,758
GA	211	4,558	187	4,726	7,741	483	2,474	20,380
HI	29	2,695	212	12,516	–	–	701	16,152
IA	–	–	–	1,055	–	–	–	1,055
ID	–	–	–	–	–	–	–	–
IL	62	888	651	108,851	13,477	5	3,589	127,523
IN	40	9,254	237	63,328	10,938	6	3,285	87,088
KS	33	374	1,280	31,299	7,595	*	742	41,323
KY	42	1,004	330	40,205	3,563	3	3,254	48,401
LA	85	3,506	439	303,226	157,845	–	7,384	472,486
MA	–	–	–	2,048	–	–	–	2,048
MD	–	–	–	1,474	–	–	–	1,474
ME	–	–	–	–	–	–	–	–
MI	34	1,817	646	19,594	14,292	5	3,129	39,517
MN	45	2,354	312	25,737	4,144	1	2,067	34,660
MO	–	–	–	7,730	–	–	–	7,730
MS	33	670	34	36,570	14,836	–	3,626	55,768
MT	1	537	121	18,727	942	–	950	21,278
NC	–	–	–	5,297	–	–	–	5,297
ND	22	663	40	6,140	663	6	161	7,695
NE	–	–	–	353	–	–	–	353
NH	–	–	–	98	–	–	–	98
NJ	151	4,144	396	82,042	7,849	59	1,288	95,929
NM	14	447	75	10,481	9,674	–	1,239	21,931
NV	145	157	394	553	763	–	1,236	3,248
NY	–	–	–	7,198	–	–	–	7,198
OH	47	3,413	804	65,335	13,522	6	6,114	89,240
OK	31	1,368	258	39,950	12,072	1	1,018	54,698
OR	–	–	–	–	–	–	–	–
PA	473	5,596	425	86,177	10,907	1,126	3,936	108,640
RI	–	–	–	–	–	–	–	–
SC	–	–	–	4,055	–	–	–	4,055
SD	–	–	–	–	–	–	–	–
TN	27	702	183	25,408	5,736	6	3,658	35,719
TX	173	2,874	2,726	556,972	278,993	–	22,964	864,703
UT	1	1,427	114	14,725	3,772	–	920	20,959
VA	191	3,920	206	10,072	3,163	974	1,466	19,991
VT	–	–	–	–	–	–	–	–
WA	165	1,957	2,134	97,132	6,540	–	7,046	114,974
WI	31	1,463	152	4,568	5,791	3	1,788	13,796
WV	165	699	25	34,086	2,441	608	910	38,935
WY	1	63	244	12,591	6,688	–	1,102	20,689
US	3,105	64,102	38,849	2,000,002	733,790	3,332	110,910	2,954,091

See footnotes at end of table.

other petroleum (crude oil, petroleum coke, and still gas), natural gas, coal, and electricity is individually estimated for each source and subtracted from its State Energy Data System (SEDS) industrial sector total. Because crude oil consumption is not an individual fuel in SEDS for 1970 through 1982, the small amounts of crude oil that were used at refineries during those years were allocated to residual and distillate fuels consumed at refineries. The allocation from crude oil refinery use to residual and distillate fuels refinery use was made according to each fuel's share of the total crude oil used directly (including losses) as residual and distillate fuels (*Petroleum Supply Annual Volume 1*, Table 2). Over this period, residual fuel ranged from a low share of 75 percent in 1971 to a high share of 92 percent in 1976. Refinery consumption of still gas, excluding still gas consumed as petrochemical feedstocks, is subtracted

Table A49. Estimates of Energy Consumed as Process Fuel and Intermediate Products, 1992 (Continued)
(Billion Btu)

	Crude Oil Lease, Plant, and Pipeline Fuel	Natural Gas Lease and Plant Fuel	Natural Gas Pipeline Fuel	Industrial Hydroelectricity	Electrical System Energy Losses	Total
AK	–	235,223	2,870	–	32,452	316,728
AL	–	13,229	19,154	244	452,577	533,228
AR	–	5,878	8,140	–	207,143	247,789
AZ	–	42	24,101	157	317,810	348,381
CA	27,341	94,761	15,168	–	1,554,037	1,971,347
CO	–	21,666	8,442	9	231,685	276,470
CT	–	–	606	64	197,502	199,851
DC	–	–	268	–	73,120	73,388
DE	–	–	4	–	62,121	83,934
FL	–	5,648	4,771	–	1,070,330	1,084,508
GA	–	–	7,689	556	607,145	635,769
HI	–	–	–	687	45,001	61,840
IA	–	–	6,968	13	219,935	227,971
ID	–	–	3,378	–	138,392	141,771
IL	–	109	11,534	175	819,224	958,565
IN	–	5	4,779	–	560,442	652,314
KS	–	43,199	28,839	–	197,081	310,443
KY	–	2,975	16,767	–	488,278	556,421
LA	–	230,466	56,417	–	473,959	1,233,328
MA	–	–	1,830	645	327,616	332,138
MD	–	–	2,484	–	371,232	375,190
ME	–	–	2	10,032	83,604	93,638
MI	–	7,546	22,502	1,200	610,412	681,177
MN	–	–	15,113	1,491	345,192	396,457
MO	–	1	2,313	–	396,147	406,192
MS	–	5,203	35,015	–	241,993	337,979
MT	–	1,912	3,086	–	95,350	121,626
NC	–	–	6,658	31	685,804	697,790
ND	–	8,843	2,852	–	51,899	71,289
NE	–	39	2,502	–	129,478	132,373
NH	–	–	85	1,598	65,193	66,974
NJ	–	–	3,657	32	459,573	559,190
NM	–	55,999	52,453	–	105,071	235,454
NV	–	31	490	–	128,840	132,610
NY	–	993	6,047	2,402	935,348	951,987
OH	–	1,502	9,923	–	1,055,816	1,156,481
OK	–	95,010	26,215	–	278,619	454,540
OR	–	71	7,072	291	312,414	319,848
PA	–	3,503	39,936	7	846,651	998,738
RI	–	–	363	–	46,542	46,905
SC	–	–	2,979	504	425,197	432,735
SD	–	458	1,767	327	47,279	49,832
TN	–	40	16,896	–	572,056	624,711
TX	–	308,408	84,913	–	1,743,216	3,001,240
UT	–	13,598	1,384	–	120,619	156,560
VA	–	678	6,702	281	556,595	584,247
VT	–	–	3	721	35,974	36,698
WA	–	–	3,169	1,333	650,304	769,780
WI	–	–	4,019	2,657	370,768	391,240
WV	–	8,624	17,761	7,109	173,506	245,935
WY	–	42,954	8,363	–	85,183	157,189
US	27,341	1,208,614	608,447	32,566	20,101,730	24,932,789

[a] In this table, other petroleum consists of: crude oil, petroleum coke, and still gas consumed as process fuel; and aviation gasoline blending components, motor gasoline blending components, pentanes plus, and unfinished oils used as intermediate products.

[b] Electricity is converted at the rate of 3,412 Btu per kilowatthour.
—No consumption.
*Value less than 0.5 billion Btu.
Sources: State Energy Price and Expenditure Data System 1992.

from the SEDS industrial sector total for 1970 through 1985. Beginning in 1986, EIA data series no longer report refinery fuel and feedstock use separately, and all SEDS industrial still gas consumption is removed from *SEPER*.

Refinery fuel consumption data are available in the data sources by Petroleum Administration for Defense District (PADD) (1981 forward) and by State or group of States (1970 through 1980). Where State-level consumption data are not available, the State-level estimates are derived by allocating the

Table A50. Energy Consumption Adjustments, 1970-1992
(Trillion Btu)

Year	Total (Gross) Consumption	Adjustments							Net Consumption
		Refinery Use	Crude Oil Lease, Plant, and Pipeline Fuel	Natural Gas Lease and Plant	Natural Gas Pipeline	Industrial Hydro-electricity	Electric Utility Losses	Total	
1970	66,334	2,464	–	1,442	740	34	11,517	16,197	50,138
1971	67,789	2,442	–	1,456	761	34	12,127	16,820	50,968
1972	71,275	2,576	–	1,497	786	34	13,110	18,003	53,273
1973	74,351	2,690	–	1,539	745	35	13,999	19,007	55,344
1974	72,528	2,683	–	1,520	684	33	14,198	19,119	53,409
1975	70,569	2,571	–	1,434	595	32	14,384	19,017	51,553
1976	74,392	2,590	–	1,679	559	33	15,255	20,116	54,276
1977	76,317	2,687	–	1,706	544	33	16,060	21,030	55,287
1978	78,158	2,623	–	1,694	541	32	16,850	21,740	56,419
1979	78,920	2,742	–	1,534	613	34	17,063	21,985	56,935
1980	75,985	2,718	–	1,058	650	33	17,387	21,845	54,140
1981	74,022	2,204	–	959	660	33	17,464	21,320	52,703
1982	70,806	2,089	–	1,144	614	33	17,100	20,979	49,827
1983	70,486	2,122	140	1,010	505	33	17,583	21,394	49,093
1984	74,085	2,255	134	1,113	545	33	18,157	22,237	51,847
1985	74,054	2,046	127	1,001	521	33	18,631	22,359	51,694
1986	74,290	2,286	103	954	501	33	18,593	22,470	51,820
1987	76,840	2,485	72	1,194	538	33	19,156	23,479	53,361
1988	80,269	2,696	85	1,134	633	33	19,887	24,468	55,802
1989	81,317	2,711	59	1,103	650	33	20,256	24,811	56,506
1990	81,143	2,803	51	1,269	682	33	20,221	25,059	56,084
1991	81,099	2,668	39	1,164	622	33	20,473	24,998	56,101
1992	82,128	2,954	27	1,209	608	33	20,102	24,933	57,195

Note: Totals may not equal sum of components due to independent rounding.

Sources: **Total (Gross) Consumption**—EIA, *State Energy Data Report 1992, Consumption Estimates, (SEDR)* DOE/EIA-0214(92) (Washington, DC, May, 1994), p. 33, column titled, "Total."
Refinery Use—State Energy Price and Expenditure Data System 1992 (SEPEDS).
Crude Oil Lease, Plant, and Pipeline Fuel—SEPEDS.
Natural Gas Lease and Plant—SEPEDS.
Natural Gas Pipeline—EIA, *SEDR*, p. 37, column titled, "Natural Gas."
Industrial Hydroelectricity—EIA, *SEDR*, p. 36, column titled, "Industrial Hydropower."
Electric Utility Losses—EIA, *SEDR*, Tables 13-16, pp. 34-37, sum of four end-use sectors' column titled, "Electrical System Energy Losses."
Net Consumption—SEPEDS.

district's or group's total consumption to the individual States within the district or group to the States that had operating refineries in a given year. Individual fuels are allocated to the refining States according to each State's share of the refining States' total industrial sector fuel consumption during the year. In some instances, estimated refinery fuel consumption exceeds the SEDS estimate for total industrial consumption of a fuel within a State. When this occurs, the excess refinery fuel consumption is reallocated as shown in Table A51.

Intermediate Products. Aviation gasoline blending components, motor gasoline blending components, natural gasoline (1970 through 1983), pentanes plus 1984 forward), plant condensate (1970 through 1983), unfinished oils, and unfractionated stream (1970 through 1983) are used at refineries and blending plants to make end-use petroleum products, particularly motor gasoline. Accordingly, consumption of these products is completely removed from *SEPER*.

Crude Oil Lease, Plant, and Pipeline Fuel. Industrial crude oil remaining after refinery fuel consumption is removed is assumed to be used as lease, plant, and pipeline fuel. Since these are process fuel uses, the remaining crude oil is removed from SEDS industrial sector consumption.

Natural Gas Lease and Plant Fuel. Natural gas consumed as lease and plant fuel is process fuel and is subtracted from SEDS industrial sector natural gas totals by State and year.

Natural Gas Pipeline Fuel. Transportation sector natural gas consumption shown in SEDS is used to power pipelines. As such, it is process fuel and is completely removed from the *SEPER* expenditure calculations.

Industrial Hydroelectricity.. Hydroelectricity generated by industries and consumed at the industrial site s has no fuel cost. Operation and maintenance

Table A51. Reallocations of Excess Refinery Fuel Consumption

Year	Fuel	Thousand Barrels	Excess In:	Re-allocated
1971	Residual Fuel	294	Kansas	Oklahoma
1973	Residual Fuel	45	Group 4: Kentucky, Tennessee	Illinois
1979	LPG	173	Montana	Wyoming
1983	Petroeum Coke	3,091	PADD I	PADD II
1984	Crude Oil	80	PADD II	PADD III
	Petroleum Coke	992	PADD I	PADD II
1985	Petroleum Coke	80	PADD II	PADD III
	Crude Oil	719	PADD I	PADD II
	Residual Fuel	212	PADD IV	PADD V
1986	Petroleum Coke	1,297	PADD I	PADD II
	Residual Fuel	403	PADD IV	PADD V
1987	Residual Fuel	497	PADD IV	PADD V
1988	Crude Oil	8	PADD III	PADD V
	Residual Fuel	305	PADD IV	PADD V
1989	Crude Oil	9	PADD I	PADD V
	Crude Oil	15	PADD III	PADD V
	Residual Fuel	381	PADD IV	PADD V
1990	Residual Fuel	332	PADD IV	PADD V
1991	Petroleum Coke	595	PADD I	PADD II
	Residual Fuel	374	PADD IV	PADD V
1992	Crude Oil	3	PADD II	PADD V
	Crude Oil	1	PADD III	PADD V
	Petroleum Coke	838	PADD I	PADD II
	Residual Fuel	355	PADD IV	PADD V

Source: EIA calculations based on data from the *State Energy Data Report* and the *Petroleum Supply Annual.*

costs associated with the hydroelectricity are included indirectly in the prices of the industries' products. Therfore, SEDS industrial hydorelectricity consumption estimates are removed from *SEPER* expenditure calculations.

Electrical System Energy Losses. The amount of energy lost during generation, transmission, and distribution of electricity (including plant use and unaccounted for electrical energy) is process fuel and is subtracted from sectoral energy consumption estimates used in *SEPER*. The energy losses are "paid for" when residential, commercial, industrial, and transportation sector consumers buy the electricity produced at electric utilities.

Data Sources

Capacity of Petroleum Refineries. 1982 forward: Energy Information Administration, *Petroleum Supply Annual Volume 1*, table titled, "Number and Capacity of Operable Petroleum Refineries," column heading, "Crude Capacity, Barrels per Calendar Day, Operating" (1982-1985), "Atmospheric Crude Oil Distillation Capacity, Barrels per Calendar Day, Operating" (1986 forward).

1979-1981: Energy Information Administration, Energy Data Reports, *Petroleum Refineries in the United States and U.S. Territories*, table titled, "Number and Capacity of Petroleum Refineries," column heading, "Crude Capacity, Barrels per Calendar Day, Operating."

1978: Energy Information Administration, Energy Data Reports, Petroleum Refineries in the United States and Puerto Rico, table titled, "Number and Capacity of Petroleum Refineries," column heading, "Crude Capacity, Barrels per Calendar Day, Operating."

1970-1977: Bureau of Mines, U.S. Department of the Interior, Mineral Industry Surveys, *Petroleum Refineries in the United States and Puerto Rico*, table titled, "Number and Capacity of Petroleum Refineries," column heading, "Crude Capacity, Barrels per Calendar Day, Operating."

Fuel Consumed at Refineries. 1981 forward: Energy Information Administration, *Petroleum Supply Annual Volume 1*, table titled, "Fuels Consumed at Refineries by PAD District." Data for 1991 are from a separately published ERRATA dated November 10, 1992, GPO Stock No. 061-003-00758-9.

1976-1980: Energy Information Administration, Energy Data Reports, *Crude Petroleum, Petroleum Products, and Natural Gas Liquids*, table titled, "Fuels Consumed for All Purposes at Refineries in the United States, by States."

1970-1975: Bureau of Mines, U.S. Department of the Interior, Mineral Industry Surveys, *Crude Petroleum, Petroleum Products, and Natural Gas Liquids*, tables

titled, "Fuels Consumed for All Purposes at Refineries in the United States, by States."

1970 forward: Energy Information Administration, State Energy Data System, industrial sector consumption estimates for aviation gasoline blending components, crude oil, motor gasoline blending components, natural gasoline (1970-1983), pentanes plus (1984 forward), petroleum coke, plant condensate (1970-1983), still gas (excluding still gas consumed as petrochemical feedstocks, 1970-1985), unfinished oil, and unfractionated stream (1970-1983).

Natural Gas Lease, Plant, and Pipeline Fuel Use. 1980 forward: Energy Information Administration, *Natural Gas Annual*, Table 10 (1980) and Table 13 (1981, 1982); *Natural Gas Annual Volume 1*, Table 13 (1983-1987) and Table 16 (1988); *Natural Gas Annual*, Table 16 (1989 forward).

1977-1979: Energy Information Administration, *Energy Data Reports*, "Natural Gas Production and Consumption," Table 6 (1977, 1978) and Table 5 (1979).

1970-1976: Bureau of Mines, U.S. Department of the Interior, *Mineral Industry Surveys*, "Natural Gas Production and Consumption," Table 5 (1970) and Table 6 (1971-1976).

