

Monthly Energy Review

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Energy Information Administration

Energy Plug:
Residential Energy Consumption

Monthly Energy Review

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The *Monthly Energy Review (MER)* presents an overview of the Energy Information Administration's recent monthly energy statistics. The statistics cover the major activities of U.S. production, consumption, trade, stocks, and prices for petroleum, natural gas, coal, electricity, and nuclear energy. Also included are international energy and thermal and metric conversion factors.

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Monthly Energy Review

July 2003

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Energy Plug



Residential Energy Consumption Special Topics

The Residential Energy Consumption Survey (RECS) from the Energy Information Administration (EIA) is a national statistical survey that collects information on residential energy use. In the most recent survey, conducted in 2001, data were collected from 4,822 households statistically selected to represent the 107 million housing units in the United States. Data are available for the four Census regions, the nine Census divisions, and the four most populous States: California, Florida, New York, and Texas.

The survey includes information on the physical characteristics of housing units, demographic characteristics of households, heating and cooling equipment, fuels used, energy consumption and expenditures, and other data. It also includes information on a variety of interesting special topics.

Square Footage. The average total square footage of U.S. housing units, as measured in the 2001 RECS, was 2,066 square feet. This is a 10-percent increase above the average total of 1,875 square feet in 1993.

Cooking Trends from 1993 to 2001. Americans spent less time in the kitchen cooking in 2001 than they did in 1993. The percentage of households that reported cooking hot meals “two or more times a day” dropped from 36 percent in 1993 to 32 percent in the 2001 RECS. The percentage of households

cooking “once a day” also declined, from 44 percent in 1993 to 41 percent in 2001. Consequently, the percentage of households cooking “a few times a week” and “once a week or less” increased. The survey also found that the tendency to cook every day increased in proportion to the number of people in the household.

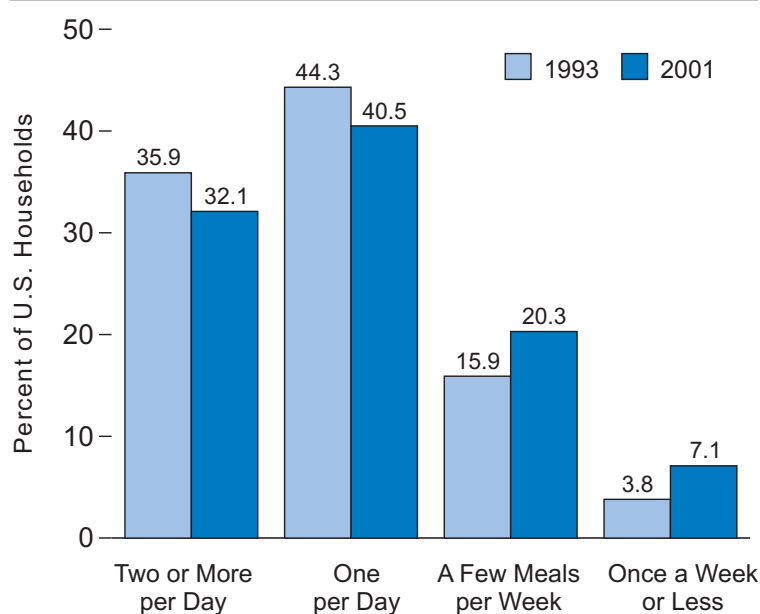
The Effect of Income on Appliances in U.S. Households examines the relationship between home appliance ownership and income, as well as geographic location, race, gender, and the number and relationships of the persons in a household. The 2001 RECS found that three appliances were ubiquitous in U.S. homes regardless of income level: 99.9 percent of households had a refrigerator, 99.7 percent owned a cooking appliance, and 98.9 percent had a color television. The presence of other appliances in the household, as well as their quality and features, vary significantly with income. Items in this category include cable and satellite television connections, video cassette recorders, stereo systems, cellular phones and answering machines, clothes washers and dryers, dishwashers, electric coffee makers, and microwave ovens.

Fax and Photocopier Machines. More than eight times as many households (24 million) had a fax machine in 2001 as in 1993. More than half of these fax machines were included as a feature of a PC printer. There were also 20 million U.S. households with photocopier machines, thirteen times as many as in 1993. Nearly two-thirds of those photocopiers were a feature of a PC printer.

Ceiling Fans were used in 70 million U.S. households (65 percent) in 2001, a 14-percent increase over the number of households with ceiling fans in 1997. Homes built after 1980 to 2001 had more ceiling fans than homes built in earlier years. Homes with five or more rooms were also more likely to have ceiling fans, and the percentage of homes with ceiling fans increased as income increased.

Other special topics in the RECS include Residential Energy Consumption and Expenditures by Origin of Householder, Residential Energy Consumption and Expenditures per Household Member and per Building, Heating Oil Use in American Households, Natural Gas Use in American Households, Winter Energy Savings From Lower Thermostat Settings, Air-Conditioning Trends and Facts, and Lighting Type at Home and at Work.

Number of Hot Meals Cooked in the Home, 1993 and 2001



Source: Energy Information Administration.

Residential Energy Consumption Survey is available on the EIA Web site at <http://www.eia.doe.gov>. Under “By Sector”, select “Residential” and then any topic under “Overview.” Contact wmaster@eia.doe.gov or call 202-586-8959 if you have problems. Questions about the survey content should be directed to Robert Latta, Office of Energy Markets and End Use, at Robert.Latta@eia.doe.gov or 202-586-1385. For general information about energy, contact the National Energy Information Center at infoctr@eia.doe.gov or 202-586-8800.

Section 1. Energy Overview

Energy production during April 2003 totaled 5.8 quadrillion Btu, a slight increase compared with the level of production during April 2002. Production of natural gas (dry) increased 4.2 percent; hydroelectric power increased 2.5 percent; coal decreased 2.2 percent; and crude oil decreased 0.8 percent, compared with the level of production during April 2002.

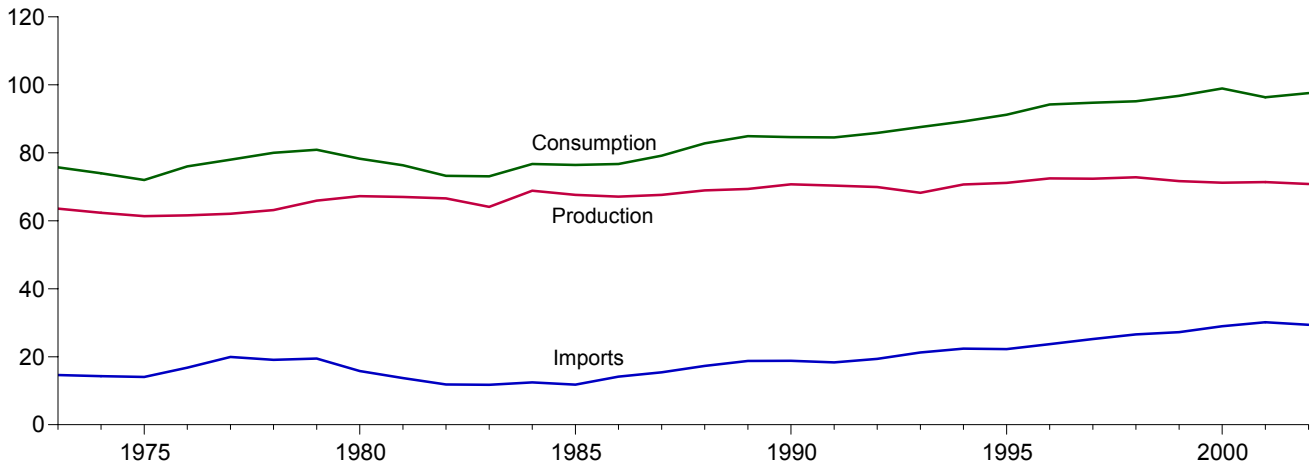
Energy consumption during April 2003 totaled 7.7 quadrillion Btu, a slight decrease compared with the level of consumption during April 2002. Consumption of nuclear

electric power decreased 2.8 percent; natural gas decreased 2.2 percent; petroleum increased 1.1 percent; and coal decreased 1.0 percent, compared with the level 1 year earlier.

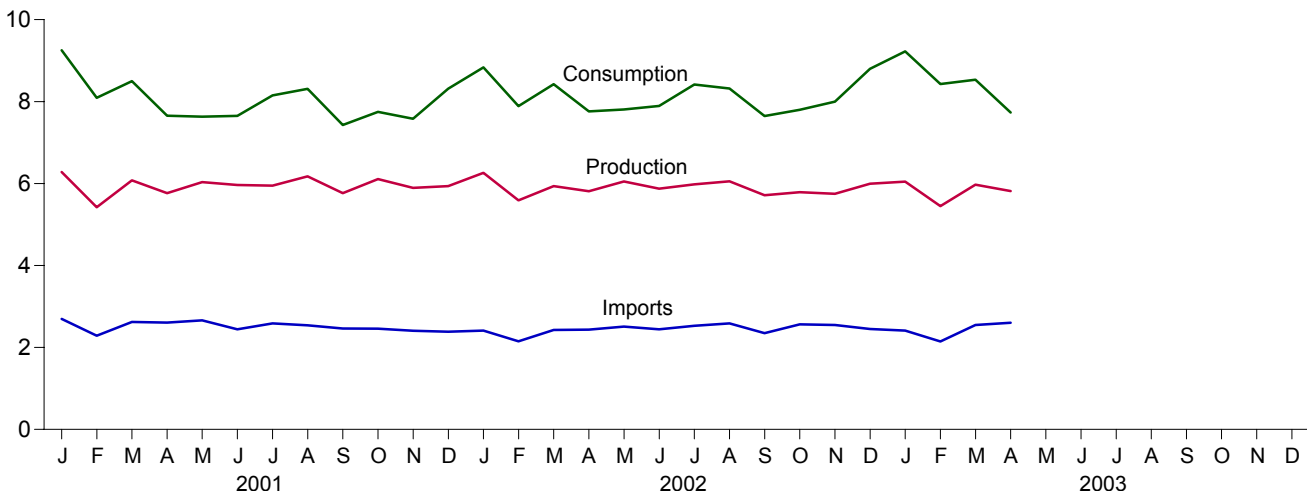
Net imports of energy during April 2003 totaled 2.3 quadrillion Btu, 5.6 percent above the level of net imports 1 year earlier. Net imports of crude oil increased 5.4 percent; petroleum products increased 0.4 percent; natural gas net imports were unchanged; and coal net exports decreased 47.6 percent, compared with the level in April 2002.

Figure 1.1 Energy Overview
(Quadrillion Btu)

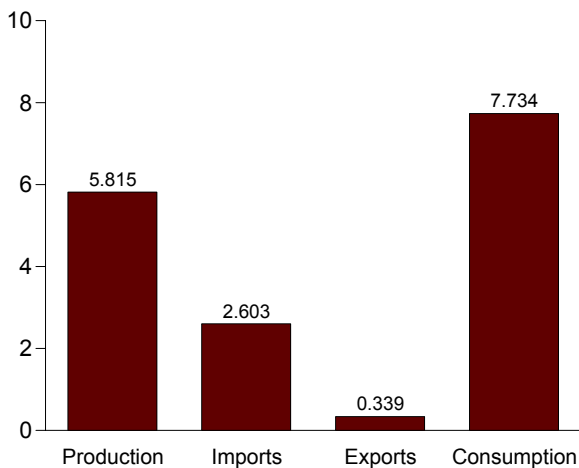
Consumption, Production, and Imports, 1973-2002



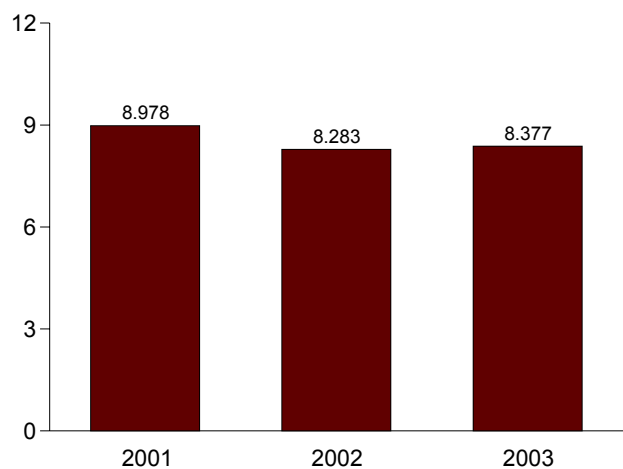
Consumption, Production, and Imports, Monthly



Overview, April 2003



Net Imports, January-April



Note: Because vertical scales differ, graphs should not be compared.
 Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.
 Sources: Tables 1.1 and 1.4.

Table 1.1 Energy Overview
(Quadrillion Btu)

| | Production | Imports | Exports | Adjustments ^a | Consumption |
|----------------------------|---------------|---------------|--------------|--------------------------|-----------------|
| 1973 Total | 63.585 | 14.613 | 2.033 | -0.456 | 75.708 |
| 1974 Total | 62.372 | 14.304 | 2.203 | -.482 | 73.991 |
| 1975 Total | 61.357 | 14.032 | 2.323 | -1.067 | 71.999 |
| 1976 Total | 61.602 | 16.760 | 2.172 | -.178 | 76.012 |
| 1977 Total | 62.052 | 19.948 | 2.052 | -1.948 | 78.000 |
| 1978 Total | 63.137 | 19.106 | 1.920 | -.337 | 79.986 |
| 1979 Total | 65.948 | 19.460 | 2.855 | -1.649 | 80.903 |
| 1980 Total | 67.241 | 15.796 | 3.695 | -1.054 | 78.289 |
| 1981 Total | 67.007 | 13.719 | 4.307 | -.084 | 76.335 |
| 1982 Total | 66.574 | 11.861 | 4.608 | -.594 | 73.234 |
| 1983 Total | 64.106 | 11.752 | 3.693 | -.900 | 73.066 |
| 1984 Total | 68.832 | 12.471 | 3.786 | -.824 | 76.693 |
| 1985 Total | 67.647 | 11.781 | 4.196 | 1.186 | 76.417 |
| 1986 Total | 67.087 | 14.151 | 4.021 | -.495 | 76.722 |
| 1987 Total | 67.608 | 15.398 | 3.812 | -.037 | 79.156 |
| 1988 Total | 68.951 | 17.296 | 4.366 | .894 | 82.774 |
| 1989 Total | 69.364 | 18.766 | 4.661 | 1.416 | 84.886 |
| 1990 Total | 70.729 | 18.817 | 4.752 | -.189 | 84.605 |
| 1991 Total | 70.362 | 18.335 | 5.141 | .967 | 84.522 |
| 1992 Total | 69.933 | 19.372 | 4.937 | 1.498 | 85.866 |
| 1993 Total | 68.260 | 21.273 | 4.258 | 2.303 | 87.578 |
| 1994 Total | 70.676 | 22.390 | 4.061 | .243 | 89.248 |
| 1995 Total | 71.156 | 22.260 | 4.511 | 2.315 | 91.221 |
| 1996 Total | 72.472 | 23.702 | 4.633 | 2.683 | 94.224 |
| 1997 Total | 72.389 | 25.215 | 4.514 | 1.637 | 94.727 |
| 1998 Total | 72.787 | 26.581 | 4.299 | .078 | 95.146 |
| 1999 Total | 71.652 | 27.252 | 3.715 | 1.585 | 96.774 |
| 2000 Total | 71.218 | 28.974 | 4.006 | 2.756 | 98.942 |
| 2001 January | 6.280 | 2.697 | .346 | .619 | 9.251 |
| February | 5.422 | 2.285 | .284 | .670 | 8.093 |
| March | 6.079 | 2.623 | .288 | .086 | 8.499 |
| April | 5.764 | 2.605 | .313 | -.398 | 7.657 |
| May | 6.033 | 2.663 | .355 | -.710 | 7.631 |
| June | 5.964 | 2.440 | .302 | -.451 | 7.651 |
| July | 5.950 | 2.588 | .278 | -.109 | 8.151 |
| August | 6.173 | 2.541 | .336 | -.066 | 8.313 |
| September | 5.767 | 2.460 | .290 | -.508 | 7.428 |
| October | 6.108 | 2.459 | .313 | -.504 | R 7.750 |
| November | 5.896 | 2.408 | .328 | -.393 | 7.583 |
| December | 5.936 | 2.383 | .329 | .326 | 8.316 |
| Total | 71.372 | 30.152 | 3.764 | -1.439 | 96.322 |
| 2002 January | 6.261 | 2.412 | .291 | R .453 | R 8.835 |
| February | 5.589 | 2.148 | .290 | R .442 | R 7.889 |
| March | 5.939 | 2.427 | .266 | R .324 | R 8.423 |
| April | 5.813 | 2.434 | .290 | R -.195 | R 7.761 |
| May | 6.050 | 2.510 | .294 | R -.457 | R 7.809 |
| June | 5.875 | 2.442 | .308 | R -.116 | R 7.893 |
| July | 5.979 | 2.528 | .270 | R .178 | R 8.415 |
| August | 6.053 | 2.588 | .344 | R .021 | R 8.318 |
| September | 5.715 | 2.349 | .301 | R -.114 | 7.649 |
| October | 5.790 | 2.565 | .332 | -.222 | 7.800 |
| November | 5.751 | 2.547 | .313 | R .012 | R 7.998 |
| December | 5.997 | 2.448 | .359 | R .713 | R 8.799 |
| Total | 70.811 | 29.398 | 3.656 | R 1.038 | R 97.590 |
| 2003 January | R 6.048 | 2.412 | .361 | 1.126 | R 9.226 |
| February | R 5.449 | 2.145 | .301 | R 1.136 | R 8.430 |
| March | R 5.971 | R 2.547 | R .330 | R .347 | R 8.535 |
| April | 5.815 | 2.603 | .339 | -.344 | 7.734 |
| 4-Month Total | 23.283 | 9.708 | 1.331 | 2.265 | 33.925 |
| 2002 4-Month Total | 23.601 | 9.421 | 1.137 | 1.024 | 32.908 |
| 2001 4-Month Total | 23.545 | 10.209 | 1.231 | .977 | 33.500 |

^a A balancing item. Includes stock changes, losses, gains, miscellaneous blending components, and unaccounted-for supply.

R=Revised.

Notes: • For definitions, see Notes 1 through 4 at end of section.

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

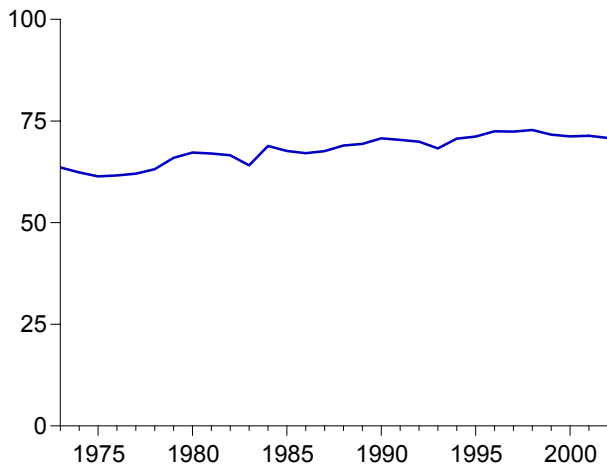
• Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.

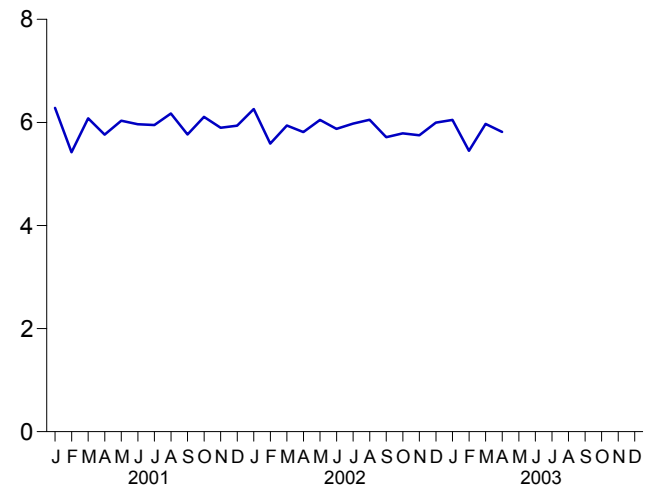
Sources: • **Production:** Table 1.2. • **Consumption:** Table 1.3. • **Imports and Exports:** Tables 3.1b, 4.3, 6.1, 7.1, A2-A6, and Section 2, "Energy Consumption Notes and Sources," Note 5.

Figure 1.2 Energy Production
(Quadrillion Btu)

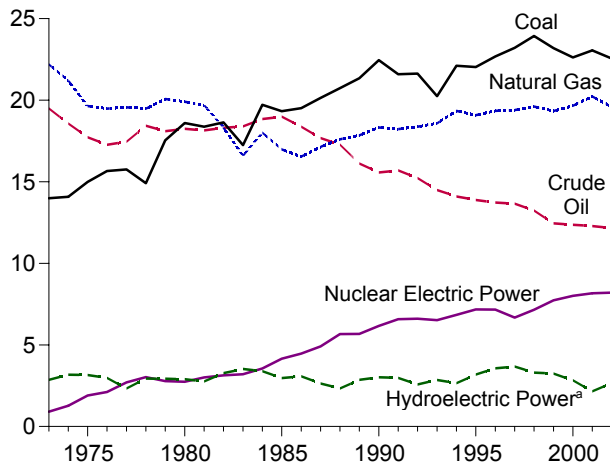
Total, 1973-2002



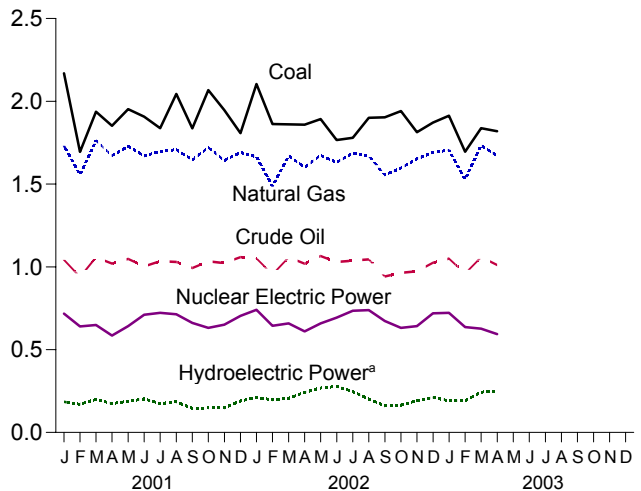
Total, Monthly



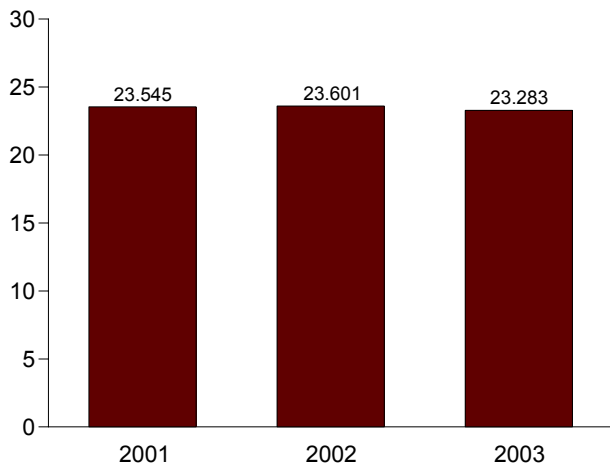
By Major Sources, 1973-2002



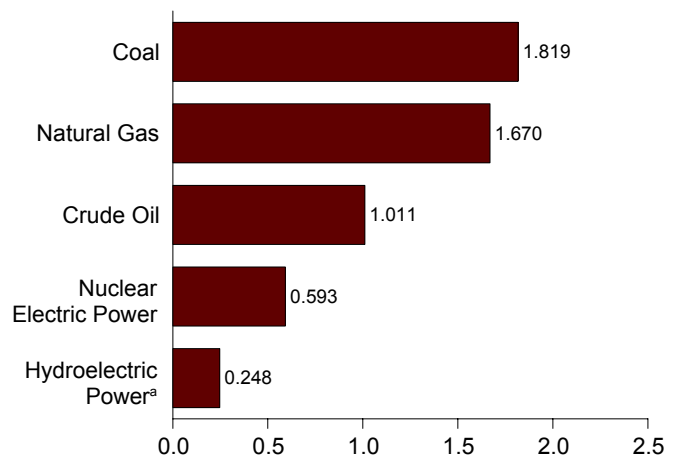
By Major Sources, Monthly



Total, January-April



By Major Sources, April 2003



^aConventional and pumped storage hydroelectric power.
Note: Because vertical scales differ, graphs should not be compared.

Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.
Source: Table 1.2.

Table 1.2 Energy Production by Source
(Quadrillion Btu)

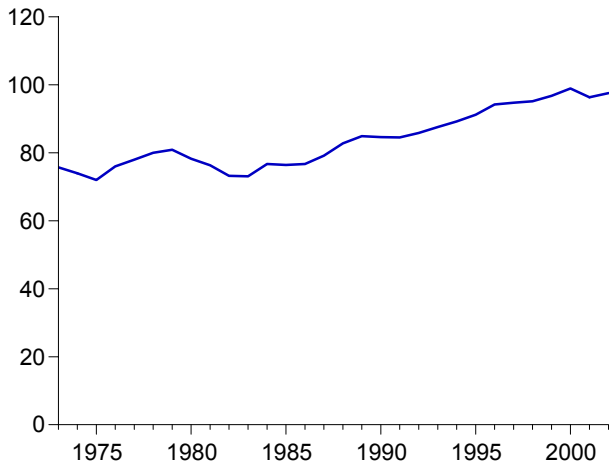
| | Fossil Fuels | | | | | Nuclear Electric Power | Hydro-electric Pumped Storage ^c | Renewable Energy ^a | | | | | Total |
|--------------------|--------------|-------------------|------------------------|---------------------------|---------|------------------------|--|----------------------------------|-----------------------------------|-------------|----------------|--------|---------|
| | Coal | Natural Gas (Dry) | Crude Oil ^b | Natural Gas Plant Liquids | Total | | | Conventional Hydroelectric Power | Wood, Waste, Alcohol ^d | Geo-thermal | Solar and Wind | Total | |
| 1973 Total | 13.992 | 22.187 | 19.493 | 2.569 | 58.241 | 0.910 | (e) | 2.861 | 1.529 | 0.043 | NA | 4.433 | 63.585 |
| 1974 Total | 14.074 | 21.210 | 18.575 | 2.471 | 56.331 | 1.272 | (e) | 3.177 | 1.540 | .053 | NA | 4.769 | 62.372 |
| 1975 Total | 14.989 | 19.640 | 17.729 | 2.374 | 54.733 | 1.900 | (e) | 3.155 | 1.499 | .070 | NA | 4.723 | 61.357 |
| 1976 Total | 15.654 | 19.480 | 17.262 | 2.327 | 54.723 | 2.111 | (e) | 2.976 | 1.713 | .078 | NA | 4.768 | 61.602 |
| 1977 Total | 15.755 | 19.565 | 17.454 | 2.327 | 55.101 | 2.702 | (e) | 2.333 | 1.838 | .077 | NA | 4.249 | 62.052 |
| 1978 Total | 14.910 | 19.485 | 18.434 | 2.245 | 55.074 | 3.024 | (e) | 2.937 | 2.038 | .064 | NA | 5.039 | 63.137 |
| 1979 Total | 17.540 | 20.076 | 18.104 | 2.286 | 58.006 | 2.776 | (e) | 2.931 | 2.152 | .084 | NA | 5.166 | 65.948 |
| 1980 Total | 18.598 | 19.908 | 18.249 | 2.254 | 59.008 | 2.739 | (e) | 2.900 | 2.485 | .110 | NA | 5.494 | 67.241 |
| 1981 Total | 18.377 | 19.699 | 18.146 | 2.307 | 58.529 | 3.008 | (e) | 2.758 | 2.590 | .123 | NA | 5.471 | 67.007 |
| 1982 Total | 18.639 | 18.319 | 18.309 | 2.191 | 57.458 | 3.131 | (e) | 3.266 | 2.615 | .105 | NA | 5.985 | 66.574 |
| 1983 Total | 17.247 | 16.593 | 18.392 | 2.184 | 54.416 | 3.203 | (e) | 3.527 | 2.831 | .129 | (s) | 6.488 | 64.106 |
| 1984 Total | 19.719 | 18.008 | 18.848 | 2.274 | 58.849 | 3.553 | (e) | 3.386 | 2.880 | .165 | (s) | 6.431 | 68.832 |
| 1985 Total | 19.325 | 16.980 | 18.992 | 2.241 | 57.539 | 4.076 | (e) | 2.970 | 2.864 | .198 | (s) | 6.033 | 67.647 |
| 1986 Total | 19.509 | 16.541 | 18.376 | 2.149 | 56.575 | 4.380 | (e) | 3.071 | 2.841 | .219 | (s) | 6.132 | 67.087 |
| 1987 Total | 20.141 | 17.136 | 17.675 | 2.215 | 57.167 | 4.754 | (e) | 2.635 | 2.823 | .229 | (s) | 5.687 | 67.608 |
| 1988 Total | 20.738 | 17.599 | 17.279 | 2.260 | 57.875 | 5.587 | (e) | 2.334 | 2.937 | .217 | (s) | 5.489 | 68.951 |
| 1989 Total | 21.346 | 17.847 | 16.117 | 2.158 | 57.468 | 5.602 | (e) | 2.837 | 3.062 | .317 | .077 | 6.294 | 69.364 |
| 1990 Total | 22.456 | 18.326 | 15.571 | 2.175 | 58.529 | 6.104 | -0.036 | 3.046 | 2.662 | .336 | .089 | 6.133 | 70.729 |
| 1991 Total | 21.594 | 18.229 | 15.701 | 2.306 | 57.829 | 6.422 | -0.047 | 3.016 | 2.702 | .346 | .093 | 6.158 | 70.362 |
| 1992 Total | 21.629 | 18.375 | 15.223 | 2.363 | 57.590 | 6.479 | -0.043 | 2.617 | 2.847 | .349 | .094 | 5.907 | 69.933 |
| 1993 Total | 20.249 | 18.584 | 14.494 | 2.408 | 55.736 | 6.410 | -0.042 | 2.892 | 2.803 | .364 | .097 | 6.156 | 68.260 |
| 1994 Total | 22.111 | 19.348 | 14.103 | 2.391 | 57.952 | 6.694 | -0.035 | 2.683 | 2.939 | .338 | .104 | 6.065 | 70.676 |
| 1995 Total | 22.029 | 19.082 | 13.887 | 2.442 | 57.440 | 7.075 | -0.028 | 3.205 | 3.068 | .294 | .102 | 6.669 | 71.156 |
| 1996 Total | 22.684 | 19.344 | 13.723 | 2.530 | 58.281 | 7.087 | -0.032 | 3.590 | 3.127 | .316 | .104 | 7.137 | 72.472 |
| 1997 Total | 23.211 | 19.394 | 13.658 | 2.495 | 58.758 | 6.597 | -0.041 | 3.640 | 3.006 | .325 | .104 | 7.075 | 72.389 |
| 1998 Total | 23.935 | 19.613 | 13.235 | 2.420 | 59.204 | 7.068 | -0.046 | 3.297 | 2.835 | .328 | .101 | 6.561 | 72.787 |
| 1999 Total | 23.186 | 19.341 | 12.451 | 2.528 | 57.505 | 7.610 | -0.062 | 3.268 | 2.885 | .331 | .115 | 6.599 | 71.652 |
| 2000 Total | 22.623 | 19.662 | 12.358 | 2.611 | 57.254 | 7.862 | -0.057 | 2.811 | 2.907 | .317 | .123 | 6.158 | 71.218 |
| 2001 January | 2.169 | 1.732 | 1.043 | .162 | 5.105 | .717 | -0.006 | .191 | .235 | .028 | .009 | .463 | 6.280 |
| February | 1.695 | 1.557 | .939 | .181 | 4.372 | .640 | -0.007 | .177 | .207 | .024 | .009 | .418 | 5.422 |
| March | 1.937 | 1.762 | 1.057 | .212 | 4.969 | .649 | -0.008 | .208 | .224 | .027 | .011 | .470 | 6.079 |
| April | 1.852 | 1.672 | 1.020 | .205 | 4.749 | .585 | -0.008 | .183 | .218 | .025 | .012 | .438 | 5.764 |
| May | 1.952 | 1.728 | 1.048 | .221 | 4.950 | .642 | -0.006 | .195 | .216 | .024 | .012 | .447 | 6.033 |
| June | 1.908 | 1.670 | 1.003 | .214 | 4.794 | .710 | -0.008 | .210 | .219 | .025 | .013 | .467 | 5.964 |
| July | 1.837 | 1.697 | 1.034 | .220 | 4.788 | .722 | -0.009 | .183 | .226 | .027 | .012 | .449 | 5.950 |
| August | 2.044 | 1.708 | 1.029 | .226 | 5.008 | .714 | -0.007 | .192 | .228 | .026 | .012 | .459 | 6.173 |
| September | 1.837 | 1.646 | .993 | .228 | 4.704 | .662 | -0.009 | .155 | .219 | .026 | .011 | .410 | 5.767 |
| October | 2.068 | 1.721 | 1.033 | .234 | 5.056 | .631 | -0.006 | .155 | .234 | .026 | .011 | .426 | 6.108 |
| November | 1.947 | 1.644 | 1.023 | .224 | 4.838 | .651 | -0.008 | .156 | .222 | .026 | .010 | .415 | 5.896 |
| December | 1.807 | 1.691 | 1.059 | .219 | 4.776 | .704 | -0.006 | .196 | .228 | .027 | .011 | .463 | 5.936 |
| Total | 23.053 | 20.227 | 12.282 | 2.547 | 58.109 | 8.028 | -0.090 | 2.201 | 2.678 | .311 | .134 | 5.324 | 71.372 |
| 2002 January | 2.105 | E 1.665 | 1.051 | .211 | 5.033 | .741 | -0.008 | .219 | .236 | .027 | .013 | .496 | 6.261 |
| February | 1.862 | E 1.487 | .954 | .198 | 4.502 | .644 | -0.006 | .204 | .210 | .024 | .012 | .449 | 5.589 |
| March | 1.860 | E 1.671 | 1.058 | .220 | 4.809 | .658 | -0.007 | .213 | .225 | .026 | .014 | .479 | 5.939 |
| April | 1.859 | E 1.602 | 1.019 | .215 | 4.696 | .610 | -0.006 | .248 | .225 | .024 | .016 | .512 | 5.813 |
| May | 1.893 | E 1.673 | 1.065 | .224 | 4.855 | .658 | -0.006 | .274 | .226 | .026 | .017 | .542 | 6.050 |
| June | 1.766 | E 1.630 | 1.029 | .209 | 4.635 | .693 | -0.009 | .287 | .228 | .024 | .017 | .556 | 5.875 |
| July | 1.779 | E 1.687 | 1.037 | .213 | 4.717 | .735 | -0.010 | .257 | .238 | .026 | .015 | .537 | 5.979 |
| August | 1.900 | E 1.669 | 1.045 | .224 | 4.838 | .739 | -0.009 | .210 | .233 | .026 | .016 | .484 | 6.053 |
| September | 1.904 | E 1.555 | .942 | .212 | 4.613 | .673 | -0.008 | .168 | .230 | .025 | .013 | .437 | 5.715 |
| October | 1.941 | E 1.597 | .964 | .217 | 4.719 | .632 | -0.007 | .171 | .236 | .026 | .013 | .446 | 5.790 |
| November | 1.813 | E 1.653 | .974 | .212 | 4.651 | .642 | -0.007 | .198 | .229 | .025 | .012 | .465 | 5.751 |
| December | 1.871 | E 1.690 | 1.025 | .203 | 4.790 | .720 | -0.007 | .218 | .238 | .026 | .013 | .494 | 5.997 |
| Total | 22.554 | E 19.580 | 12.163 | 2.559 | 56.857 | 8.145 | -0.089 | 2.668 | 2.755 | .304 | .170 | 5.897 | 70.811 |
| 2003 January | 1.913 | RE 1.705 | E 1.050 | .203 | R 4.871 | .723 | -0.008 | .199 | .226 | .026 | .011 | .462 | R 6.048 |
| February | 1.696 | RE 1.530 | E .961 | .189 | R 4.375 | R .636 | R -.008 | R .199 | R .212 | .023 | R .012 | R .446 | R 5.449 |
| March | 1.837 | RF 1.733 | E 1.059 | .200 | R 4.829 | R .626 | R -.008 | R .253 | R .228 | .029 | R .014 | R .524 | R 5.971 |
| April | 1.819 | F 1.670 | E 1.011 | .191 | 4.691 | .593 | -0.006 | .254 | .237 | .030 | .015 | .536 | 5.815 |
| 4-Month Total | 7.264 | E 6.638 | E 4.082 | .783 | 18.766 | 2.579 | -0.030 | .905 | .903 | .109 | .051 | 1.968 | 23.283 |
| 2002 4-Month Total | 7.687 | 6.425 | 4.082 | .845 | 19.039 | 2.653 | -0.027 | .884 | .897 | .101 | .055 | 1.936 | 23.601 |
| 2001 4-Month Total | 7.653 | 6.723 | 4.059 | .760 | 19.195 | 2.591 | -0.029 | .759 | .885 | .104 | .041 | 1.789 | 23.545 |

a End-use consumption and electricity net generation.
b Includes lease condensate.
c Pumped storage facility production minus energy used for pumping.
d Alcohol is ethanol blended into motor gasoline.
e Included in conventional hydroelectric power.
R=Revised. E=Estimate. NA=Not available. (s)=Less than +0.5 trillion Btu and greater than -0.5 trillion Btu. F=Forecast.
Notes: • See Note 1 at end of section. • Totals may not equal sum of

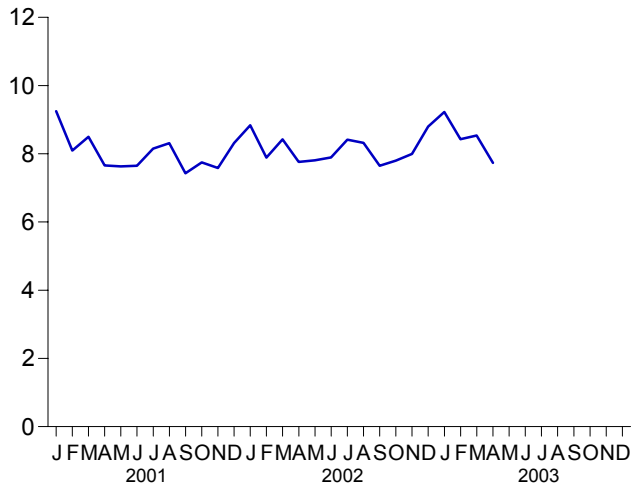
components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.
Sources: • Coal: Tables 6.1 and A5. • Natural Gas (Dry): Tables 4.1 and A4. • Crude Oil and Natural Gas Plant Liquids: Tables 3.1a and A2. • Nuclear Electric Power: Tables 8.1 and A6. • Hydroelectric Pumped Storage: Tables 7.2a and A6. • Renewable Energy: Table 10.1.

Figure 1.3 Energy Consumption
(Quadrillion Btu)

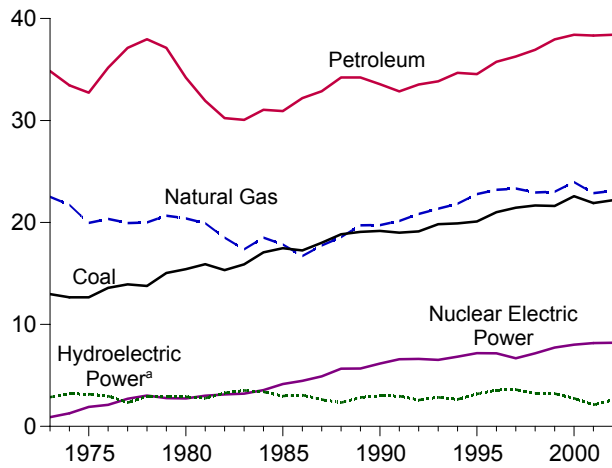
Total, 1973-2002



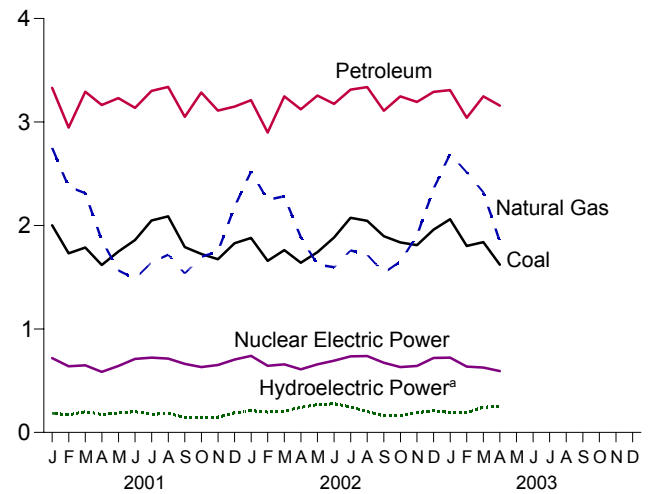
Total, Monthly



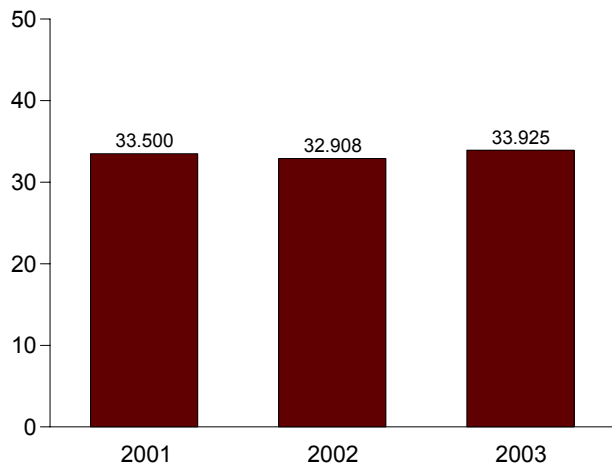
By Major Sources, 1973-2002



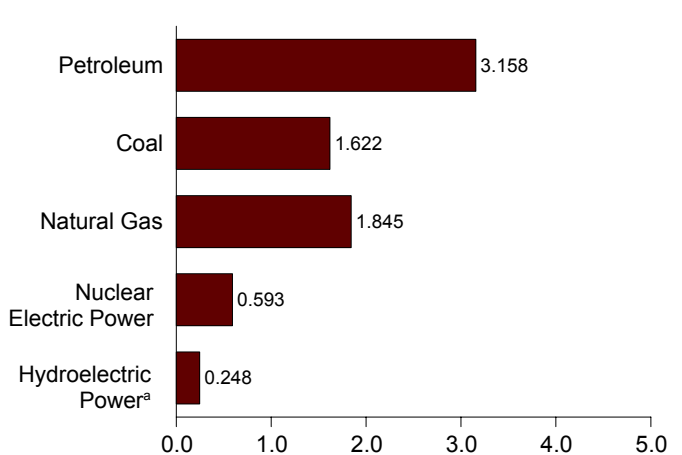
By Major Sources, Monthly



Total, January-April



By Major Sources, April 2003



^aConventional and pumped storage hydroelectric power.
Note: Because vertical scales differ, graphs should not be compared.

Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.
Source: Table 1.3.

Table 1.3 Energy Consumption by Source
(Quadrillion Btu)

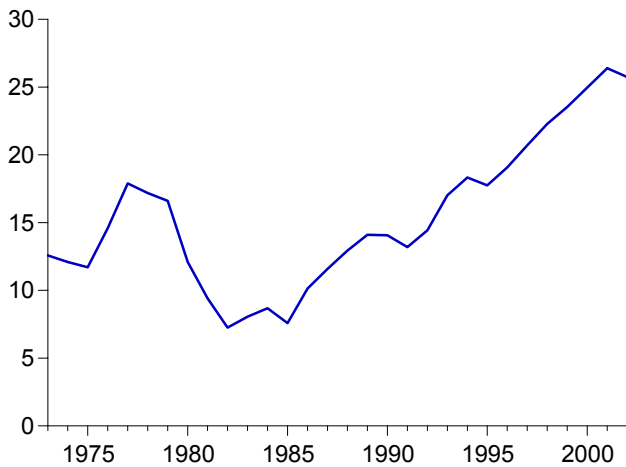
| | Fossil Fuels | | | | Nuclear Electric Power | Hydro-electric Pumped Storage ^e | Renewable Energy ^a | | | | | Total ^{f,g} |
|--------------------|--------------|--------------------------|-------------------------|--------------------|------------------------|--|----------------------------------|-----------------------------------|-------------|----------------|--------|----------------------|
| | Coal | Natural Gas ^b | Petro-leum ^c | Total ^d | | | Conventional Hydroelectric Power | Wood, Waste, Alcohol ^f | Geo-thermal | Solar and Wind | Total | |
| 1973 Total | 12.971 | 22.512 | 34.840 | 70.316 | 0.910 | (h) | 2.861 | 1.529 | 0.043 | NA | 4.433 | 75.708 |
| 1974 Total | 12.663 | 21.732 | 33.455 | 67.906 | 1.272 | (h) | 3.177 | 1.540 | .053 | NA | 4.769 | 73.991 |
| 1975 Total | 12.663 | 19.948 | 32.731 | 65.355 | 1.900 | (h) | 3.155 | 1.499 | .070 | NA | 4.723 | 71.999 |
| 1976 Total | 13.584 | 20.345 | 35.175 | 69.104 | 2.111 | (h) | 2.976 | 1.713 | .078 | NA | 4.768 | 76.012 |
| 1977 Total | 13.922 | 19.931 | 37.122 | 70.989 | 2.702 | (h) | 2.333 | 1.838 | .077 | NA | 4.249 | 78.000 |
| 1978 Total | 13.766 | 20.000 | 37.965 | 71.856 | 3.024 | (h) | 2.937 | 2.038 | .064 | NA | 5.039 | 79.986 |
| 1979 Total | 15.040 | 20.666 | 37.123 | 72.892 | 2.776 | (h) | 2.931 | 2.152 | .084 | NA | 5.166 | 80.903 |
| 1980 Total | 15.423 | 20.394 | 34.202 | 69.984 | 2.739 | (h) | 2.900 | 2.485 | .110 | NA | 5.494 | 78.289 |
| 1981 Total | 15.908 | 19.928 | 31.931 | 67.750 | 3.008 | (h) | 2.758 | 2.590 | .123 | NA | 5.471 | 76.335 |
| 1982 Total | 15.322 | 18.505 | 30.231 | 64.036 | 3.131 | (h) | 3.266 | 2.615 | .105 | NA | 5.985 | 73.234 |
| 1983 Total | 15.894 | 17.357 | 30.054 | 63.290 | 3.203 | (h) | 3.527 | 2.831 | .129 | (s) | 6.488 | 73.066 |
| 1984 Total | 17.071 | 18.507 | 31.051 | 66.617 | 3.553 | (h) | 3.386 | 2.880 | .165 | (s) | 6.431 | 76.693 |
| 1985 Total | 17.478 | 17.834 | 30.922 | 66.221 | 4.076 | (h) | 2.970 | 2.864 | .198 | (s) | 6.033 | 76.417 |
| 1986 Total | 17.260 | 16.708 | 32.196 | 66.148 | 4.380 | (h) | 3.071 | 2.841 | .219 | (s) | 6.132 | 76.722 |
| 1987 Total | 18.008 | 17.744 | 32.865 | 68.626 | 4.754 | (h) | 2.635 | 2.823 | .229 | (s) | 5.687 | 79.156 |
| 1988 Total | 18.846 | 18.552 | 34.222 | 71.660 | 5.587 | (h) | 2.334 | 2.937 | .217 | (s) | 5.489 | 82.774 |
| 1989 Total | 19.070 | 19.712 | 34.211 | 73.023 | 5.602 | (h) | 2.837 | 3.062 | .317 | .077 | 6.294 | 84.886 |
| 1990 Total | 19.173 | 19.730 | 33.553 | 72.460 | 6.104 | -0.036 | 3.046 | 2.662 | .336 | .089 | 6.133 | 84.605 |
| 1991 Total | 18.992 | 20.149 | 32.845 | 71.996 | 6.422 | -0.047 | 3.016 | 2.702 | .346 | .093 | 6.158 | 84.522 |
| 1992 Total | 19.122 | 20.835 | 33.527 | 73.519 | 6.479 | -0.043 | 2.617 | 2.847 | .349 | .094 | 5.907 | 85.866 |
| 1993 Total | 19.835 | 21.351 | 33.841 | 75.055 | 6.410 | -0.042 | 2.892 | 2.803 | .364 | .097 | 6.156 | 87.578 |
| 1994 Total | 19.909 | 21.842 | 34.670 | 76.480 | 6.694 | -0.035 | 2.683 | 2.939 | .338 | .104 | 6.065 | 89.248 |
| 1995 Total | 20.089 | 22.784 | 34.553 | 77.488 | 7.075 | -0.028 | 3.205 | 3.068 | .294 | .102 | 6.669 | 91.221 |
| 1996 Total | 21.002 | 23.197 | 35.757 | 79.979 | 7.087 | -0.032 | 3.590 | 3.127 | .316 | .104 | 7.137 | 94.224 |
| 1997 Total | 21.445 | 23.328 | 36.266 | 81.086 | 6.597 | -0.041 | 3.640 | 3.006 | .325 | .104 | 7.075 | 94.727 |
| 1998 Total | 21.656 | 22.936 | 36.934 | 81.592 | 7.068 | -0.046 | 3.297 | 2.835 | .328 | .101 | 6.561 | 95.146 |
| 1999 Total | 21.623 | 23.010 | 37.960 | 82.650 | 7.610 | -0.062 | 3.268 | 2.885 | .331 | .115 | 6.599 | 96.774 |
| 2000 Total | 22.580 | 23.952 | 38.404 | 85.001 | 7.862 | -0.057 | 2.811 | 2.907 | .317 | .123 | 6.158 | 98.942 |
| 2001 January | 2.001 | 2.751 | 3.329 | 8.084 | .717 | -0.006 | .191 | .235 | .028 | .009 | .463 | 9.251 |
| February | 1.730 | 2.374 | 2.947 | 7.054 | .640 | -0.007 | .177 | .207 | .024 | .009 | .418 | 8.093 |
| March | 1.787 | 2.313 | 3.293 | 7.395 | .649 | -0.008 | .208 | .224 | .027 | .011 | .470 | 8.499 |
| April | 1.619 | 1.857 | 3.164 | 6.645 | .585 | -0.008 | .183 | .218 | .025 | .012 | .438 | 7.657 |
| May | 1.748 | 1.566 | 3.231 | 6.549 | .642 | -0.006 | .195 | .216 | .024 | .012 | .447 | 7.631 |
| June | 1.859 | 1.486 | 3.137 | 6.485 | .710 | -0.008 | .210 | .219 | .025 | .013 | .467 | 7.651 |
| July | 2.048 | 1.643 | 3.301 | 6.992 | .722 | -0.009 | .183 | .226 | .027 | .012 | .449 | 8.151 |
| August | 2.088 | 1.717 | 3.339 | 7.148 | .714 | -0.007 | .192 | .228 | .026 | .012 | .459 | 8.313 |
| September | 1.791 | 1.536 | 3.049 | 6.376 | .662 | -0.009 | .155 | .219 | .026 | .011 | .410 | 7.428 |
| October | 1.725 | 1.698 | 3.285 | 6.711 | .631 | -0.006 | .155 | .234 | .026 | .011 | .426 | 7.750 |
| November | 1.673 | 1.748 | 3.110 | 6.534 | .651 | -0.008 | .156 | .222 | .026 | .010 | .415 | 7.583 |
| December | 1.828 | 2.182 | 3.149 | 7.159 | .704 | -0.006 | .196 | .228 | .027 | .011 | .463 | 8.316 |
| Total | 21.897 | 22.869 | 38.333 | 83.131 | 8.028 | -0.090 | 2.201 | 2.678 | .311 | .134 | 5.324 | 96.322 |
| 2002 January | 1.880 | R 2.521 | 3.211 | R 7.610 | .741 | -0.008 | .219 | .236 | .027 | .013 | .496 | R 8.835 |
| February | 1.658 | R 2.248 | 2.899 | R 6.807 | .644 | -0.006 | .204 | .210 | .024 | .012 | .449 | R 7.889 |
| March | 1.762 | R 2.281 | 3.247 | R 7.299 | .658 | -0.007 | .213 | .225 | .026 | .014 | .479 | R 8.423 |
| April | 1.639 | R 1.887 | 3.123 | R 6.650 | .610 | -0.006 | .248 | .225 | .024 | .016 | .512 | R 7.761 |
| May | 1.742 | R 1.623 | 3.256 | R 6.625 | .658 | -0.006 | .274 | .226 | .026 | .017 | .542 | R 7.809 |
| June | 1.885 | R 1.597 | 3.174 | R 6.658 | .693 | -0.009 | .287 | .228 | .024 | .017 | .556 | R 7.893 |
| July | 2.074 | R 1.759 | 3.313 | R 7.155 | .735 | -0.010 | .257 | .238 | .026 | .015 | .537 | R 8.415 |
| August | 2.046 | R 1.717 | 3.337 | R 7.108 | .739 | -0.009 | .210 | .233 | .026 | .016 | .484 | R 8.318 |
| September | 1.896 | 1.542 | 3.108 | R 6.556 | .673 | -0.008 | .168 | .230 | .025 | .013 | .437 | 7.649 |
| October | 1.836 | 1.652 | 3.248 | 6.742 | .632 | -0.007 | .171 | .236 | .026 | .013 | .446 | 7.800 |
| November | 1.809 | R 1.903 | 3.193 | R 6.914 | .642 | -0.007 | .198 | .229 | .025 | .012 | .465 | R 7.998 |
| December | 1.959 | 2.354 | 3.292 | 7.608 | .720 | -0.007 | .218 | .238 | .026 | .013 | .494 | R 8.799 |
| Total | 22.184 | R 23.084 | 38.401 | R 83.732 | 8.145 | -0.089 | 2.668 | 2.755 | .304 | .170 | 5.897 | R 97.590 |
| 2003 January | 2.060 | R 2.693 | 3.308 | R 8.061 | .723 | -0.008 | .199 | .226 | .026 | .011 | .462 | R 9.226 |
| February | R 1.803 | R 2.513 | 3.041 | R 7.370 | R .636 | R -.008 | R .199 | R .212 | .023 | R .012 | R .446 | R 8.430 |
| March | 1.839 | RF 2.320 | 3.248 | R 7.411 | R .626 | R -.008 | R .253 | R .228 | .029 | R .014 | R .524 | R 8.535 |
| April | 1.622 | F 1.845 | 3.158 | 6.628 | .593 | -0.006 | .254 | .237 | .030 | .015 | .536 | 7.734 |
| 4-Month Total | 7.323 | E 9.371 | 12.754 | 29.471 | 2.579 | -0.030 | .905 | .903 | .109 | .051 | 1.968 | 33.925 |
| 2002 4-Month Total | 6.939 | 8.938 | 12.479 | 28.366 | 2.653 | -0.027 | .884 | .897 | .101 | .055 | 1.936 | 32.908 |
| 2001 4-Month Total | 7.137 | 9.294 | 12.733 | 29.178 | 2.591 | -0.029 | .759 | .885 | .104 | .041 | 1.789 | 33.500 |

^a End-use consumption and electricity net generation.
^b Includes supplemental gaseous fuels.
^c Petroleum products supplied, including natural gas plant liquids and crude oil burned as fuel.
^d Includes coal coke net imports. See Table 1.4.
^e Pumped storage facility production minus energy used for pumping.
^f Alcohol (ethanol blended into motor gasoline) is included in both "Petroleum" and "Alcohol," but is counted only once in total energy consumption. See Table 10.1.
^g Includes coal coke net imports and electricity net imports, which are not separately displayed. See Table 1.4.

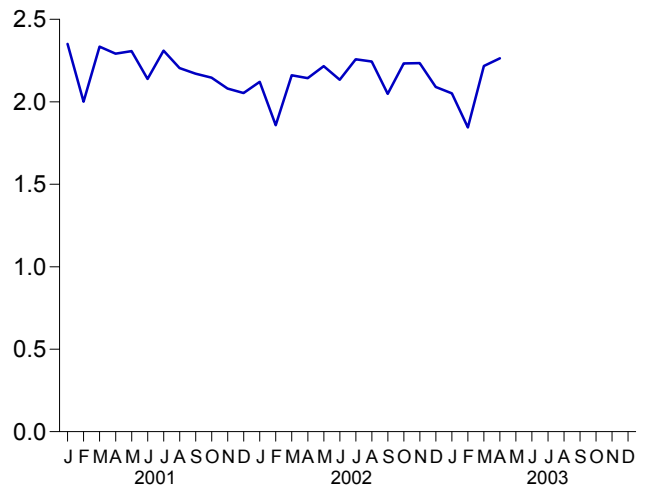
^h Included in conventional hydroelectric power.
R=Revised. E=Estimate. NA=Not available. F=Forecast. (s)=Less than +0.5 trillion Btu and greater than -0.5 trillion Btu.
Notes: • See Note 2 at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.
Sources: • Coal: Tables 6.1 and A5. • Natural Gas: Tables 4.1 and A4. • Petroleum: Tables 3.1a and A3. • Nuclear Electric Power: Tables 8.1 and A6. • Hydroelectric Pumped Storage: Tables 7.2a and A6. • Renewable Energy: Table 10.1. • Net Imports of Coal Coke and Electricity: Table 1.4.

Figure 1.4 Energy Net Imports
(Quadrillion Btu, Except as noted)

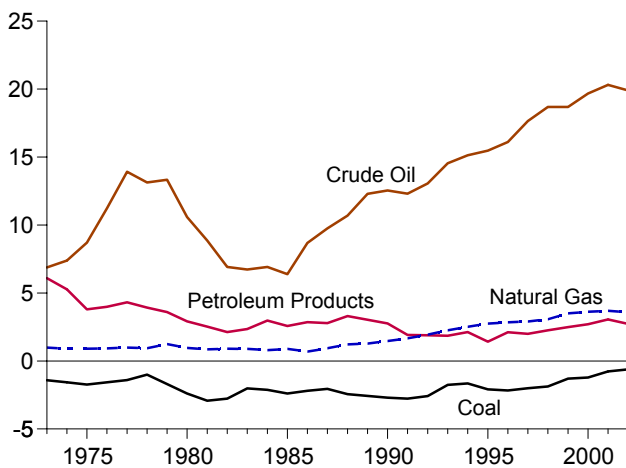
Total, 1973-2002



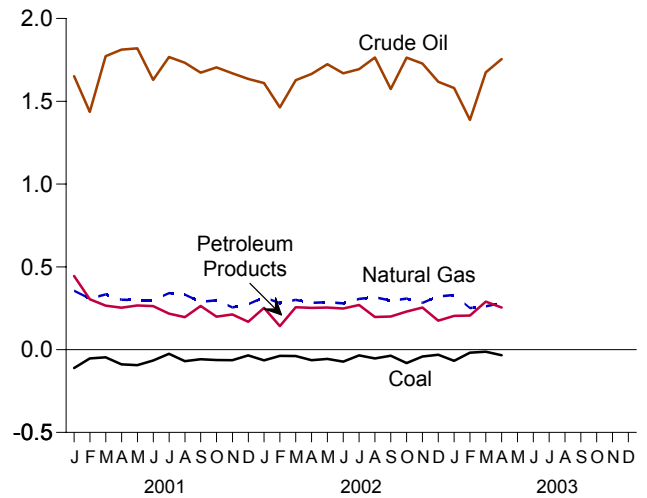
Total, Monthly



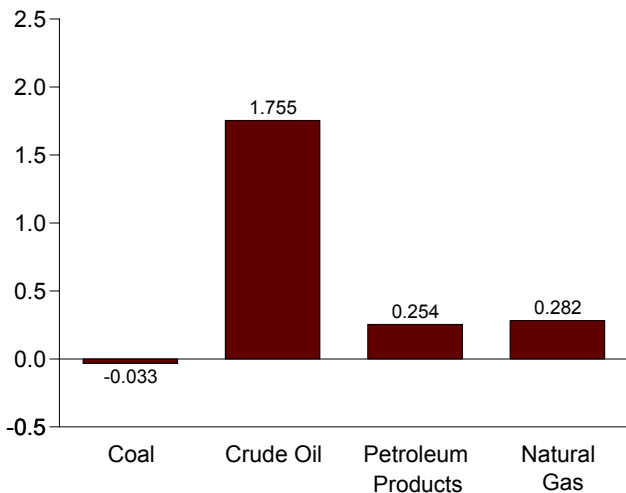
By Major Sources, 1973-2002



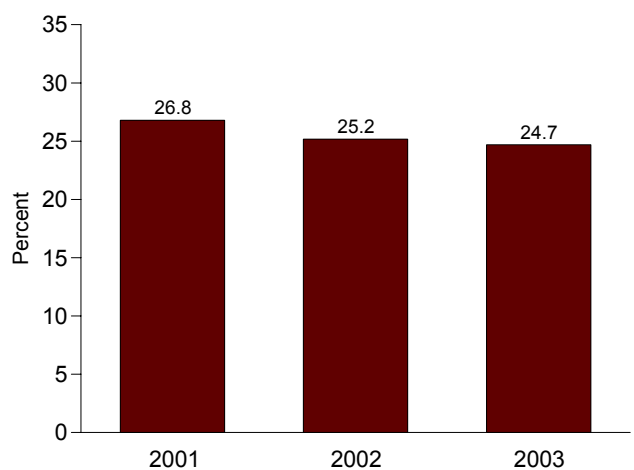
By Major Sources, Monthly



By Major Sources, April 2003



As Share of Consumption, January-April



Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>
Sources: Tables 1.3 and 1.4.

Table 1.4 Energy Net Imports by Source
(Quadrillion Btu)

| | Coal | Coal Coke | Natural Gas | Crude Oil ^a | Petroleum Products ^b | Electricity | Total |
|---------------------------------|--------------|--------------|----------------|---------------------------|------------------------------------|---------------|---------------|
| 1973 Total | -1.422 | -0.007 | 0.981 | 6.883 | 6.097 | 0.049 | 12.580 |
| 1974 Total | -1.568 | .056 | .907 | 7.389 | 5.273 | .043 | 12.101 |
| 1975 Total | -1.738 | .014 | .904 | 8.708 | 3.800 | .021 | 11.709 |
| 1976 Total | -1.567 | (s) | .922 | 11.221 | 3.982 | .029 | 14.588 |
| 1977 Total | -1.401 | .015 | .981 | 13.921 | 4.321 | .059 | 17.896 |
| 1978 Total | -1.004 | .125 | .941 | 13.125 | 3.932 | .067 | 17.186 |
| 1979 Total | -1.702 | .063 | 1.243 | 13.328 | 3.603 | .069 | 16.605 |
| 1980 Total | -2.391 | -.035 | .957 | 10.586 | 2.912 | .071 | 12.101 |
| 1981 Total | -2.918 | -.016 | .857 | 8.854 | 2.522 | .113 | 9.412 |
| 1982 Total | -2.768 | -.022 | .898 | 6.917 | 2.128 | .100 | 7.253 |
| 1983 Total | -2.013 | -.016 | .885 | 6.731 | 2.351 | .121 | 8.059 |
| 1984 Total | -2.119 | -.011 | .792 | 6.918 | 2.970 | .135 | 8.685 |
| 1985 Total | -2.389 | -.013 | .896 | 6.381 | 2.570 | .140 | 7.584 |
| 1986 Total | -2.193 | -.017 | .686 | 8.676 | 2.855 | .122 | 10.130 |
| 1987 Total | -2.049 | .009 | .937 | 9.748 | 2.784 | .158 | 11.586 |
| 1988 Total | -2.446 | .040 | 1.221 | 10.698 | 3.308 | .108 | 12.929 |
| 1989 Total | -2.566 | .030 | 1.278 | 12.296 | 3.029 | .037 | 14.105 |
| 1990 Total | -2.705 | .005 | 1.464 | 12.536 | 2.757 | .008 | 14.065 |
| 1991 Total | -2.769 | .010 | 1.666 | 12.308 | 1.912 | .067 | 13.194 |
| 1992 Total | -2.587 | .035 | 1.941 | 13.065 | 1.895 | .087 | 14.435 |
| 1993 Total | -1.758 | .027 | 2.255 | 14.542 | 1.854 | .095 | 17.014 |
| 1994 Total | -1.657 | .058 | 2.518 | 15.131 | 2.126 | .153 | 18.329 |
| 1995 Total | -2.081 | .061 | 2.745 | 15.469 | 1.422 | .134 | 17.750 |
| 1996 Total | -2.165 | .023 | 2.847 | 16.108 | 2.119 | .137 | 19.069 |
| 1997 Total | -2.006 | .046 | 2.904 | 17.648 | 1.993 | .116 | 20.701 |
| 1998 Total | -1.874 | .067 | 3.064 | 18.684 | 2.252 | .088 | 22.281 |
| 1999 Total | -1.298 | .058 | 3.500 | 18.686 | 2.493 | .099 | 23.537 |
| 2000 Total | -1.215 | .065 | 3.623 | 19.676 | 2.701 | .116 | 24.968 |
| 2001 January | -.111 | .003 | .356 | 1.652 | .444 | E .006 | 2.351 |
| February | -.053 | .002 | .309 | 1.437 | .305 | E .002 | 2.001 |
| March | -.047 | .003 | .334 | 1.772 | .266 | E .006 | 2.334 |
| April | -.089 | .005 | .302 | 1.812 | .253 | E .008 | 2.292 |
| May | -.093 | .004 | .300 | 1.820 | .267 | E .010 | 2.307 |
| June | -.066 | .003 | .300 | 1.630 | .263 | E .008 | 2.138 |
| July | -.025 | (s) | .341 | 1.768 | .218 | E .008 | 2.310 |
| August | -.069 | .004 | .332 | 1.733 | .196 | E .009 | 2.205 |
| September | -.058 | .001 | .288 | 1.673 | .264 | E .002 | 2.170 |
| October | -.063 | .004 | .299 | 1.704 | .199 | E .003 | 2.146 |
| November | -.063 | .002 | .255 | 1.669 | .213 | E .004 | 2.080 |
| December | -.035 | .001 | .275 | 1.635 | .168 | E .009 | 2.053 |
| Total | -.771 | .032 | 3.691 | 20.305 | 3.056 | .075 | 26.388 |
| 2002 January | -.065 | -.001 | .316 | 1.610 | .252 | E .009 | 2.121 |
| February | -.038 | .003 | .282 | 1.463 | .142 | E .007 | 1.858 |
| March | -.038 | .008 | .301 | 1.627 | .256 | E .006 | 2.161 |
| April | -.063 | .001 | .282 | 1.665 | .253 | E .006 | 2.143 |
| May | -.056 | .005 | .286 | 1.724 | .254 | E .003 | 2.216 |
| June | -.072 | .003 | .279 | 1.669 | .248 | E .007 | 2.134 |
| July | -.035 | .009 | .306 | 1.694 | .270 | E .013 | 2.258 |
| August | -.053 | .008 | .317 | 1.765 | .197 | E .011 | 2.244 |
| September | -.037 | .009 | .296 | 1.575 | .200 | E .006 | 2.049 |
| October | -.081 | .006 | .308 | 1.764 | .230 | E .005 | 2.233 |
| November | -.042 | .008 | .282 | 1.728 | .254 | E .004 | 2.235 |
| December | -.031 | .003 | .322 | 1.618 | .175 | E .002 | 2.090 |
| Total | -.610 | .062 | 3.578 | 19.901 | 2.732 | .078 | 25.741 |
| 2003 January | -.068 | (s) | .330 | 1.580 | .204 | E .005 | 2.052 |
| February | -.018 | .014 | .251 | 1.387 | .206 | E .004 | 1.844 |
| March | -.012 | .004 | RE .262 | 1.674 | .290 | E .001 | R 2.217 |
| April | -.033 | .004 | F .282 | 1.755 | .254 | E .003 | 2.264 |
| 4-Month Total | -.131 | .021 | E 1.125 | 6.397 | .954 | E .011 | 8.377 |
| 2002 4-Month Total | -.204 | .011 | 1.181 | 6.365 | .903 | .028 | 8.283 |
| 2001 4-Month Total | -.299 | .013 | 1.300 | 6.672 | 1.269 | .022 | 8.978 |

^a Crude oil and lease condensate. Includes imports into the Strategic Petroleum Reserve, which began in 1977.