Appendix B

Metric and Other Physical Conversion Factors

Metric and Other Physical Conversion Factors

Data presented in this *State Energy Price and Expenditure Report* and in other Energy Information Administration publications are expressed predominately in units that historically have been used in the United States, such as British thermal units, barrels, cubic feet, and short tons. However, because U.S. commerce involves other nations, most of which use metric units of measure, the U.S. Government is committed to the transition to the metric system, as stated in the Metric Conversion Act of 1975 (Public Law 94–168), amended by the Omnibus Trade and Competitiveness Act of 1988 (Public Law 100–418), and Executive Order 12770 of July 25, 1991.

The metric conversion factors presented in Table B1 can be used to calculate the metric-unit equivalents of values expressed in U.S. customary units. For example, 500 short tons are the equivalent of 453.6 metric tons (500 short tons x 0.9071847 metric tons/short ton = 453.6 metric tons).

In the metric system of weights and measures, the names of multiples and subdivisions of any unit may be derived by combining the name of the unit with prefixes, such as deka, hecto, and kilo, meaning, respectively, 10, 100, 1,000, and deci, centi, and milli, meaning, respectively, one-tenth, one-hundredth, and one-thousandth. Common metric prefixes can be found in Table B2.

The conversion factors presented in Table B3 can be used to calculate equivalents in various physical units commonly used in energy analyses. For example, 10 barrels are the equivalent of 420 U.S. gallons (10 barrels x 42 gallons/barrel = 420 gallons).

Table B1. Metric Conversion Factors

Type of Unit	U.S. Unit	*multiplied by*	Conversion Factor	*equals*	Metric Unit
Mass	short tons (2,000 lb)	x	0.907 184 7	=	metric tons (t)
	long tons	x	1.016 047	=	metric tons (t)
	pounds (lb)	x	0.453 592 37[a]	=	kilograms (kg)
	pounds uranium oxide (lb U_3O_8)	x	0.384 647[b]	=	kilograms uranium (kgU)
	ounces, avoirdupois (avdp oz)	x	28.349 52	=	grams (g)
Volume	barrels of oil (bbl)	x	0.158 987 3	=	cubic meters (m^3)
	cubic yards (yd^3)	x	0.764 555	=	cubic meters (m^3)
	cubic feet (ft^3)	x	0.028 316 85	=	cubic meters (m^3)
	U.S. gallons (gal)	x	3.785 412	=	liters (L)
	ounces, fluid (fl oz)	x	29.573 53	=	milliliters (mL)
	cubic inches (in^3)	x	16.387 06	=	milliliters (mL)
Length	miles (mi)	x	1.609 344[a]	=	kilometers (km)
	yards (yd)	x	0.914 4[a]	=	meters (m)
	feet (ft)	x	0.304 8[a]	=	meters (m)
	inches (in)	x	2.54[a]	=	centimeters (cm)
Area	acres	x	0.404 69	=	hectares (ha)
	square miles (mi^2)	x	2.589 988	=	square kilometers (km^2)
	square yards (yd^2)	x	0.836 127 4	=	square meters (m^2)
	square feet (ft^2)	x	0.092 903 04[a]	=	square meters (m^2)
	square inches (in^2)	x	6.451 6[a]	=	square centimeters (cm^2)
Temperature	degrees Fahrenheit[c] (° F)	x	5/9 (after subtracting 32)[a,c]	=	degrees Celsius (° C)
Energy	British thermal units (Btu)	x	1,055.055 852 62[a,d]	=	joules (J)
	calories (cal)	x	4.186 8[a]	=	joules (J)
	kilowatthours (kWh)	x	3.6[a]	=	megajoules (MJ)

[a]Exact conversion.
[b]Calculated by the Energy Information Administration.
[c]To convert degrees Celsius (° C) to degrees Fahrenheit (° F) exactly, multiply by 9/5, then add 32.
[d]The Btu used in this table is the International Table Btu adopted by the Fifth International Conference on the Properties of Steam, London, 1956.

Notes: • Spaces have been inserted after every third digit to the right of the decimal for ease of reading. • Most metric units shown belong to the International System of Units (SI), and the liter, hectare, and metric ton are accepted for use with the SI units. For more information about the SI units, contact Dr. Barry Taylor at Building 221, Room B160, National Institute of Standards and Technology, Gaithersburg, MD 20899, or on telephone number 301–975–4220.

Sources: • General Services Administration, Federal Standard 376B, *Preferred Metric Units for General Use by the Federal Government* (Washington, DC, January 27, 1993), pp. 9–11, 13, and 16. • National Institute of Standards and Technology, Special Publications 330, 811, and 814. • American National Standards Institute/Institute of Electrical and Electronic Engineers, ANSI/IEEE Std. 268–1992, pp. 28 and 29.

Table B2. Metric Prefixes

Unit Multiple	Prefix	Symbol	Unit Subdivision	Prefix	Symbol
10^{1}	deka	da	10^{-1}	deci	d
10^{2}	hecto	h	10^{-2}	centi	c
10^{3}	kilo	k	10^{-3}	milli	m
10^{6}	mega	M	10^{-6}	micro	μ
10^{9}	giga	G	10^{-9}	nano	n
10^{12}	tera	T	10^{-12}	pico	p
10^{15}	peta	P	10^{-15}	femto	f
10^{18}	exa	E	10-18	atto	a
10^{21}	zetta	Z	10^{-21}	zepto	z
10^{24}	yotta	Y	10^{-24}	yocto	y

Source: U.S. Department of Commerce, National Institute of Standards and Technology, *The International System of Units (SI)*, NIST Special Publication 330, 1991 Edition (Washington, DC, August 1991), p. 10.

Table B3. Other Physical Conversion Factors

Energy Source	Original Unit		Conversion Factor		Final Unit
Petroleum	barrels (bbl)	x	42[a]	=	U.S. gallons (gal)
Coal	short tons	x	2,000[a]	=	pounds (lb)
	long tons	x	2,240[a]	=	pounds (lb)
	metric tons (t)	x	1,000[a]	=	kilograms (kg)
Wood	cords (cd)	x	1.25[b]	=	short tons
	cords (cd)	x	128[a]	=	cubic feet (ft^3)

[a]Exact conversion.
[b]Calculated by the Energy Information Administration.
Source: U.S. Department of Commerce, National Institute of Standards and Technology, *Specifications, Tolerance and Other Technical Requirements for Weighing and Measuring Devices*, NIST Handbook 44, 1994 Edition (Washington, DC, October 1993), pp. B–10, C–17, and C–21.

Appendix C

Summary of Changes

Summary of Changes Since the *State Energy Price and Expenditure Report 1991*

In this appendix, revisions in the State Energy Price and Expenditure Data System (SEPEDS) that appear in the tables of this *State Energy Price and Expenditure Report (SEPER)* are summarized by energy source. Revisions to prices and expenditures are noted, as well as revisions to consumption data that are used in the calculation of weighted-average prices. This appendix covers data revisions in all years contained in SEPEDS, 1970 through 1992, although only selected years are published in *SEPER*. Users of the SEPEDS personal computer (PC) diskettes, which contain data for all 23 years, may notice data changes that do not appear in the report due to the level of rounding in the published tables.

Price and expenditure revisions occur for several reasons: data sources for prices change; price estimation methodologies are revised or price assignment and estimation procedures are updated; data entries are corrected; or consumption estimates are revised. The first three kinds of changes affect State-level and U.S. prices directly. The fourth, a revised consumption value, affects only State prices that are estimated by consumption-weighted averaging of adjacent States and, similarly, affects U.S. average prices. Consumption estimates used in *SEPER* are taken from the State Energy Data System (SEDS), published as the *State Energy Data Report 1992, Consumption Estimates (SEDR)*, which contains full documentation of the consumption estimation procedures. Consumption revisions are described in *SEDR*, Appendix F, "Summary of Changes." Since energy expenditure estimates depend on both the price and consumption estimates (including the consumption adjustments for process fuel and intermediate products), revision of either or both may cause revisions to the expenditures series.

Natural Gas

Residential, Commercial, and Industrial Sectors, 1991. Several natural gas prices and numerous expenditures for 1991 were revised due to small consumption and conversion factor revisions in SEDS, as documented in *SEDR*, Appendix F. Most of these price and expenditure revisions are not visible in the published tables due to the level of rounding but may be noticed in the data on the SEPEDS PC diskettes. In the published *SEPER*, only the residential sector price in Florida and the commercial sector price in Rhode Island have noticeable revisions of $0.01 per million Btu.

Electric Utilities, 1989. The average price of natural gas paid by electric utilities in Vermont in 1989 increased from $2.38 per million Btu to $2.64 per million Btu as revised in the source publication.

The revisions to prices and expenditures within the sectors are reflected in the natural gas average total prices and expenditures for the sectors and the States. These revisions are also too small to be noticed in the published tables but can be seen in the data on the SEPEDS PC diskettes.

Petroleum

Aviation Gasoline

Transportation Sector Expenditures, 1991. Revisions to 1991 consumption estimates for military use of aviation gasoline, as documented in *SEDR* Appendix F, caused small revisions to SEPEDS aviation gasoline expenditures (by $0.1 million or less) for all States and U.S. transportation sectors and their average totals.

Distillate Fuel

Electric Utilities, 1987 Through 1991. Prices paid for distillate fuel by electric utilities in Alaska in 1987 through 1991 were revised by using an estimation methodology consistent with that of other years. Alaska prices and expenditures for distillate fuel at electric utilities changed by 2 percent or less in each of the 5 years. The U.S. average prices and expenditures for distillate fuel at electric utilities reflected the

revisions but by amounts too small to be seen the *SEPER* published tables.

Transportation Sector, 1991. The price of distillate fuel used by the transportation sector in the District of Columbia in 1991 was revised from $10.66 per million Btu to $8.05 per million Btu as a result of correcting an adjacent State price assignment. This revision caused a 24-percent decrease in expenditures for DC's transportation distillate fuel in 1991. This revision also caused a decrease in the U.S. average transportation sector distillate fuel price by an amount that is too small to be seen in the SEPER published tables and a decrease of $12 million in the associated U.S. expenditures.

Jet Fuel

Transportation Sector Expenditures, 1991. Revisions to 1991 consumption estimates for military use of jet fuel, as documented in *SEDR* Appendix F, resulted in small revisions to SEPEDS jet fuel expenditures (by $0.1 million or less) for all States and U.S. transportation sectors and total averages.

Kerosene

Commercial and Industrial Sectors, 1991. Industrial sector kerosene prices for 1991 were recalculated by using revised data in the estimation procedures. Since industrial prices are assigned to the commercial sector, commercial prices also reflect the revisions. All of these revisions are too small to the seen at the level of rounding published in *SEPER* tables and are barely noticeable in the data on the SEPEDS PC diskettes. These small revisions are also reflected in the State-level expenditures and the U.S. average prices and expenditures for industrial and commercial kerosene in 1991.

Liquefied Petroleum Gases

All Sectors Expenditures, 1989 Through 1991. Revisions to the estimated consumption of liquefied petroleum gases (LPG) in all consuming sectors for 1989 through 1991, as described in *SEDR* Appendix F, caused proportional revisions to State and U.S. expenditures and small revisions to the U.S. consumption-weighted average prices for all sectors. The revisions also caused State and U.S. total averages for LPG prices and expenditures for 1989 through 1991 to be revised. Most of the State and U.S. revisions are large enough to be visible in the SEPER tables and, therefore, are marked with "R" next to the values.

Motor Gasoline

Commercial, Industrial, and Transportation Sector Expenditures, 1991. As explained in the *SEDR* Appendix F, commercial use of motor gasoline in Alaska in 1991 was revised from 755 billion Btu to 460 billion Btu. This revision resulted in Alaska's 1991 commercial sector expenditures for motor gasoline to decrease from $6.8 million to $4.1 million and the U.S. average commercial motor gasoline expenditures to drop from $767 billion to $764 billion. Because of the methodology for estimating the consumption of motor gasoline, the Alaska revision also led to a 0.002 percent increase in motor gasoline expenditures in the transportation, commercial, and industrial sectors for all States. These revisions cannot be seen in the *SEPER* published tables but are visible in the data on the SEPEDS PC diskettes.

Electricity

Electricity Consumed by End-Use Sectors

Transportation and Commerical Sectors, 1991. Electricity prices for the transportation and commercial sectors in 1991 were revised due to the routine replacement of preliminary consumption values used in the price estimations for the District of Columbia and the 17 States with transportation electricity use as documented in *SEDR*, Appendix F. Electricity expenditures also revised in 1991 in proportion to the consumption changes. Most of the price and expenditure revisions are not visible in the published tables due to the level of rounding but may be noticed in the data on the SEPEDS PC diskettes. In the published *SEPER*, only two price changes can be seen—the New York commercial sector price decreased by $0.01 per million Btu and, since the transportation consumption in Michigan was revised from zero to 13 billion Btu, the price changed from zero to $26.87 per million Btu.

Consumption Adjustments for Process Fuel and Intermediate Products

Changes in consumption estimates of process fuel and intermediate products are caused by revisions to industrial and transportation sector consumption estimates in SEDS. In this edition of *SEPER* revisions were caused, primarily, by industrial sector

consumption revisions that affected the State allocations of various energy sources consumed by refineries. Although the consumption adjustments for 1992 are shown in Table A49, the revisions mentioned in this section are noticeable only in the data included on the SEPEDS PC diskettes.

Refinery Fuel

Liquefied Petroleum Gases. Changes in industrial sector liquefied petroleum gases consumption described in *SEDR*, Appendix F, were reflected in the refinery fuel allocation for as many as 35 States with active refinery capacity in 1989, 1990, and 1991. Most revisions were between 5 percent and 20 percent, but individual values ranged from less than 1 percent to more than 140 percent.

Natural Gas. Revisions to industrial sector natural gas consumption in 1991 as described in *SEDR*, Appendix F, caused changes in the consumption adjustments for 17 States with active refinery capacity in Petroleum Administration for Defense District (PADD) II and PADD III. All revisions were by less than 1 percent.

Natural Gas Lease and Plant Fuel

Changes in 1991 industrial sector natural gas consumption described in *SEDR*, Appendix F, include the use of natural gas as lease and plant fuel. Consumption adjustments for three States and the United States total were affected. The U.S. value decreased 2 percent while the Florida adjustment increased 159 percent, the Kansas value increased 3 percent, and the Texas adjustment decreased 7 percent.

Appendix D

Additional Measures of Energy Consumption, Expenditures, and Prices

Additional Measures of Energy Consumption, Expenditures, and Prices[1]

The major section of this *State Energy Price and Expenditure Report (SEPER)* provides detailed estimates of energy in nominal prices, with expenditures given in current dollars. Energy expenditures are derived as the product of energy prices multiplied by energy consumption with the latter adjusted to exclude energy used or lost by energy industries. The adjusted measure of energy consumption is called "net energy consumption" and represents the energy purchased by end users in the domestic economy. The energy price and net energy consumption data can also be used to derive additional energy measures: energy expenditures in constant 1987 dollars and a fixed-weight energy price index. The additional measures, presented in this appendix, complement, but are not intended to replace, the standard EIA data series.

In this appendix, the methodology used to derive the additional energy measures is described, and the measures are used to examine changes in energy consumption, expenditures, and prices throughout the period of 1970 through 1992. For purposes of analysis, information is presented for three shorter periods, as well as for the 23-year period. The first period, 1970 through 1973, was chosen to allow analysis of energy use and its relation to Gross Domestic Product (GDP) over a base period, before the sharp price increases that began in the last months of 1973. The second period, 1973 through 1981, includes the years of rapid price increases, which led to efforts to conserve energy and increase energy efficiency. The third period, 1981 through 1992, was selected to see whether the decline in real energy prices after 1981 resulted in a moderation of efforts to increase energy efficiency, relative to the earlier periods.

This appendix also provides State data on energy expenditures and energy expenditures per capita, both in constant 1987 dollars. The population data underlying the per capita expenditure estimates and State fixed-weight energy price indices are also presented.

Methodology

Net Energy Consumption

The net energy consumption data[2] used in *SEPER* differ from the total energy consumption data published in other EIA reports, such as the *State Energy Data Report 1992*. The total (gross) consumption data include all energy sources before deduction of intermediate energy used or lost by energy industries in producing, processing, converting, generating, and distributing energy to end users. The net consumption data used in *SEPER* exclude the categories of energy used by the energy industry, as outlined below. The major category of energy used or lost by energy industries is the losses incurred in the generation, transmission, and distribution of electricity by electric utilities. Additional important losses include a power plant's own use of electricity, unaccounted-for electric system energy losses, fuels and purchased electricity consumed by petroleum refineries, natural gas lease and plant fuel, natural gas used as pipeline fuel, and crude oil consumed as lease, plant, and pipeline fuel.

In addition to the exclusion of energy used or lost, two other adjustments are made to the total energy consumption data: industrial hydroelectricity (used completely as a power source by the company generating the power) is excluded, and several intermediate petroleum products, which are used in

[1] The contribution made to this appendix by Jack Alterman, retired Assistant Commissioner for Economic Trends and Labor Conditions, Bureau of Labor Statistics, U.S. Department of Labor, is greatly appreciated.

[2] The detailed estimates of net energy, classified by energy form and major end-use sector, at both State and national levels, are included in the State Energy Price and Expenditure Data System. The net energy estimates are based on adjustments to total energy consumption data in EIA's *State Energy Data Report 1992, Consumption Estimates,* DOE/EIA-0214(92) (Washington, DC, May 1994).

the production of other petroleum products or reflect petroleum supply-consumption balance entries, are also excluded. The adjusted measure thus derived is designated "net energy consumption" (Table D1). Table A50 on page 256 shows the reconciliation of total (gross) and net energy consumption data.