^b Petroleum products, unfinished oils, pentanes plus, and gasoline blending components.

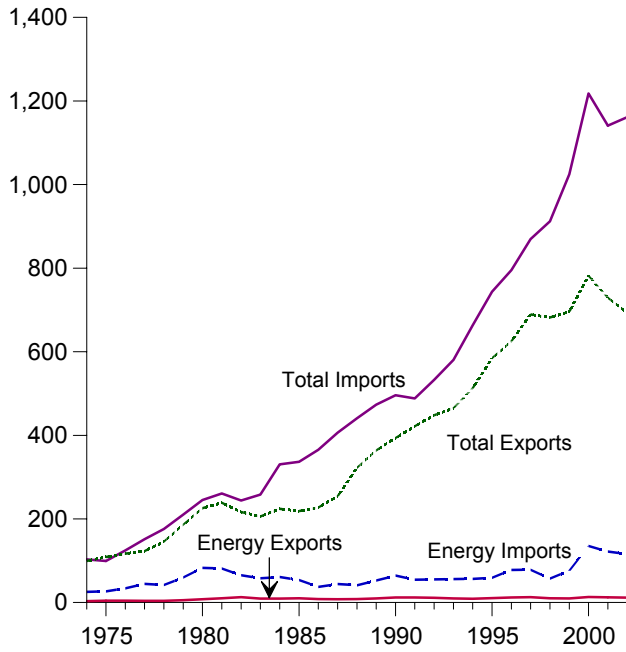
R=Revised. E=Estimate. F=Forecast. (s)=Less than +0.5 trillion Btu and greater than -0.5 trillion Btu.

Notes: • See Notes 3 and 4 at end of section. • Net imports equal imports minus exports. Minus sign indicates exports are greater than imports.

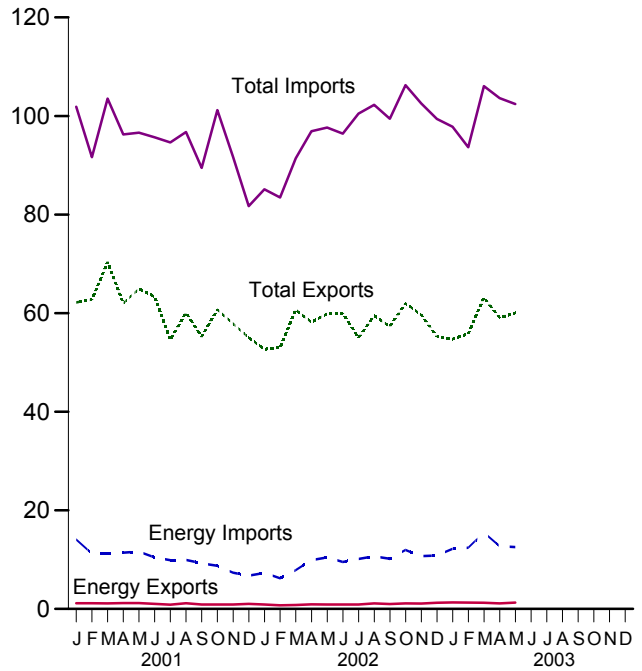
- Totals may not equal sum of components due to independent rounding.
- Geographic coverage is the 50 States and the District of Columbia.
Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.
- Sources: • **Coal:** Tables 6.1 and A5. • **Coal Coke:** Section 2, "Energy Consumption Notes and Sources," Note 5, and Table A5. • **Natural Gas:** Tables 4.1 and A4. • **Crude Oil and Petroleum Products:** Tables 3.1b, A2, and A3. • **Electricity:** Tables 7.1 and A6.

Figure 1.5 Merchandise Trade Value
(Billion Dollars)

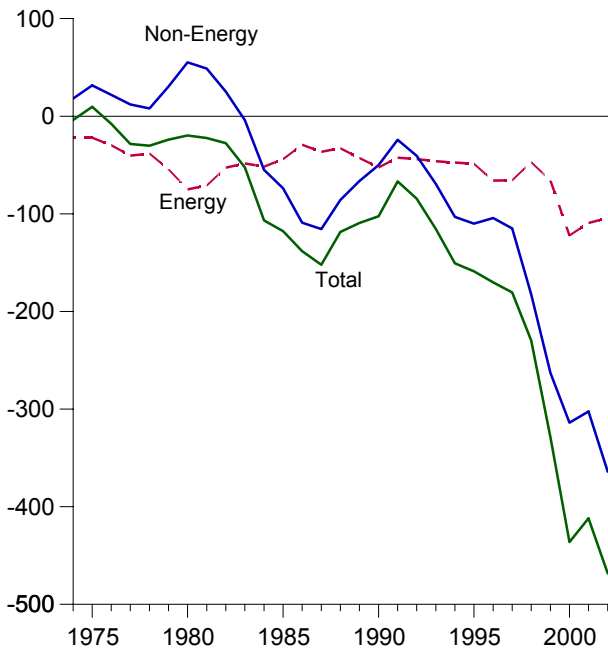
Imports and Exports, 1974-2002



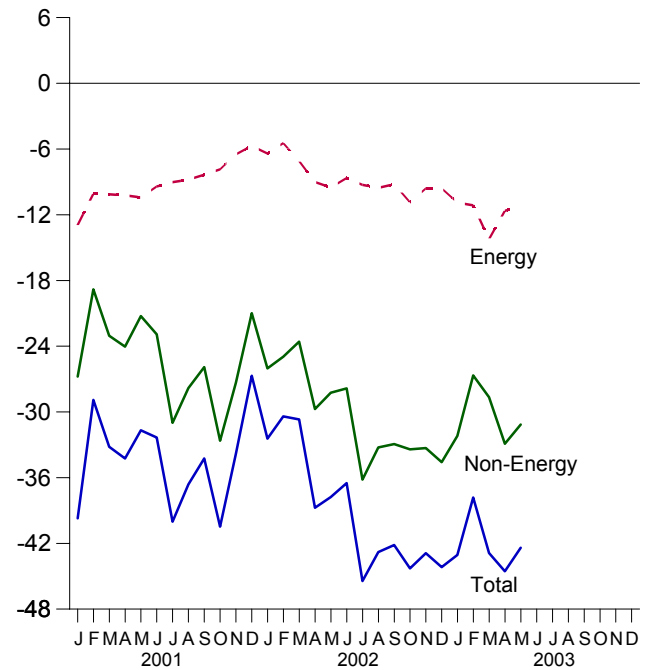
Imports and Exports, Monthly



Trade Balance, 1974-2002



Trade Balance, Monthly



Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.
Source: Table 1.5.

Table 1.5 Merchandise Trade Value
(Million Dollars)

| | Petroleum ^a | | | Energy ^b | | | Non-Energy Balance | Total Merchandise | | |
|----------------------|------------------------|------------------|------------------|---------------------|------------------|-------------------|--------------------|-------------------|--------------------|-------------------|
| | Exports | Imports | Balance | Exports | Imports | Balance | | Exports | Imports | Balance |
| 1974 Total | 792 | 24,668 | -23,876 | 3,444 | 25,454 | -22,010 | 18,126 | 99,437 | 103,321 | -3,884 |
| 1975 Total | 907 | 25,197 | -24,289 | 4,470 | 26,476 | -22,006 | 31,557 | 108,856 | 99,305 | 9,551 |
| 1976 Total | 998 | 32,226 | -31,228 | 4,226 | 33,996 | -29,770 | 21,950 | 116,794 | 124,614 | -7,820 |
| 1977 Total | 1,276 | 42,368 | -41,093 | 4,184 | 44,537 | -40,354 | 12,001 | 123,182 | 151,534 | -28,353 |
| 1978 Total | 1,561 | 39,526 | -37,965 | 3,881 | 42,096 | -38,215 | 8,010 | 145,847 | 176,052 | -30,205 |
| 1979 Total | 1,914 | 56,715 | -54,801 | 5,621 | 59,998 | -54,377 | 30,455 | 186,363 | 210,285 | -23,922 |
| 1980 Total | 2,833 | 78,637 | -75,803 | 7,982 | 82,924 | -74,942 | 55,246 | 225,566 | 245,262 | -19,696 |
| 1981 Total | 3,696 | 76,659 | -72,963 | 10,279 | 81,360 | -71,081 | 48,814 | 238,715 | 260,982 | -22,267 |
| 1982 Total | 5,947 | 60,458 | -54,511 | 12,729 | 65,409 | -52,680 | 25,170 | 216,442 | 243,952 | -27,510 |
| 1983 Total | 4,557 | 53,217 | -48,659 | 9,500 | 57,952 | -48,452 | -3,957 | 205,639 | 258,048 | -52,409 |
| 1984 Total | 4,470 | 56,924 | -52,454 | 9,311 | 60,980 | -51,669 | -55,033 | 223,976 | 330,678 | -106,703 |
| 1985 Total | 4,707 | 50,475 | -45,768 | 9,971 | 53,917 | -43,946 | -73,765 | 218,815 | 336,526 | -117,712 |
| 1986 Total | 3,640 | 35,142 | -31,503 | 8,115 | 37,310 | -29,195 | -109,084 | 227,159 | 365,438 | -138,279 |
| 1987 Total | 3,922 | 42,285 | -38,363 | 7,713 | 44,220 | -36,506 | -115,613 | 254,122 | 406,241 | -152,119 |
| 1988 Total | 3,693 | 38,787 | -35,094 | 8,235 | 41,042 | -32,806 | -85,720 | 322,426 | 440,952 | -118,526 |
| 1989 Total | 5,021 | 49,704 | -44,683 | 9,869 | 52,779 | -42,910 | -66,490 | 363,812 | 473,211 | -109,399 |
| 1990 Total | 6,901 | 61,583 | -54,682 | 12,233 | 64,661 | -52,428 | -50,068 | 393,592 | 496,088 | -102,496 |
| 1991 Total | 6,954 | 51,350 | -44,396 | 12,081 | 54,629 | -42,548 | -24,175 | 421,730 | 488,453 | -66,723 |
| 1992 Total | 6,412 | 51,217 | -44,805 | 11,254 | 55,256 | -44,002 | -40,500 | 448,164 | 532,665 | -84,501 |
| 1993 Total | 6,215 | 51,046 | -44,831 | 9,756 | 55,900 | -46,144 | -69,425 | 465,091 | 580,659 | -115,568 |
| 1994 Total | 5,659 | 50,835 | -45,176 | 8,911 | 56,391 | -47,480 | -103,149 | 512,626 | 663,256 | -150,629 |
| 1995 Total | 6,321 | 54,368 | -48,047 | 10,358 | 59,109 | -48,751 | -110,050 | 584,742 | 743,543 | -158,801 |
| 1996 Total | 7,984 | 72,022 | -64,038 | 12,181 | 78,086 | -65,905 | -104,309 | 625,075 | 795,289 | -170,214 |
| 1997 Total | 8,592 | 71,152 | -62,560 | 12,682 | 78,277 | -65,595 | -114,927 | 689,182 | 869,704 | -180,522 |
| 1998 Total | 6,574 | 50,264 | -43,690 | 10,251 | 57,323 | -47,072 | -182,686 | 682,138 | 911,896 | -229,758 |
| 1999 Total | 7,118 | 67,173 | -60,055 | 9,880 | 75,803 | -65,923 | -262,898 | 695,797 | 1,024,618 | -328,821 |
| 2000 Total | 10,192 | 119,251 | -109,059 | 13,179 | 135,367 | -122,188 | -313,916 | 781,918 | 1,218,022 | -436,104 |
| 2001 January | 804 | 10,538 | -9,734 | 1,148 | 14,087 | -12,939 | -26,769 | 62,161 | 101,869 | -39,708 |
| February | 690 | 8,856 | -8,166 | 1,141 | 11,226 | -10,085 | -18,811 | 62,743 | 91,639 | -28,896 |
| March | 757 | 9,226 | -8,469 | 1,129 | 11,256 | -10,127 | -23,052 | 70,358 | 103,536 | -33,179 |
| April | 774 | 9,430 | -8,656 | 1,179 | 11,398 | -10,219 | -24,031 | 62,015 | 96,265 | -34,250 |
| May | 805 | 9,727 | -8,922 | 1,189 | 11,617 | -10,428 | -21,246 | 64,931 | 96,605 | -31,674 |
| June | 749 | 9,096 | -8,347 | 1,009 | 10,425 | -9,416 | -22,914 | 63,333 | 95,663 | -32,330 |
| July | 663 | 8,621 | -7,958 | 867 | 9,893 | -9,026 | -30,989 | 54,611 | 94,625 | -40,015 |
| August | 864 | 8,672 | -7,808 | 1,162 | 9,956 | -8,794 | -27,822 | 60,111 | 96,728 | -36,616 |
| September | 619 | 8,348 | -7,729 | 883 | 9,227 | -8,344 | -25,908 | 55,232 | 89,484 | -34,252 |
| October | 669 | 7,992 | -7,323 | 891 | 8,745 | -7,854 | -32,621 | 60,701 | 101,177 | -40,475 |
| November | 638 | 6,429 | -5,791 | 878 | 7,364 | -6,486 | -27,319 | 57,900 | 91,705 | -33,805 |
| December | 838 | 5,807 | -4,969 | 1,017 | 6,728 | -5,711 | -20,989 | 55,003 | 81,703 | -26,700 |
| Total | 8,868 | 102,747 | -93,879 | 12,494 | 121,923 | -109,429 | -302,470 | 729,100 | 1,140,999 | -411,899 |
| 2002 January | R 639 | R 6,348 | R -5,709 | R 908 | R 7,321 | R -6,413 | R -26,031 | R 52,667 | R 85,111 | R -32,444 |
| February | R 597 | R 5,427 | R -4,830 | R 744 | R 6,200 | R -5,456 | R -24,955 | R 53,061 | R 83,473 | R -30,411 |
| March | R 593 | R 6,914 | R -6,321 | R 782 | R 7,878 | R -7,096 | R -23,591 | R 60,728 | R 91,415 | R -30,687 |
| April | R 676 | R 8,907 | R -8,231 | R 910 | R 9,917 | R -9,007 | R -29,738 | R 58,146 | R 96,891 | R -38,745 |
| May | R 664 | R 9,365 | R -8,701 | R 903 | R 10,423 | R -9,520 | R -28,245 | R 59,884 | R 97,649 | R -37,765 |
| June | R 603 | R 8,465 | R -7,862 | R 883 | R 9,522 | R -8,639 | R -27,856 | R 59,920 | R 96,415 | R -36,495 |
| July | R 664 | R 9,086 | R -8,422 | R 883 | R 10,153 | R -9,270 | R -36,170 | R 55,032 | R 100,472 | R -45,440 |
| August | R 822 | R 9,637 | R -8,815 | R 1,121 | R 10,667 | R -9,546 | R -33,241 | R 59,491 | R 102,277 | R -42,787 |
| September | R 726 | R 9,119 | R -8,393 | R 979 | R 10,191 | R -9,212 | R -32,939 | R 57,277 | R 99,429 | R -42,151 |
| October | R 827 | R 10,712 | R -9,885 | R 1,104 | R 11,961 | R -10,857 | R -33,419 | R 61,975 | R 106,251 | R -44,276 |
| November | R 779 | R 9,328 | R -8,549 | R 1,085 | R 10,682 | R -9,597 | R -33,297 | R 59,671 | R 102,564 | R -42,894 |
| December | R 979 | R 9,354 | R -8,375 | R 1,239 | R 10,831 | R -9,592 | R -34,577 | R 55,249 | R 99,418 | R -44,169 |
| Total | R 8,569 | R 102,663 | R -94,094 | R 11,541 | R 115,748 | R -104,207 | R -364,056 | R 693,103 | R 1,161,366 | R -468,263 |
| 2003 January | 1,045 | 10,396 | -9,351 | 1,310 | 12,182 | -10,872 | -32,189 | 54,745 | 97,806 | -43,061 |
| February | 956 | 10,168 | -9,212 | 1,266 | 12,411 | -11,145 | -26,674 | 55,828 | 93,647 | -37,819 |
| March | 1,005 | 12,751 | -11,746 | 1,250 | 15,488 | -14,238 | R -28,647 | R 63,184 | R 106,070 | R -42,885 |
| April | 858 | 11,014 | -10,156 | 1,105 | 12,740 | -11,635 | -32,909 | 59,086 | 103,630 | -44,544 |
| May | 842 | 10,450 | -9,608 | 1,287 | 12,536 | -11,249 | -31,148 | 60,024 | 102,421 | -42,397 |
| 5-Month Total | 4,706 | 54,779 | -50,073 | 6,218 | 65,357 | -59,139 | -151,567 | 292,866 | 503,574 | -210,707 |
| 2002 5-Month Total | 3,169 | 36,961 | -33,792 | 4,247 | 41,739 | -37,492 | -132,560 | 284,487 | 454,539 | -170,052 |
| 2001 5-Month Total | 3,830 | 47,777 | -43,947 | 5,786 | 59,584 | -53,798 | -113,909 | 322,208 | 489,915 | -167,706 |

^a Crude oil, petroleum preparations, liquefied propane and butane, and other mineral fuels.

^b Petroleum, coal, natural gas, and electricity.

R=Revised.

Notes: • Monthly data are not adjusted for seasonal variations. • See Note 5 at end of section. • Totals may not equal sum of components due to independent rounding. • The U.S. import statistics reflect both government and

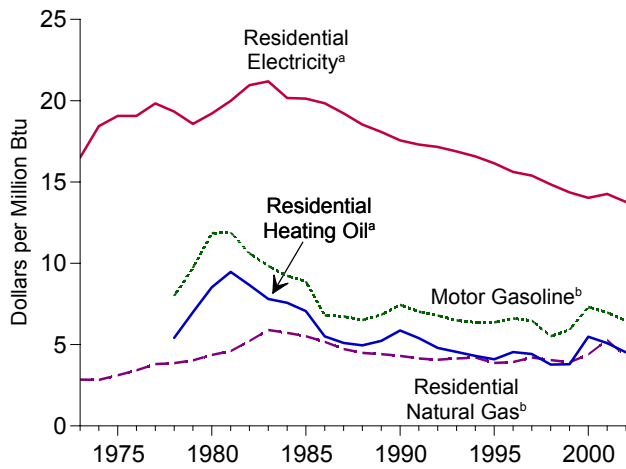
nongovernment imports of merchandise from foreign countries into the U.S. customs territory, which comprises the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands.

Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.

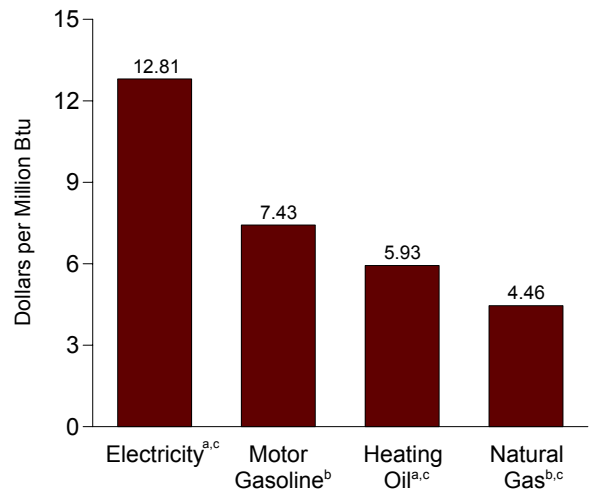
Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division. For details, see "Sources for Table 1.5" at the end of this section.

Figure 1.6 Cost of Fuels to End Users in Constant (1982-1984) Dollars

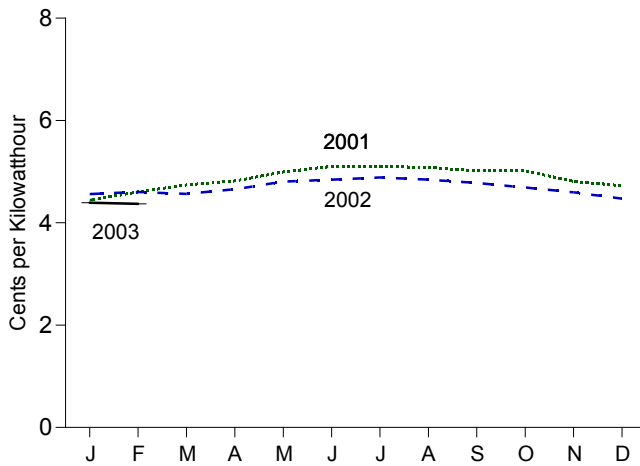
Costs, 1973-2002



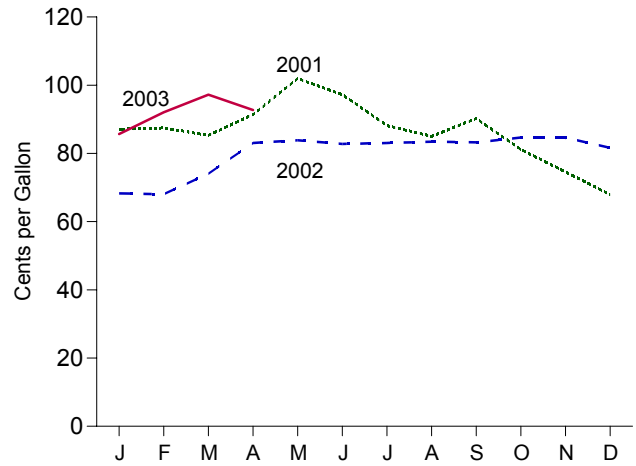
Costs, February 2003



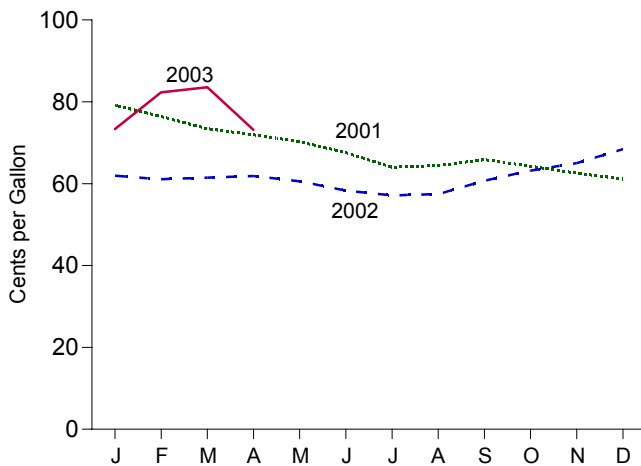
Residential Electricity^a, Monthly



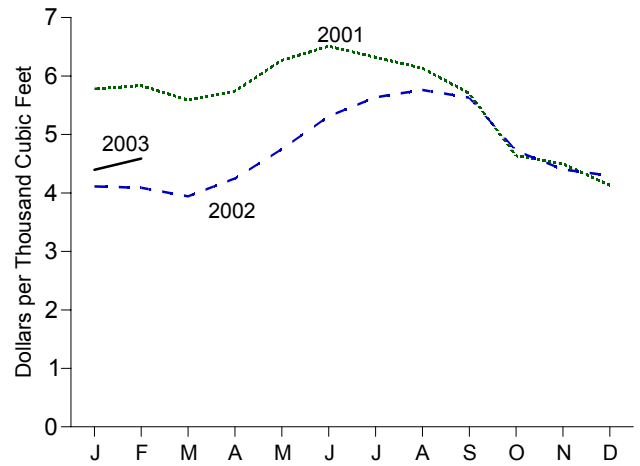
Motor Gasoline^b, Monthly



Residential Heating Oil^a, Monthly



Residential Natural Gas^b, Monthly



^aExcludes taxes.
^bIncludes taxes.
^cResidential.

Note: Because vertical scales differ, graphs should not be compared.
 Web Page: <http://www.eai.doe.gov/emeu/mer/overview.html>.
 Source: Table 1.6.

Table 1.6 Cost of Fuels to End Users in Constant (1982-1984) Dollars

| | Consumer Price Index (Urban) ^a | Motor Gasoline ^b | | Residential Heating Oil ^c | | Residential Natural Gas ^b | | Residential Electricity ^c | |
|--------------------|---|-----------------------------|-------------------------|--------------------------------------|-------------------------|--------------------------------------|-------------------------|--------------------------------------|-------------------------|
| | Index 1982-1984=100 | Cents per Gallon | Dollars per Million Btu | Cents per Gallon | Dollars per Million Btu | Cents per Thousand Cubic Feet | Dollars per Million Btu | Cents per Kilowatt-hour | Dollars per Million Btu |
| 1973 Average | 44.4 | NA | NA | NA | NA | 290.5 | 2.85 | 5.6 | 16.50 |
| 1974 Average | 49.3 | NA | NA | NA | NA | 290.1 | 2.83 | 6.3 | 18.43 |
| 1975 Average | 53.8 | NA | NA | NA | NA | 317.8 | 3.12 | 6.5 | 19.07 |
| 1976 Average | 56.9 | NA | NA | NA | NA | 348.0 | 3.41 | 6.5 | 19.06 |
| 1977 Average | 60.6 | NA | NA | NA | NA | 387.8 | 3.81 | 6.8 | 19.83 |
| 1978 Average | 65.2 | 100.0 | 8.00 | 75.2 | 5.42 | 392.6 | 3.86 | 6.6 | 19.33 |
| 1979 Average | 72.6 | 121.5 | 9.71 | 97.0 | 6.99 | 410.5 | 4.03 | 6.3 | 18.57 |
| 1980 Average | 82.4 | 148.2 | 11.85 | 118.2 | 8.52 | 446.6 | 4.36 | 6.6 | 19.21 |
| 1981 Average | 90.9 | 148.8 | 11.90 | 131.4 | 9.47 | 471.9 | 4.60 | 6.8 | 19.99 |
| 1982 Average | 96.5 | 132.7 | 10.61 | 120.2 | 8.67 | 535.8 | 5.22 | 7.2 | 20.96 |
| 1983 Average | 99.6 | 123.0 | 9.83 | 108.2 | 7.80 | 608.4 | 5.90 | 7.2 | 21.19 |
| 1984 Average | 103.9 | 115.3 | 9.22 | 105.0 | 7.57 | 589.0 | 5.72 | 6.88 | 20.17 |
| 1985 Average | 107.6 | 111.2 | 8.89 | 97.9 | 7.06 | 568.8 | 5.52 | 6.87 | 20.13 |
| 1986 Average | 109.6 | 84.9 | 6.79 | 76.3 | 5.50 | 531.9 | 5.17 | 6.77 | 19.84 |
| 1987 Average | 113.6 | 84.2 | 6.74 | 70.7 | 5.10 | 487.7 | 4.73 | 6.56 | 19.22 |
| 1988 Average | 118.3 | 81.4 | 6.51 | 68.7 | 4.96 | 462.4 | 4.49 | 6.32 | 18.53 |
| 1989 Average | 124.0 | 85.5 | 6.83 | 72.6 | 5.23 | 454.8 | 4.41 | 6.17 | 18.08 |
| 1990 Average | 130.7 | 93.1 | 7.44 | 81.3 | 5.86 | 443.8 | 4.31 | 5.99 | 17.56 |
| 1991 Average | 136.2 | 87.8 | 7.02 | 74.8 | 5.39 | 427.3 | 4.14 | 5.90 | 17.30 |
| 1992 Average | 140.3 | 84.8 | 6.78 | 66.6 | 4.80 | 419.8 | 4.07 | 5.85 | 17.15 |
| 1993 Average | 144.5 | 81.2 | 6.49 | 63.0 | 4.55 | 426.3 | 4.15 | 5.76 | 16.88 |
| 1994 Average | 148.2 | 79.2 | 6.36 | 59.6 | 4.30 | 432.5 | 4.20 | 5.65 | 16.57 |
| 1995 Average | 152.4 | 79.1 | 6.37 | 56.9 | 4.10 | 397.6 | 3.87 | 5.51 | 16.15 |
| 1996 Average | 156.9 | 82.1 | 6.61 | 63.0 | 4.54 | 404.1 | 3.93 | 5.33 | 15.62 |
| 1997 Average | 160.5 | 80.4 | 6.48 | 61.3 | 4.42 | 432.4 | 4.21 | 5.25 | 15.39 |
| 1998 Average | 163.0 | 68.4 | 5.51 | 52.3 | 3.77 | 418.4 | 4.05 | 5.07 | 14.85 |
| 1999 Average | 166.6 | 73.3 | 5.91 | 52.6 | 3.79 | 401.6 | 3.91 | 4.90 | 14.36 |
| 2000 Average | 172.2 | 90.8 | 7.32 | 76.1 | 5.49 | 450.6 | 4.39 | 4.79 | 14.02 |
| 2001 January | 175.1 | 87.1 | 7.02 | 79.2 | 5.71 | 578.0 | 5.62 | 4.44 | 13.02 |
| February | 175.8 | 87.5 | 7.05 | 76.4 | 5.51 | 583.6 | 5.67 | 4.60 | 13.49 |
| March | 176.2 | 85.3 | 6.88 | 73.4 | 5.30 | 559.0 | 5.43 | 4.74 | 13.89 |
| April | 176.9 | 91.4 | 7.37 | 72.0 | 5.19 | 574.3 | 5.58 | 4.82 | 14.12 |
| May | 177.7 | 102.0 | 8.22 | 70.3 | 5.07 | 626.9 | 6.09 | 4.99 | 14.63 |
| June | 178.0 | 97.2 | 7.84 | 67.6 | 4.87 | 651.1 | 6.33 | 5.10 | 14.95 |
| July | 177.5 | 88.2 | 7.11 | 64.0 | 4.61 | 632.1 | 6.14 | 5.10 | 14.96 |
| August | 177.5 | 85.0 | 6.85 | 64.4 | 4.64 | 613.5 | 5.96 | 5.08 | 14.89 |
| September | 178.3 | 90.2 | 7.27 | 65.9 | 4.75 | 570.4 | 5.54 | 5.01 | 14.70 |
| October | 177.7 | 81.1 | 6.54 | 64.3 | 4.63 | 463.7 | 4.51 | 5.01 | 14.70 |
| November | 177.4 | 74.6 | 6.02 | 62.6 | 4.51 | 449.8 | 4.37 | 4.81 | 14.09 |
| December | 176.7 | 67.9 | 5.47 | 61.1 | 4.41 | 413.1 | 4.01 | 4.73 | 13.85 |
| Average | 177.1 | 86.4 | 6.97 | 70.6 | 5.09 | 544.3 | 5.29 | 4.87 | 14.27 |
| 2002 January | 177.1 | 68.3 | 5.51 | 61.9 | 4.47 | R 411.1 | R 3.99 | 4.56 | 13.37 |
| February | 177.8 | 68.1 | 5.49 | 61.1 | 4.40 | R 408.9 | R 3.97 | 4.60 | 13.48 |
| March | 178.8 | 74.0 | 5.97 | 61.5 | 4.43 | R 394.3 | R 3.83 | 4.56 | 13.38 |
| April | 179.8 | 83.0 | 6.70 | 61.8 | 4.46 | R 424.9 | R 4.13 | 4.66 | 13.64 |
| May | 179.8 | 83.9 | 6.76 | 60.6 | 4.37 | R 475.0 | R 4.62 | 4.81 | 14.08 |
| June | 179.9 | 82.8 | 6.67 | 58.3 | 4.20 | R 531.4 | R 5.16 | 4.84 | 14.19 |
| July | 180.1 | 83.1 | 6.70 | 57.1 | 4.12 | R 563.6 | R 5.48 | 4.89 | 14.32 |
| August | 180.7 | 83.5 | 6.73 | 57.4 | 4.14 | R 576.1 | R 5.60 | 4.84 | 14.19 |
| September | 181.0 | 83.3 | 6.71 | 60.7 | 4.38 | R 563.0 | R 5.47 | 4.78 | 14.01 |
| October | 181.3 | 84.7 | 6.83 | 63.2 | 4.56 | R 472.1 | R 4.59 | 4.69 | 13.74 |
| November | 181.3 | 84.6 | 6.82 | 65.0 | 4.69 | R 440.2 | R 4.28 | 4.59 | 13.47 |
| December | 180.9 | 81.6 | 6.58 | 68.4 | 4.93 | R 429.5 | R 4.17 | 4.47 | 13.11 |
| Average | 179.9 | 80.1 | 6.46 | 62.7 | 4.52 | R 436.4 | R 4.24 | 4.70 | 13.77 |
| 2003 January | 181.7 | 85.7 | 6.91 | 73.4 | 5.29 | R 439.7 | R 4.27 | 4.39 | 12.87 |
| February | 183.1 | 92.1 | 7.43 | 82.3 | 5.93 | 458.8 | 4.46 | R 4.37 | R 12.81 |
| March | 184.2 | 97.2 | 7.84 | 83.6 | 6.02 | NA | NA | NA | NA |
| April | 183.8 | 92.7 | 7.48 | 73.2 | 5.28 | NA | NA | NA | NA |

^a Consumer Price Index, All Urban Consumers, All Items, 1982-1984 = 100.0.

^b Includes taxes.

^c Excludes taxes.

R=Revised. NA=Not available.

Notes: • Fuel costs are calculated by using the Urban Consumer Price Index (CPI) developed by the Bureau of Labor Statistics. • Annual averages may not equal average of months due to independent rounding.

• Geographic coverage is the 50 States and the District of Columbia.

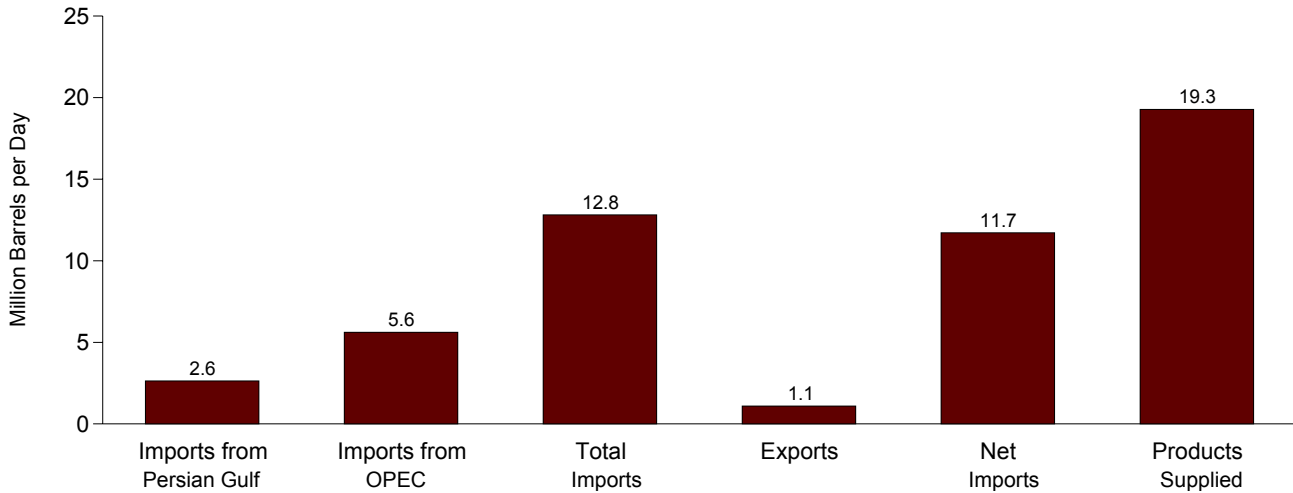
Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.

Sources: • **Fuel Prices:** Tables 9.4 (All Types), 9.8c, 9.11, and 9.9, adjusted by the CPI. • **CPI: 1973-2001—Economic Report of the President,** February 2003, Table B-60. **2002 forward—**Council of Economic Advisers, *Economic Indicators*, June 2003, "Consumer Prices - All Urban Consumers."

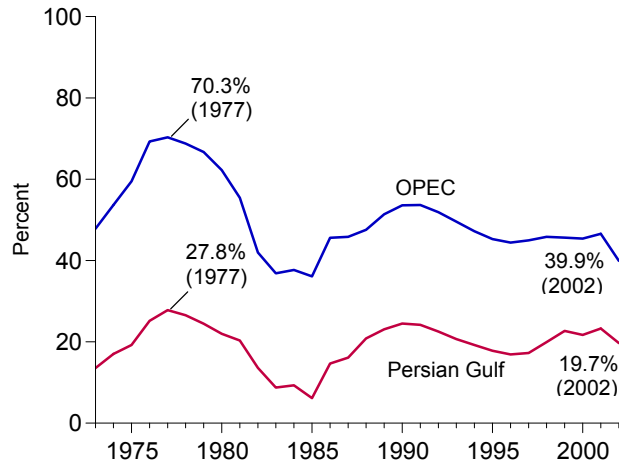
• **Conversion Factors:** Tables A1, A3, A4, and A6.

Figure 1.7 Overview of U.S. Petroleum Trade

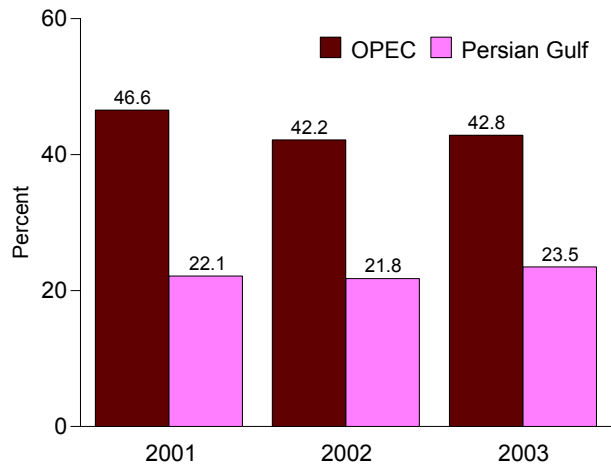
Overview, May 2003



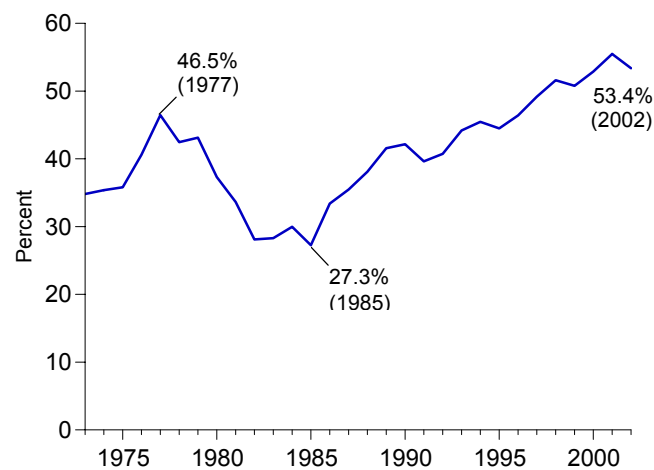
Imports from OPEC and the Persian Gulf as a Share of Total Imports 1973-2002



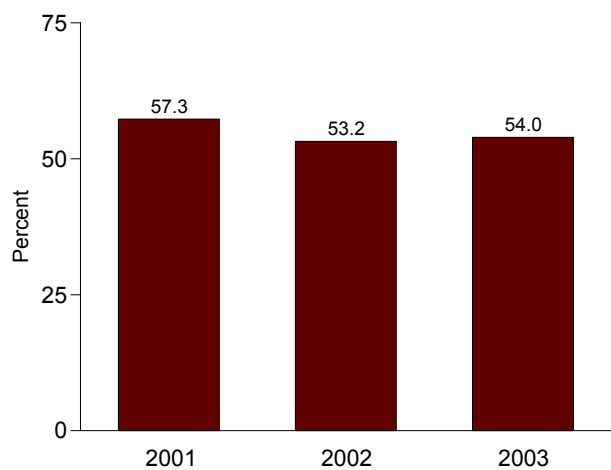
January - May



Net Imports as Share of Products Supplied 1973-2002



January - May



OPEC=Organization of Petroleum Exporting Countries.
Note: Because vertical scales differ, graphs should not be compared.

Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.
Source: Table 1.7.

Table 1.7 Overview of U.S. Petroleum Trade

| | Imports from Persian Gulf ^a | Imports from OPEC ^b | Imports | Exports | Net Imports | Products Supplied | As Share of Products Supplied | | | | As Share of Total Imports | |
|-----------------------------------|--|--------------------------------|---------------|--------------|---------------|-------------------|--|--------------------------------|-------------|-------------|--|--------------------------------|
| | | | | | | | Imports from Persian Gulf ^a | Imports from OPEC ^b | Imports | Net Imports | Imports from Persian Gulf ^a | Imports from OPEC ^b |
| | | | | | | | Thousand Barrels per Day | | | | | |
| 1973 Average | 848 | 2,993 | 6,256 | 231 | 6,025 | 17,308 | 4.9 | 17.3 | 36.1 | 34.8 | 13.6 | 47.8 |
| 1974 Average | 1,039 | 3,280 | 6,112 | 221 | 5,892 | 16,653 | 6.2 | 19.7 | 36.7 | 35.4 | 17.0 | 53.7 |
| 1975 Average | 1,165 | 3,601 | 6,056 | 209 | 5,846 | 16,322 | 7.1 | 22.1 | 37.1 | 35.8 | 19.2 | 59.5 |
| 1976 Average | 1,840 | 5,066 | 7,313 | 223 | 7,090 | 17,461 | 10.5 | 29.0 | 41.9 | 40.6 | 25.2 | 69.3 |
| 1977 Average | 2,448 | 6,193 | 8,807 | 243 | 8,565 | 18,431 | 13.3 | 33.6 | 47.8 | 46.5 | 27.8 | 70.3 |
| 1978 Average | 2,219 | 5,751 | 8,363 | 362 | 8,002 | 18,847 | 11.8 | 30.5 | 44.4 | 42.5 | 26.5 | 68.8 |
| 1979 Average | 2,069 | 5,637 | 8,456 | 471 | 7,985 | 18,513 | 11.2 | 30.5 | 45.7 | 43.1 | 24.5 | 66.7 |
| 1980 Average | 1,519 | 4,300 | 6,909 | 544 | 6,365 | 17,056 | 8.9 | 25.2 | 40.5 | 37.3 | 22.0 | 62.2 |
| 1981 Average | 1,219 | 3,323 | 5,996 | 595 | 5,401 | 16,058 | 7.6 | 20.7 | 37.3 | 33.6 | 20.3 | 55.4 |
| 1982 Average | 696 | 2,146 | 5,113 | 815 | 4,298 | 15,296 | 4.5 | 14.0 | 33.4 | 28.1 | 13.6 | 42.0 |
| 1983 Average | 442 | 1,862 | 5,051 | 739 | 4,312 | 15,231 | 2.9 | 12.2 | 33.2 | 28.3 | 8.8 | 36.9 |
| 1984 Average | 506 | 2,049 | 5,437 | 722 | 4,715 | 15,726 | 3.2 | 13.0 | 34.6 | 30.0 | 9.3 | 37.7 |
| 1985 Average | 311 | 1,830 | 5,067 | 781 | 4,286 | 15,726 | 2.0 | 11.6 | 32.2 | 27.3 | 6.1 | 36.1 |
| 1986 Average | 912 | 2,837 | 6,224 | 785 | 5,439 | 16,281 | 5.6 | 17.4 | 38.2 | 33.4 | 14.7 | 45.6 |
| 1987 Average | 1,077 | 3,060 | 6,678 | 764 | 5,914 | 16,665 | 6.5 | 18.4 | 40.1 | 35.5 | 16.1 | 45.8 |
| 1988 Average | 1,541 | 3,520 | 7,402 | 815 | 6,587 | 17,283 | 8.9 | 20.4 | 42.8 | 38.1 | 20.8 | 47.6 |
| 1989 Average | 1,861 | 4,140 | 8,061 | 859 | 7,202 | 17,325 | 10.7 | 23.9 | 46.5 | 41.6 | 23.1 | 51.4 |
| 1990 Average | 1,966 | 4,296 | 8,018 | 857 | 7,161 | 16,988 | 11.6 | 25.3 | 47.2 | 42.2 | 24.5 | 53.6 |
| 1991 Average | 1,845 | 4,092 | 7,627 | 1,001 | 6,626 | 16,714 | 11.0 | 24.5 | 45.6 | 39.6 | 24.2 | 53.7 |
| 1992 Average | 1,778 | 4,092 | 7,888 | 950 | 6,938 | 17,033 | 10.4 | 24.0 | 46.3 | 40.7 | 22.5 | 51.9 |
| 1993 Average | 1,782 | 4,273 | 8,620 | 1,003 | 7,618 | 17,237 | 10.3 | 24.8 | 50.0 | 44.2 | 20.7 | 49.6 |
| 1994 Average | 1,728 | 4,247 | 8,996 | 942 | 8,054 | 17,718 | 9.8 | 24.0 | 50.8 | 45.5 | 19.2 | 47.2 |
| 1995 Average | 1,573 | 4,002 | 8,835 | 949 | 7,886 | 17,725 | 8.9 | 22.6 | 49.8 | 44.5 | 17.8 | 45.3 |
| 1996 Average | 1,604 | 4,211 | 9,478 | 981 | 8,498 | 18,309 | 8.8 | 23.0 | 51.8 | 46.4 | 16.9 | 44.4 |
| 1997 Average | 1,755 | 4,569 | 10,162 | 1,003 | 9,158 | 18,620 | 9.4 | 24.5 | 54.6 | 49.2 | 17.3 | 45.0 |
| 1998 Average | 2,136 | 4,905 | 10,708 | 945 | 9,764 | 18,917 | 11.3 | 25.9 | 56.6 | 51.6 | 19.9 | 45.8 |
| 1999 Average | 2,464 | 4,953 | 10,852 | 940 | 9,912 | 19,519 | 12.6 | 25.4 | 55.6 | 50.8 | 22.7 | 45.6 |
| 2000 Average | 2,488 | 5,203 | 11,459 | 1,040 | 10,419 | 19,701 | 12.6 | 26.4 | 58.2 | 52.9 | 21.7 | 45.4 |
| 2001 | | | | | | | | | | | | |
| January | 2,504 | 5,527 | 12,555 | 954 | 11,601 | 20,092 | 12.5 | 27.5 | 62.5 | 57.7 | 19.9 | 44.0 |
| February | 2,377 | 5,071 | 11,643 | 1,004 | 10,639 | 19,689 | 12.1 | 25.8 | 59.1 | 54.0 | 20.4 | 43.6 |
| March | 2,699 | 5,832 | 12,132 | 938 | 11,194 | 19,876 | 13.6 | 29.3 | 61.0 | 56.3 | 22.2 | 48.1 |
| April | 2,904 | 6,104 | 12,653 | 942 | 11,711 | 19,729 | 14.7 | 30.9 | 64.1 | 59.4 | 23.0 | 48.2 |
| May | 3,120 | 6,080 | 12,529 | 1,069 | 11,461 | 19,501 | 16.0 | 31.2 | 64.2 | 58.8 | 24.9 | 48.5 |
| June | 2,901 | 5,641 | 11,732 | 976 | 10,756 | 19,561 | 14.8 | 28.8 | 60.0 | 55.0 | 24.7 | 48.1 |
| July | 2,736 | 5,509 | 11,760 | 879 | 10,881 | 19,919 | 13.7 | 27.7 | 59.0 | 54.6 | 23.3 | 46.8 |
| August | 2,695 | 5,289 | 11,622 | 1,048 | 10,573 | 20,153 | 13.4 | 26.2 | 57.7 | 52.5 | 23.2 | 45.5 |
| September | 3,028 | 5,593 | 11,818 | 825 | 10,993 | 19,016 | 15.9 | 29.4 | 62.1 | 57.8 | 25.6 | 47.3 |
| October | 2,857 | 5,542 | 11,379 | 946 | 10,432 | 19,824 | 14.4 | 28.0 | 57.4 | 52.6 | 25.1 | 48.7 |
| November | 2,637 | 5,097 | 11,628 | 960 | 10,669 | 19,396 | 13.6 | 26.3 | 60.0 | 55.0 | 22.7 | 43.8 |
| December | 2,651 | 5,024 | 10,994 | 1,109 | 9,885 | 19,003 | 14.0 | 26.4 | 57.9 | 52.0 | 24.1 | 45.7 |
| Average | 2,761 | 5,528 | 11,871 | 971 | 10,900 | 19,649 | 14.1 | 28.1 | 60.4 | 55.5 | 23.3 | 46.6 |
| 2002 | | | | | | | | | | | | |
| January | 2,670 | 5,029 | 11,088 | 861 | 10,228 | 19,454 | 13.7 | 25.9 | 57.0 | 52.6 | 24.1 | 45.4 |
| February | 2,484 | 4,733 | 10,904 | 1,175 | 9,729 | 19,444 | 12.8 | 24.3 | 56.1 | 50.0 | 22.8 | 43.4 |
| March | 2,556 | 4,991 | 11,198 | 853 | 10,345 | 19,676 | 13.0 | 25.4 | 56.9 | 52.6 | 22.8 | 44.6 |
| April | 2,400 | 4,606 | 11,765 | 890 | 10,876 | 19,552 | 12.3 | 23.6 | 60.2 | 55.6 | 20.4 | 39.1 |
| May | 2,238 | 4,561 | 11,769 | 910 | 10,859 | 19,728 | 11.3 | 23.1 | 59.7 | 55.0 | 19.0 | 38.8 |
| June | 2,090 | 4,356 | 11,753 | 880 | 10,873 | 19,875 | 10.5 | 21.9 | 59.1 | 54.7 | 17.8 | 37.1 |
| July | 1,999 | 4,366 | 11,624 | 839 | 10,785 | 20,076 | 10.0 | 21.7 | 57.9 | 53.7 | 17.2 | 37.6 |
| August | 1,903 | 4,638 | 11,890 | 1,138 | 10,752 | 20,221 | 9.4 | 22.9 | 58.8 | 53.2 | 16.0 | 39.0 |
| September | 2,052 | 4,452 | 11,075 | 1,015 | 10,059 | 19,461 | 10.5 | 22.9 | 56.9 | 51.7 | 18.5 | 40.2 |
| October | 2,177 | 4,686 | 11,893 | 962 | 10,931 | 19,671 | 11.1 | 23.8 | 60.4 | 55.5 | 18.3 | 39.4 |
| November | 2,222 | 4,682 | 12,268 | 1,026 | 11,242 | 19,991 | 11.1 | 23.4 | 61.4 | 56.2 | 18.1 | 38.2 |
| December | 2,449 | 4,164 | 11,100 | 1,272 | 9,828 | 19,943 | 12.3 | 20.9 | 55.7 | 49.3 | 22.1 | 37.5 |
| Average | 2,269 | 4,605 | 11,530 | 984 | 10,546 | 19,761 | 11.5 | 23.3 | 58.3 | 53.4 | 19.7 | 39.9 |
| 2003 | | | | | | | | | | | | |
| January | 2,718 | 4,272 | 11,008 | 1,212 | 9,796 | 20,042 | 13.6 | 21.3 | 54.9 | 48.9 | 24.7 | 38.8 |
| February | 2,612 | 3,990 | 10,764 | 1,067 | 9,697 | 20,396 | 12.8 | 19.6 | 52.8 | 47.5 | 24.3 | 37.1 |
| March | 2,740 | 5,371 | 11,857 | 1,051 | 10,806 | 19,682 | 13.9 | 27.3 | 60.2 | 54.9 | 23.1 | 45.3 |
| April | 3,131 | 5,936 | 12,446 | 1,053 | 11,394 | 19,770 | 15.8 | 30.0 | 63.0 | 57.6 | 25.2 | 47.7 |
| May | 2,637 | 5,619 | 12,814 | 1,097 | 11,717 | 19,277 | 13.7 | 29.1 | 66.5 | 60.8 | 20.6 | 43.9 |
| 5-Month Average | 2,768 | 5,053 | 11,793 | 1,097 | 10,697 | 19,823 | 14.0 | 25.5 | 59.5 | 54.0 | 23.5 | 42.8 |
| 2002 5-Month Average | 2,470 | 4,786 | 11,351 | 933 | 10,418 | 19,573 | 12.6 | 24.5 | 58.0 | 53.2 | 21.8 | 42.2 |
| 2001 5-Month Average | 2,727 | 5,733 | 12,313 | 981 | 11,332 | 19,780 | 13.8 | 29.0 | 62.3 | 57.3 | 22.1 | 46.6 |

^a Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.

^b Organization of Petroleum Exporting Countries. See Glossary.

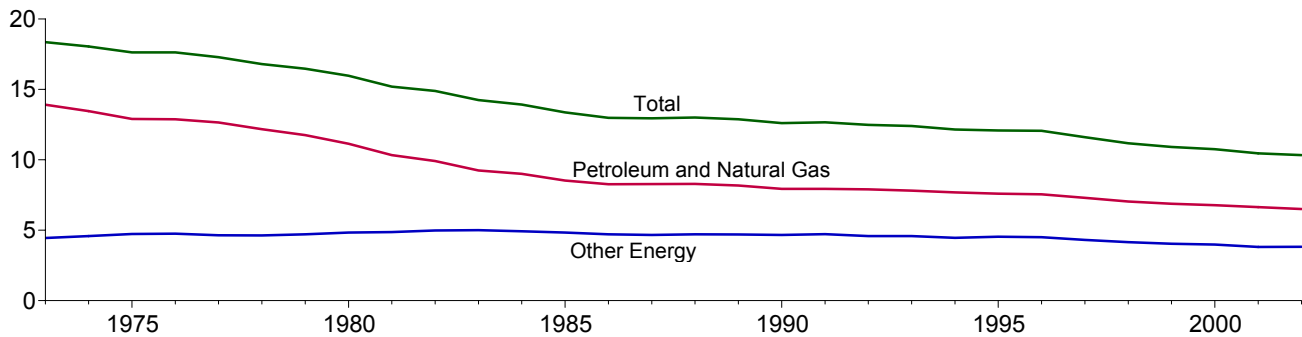
Notes: • Readers of Table 1.7 may be interested in a feature article, "Measuring Dependence on Imported Oil," that was published in the August 1995 *Monthly Energy Review*. • Petroleum is crude oil, lease condensate, unfinished oils, petroleum products, natural gas plant liquids, and nonhydrocarbon compounds blended into finished petroleum products. • Beginning in October 1977, petroleum imported for the Strategic Petroleum

Reserves is included. • Annual averages may not equal average of months due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia. U.S. exports include shipments to U.S. territories, and imports include receipts from U.S. territories.

Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.

Sources: • **Column 1:** Table 3.3b. • **Column 2:** Table 3.3d. • **Columns 3-5:** Table 3.1b. • **Column 6:** Table 3.1a. • **Columns 7-12:** Calculated by Energy Information Administration.

Figure 1.8 Energy Consumption per Dollar of Gross Domestic Product
(Thousand Btu per Chained (1996) Dollar)



Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.
Source: Table 1.8.

Table 1.8 Energy Consumption per Dollar of Gross Domestic Product

| | Energy Consumption | | | Gross Domestic Product (GDP) | Energy Consumption per Dollar of GDP | | |
|-----------------|---------------------------|---------------------------|---------------------|------------------------------|--------------------------------------|--|-------|
| | Petroleum and Natural Gas | Other Energy ^a | Total | | Petroleum and Natural Gas | Other Energy ^a | Total |
| | Quadrillion Btu | | | | Billion Chained (1996) Dollars | Thousand Btu per Chained (1996) Dollar | |
| 1973 Year | 57.352 | 18.356 | 75.708 | 4,123.4 | 13.91 | 4.45 | 18.36 |
| 1974 Year | 55.187 | 18.804 | 73.991 | 4,099.0 | 13.46 | 4.59 | 18.05 |
| 1975 Year | 52.678 | 19.321 | 71.999 | 4,084.4 | 12.90 | 4.73 | 17.63 |
| 1976 Year | 55.520 | 20.492 | 76.012 | 4,311.7 | 12.88 | 4.75 | 17.63 |
| 1977 Year | 57.053 | 20.947 | 78.000 | 4,511.8 | 12.65 | 4.64 | 17.29 |
| 1978 Year | 57.966 | 22.021 | 79.986 | 4,760.6 | 12.18 | 4.63 | 16.80 |
| 1979 Year | 57.789 | 23.114 | 80.903 | 4,912.1 | 11.76 | 4.71 | 16.47 |
| 1980 Year | 54.596 | 23.693 | 78.289 | 4,900.9 | 11.14 | 4.83 | 15.97 |
| 1981 Year | 51.859 | 24.476 | 76.335 | 5,021.0 | 10.33 | 4.87 | 15.20 |
| 1982 Year | 48.736 | 24.497 | 73.234 | 4,919.3 | 9.91 | 4.98 | 14.89 |
| 1983 Year | 47.411 | 25.655 | 73.066 | 5,132.3 | 9.24 | 5.00 | 14.24 |
| 1984 Year | 49.558 | 27.135 | 76.693 | 5,505.2 | 9.00 | 4.93 | 13.93 |
| 1985 Year | 48.756 | 27.661 | 76.417 | 5,717.1 | 8.53 | 4.84 | 13.37 |
| 1986 Year | 48.904 | 27.818 | 76.722 | 5,912.4 | 8.27 | 4.71 | 12.98 |
| 1987 Year | 50.609 | 28.547 | 79.156 | 6,113.3 | 8.28 | 4.67 | 12.95 |
| 1988 Year | 52.774 | 30.000 | 82.774 | 6,368.4 | 8.29 | 4.71 | 13.00 |
| 1989 Year | 53.923 | 30.963 | 84.886 | 6,591.8 | 8.18 | 4.70 | 12.88 |
| 1990 Year | 53.282 | 31.323 | 84.605 | 6,707.9 | 7.94 | 4.67 | 12.61 |
| 1991 Year | 52.994 | 31.528 | 84.522 | 6,676.4 | 7.94 | 4.72 | 12.66 |
| 1992 Year | 54.362 | 31.504 | 85.866 | 6,880.0 | 7.90 | 4.58 | 12.48 |
| 1993 Year | 55.193 | 32.385 | 87.578 | 7,062.6 | 7.81 | 4.59 | 12.40 |
| 1994 Year | 56.512 | 32.736 | 89.248 | 7,347.7 | 7.69 | 4.46 | 12.15 |
| 1995 Year | 57.338 | 33.884 | 91.221 | 7,543.8 | 7.60 | 4.54 | 12.09 |
| 1996 Year | 58.954 | 35.270 | 94.224 | 7,813.2 | 7.55 | 4.51 | 12.06 |
| 1997 Year | 59.594 | 35.133 | 94.727 | 8,159.5 | 7.30 | 4.31 | 11.61 |
| 1998 Year | 59.869 | 35.277 | 95.146 | 8,508.9 | 7.04 | 4.15 | 11.18 |
| 1999 Year | 60.970 | 35.804 | 96.774 | 8,859.0 | 6.88 | 4.04 | 10.92 |
| 2000 Year | 62.356 | 36.586 | 98.942 | 9,191.4 | 6.78 | 3.98 | 10.76 |
| 2001 Year | 61.202 | 35.120 | 96.322 | 9,214.5 | 6.64 | 3.81 | 10.46 |
| 2002 Year | ^R 61.486 | ^R 36.084 | ^R 97.570 | 9,439.9 | 6.51 | 3.82 | 10.34 |

^a Coal, nuclear electric power, renewable energy, pumped-storage hydroelectric power, and net imports of coal coke and electricity.

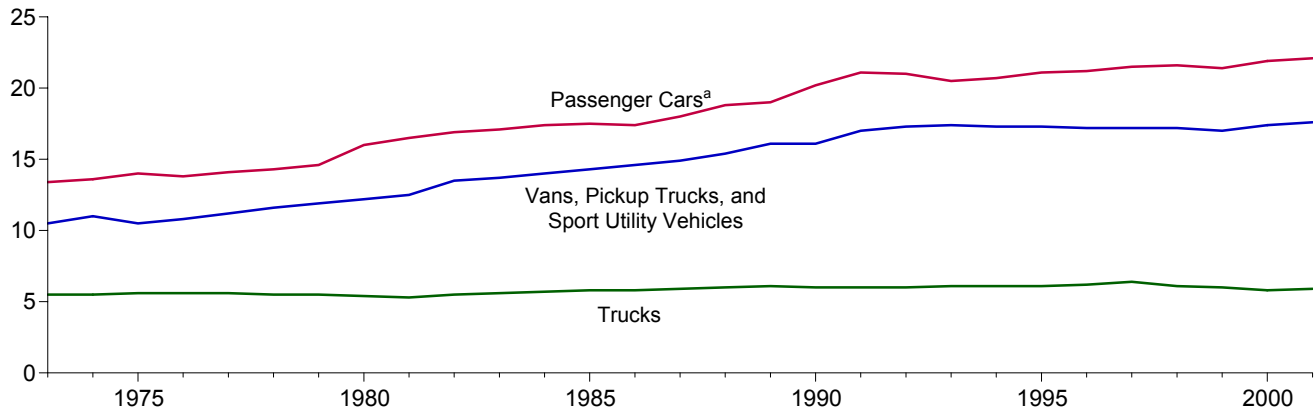
R=Revised.

Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.

Sources: • **Energy Consumption:** Table 1.3. • **Gross Domestic Product: 1973-2000**—U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, August 2002, Table 2A. **2001 and 2002**—U.S. Department of Commerce, Bureau of Economic Analysis, *BEA News Release*, June 26, 2003, Table 3, which is available at website www.bea.doc.gov/bea/newsrel/gdp400p.htm.

Figure 1.9 Motor Vehicle Fuel Rates
(Miles per Gallon)



^aMotorcycles are included through 1989.
 Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.
 Source: Table 1.9.

Table 1.9 Motor Vehicle Mileage, Fuel Consumption, and Fuel Rates

| | Passenger Cars ^a | | | Vans, Pickup Trucks, and Sport Utility Vehicles ^b | | | Trucks ^c | | | All Motor Vehicles ^d | | |
|-------------------|-----------------------------|--|------------------------------|--|--|------------------------------|-----------------------------|--|------------------------------|---------------------------------|--|------------------------------|
| | Mileage (miles per vehicle) | Fuel Consumption (gallons per vehicle) | Fuel Rate (miles per gallon) | Mileage (miles per vehicle) | Fuel Consumption (gallons per vehicle) | Fuel Rate (miles per gallon) | Mileage (miles per vehicle) | Fuel Consumption (gallons per vehicle) | Fuel Rate (miles per gallon) | Mileage (miles per vehicle) | Fuel Consumption (gallons per vehicle) | Fuel Rate (miles per gallon) |
| 1973 | 9,884 | 737 | 13.4 | 9,779 | 931 | 10.5 | 15,370 | 2,775 | 5.5 | 10,099 | 850 | 11.9 |
| 1974 | 9,221 | 677 | 13.6 | 9,452 | 862 | 11.0 | 14,995 | 2,708 | 5.5 | 9,493 | 788 | 12.0 |
| 1975 | 9,309 | 665 | 14.0 | 9,829 | 934 | 10.5 | 15,167 | 2,722 | 5.6 | 9,627 | 790 | 12.2 |
| 1976 | 9,418 | 681 | 13.8 | 10,127 | 934 | 10.8 | 15,438 | 2,764 | 5.6 | 9,774 | 806 | 12.1 |
| 1977 | 9,517 | 676 | 14.1 | 10,607 | 947 | 11.2 | 16,700 | 3,002 | 5.6 | 9,978 | 814 | 12.3 |
| 1978 | 9,500 | 665 | 14.3 | 10,968 | 948 | 11.6 | 18,045 | 3,263 | 5.5 | 10,077 | 816 | 12.4 |
| 1979 | 9,062 | 620 | 14.6 | 10,802 | 905 | 11.9 | 18,502 | 3,380 | 5.5 | 9,722 | 776 | 12.5 |
| 1980 | 8,813 | 551 | 16.0 | 10,437 | 854 | 12.2 | 18,736 | 3,447 | 5.4 | 9,458 | 712 | 13.3 |
| 1981 | 8,873 | 538 | 16.5 | 10,244 | 819 | 12.5 | 19,016 | 3,565 | 5.3 | 9,477 | 697 | 13.6 |
| 1982 | 9,050 | 535 | 16.9 | 10,276 | 762 | 13.5 | 19,931 | 3,647 | 5.5 | 9,644 | 686 | 14.1 |
| 1983 | 9,118 | 534 | 17.1 | 10,497 | 767 | 13.7 | 21,083 | 3,769 | 5.6 | 9,760 | 686 | 14.2 |
| 1984 | 9,248 | 530 | 17.4 | 11,151 | 797 | 14.0 | 22,550 | 3,967 | 5.7 | 10,017 | 691 | 14.5 |
| 1985 | 9,419 | 538 | 17.5 | 10,506 | 735 | 14.3 | 20,597 | 3,570 | 5.8 | 10,020 | 685 | 14.6 |
| 1986 | 9,464 | 543 | 17.4 | 10,764 | 738 | 14.6 | 22,143 | 3,821 | 5.8 | 10,143 | 692 | 14.7 |
| 1987 | 9,720 | 539 | 18.0 | 11,114 | 744 | 14.9 | 23,349 | 3,937 | 5.9 | 10,453 | 694 | 15.1 |
| 1988 | 9,972 | 531 | 18.8 | 11,465 | 745 | 15.4 | 22,485 | 3,736 | 6.0 | 10,721 | 688 | 15.6 |
| 1989 | 10,157 | 533 | 19.0 | 11,676 | 724 | 16.1 | 22,926 | 3,776 | 6.1 | 10,932 | 688 | 15.9 |
| 1990 | ^a 10,504 | ^a 520 | ^a 20.2 | 11,902 | 738 | 16.1 | 23,603 | 3,953 | 6.0 | 11,107 | 677 | 16.4 |
| 1991 | 10,571 | 501 | 21.1 | 12,245 | 721 | 17.0 | 24,229 | 4,047 | 6.0 | 11,294 | 669 | 16.9 |
| 1992 | 10,857 | 517 | 21.0 | 12,381 | 717 | 17.3 | 25,373 | 4,210 | 6.0 | 11,558 | 683 | 16.9 |
| 1993 | 10,804 | 527 | 20.5 | 12,430 | 714 | 17.4 | 26,262 | 4,309 | 6.1 | 11,595 | 693 | 16.7 |
| 1994 | 10,992 | 531 | 20.7 | 12,156 | 701 | 17.3 | 25,838 | 4,202 | 6.1 | 11,683 | 698 | 16.7 |
| 1995 | 11,203 | 530 | 21.1 | 12,018 | 694 | 17.3 | 26,514 | 4,315 | 6.1 | 11,793 | 700 | 16.8 |
| 1996 | 11,330 | 534 | 21.2 | 11,811 | 685 | 17.2 | 26,092 | 4,221 | 6.2 | 11,813 | 700 | 16.9 |
| 1997 | 11,581 | 539 | 21.5 | 12,115 | 703 | 17.2 | 27,032 | 4,218 | 6.4 | 12,107 | 711 | 17.0 |
| 1998 | 11,754 | 544 | 21.6 | 12,173 | 707 | 17.2 | 25,397 | 4,135 | 6.1 | 12,211 | 721 | 16.9 |
| 1999 | 11,848 | 553 | 21.4 | 11,957 | 701 | 17.0 | 26,014 | 4,352 | 6.0 | 12,206 | 732 | 16.7 |
| 2000 | 11,976 | 547 | 21.9 | 11,672 | 669 | 17.4 | 25,617 | 4,391 | 5.8 | 12,164 | 720 | 16.9 |
| 2001 ^P | 11,766 | 532 | 22.1 | 11,140 | 633 | 17.6 | 26,431 | 4,491 | 5.9 | 11,800 | 692 | 17.1 |

^a Motorcycles are included through 1989.
^b Includes a small number of trucks with 2 axles and 4 tires, such as step vans.
^c Single-unit trucks with 2 axles and 6 or more tires, and combination trucks.
^d Includes buses and motorcycles, which are not shown separately.
 P=Preliminary.
 Notes: Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.
 Sources: • **Passenger Cars: 1990-1994:** U.S. Department of Transportation, Bureau of Transportation Statistics, *National Transportation Statistics 1998*, Table 4-13. • **All Other Data:** • **1973-1994:** Federal Highway Administration (FHWA), *Highway Statistics Summary to 1995*, Table VM-201A. • **1995 forward:** FHWA, *Highway Statistics*, annual, Table VM-1.