Constant-Dollar Energy Expenditures

The energy expenditures series presented in this appendix is the constant-dollar counterpart to the current-dollar expenditure series published in the body of this report.[3] The constant-dollar series is the product of 1987 energy prices, paid by the end users in dollars per million net Btu, multiplied by net energy consumption in Btu for each year. Since the constant-dollar series is derived by holding 1987 prices constant, in this sense, it is comparable to the constant-dollar Gross Domestic Product measures. In addition, the constant-dollar energy expenditure series has been used along with the constant-dollar GDP series to derive an energy expenditure per GDP index, which is a measure of the energy intensity of the economy (Table D2).

Current-and constant-dollar energy expenditure estimates also can be used with measures of U.S. gross domestic purchases of goods and services, published by the Bureau of Economic Analysis of the U.S. Department of Commerce, to determine how much of

Table D1. Energy Consumption, 1970-1992

Year	Total (trillion Btu)	Net (trillion Btu)	Net/Total (percent)
1970	66,334	50,138	75.6
1971	67,789	50,968	75.2
1972	71,275	53,273	74.7
1973	74,351	55,344	74.4
1974	72,528	53,409	73.6
1975	70,569	51,553	73.1
1976	74,392	54,276	73.0
1977	76,317	55,287	72.4
1978	78,158	56,419	72.2
1979	78,920	56,935	72.1
1980	75,985	54,140	71.3
1981	74,022	52,703	71.2
1982	70,806	49,827	70.4
1983	70,486	49,093	69.6
1984	74,085	51,847	70.0
1985	74,054	51,694	69.8
1986	74,290	51,820	69.8
1987	76,840	53,361	69.4
1988	80,269	55,802	69.5
1989	81,317	56,506	69.5
1990	81,143	56,084	69.1
1991	81,099	56,101	69.2
1992	82,128	57,195	69.6

Note: Calculations are based on unrounded data.
Sources: **Total Consumption**—Table A50, "Energy Consumption Adjustments, 1970-1992", column titled "Total (Gross)."
Net Consumption—Table A50,"Energy Consumption Adjustments, 1970-1992", column titled "Net."
Net/Total Consumption—Net Btu divided by Total Btu.

Table D2. Energy Expenditures and Expenditures/GDP Index, 1970-1992 (1987=100)

Year	Constant-Dollar Expenditures (million 1987 dollars)	Constant-Dollar Expenditures/GDP Index (1987=100)
1970	307,518	123.4
1971	318,458	124.3
1972	337,686	125.4
1973	353,506	124.8
1974	344,036	122.2
1975	341,306	122.2
1976	360,377	123.0
1977	370,267	120.9
1978	380,539	118.5
1979	382,919	116.3
1980	369,392	112.8
1981	365,418	109.7
1982	354,387	108.7
1983	356,218	105.2
1984	373,085	103.8
1985	376,089	101.4
1986	381,249	99.9
1987	393,525	100.0
1988	410,592	100.4
1989	416,624	99.3
1990	415,791	97.9
1991	418,456	99.2
1992	423,934	98.2

Note: Calculations are based on unrounded data.
Sources: **Expenditures**—Energy Information Administration, State Energy Price and Expenditure Data System 1992.
Expenditures/GDP Index—Expenditures/GDP, converted to index, 1987 = 100.0. (GDP data appear in Table D8, column titled "GDP (Billion 1987 Dollars)."

[3] The national estimates of constant-dollar energy expenditures are based on detailed energy consumption and price data for energy products, classified by end-use sector, for each State. The State estimates of constant-dollar energy expenditures for the years 1970-1992, as well as related State measures of constant dollar expenditures per capita are given in the section beginning on page 278.

total domestic purchases are accounted for by energy expenditures as discussed on page 277.

Energy Price Measures

Earlier sections of this report have provided detailed data on energy expenditures and prices at both the national and State level. The annual price data at the national and State level are based on the prices of the individual energy sources, weighted by their relative importance as measured by the net Btu content of each energy source. Year-to-year changes in energy prices at the aggregate national and State level therefore reflect both changes in prices of the individual energy sources as well as changes in the composition of energy sources and their related net Btu content. In order to compare price data for any year with price data at the aggregate level for any other year it is necessary to develop fixed-weight price indices.

The methodology used to develop the fixed-weight energy price indices presented in this appendix is comparable to that used to develop the Gross Domestic Product fixed-weight price index. The nominal fixed-weight energy price index is a measure of the average price of net energy consumption for each given year relative to the average price of net energy consumption in 1987, the weight-base year. The composition of net energy consumption is held constant at 1987 weights for each year in the series. The 1987 weights consist of detailed energy source and end-use sector categories for each State and the relative distribution of net energy consumption among the various States. The real fixed-weight energy price index is obtained by dividing the nominal fixed-weight energy price index by the gross domestic purchases benchmark-years-weighted price index[4] (Table D3).

Table D3. Energy Price Indices, 1970-1992, (1987=100)

Year	Fixed-Weight Energy Price Indices	
	Nominal	Real
1970	27.8	76.7
1971	29.0	76.0
1972	29.7	74.7
1973	32.1	76.1
1974	44.4	95.7
1975	50.2	98.9
1976	53.5	99.8
1977	59.0	102.7
1978	62.4	101.9
1979	76.9	115.5
1980	100.7	136.8
1981	116.3	145.0
1982	119.8	141.3
1983	116.6	132.8
1984	116.0	127.7
1985	115.8	123.3
1986	100.1	103.6
1987	100.0	100.0
1988	99.3	95.5
1989	104.3	96.1
1990	113.4	100.0
1991	112.1	95.3
1992	111.9	92.3

Note: Calculations are based on unrounded data.
Sources: **Nominal Fixed-Weight Energy Price Index**—Based on net energy consumption (1987 fixed-quantity weights) and end-use price data from Energy Information Administration, State Energy Price and Expenditure Data System 1992.
Real Fixed-Weight Price Index—Nominal energy fixed-weight price index/Gross Domestic Purchases benchmark-years-weighted price index. (Gross Domestic Purchases price data appear in appendix Table D8.)

Energy Consumption, Expenditures, and Prices

The Decline in the Net/Total Ratio

Over time, the amount of energy used or lost by energy industries has accounted for an increasing proportion of total energy. In 1970, energy used or lost by energy industries amounted to about 24.4 percent of total energy consumed. By 1992, it had risen to 30.4 percent (Table D1). Of course, as the proportion of energy used or lost rose, the ratio of net energy consumption—energy actually delivered to end users—to total energy consumption registered a concomitant decline. The rate of decline in the ratio averaged about 0.4 percent per year from 1970 through 1992.

[4] The gross domestic purchases benchmark-years-weighted price index is used to convert the energy expenditure price index from nominal to real terms, instead of using the GDP fixed-weight price index because the latter is not available for years prior to 1982 and the scope of energy expenditures and prices is more consistent with that of gross domestic purchases, i.e., both include expenditures or purchases in the domestic economy, including imports but excluding exports.

The Shift to Higher-Priced Products

When the effect on constant-dollar energy expenditures of the decline in the proportion of energy actually delivered to end users is taken into account by basing energy expenditure and price series on net energy consumption, it becomes possible to examine changes in the product mix. The difference between the rate of increase in constant-dollar energy expenditures and that of net energy consumption is an implicit measure of the rate of change in the mix of products supplied to end users (Table D4).

When the rate of change in constant-dollar energy expenditures exceeds the rate of change in net energy consumption, the shift in product mix is towards higher-priced products. And, in fact, throughout the period of 1970 through 1992, constant-dollar energy expenditures rose more rapidly—or fell more slowly—than net energy consumption. For the period as a whole, the effect of the change in product mix averaged 0.9 percent per year. But the product-mix effect was not uniform over the period; it declined slightly from 1.5 percent per year between 1970 and 1973 to 1.0 percent yearly between 1973 and 1981 and to 0.7 percent per year between 1981 and 1992.

An examination of changes in the shares of electricity and motor gasoline over the 23-year period illustrates the effect of the change in product mix. On a dollar-per-net-Btu basis, electricity and motor gasoline are relatively higher-priced sources of energy. In 1987, the base year used in calculating constant-dollar energy expenditures, the prices per million net Btu of electricity and motor gasoline averaged $18.74 and $7.22, respectively. By comparison, the average price for all other energy sources was $4.44 per million net Btu. In 1970, electricity accounted for 9.3 percent of net energy consumption and motor gasoline accounted for 22.1 percent. By 1992, the shares of those higher-priced energy products had grown to 16.3 percent, and 24.4 percent, respectively. However, the rate of increase in the shares of both electricity and motor gasoline in total energy expenditures slowed over the period, a trend that explains the sharp drop in the product-mix effect over the 23-year period.

Table D4. Rates of Change in Energy Expenditures and Consumption, 1970-1992
(Percent)

Period	Constant-Dollar Expenditures	Net Energy Consumption	Product Mix Effect [a]
1970-73	4.8	3.3	1.5
1973-81	.4	-.6	1.0
1981-92	1.4	.7	.7
1970-92	1.5	.6	.9

[a] Constant-dollar expenditure rate minus net energy consumption rate.
Note: Rates of change are average annual rates.
Source: Based on unrounded data underlying Tables D1 and D2.

The Decline in Energy Intensity

A second analytical use of the constant-dollar energy expenditure series is an examination of changes in the energy intensity of the economy. The change in the ratio of constant-dollar energy expenditures to constant-dollar GDP is one measure of energy intensity.

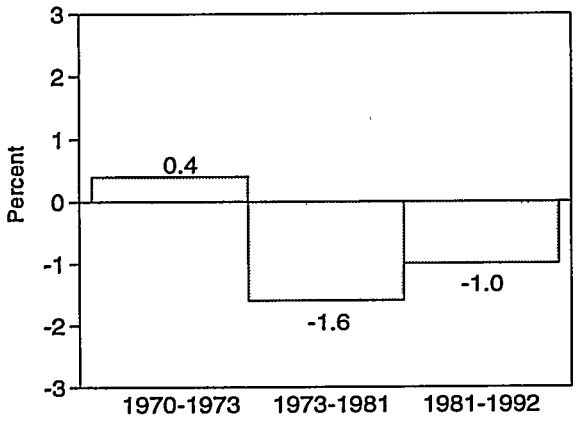
For the 1970-1992 period as a whole, the energy intensity ratio based on constant-dollar energy expenditures declined by 1.0 percent per year.[5] The decline in energy intensity was not uniform over the period. In 1970 through 1973, the energy expenditure/GDP ratio actually increased 0.4 percent per year (Figure D1).

In 1973 through 1981, the decline in energy intensity, as measured by the energy expenditure/GDP ratio, averaged 1.6 percent. The decline is largely attributable to dramatic increases in real energy prices. Such increases, by promoting energy conservation and energy efficiency, would tend to reduce energy consumption and, hence, constant-dollar expenditures, relative to growth in the economy.

In 1981 through 1992, energy intensity continued to decline, averaging 1.0 percent per year, despite a substantial decline in the real price of energy. The price decline might have been expected to lead to an increase in energy expenditures relative to the growth in the economy. This apparent anomaly—the con-

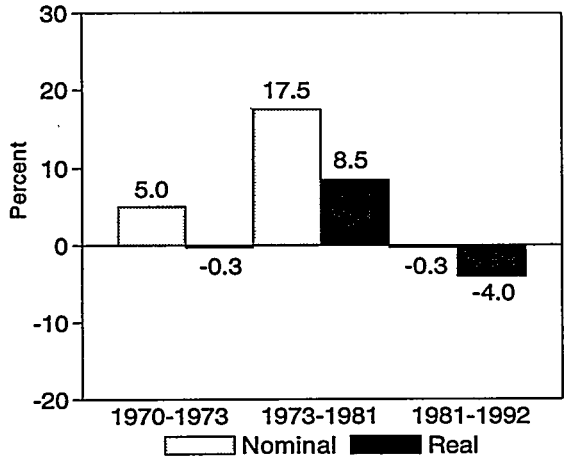
[5] It should be noted that the decline in energy intensity of 1.0 percent per year between 1970 and 1992, based on the constant dollar energy expenditure/GDP measure is one third less than the 1.5 percent rate of decline based on the Total Btu/GDP ratio. (See EIA *Annual Energy Review 1993*, Table 1.7, p. 17.) The difference is due to the greater increase in constant dollar energy expenditures relative to both net Btu (discussed above) and to gross or total Btu's.

Figure D1. Rates of Change in Constant-Dollar Energy Expenditures/GDP Index, 1970-1992



Note: Rates of change are average annual rates of change.
Source: Based on data in Table D2.

Figure D2. Rates of Change In Fixed-Weight Energy Price Indices, 1970-1992



Note: Rates of change are average annual rates of change.
Source: Based on data in Table D3.

tinuation of the decline in energy intensity although at a slower rate, despite the price decline—can be explained in large part by the continuing replacement of machinery, vehicles, appliances, structures, and other energy-consuming units with more efficient units. As the proportion of more efficient units rose, average energy efficiency increased. For example, U.S. passenger car efficiency increased faster in 1981 through 1992 than in 1973 through 1981. From 1973 to 1981, the average number of miles traveled per gallon of fuel consumed rose from 13.3 to 15.9, an average annual increase of 2.3 percent. From 1981 to 1992, the number rose from 15.9 to 21.6, an average annual increase of 2.8 percent.[6]

Changes in Energy Prices

For the period of 1970 through 1992 as a whole, the fixed-weight energy price index, in nominal terms, registered a sizeable increase of 6.5 percent per year. That average, however, masked significant variations between periods. In 1970 through 1973, prices increased at the average annual rate of 5.0 percent, in nominal terms (Figure D2).

In 1973 through 1981, the rate jumped to 17.5 percent as world events—notably the Arab oil embargo of 1973 to 1974 and the Iranian crisis in 1979—boosted the price of oil. In 1981 through 1992, energy prices declined an average of 0.3 percent per year, in nominal terms.

However, removing the effects of general inflation modifies these rates of change considerably for all three subperiods. The 5.0-percent-per-year increase in nominal terms in 1970 through 1973 is an actual decline of 0.3 percent per year in real terms. The increase in 1973 through 1981 is reduced from 17.5 percent per year, in nominal terms, to less than half that rate, 8.4 percent, in real terms.

In the period after 1981, the rate of decline in real terms is much larger than the nominal rate of decline, due to continued increases in the gross domestic purchase benchmark-weighted price index. The decline in nominal energy prices of 0.3 percent per year in 1981 through 1992 is a 4.0-percent-per-year reduction in real terms. Considering only the nominal rates of change in energy prices conceals the magnitude of the post-1981 decline. By 1992, the average price of energy, in real terms, was about 21 percent above the level of real energy prices in 1973, prior to the period of dramatic increase in energy prices. This represents a sharp reduction from the level reached in 1981, when real energy prices were 91 percent above the 1973 level.

Energy Expenditures Percentage of Gross Domestic Purchases

The development of energy expenditure data in both current and constant 1987 dollars makes it possible to determine how much of U.S. gross domestic

[6] Miles per gallon data are from EIA, *Monthly Energy Review*, May 1994, DOE/EIA-0035(94/05) (Washington, DC), Table 1.10.

purchases of goods and services is accounted for by energy expenditures.

Measures of energy expenditures and gross domestic purchases are comparable in that both include products purchased in the domestic economy, including imports and excluding exports. The percentages of energy purchases in gross domestic purchases, based on current and constant 1987 dollars, are given in Table D5. The percentages based on current-dollar measures show an almost continuous increase from 8.2 percent in 1970 to a peak of 14.0 percent in 1981, followed by an equally rapid decline to 7.8 percent in 1992.

Table D5. Energy Expenditures as a Share of Gross Domestic Purchases, Current and Constant 1987 Dollars, 1970-1992

Year	Energy Expenditures as a Share of Gross Domestic Purchases (Percent)	
	Based on Current Dollars	Based on Constant Dollars
1970	8.2	10.6
1971	8.2	10.6
1972	8.0	10.7
1973	8.3	10.7
1974	10.5	10.6
1975	10.9	10.7
1976	10.9	10.6
1977	11.1	10.4
1978	10.6	10.2
1979	11.8	10.1
1980	13.7	9.9
1981	14.0	9.6
1982	13.4	9.4
1983	12.0	9.0
1984	11.2	8.7
1985	10.5	8.5
1986	8.7	8.4
1987	8.4	8.4
1988	8.1	8.5
1989	8.1	8.5
1990	8.4	8.4
1991	8.1	8.6
1992	7.8	8.5

Sources: **Energy Expenditures—Current Dollars,** Table D8, **Constant Dollars,** Table D2.
Gross Domestic Purchases—Current and Constant Dollars, Table D8.

The energy expenditure-gross domestic purchases percentage based on constant 1987 dollars shows an entirely different pattern, remaining in the range 10.6 percent to 10.7 percent for the years 1970 through 1976 and then declining rapidly to a range of 8.4 percent to 8.6 percent for the years 1985 through 1992.