Table 1.10 Heating Degree-Days by Census Division

| Census Divisions | June 1 through June 30 | | | | | Cumulative July 1 through June 30 | | | | |
|--|------------------------|-----------|-----------|-----------------------|-----------------------|--------------------------------------|--------------|--------------|----------------|--------------|
| | Normal ^a | 2002 | 2003 | Percent Change | | Normal ^a | 2002 | 2003 | Percent Change | |
| | | | | Normal to 2003 | 2002 to 2003 | | | | Normal to 2003 | 2002 to 2003 |
| New England Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont | 66 | 89 | 92 | (^c) | (^c) | 6,611 | 5,777 | 7,063 | 7 | 22 |
| Middle Atlantic New Jersey, New York, Pennsylvania | 39 | 26 | 56 | (^c) | (^c) | 5,911 | 4,924 | 6,224 | 5 | 26 |
| East North Central Illinois, Indiana, Michigan, Ohio, Wisconsin | 50 | 30 | 67 | (^c) | (^c) | 6,497 | 5,613 | 6,599 | 2 | 18 |
| West North Central Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota | 49 | 27 | 57 | (^c) | (^c) | 6,750 | 5,921 | 6,643 | -2 | 12 |
| South Atlantic Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia | 7 | 1 | 8 | (^c) | (^c) | 2,853 | 2,431 | 2,961 | 4 | 22 |
| East South Central Alabama, Kentucky, Mississippi, Tennessee | 7 | 2 | 14 | (^c) | (^c) | 3,604 | 3,235 | 3,681 | 2 | 14 |
| West South Central Arkansas, Louisiana, Oklahoma, Texas | 1 | 0 | 2 | (^c) | (^c) | 2,287 | 2,169 | 2,368 | 4 | 9 |
| Mountain Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming | 82 | 39 | 69 | (^c) | (^c) | 5,209 | 4,782 | 4,696 | -10 | -2 |
| Pacific^b California, Oregon, Washington | 76 | 34 | 28 | (^c) | (^c) | 3,228 | 3,056 | 2,910 | -10 | -5 |
| U.S. Average^b | 39 | 23 | 39 | (^c) | (^c) | 4,524 | 3,974 | 4,551 | 1 | 15 |

^a "Normal" is based on calculations of data from 1971 through 2000.

^b Excludes Alaska and Hawaii.

^c Percent change is not meaningful: normal is less than 100 or ratio is incalculable.

Notes: Degree-days are relative measurements of outdoor air temperature used as an index for heating and cooling energy requirements. Heating degree-days are the number of degrees that the daily average temperature falls below 65° F. Cooling degree-days are the number of degrees that the daily average temperature rises above 65° F. The daily average temperature

is the mean of the maximum and minimum temperatures in a 24-hour period. For example, a weather station recording an average daily temperature of 40° F would report 25 heating degree-days for that day (and 0 cooling degree-days). If a weather station recorded an average daily temperature of 78° F, cooling degree-days for that station would be 13 (and 0 heating degree days).

Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.

Sources: See end of section.

Table 1.11 Cooling Degree-Days by Census Division

| Census Divisions | June 1 through June 30 | | | | | Cumulative January 1 through June 30 | | | | |
|--|------------------------|------------|------------|------------------|------------------|---|------------|------------|------------------|------------------|
| | Normal ^a | 2002 | 2003 | Percent Change | | Normal ^a | 2002 | 2003 | Percent Change | |
| | | | | Normal to 2003 | 2002 to 2003 | | | | Normal to 2003 | 2002 to 2003 |
| New England Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont | 63 | 76 | 64 | (^c) | (^c) | 69 | 90 | 64 | (^c) | (^c) |
| Middle Atlantic New Jersey, New York, Pennsylvania | 117 | 146 | 99 | -15 | -32 | 140 | 197 | 100 | -29 | -49 |
| East North Central Illinois, Indiana, Michigan, Ohio, Wisconsin | 147 | 195 | 94 | -36 | -52 | 198 | 249 | 105 | -47 | -58 |
| West North Central Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota | 147 | 251 | 140 | -5 | -44 | 205 | 315 | 180 | -12 | -43 |
| South Atlantic Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia | 380 | 343 | 305 | -20 | -11 | 793 | 823 | 709 | -11 | -14 |
| East South Central Alabama, Kentucky, Mississippi, Tennessee | 296 | 335 | 246 | -17 | -27 | 489 | 598 | 470 | -4 | -21 |
| West South Central Arkansas, Louisiana, Oklahoma, Texas | 431 | 442 | 410 | -5 | -7 | 857 | 976 | 929 | 8 | -5 |
| Mountain Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming | 229 | 313 | 257 | 12 | -18 | 374 | 508 | 448 | 20 | -12 |
| Pacific^b California, Oregon, Washington | 100 | 120 | 128 | 28 | 7 | 157 | 172 | 181 | 15 | 5 |
| U.S. Average^b | 221 | 246 | 196 | -11 | -20 | 392 | 452 | 368 | -6 | -19 |

^a "Normal" is based on calculations of data from 1971 through 2000.

^b Excludes Alaska and Hawaii.

^c Percent change is not meaningful: normal is less than 100 or ratio is incalculable.

Notes: Degree-days are relative measurements of outdoor air temperature used as an index for heating and cooling energy requirements. Cooling degree-days are the number of degrees that the daily average temperature rises above 65° F. Heating degree-days are the number of degrees that the daily average temperature falls below 65° F. The daily average temperature

is the mean of the maximum and minimum temperatures in a 24-hour period. For example, if a weather station recorded an average daily temperature of 78° F, cooling degree-days for that station would be 13 (and 0 heating degree-days). A weather station recording an average daily temperature of 40° F would report 25 heating degree-days for that day (and 0 cooling degree-days).

Web Page: <http://www.eia.doe.gov/emeu/mer/overview.html>.

Sources: See end of section.

Energy Overview

Note 1. Energy Production: Includes production of fossil fuels (coal, dry natural gas, crude oil and lease condensate, and natural gas plant liquids), nuclear electric power, pumped-storage hydroelectric power, and renewable energy. Renewable energy production is assumed to be equivalent to: end-use consumption of wood, waste, alcohol fuels, geothermal heat pump and direct use energy, and solar thermal direct use and photovoltaic energy; and electricity net generation from conventional hydroelectric power, wood, waste, geothermal, solar, and wind. Approximate heat contents (Btu values) are derived by using the conversion factors provided in Appendix A. See Section 10 for further information on renewable energy.

Note 2. Energy Consumption: Includes consumption of fossil fuels (coal, natural gas, and petroleum), some secondary energy derived from fossil fuels (supplemental gaseous fuels and coal coke net imports), nuclear electric power, pumped-storage hydroelectric power, renewable energy, and net imports of electricity. Renewable energy consumption includes: end-use consumption of wood, waste, alcohol fuels, geothermal heat pump and direct use energy, and solar thermal direct use and photovoltaic energy and net electricity generation from conventional hydroelectric power, wood, waste, geothermal, solar, and wind. Approximate heat contents (Btu values) are derived by using the conversion factors provided in Appendix A. See Section 10 for further information on renewable energy.

Note 3. Energy Imports: Includes imports of fossil fuels (coal, natural gas, and petroleum, including crude oil imported for the Strategic Petroleum Reserve), some secondary energy derived from fossil fuels (coal coke imports), and electricity. Approximate heat contents (Btu values) are derived by using the conversion factors provided in Appendix A. See Section 10 for further information on renewable energy.

Note 4. Energy Exports: Includes exports of fossil fuels (coal, natural gas, and petroleum), some secondary energy derived from fossil fuels (coal coke exports), and electricity. Approximate heat contents (Btu values) are derived by using the conversion factors provided in Appendix A. See Section 10 for further information on renewable energy.

Note 5. Merchandise Trade Value: Import data presented are based on the customs value. That value does not include insurance and freight and is consequently lower than the cost, insurance, and freight (CIF) value, which is also reported by the Bureau of the Census. All export data, and import data prior to 1981, are on a free alongside ship (f.a.s.) basis.

“Balance” is exports minus imports; a positive balance indicates a surplus trade value and a negative balance indicates a deficit trade value. “Energy” includes mineral

fuels, lubricants, and related material. “Non-Energy Balance” and “Total Merchandise” include foreign exports (i.e., re-exports) and nonmonetary gold and Department of Defense Grant-Aid shipments. The “Non-Energy Balance” is calculated by subtracting the “Energy” from the “Total Merchandise Balance.”

“Imports” consist of government and nongovernment shipments of merchandise into the 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and the U.S. Foreign Trade Zones. They reflect the total arrival from foreign countries of merchandise that immediately entered consumption channels, warehouses, the Foreign Trade Zones, or the Strategic Petroleum Reserve. They exclude shipments between the United States, Puerto Rico, and U.S. possessions, shipments to U.S. Armed Forces and diplomatic missions abroad for their own use, U.S. goods returned to the United States by its Armed Forces, and in-transit shipments.

Table 1.5 Sources

U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division:

Petroleum Exports

1974-1987: “U.S. Exports,” FT410, December issues.

1988 and 1989: “Report on U.S. Merchandise Trade,” Final Revisions.

1990-1992: “U.S. Merchandise Trade,” Final Report.

1993-2001: “U.S. International Trade in Goods and Services,” Annual Revision.

2002 and 2003: “U.S. International Trade in Goods and Services,” FT-900, monthly.

Petroleum Imports

1974-1987: “U.S. Merchandise Trade,” FT900, December issues, 1975-1988.

1989: “Report on U.S. Merchandise Trade,” Final Revisions.

1990-1993: “U.S. Merchandise Trade,” Final Report.

1994-2001: “U.S. International Trade in Goods and Services,” Annual Revision.

2002 and 2003: “U.S. International Trade in Goods and Services,” FT-900, monthly.

Energy Exports and Imports

1974-1987: U.S. merchandise trade press releases and database printouts for adjustments.

1988: January-July, monthly FT-900 supplement, 1989 issues. August-December, monthly FT-900, 1989 issues.

1989: Monthly FT-900, 1990 issues.

1990-1992: “U.S. Merchandise Trade,” Final Report.

1993-2001: “U.S. International Trade in Goods and Services,” Annual Revision.

2002 and 2003: “U.S. International Trade in Goods and Services,” FT-900, monthly.

Petroleum, Energy, and Non-Energy Balances

Calculated by the Energy Information Administration.

Total Merchandise

1974-1987: U.S. merchandise trade press releases and database printouts for adjustments.

1988: "Report on U.S. Merchandise Trade, 1988 Final Revisions," August 18, 1989.

1989: "Report on U.S. Merchandise Trade, 1989 Revisions," July 10, 1990.

1990: "U.S. Merchandise Trade, 1990 Final Report," May 10, 1991, and "U.S. Merchandise Trade, December 1992," February 18, 1993, page 3.

1991: "U.S. Merchandise Trade, 1992 Final Report," May 12, 1993.

1992-2001: "U.S. International Trade in Goods and Services," Annual Revision.

2002 and 2003: "U.S. International Trade in Goods and Services," FT-900, monthly.

Tables 1.10 and 1.11 Sources

There are several degree-day databases maintained by the National Oceanic and Atmospheric Administration. The information published here is developed by the National Weather Service Climate Analysis Center, Camp Springs, MD. The data are available weekly with monthly summaries and are based on mean daily temperatures recorded at about 200 major weather stations around the country. The temperature information recorded at those weather stations is used to calculate statewide degree-day averages based on population.

The State figures are then aggregated into Census Divisions and into the national average. The population weights currently used represent resident State population data estimated for 1990 by the U.S. Department of Commerce, Bureau of the Census. The data provided here are available sooner than the Historical Climatology Series 5-1 (heating degree-days) and 5-2 (cooling degree-days) developed by the National Climatic Data Center, Asheville, NC, which compiles data from some 8,000 weather stations.

Section 2. Energy Consumption by Sector

U.S. total energy consumption in April 2003 was 7.7 quadrillion Btu, less than 1 percent lower than in April 2002.

Residential sector total consumption was 1.6 quadrillion Btu in April 2003, 3 percent higher than the April 2002 level. The sector accounted for 21 percent of total energy consumption.

Commercial sector total consumption was 1.3 quadrillion Btu in April 2003, 5 percent lower than the April 2002 level. The sector accounted for 17 percent of total energy consumption.

Industrial sector total consumption was 2.7 quadrillion Btu in April 2003, less than 1 percent higher than the April 2002

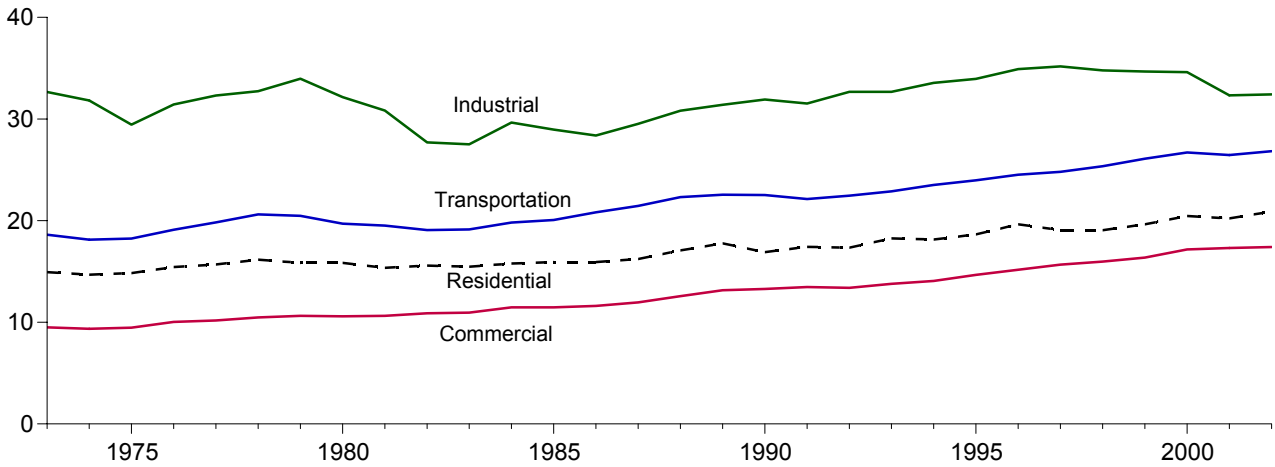
level. The sector accounted for 34 percent of total energy consumption.

Transportation sector total consumption was 2.2 quadrillion Btu in April 2003, 1 percent lower than the April 2002 level. The sector accounted for 28 percent of total energy consumption.

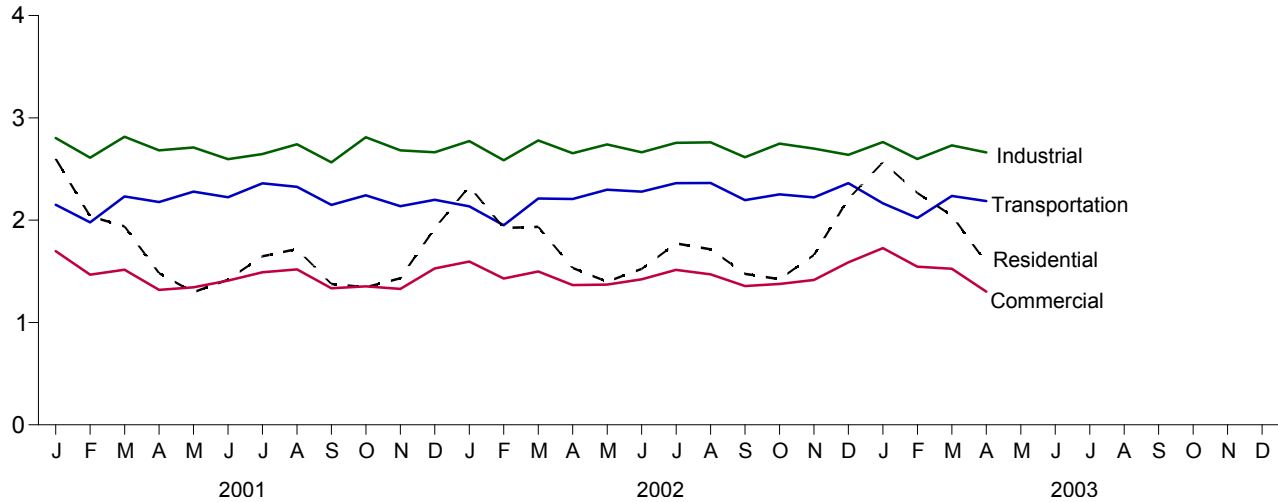
Electric power sector primary consumption was forecast as 2.8 quadrillion Btu in April 2003, 1 percent lower than the April 2002 level. Fossil fuels accounted for 68 percent of all primary energy consumed by the electric power sector; nuclear electric power 21 percent; and renewable energy 11 percent.

Figure 2.1 Energy Consumption by Sector
(Quadrillion Btu)

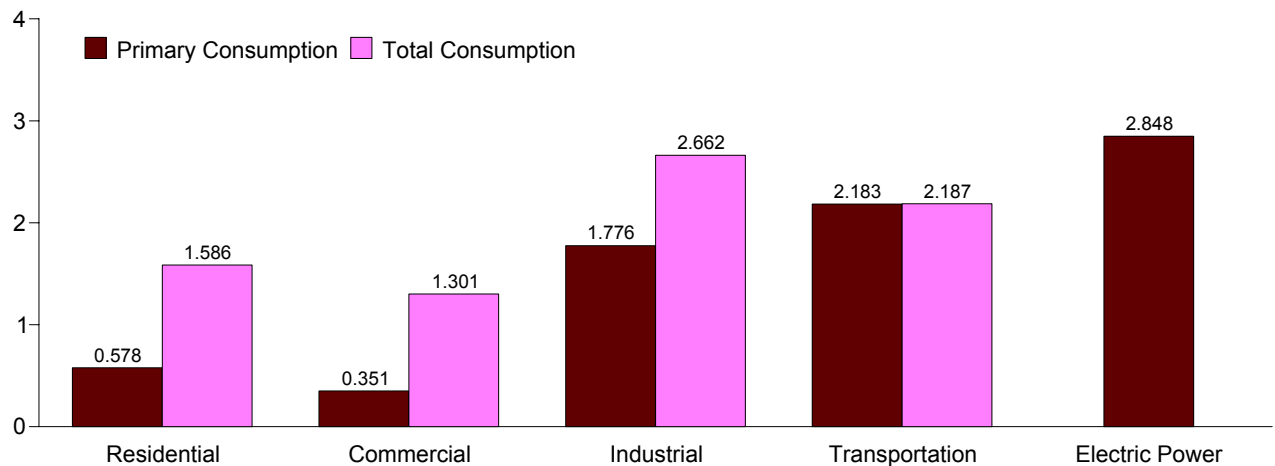
Total Consumption by End-Use Sector, 1973-2002



Total Consumption by End-Use Sector, Monthly



By Sector, April 2003



Note: Because vertical scales differ, graphs should not be compared.
 Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>.
 Source: Table 2.1.

Table 2.1 Energy Consumption by Sector
(Quadrillion Btu)

| | End-Use Sectors | | | | | | | | Electric Power Sector ^{c,d} | Adjustments ^e | Total ^b |
|--------------------|-----------------|----------|-------------------------|----------|-------------------------|----------|----------------|----------|--------------------------------------|--------------------------|--------------------|
| | Residential | | Commercial ^a | | Industrial ^b | | Transportation | | | | |
| | Primary | Total | Primary | Total | Primary | Total | Primary | Total | | | |
| 1973 Total | 8.250 | 14.930 | 4.381 | 9.507 | 24.741 | 32.653 | 18.576 | 18.612 | 19.753 | 0.007 | 75.708 |
| 1974 Total | 7.928 | 14.683 | 4.221 | 9.363 | 23.816 | 31.819 | 18.086 | 18.119 | 19.933 | .007 | 73.991 |
| 1975 Total | 8.006 | 14.842 | 4.023 | 9.466 | 21.454 | 29.447 | 18.209 | 18.244 | 20.307 | .001 | 71.999 |
| 1976 Total | 8.408 | 15.441 | 4.333 | 10.035 | 22.685 | 31.429 | 19.065 | 19.099 | 21.513 | .008 | 76.012 |
| 1977 Total | 8.207 | 15.689 | 4.217 | 10.177 | 23.193 | 32.307 | 19.784 | 19.820 | 22.591 | .007 | 78.000 |
| 1978 Total | 8.272 | 16.156 | 4.269 | 10.481 | 23.277 | 32.733 | 20.580 | 20.615 | 23.587 | .002 | 79.986 |
| 1979 Total | 7.934 | 15.842 | 4.333 | 10.627 | 24.211 | 33.962 | 20.436 | 20.471 | 23.987 | .002 | 80.903 |
| 1980 Total | 7.504 | 15.848 | 4.097 | 10.594 | 22.673 | 32.152 | 19.658 | 19.696 | 24.359 | -.001 | 78.289 |
| 1981 Total | 7.103 | 15.353 | 3.831 | 10.638 | 21.404 | 30.836 | 19.469 | 19.506 | 24.525 | .003 | 76.335 |
| 1982 Total | 7.163 | 15.577 | 3.859 | 10.880 | 19.112 | 27.704 | 19.032 | 19.069 | 24.063 | .004 | 73.234 |
| 1983 Total | 6.834 | 15.459 | 3.827 | 10.952 | 18.598 | 27.511 | 19.098 | 19.141 | 24.705 | .003 | 73.066 |
| 1984 Total | 6.990 | 15.775 | 3.991 | 11.465 | 20.208 | 29.643 | 19.761 | 19.808 | 25.741 | .003 | 76.693 |
| 1985 Total | 6.988 | 15.925 | 3.712 | 11.468 | 19.540 | 28.958 | 20.023 | 20.070 | 26.158 | -.004 | 76.417 |
| 1986 Total | 6.807 | 15.922 | 3.652 | 11.605 | 19.133 | 28.375 | 20.768 | 20.817 | 26.359 | .003 | 76.722 |
| 1987 Total | 6.841 | 16.228 | 3.743 | 11.956 | 20.046 | 29.519 | 21.405 | 21.455 | 27.124 | -.003 | 79.156 |
| 1988 Total | 7.246 | 17.066 | 3.951 | 12.574 | 20.958 | 30.818 | 22.261 | 22.312 | 28.354 | .003 | 82.774 |
| 1989 Total | 7.492 | 17.771 | 3.955 | 13.159 | 20.888 | 31.396 | 22.497 | 22.551 | 30.044 | .009 | 84.886 |
| 1990 Total | 6.457 | 16.896 | 3.813 | 13.284 | 21.235 | 31.918 | 22.472 | 22.526 | 30.647 | -.020 | 84.605 |
| 1991 Total | 6.689 | 17.412 | 3.862 | 13.461 | 20.903 | 31.527 | 22.069 | 22.122 | 30.999 | .001 | 84.522 |
| 1992 Total | 6.882 | 17.338 | 3.899 | 13.396 | 21.806 | 32.673 | 22.406 | 22.459 | 30.873 | (s) | 85.866 |
| 1993 Total | 7.121 | 18.248 | 3.893 | 13.789 | 21.738 | 32.668 | 22.830 | 22.883 | 32.006 | -.010 | 87.578 |
| 1994 Total | 6.949 | 18.135 | 3.930 | 14.058 | 22.376 | 33.557 | 23.448 | 23.503 | 32.551 | -.006 | 89.248 |
| 1995 Total | 7.022 | 18.653 | 4.032 | 14.665 | 22.643 | 33.941 | 23.905 | 23.960 | 33.616 | .003 | 91.221 |
| 1996 Total | 7.556 | 19.643 | 4.218 | 15.161 | 23.364 | 34.905 | 24.456 | 24.511 | 34.626 | .004 | 94.224 |
| 1997 Total | 7.088 | 19.067 | 4.248 | 15.679 | 23.608 | 35.168 | 24.753 | 24.808 | 35.024 | .006 | 94.727 |
| 1998 Total | 6.462 | 19.051 | 3.961 | 15.969 | 23.067 | 34.777 | 25.297 | 25.352 | 36.363 | -.003 | 95.146 |
| 1999 Total | 6.810 | 19.634 | 4.001 | 16.365 | 22.827 | 34.679 | 26.033 | 26.090 | 37.097 | .006 | 96.774 |
| 2000 Total | 7.149 | 20.456 | 4.228 | 17.166 | 22.737 | 34.613 | 26.644 | 26.704 | 38.181 | .002 | 98.942 |
| 2001 January | 1.226 | 2.599 | .627 | 1.697 | 1.945 | 2.803 | 2.146 | 2.151 | 3.306 | .001 | 9.251 |
| February | .986 | 2.039 | .527 | 1.468 | 1.785 | 2.611 | 1.974 | 1.978 | 2.825 | -.003 | 8.093 |
| March | .893 | 1.939 | .478 | 1.516 | 1.914 | 2.815 | 2.228 | 2.233 | 2.990 | -.004 | 8.499 |
| April | .575 | 1.482 | .339 | 1.320 | 1.809 | 2.682 | 2.172 | 2.177 | 2.764 | -.004 | 7.657 |
| May | .357 | 1.296 | .232 | 1.344 | 1.758 | 2.711 | 2.274 | 2.279 | 3.010 | (s) | 7.631 |
| June | .292 | 1.419 | .202 | 1.409 | 1.653 | 2.596 | 2.218 | 2.224 | 3.283 | .003 | 7.651 |
| July | .278 | 1.647 | .203 | 1.490 | 1.724 | 2.646 | 2.355 | 2.361 | 3.586 | .006 | 8.151 |
| August | .272 | 1.718 | .205 | 1.519 | 1.793 | 2.742 | 2.320 | 2.326 | 3.716 | .007 | 8.313 |
| September | .275 | 1.377 | .209 | 1.334 | 1.727 | 2.565 | 2.144 | 2.150 | 3.072 | .002 | 7.428 |
| October | .405 | 1.343 | .262 | 1.353 | 1.923 | 2.811 | 2.237 | 2.243 | 2.923 | (s) | 7.750 |
| November | .538 | 1.433 | .314 | 1.329 | 1.825 | 2.683 | 2.133 | 2.138 | 2.773 | (s) | 7.583 |
| December | .818 | 1.921 | .452 | 1.529 | 1.800 | 2.664 | 2.195 | 2.200 | 3.048 | .003 | 8.316 |
| Total | 6.914 | 20.224 | 4.049 | 17.301 | 21.657 | 32.328 | 26.396 | 26.458 | 37.295 | .011 | 96.322 |
| 2002 January | R 1.054 | R 2.330 | R .552 | R 1.596 | R 1.926 | R 2.774 | 2.130 | R 2.135 | R 3.172 | .001 | R 8.835 |
| February | R .902 | R 1.925 | R .491 | R 1.429 | R 1.766 | R 2.586 | 1.947 | 1.951 | R 2.785 | -.002 | R 7.889 |
| March | .860 | R 1.934 | R .469 | R 1.498 | R 1.886 | R 2.779 | 2.208 | 2.212 | R 3.002 | -.001 | R 8.423 |
| April | .582 | 1.534 | R .346 | R 1.366 | R 1.764 | R 2.655 | 2.202 | 2.207 | R 2.868 | -.001 | R 7.761 |
| May | R .406 | R 1.398 | R .260 | R 1.371 | R 1.789 | R 2.741 | 2.293 | 2.298 | R 3.060 | .001 | R 7.809 |
| June | .303 | 1.524 | R .217 | R 1.422 | R 1.711 | R 2.664 | R 2.274 | 2.279 | R 3.384 | .005 | R 7.893 |
| July | R .274 | 1.773 | R .205 | R 1.515 | R 1.773 | R 2.756 | 2.356 | 2.362 | R 3.797 | .009 | R 8.415 |
| August | R .259 | 1.716 | R .209 | R 1.471 | R 1.798 | R 2.761 | R 2.358 | 2.363 | R 3.686 | .008 | R 8.318 |
| September | .265 | R 1.476 | R .209 | R 1.356 | R 1.710 | R 2.615 | 2.192 | 2.197 | R 3.269 | .005 | 7.649 |
| October | .414 | 1.423 | R .272 | R 1.377 | R 1.831 | R 2.748 | 2.247 | 2.252 | R 3.036 | (s) | 7.800 |
| November | R .668 | R 1.660 | R .383 | R 1.416 | R 1.799 | R 2.700 | 2.218 | 2.223 | R 2.931 | -.001 | R 7.998 |
| December | R .987 | R 2.209 | R .519 | R 1.587 | R 1.746 | R 2.639 | 2.358 | 2.363 | R 3.188 | .001 | R 8.799 |
| Total | 6.974 | R 20.905 | R 4.132 | R 17.403 | R 21.498 | R 32.415 | R 26.783 | R 26.840 | 38.177 | .027 | R 97.590 |
| 2003 January | 1.204 | 2.568 | R .617 | R 1.727 | R 1.890 | R 2.764 | 2.160 | 2.165 | R 3.354 | .003 | R 9.226 |
| February | R 1.099 | R 2.267 | R .579 | R 1.546 | R 1.786 | R 2.597 | R 2.017 | R 2.021 | R 2.950 | -.001 | R 8.430 |
| March | R .875 | R 2.044 | R .485 | R 1.525 | R 1.838 | R 2.730 | R 2.232 | R 2.236 | RF 3.106 | -.001 | R 8.535 |
| April | .578 | 1.586 | .351 | 1.301 | 1.776 | 2.662 | 2.183 | 2.187 | F 2.848 | -.002 | 7.734 |
| 4-Month Total | 3.757 | 8.464 | 2.032 | 6.100 | 7.289 | 10.754 | 8.592 | 8.610 | E 12.257 | -.002 | 33.925 |
| 2002 4-Month Total | 3.398 | 7.722 | 1.858 | 5.890 | 7.341 | 10.794 | 8.487 | 8.504 | 11.826 | -.003 | 32.908 |
| 2001 4-Month Total | 3.680 | 8.060 | 1.971 | 6.000 | 7.453 | 10.912 | 8.520 | 8.539 | 11.885 | -.010 | 33.500 |

^a Commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See note at end of Section 7.

^b Industrial sector fuel use, including that at industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See note at end of Section 7.

^c The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

^d Through 1988, data are for consumption at electric utilities only. Beginning in 1989, data also include consumption at independent power producers.

^e A balancing item. The sum of primary consumption in the five energy-use

sectors equals the sum of total consumption in the four end-use sectors. However, total energy consumption does not equal the sum of the sectoral components due to the use of sector-specific conversion factors for coal and natural gas.