Both the current- and constant-dollar percentages show that energy expenditures represent a significant proportion of total domestic purchases, although the percentages for the most recent years indicate a substantial reduction from their peaks in earlier years. In order to provide some perspective on energy expenditure's share of gross domestic purchases (i.e., how does energy's share compare with that of another major sector in the Nation's economy?), data in the national income and product accounts on expenditures in 1992 for new automobiles and trucks have been used to derive percentages of gross domestic purchases comparable to those for energy expenditures.

The expenditures for new automobiles and trucks, in current dollars, amounted to $238.8 billion, or 3.9 percent of gross domestic purchases, as compared to $472.8 billion, or 7.8 percent, for energy purchases. In constant dollars, expenditures for new automobiles and trucks accounted for 4.2 percent of gross domestic purchases as compared to 8.5 percent for energy expenditures. In both comparisons, the percentage for energy expenditures were double that for new automobiles and trucks.[7]

State Constant Dollar Expenditures, Expenditures per Capita, Population, and Fixed-Weight Energy Price Indices.

As noted earlier the constant dollar energy expenditure estimates and fixed-weight price indices at the national level are based on estimates for both series at the State level. The State data for the years 1970 to 1992 on constant dollar energy expenditures are provided in Table D9, and for the fixed-weight energy price indices in Table D11. In addition, State estimates for constant dollar energy expenditures per capita are given in Table D10. The State population data underlying the per capita constant dollar energy expenditure series are given in Table D12.

[7] The basic data on 1992 expenditures for new automobiles and trucks are included in the April 1994 issue of the U.S. Bureau of Economic Analysis, *Survey of Current Business*, Tables 8.3, 8.4, 8.5, and 8.6, page 28.

The analysis which follows will focus on two aspects of the new State series. The first will analyze the State data to determine how much of the annual rate of change in constant dollar energy expenditures between 1970 and 1992 is attributable to the increase in population and how much to the increase in State energy expenditures per person. The results are given in Table D6.

The objective of the second analysis is to determine how much of the rate of increase in State total energy price is attributable to the change in energy product mix towards higher or lower priced sources of energy as distinguished from the change in price of energy with product mix help constant. The findings are given in Table D7.

Table D6 provides national and State data on annual rates of change between 1970 and 1992 of constant dollar energy expenditures, and the two variables underlying the movement in energy expenditures, namely changes in expenditures per capita and growth in population. The listing for all three variables is based on the ranking from high to low of rates of change in energy expenditures, with the actual rank for population and expenditures per capita shown, along with their rates of change. At the national level, the data show that the rate of increase in constant dollar expenditures of 1.5 percent per year over the 23 year period was largely attributable to growth in population of 1.0 percent per year, or about 70 percent of the increase in energy expenditures, with increases in expenditure per capita, at 0.4 percent per year, accounting for only 30 percent of the total change.[8]

The estimate of how much of the change in energy expenditures over the 1970-1992 period is attributable to each of the two underlying factors varies from State to State. Of the 51 States (counting the District of Columbia as a "State"), there are 30 States in which growth in population accounted for most of the increase in energy expenditures. These States range from Alaska, where the rate of increase in energy expenditures was 4.0 percent, population increased at a rate of 3.1 percent, and expenditures per capita increased at a rate of 0.9 percent per year, to Illinois, where the increase in energy expenditures of 0.3 percent per year was due to annual increases of 0.2 percent in population and 0.1 percent in expenditures per capita.

The 18 States in which increases in energy expenditures per capita accounted for most of the growth in energy expenditures ranged from North Dakota, where the yearly increase in expenditures of 2.1 percent was attributable almost entirely to an increase of 2.0 percent per year in expenditures per capita, to New York, where the increase of energy expenditures was slight, 0.1 percent per year, with a gain in expenditures per capita of 0.1 percent and no increase in population. In general, the States where increases in population accounted for most of the growth in energy expenditures are also the States with relatively higher than average increases in expenditures. More specifically, excluding North Dakota, the 14 States with the highest increases in energy expenditures, that is, Alaska with the highest increase and Hawaii the 14th highest, are all States in which gains in population are the major factor underlying the increases in energy expenditures.[9]

Conversely, the 12 States with smallest increase in energy expenditures, ranging from Rhode Island, which ranked 36, to Nebraska which ranked 51, but excluding 5 States (Wisconsin, Montana, Nebraska, Michigan and Illinois), are all States in which an increase in energy expenditures per capita was the major factor underlying the increase in energy expenditures.

The analysis of the relative importance of the energy product mix on rates of change in energy price is based on Table D7. Table D7 provides State data on rates of change between 1970 and 1992 of: a) total energy prices, which reflect both changes in prices of the various energy products as well as changes in the relative importance or "mix" of energy products, and b) estimates of the change in total energy prices with the 1987 product mix held constant. The difference between the two rates of change is a measure of the "mix" effect on energy prices. The last column shows the percent of the total price rate of change for each State and for the Nation as a whole attributable to the "mix" effect. The estimates of the "mix" effect on rates of change in total energy prices range from a high of 32.2 percent for the District of Columbia to a low of minus 9.4 percent in North Dakota, with an average of 14.5 percent for the United States as a whole.

In 12 States, including the District of Columbia, the mix effect accounted for 32.2 to 20.1 percent of the rate of increase in energy prices. In the middle range

[8] The unrounded rates of change are 1.47 for energy expenditures, 0.43 for expenditures per capita and 1.04 for population.

[9] In three States, Oklahoma, Nebraska, and Michigan, the increase in energy expenditures was accounted for by equal increases in both energy expenditures per capita and population.

Table D6. Annual Rate of Change between 1970 and 1992 of Constant Dollar Energy Expenditures, Energy Expenditures per Capita, and Population

State Ranked by Expenditures	Annual Rate of Change (Percent) 1970-1992					
	Rank	Expenditures	Rank	Expenditures per Capita	Rank	Population
Alaska	1	4.0	10	0.9	4	3.1
Nevada	2	3.7	51	-1.0	1	4.7
Florida	3	3.5	31	0.3	3	3.2
Arizona	4	3.4	47	-0.1	2	3.6
Texas	5	2.9	15	0.7	6	2.1
South Carolina	6	2.8	4	1.3	17	1.5
Georgia	7	2.7	11	0.9	14	1.8
Utah	8	2.5	43	0.0	5	2.5
North Carolina	9	2.4	6	1.1	19	1.3
Washington	10	2.3	27	0.4	11	1.9
Wyoming	11	2.3	16	0.7	16	1.5
Virginia	12	2.3	12	0.8	18	1.5
North Dakota	13	2.1	1	2.0	47	0.1
New Hampshire	14	2.1	39	0.2	10	1.9
Hawaii	15	2.1	38	0.2	12	1.9
Oklahoma	16	2.1	9	1.0	24	1.0
Colorado	17	2.1	45	0.0	7	2.1
Louisiana	18	2.0	3	1.3	30	0.7
Kentucky	19	1.9	5	1.2	32	0.7
New Mexico	20	1.8	48	-0.2	8	2.0
Mississippi	21	1.8	8	1.0	29	0.8
California	22	1.7	49	-0.3	9	2.0
Oregon	23	1.7	42	0.0	15	1.6
Vermont	24	1.6	24	0.5	20	1.1
Tennessee	25	1.6	25	0.5	21	1.1
Kansas	26	1.6	7	1.1	34	0.5
Maine	27	1.5	22	0.5	26	1.0
Alabama	28	1.5	19	0.7	27	0.8
Idaho	29	1.5	50	-0.4	13	1.8
Maryland	30	1.4	28	0.4	23	1.0
Arkansas	31	1.3	37	0.3	25	1.0
Minnesota	32	1.2	26	0.5	31	0.7
Missouri	33	1.2	17	0.7	35	0.5
New Jersey	34	1.2	14	0.8	36	0.4
Delaware	35	1.0	46	-0.1	22	1.1
Rhode Island	36	1.0	13	0.8	42	0.2
Indiana	37	1.0	21	0.6	37	0.4
South Dakota	38	0.9	20	0.6	40	0.3
Connecticut	39	0.9	23	0.5	38	0.4
Wisconsin	40	0.9	32	0.3	33	0.6
Montana	41	0.8	44	0.0	28	0.8
Iowa	42	0.6	18	0.7	50	0.0
Nebraska	43	0.6	36	0.3	39	0.3
Michigan	44	0.6	33	0.3	41	0.3
Massachusetts	45	0.5	34	0.3	43	0.2
Ohio	46	0.5	29	0.4	46	0.2
West Virginia	47	0.4	35	0.3	45	0.2
Pennsylvania	48	0.4	30	0.4	48	0.1
District of Columbia	49	0.4	2	1.6	51	-1.2
Illinois	50	0.3	40	0.1	44	0.2
New York	51	0.1	41	0.1	49	0.0
United States		[a] 1.5		0.4		1.0

[a] This value equals 1.47, in fuller precision.
Sources: **Constant 1987-Dollar Energy Expenditures**—Table D9.
Constant 1987-Dollar Energy Expenditures per Capita—Table D10.
Population—Table D12.

of product mix effects there were 26 States in which 20.0 to 10.0 percent of the increase in energy prices was attributable to the product mix effect. At the lower end of the range of product mix effect there were 13 States including North Dakota, in which 9.9 to -9.4 percent of the price increase was attributable to the product mix effect. These figures indicate that although the mix effect was not the major factor underlying the increase in energy prices over the 1970-1992 period, it accounted for a significant percentage of the increase.

Table D7. Percent of Energy Price Rate of Change, 1970-1992, Attributable to Energy Product Mix

State	Rates of Change				Mix Effect			
	Rank	Energy Prices	Rank	Fixed-Weight Energy Prices	Rank	Rates of Change of Energy Prices minus Rates of Change of Fixed-Weight Energy Prices	Rank	Percent of Energy Price Change
District of Columbia	1	9.0	41	6.1	1	2.9	1	32.2
West Virginia	2	8.6	29	6.4	2	2.2	2	25.6
New York	3	8.4	13	6.7	7	1.7	10	20.2
Pennsylvania	4	8.4	11	6.7	6	1.7	9	20.2
New Mexico	5	8.4	24	6.4	3	2.0	3	23.8
Arizona	6	8.4	14	6.7	8	1.7	11	20.2
Arkansas	7	8.2	19	6.6	10	1.6	13	19.5
Louisiana	8	8.2	2	7.1	24	1.1	27	13.4
Hawaii	9	8.2	6	6.9	15	1.3	22	15.9
California	10	8.1	1	7.3	31	0.8	38	9.9
Maryland	11	8.1	38	6.2	4	1.9	4	23.5
Connecticut	12	8.1	9	6.8	16	1.3	20	16.0
Massachusetts	13	8.1	26	6.4	9	1.7	6	21.0
Ohio	14	8.0	30	6.4	11	1.6	12	20.0
Utah	15	8.0	34	6.3	5	1.7	5	21.3
Alabama	16	8.0	12	6.7	17	1.3	18	16.3
Colorado	17	7.8	39	6.2	12	1.6	8	20.5
Delaware	18	7.8	32	6.4	14	1.4	15	17.9
New Hampshire	19	7.7	20	6.5	20	1.2	24	15.6
Montana	20	7.6	28	6.4	21	1.2	23	15.8
Illinois	21	7.6	23	6.5	25	1.1	25	14.5
Virginia	22	7.5	36	6.3	19	1.2	21	16.0
Texas	23	7.5	7	6.8	37	0.7	42	9.3
Rhode Island	24	7.5	15	6.7	32	0.8	36	10.7
Kansas	25	7.5	5	6.9	43	0.6	45	8.0
North Carolina	26	7.4	16	6.7	39	0.7	41	9.5
Tennessee	27	7.3	4	6.9	47	0.4	48	5.5
Maine	28	7.3	18	6.6	40	0.7	40	9.6
Nebraska	29	7.3	27	6.4	29	0.9	30	12.3
Michigan	30	7.3	35	6.3	27	1.0	26	13.7
South Carolina	31	7.2	31	6.4	34	0.8	33	11.1
Georgia	32	7.2	22	6.5	41	0.7	39	9.7
Nevada	33	7.2	17	6.6	44	0.6	44	8.3
Vermont	34	7.2	25	6.4	33	0.8	32	11.1
Indiana	35	7.2	43	6.0	22	1.2	17	16.7
Missouri	36	7.2	50	5.7	13	1.5	7	20.8
Washington	37	7.2	8	6.8	46	0.4	47	5.6
Wisconsin	38	7.2	47	5.9	18	1.3	14	18.1
Mississippi	39	7.2	33	6.4	35	0.8	34	11.1
Alaska	40	7.1	3	7.1	50	0.0	50	0.0
New Jersey	41	7.1	21	6.5	45	0.6	43	8.5
Kentucky	42	7.1	46	5.9	23	1.2	16	16.9
Idaho	43	7.0	37	6.3	38	0.7	37	10.0
Wyoming	44	7.0	40	6.1	28	0.9	29	12.9
Oregon	45	7.0	10	6.8	49	0.2	49	2.9
Florida	46	6.9	45	6.0	30	0.9	28	13.0
Minnesota	47	6.8	49	5.7	26	1.1	19	16.2
Iowa	48	6.8	44	6.0	36	0.8	31	11.8
South Dakota	49	6.4	51	5.7	42	0.7	35	10.9
Oklahoma	50	6.4	42	6.0	48	0.4	46	6.2
North Dakota	51	5.3	48	5.8	51	-0.5	51	-9.4
United States		7.6		6.5		1.1		14.5

Sources: **Energy Prices**—State Energy Price and Expenditure Data System 1992.
Fixed-Weight Price Indices—Table D11.

Table D8. Energy Expenditures, Gross Domestic Product (GDP), and Gross Domestic Purchase Measures, 1970-1992

Year	Energy Expenditures (Million Current Dollars)	GDP (Billion 1987 Dollars)	Gross Domestic Purchase Measures		
			(Billion Current Dollars)	(Billion 1987 Dollars)	(Price Index, 1987=100, Benchmark Weights)
1970	82,579	2,873.9	1,009.5	2,909.1	36.2
1971	89,781	2,955.9	1,100.2	3,001.8	38.1
1972	97,801	3,107.1	1,215.0	3,163.6	39.8
1973	111,638	3,268.6	1,349.0	3,302.7	42.2
1974	153,078	3,248.1	1,461.8	3,252.2	46.4
1975	171,782	3,221.7	1,572.3	3,198.6	50.7
1976	193,660	3,380.8	1,770.7	3,387.1	53.6
1977	220,220	3,533.3	1,977.8	3,561.1	57.4
1978	238,877	3,703.5	2,258.8	3,733.3	61.2
1979	296,993	3,796.8	2,512.5	3,807.4	66.6
1980	373,900	3,776.3	2,722.8	3,745.7	73.6
1981	426,446	3,843.1	3,045.3	3,821.2	80.2
1982	424,809	3,760.3	3,170.2	3,767.7	84.8
1983	415,750	3,906.6	3,456.5	3,962.8	87.8
1984	433,462	4,148.5	3,879.9	4,270.5	90.8
1985	435,444	4,279.8	4,154.3	4,425.1	93.9
1986	381,250	4,404.5	4,401.2	4,559.6	96.6
1987	393,525	4,539.9	4,683.0	4,683.0	100.0
1988	407,597	4,718.6	5,008.4	4,822.6	103.9
1989	434,354	4,838.0	5,330.5	4,911.7	108.5
1990	469,420	4,897.3	5,617.5	4,951.9	113.4
1991	467,029	4,867.6	5,744.7	4,887.2	117.7
1992	472,756	4,979.3	6,050.5	5,011.6	121.3

Sources: **Energy Expenditures** (Million Current Dollars)—State Energy Price and Expenditure Data System 1992.
Gross Domestic Product (Billion 1987 Dollars)—**1970-1990:** U.S. Department of Commerce, Bureau of Economic Analysis, (BEA), *Survey of Current Business, (SCB),* September 1993, Table 2, p. 50, column titled "GDP." **1991, 1992:**, BEA, *SCB,* July 1994, Table 1.2, p. 54.
Gross Domestic Purchase Measures (Billion Current Dollars)—**1970-1990:** BEA, *SCB,* September, 1993, Table 1, p. 47, column titled, "Gross Domestic Purchases." **1991, 1992:** BEA, *SCB,* July 1994, Table 1.5, p. 55.
Gross Domestic Purchase Measures (Billion 1987 Dollars)— **1970-1990:** BEA, *SCB,* September 1993, Table 2, p.50, column titled, "Gross Domestic Purchases." **1991, 1992:** July 1994, Table 1.6, p. 56.
Gross Domestic Purchase Measures (Price Index, 1987=100, Benchmark Years Weights)—**1970-1988:** BEA, *SCB,* April 1992, Table 3, p. 48, column titled, "Gross Domestic Purchases." **1989-1992:** BEA, *SCB,* August 1994, Table 7.2, p. 38.