R=Revised. E=Estimate. F=Forecast. (s)=Less than 0.5 trillion Btu.

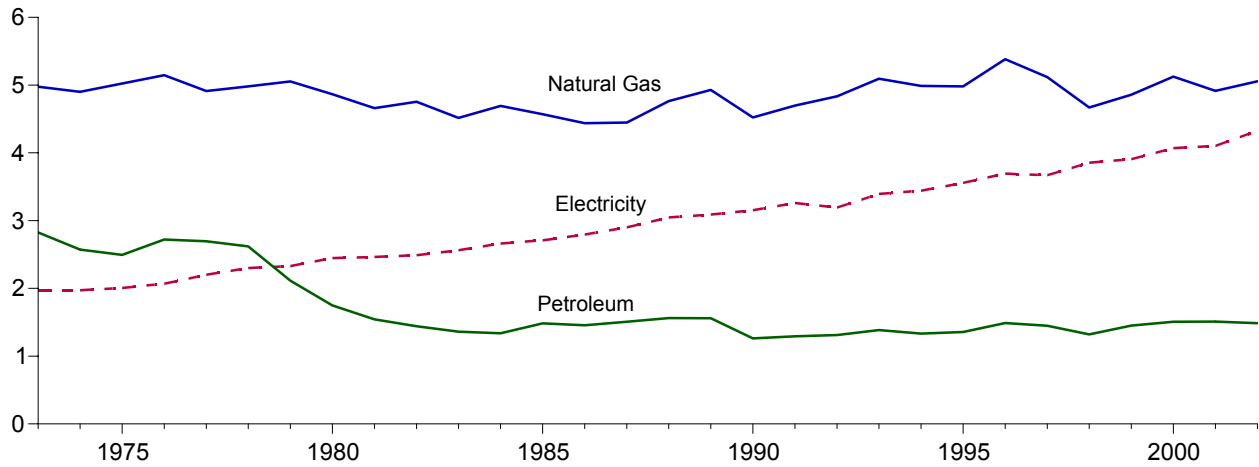
Notes: • Primary consumption includes coal, natural gas, petroleum, nuclear electric power, hydroelectric power, wood, waste, alcohol fuels, geothermal, solar, wind, coal coke net imports, and electricity net imports. • Total consumption includes primary consumption, electricity retail sales, and electrical system energy losses. • Totals may not equal sum of components due to independent rounding.

• Geographic coverage is the 50 States and the District of Columbia. Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>.

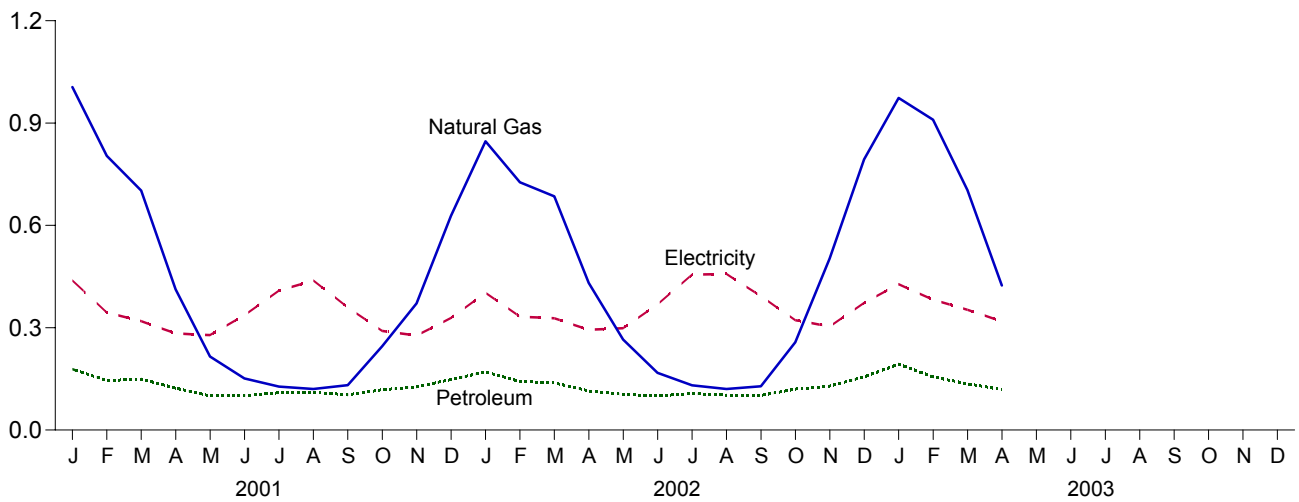
Additional Notes and Sources: See Tables 2.2-2.6 and end of section.

Figure 2.2 Residential Sector Energy Consumption
(Quadrillion Btu)

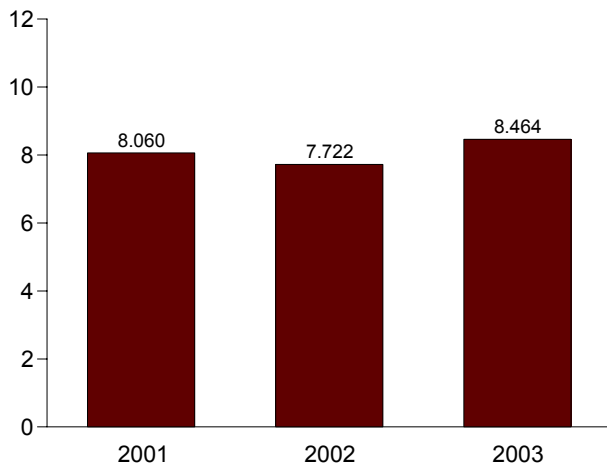
By Major Sources, 1973-2002



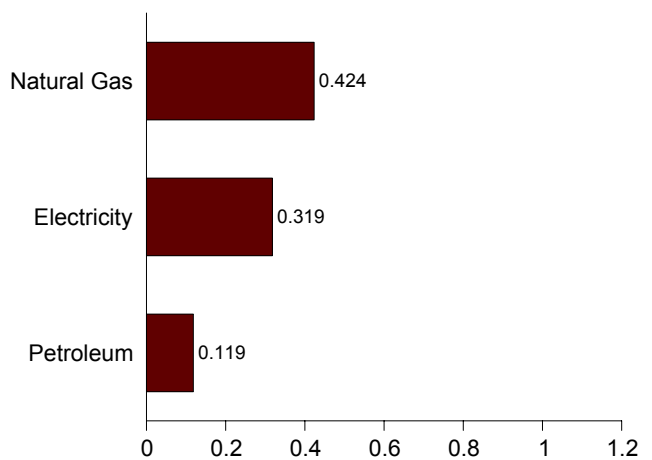
By Major Sources, Monthly



Total, January-April



By Major Sources, April 2003



Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>.
Source: Table 2.2.

Table 2.2 Residential Sector Energy Consumption
(Quadrillion Btu)

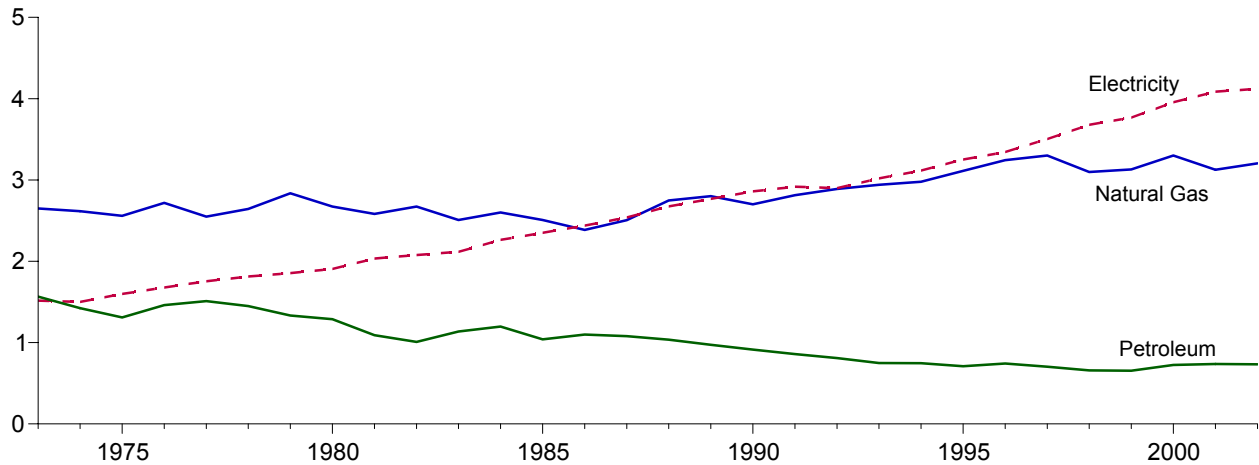
| | Primary Consumption | | | | | | | | Total Primary | Electricity Retail Sales ^d | Electrical System Energy Losses ^e | Total |
|--------------------|---------------------|--------------------------|-----------|---------|------------------|--------------------------|--------------------|-------|---------------|---------------------------------------|--|----------|
| | Fossil Fuels | | | | Renewable Energy | | | | | | | |
| | Coal | Natural Gas ^a | Petroleum | Total | Wood | Geo-thermal ^b | Solar ^c | Total | | | | |
| 1973 Total | 0.094 | 4.977 | 2.825 | 7.896 | 0.354 | NA | NA | 0.354 | 8.250 | 1.976 | 4.703 | 14.930 |
| 1974 Total | .082 | 4.901 | 2.573 | 7.557 | .371 | NA | NA | .371 | 7.928 | 1.973 | 4.783 | 14.683 |
| 1975 Total | .063 | 5.023 | 2.495 | 7.580 | .425 | NA | NA | .425 | 8.006 | 2.007 | 4.829 | 14.842 |
| 1976 Total | .059 | 5.147 | 2.720 | 7.927 | .482 | NA | NA | .482 | 8.408 | 2.069 | 4.963 | 15.441 |
| 1977 Total | .057 | 4.913 | 2.695 | 7.666 | .542 | NA | NA | .542 | 8.207 | 2.202 | 5.280 | 15.689 |
| 1978 Total | .049 | 4.981 | 2.620 | 7.651 | .622 | NA | NA | .622 | 8.272 | 2.301 | 5.582 | 16.156 |
| 1979 Total | .037 | 5.055 | 2.114 | 7.206 | .728 | NA | NA | .728 | 7.934 | 2.330 | 5.578 | 15.842 |
| 1980 Total | .031 | 4.866 | 1.748 | 6.645 | .859 | NA | NA | .859 | 7.504 | 2.448 | 5.897 | 15.848 |
| 1981 Total | .030 | 4.660 | 1.543 | 6.234 | .869 | NA | NA | .869 | 7.103 | 2.464 | 5.786 | 15.353 |
| 1982 Total | .032 | 4.753 | 1.441 | 6.226 | .937 | NA | NA | .937 | 7.163 | 2.489 | 5.925 | 15.577 |
| 1983 Total | .031 | 4.516 | 1.362 | 5.909 | .925 | NA | NA | .925 | 6.834 | 2.562 | 6.063 | 15.459 |
| 1984 Total | .038 | 4.692 | 1.337 | 6.067 | .923 | NA | NA | .923 | 6.990 | 2.662 | 6.123 | 15.775 |
| 1985 Total | .035 | 4.571 | 1.483 | 6.089 | .899 | NA | NA | .899 | 6.988 | 2.709 | 6.227 | 15.925 |
| 1986 Total | .035 | 4.439 | 1.457 | 5.931 | .876 | NA | NA | .876 | 6.807 | 2.795 | 6.320 | 15.922 |
| 1987 Total | .032 | 4.449 | 1.508 | 5.989 | .852 | NA | NA | .852 | 6.841 | 2.902 | 6.485 | 16.228 |
| 1988 Total | .034 | 4.765 | 1.563 | 6.361 | .885 | NA | NA | .885 | 7.246 | 3.046 | 6.774 | 17.066 |
| 1989 Total | .028 | 4.929 | 1.560 | 6.517 | .918 | .005 | .053 | .976 | 7.492 | 3.090 | 7.189 | 17.771 |
| 1990 Total | .028 | 4.523 | 1.263 | 5.814 | .581 | .006 | .056 | .642 | 6.457 | 3.153 | 7.287 | 16.896 |
| 1991 Total | .023 | 4.697 | 1.293 | 6.012 | .613 | .006 | .058 | .677 | 6.689 | 3.260 | 7.463 | 17.412 |
| 1992 Total | .024 | 4.835 | 1.311 | 6.170 | .645 | .006 | .060 | .711 | 6.882 | 3.193 | 7.263 | 17.338 |
| 1993 Total | .024 | 5.095 | 1.385 | 6.504 | .548 | .007 | .062 | .616 | 7.121 | 3.394 | 7.733 | 18.248 |
| 1994 Total | .021 | 4.988 | 1.333 | 6.342 | .537 | .006 | .064 | .607 | 6.949 | 3.441 | 7.746 | 18.135 |
| 1995 Total | .017 | 4.981 | 1.356 | 6.355 | .596 | .007 | .065 | .667 | 7.022 | 3.557 | 8.073 | 18.653 |
| 1996 Total | .017 | 5.383 | 1.489 | 6.888 | .595 | .007 | R .065 | .667 | 7.556 | 3.694 | 8.393 | 19.643 |
| 1997 Total | .016 | 5.118 | 1.448 | 6.582 | .433 | .008 | .065 | .506 | 7.088 | 3.671 | 8.308 | 19.067 |
| 1998 Total | .012 | 4.669 | 1.322 | 6.003 | .387 | .008 | .065 | .459 | 6.462 | 3.856 | 8.733 | 19.051 |
| 1999 Total | .014 | 4.858 | 1.452 | 6.324 | .414 | .009 | .064 | .486 | 6.810 | 3.906 | 8.917 | 19.634 |
| 2000 Total | .011 | 5.126 | 1.508 | 6.645 | .433 | .009 | R .061 | .503 | 7.149 | 4.069 | 9.238 | 20.456 |
| 2001 January | .001 | 1.006 | .178 | 1.186 | .035 | .001 | .005 | .040 | 1.226 | .438 | .935 | 2.599 |
| February | .001 | .804 | .145 | .950 | .031 | .001 | .005 | .037 | .986 | .345 | .708 | 2.039 |
| March | .001 | .702 | .149 | .852 | .035 | .001 | .005 | .040 | .893 | .319 | .727 | 1.939 |
| April | .001 | .413 | .123 | .536 | .033 | .001 | .005 | .039 | .575 | .283 | .624 | 1.482 |
| May | .001 | .216 | .100 | .316 | .035 | .001 | .005 | .040 | .357 | .278 | .661 | 1.296 |
| June | .001 | .151 | .101 | .253 | .033 | .001 | .005 | .039 | .292 | .337 | .790 | 1.419 |
| July | .001 | .127 | .109 | .237 | .035 | .001 | .005 | .040 | .278 | .409 | .960 | 1.647 |
| August | .001 | .120 | .110 | .231 | .035 | .001 | .005 | .040 | .272 | .438 | 1.008 | 1.718 |
| September | .001 | .131 | .104 | .236 | .033 | .001 | .005 | .039 | .275 | .360 | .743 | 1.377 |
| October | .001 | .245 | .118 | .364 | .035 | .001 | .005 | .040 | .405 | .291 | .648 | 1.343 |
| November | .001 | .371 | .126 | .499 | .033 | .001 | .005 | .039 | .538 | .277 | .618 | 1.433 |
| December | .002 | .628 | .148 | .778 | .035 | .001 | .005 | .040 | .818 | .329 | .774 | 1.921 |
| Total | .012 | 4.915 | 1.511 | 6.438 | .407 | .009 | .060 | .476 | 6.914 | 4.103 | 9.207 | 20.224 |
| 2002 January | .001 | R .847 | .171 | R 1.019 | .030 | .001 | .005 | .036 | R 1.054 | .402 | .874 | R 2.330 |
| February | .001 | R .727 | .142 | R .870 | .027 | .001 | .004 | .032 | R .902 | .332 | .690 | R 1.925 |
| March | .001 | R .685 | .138 | R .824 | .030 | .001 | .005 | .036 | R .860 | .328 | .747 | R 1.934 |
| April | .001 | .432 | .115 | .547 | .029 | .001 | .005 | .034 | .582 | .294 | .658 | 1.534 |
| May | .001 | R .265 | .105 | R .371 | .030 | .001 | .005 | .036 | R .406 | .299 | .693 | R 1.398 |
| June | .001 | .168 | .100 | .269 | .029 | .001 | .005 | .034 | .303 | .368 | .852 | 1.524 |
| July | .001 | R .131 | .107 | .239 | .030 | .001 | .005 | .036 | R .274 | .456 | 1.043 | 1.773 |
| August | .001 | R .120 | .103 | .224 | .030 | .001 | .005 | .036 | R .259 | .457 | .999 | 1.716 |
| September | .001 | R .128 | .102 | .231 | .029 | .001 | .005 | .034 | .265 | .393 | .819 | R 1.476 |
| October | .001 | .257 | .120 | .378 | .030 | .001 | .005 | .036 | .414 | .322 | .688 | 1.423 |
| November | .001 | .503 | .129 | .633 | .029 | .001 | .005 | .034 | R .668 | .304 | .689 | R 1.660 |
| December | .002 | R .794 | .156 | R .951 | .030 | .001 | .005 | .036 | R .987 | .373 | .850 | R 2.209 |
| Total | .012 | R 5.057 | 1.486 | R 6.555 | .350 | .010 | .058 | .419 | 6.974 | 4.327 | 9.604 | R 20.905 |
| 2003 January | .001 | R .973 | .193 | 1.168 | .030 | .001 | .005 | .036 | 1.204 | .428 | .936 | 2.568 |
| February | .001 | R .910 | .156 | R 1.067 | .027 | .001 | .004 | .032 | R 1.099 | .382 | R .785 | R 2.267 |
| March | .001 | RF .703 | .136 | R .840 | .030 | .001 | .005 | .036 | R .875 | RF .353 | R .816 | R 2.044 |
| April | .001 | F .424 | .119 | .544 | .029 | .001 | .005 | .034 | .578 | F .319 | .688 | 1.586 |
| 4-Month Total | .005 | E 3.011 | .604 | 3.619 | .115 | .003 | .019 | .138 | 3.757 | E 1.481 | 3.226 | 8.464 |
| 2002 4-Month Total | .005 | 2.690 | .566 | 3.260 | .115 | .003 | .019 | .138 | 3.398 | 1.356 | 2.969 | 7.722 |
| 2001 4-Month Total | .005 | 2.924 | .595 | 3.524 | .134 | .003 | .020 | .157 | 3.680 | 1.385 | 2.994 | 8.060 |

^a Includes supplemental gaseous fuels.
^b Geothermal heat pump and direct use energy.
^c Solar thermal direct use and photovoltaic electricity generation. Includes small amounts of commercial sector use.
^d Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.

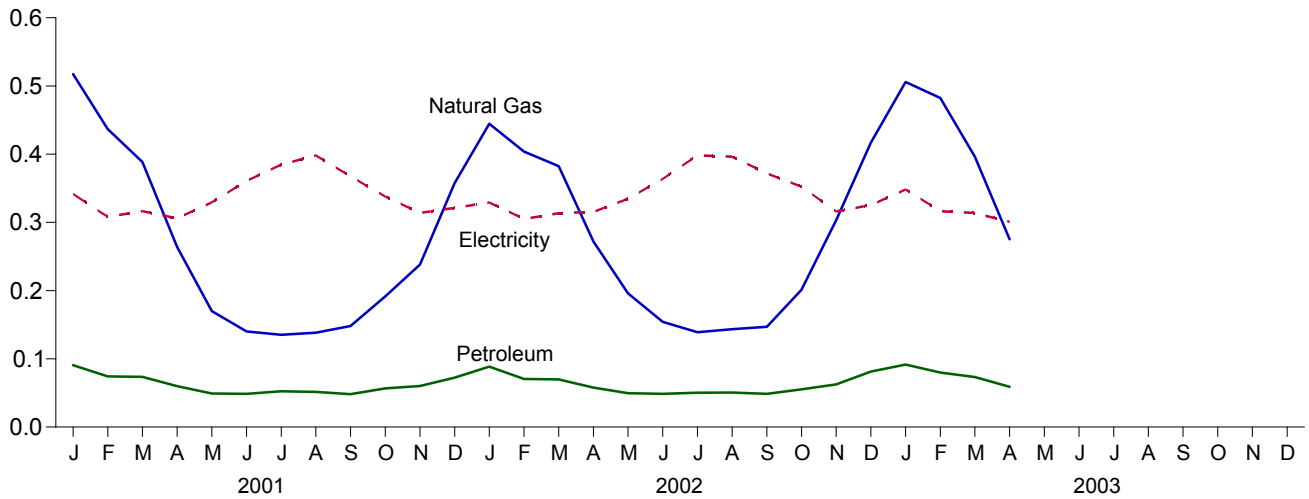
^e See Note 12 at end of section.
R=Revised, E=Estimate, NA=Not available, F=Forecast.
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>.
Additional Notes and Sources: See end of section.

Figure 2.3 Commercial Sector Energy Consumption
(Quadrillion Btu)

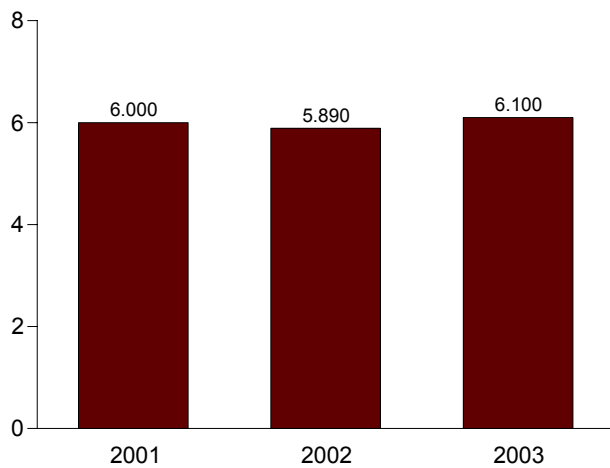
By Major Sources, 1973-2002



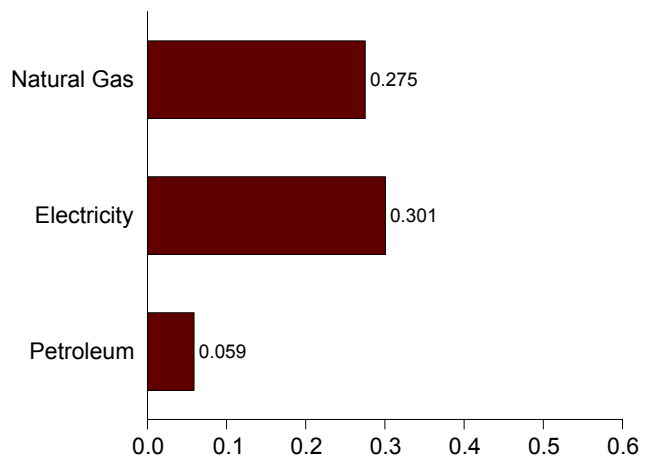
By Major Sources, Monthly



Total, January-April



By Major Sources, April 2003



Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>.
Source: Table 2.3.

Table 2.3 Commercial Sector Energy Consumption
(Quadrillion Btu)

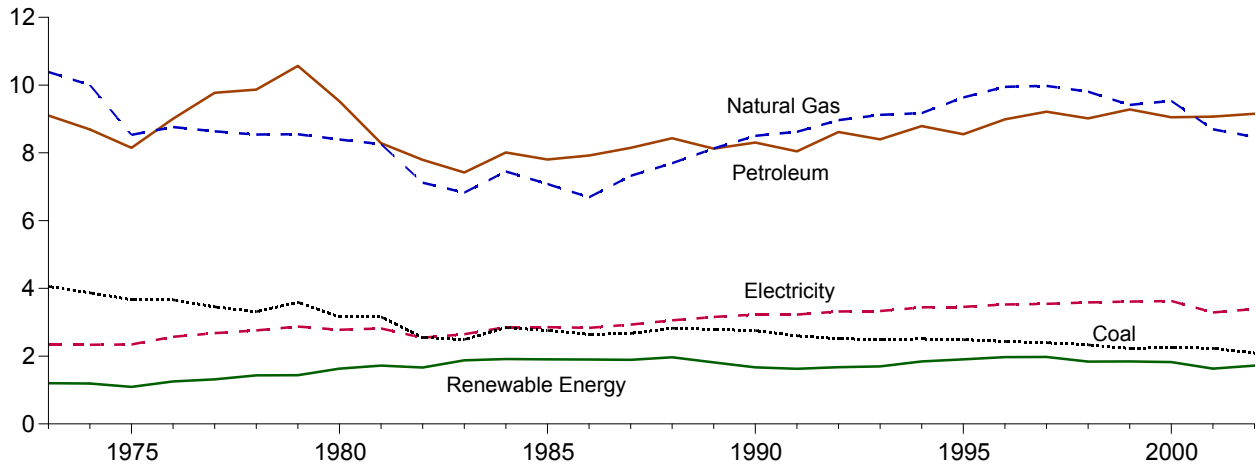
| | Primary Consumption | | | | | | | | | Electricity Retail Sales ^d | Electrical System Energy Losses ^e | Total |
|--------------------|---------------------|--------------------------|-----------|---------|--------------------------|----------------|--------------------------|--------|---------------|---------------------------------------|--|----------|
| | Fossil Fuels | | | | Renewable Energy | | | | Total Primary | | | |
| | Coal | Natural Gas ^a | Petroleum | Total | Hydro-power ^b | Wood and Waste | Geo-thermal ^c | Total | | | | |
| 1973 Total | 0.160 | 2.649 | 1.565 | 4.374 | NA | 0.007 | NA | 0.007 | 4.381 | 1.517 | 3.609 | 9.507 |
| 1974 Total | .175 | 2.617 | 1.423 | 4.214 | NA | .007 | NA | .007 | 4.221 | 1.501 | 3.640 | 9.363 |
| 1975 Total | .147 | 2.558 | 1.310 | 4.015 | NA | .008 | NA | .008 | 4.023 | 1.598 | 3.845 | 9.466 |
| 1976 Total | .144 | 2.718 | 1.461 | 4.324 | NA | .009 | NA | .009 | 4.333 | 1.678 | 4.025 | 10.035 |
| 1977 Total | .148 | 2.548 | 1.511 | 4.207 | NA | .010 | NA | .010 | 4.217 | 1.754 | 4.206 | 10.177 |
| 1978 Total | .165 | 2.643 | 1.450 | 4.257 | NA | .012 | NA | .012 | 4.269 | 1.813 | 4.398 | 10.481 |
| 1979 Total | .149 | 2.836 | 1.334 | 4.319 | NA | .014 | NA | .014 | 4.333 | 1.854 | 4.439 | 10.627 |
| 1980 Total | .115 | 2.674 | 1.288 | 4.076 | NA | .021 | NA | .021 | 4.097 | 1.906 | 4.591 | 10.594 |
| 1981 Total | .137 | 2.583 | 1.090 | 3.810 | NA | .021 | NA | .021 | 3.831 | 2.033 | 4.774 | 10.638 |
| 1982 Total | .155 | 2.673 | 1.008 | 3.837 | NA | .022 | NA | .022 | 3.859 | 2.077 | 4.944 | 10.880 |
| 1983 Total | .162 | 2.508 | 1.136 | 3.805 | NA | .022 | NA | .022 | 3.827 | 2.116 | 5.008 | 10.952 |
| 1984 Total | .171 | 2.600 | 1.198 | 3.969 | NA | .022 | NA | .022 | 3.991 | 2.264 | 5.209 | 11.465 |
| 1985 Total | .141 | 2.508 | 1.039 | 3.688 | NA | .024 | NA | .024 | 3.712 | 2.351 | 5.405 | 11.468 |
| 1986 Total | .141 | 2.386 | 1.099 | 3.625 | NA | .027 | NA | .027 | 3.652 | 2.439 | 5.515 | 11.605 |
| 1987 Total | .129 | 2.505 | 1.079 | 3.714 | NA | .029 | NA | .029 | 3.743 | 2.539 | 5.674 | 11.956 |
| 1988 Total | .134 | 2.748 | 1.037 | 3.919 | NA | .032 | NA | .032 | 3.951 | 2.675 | 5.948 | 12.574 |
| 1989 Total | .118 | 2.802 | .973 | 3.893 | .001 | .058 | .003 | .061 | 3.955 | 2.767 | 6.437 | 13.159 |
| 1990 Total | .128 | 2.701 | .913 | 3.742 | .001 | .067 | .003 | .071 | 3.813 | 2.860 | 6.611 | 13.284 |
| 1991 Total | .118 | 2.813 | .859 | 3.791 | .001 | .068 | .003 | .072 | 3.862 | 2.918 | 6.681 | 13.461 |
| 1992 Total | .118 | 2.890 | .811 | 3.818 | .001 | .076 | .003 | .081 | 3.899 | 2.900 | 6.596 | 13.396 |
| 1993 Total | .119 | 2.942 | .749 | 3.810 | .001 | .079 | .003 | .084 | 3.893 | 3.019 | 6.877 | 13.789 |
| 1994 Total | .118 | 2.979 | .747 | 3.844 | .001 | .081 | .004 | .086 | 3.930 | 3.116 | 7.013 | 14.058 |
| 1995 Total | .117 | 3.113 | .710 | 3.940 | .001 | .086 | .005 | .092 | 4.032 | 3.252 | 7.381 | 14.665 |
| 1996 Total | .122 | 3.244 | .742 | 4.108 | .001 | .103 | .005 | .110 | 4.218 | 3.344 | 7.599 | 15.161 |
| 1997 Total | .129 | 3.302 | .703 | 4.134 | .001 | .107 | .006 | .113 | 4.248 | 3.503 | 7.928 | 15.679 |
| 1998 Total | .093 | 3.098 | .658 | 3.850 | .001 | .102 | .007 | .111 | 3.961 | 3.678 | 8.330 | 15.969 |
| 1999 Total | .103 | 3.130 | .655 | 3.887 | .001 | .106 | .007 | .114 | 4.001 | 3.766 | 8.597 | 16.365 |
| 2000 Total | .092 | 3.301 | .726 | 4.119 | .001 | .100 | .008 | .109 | 4.228 | 3.956 | 8.982 | 17.166 |
| 2001 January | .012 | .517 | .091 | .619 | (s) | .007 | .001 | .007 | .627 | .342 | .729 | 1.697 |
| February | .009 | .437 | .074 | .520 | (s) | .006 | .001 | .007 | .527 | .308 | .633 | 1.468 |
| March | .008 | .389 | .073 | .470 | (s) | .007 | .001 | .007 | .478 | .317 | .721 | 1.516 |
| April | .008 | .264 | .060 | .332 | (s) | .007 | .001 | .007 | .339 | .306 | .674 | 1.320 |
| May | .005 | .170 | .049 | .224 | (s) | .007 | .001 | .007 | .232 | .329 | .783 | 1.344 |
| June | .006 | .140 | .049 | .195 | (s) | .007 | .001 | .008 | .202 | .361 | .846 | 1.409 |
| July | .007 | .135 | .052 | .195 | (s) | .007 | .001 | .008 | .203 | .385 | .903 | 1.490 |
| August | .007 | .138 | .052 | .197 | (s) | .007 | .001 | .008 | .205 | .398 | .916 | 1.519 |
| September | .005 | .148 | .048 | .201 | (s) | .007 | .001 | .007 | .209 | .367 | .759 | 1.334 |
| October | .006 | .192 | .057 | .255 | (s) | .007 | .001 | .007 | .262 | .338 | .753 | 1.353 |
| November | .008 | .238 | .060 | .307 | (s) | .006 | .001 | .007 | .314 | .314 | .701 | 1.329 |
| December | .014 | .357 | .072 | .444 | (s) | .007 | .001 | .008 | .452 | .321 | .756 | 1.529 |
| Total | .097 | 3.126 | .737 | 3.960 | .001 | .081 | .008 | .089 | 4.049 | 4.085 | 9.166 | 17.301 |
| 2002 January | .011 | .445 | .089 | .544 | (s) | .007 | .001 | .008 | R .552 | .329 | .715 | R 1.596 |
| February | .009 | R .404 | .070 | R .484 | (s) | .007 | .001 | .007 | R .491 | .305 | .633 | R 1.429 |
| March | .009 | R .383 | .070 | R .461 | (s) | .007 | .001 | .008 | R .469 | .314 | .715 | R 1.498 |
| April | .008 | R .272 | .058 | R .338 | (s) | .007 | .001 | .008 | R .346 | .315 | .705 | R 1.366 |
| May | .006 | R .196 | .050 | R .251 | (s) | .007 | .001 | .008 | R .260 | .335 | .776 | R 1.371 |
| June | .005 | R .154 | .049 | R .209 | (s) | .007 | .001 | .008 | R .217 | .364 | .842 | R 1.422 |
| July | .008 | R .139 | .050 | R .197 | (s) | .008 | .001 | .008 | R .205 | .398 | .911 | R 1.515 |
| August | .007 | R .144 | .051 | R .201 | (s) | .007 | .001 | .008 | R .209 | .396 | .865 | R 1.471 |
| September | .005 | R .147 | .049 | R .201 | (s) | .007 | .001 | .008 | R .209 | .372 | .775 | R 1.356 |
| October | .006 | R .201 | .055 | R .263 | (s) | .008 | .001 | .009 | R .272 | .353 | .753 | R 1.377 |
| November | .010 | R .303 | .063 | R .375 | (s) | .007 | .001 | .008 | R .383 | .316 | .717 | R 1.416 |
| December | .013 | R .417 | .081 | R .511 | (s) | .008 | .001 | .008 | R .519 | .326 | .742 | R 1.587 |
| Total | .097 | R 3.204 | .734 | R 4.034 | .001 | .088 | .009 | .097 | R 4.132 | 4.122 | 9.149 | R 17.403 |
| 2003 January | .012 | R .506 | .092 | R .609 | (s) | .007 | .001 | .007 | R .617 | .348 | .762 | R 1.727 |
| February | .010 | R .482 | .080 | R .572 | (s) | R .007 | .001 | .007 | R .579 | R .317 | R .650 | R 1.546 |
| March | .007 | RF .396 | .073 | R .477 | (s) | RE .007 | .001 | R .008 | R .485 | RF .314 | R .726 | R 1.525 |
| April | .009 | F .275 | .059 | .343 | (s) | E .007 | .001 | .008 | .351 | F .301 | .650 | 1.301 |
| 4-Month Total | .038 | E 1.660 | .304 | 2.001 | (s) | E .028 | .003 | .031 | 2.032 | E 1.279 | 2.788 | 6.100 |
| 2002 4-Month Total | .037 | 1.503 | .287 | 1.826 | (s) | .029 | .003 | .032 | 1.858 | 1.263 | 2.769 | 5.890 |
| 2001 4-Month Total | .037 | 1.607 | .298 | 1.942 | (s) | .026 | .003 | .029 | 1.971 | 1.272 | 2.757 | 6.000 |

^a Includes supplemental gaseous fuels.
^b Conventional hydroelectric power.
^c Geothermal heat pump and direct use energy.
^d Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.
^e See Note 12 at end of section.