Table D9. State Energy Expenditures, 1970-1992
(Million 1987 Dollars)

State	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Alabama	5,660	5,741	6,165	6,502	6,544	6,370	6,680	7,016	7,141	6,940	6,725
Alaska	642	735	797	760	805	901	1,030	1,120	1,176	988	965
Arizona	2,850	3,050	3,429	3,782	3,789	3,786	3,961	4,206	4,292	4,457	4,323
Arkansas	3,222	3,273	3,566	3,888	3,787	3,834	4,083	4,291	4,303	4,147	4,170
California	27,942	29,626	30,604	31,491	30,104	31,700	32,498	33,351	34,356	35,678	34,409
Colorado	3,180	3,314	3,605	3,836	3,769	3,769	3,930	4,014	4,165	4,164	4,141
Connecticut	4,445	4,335	4,583	4,737	4,587	4,471	4,760	4,811	4,893	4,902	4,642
Delaware	1,003	1,033	1,084	1,144	1,083	1,058	1,116	1,127	1,120	1,298	1,188
District of Columbia	997	987	968	1,006	926	916	937	932	926	898	876
Florida	8,954	9,533	10,332	11,507	11,144	11,240	11,845	12,702	13,315	13,581	13,952
Georgia	6,355	6,748	7,182	7,797	7,486	7,573	7,924	8,344	8,535	8,614	8,567
Hawaii	1,114	1,204	1,238	1,289	1,255	1,273	1,321	1,394	1,430	1,589	1,573
Idaho	1,293	1,353	1,466	1,503	1,528	1,611	1,589	1,620	1,658	1,703	1,547
Illinois	18,473	18,940	20,158	20,815	20,454	20,167	21,141	21,659	22,316	21,694	20,194
Indiana	8,973	9,289	10,006	10,282	10,117	10,021	10,337	10,636	10,839	10,870	10,176
Iowa	4,264	4,387	4,609	4,930	4,825	4,852	5,155	5,220	5,182	5,441	4,960
Kansas	3,494	3,622	3,815	3,897	3,868	3,818	4,058	4,136	4,354	4,683	4,394
Kentucky	4,914	5,042	5,456	5,712	5,637	5,928	6,560	6,712	6,649	6,762	6,547
Louisiana	7,523	7,919	8,696	9,428	9,599	9,054	9,543	10,574	11,141	11,978	11,317
Maine	1,485	1,668	1,788	1,790	1,705	1,636	1,865	1,937	1,881	1,757	1,607
Maryland	5,306	5,515	5,751	6,098	5,791	5,681	6,053	6,077	6,167	6,362	6,188
Massachusetts	8,090	8,360	8,767	9,028	8,536	8,373	8,821	8,795	8,732	7,945	7,689
Michigan	13,829	14,310	15,317	16,077	15,494	15,108	15,793	15,430	15,916	15,637	14,867
Minnesota	5,342	5,571	5,871	6,025	5,969	6,002	6,245	6,128	6,506	6,475	5,917
Mississippi	3,152	3,361	3,595	3,756	3,644	3,482	3,576	3,781	3,909	3,830	3,627
Missouri	6,574	6,710	7,019	7,242	7,106	7,231	7,647	7,888	8,187	8,064	7,673
Montana	1,275	1,327	1,377	1,438	1,441	1,438	1,529	1,498	1,617	1,610	1,479
Nebraska	2,363	2,422	2,518	2,559	2,538	2,576	2,730	2,750	2,783	2,702	2,503
Nevada	964	1,019	1,096	1,180	1,173	1,205	1,252	1,289	1,424	1,475	1,450
New Hampshire	1,054	1,130	1,208	1,243	1,193	1,186	1,316	1,338	1,359	1,229	1,209
New Jersey	11,354	11,515	12,219	12,579	11,935	11,520	12,351	12,075	12,251	12,116	12,242
New Mexico	1,899	1,989	2,123	2,084	2,073	2,031	2,223	2,155	2,236	2,184	2,201
New York	23,821	24,104	24,625	25,421	23,775	23,159	24,582	24,497	24,688	23,349	22,663
North Carolina	6,922	7,274	7,713	8,149	7,920	7,787	8,284	8,639	8,831	9,033	8,835
North Dakota	934	970	1,019	1,021	1,019	1,036	1,051	1,069	1,167	1,246	1,182
Ohio	17,338	17,534	18,801	19,422	19,153	18,417	19,635	19,614	20,100	20,440	19,689
Oklahoma	3,529	3,623	3,935	4,084	4,162	4,226	4,516	4,837	5,053	5,035	4,994
Oregon	3,147	3,349	3,550	3,743	3,637	3,691	3,813	3,829	4,020	4,130	3,947
Pennsylvania	17,821	18,172	19,212	19,744	18,887	18,222	19,575	19,734	19,826	20,208	19,280
Rhode Island	1,301	1,369	1,404	1,393	1,321	1,308	1,354	1,396	1,343	1,292	1,197
South Carolina	3,553	3,760	4,044	4,347	4,196	4,201	4,797	4,990	4,980	4,890	4,959
South Dakota	932	952	1,002	1,000	977	1,013	1,076	1,097	1,136	1,142	1,049
Tennessee	6,292	6,363	6,895	7,559	7,404	7,739	8,249	8,516	8,496	8,624	8,278
Texas	20,722	21,987	23,749	25,644	25,330	24,542	26,244	28,831	30,593	31,936	31,713
Utah	1,560	1,664	1,753	1,868	1,914	1,976	2,095	2,006	2,157	2,242	2,188
Vermont	706	734	792	812	757	736	831	814	840	820	773
Virginia	6,176	6,473	6,812	7,206	6,964	6,926	7,460	7,756	7,918	8,104	7,780
Washington	4,563	4,685	5,093	5,285	5,197	5,185	5,384	5,482	5,767	5,973	5,735
West Virginia	3,111	3,095	3,322	3,432	3,431	3,321	3,361	3,506	3,530	3,693	3,629
Wisconsin	6,416	6,564	6,640	7,048	6,990	7,014	7,181	7,502	7,804	7,583	7,020
Wyoming	886	872	1,012	978	993	995	1,052	1,140	1,250	1,288	1,299
United States	307,518	318,458	337,686	353,506	344,036	341,306	360,377	370,267	380,539	382,919	369,392

See footnote at end of table.

Table D9. State Energy Expenditures, 1970-1992 (Continued)
(Million 1987 Dollars)

State	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Alabama	6,672	6,273	6,156	6,530	6,421	6,599	7,006	7,219	7,528	7,563	7,654	7,848
Alaska	1,042	1,180	1,198	1,356	1,554	1,705	1,582	1,463	1,574	1,619	1,519	1,531
Arizona	4,369	4,231	4,433	4,733	4,993	5,134	5,402	5,637	5,727	5,743	5,805	5,994
Arkansas	3,883	3,775	3,807	3,947	3,842	3,765	3,775	4,066	4,183	4,164	4,188	4,250
California	34,024	33,208	32,956	35,412	36,010	35,889	37,941	39,440	40,583	41,265	40,286	40,622
Colorado	4,096	4,262	4,273	4,483	4,512	4,489	4,556	4,727	4,733	4,780	4,954	4,980
Connecticut	4,601	4,591	4,511	4,657	4,722	4,909	5,108	5,339	5,479	5,187	5,193	5,409
Delaware	990	939	995	1,099	1,099	1,120	1,177	1,215	1,248	1,230	1,265	1,261
District of Columbia	858	893	922	982	972	1,029	1,050	1,070	1,080	1,052	1,085	1,089
Florida	14,183	13,714	14,236	14,807	15,636	16,352	17,040	17,992	18,529	18,894	18,791	19,131
Georgia	8,478	8,356	8,698	9,354	9,573	9,910	10,477	10,941	11,001	11,174	11,160	11,416
Hawaii	1,490	1,388	1,373	1,396	1,517	1,485	1,487	1,687	1,749	1,794	1,791	1,749
Idaho	1,543	1,494	1,460	1,503	1,532	1,487	1,511	1,593	1,673	1,696	1,784	1,788
Illinois	19,538	18,594	19,024	19,277	18,985	19,126	19,471	20,647	19,940	20,329	20,165	19,853
Indiana	10,138	9,579	9,619	10,029	10,101	10,168	10,615	11,007	11,169	11,181	11,265	11,174
Iowa	4,815	4,859	4,776	4,616	4,585	4,570	4,530	4,818	4,773	4,734	4,913	4,882
Kansas	4,345	4,341	4,320	4,921	4,865	4,654	4,829	5,078	4,935	4,961	4,927	4,917
Kentucky	6,082	5,852	5,995	6,366	6,141	6,114	6,308	6,719	7,068	6,935	7,132	7,423
Louisiana	12,166	11,286	11,082	11,031	10,861	11,141	10,999	11,247	11,401	11,479	11,665	11,661
Maine	1,561	1,727	1,584	1,694	1,777	1,956	1,984	2,227	2,118	2,106	2,057	2,080
Maryland	6,146	5,933	6,114	6,397	6,311	6,558	6,918	7,188	7,319	6,992	7,100	7,219
Massachusetts	7,621	7,677	7,638	7,944	8,062	8,459	8,764	8,979	9,205	8,895	8,740	9,087
Michigan	13,984	13,176	13,227	13,757	14,021	14,209	14,448	15,273	15,401	15,257	15,496	15,752
Minnesota	5,738	5,850	5,849	6,108	6,114	6,101	6,160	6,631	6,678	6,644	6,944	6,969
Mississippi	3,653	3,588	3,664	3,847	3,887	3,929	4,098	4,309	4,302	4,476	4,567	4,662
Missouri	7,345	7,396	7,490	7,595	7,656	7,818	7,985	8,351	8,391	8,324	8,572	8,514
Montana	1,405	1,357	1,406	1,595	1,642	1,502	1,404	1,440	1,502	1,485	1,518	1,510
Nebraska	2,391	2,483	2,572	2,568	2,543	2,514	2,579	2,787	2,728	2,693	2,749	2,700
Nevada	1,409	1,427	1,473	1,516	1,536	1,543	1,695	1,812	1,957	2,032	2,059	2,127
New Hampshire	1,191	1,190	1,201	1,303	1,396	1,488	1,630	1,663	1,727	1,642	1,611	1,656
New Jersey	12,414	12,442	12,603	13,089	13,049	13,574	14,098	14,396	14,663	14,005	14,292	14,650
New Mexico	2,237	2,051	2,074	2,350	2,240	2,278	2,400	2,486	2,529	2,620	2,759	2,826
New York	21,961	21,323	20,731	21,041	22,005	22,611	23,296	23,962	24,093	23,917	23,872	24,227
North Carolina	8,754	8,422	8,899	9,494	9,569	10,208	10,709	11,140	11,086	11,039	11,252	11,592
North Dakota	1,184	1,212	1,165	1,301	1,414	1,424	1,402	1,429	1,454	1,406	1,455	1,478
Ohio	19,153	17,898	17,643	18,384	18,163	18,053	18,584	19,203	19,698	18,960	19,197	19,462
Oklahoma	5,325	5,519	5,598	5,559	5,547	5,204	5,214	5,383	5,398	5,661	5,497	5,528
Oregon	3,956	3,751	3,622	3,959	3,874	3,856	4,044	4,247	4,367	4,449	4,569	4,520
Pennsylvania	18,866	17,391	17,267	18,074	17,635	17,879	18,653	19,441	19,582	19,185	19,159	19,597
Rhode Island	1,150	1,146	1,178	1,240	1,286	1,334	1,409	1,444	1,421	1,366	1,462	1,628
South Carolina	4,977	4,824	4,995	5,276	5,340	5,606	5,823	5,901	6,118	6,302	6,431	6,499
South Dakota	981	1,037	1,019	1,028	1,058	1,055	1,061	1,109	1,157	1,148	1,125	1,141
Tennessee	8,040	7,643	7,857	8,246	8,087	8,195	8,458	8,557	8,797	8,799	8,764	8,989
Texas	32,431	31,595	31,875	34,332	34,711	34,500	35,102	36,804	37,449	37,647	38,133	38,509
Utah	2,153	2,178	2,223	2,304	2,327	2,313	2,354	2,491	2,481	2,524	2,688	2,687
Vermont	743	713	758	799	815	785	869	921	938	917	949	1,012
Virginia	7,686	7,541	7,871	8,183	8,448	8,967	9,522	9,926	10,003	9,856	9,898	10,112
Washington	6,096	5,924	5,791	6,154	6,214	6,392	6,569	6,910	7,192	7,340	7,427	7,506
West Virginia	3,532	3,212	3,200	3,166	3,074	3,071	3,165	3,342	3,429	3,434	3,408	3,432
Wisconsin	6,777	6,687	6,703	7,088	7,162	7,091	6,975	7,544	7,663	7,514	7,794	7,784
Wyoming	1,311	1,331	1,148	1,246	1,265	1,194	1,283	1,325	1,357	1,376	1,366	1,454
United States	365,418	354,387	356,218	373,085	376,089	381,249	393,525	410,592	416,624	415,791	418,456	423,934

Source: Energy Information Administration, State Energy Price and Expenditure Data System 1992.

Table D10. State Energy Expenditures per Capita, 1970-1992
(1987 Dollars per Capita)

State	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Alabama	1,644	1,642	1,742	1,816	1,805	1,731	1,789	1,856	1,863	1,795	1,727
Alaska	2,118	2,326	2,461	2,295	2,360	2,395	2,568	2,778	2,904	2,453	2,401
Arizona	1,606	1,609	1,708	1,781	1,704	1,657	1,688	1,734	1,707	1,691	1,590
Arkansas	1,676	1,660	1,766	1,888	1,802	1,775	1,882	1,943	1,918	1,826	1,824
California	1,399	1,456	1,487	1,509	1,422	1,472	1,481	1,492	1,504	1,534	1,454
Colorado	1,439	1,438	1,499	1,537	1,483	1,457	1,493	1,489	1,505	1,462	1,433
Connecticut	1,466	1,416	1,493	1,544	1,492	1,450	1,544	1,559	1,582	1,583	1,493
Delaware	1,830	1,828	1,892	1,979	1,864	1,803	1,891	1,904	1,882	2,181	2,001
District of Columbia	1,317	1,316	1,305	1,376	1,289	1,295	1,354	1,376	1,393	1,382	1,372
Florida	1,319	1,332	1,376	1,454	1,343	1,320	1,367	1,434	1,463	1,441	1,432
Georgia	1,385	1,432	1,493	1,588	1,497	1,496	1,544	1,598	1,612	1,595	1,568
Hawaii	1,447	1,501	1,495	1,513	1,446	1,436	1,461	1,518	1,534	1,668	1,630
Idaho	1,814	1,831	1,922	1,922	1,892	1,936	1,854	1,835	1,820	1,826	1,639
Illinois	1,663	1,691	1,792	1,850	1,816	1,786	1,864	1,902	1,955	1,903	1,767
Indiana	1,727	1,768	1,887	1,926	1,887	1,868	1,918	1,960	1,982	1,976	1,853
Iowa	1,509	1,538	1,611	1,721	1,682	1,684	1,776	1,791	1,776	1,866	1,702
Kansas	1,553	1,612	1,691	1,720	1,705	1,674	1,763	1,782	1,864	1,992	1,859
Kentucky	1,525	1,529	1,636	1,694	1,650	1,709	1,859	1,878	1,842	1,857	1,788
Louisiana	2,064	2,134	2,312	2,489	2,513	2,330	2,415	2,634	2,738	2,895	2,691
Maine	1,494	1,644	1,729	1,711	1,610	1,526	1,714	1,754	1,688	1,565	1,428
Maryland	1,352	1,373	1,412	1,488	1,406	1,373	1,458	1,457	1,474	1,518	1,467
Massachusetts	1,422	1,457	1,522	1,562	1,478	1,454	1,536	1,533	1,522	1,385	1,340
Michigan	1,557	1,595	1,696	1,771	1,699	1,657	1,730	1,682	1,727	1,688	1,605
Minnesota	1,404	1,446	1,517	1,549	1,529	1,526	1,575	1,536	1,620	1,599	1,452
Mississippi	1,422	1,484	1,558	1,598	1,533	1,451	1,471	1,538	1,571	1,528	1,439
Missouri	1,405	1,420	1,475	1,514	1,482	1,504	1,580	1,622	1,675	1,642	1,560
Montana	1,837	1,867	1,915	1,977	1,958	1,923	2,020	1,945	2,068	2,046	1,880
Nebraska	1,591	1,609	1,658	1,673	1,649	1,669	1,760	1,766	1,779	1,724	1,594
Nevada	1,970	1,960	2,004	2,074	1,964	1,944	1,936	1,901	1,981	1,928	1,812
New Hampshire	1,428	1,483	1,547	1,552	1,462	1,430	1,557	1,538	1,523	1,352	1,312
New Jersey	1,583	1,582	1,666	1,715	1,628	1,570	1,683	1,646	1,667	1,645	1,662
New Mexico	1,868	1,888	1,967	1,884	1,833	1,751	1,870	1,773	1,806	1,700	1,689
New York	1,306	1,313	1,343	1,399	1,317	1,286	1,370	1,375	1,396	1,328	1,291
North Carolina	1,362	1,398	1,455	1,512	1,448	1,404	1,477	1,519	1,533	1,551	1,502
North Dakota	1,511	1,547	1,615	1,613	1,604	1,621	1,627	1,645	1,792	1,907	1,811
Ohio	1,627	1,633	1,749	1,804	1,779	1,710	1,826	1,821	1,862	1,893	1,823
Oklahoma	1,379	1,383	1,480	1,515	1,522	1,523	1,597	1,685	1,732	1,692	1,651
Oregon	1,504	1,557	1,616	1,669	1,592	1,584	1,604	1,565	1,596	1,596	1,499
Pennsylvania	1,510	1,529	1,613	1,660	1,591	1,531	1,645	1,659	1,669	1,700	1,625
Rhode Island	1,370	1,422	1,440	1,427	1,389	1,387	1,431	1,470	1,410	1,360	1,264
South Carolina	1,371	1,412	1,487	1,565	1,475	1,448	1,629	1,668	1,636	1,582	1,589
South Dakota	1,400	1,419	1,479	1,473	1,437	1,487	1,568	1,595	1,648	1,659	1,518
Tennessee	1,603	1,585	1,684	1,823	1,757	1,810	1,898	1,925	1,894	1,891	1,803
Texas	1,850	1,910	2,020	2,133	2,065	1,953	2,034	2,185	2,266	2,300	2,229
Utah	1,473	1,512	1,544	1,597	1,595	1,599	1,643	1,520	1,577	1,579	1,497
Vermont	1,586	1,616	1,710	1,734	1,601	1,533	1,714	1,654	1,687	1,625	1,512
Virginia	1,328	1,362	1,412	1,470	1,401	1,372	1,456	1,493	1,502	1,527	1,455
Washington	1,337	1,359	1,477	1,519	1,464	1,432	1,457	1,452	1,483	1,487	1,388
West Virginia	1,784	1,748	1,848	1,900	1,890	1,803	1,788	1,837	1,836	1,902	1,861
Wisconsin	1,452	1,471	1,475	1,558	1,538	1,532	1,562	1,621	1,680	1,619	1,492
Wyoming	2,668	2,566	2,916	2,763	2,712	2,606	2,651	2,761	2,887	2,836	2,765
United States	1,513	1,540	1,614	1,673	1,613	1,584	1,656	1,685	1,713	1,705	1,631

See footnote at end of table.