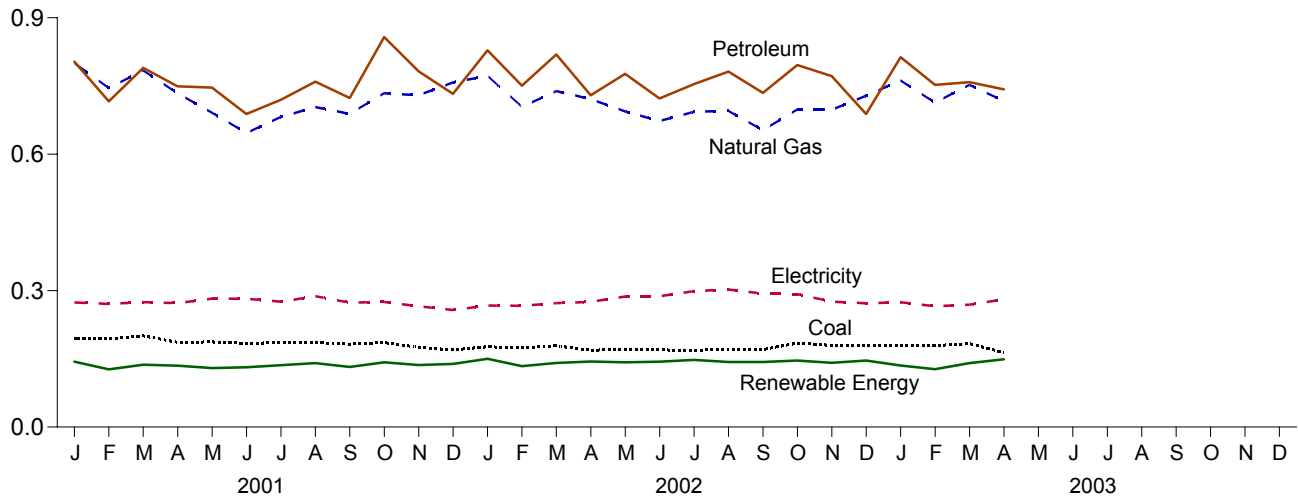
R=Revised. E=Estimate. NA=Not available. F=Forecast. (s)=Less than 0.5 trillion Btu.
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>.
Additional Notes and Sources: See end of section.

Figure 2.4 Industrial Sector Energy Consumption
(Quadrillion Btu)

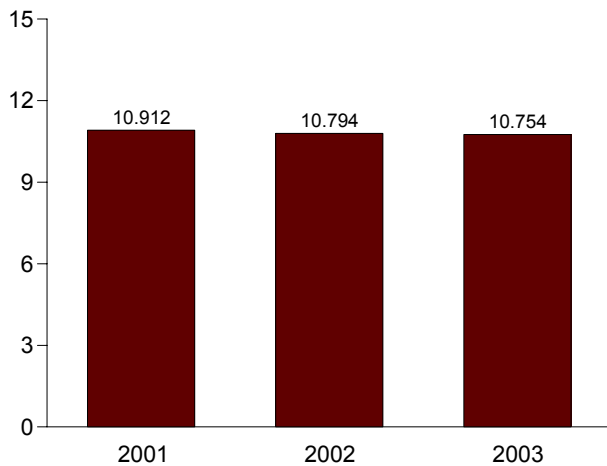
By Major Sources, 1973-2002



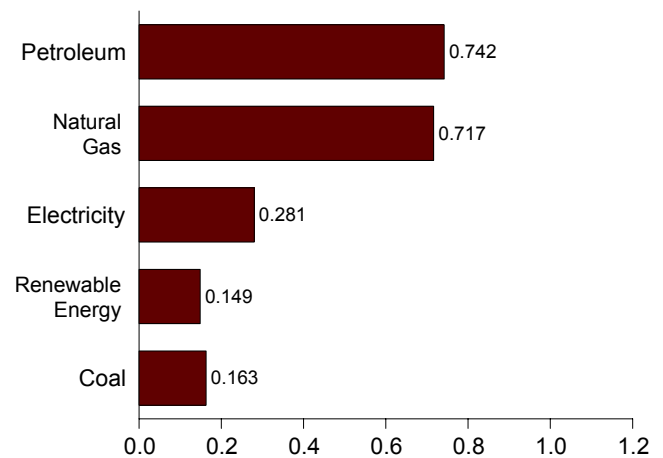
By Major Sources, Monthly



Total, January-April



By Major Sources, April 2003



Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>.
Source: Table 2.4.

Table 2.4 Industrial Sector Energy Consumption
(Quadrillion Btu)

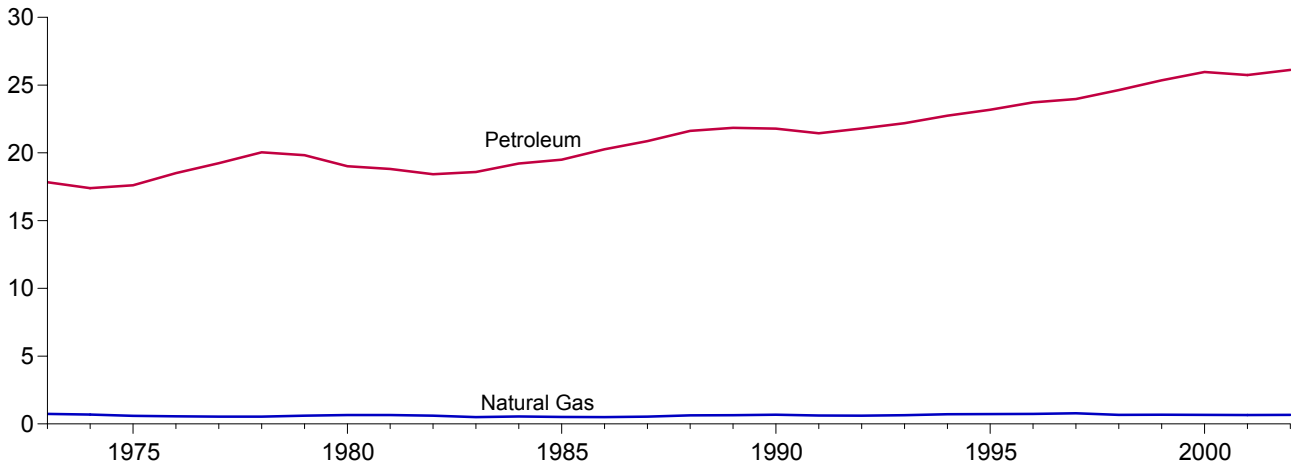
| | Primary Consumption | | | | | | | | Electricity Retail Sales ^g | Electrical System Energy Losses ^h | Total ^b | |
|--------------------|---------------------|--------------------------|-----------|--------------------|--------------------------|--|--------------------------|--------|---------------------------------------|--|--------------------|---------------|
| | Fossil Fuels | | | | Renewable Energy | | | | | | | |
| | Coal | Natural Gas ^a | Petroleum | Total ^b | Hydro-power ^c | Wood ^d and Waste ^e | Geo-thermal ^f | Total | | | | Total Primary |
| 1973 Total | 4.057 | 10.388 | 9.104 | 23.541 | 0.035 | 1.165 | NA | 1.200 | 24.741 | 2.341 | 5.571 | 32.653 |
| 1974 Total | 3.870 | 10.004 | 8.694 | 22.624 | .033 | 1.159 | NA | 1.192 | 23.816 | 2.337 | 5.666 | 31.819 |
| 1975 Total | 3.667 | 8.532 | 8.146 | 20.359 | .032 | 1.063 | NA | 1.096 | 21.454 | 2.346 | 5.647 | 29.447 |
| 1976 Total | 3.661 | 8.762 | 9.010 | 21.432 | .033 | 1.220 | NA | 1.253 | 22.685 | 2.573 | 6.171 | 31.429 |
| 1977 Total | 3.454 | 8.635 | 9.774 | 21.879 | .033 | 1.281 | NA | 1.314 | 23.193 | 2.682 | 6.432 | 32.307 |
| 1978 Total | 3.314 | 8.539 | 9.867 | 21.845 | .032 | 1.400 | NA | 1.432 | 23.277 | 2.761 | 6.696 | 32.733 |
| 1979 Total | 3.593 | 8.549 | 10.568 | 22.773 | .034 | 1.405 | NA | 1.439 | 24.211 | 2.873 | 6.878 | 33.962 |
| 1980 Total | 3.155 | 8.395 | 9.525 | 21.040 | .033 | 1.600 | NA | 1.633 | 22.673 | 2.781 | 6.698 | 32.152 |
| 1981 Total | 3.157 | 8.257 | 8.285 | 19.682 | .033 | 1.689 | NA | 1.722 | 21.404 | 2.817 | 6.615 | 30.836 |
| 1982 Total | 2.552 | 7.121 | 7.794 | 17.446 | .033 | 1.634 | NA | 1.667 | 19.112 | 2.542 | 6.050 | 27.704 |
| 1983 Total | 2.490 | 6.826 | 7.420 | 16.720 | .033 | 1.845 | NA | 1.879 | 18.598 | 2.648 | 6.265 | 27.511 |
| 1984 Total | 2.842 | 7.448 | 8.014 | 18.292 | .033 | 1.883 | NA | 1.916 | 20.208 | 2.859 | 6.576 | 29.643 |
| 1985 Total | 2.760 | 7.080 | 7.805 | 17.632 | .033 | 1.875 | NA | 1.908 | 19.540 | 2.855 | 6.563 | 28.958 |
| 1986 Total | 2.641 | 6.690 | 7.920 | 17.234 | .033 | 1.866 | NA | 1.899 | 19.133 | 2.834 | 6.408 | 28.375 |
| 1987 Total | 2.673 | 7.323 | 8.151 | 18.155 | .033 | 1.858 | NA | 1.891 | 20.046 | 2.928 | 6.545 | 29.519 |
| 1988 Total | 2.828 | 7.696 | 8.430 | 18.993 | .033 | 1.933 | NA | 1.965 | 20.958 | 3.059 | 6.801 | 30.818 |
| 1989 Total | 2.787 | 8.131 | 8.126 | 19.074 | .028 | 1.784 | .002 | 1.814 | 20.888 | 3.158 | 7.349 | 31.396 |
| 1990 Total | 2.756 | 8.502 | 8.305 | 19.568 | .031 | 1.634 | .002 | 1.667 | 21.235 | 3.226 | 7.457 | 31.918 |
| 1991 Total | 2.601 | 8.619 | 8.047 | 19.277 | .030 | 1.595 | .002 | 1.626 | 20.903 | 3.230 | 7.394 | 31.527 |
| 1992 Total | 2.515 | 8.967 | 8.617 | 20.133 | .031 | 1.640 | .002 | 1.672 | 21.806 | 3.319 | 7.548 | 32.673 |
| 1993 Total | 2.496 | 9.120 | 8.399 | 20.042 | .030 | 1.664 | .002 | 1.696 | 21.738 | 3.334 | 7.596 | 32.668 |
| 1994 Total | 2.510 | 9.172 | 8.792 | 20.532 | .062 | 1.779 | .003 | 1.844 | 22.376 | 3.439 | 7.742 | 33.557 |
| 1995 Total | 2.488 | 9.637 | 8.552 | 20.739 | .055 | 1.847 | .003 | 1.905 | 22.643 | 3.455 | 7.842 | 33.941 |
| 1996 Total | 2.434 | 9.947 | 8.989 | 21.393 | .061 | 1.907 | .003 | 1.971 | 23.364 | 3.527 | 8.014 | 34.905 |
| 1997 Total | 2.395 | 9.976 | 9.215 | 21.632 | .058 | 1.915 | .003 | 1.976 | 23.608 | 3.542 | 8.017 | 35.168 |
| 1998 Total | 2.335 | 9.806 | 9.017 | 21.226 | .055 | 1.784 | .003 | 1.841 | 23.067 | 3.587 | 8.124 | 34.777 |
| 1999 Total | 2.227 | 9.415 | 9.284 | 20.983 | .049 | 1.791 | .004 | 1.843 | 22.827 | 3.611 | 8.242 | 34.679 |
| 2000 Total | 2.256 | 9.535 | 9.053 | 20.909 | .042 | 1.781 | .004 | 1.828 | 22.737 | 3.631 | 8.245 | 34.613 |
| 2001 January | .194 | .800 | .803 | 1.801 | .002 | .141 | (s) | .144 | 1.945 | .274 | .584 | 2.803 |
| February | .194 | .745 | .716 | 1.658 | .002 | .124 | (s) | .127 | 1.785 | .271 | .556 | 2.611 |
| March | .201 | .784 | .790 | 1.777 | .003 | .133 | (s) | .137 | 1.914 | .275 | .626 | 2.815 |
| April | .186 | .734 | .749 | 1.674 | .003 | .132 | (s) | .135 | 1.809 | .272 | .600 | 2.682 |
| May | .187 | .691 | .746 | 1.628 | .003 | .126 | (s) | .130 | 1.758 | .282 | .671 | 2.711 |
| June | .184 | .647 | .688 | 1.522 | .003 | .128 | (s) | .131 | 1.653 | .282 | .661 | 2.596 |
| July | .185 | .682 | .720 | 1.588 | .002 | .133 | (s) | .136 | 1.724 | .276 | .647 | 2.646 |
| August | .186 | .704 | .760 | 1.653 | .003 | .137 | (s) | .140 | 1.793 | .287 | .661 | 2.742 |
| September | .182 | .689 | .723 | 1.595 | .002 | .129 | (s) | .132 | 1.727 | .273 | .565 | 2.565 |
| October | .185 | .734 | .857 | 1.781 | .002 | .140 | (s) | .142 | 1.923 | .275 | .613 | 2.811 |
| November | .175 | .730 | .782 | 1.689 | .002 | .134 | (s) | .136 | 1.825 | .265 | .592 | 2.683 |
| December | .170 | .758 | .733 | 1.661 | .003 | .136 | (s) | .139 | 1.800 | .257 | .606 | 2.664 |
| Total | 2.230 | 8.697 | 9.069 | 20.027 | .032 | 1.593 | .005 | 1.630 | 21.657 | 3.290 | 7.382 | 32.328 |
| 2002 January | .176 | R .772 | .829 | R 1.776 | .003 | .147 | (s) | .150 | R 1.926 | .267 | .580 | R 2.774 |
| February | .174 | R .704 | .751 | R 1.632 | .003 | .130 | (s) | .134 | R 1.766 | .267 | .553 | R 2.586 |
| March | .178 | R .739 | .819 | R 1.745 | .003 | .137 | (s) | .141 | R 1.886 | .272 | .621 | R 2.779 |
| April | .169 | R .721 | .730 | R 1.620 | .004 | .140 | (s) | .144 | R 1.764 | .275 | .616 | R 2.655 |
| May | .171 | R .694 | .777 | R 1.646 | .004 | .138 | (s) | .142 | R 1.789 | .287 | .665 | R 2.741 |
| June | .169 | R .673 | .722 | R 1.567 | .003 | .140 | (s) | .144 | R 1.711 | .288 | .665 | R 2.664 |
| July | .169 | R .693 | .754 | R 1.625 | .003 | .145 | (s) | .148 | R 1.773 | .299 | .684 | R 2.756 |
| August | .171 | R .695 | .782 | R 1.655 | .002 | .140 | (s) | .143 | R 1.798 | .303 | .661 | R 2.761 |
| September | .171 | R .653 | .735 | R 1.567 | .002 | .141 | (s) | .143 | R 1.710 | .293 | .612 | R 2.615 |
| October | .185 | R .698 | .796 | R 1.685 | .003 | .142 | (s) | .146 | R 1.831 | .292 | .624 | R 2.748 |
| November | .180 | R .697 | .772 | R 1.657 | .005 | .136 | (s) | .141 | R 1.799 | .276 | .625 | R 2.700 |
| December | .180 | R .728 | .688 | R 1.600 | .006 | .140 | (s) | .146 | R 1.746 | .272 | .621 | R 2.639 |
| Total | 2.092 | R 8.468 | 9.154 | R 19.775 | .041 | 1.677 | .005 | 1.722 | R 21.498 | 3.391 | 7.526 | R 32.415 |
| 2003 January | .179 | R .762 | .813 | R 1.754 | .004 | .131 | (s) | .135 | R 1.890 | .274 | .600 | R 2.764 |
| February | .179 | R .713 | R .752 | R 1.659 | R .004 | R .123 | (s) | R .127 | R 1.786 | .266 | R .546 | R 2.597 |
| March | .183 | RF .752 | RF .758 | R 1.698 | .004 | R .137 | (s) | R .141 | R 1.838 | RF .269 | R .623 | R 2.730 |
| April | .163 | F .717 | F .742 | 1.627 | .004 | .144 | (s) | .149 | 1.776 | F .281 | .606 | 2.662 |
| 4-Month Total | .705 | E 2.944 | 3.066 | 6.737 | .016 | .535 | .002 | .552 | 7.289 | E 1.090 | 2.375 | 10.754 |
| 2002 4-Month Total | .698 | 2.936 | 3.128 | 6.773 | .013 | .554 | .002 | .569 | 7.341 | 1.081 | 2.371 | 10.794 |
| 2001 4-Month Total | .775 | 3.064 | 3.059 | 6.911 | .011 | .530 | .002 | .543 | 7.453 | 1.092 | 2.367 | 10.912 |

a Includes supplemental gaseous fuels.
b Includes coal coke net imports, which are not separately displayed. See Table 1.4.
c Conventional hydroelectric power.
d Wood, black liquor, and other wood waste.
e Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.
f Geothermal heat pump and direct use energy.
g Electricity retail sales to ultimate customers reported by electric utilities and

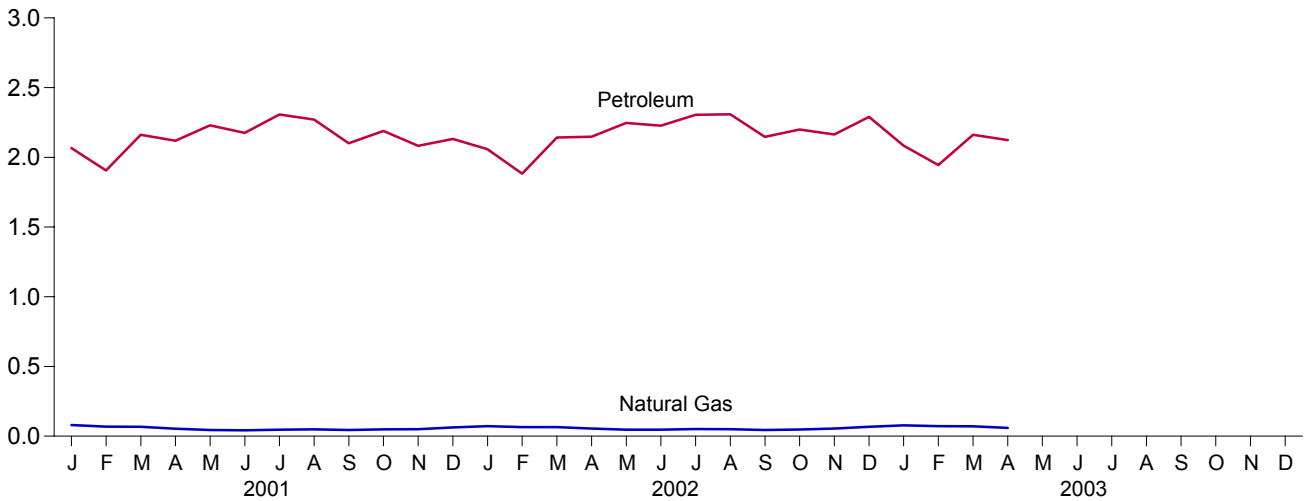
other energy service providers.
h See Note 12 at end of section.
R=Revised. E=Estimate. NA=Not available. F=Forecast. (s)=Less than 0.5 trillion Btu.
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>.
Additional Notes and Sources: See end of section.

Figure 2.5 Transportation Sector Energy Consumption
(Quadrillion Btu)

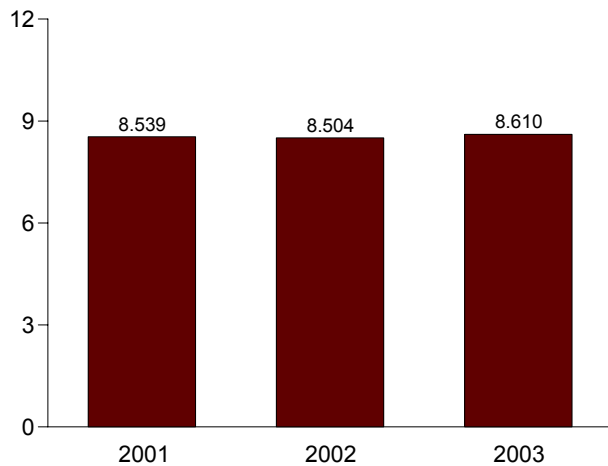
By Major Sources, 1973-2002



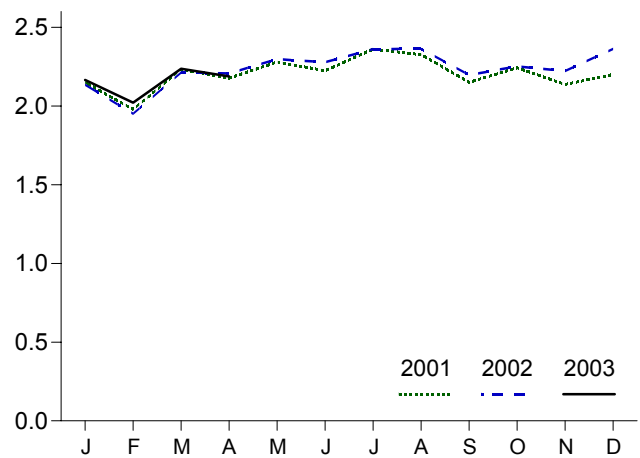
By Major Sources, Monthly



Total, January-April



Total, Monthly



Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>.
Source: Table 2.5.

Table 2.5 Transportation Sector Energy Consumption
(Quadrillion Btu)

| | Primary Consumption | | | | | | Electricity Retail Sales ^c | Electrical System Energy Losses ^d | Total ^b |
|--------------------------|---------------------|-----------------------------|-----------|----------|-------------------------------|-------------------------------|---|---|--------------------|
| | Fossil Fuels | | | | Renewable Energy | Total Primary ^b | | | |
| | Coal | Natural Gas ^a | Petroleum | Total | Alcohol Fuels ^b | | | | |
| 1973 Total | 0.003 | 0.743 | 17.831 | 18.576 | NA | 18.576 | 0.011 | 0.025 | 18.612 |
| 1974 Total | .002 | .685 | 17.399 | 18.086 | NA | 18.086 | .010 | .024 | 18.119 |
| 1975 Total | .001 | .595 | 17.614 | 18.209 | NA | 18.209 | .010 | .024 | 18.244 |
| 1976 Total | (s) | .559 | 18.506 | 19.065 | NA | 19.065 | .010 | .024 | 19.099 |
| 1977 Total | (s) | .543 | 19.241 | 19.784 | NA | 19.784 | .010 | .025 | 19.820 |
| 1978 Total | (e) | .539 | 20.041 | 20.580 | NA | 20.580 | .010 | .024 | 20.615 |
| 1979 Total | (e) | .612 | 19.825 | 20.436 | NA | 20.436 | .010 | .024 | 20.471 |
| 1980 Total | (e) | .650 | 19.008 | 19.658 | NA | 19.658 | .011 | .027 | 19.696 |
| 1981 Total | (e) | .658 | 18.811 | 19.469 | .007 | 19.469 | .011 | .026 | 19.506 |
| 1982 Total | (e) | .612 | 18.420 | 19.032 | .019 | 19.032 | .011 | .026 | 19.069 |
| 1983 Total | (e) | .505 | 18.593 | 19.098 | .035 | 19.098 | .013 | .030 | 19.141 |
| 1984 Total | (e) | .545 | 19.216 | 19.761 | .043 | 19.761 | .014 | .033 | 19.808 |
| 1985 Total | (e) | .519 | 19.504 | 20.023 | .052 | 20.023 | .014 | .033 | 20.070 |
| 1986 Total | (e) | .499 | 20.269 | 20.768 | .060 | 20.768 | .015 | .034 | 20.817 |
| 1987 Total | (e) | .535 | 20.870 | 21.405 | .069 | 21.405 | .016 | .035 | 21.455 |
| 1988 Total | (e) | .632 | 21.629 | 22.261 | .070 | 22.261 | .016 | .035 | 22.312 |
| 1989 Total | (e) | .649 | 21.848 | 22.497 | .071 | 22.497 | .016 | .038 | 22.551 |
| 1990 Total | (e) | .680 | 21.792 | 22.472 | .063 | 22.472 | .016 | .037 | 22.526 |
| 1991 Total | (e) | .620 | 21.448 | 22.069 | .073 | 22.069 | .016 | .037 | 22.122 |
| 1992 Total | (e) | .608 | 21.798 | 22.406 | .083 | 22.406 | .016 | .037 | 22.459 |
| 1993 Total | (e) | .645 | 22.185 | 22.830 | .097 | 22.830 | .016 | .037 | 22.883 |
| 1994 Total | (e) | .709 | 22.739 | 23.448 | .109 | 23.448 | .017 | .038 | 23.503 |
| 1995 Total | (e) | .724 | 23.181 | 23.905 | .117 | 23.905 | .017 | .039 | 23.960 |
| 1996 Total | (e) | .737 | 23.719 | 24.456 | .084 | 24.456 | .017 | .038 | 24.511 |
| 1997 Total | (e) | .780 | 23.973 | 24.753 | .106 | 24.753 | .017 | .038 | 24.808 |
| 1998 Total | (e) | .666 | 24.630 | 25.297 | .117 | 25.297 | .017 | .038 | 25.352 |
| 1999 Total | (e) | .675 | 25.358 | 26.033 | .122 | 26.033 | .017 | .040 | 26.090 |
| 2000 Total | (e) | .672 | 25.973 | 26.644 | .139 | 26.644 | .018 | .042 | 26.704 |
| 2001 January | (e) | .080 | 2.066 | 2.146 | .015 | 2.146 | .002 | .003 | 2.151 |
| February | (e) | .069 | 1.905 | 1.974 | .012 | 1.974 | .001 | .003 | 1.978 |
| March | (e) | .067 | 2.161 | 2.228 | .012 | 2.228 | .001 | .003 | 2.233 |
| April | (e) | .053 | 2.119 | 2.172 | .011 | 2.172 | .001 | .003 | 2.177 |
| May | (e) | .045 | 2.230 | 2.274 | .011 | 2.274 | .002 | .004 | 2.279 |
| June | (e) | .042 | 2.176 | 2.218 | .012 | 2.218 | .002 | .004 | 2.224 |
| July | (e) | .047 | 2.308 | 2.355 | .011 | 2.355 | .002 | .004 | 2.361 |
| August | (e) | .049 | 2.271 | 2.320 | .010 | 2.320 | .002 | .004 | 2.326 |
| September | (e) | .044 | 2.100 | 2.144 | .012 | 2.144 | .002 | .004 | 2.150 |
| October | (e) | .049 | 2.189 | 2.237 | .016 | 2.237 | .002 | .004 | 2.243 |
| November | (e) | .050 | 2.083 | 2.133 | .013 | 2.133 | .001 | .003 | 2.138 |
| December | (e) | .063 | 2.132 | 2.195 | .013 | 2.195 | .001 | .003 | 2.200 |
| Total | (e) | .657 | 25.739 | 26.396 | .147 | 26.396 | .019 | .043 | 26.458 |
| 2002 January | (e) | .072 | 2.058 | 2.130 | .013 | 2.130 | .001 | .003 | R 2.135 |
| February | (e) | .064 | 1.883 | 1.947 | .012 | 1.947 | .001 | .003 | 1.951 |
| March | (e) | .065 | 2.142 | 2.208 | .012 | 2.208 | .001 | .003 | 2.212 |
| April | (e) | .054 | 2.148 | 2.202 | .012 | 2.202 | .001 | .003 | 2.207 |
| May | (e) | .047 | 2.246 | 2.293 | .014 | 2.293 | .001 | .003 | 2.298 |
| June | (e) | .046 | 2.227 | R 2.274 | .012 | R 2.274 | .002 | .004 | 2.279 |
| July | (e) | .051 | 2.306 | 2.356 | .015 | 2.356 | .002 | .004 | 2.362 |
| August | (e) | R .050 | 2.308 | R 2.358 | .014 | R 2.358 | .002 | .004 | 2.363 |
| September | (e) | .045 | 2.147 | 2.192 | .015 | 2.192 | .002 | .004 | 2.197 |
| October | (e) | .048 | 2.199 | 2.247 | .017 | 2.247 | .002 | .003 | 2.252 |
| November | (e) | .055 | 2.164 | 2.218 | .020 | 2.218 | .001 | .003 | 2.223 |
| December | (e) | .067 | 2.291 | 2.358 | .019 | 2.358 | .001 | .003 | 2.363 |
| Total | (e) | .663 | 26.119 | R 26.783 | .174 | R 26.783 | .018 | .039 | R 26.840 |
| 2003 January | (e) | .077 | 2.083 | 2.160 | .017 | 2.160 | .001 | .003 | 2.165 |
| February | (e) | R .072 | 1.945 | R 2.017 | .020 | R 2.017 | .001 | .003 | R 2.021 |
| March | (e) | RE .071 | 2.161 | RE 2.232 | .017 | R 2.232 | F .001 | .003 | R 2.236 |
| April | (e) | E .059 | 2.124 | E 2.183 | .020 | 2.183 | F .001 | .003 | 2.187 |
| 4-Month Total | (e) | E .279 | 8.313 | E 8.592 | .073 | 8.592 | E .006 | .012 | 8.610 |
| 2002 4-Month Total | (e) | .256 | 8.231 | 8.487 | .049 | 8.487 | .005 | .012 | 8.504 |
| 2001 4-Month Total | (e) | .268 | 8.252 | 8.520 | .050 | 8.520 | .006 | .013 | 8.539 |

^a Natural gas consumed in the operation of pipelines (primarily in compressors) and small amounts consumed as vehicle fuel. See Table 4.4.

^b Alcohol (ethanol blended into motor gasoline) is included in both "Petroleum" and "Alcohol Fuels," but is counted only once in both total primary consumption and total consumption.

^c Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.

^d See Note 12 at end of Section.

^e Since 1978, the small amounts of coal consumed for transportation are reported as industrial sector consumption.

R=Revised. E=Estimate. NA=Not available. F=Forecast. (s)=Less than 0.5 trillion Btu.

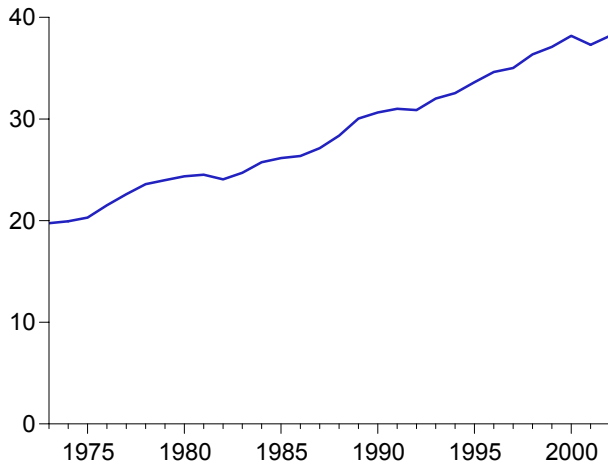
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>.