Table D10. Energy Expenditures per Capita, 1970-1992 (Continued)
(1987 Dollars per Capita)

State	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Alabama	1,698	1,590	1,553	1,636	1,596	1,629	1,716	1,759	1,828	1,872	1,871	1,897
Alaska	2,504	2,647	2,486	2,685	2,977	3,211	3,013	2,786	2,987	2,944	2,669	2,603
Arizona	1,557	1,466	1,496	1,550	1,580	1,565	1,590	1,618	1,611	1,567	1,550	1,564
Arkansas	1,687	1,635	1,637	1,682	1,628	1,588	1,581	1,697	1,739	1,771	1,766	1,775
California	1,402	1,340	1,302	1,374	1,366	1,329	1,372	1,392	1,396	1,387	1,325	1,315
Colorado	1,373	1,387	1,357	1,406	1,396	1,375	1,383	1,432	1,427	1,451	1,470	1,437
Connecticut	1,473	1,468	1,434	1,474	1,487	1,537	1,590	1,652	1,692	1,578	1,578	1,650
Delaware	1,655	1,560	1,631	1,778	1,755	1,759	1,816	1,840	1,855	1,847	1,857	1,801
District of Columbia	1,356	1,424	1,475	1,574	1,558	1,646	1,688	1,745	1,789	1,734	1,827	1,861
Florida	1,391	1,309	1,323	1,340	1,375	1,399	1,417	1,458	1,462	1,460	1,416	1,419
Georgia	1,522	1,478	1,516	1,600	1,602	1,624	1,682	1,726	1,709	1,725	1,684	1,685
Hawaii	1,521	1,391	1,347	1,347	1,445	1,396	1,374	1,540	1,573	1,619	1,578	1,513
Idaho	1,599	1,527	1,478	1,503	1,525	1,483	1,511	1,588	1,650	1,685	1,718	1,678
Illinois	1,703	1,619	1,655	1,673	1,645	1,655	1,681	1,778	1,710	1,778	1,750	1,710
Indiana	1,847	1,746	1,757	1,826	1,836	1,847	1,919	1,980	1,997	2,017	2,009	1,975
Iowa	1,650	1,673	1,649	1,596	1,597	1,609	1,605	1,702	1,681	1,705	1,761	1,742
Kansas	1,818	1,801	1,779	2,016	1,987	1,893	1,951	2,034	1,964	2,002	1,978	1,955
Kentucky	1,654	1,584	1,615	1,711	1,649	1,642	1,694	1,803	1,896	1,882	1,920	1,977
Louisiana	2,829	2,574	2,495	2,472	2,422	2,477	2,473	2,552	2,602	2,720	2,748	2,725
Maine	1,378	1,519	1,383	1,464	1,527	1,669	1,673	1,846	1,733	1,715	1,664	1,683
Maryland	1,444	1,388	1,422	1,471	1,437	1,470	1,525	1,554	1,559	1,463	1,460	1,468
Massachusetts	1,324	1,336	1,325	1,371	1,384	1,450	1,497	1,524	1,557	1,479	1,458	1,516
Michigan	1,518	1,445	1,461	1,518	1,543	1,554	1,569	1,653	1,661	1,641	1,653	1,670
Minnesota	1,395	1,415	1,411	1,467	1,459	1,448	1,451	1,539	1,534	1,519	1,569	1,560
Mississippi	1,435	1,398	1,419	1,480	1,487	1,498	1,562	1,645	1,641	1,740	1,762	1,783
Missouri	1,487	1,496	1,509	1,518	1,520	1,543	1,563	1,625	1,626	1,627	1,663	1,640
Montana	1,765	1,686	1,723	1,938	1,990	1,838	1,736	1,789	1,864	1,859	1,881	1,837
Nebraska	1,510	1,562	1,611	1,600	1,585	1,573	1,618	1,739	1,693	1,706	1,729	1,686
Nevada	1,668	1,627	1,646	1,655	1,636	1,597	1,685	1,719	1,761	1,690	1,599	1,592
New Hampshire	1,271	1,255	1,252	1,332	1,399	1,449	1,542	1,532	1,560	1,480	1,454	1,485
New Jersey	1,676	1,674	1,687	1,741	1,724	1,780	1,837	1,865	1,895	1,812	1,839	1,873
New Mexico	1,676	1,498	1,479	1,648	1,545	1,542	1,604	1,647	1,655	1,730	1,744	1,786
New York	1,251	1,213	1,173	1,187	1,238	1,270	1,306	1,338	1,342	1,329	1,323	1,338
North Carolina	1,470	1,399	1,464	1,539	1,529	1,613	1,671	1,717	1,687	1,665	1,667	1,721
North Dakota	1,791	1,804	1,711	1,894	2,064	2,098	2,087	2,143	2,203	2,201	2,298	2,331
Ohio	1,774	1,661	1,640	1,707	1,686	1,675	1,718	1,767	1,806	1,748	1,755	1,766
Oklahoma	1,714	1,712	1,688	1,674	1,673	1,575	1,595	1,665	1,674	1,800	1,735	1,725
Oregon	1,480	1,404	1,360	1,478	1,441	1,427	1,485	1,534	1,549	1,566	1,565	1,521
Pennsylvania	1,588	1,463	1,451	1,520	1,486	1,503	1,562	1,620	1,626	1,615	1,603	1,634
Rhode Island	1,208	1,203	1,234	1,292	1,330	1,368	1,429	1,454	1,424	1,362	1,456	1,626
South Carolina	1,562	1,498	1,535	1,600	1,601	1,658	1,700	1,703	1,742	1,807	1,806	1,804
South Dakota	1,418	1,493	1,458	1,457	1,494	1,490	1,494	1,553	1,618	1,650	1,603	1,612
Tennessee	1,733	1,638	1,675	1,744	1,696	1,707	1,742	1,747	1,781	1,804	1,770	1,789
Texas	2,196	2,055	2,015	2,135	2,119	2,068	2,092	2,186	2,204	2,216	2,198	2,178
Utah	1,420	1,397	1,393	1,420	1,416	1,390	1,401	1,473	1,454	1,465	1,521	1,484
Vermont	1,437	1,368	1,441	1,506	1,524	1,454	1,589	1,651	1,655	1,629	1,671	1,772
Virginia	1,412	1,374	1,416	1,452	1,481	1,547	1,609	1,651	1,640	1,593	1,574	1,581
Washington	1,439	1,385	1,345	1,415	1,410	1,433	1,446	1,485	1,511	1,508	1,481	1,460
West Virginia	1,801	1,637	1,630	1,622	1,588	1,602	1,667	1,781	1,846	1,915	1,894	1,897
Wisconsin	1,434	1,413	1,419	1,495	1,507	1,489	1,458	1,561	1,574	1,536	1,575	1,559
Wyoming	2,654	2,605	2,224	2,429	2,486	2,356	2,617	2,760	2,857	3,031	2,982	3,126
United States	1,591	1,528	1,520	1,578	1,575	1,581	1,617	1,671	1,678	1,672	1,660	1,662

Source: Energy Information Administration, State Energy Price and Expenditure Data System 1992.

Table D11. State Fixed Weight Energy Price Indices, 1970-1992
(1987=100.0)

State	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Alabama	25.59	26.88	28.06	30.94	41.42	47.27	51.55	59.45	62.28	78.18	99.94
Alaska	25.74	27.06	27.83	29.30	40.12	45.01	48.59	53.73	56.99	69.01	94.60
Arizona	27.69	28.22	29.09	31.53	40.99	49.01	52.28	58.20	62.40	75.39	95.50
Arkansas	27.29	28.46	28.75	30.78	41.33	45.95	50.75	56.96	58.37	70.94	95.55
California	25.54	26.66	27.25	30.16	43.32	48.40	51.82	57.83	61.12	74.98	105.06
Colorado	29.61	30.98	30.99	33.36	42.43	48.44	51.53	55.91	59.28	75.07	99.03
Connecticut	28.06	29.60	31.00	33.98	48.23	52.68	54.00	57.88	59.85	75.39	99.01
Delaware	28.24	30.58	33.22	35.99	51.18	56.80	57.88	66.43	69.75	83.53	110.57
District of Columbia	28.76	30.74	32.12	34.05	48.00	53.33	55.74	61.79	66.93	74.20	91.60
Florida	30.03	30.49	31.76	34.27	46.89	53.68	56.45	59.71	63.96	79.58	104.29
Georgia	27.86	29.55	30.57	32.97	45.07	52.59	54.76	60.36	64.89	79.05	102.67
Hawaii	26.40	27.73	27.87	30.74	40.86	50.89	53.59	58.28	63.63	76.83	109.33
Idaho	28.85	29.46	29.82	32.23	40.47	45.54	49.44	53.82	57.09	71.43	94.93
Illinois	27.23	27.97	28.84	31.14	40.43	45.41	48.97	53.61	58.30	70.85	90.11
Indiana	28.89	29.58	30.44	33.07	44.39	50.20	52.88	59.92	65.63	79.30	100.61
Iowa	30.08	31.11	32.39	34.27	43.05	49.23	53.27	59.10	63.06	77.67	98.54
Kansas	25.11	25.72	25.78	28.44	37.80	42.49	47.31	53.20	56.23	70.11	90.79
Kentucky	28.14	28.14	28.66	30.80	40.92	46.37	48.53	53.89	58.48	71.60	94.55
Louisiana	23.78	24.35	24.88	27.33	40.79	45.28	49.32	54.63	57.03	71.27	98.46
Maine	30.35	31.15	31.84	33.94	47.52	52.11	52.41	57.99	59.95	78.30	107.09
Maryland	29.88	31.75	33.10	35.28	50.82	56.61	58.25	63.57	68.37	78.73	101.77
Massachusetts	30.54	32.49	33.24	35.85	51.32	56.58	59.44	64.13	65.23	80.25	105.81
Michigan	27.68	28.60	29.20	32.33	43.79	50.04	53.79	58.86	62.21	75.63	96.85
Minnesota	32.36	33.28	34.01	35.96	46.65	51.83	55.56	61.40	63.37	77.79	100.93
Mississippi	27.74	28.93	29.88	31.37	42.83	46.54	53.10	59.65	62.69	81.32	107.17
Missouri	31.99	33.18	33.75	36.28	46.37	51.25	55.40	59.80	63.13	78.74	99.97
Montana	29.27	29.94	29.76	33.09	42.15	45.98	46.78	50.92	54.98	69.10	91.64
Nebraska	28.56	29.50	30.37	32.33	41.35	46.63	51.52	56.18	59.43	74.04	97.76
Nevada	29.12	29.42	30.61	33.19	44.69	50.91	55.57	62.49	66.50	82.90	113.69
New Hampshire	30.07	30.98	31.19	34.03	48.13	53.78	55.77	60.28	65.05	80.50	106.33
New Jersey	27.96	30.13	30.62	32.96	48.82	54.14	57.14	62.50	65.07	80.63	107.47
New Mexico	27.91	28.36	28.74	30.62	40.77	45.69	48.16	54.33	60.18	75.81	100.38
New York	28.62	30.81	32.40	35.27	50.15	55.07	57.63	62.80	64.61	79.09	100.47
North Carolina	27.02	28.62	29.64	31.83	43.85	50.12	53.88	58.30	61.34	73.70	95.36
North Dakota	31.28	31.26	31.39	33.80	44.50	50.40	55.71	60.45	60.85	75.29	100.80
Ohio	28.12	29.54	30.04	31.26	43.29	49.43	51.44	57.53	61.74	74.27	93.82
Oklahoma	30.00	30.38	30.52	32.24	41.07	46.50	52.07	59.26	63.70	78.25	99.99
Oregon	26.98	28.15	28.12	30.42	40.24	44.63	48.16	53.21	57.57	71.64	97.56
Pennsylvania	27.42	29.58	30.58	32.53	45.95	51.43	53.45	58.99	61.46	74.61	95.03
Rhode Island	28.53	29.75	31.12	33.63	48.53	52.95	54.68	60.45	61.99	76.00	101.74
South Carolina	26.78	28.51	29.66	31.75	44.27	49.81	53.04	58.08	61.04	75.19	94.54
South Dakota	33.50	33.40	32.42	36.40	47.69	51.90	55.55	59.36	63.44	81.37	106.50
Tennessee	24.58	26.34	26.55	28.51	38.50	46.36	49.56	53.61	59.53	74.45	95.20
Texas	26.43	27.32	27.66	29.70	43.90	50.57	56.30	62.51	66.46	85.46	111.34
Utah	27.28	28.20	28.80	30.58	39.06	45.39	48.59	53.01	57.81	74.64	98.12
Vermont	28.95	29.96	31.08	33.60	45.69	48.81	51.73	54.69	57.44	72.46	96.63
Virginia	28.97	29.76	30.76	33.00	47.41	55.14	57.35	64.85	67.44	82.51	108.83
Washington	27.22	27.93	27.98	30.45	39.83	46.18	48.72	53.14	55.63	70.15	96.54
West Virginia	28.30	30.35	31.73	33.32	47.24	56.44	58.93	63.74	66.53	79.92	104.06
Wisconsin	29.79	30.75	31.70	35.20	43.90	49.04	53.10	58.12	60.60	74.84	95.02
Wyoming	29.63	29.65	29.93	32.10	42.45	46.19	49.01	53.61	58.86	75.01	98.26
United States	27.77	28.97	29.72	32.10	44.39	50.16	53.51	58.95	62.38	76.94	100.65

See footnote at end of table.

Table D11. Fixed Weight Energy Price Indices, 1970-1992 (Continued)
(1987=100.0)

State	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Alabama	115.80	120.24	115.07	116.85	113.21	100.34	100.00	98.27	102.81	110.23	109.14	106.82
Alaska	108.00	124.03	121.81	118.86	116.39	100.81	100.00	97.70	107.06	124.33	117.78	115.54
Arizona	106.83	112.17	106.73	107.35	108.81	99.44	100.00	99.64	104.77	113.67	111.10	115.19
Arkansas	107.01	110.80	105.97	107.11	111.36	99.07	100.00	98.22	102.56	114.46	113.73	111.07
California	118.22	123.41	115.25	114.61	115.56	99.54	100.00	101.14	107.49	117.04	117.08	120.98
Colorado	113.30	118.80	114.14	114.04	113.91	99.36	100.00	97.50	103.02	110.13	109.40	110.49
Connecticut	118.50	119.61	117.85	117.80	117.72	101.30	100.00	103.35	109.23	118.01	119.41	119.87
Delaware	126.55	127.62	123.22	120.97	123.90	100.96	100.00	101.85	106.10	116.19	111.94	109.46
District of Columbia	104.30	110.65	116.04	114.24	116.30	105.49	100.00	98.11	99.15	103.91	103.79	105.22
Florida	123.11	120.59	114.31	116.30	117.58	99.95	100.00	99.32	102.05	111.26	108.87	107.33
Georgia	116.69	119.84	113.24	113.97	114.47	97.83	100.00	100.19	105.14	115.06	112.00	110.48
Hawaii	142.23	144.73	133.24	131.42	125.51	98.77	100.00	95.42	103.56	119.80	113.16	113.69
Idaho	107.92	111.12	108.38	110.92	110.72	95.72	100.00	98.62	101.77	108.14	108.28	110.09
Illinois	101.79	107.51	110.17	106.74	110.12	99.49	100.00	96.21	101.85	110.06	107.86	107.81
Indiana	114.38	117.83	115.25	116.16	116.45	102.49	100.00	99.35	102.63	108.92	106.55	104.47
Iowa	112.83	116.23	115.82	116.34	115.46	103.37	100.00	98.37	101.57	108.57	106.61	108.56
Kansas	105.76	109.81	111.56	112.05	107.80	101.51	100.00	96.02	102.06	106.45	103.09	108.55
Kentucky	109.82	114.03	110.03	107.98	110.09	98.30	100.00	99.16	100.62	106.21	102.22	100.05
Louisiana	118.64	126.46	120.01	123.78	119.43	96.81	100.00	100.24	104.25	118.50	114.53	107.08
Maine	124.86	121.16	117.40	117.38	119.08	99.54	100.00	101.74	109.29	121.15	124.53	124.36
Maryland	115.51	117.46	114.73	112.18	115.19	102.90	100.00	98.50	104.91	112.86	112.58	111.66
Massachusetts	125.29	121.75	120.49	120.76	117.56	99.38	100.00	99.49	107.07	118.68	121.77	119.65
Michigan	109.59	113.41	113.25	113.07	116.28	102.06	100.00	99.39	103.11	109.59	108.37	106.96
Minnesota	115.74	121.01	119.71	118.46	118.93	102.67	100.00	101.20	105.73	112.88	109.88	109.87
Mississippi	125.29	125.78	113.54	111.97	112.14	97.57	100.00	100.25	104.23	112.11	108.86	107.47
Missouri	111.62	115.98	113.42	109.86	110.74	96.49	100.00	99.62	104.27	113.05	109.97	108.48
Montana	106.97	109.28	106.19	106.45	107.28	94.60	100.00	100.79	105.39	112.85	112.41	114.17
Nebraska	113.47	112.12	114.41	113.09	114.71	99.80	100.00	97.13	106.30	115.61	112.79	111.88
Nevada	128.49	132.57	126.69	119.67	122.49	104.83	100.00	104.47	111.26	120.17	117.59	119.32
New Hampshire	127.83	122.15	118.28	116.44	114.69	97.35	100.00	101.85	108.01	120.28	117.82	120.22
New Jersey	125.13	125.85	120.70	120.14	122.26	103.68	100.00	98.52	105.31	113.83	111.68	111.09
New Mexico	117.38	119.46	111.43	113.02	114.71	99.21	100.00	98.78	104.94	112.42	110.32	110.08
New York	119.20	120.88	120.69	117.44	116.66	101.78	100.00	99.04	105.80	115.15	117.97	119.18
North Carolina	109.96	113.14	109.25	110.57	112.15	98.80	100.00	98.88	104.77	114.54	112.90	112.01
North Dakota	113.93	114.57	114.88	114.27	116.94	99.85	100.00	98.97	103.77	112.66	109.62	107.10
Ohio	107.41	114.26	115.95	112.99	113.22	100.80	100.00	99.25	103.36	110.52	110.26	109.16
Oklahoma	114.05	117.80	115.39	115.25	116.16	103.60	100.00	97.57	102.57	109.55	109.40	109.06
Oregon	111.19	115.64	112.03	114.61	117.28	98.80	100.00	100.92	106.21	112.87	110.69	114.39
Pennsylvania	109.26	114.31	112.83	113.32	115.11	101.41	100.00	98.04	104.06	115.18	116.58	114.92
Rhode Island	121.25	117.72	117.58	114.55	114.71	99.75	100.00	99.99	106.33	118.18	120.62	118.37
South Carolina	109.97	112.39	109.17	109.20	110.61	97.54	100.00	99.45	103.33	109.12	106.86	103.91
South Dakota	121.39	121.83	118.34	117.74	118.85	99.72	100.00	99.29	109.95	116.81	111.82	113.57
Tennessee	111.76	115.07	107.59	105.61	106.91	98.54	100.00	100.09	103.85	110.73	106.88	107.46
Texas	132.25	136.34	134.10	132.77	124.17	99.87	100.00	99.16	102.23	114.63	113.27	113.35
Utah	110.60	113.05	108.12	110.68	111.72	99.47	100.00	99.71	101.90	107.13	105.74	105.50
Vermont	113.03	111.42	110.05	108.98	111.55	99.06	100.00	99.48	106.08	115.48	115.49	113.49
Virginia	120.42	121.90	118.32	115.32	115.52	98.05	100.00	98.99	105.68	114.79	111.42	111.59
Washington	113.85	120.63	116.39	119.70	117.99	98.98	100.00	101.45	107.67	116.85	115.01	116.43
West Virginia	120.46	123.14	119.91	116.51	117.50	99.24	100.00	96.15	102.34	113.47	110.64	109.88
Wisconsin	109.70	116.35	115.12	113.53	113.35	99.80	100.00	98.62	101.85	107.24	105.05	104.94
Wyoming	113.83	115.48	114.80	116.15	116.72	103.73	100.00	99.77	107.17	111.91	111.84	109.22
United States	116.30	119.80	116.64	115.97	115.79	100.12	100.00	99.27	104.32	113.36	112.13	111.95

Source: Energy Information Administration, State Energy Price and Expenditure Data System 1992.

Table D12. State Population, 1970-1992
(Thousands)

State	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Alabama	3,444	3,497	3,539	3,580	3,626	3,679	3,735	3,780	3,832	3,866	3,894
Alaska	303	316	324	331	341	376	401	403	405	403	402
Arizona	1,775	1,896	2,008	2,124	2,223	2,285	2,346	2,425	2,515	2,636	2,718
Arkansas	1,923	1,972	2,019	2,059	2,101	2,160	2,170	2,209	2,243	2,271	2,286
California	19,971	20,346	20,585	20,869	21,174	21,538	21,936	22,352	22,836	23,257	23,668
Colorado	2,210	2,304	2,405	2,496	2,541	2,586	2,632	2,696	2,767	2,849	2,890
Connecticut	3,032	3,061	3,069	3,068	3,074	3,083	3,083	3,086	3,092	3,096	3,108
Delaware	548	565	573	578	581	587	590	592	595	595	594
District of Columbia	757	750	742	731	718	707	692	677	665	650	638
Florida	6,791	7,158	7,511	7,914	8,299	8,518	8,667	8,856	9,102	9,426	9,746
Georgia	4,588	4,712	4,809	4,910	4,999	5,064	5,133	5,220	5,296	5,401	5,463
Hawaii	770	802	828	852	868	886	904	918	932	953	965
Idaho	713	739	763	782	808	832	857	883	911	933	944
Illinois	11,110	11,202	11,252	11,251	11,262	11,292	11,343	11,386	11,413	11,397	11,427
Indiana	5,195	5,253	5,302	5,338	5,362	5,366	5,389	5,426	5,470	5,501	5,490
Iowa	2,825	2,852	2,860	2,864	2,868	2,881	2,903	2,914	2,918	2,916	2,914
Kansas	2,249	2,247	2,256	2,266	2,269	2,281	2,301	2,321	2,336	2,351	2,364
Kentucky	3,221	3,298	3,336	3,371	3,416	3,468	3,529	3,574	3,610	3,642	3,661
Louisiana	3,645	3,710	3,762	3,788	3,820	3,886	3,951	4,014	4,069	4,138	4,206
Maine	994	1,015	1,034	1,046	1,059	1,072	1,088	1,104	1,114	1,123	1,125
Maryland	3,924	4,018	4,073	4,098	4,119	4,139	4,151	4,170	4,184	4,191	4,217
Massachusetts	5,689	5,738	5,760	5,781	5,774	5,758	5,744	5,738	5,736	5,738	5,737
Michigan	8,882	8,974	9,029	9,078	9,118	9,118	9,129	9,171	9,218	9,266	9,262
Minnesota	3,806	3,853	3,870	3,889	3,904	3,933	3,965	3,989	4,015	4,050	4,076
Mississippi	2,217	2,265	2,307	2,350	2,378	2,399	2,430	2,459	2,488	2,507	2,521
Missouri	4,678	4,726	4,759	4,783	4,796	4,808	4,839	4,863	4,889	4,912	4,917
Montana	694	711	719	727	736	748	757	770	782	787	787
Nebraska	1,485	1,505	1,519	1,530	1,539	1,543	1,551	1,557	1,564	1,567	1,570
Nevada	489	520	547	569	597	620	647	678	719	765	800
New Hampshire	738	762	781	801	816	829	845	870	892	909	921
New Jersey	7,171	7,281	7,335	7,333	7,332	7,338	7,340	7,337	7,351	7,367	7,365
New Mexico	1,017	1,054	1,079	1,106	1,131	1,160	1,189	1,216	1,238	1,285	1,303
New York	18,241	18,358	18,339	18,177	18,050	18,003	17,941	17,813	17,681	17,584	17,558
North Carolina	5,084	5,204	5,301	5,390	5,471	5,547	5,608	5,686	5,759	5,823	5,882
North Dakota	618	627	631	633	635	639	646	650	651	653	653
Ohio	10,657	10,735	10,747	10,767	10,766	10,770	10,753	10,771	10,796	10,798	10,798
Oklahoma	2,559	2,619	2,659	2,696	2,735	2,775	2,827	2,870	2,917	2,975	3,025
Oregon	2,092	2,151	2,197	2,242	2,285	2,330	2,378	2,447	2,518	2,588	2,633
Pennsylvania	11,801	11,886	11,908	11,891	11,871	11,906	11,897	11,894	11,879	11,888	11,864
Rhode Island	950	963	975	976	951	943	946	950	952	950	947
South Carolina	2,591	2,662	2,719	2,777	2,845	2,902	2,944	2,992	3,044	3,090	3,122
South Dakota	666	671	677	679	680	681	686	688	689	688	691
Tennessee	3,926	4,014	4,095	4,147	4,214	4,276	4,347	4,423	4,486	4,560	4,591
Texas	11,199	11,510	11,759	12,020	12,269	12,569	12,904	13,193	13,500	13,888	14,229
Utah	1,059	1,101	1,135	1,170	1,200	1,236	1,275	1,320	1,368	1,420	1,461
Vermont	445	454	463	468	473	480	485	492	498	505	511
Virginia	4,651	4,751	4,824	4,901	4,971	5,047	5,122	5,193	5,270	5,308	5,347
Washington	3,413	3,448	3,448	3,479	3,550	3,621	3,694	3,776	3,889	4,018	4,132
West Virginia	1,744	1,771	1,798	1,806	1,815	1,842	1,880	1,908	1,923	1,942	1,950
Wisconsin	4,418	4,462	4,502	4,524	4,546	4,579	4,596	4,627	4,646	4,683	4,706
Wyoming	332	340	347	354	366	382	397	413	433	454	470
United States	203,302	206,827	209,284	211,357	213,342	215,465	217,563	219,760	222,095	224,567	226,546

See footnote at end of table.

Table D12. State Population, 1970-1992 (Continued)
(Thousands)

State	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Alabama	3,929	3,945	3,963	3,991	4,022	4,051	4,084	4,103	4,118	4,041	4,090	4,138
Alaska	416	446	482	505	522	531	525	525	527	550	569	588
Arizona	2,807	2,886	2,963	3,053	3,161	3,281	3,397	3,483	3,556	3,665	3,746	3,832
Arkansas	2,301	2,308	2,326	2,346	2,360	2,371	2,388	2,396	2,406	2,351	2,371	2,394
California	24,265	24,783	25,307	25,777	26,355	26,999	27,655	28,323	29,063	29,760	30,407	30,895
Colorado	2,984	3,072	3,148	3,189	3,232	3,265	3,294	3,300	3,317	3,294	3,370	3,465
Connecticut	3,123	3,128	3,147	3,160	3,176	3,194	3,212	3,232	3,239	3,287	3,290	3,279
Delaware	598	602	610	618	626	637	648	660	673	666	681	700
District of Columbia	633	627	625	624	624	625	622	613	604	607	594	585
Florida	10,196	10,477	10,759	11,053	11,368	11,689	12,023	12,338	12,671	12,938	13,273	13,483
Georgia	5,571	5,655	5,736	5,845	5,976	6,102	6,228	6,339	6,436	6,478	6,628	6,773
Hawaii	980	998	1,019	1,036	1,050	1,064	1,082	1,096	1,112	1,108	1,135	1,156
Idaho	965	978	988	1,000	1,005	1,003	1,000	1,003	1,014	1,007	1,038	1,066
Illinois	11,476	11,482	11,494	11,525	11,539	11,554	11,585	11,613	11,658	11,431	11,525	11,613
Indiana	5,490	5,485	5,475	5,492	5,500	5,504	5,531	5,559	5,593	5,544	5,607	5,658
Iowa	2,918	2,905	2,896	2,892	2,870	2,840	2,822	2,830	2,840	2,777	2,790	2,803
Kansas	2,390	2,410	2,428	2,441	2,448	2,458	2,475	2,496	2,513	2,478	2,491	2,515
Kentucky	3,677	3,695	3,713	3,720	3,724	3,723	3,723	3,726	3,727	3,685	3,715	3,754
Louisiana	4,300	4,384	4,442	4,462	4,484	4,498	4,448	4,407	4,382	4,220	4,244	4,279
Maine	1,133	1,137	1,145	1,157	1,164	1,172	1,186	1,206	1,222	1,228	1,236	1,236
Maryland	4,257	4,274	4,301	4,349	4,393	4,463	4,537	4,626	4,694	4,781	4,863	4,917
Massachusetts	5,755	5,747	5,764	5,795	5,824	5,835	5,856	5,890	5,913	6,016	5,995	5,993
Michigan	9,211	9,120	9,055	9,060	9,089	9,143	9,206	9,240	9,273	9,295	9,375	9,434
Minnesota	4,113	4,134	4,145	4,163	4,191	4,214	4,245	4,308	4,353	4,375	4,426	4,468
Mississippi	2,545	2,567	2,583	2,599	2,614	2,624	2,624	2,620	2,621	2,573	2,592	2,615
Missouri	4,940	4,944	4,965	5,004	5,036	5,066	5,107	5,140	5,159	5,117	5,156	5,191
Montana	796	805	816	823	825	817	809	805	806	799	807	822
Nebraska	1,583	1,590	1,597	1,605	1,605	1,598	1,594	1,603	1,611	1,578	1,590	1,601
Nevada	845	877	895	916	939	966	1,006	1,054	1,111	1,202	1,288	1,336
New Hampshire	937	948	959	978	998	1,027	1,057	1,085	1,107	1,109	1,108	1,115
New Jersey	7,407	7,431	7,469	7,517	7,568	7,626	7,675	7,718	7,736	7,730	7,773	7,820
New Mexico	1,335	1,369	1,402	1,426	1,450	1,477	1,496	1,510	1,528	1,515	1,582	1,582
New York	17,561	17,578	17,671	17,727	17,768	17,807	17,838	17,909	17,950	17,990	18,047	18,109
North Carolina	5,957	6,019	6,079	6,168	6,258	6,328	6,410	6,489	6,571	6,629	6,749	6,736
North Dakota	661	672	681	687	685	679	672	667	660	639	633	634
Ohio	10,797	10,773	10,761	10,770	10,775	10,779	10,817	10,865	10,907	10,847	10,940	11,021
Oklahoma	3,106	3,224	3,317	3,321	3,315	3,304	3,269	3,234	3,224	3,146	3,168	3,205
Oregon	2,672	2,671	2,663	2,679	2,689	2,703	2,723	2,768	2,820	2,842	2,919	2,972
Pennsylvania	11,880	11,885	11,896	11,892	11,866	11,897	11,943	11,998	12,040	11,882	11,949	11,995
Rhode Island	952	953	955	960	967	975	986	993	998	1,003	1,004	1,001
South Carolina	3,186	3,220	3,253	3,297	3,335	3,381	3,426	3,465	3,512	3,487	3,561	3,603
South Dakota	692	695	699	705	708	708	710	714	715	696	702	708
Tennessee	4,639	4,667	4,691	4,728	4,767	4,801	4,856	4,898	4,940	4,877	4,952	5,025
Texas	14,765	15,376	15,816	16,079	16,378	16,680	16,778	16,834	16,991	16,987	17,352	17,683
Utah	1,516	1,559	1,596	1,623	1,644	1,664	1,680	1,691	1,707	1,723	1,767	1,811
Vermont	517	521	526	531	535	540	547	558	567	563	568	571
Virginia	5,444	5,490	5,558	5,635	5,704	5,798	5,916	6,013	6,098	6,187	6,288	6,394
Washington	4,237	4,279	4,304	4,349	4,407	4,461	4,542	4,652	4,761	4,867	5,016	5,143
West Virginia	1,961	1,962	1,963	1,952	1,936	1,917	1,898	1,876	1,857	1,793	1,799	1,809
Wisconsin	4,727	4,731	4,724	4,740	4,753	4,762	4,785	4,832	4,867	4,892	4,947	4,993
Wyoming	494	511	516	513	509	507	490	480	475	454	458	465
United States	229,637	231,996	234,284	236,477	238,736	241,107	243,427	245,785	248,239	248,710	252,137	255,078

Source: Energy Information Administration, State Energy Price and Expenditure Data System 1992.

Glossary

Glossary

Asphalt: A dark-brown-to-black cement-like material containing bitumens as the predominant constituents obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts.

ASTM: The American Society for Testing and Materials.

Aviation Gasoline Blending Components: Naphthas that are used for blending or compounding into finished aviation gasoline (e.g., straight-run gasoline, alkylate, and reformate). Excludes oxygenates (alcohols and ethers), butane, and pentanes plus.

Aviation Gasoline: All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G-5572. Aviation gasoline includes blending components.

Barrel (petroleum): A unit of volume equal to 42 U.S. gallons.

Biomass Fuels: Wood, waste, and alcohol fuels are the primary examples of biomass fuels. The term "biomass fuels" comprises biomass energy sources and biofuels. Biomass energy sources are essentially unprocessed; they are burned, as received, to produce thermal energy. Examples are wood, garbage, and corn. Biofuels result from the processing of biomass energy sources. In general, biofuels have a greater energy density and are more easily transported and used. Examples are wood chips, pellets, briquettes, and methanol (made from wood); refuse-derived fuel (made from garbage); and ethanol (made from corn).

British Thermal Unit (Btu): The quantity of heat needed to raise the temperature of 1 pound of water by 1° F at or near 39.2° F. See **Heat Content of a Quantity of Fuel, Gross** and **Heat Content of a Quantity of Fuel, Net.**

Butane: A normally gaseous straight-chain or branched-chain hydrocarbon (C_4H_{10}). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

- **Isobutane:** A normally gaseous branched-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams.
- **Normal Butane:** A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1° F. It is extracted from natural gas or refinery gas streams.

Butylene: An olefinic hydrocarbon (C_4H_8) recovered from refinery processes.

Coal: Includes all ranks of coal—anthracite, bituminous coal, subbituminous coal, and lignite—conforming to ASTM Specification D388.

- **Coking Coal:** Coal that meets the requirements for making coal coke. It must be low in ash and sulfur and form a coke that is capable of supporting the charge of iron ore and limestone in a blast furnace. Coking coal is usually a blend of two or more bituminous coals.
- **Steam Coal:** In this report, steam coal represents all noncoking coal.

Coal Coke: A hard, porous product made from baking bituminous coal in ovens at temperatures as high as 2,000° F. It is used both as a fuel and as a reducing agent in smelting iron ore in a blast furnace.

Coke Plants: Plants where coal is carbonized in slot or beehive ovens for the manufacture of coke.

Coking Coal: See **Coal.**

Commercial Sector: The commercial sector, as defined economically, consists of business establishments that are not engaged in transportation or in manufacturing or other types of industrial

activity (agriculture, mining, or construction). Commercial establishments include hotels, motels, restaurants, wholesale businesses, retail stores, laundries, and other service enterprises; religious and nonprofit organizations; health, social, and educational institutions; and Federal, State, and local governments. Street lights, pumps, bridges, and public services are also included if the establishment operating them is considered commercial.

Constant Dollars: Amounts expressed in constant dollars have been adjusted to remove the effect of changes in the purchasing power of the dollar. Prices expressed in constant dollars usually reflect buying power relative to a base year.

Conversion Factor: A number that translates units of one system into corresponding values of another system. Conversion factors can be used to translate physical units of measure for various fuels into Btu equivalents.

Crude Oil Used Directly: Crude oil consumed as fuel by crude oil pipelines and on crude oil leases.

Cubic Foot (natural gas): A unit of volume equal to 1 cubic foot at a pressure base of 14.73 pounds standard per square inch absolute and a temperature base of 60° F.

Current Dollars: Amounts expressed in current dollars have not been adjusted to remove the effect of changes in the purchasing power of the dollar.

Degree-Day Normals: Simple arithmetic averages of monthly or annual degree-days over a long period of time (the 30-year period 1951 through 1980 is used for the estimates in this report). The averages may be simple degree-day normals or population-weighted degree-day normals. Monthly, State-level simple averages are used for this report.

Degree-Days, Cooling (CDD): The number of degrees per day that the daily average temperature is above 65° F. The daily average temperature is the mean of the maximum and minimum temperatures for a 24-hour period.

Degree-Days, Heating (HDD): The number of degrees per day that the daily average temperature is below 65° F. The daily average temperature is the mean of the maximum and minimum temperatures for a 24-hour period.

Degree-Days, Population-Weighted: Heating or cooling degree-days weighted by the population of the area in which the degree-days are recorded. To compute State population-weighted degree-days, each State is divided into from one to nine climatically homogeneous divisions, which are assigned weights based on the ratio of the population of the division to the total population of the State. Degree-day readings for each division are multiplied by the corresponding population weight for each division and those products are then summed to arrive at the State population-weighted degree-day figure. To compute national population-weighted degree-days, the Nation is divided into nine Census regions comprised of from three to eight States, which are assigned weights based on the ratio of the population of the region to the total population of the Nation. Degree-day readings for each region are multiplied by the corresponding population weight for each region and those products are then summed to arrive at the national population-weighted degree-day figure.

Diesel Fuel: Fuel used for internal combustion in diesel engines; usually that fraction of crude oil that distills after kerosene. (See **Distillate Fuel Oil.**)

Distillate Fuel Oil: A general classification for one of the petroleum fractions produced in conventional distillation operations. Included are products known as No. 1, No. 2, and No. 4 fuel oils and No. 1, No. 2, and No. 4 diesel fuels. It is used primarily for space heating, on- and off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation.

Electrical System Energy Losses: The amount of energy lost during generation, transmission, and distribution of electricity, including plant and unaccounted-for uses.

Electricity Generation: The process of producing electric energy or transforming other forms of energy into electric energy. Also the amount of electric energy produced or expressed in watthours (Wh).

Electricity Sales: The amount of kilowatthours sold in a given period of time; usually grouped by classes of service, such as residential, commercial, industrial, and other. "Other" sales include sales for public street and highway lighting and other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

Electric Power Plant: A station containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

Electric Utility: A corporation, person, agency, authority, or other legal entity or instrumentality that owns and/or operates facilities for the generation, transmission, distribution, or sale of electric energy, primarily for use by the public, and that files forms listed in the Code of Federal Regulations, Title 18, Part 141. Facilities that qualify as cogenerators or small power producers under the Public Utility Regulatory Policies Act are not considered utilities.

Electric Utility Sector: The electric utility sector consists of privately and publicly owned establishments that generate, transmit, distribute, or sell electricity primarily for use by the public and that meet the definition of an electric utility. Nonutility power producers are not included in the electric utility sector.

End-Use Sectors: The residential, commercial, industrial, and transportation sectors of the economy.

Energy: The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatthours, while heat energy is usually measured in British thermal units.

Ethane: A normally gaseous straight-chain hydrocarbon (C_2H_6). It is a colorless, paraffinic gas that boils at a temperature of -127.48° F. It is extracted from natural gas and refinery gas streams.

Ethylene: An olefinic hydrocarbon (C_2H_4) recovered from refinery processes or petrochemical processes.

Expenditures: In this report, "expenditures" refers to the money directly spent by consumers to purchase energy. Expenditures equal the amount of energy used by the consumer times the price per unit paid by the consumer. In calculating the amount of energy used, process fuel and intermediate products are not included.

Exports: Shipments of goods from the 50 States and the District of Columbia to foreign countries and to Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Federal Energy Regulatory Commission (FERC): The Federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, oil pipeline rates, and gas pipeline certification. FERC is an independent regulatory agency within the Department of Energy and is the successor to the Federal Power Commission.

Federal Power Commission (FPC): The predecessor agency of the Federal Energy Regulatory Commission. The Federal Power Commission was created by an Act of Congress under the Federal Water Power Act on June 10, 1920. It was charged originally with regulating the electric power and natural gas industries. It was abolished on September 30, 1977, when the Department of Energy was created. Its functions were divided between the Department of Energy and the Federal Energy Regulatory Commission, an independent regulatory agency.

Fossil Fuel: Any naturally occurring organic fuel, such as petroleum, coal, and natural gas.

Gasohol: A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) limited to 10 percent by volume of alcohol. Gasohol is included in finished leaded and unleaded motor gasoline.

Geothermal Energy (as used at electric utilities): Hot water or steam extracted from geothermal reservoirs in the Earth's crust and supplied to steam turbines at electric utilities that drive generators to produce electricity.

Gross Domestic Product (GDP): The total value of goods and services produced by labor and property located in the United States. As long as the labor and property are located in the United States, the supplier (that is, the workers and, for property, the owners) may be either U.S. residents or residents of foreign countries.

Gross Domestic Product (GDP) Implicit Price Deflator: The implicit price deflator, published by the U.S. Department of Commerce, Bureau of Economic Analysis, is used to convert nominal figures to real figures.

Gross Domestic Purchases: The total purchases by U.S. residents for all goods and services wherever produced, including imports but excluding exports. It includes all personal consumption expenditures, gross private domestic investment, and government purchases (Federal, State, and local).

Gross Domestic Purchases Price Index: This index measures prices paid by U.S. residents. It is derived from the prices of the components included in gross domestic purchases.

Heat Content of a Quantity of Fuel, Gross: The total amount of heat released when a fuel is burned. Coal, crude oil, and natural gas all include chemical compounds of carbon and hydrogen. When those fuels are burned, the carbon and hydrogen combine with oxygen in the air to produce carbon dioxide and water. Some of the energy released in burning goes into transforming the water into steam and is usually lost. The amount of heat spent in transforming the water into steam is counted as part of gross heat content but is not counted as part of net heat content. Also referred to as the higher heating value. Btu conversion factors typically used in EIA represent gross heat content.

Heat Content of a Quantity of Fuel, Net: The amount of useable heat energy released when a fuel is burned under conditions similar to those in which it is normally used. Also referred to as the lower heating value. Btu conversion factors typically used in EIA represent gross heat content.

Heavy Oil: The fuel oils remaining after the lighter oils have been distilled off during the refining process. Except for start-up and flame stabilization, virtually all petroleum used in steam-electric power plants is heavy oil.

Hydroelectric Power: The production of electricity from the kinetic energy of falling water.

Imports: Receipts of goods into the 50 States and the District of Columbia from foreign countries and from Puerto Rico, the Virgin Islands, and other U.S. possessions and territories.

Industrial Sector: The industrial sector comprises manufacturing industries, which make up the largest part of the sector, along with mining, construction, agriculture, fisheries, and forestry. Establishments in the sector range from steel mills, to small farms, to companies assembling electronic components.

Jet Fuel: The term includes kerosene-type jet fuel and naphtha-type jet fuel. Kerosene-type jet fuel is a kerosene-quality product used primarily for commercial turbojet and turboprop aircraft engines. Naphtha-type jet fuel is a fuel in the heavy naphthas range used primarily for military turbojet and turboprop aircraft engines.

Kerosene: A petroleum distillate that has a maximum distillation temperature of 401° F at the 10-percent recovery point, a final boiling point of 572° F, and a minimum flash point of 100° F. Included are the two grades designated in ASTM D3699 (No. 1-K and No. 2-K) and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters; it is suitable for use as an illuminant when burned in wick lamps.

Lease and Plant Fuel: Natural gas used in well, field, and lease operations (such as gas used in drilling operations, heaters, dehydrators, and field compressors), and as fuel in natural gas processing plants.

Light Oil: Lighter fuel oils distilled off during the refining process. Virtually all petroleum used in internal combustion and gas-turbine engines is light oil.

Liquefied Petroleum Gases (LPG): Ethane, ethylene, propane, propylene, normal butane, butylene, and isobutane produced at refineries or natural gas processing plants, including plants that fractionate new natural gas plant liquids.

Lubricants: Substances used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacturing of other products or as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Excluded are byproducts of lubricating oil refining, such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. Included are all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. Lubricant categories are paraffinic and naphthenic.

Miscellaneous Petroleum Products: All finished petroleum products not classified elsewhere—for example, petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils.

Motor Gasoline: A complex mixture of relatively volatile hydrocarbons, with or without small quantities of additives, obtained by blending appropriate refinery streams to form a fuel suitable for use in spark-ignition engines. Motor gasoline includes

both leaded and unleaded grades of finished motor gasoline, blending components, and gasohol.

Motor Gasoline Blending Components: Naphthas that will be used for blending or compounding into finished motor gasoline (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excluded are oxygenates (alcohols and ethers), butane, and pentanes plus.

Natural Gas: A mixture of hydrocarbons (principally methane) and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in underground reservoirs.

Natural Gasoline: A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas that meets specifications for natural gasoline set by the Gas Processors Association. Includes isopentane.

Nominal Price: The price paid for a product or service at the time of the transaction. The nominal price, which is expressed in current dollars, is not adjusted to remove the effect of changes in the purchasing power of the dollar.

Nuclear Electric Power: Electricity generated by an electric power plant whose turbines are driven by steam generated in a reactor by heat from the fissioning of nuclear fuel.

Nuclear Electric Power Plant: A single-unit or multiunit facility in which heat produced in one or more reactors by the fissioning of nuclear fuel is used to drive one or more steam turbines.

Nuclear Fuel: Fissionable materials that have been enriched to a composition that, when placed in a nuclear reactor, will support a self-sustaining fission chain reaction, producing heat in a controlled manner for process use.

Pentanes Plus: A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

Petrochemical Feedstocks: Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics. The categories reported are naphthas less than 401° F endpoint and other oils equal to or greater than 401° F endpoint.

Petroleum: A generic term applied to oil and oil products in all forms, such as crude oil, lease condensate, unfinished oils, petroleum products, natural gas plant liquids, and nonhydrocarbon compounds blended into finished petroleum products.

Petroleum Coke: A residue that is the final product of the condensation process in cracking. The product is either marketable petroleum coke or catalyst petroleum coke.

Petroleum Coke, Catalyst: The carbonaceous residue that is deposited on and deactivates the catalyst used in many catalytic operations (e.g., catalytic cracking). Carbon is deposited on the catalyst, thus deactivating the catalyst. The catalyst is reactivated by burning off the carbon, which is used as a fuel in the refining process. That carbon or coke is not recoverable in a concentrated form.

Petroleum Coke, Marketable: Those grades of coke produced in delayed or fluid cokers that may be recovered as relatively pure carbon. Marketable petroleum coke may be sold as is or further purified by calcining.

Petroleum Products: Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Photovoltaic and Solar Thermal Energy (as used at electric utilities): Energy radiated by the sun as electromagnetic waves (electromagnetic radiation) that is converted at electric utilities into electricity by means of solar (photovoltaic) cells or concentrating (focusing) collectors.

Plant Condensate: One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquids at gas inlet separators or scrubbers in processing plants.

Primary Energy: All energy consumed by end users, excluding electricity but including the energy consumed at electric utilities to generate electricity. (In estimating energy expenditures, there are no fuel-associated expenditures for hydroelectric power, geothermal energy, solar energy, or wind energy, and

the quantifiable expenditures for process fuel and intermediate products are excluded.)

Process Fuel: All energy consumed in the acquisition, processing, and transportation of energy. Quantifiable process fuel includes three categories: natural gas lease and plant operations, natural gas pipeline operations, and oil refinery operations.

Propane: A normally gaseous straight-chain hydrocarbon (C_3H_8). It is a colorless paraffinic gas that boils at a temperature of -43.67° F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

Propylene: An olefinic hydrocarbon (C_3H_6) recovered from refinery or petrochemical processes.

Real Price: A price that has been adjusted to remove the effect of changes in the purchasing power of the dollar. Real prices, which are expressed in constant dollars, usually reflect buying power relative to a base year.

Refinery (petroleum): An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Residential Sector: The residential sector is considered to consist of all private residences, whether occupied or vacant, owned or rented, including single-family homes, multifamily housing units, and mobile homes. Secondary homes, such as summer homes, are also included. Institutional housing, such as school dormitories, hospitals, and military barracks, generally are not included in the residential sector; they are included in the commercial sector.

Residual Fuel Oil: The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and that conform to ASTM Specifications D396 and 975. Included are No. 5, a residual fuel oil of medium viscosity; Navy Special, for use in steam-powered vessels in government service and in shore power plants; and No. 6, which includes Bunker C fuel oil and is used for commercial and industrial heating, electricity generation, and to power ships. Imports of residual fuel oil include imported crude oil burned as fuel.

Road Oil: Any heavy petroleum oil, including residual asphaltic oil, used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades, from 0, the most liquid, to 5, the most viscous.

Short Ton (coal): A unit of weight equal to 2,000 pounds.

SIC: See **Standard Industrial Classification.**

Special Naphthas: All finished products within the naphtha boiling range that are used as paint thinners, cleaners, or solvents. Those products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks are excluded.

Standard Industrial Classification (SIC): A set of codes developed by the Office of Management and Budget which categorizes industries into groups with similar economic activities.

Steam Coal: See **Coal.**

Still Gas (refinery gas): Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, and propylene. It is used primarily as refinery fuel and petrochemical feedstock.

Total Energy: All energy consumed by end users including electricity but excluding the energy consumed at electric utilities to generate electricity. (In estimating energy expenditures, there are no fuel-associated expenditures for hydroelectric power, geothermal energy, solar power, or wind energy, and the quantifiable expenditures for process fuel and intermediate products are excluded.)

Transportation Sector: The transportation sector consists of private and public vehicles that move people and commodities. Included are automobiles, trucks, buses, motorcycles, railroads and railways (including streetcars), aircraft, ships, barges, and natural gas pipelines.

Unfinished Oils: All oils requiring further refinery processing, except those requiring only mechanical blending. Included are naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

Unfractionated Streams: Mixtures of unsegregated natural gas liquid components, excluding those in plant condensate. This product is extracted from natural gas.

United States: The 50 States and the District of Columbia.

Waxes: Solid or semisolid materials derived from petroleum distillates or residues. Waxes are light-colored, more or less translucent crystalline masses, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Included are all marketable waxes, whether crude scale or fully refined. Waxes are used primarily as industrial coating for surface protection.

Wind Energy (as used at electric utilities): The kinetic energy of wind converted at electric utilities into mechanical energy by wind turbines (i.e., blades rotating from a hub) that drive generators to produce electricity for distribution.