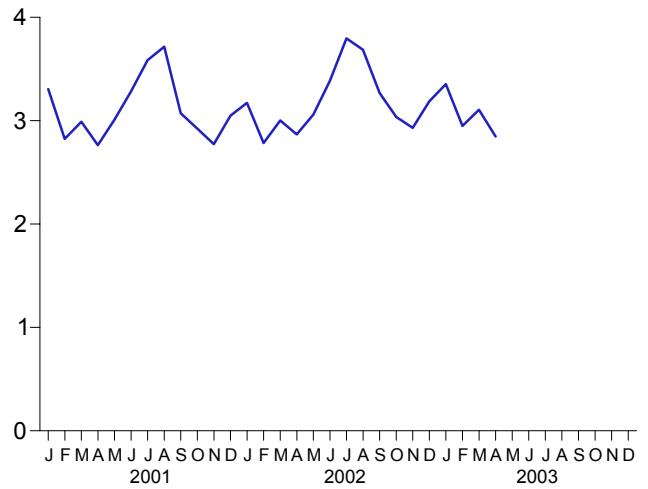
Additional Notes and Sources: See end of section.

Figure 2.6 Electric Power Sector Energy Consumption
(Quadrillion Btu)

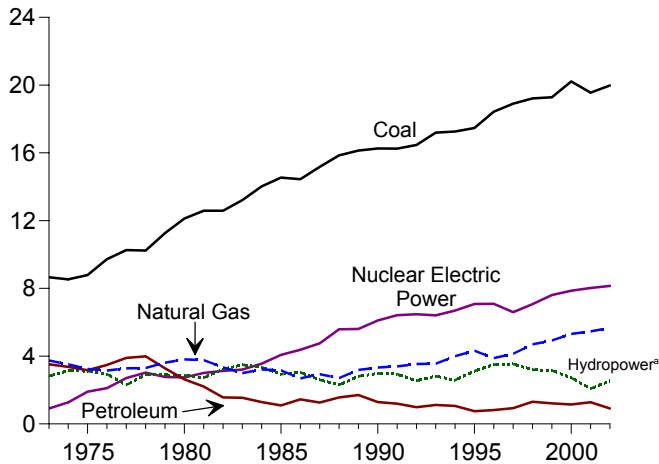
Total, 1973-2002



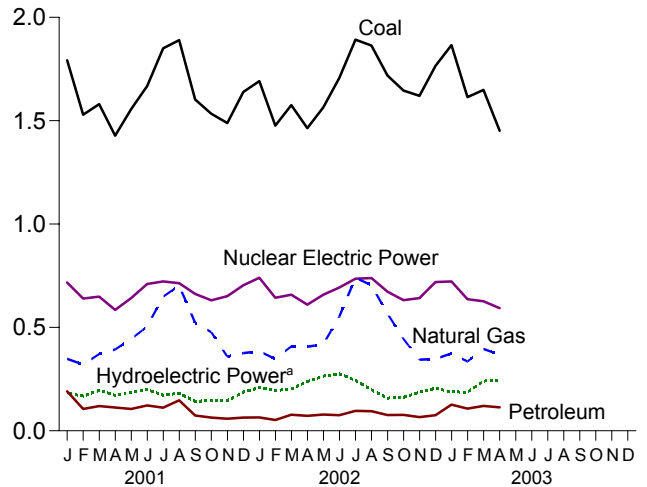
Total, Monthly



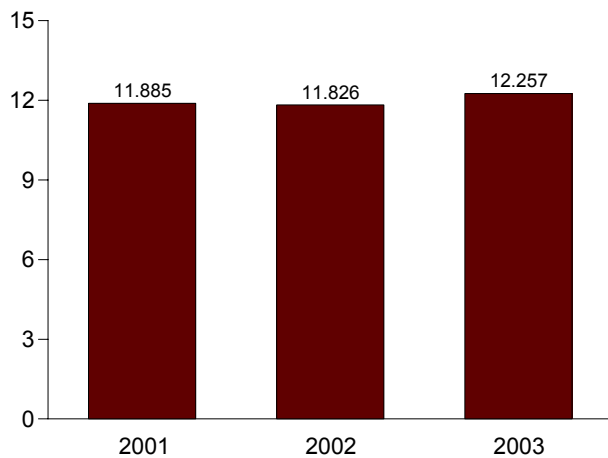
By Major Sources, 1973-2002



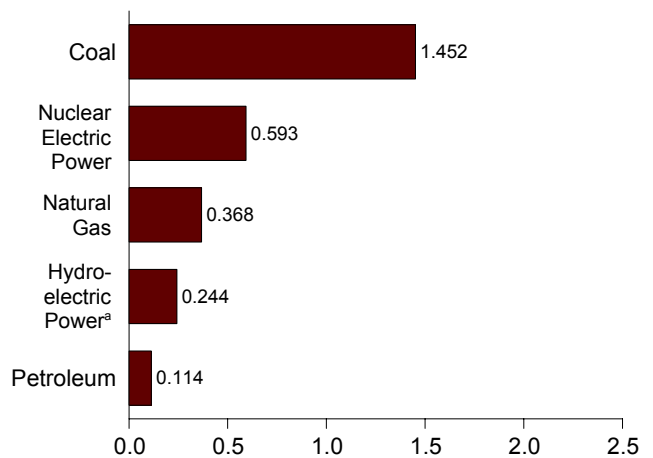
By Major Sources, Monthly



Total, January-April



By Major Sources, April 2003



^aConventional and pumped storage hydroelectric power.
Note: Because vertical scales differ, graphs should not be compared.

Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>.
Source: Table 2.6.

Table 2.6 Electric Power Sector Energy Consumption
(Quadrillion Btu)

| | Primary Consumption | | | | | | | | | | | | Electricity Net Imports | Total Primary |
|---------------------------------|---------------------|--------------------------|-----------|----------|------------------------|--|----------------------------------|--|--------------------------|--|---------|---------|-------------------------|---------------|
| | Fossil Fuels | | | | Nuclear Electric Power | Hydro-electric Pumped Storage ^b | Renewable Energy | | | | | | | |
| | Coal | Natural Gas ^a | Petroleum | Total | | | Conventional Hydroelectric Power | Wood ^c and Waste ^d | Geo-thermal ^e | Solar ^f and Wind ^g | Total | | | |
| 1973 Total | 8.658 | 3.748 | 3.515 | 15.921 | 0.910 | (h) | 2.827 | 0.003 | 0.043 | NA | 2.873 | 0.049 | 19.753 | |
| 1974 Total | 8.534 | 3.519 | 3.365 | 15.418 | 1.272 | (h) | 3.143 | .003 | .053 | NA | 3.199 | .043 | 19.933 | |
| 1975 Total | 8.786 | 3.240 | 3.166 | 15.191 | 1.900 | (h) | 3.122 | .002 | .070 | NA | 3.194 | .021 | 20.307 | |
| 1976 Total | 9.720 | 3.152 | 3.477 | 16.349 | 2.111 | (h) | 2.943 | .003 | .078 | NA | 3.024 | .029 | 21.513 | |
| 1977 Total | 10.262 | 3.284 | 3.901 | 17.446 | 2.702 | (h) | 2.301 | .005 | .077 | NA | 2.383 | .059 | 22.591 | |
| 1978 Total | 10.238 | 3.297 | 3.987 | 17.522 | 3.024 | (h) | 2.905 | .003 | .064 | NA | 2.973 | .067 | 23.587 | |
| 1979 Total | 11.260 | 3.613 | 3.283 | 18.156 | 2.776 | (h) | 2.897 | .005 | .084 | NA | 2.986 | .069 | 23.987 | |
| 1980 Total | 12.123 | 3.810 | 2.634 | 18.567 | 2.739 | (h) | 2.867 | .005 | .110 | NA | 2.982 | .071 | 24.359 | |
| 1981 Total | 12.583 | 3.768 | 2.202 | 18.553 | 3.008 | (h) | 2.725 | .004 | .123 | NA | 2.852 | .113 | 24.525 | |
| 1982 Total | 12.582 | 3.342 | 1.568 | 17.491 | 3.131 | (h) | 3.233 | .003 | .105 | NA | 3.341 | .100 | 24.063 | |
| 1983 Total | 13.213 | 2.998 | 1.544 | 17.754 | 3.203 | (h) | 3.494 | .004 | .129 | (s) | 3.627 | .121 | 24.705 | |
| 1984 Total | 14.019 | 3.220 | 1.286 | 18.526 | 3.553 | (h) | 3.353 | .009 | .165 | (s) | 3.527 | .135 | 25.741 | |
| 1985 Total | 14.542 | 3.160 | 1.090 | 18.792 | 4.076 | (h) | 2.937 | .014 | .198 | (s) | 3.150 | .140 | 26.158 | |
| 1986 Total | 14.444 | 2.691 | 1.452 | 18.586 | 4.380 | (h) | 3.038 | .012 | .219 | (s) | 3.270 | .122 | 26.359 | |
| 1987 Total | 15.173 | 2.935 | 1.257 | 19.365 | 4.754 | (h) | 2.602 | .015 | .229 | (s) | 2.846 | .158 | 27.124 | |
| 1988 Total | 15.850 | 2.709 | 1.563 | 20.123 | 5.587 | (h) | 2.302 | .017 | .217 | (s) | 2.536 | .108 | 28.354 | |
| 1989 Total | 16.137 | 3.192 | 1.703 | 21.032 | 5.602 | (h) | 2.808 | .232 | .308 | .025 | 3.372 | .037 | 30.044 | |
| 1990 Total | 16.261 | 3.332 | 1.289 | 20.883 | 6.104 | -0.036 | 3.014 | .317 | .326 | .033 | 3.689 | .008 | 30.647 | |
| 1991 Total | 16.250 | 3.399 | 1.198 | 20.847 | 6.422 | -0.047 | 2.985 | .354 | .335 | .036 | 3.710 | .067 | 30.999 | |
| 1992 Total | 16.466 | 3.534 | .991 | 20.990 | 6.479 | -0.043 | 2.586 | .402 | .338 | .034 | 3.360 | .087 | 30.873 | |
| 1993 Total | 17.196 | 3.560 | 1.124 | 21.880 | 6.410 | -0.042 | 2.861 | .415 | .351 | .036 | 3.662 | .095 | 32.006 | |
| 1994 Total | 17.261 | 4.000 | 1.059 | 22.320 | 6.694 | -0.035 | 2.620 | .434 | .325 | .041 | 3.420 | .153 | 32.551 | |
| 1995 Total | 17.466 | 4.325 | .755 | 22.546 | 7.075 | -0.028 | 3.149 | .422 | .280 | .038 | 3.889 | .134 | 33.616 | |
| 1996 Total | 18.429 | 3.883 | .817 | 23.129 | 7.087 | -0.032 | 3.528 | .438 | .300 | .039 | 4.305 | .137 | 34.626 | |
| 1997 Total | 18.905 | 4.146 | .927 | 23.977 | 6.597 | -0.041 | 3.581 | .446 | .309 | .039 | 4.375 | .116 | 35.024 | |
| 1998 Total | 19.216 | 4.698 | 1.306 | 25.220 | 7.068 | -0.046 | 3.241 | .444 | .311 | .036 | 4.032 | .088 | 36.363 | |
| 1999 Total | 19.279 | 4.926 | 1.211 | 25.416 | 7.610 | -0.062 | 3.218 | .453 | .312 | .051 | 4.034 | .099 | 37.097 | |
| 2000 Total | 20.220 | 5.316 | 1.144 | 26.680 | 7.862 | -0.057 | 2.768 | .453 | .296 | .062 | 3.579 | .116 | 38.181 | |
| 2001 January | 1.793 | .348 | .191 | 2.331 | .717 | -0.006 | .189 | .038 | .026 | .004 | .257 | .006 | 3.306 | |
| February | 1.529 | .320 | .106 | 1.955 | .640 | -0.007 | .175 | .034 | .023 | .005 | .235 | .002 | 2.825 | |
| March | 1.580 | .371 | .120 | 2.071 | .649 | -0.008 | .204 | .037 | .025 | .006 | .272 | .006 | 2.990 | |
| April | 1.427 | .393 | .113 | 1.933 | .585 | -0.008 | .180 | .036 | .023 | .007 | .246 | .008 | 2.764 | |
| May | 1.556 | .444 | .106 | 2.106 | .642 | -0.006 | .192 | .037 | .023 | .007 | .259 | .010 | 3.010 | |
| June | 1.668 | .504 | .123 | 2.295 | .710 | -0.008 | .207 | .039 | .023 | .008 | .277 | .008 | 3.283 | |
| July | 1.850 | .649 | .112 | 2.611 | .722 | -0.009 | .181 | .040 | .025 | .007 | .253 | .008 | 3.586 | |
| August | 1.890 | .703 | .147 | 2.740 | .714 | -0.007 | .189 | .040 | .025 | .007 | .260 | .009 | 3.716 | |
| September | 1.602 | .522 | .074 | 2.198 | .662 | -0.009 | .152 | .037 | .024 | .006 | .219 | .002 | 3.072 | |
| October | 1.534 | .477 | .064 | 2.074 | .631 | -0.006 | .152 | .037 | .024 | .006 | .220 | .003 | 2.923 | |
| November | 1.489 | .359 | .059 | 1.906 | .651 | -0.008 | .154 | .036 | .024 | .005 | .220 | .004 | 2.773 | |
| December | 1.639 | .375 | .064 | 2.078 | .704 | -0.006 | .194 | .038 | .025 | .006 | .263 | .009 | 3.048 | |
| Total | 19.558 | 5.465 | 1.277 | 26.299 | 8.028 | -0.090 | 2.169 | .450 | .289 | .074 | 2.982 | .075 | 37.295 | |
| 2002 January | 1.691 | .385 | .065 | 2.141 | .741 | -0.008 | .216 | .040 | .025 | .008 | .290 | .009 | 3.172 | |
| February | 1.476 | .348 | .052 | 1.876 | .644 | -0.006 | .201 | .034 | .022 | .007 | .264 | .007 | 2.785 | |
| March | 1.576 | .408 | .078 | 2.062 | .658 | -0.007 | .210 | .039 | .024 | .009 | .282 | .006 | 3.002 | |
| April | 1.464 | .407 | .072 | 1.943 | .610 | -0.006 | .244 | .037 | .022 | .011 | .314 | .006 | 2.868 | |
| May | 1.565 | .418 | .079 | 2.062 | .658 | -0.006 | .270 | .037 | .024 | .012 | .343 | .003 | 3.060 | |
| June | 1.707 | .552 | .076 | 2.335 | .693 | -0.009 | .284 | .039 | .022 | .013 | .358 | .007 | 3.384 | |
| July | 1.892 | .740 | .096 | 2.728 | .735 | -0.010 | .254 | .042 | .024 | .010 | .331 | .013 | 3.797 | |
| August | 1.863 | .704 | .095 | 2.662 | .739 | -0.009 | .208 | .041 | .024 | .011 | .283 | .011 | 3.686 | |
| September | 1.718 | .566 | .076 | 2.361 | .673 | -0.008 | .166 | .039 | .023 | .008 | .237 | .006 | 3.269 | |
| October | 1.646 | .445 | .077 | 2.168 | .632 | -0.007 | .168 | .038 | .024 | .008 | .238 | .005 | 3.036 | |
| November | 1.620 | .344 | .066 | 2.030 | .642 | -0.007 | .194 | .037 | .023 | .007 | .261 | .004 | 2.931 | |
| December | 1.765 | .347 | .075 | 2.187 | .720 | -0.007 | .212 | .042 | .024 | .008 | .285 | .002 | 3.188 | |
| Total | 19.985 | 5.664 | .908 | 26.557 | 8.145 | -0.089 | 2.626 | .466 | .281 | .112 | 3.485 | .078 | 38.177 | |
| 2003 January | 1.866 | .374 | .126 | 2.367 | .723 | -0.008 | .195 | .042 | .024 | .006 | .267 | .005 | R 3.354 | |
| February | R 1.615 | R .335 | R .107 | R 2.057 | R .636 | R -.008 | R .195 | R .036 | R .022 | R .007 | R .260 | .004 | R 2.950 | |
| March | F 1.649 | F .396 | RF .120 | RF 2.166 | RF .626 | RF -.008 | RF .249 | RF .037 | F .027 | RF .009 | RF .323 | F -.001 | RF 3.106 | |
| April | F 1.452 | F .368 | F .114 | F 1.934 | F .593 | F -.006 | F .250 | F .037 | F .028 | F .010 | F .325 | F .003 | F 2.848 | |
| 4-Month Total | E 6.582 | E 1.474 | E .467 | E 8.523 | E 2.579 | E -.030 | E .889 | E .152 | E .101 | E .032 | E 1.174 | E .011 | E 12.257 | |
| 2002 4-Month Total | 6.207 | 1.548 | .268 | 8.022 | 2.653 | -.027 | .870 | .150 | .093 | .036 | 1.150 | .028 | 11.826 | |
| 2001 4-Month Total | 6.329 | 1.433 | .529 | 8.291 | 2.591 | -.029 | .748 | .145 | .096 | .022 | 1.011 | .022 | 11.885 | |

a Includes supplemental gaseous fuels.
b Pumped storage facility production minus energy used for pumping.
c Wood, black liquor, and other wood waste.
d Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.
e Geothermal electricity net generation.
f Solar thermal and photovoltaic electricity net generation.
g Wind electricity net generation.
h Included in conventional hydroelectric power.
i Through 1988, data are for consumption at electric utilities only. Beginning in 1989, data also include consumption at independent power producers.

R=Revised. E=Estimate. NA=Not available. F=Forecast. (s)=Less than 0.5 trillion Btu.
Notes: • Data are for fuels consumed to produce electricity and useful thermal output. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: <http://www.eia.doe.gov/emeu/mer/consump.html>.
Additional Notes and Sources: See end of section.

Energy Consumption by Sector

Most of the data in this section of the *Monthly Energy Review (MER)* is developed from a group of energy-related surveys, typically called "supply surveys," conducted by the Energy Information Administration (EIA). Supply surveys are directed to suppliers and marketers of specific energy sources. They measure the quantities of specific energy sources produced, or the quantities supplied to the market, or both. The data obtained from EIA's supply surveys are integrated to yield the summary consumption statistics published in this section (and in Section 1) of the *MER*.

Users of EIA's energy consumption statistics should be aware of a second group of energy-related surveys, typically called "consumption surveys." Consumption surveys gather information on the types of energy consumed by end users of energy, along with the characteristics of those end users that can be associated with energy use. For example, the Manufacturing Energy Consumption Survey belongs to the consumption survey group because it collects information directly from end users (the manufacturing establishments). There are important differences between the supply and consumption surveys that need to be taken into account in any analysis that uses both data sources. For information on those differences, see *Energy Consumption by End-Use Sector, A Comparison of Measures by Consumption and Supply Surveys*, DOE/EIA-0533, Energy Information Administration, Washington, DC, April 6, 1990.

Note 1. Energy Consumption:

Primary Consumption: Consumption in the five energy-use sectors (residential, commercial, industrial, transportation, and electric power) consists of fossil fuels (coal, natural gas, and petroleum), some secondary energy derived from fossil fuels (supplemental gaseous fuels and coal coke net imports), nuclear electric power, pumped-storage hydroelectric power, renewable energy, and net imports of electricity. Renewable energy consumption is the end-use consumption of wood, waste, alcohol fuels, geothermal heat pump and direct use energy, solar thermal direct use and photovoltaic energy and net electricity generation from conventional hydroelectric power, wood, waste, geothermal, solar, and wind.

Total Consumption: In addition to primary consumption in the four end-use sectors (residential, commercial, industrial, and transportation), total consumption also includes retail sales of electricity and electrical system energy losses (see Note 12).

Note 2. Energy-Use Sectors: The five major economic sectors—residential, commercial, industrial, transportation, and electric power—are called energy-use sectors in this report. The first four sectors comprise the end-use sectors, that is, the point of final consumption of the energy. Energy

consumption is assigned to the five energy-use sectors, as closely as possible, by the following definitions:

Residential Sector—An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters. For further explanation see:

<http://www.eia.doe.gov/neic/datadefinitions/Guideforwebres.htm>.

Commercial Sector—An energy-consuming sector that consists of service-providing facilities and equipment of: businesses; Federal, State, and local governments; and other private and public organizations, such as religious, social, or fraternal groups. The commercial sector includes institutional living quarters. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a wide variety of other equipment. *Note:* This sector includes generators that produce electricity and/or useful thermal output primarily to support the activities of the above-mentioned commercial establishments.

Industrial Sector—An energy-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity: manufacturing (NAICS (North American Industry Classification System) codes 31-33); agriculture, forestry, fishing and hunting (NAICS code 11); mining, including oil and gas extraction (NAICS code 21); natural gas distribution (NAICS code 2212); and construction (NAICS code 23). Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. *Note:* This sector includes generators that produce electricity and/or useful thermal output primarily to support the above-mentioned industrial activities.

Transportation Sector—An energy-consuming sector that consists of all vehicles whose primary purpose is transporting people and/or goods from one physical location to another. Included are automobiles; trucks; buses; motorcycles; trains, subways, and other rail vehicles; aircraft; and ships, barges, and other waterborne vehicles. Vehicles whose primary purpose is not transportation (e.g., construction cranes and bulldozers, farming vehicles, and warehouse tractors and forklifts) are classified in the sector of their primary use. *Note:* Various EIA programs differ in sectoral coverage. For further information see:

<http://www.eia.doe.gov/neic/datadefinitions/Guideforwebtrans.htm>.

Electric Power Sector—An energy-consuming sector that consists of electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or

electricity and heat, to the public—i.e., North American Industry Classification System 22 plants.

Although the energy-use allocations are made according to these aggregations as closely as possible, some data are collected by using different classifications. For example, electric power facilities may classify commercial and industrial users by the quantity of electricity purchased rather than by the business activity of the purchaser. Natural gas used in agriculture, forestry, and fisheries was collected and reported in the commercial sector through 1995. Beginning with 1996 data, deliveries of natural gas for agriculture, forestry, fishing, and hunting are reported in the industrial sector instead. Another example is master-metered condominiums and apartments, and buildings with a combination of residential and commercial units. In many cases, the metering and billing practices cause residential energy usage of electricity, natural gas, or fuel oil to be included in the commercial sector. No adjustments for these discrepancies were made.

Note 3. Conversion Factors: See Appendix A.

Note 4. Coal: See Tables 6.2 and A5.

Note 5. Coal Coke Net Imports: Net imports means imports minus exports, and a minus sign indicates that exports are greater than imports. Coal coke net imports are included in the industrial sector.

Sources :

1973-1975: DOI, BOM, *Minerals Yearbook*, "Coke and Coal Chemicals" chapter.

1976-1980: EIA, *Energy Data Report*, "Coke and Coal Chemicals" annual.

1981: EIA, *Energy Data Report*, "Coke Plant Report," quarterly.

1982 forward: EIA, *Quarterly Coal Report*.

Note 6. Natural Gas: See Tables 4.4 and A4. For Section 2 calculations, lease and plant fuel consumption are included in the industrial sector, and pipeline fuel use of natural gas is included in the transportation sector. For 1973-1979, annual values for residential and commercial natural gas consumption are allocated to the months in proportion to the monthly sales data from the American Gas Association, "Monthly Gas Utility Statistical Report."

Note 7. Petroleum: Petroleum consumption in this section of the *Monthly Energy Review (MER)* is the series called "petroleum product supplied" from Section 3.

The sources for petroleum product supplied by product are:

1973-1975: DOI, BOM, *Mineral Industry Surveys*, "Petroleum Statement, Annual."

1976-1980: EIA, *Energy Data Reports*, "Petroleum Statement, Annual."

1981-2001: EIA, *Petroleum Supply Annual*.

2002 forward: EIA, *Petroleum Supply Monthly*.

Energy-use allocation procedures by individual product are as follows:

Aviation Gasoline—All consumption of aviation gasoline is assigned to the transportation sector.

Asphalt—All consumption of asphalt is assigned to the industrial sector.

Distillate Fuel—Distillate fuel consumption is assigned to the sectors as follows:

Distillate Fuel Consumed by the Electric Power Sector, All Time Periods—For 1973-1979, consumption of distillate fuel is assumed to be the amount of petroleum (minus small amounts of kerosene and kerosene-type jet fuel deliveries) consumed in gas turbine and internal combustion plants. For 1980 forward, consumption of distillate fuel is assumed to be the amount of light oil (minus small amounts of kerosene deliveries through 1982) consumed by the electric power sector. See Table 7.3e.

Distillate Fuel Consumed by End-Use Sectors, Annually Through 2000—The aggregate end-use amount is total distillate fuel supplied minus the amount consumed for electric power. The end-use total consumed annually is allocated into the individual end-use sectors (residential, commercial, industrial, and transportation) in proportion to each sector's share of "adjusted sales" as reported in EIA's *Fuel Oil and Kerosene Sales (Sales)* report series (DOE/EIA-0535), which is based primarily on data collected by Form EIA-821, previously Form EIA-172. "Adjusted sales" are sales that have been adjusted to equal EIA distillate fuel product supplied.

Following are notes on the individual sector groupings:

Since 1979, the residential sector adjusted sales total is directly from the *Sales* reports. Prior to 1979, each year's sales subtotal of the heating plus industrial category is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares.

Since 1979, the commercial sector adjusted sales total is directly from the *Sales* reports. Prior to 1979, each year's sales subtotal of the heating plus industrial category is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares.

Since 1979, the industrial sector adjusted sales total is the sum of the adjusted sales for industrial, farm, oil company, off-highway diesel, and all other uses. Prior to 1979, each year's sales subtotal of the heating plus industrial category is split into residential, commercial, and industrial (including farm) in proportion to the 1979 shares, and this estimated industrial portion is added to oil company, off-highway diesel, and all other uses.

The transportation sector adjusted sales total is the sum of the adjusted sales for railroad, vessel bunkering, on-highway diesel, and military uses for all years.

Distillate Fuel Consumed by End-Use Sectors, Monthly Through 2000—Residential and commercial monthly consumption is estimated by allocating the annual estimates, which are described above, into the months in proportion to each month's share of the year's sales of No. 2 heating oil. The years' sales totals are from the following sources: for 1973-1980, the Ethyl Corporation, *Monthly Report of Heating Oil Sales*; for 1981 and 1982, the American Petroleum Institute, *Monthly Report of Heating Oil Sales*; and for 1983 forward, EIA, Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report," No. 2 Fuel Oil Sales to End Users and for Resale.

The transportation highway use portion is allocated into the months in proportion to each month's share of the year's total sales for highway use as reported by the Federal Highway Administration's Table MF-25, "Private and Commercial Highway Use of Special Fuels by Months." After 1993, the sales-for-highway-use data are no longer available as a monthly series; the 1993 data are used for allocating succeeding year's totals into months. The remaining transportation use of distillate fuel (i.e., for railroads, vessel bunkering, and military use) is evenly distributed over the months, adjusted for the number of days per month.

Industrial monthly estimates are calculated as the difference between the sum of the estimates for residential, commercial, transportation, and electric power sectors and total distillate fuel consumption.

Distillate Fuel Consumed by End-Use Sectors, 2001 Forward—Each month's end-use consumption total is disaggregated into the individual sectors in proportion to the share that each sector held of the total in the same month in 2000. Annual values are the sum of the monthly values.

Jet Fuel—Through 1982, small amounts of kerosene-type jet fuel were consumed by the electric power sector. Kerosene-type jet fuel deliveries to the electric power sector as reported on the Form FERC-423 (formerly Form FPC-423) were used as estimates of this consumption. All remaining jet fuel (kerosene-type and naphtha-type) is consumed by the transportation sector.

Kerosene—Kerosene product supplied is allocated into the individual end-use sectors (residential, commercial, and industrial) in proportion to each sector's share of "sales" as reported in EIA's *Fuel Oil and Kerosene Sales (Sales)* report series (DOE/EIA-0535), which is based primarily on data collected by Form EIA-821, previously Form EIA-172.

Since 1979, the residential sector sales total is directly from the *Sales* reports. Prior to 1979, each year's sales category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares.

Since 1979, the commercial sector sales total is directly from the *Sales* reports. Prior to 1979, each year's sales category called "heating" is split into residential, commercial, and industrial in proportion to the 1979 shares.

Since 1979, the industrial sector sales total is the sum of the adjusted sales for industrial, farm, and all other uses. Prior to 1979, each year's sales category called "heating" is split into residential, commercial and industrial in proportion to the 1979 shares, and this estimated industrial (including farm) portion is added to all other uses.

Liquefied Petroleum Gases (LPG)—The annual shares of LPG's total consumption that are estimated to be used by each sector are applied to each month's total LPG consumption to create monthly sector consumption estimates. The annual sector shares are calculated as described below.

Sales of LPG to the residential and commercial sector are converted from thousand gallons per year to thousand barrels per year and are assumed to be the annual consumption of LPG by the sector.

The quantity of LPG sold each year for consumption in internal combustion engines is allocated between the transportation and industrial sectors on the basis of data for special fuels used on highways published by the U.S. Department of Transportation, Federal Highway Administration, in *Highway Statistics*. The allocations of LPG sold for internal combustion engine use to the transportation sector range from a low of 28 percent (in 1997) to a high of 73 percent (in 1994).

LPG consumed annually by the industrial sector is estimated as the difference between LPG total supplied and the estimated consumption of LPG by the sum of the residential and commercial sector and the transportation sector. The industrial sector includes LPG used by chemical plants as raw materials or solvents and used in the production of synthetic rubber; refinery fuel use; use as synthetic natural gas feedstock and use in secondary recovery projects; all farm use; LPG sold to gas utility companies for distribution through the mains; and a portion of the use of LPG as an internal combustion engine fuel.

Sources of the annual sales data for creating annual energy shares are:

1973-1982: EIA's "Sales of Liquefied Petroleum Gases and Ethane" reports, based primarily on data collected by Form EIA-174.

1983: End-use consumption estimates for 1983 are based on 1982 end-use consumption because the collection of data under Form EIA-174 was discontinued after data year 1982. 1984-forward: American Petroleum Institute (API), "Sales of Natural Gas Liquids and Liquefied Refinery Gases," which is based on an LPG sales survey jointly sponsored by API, the Gas Processors Association, and the National Liquefied Petroleum Gas Association. EIA adjusts the data

to remove quantities of pentanes plus and to estimate withheld values.

Lubricants—The consumption of lubricants is allocated to the industrial and transportation sectors for all months according to proportions developed from annual sales of lubricants to the two sectors from U.S. Department of Commerce, Bureau of the Census, *Current Industrial Reports*, "Sales of Lubricating and Industrial Oils and Greases." The 1973 shares are applied to 1973 and 1974; the 1975 shares are applied to 1975 and 1976; and the 1977 shares are applied to 1977 forward.

Motor Gasoline—The total monthly consumption of motor gasoline is allocated to the sectors in proportion to aggregations of annual sales categories created on the basis of the U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics*, Tables MF-21, MF-24, and MF-25, as follows:

Commercial sales are the sum of sales for public non-highway use and miscellaneous and unclassified uses.

Industrial sales are the sum of sales for agriculture, construction, and industrial and commercial use as classified in the *Highway Statistics*.

Transportation sales are the sum of sales for highway use (minus the sales of special fuels, which are primarily diesel fuel and are accounted for in the transportation sector of distillate fuel) and sales for marine use.

Petroleum Coke—A portion of petroleum coke is consumed by electric utilities, as reported on Form EIA-759, "Monthly Power Plant Report" (formerly Form FPC-4). The remaining petroleum coke is assigned to the industrial sector.

Residual Fuel—Residual fuel consumption is assigned to the sectors as follows:

Residual Fuel Consumed by the Electric Power Sector, All Time Periods—For 1973-1979, consumption of residual fuel is assumed to be the amount of petroleum consumed in steam-electric power plants. For 1980 forward, consumption of residual fuel is assumed to be the amount of heavy oil consumed by the electric power sector. Source: Table 7.3e

Residual Fuel Consumed by End-Use Sectors, Annually Through 2000—The aggregate end-use amount is total residual fuel supplied minus the amount consumed for electric power. The end-use total consumed annually is allocated into the individual end-use sectors (commercial, industrial, and transportation) in proportion to each sector's share of "adjusted sales" as reported in EIA's *Fuel Oil and Kerosene Sales (Sales)* report series (DOE/EIA-535), which is based primarily on data collected by Form EIA-821, previously Form EIA-172). "Adjusted sales" are sales that have been adjusted to equal EIA residual fuel product supplied.

Following are notes on the individual sector groupings:

Since 1979, commercial sales data are directly from the *Sales* reports. Prior to 1979, each year's sales subtotal of the heating plus industrial category is split into commercial and industrial in proportion to the 1979 shares.

Since 1979, industrial sales data are the sum of sales for industrial, oil company, and all other uses. Prior to 1979, each year's sales subtotal of the heating plus industrial category is split into commercial and industrial in proportion to the 1979 shares, and this estimated industrial portion is added to oil company and all other uses.

Transportation sales are the sum of sales for railroad, vessel bunkering, and military uses for all years.

Residual Fuel Consumed by End-Use Sectors, Monthly Through 2000—Commercial monthly consumption is estimated by allocating the annual estimates, which are described above, into the months in proportion to each month's share of the year's sales of No. 2 heating oil. The years' sales totals are from the following sources: for 1973-1980, the Ethyl Corporation, *Monthly Report of Heating Oil Sales*; for 1981 and 1982, the American Petroleum Institute, *Monthly Report of Heating Oil Sales*; and for 1983-1996, EIA, Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report," No. 2 Fuel Oil Sales to End Users and for Resale.

Transportation monthly estimates are made by evenly distributing the annual sector estimate over the months, adjusting for the number of days per month.

Industrial monthly estimates are calculated as the difference between the sum of the estimates for commercial, transportation, and electric power sectors and total residual fuel consumption.

Residual Fuel Consumption by End-Use Sectors, 2001 Forward—Each month's end-use consumption total is disaggregated into the individual sectors in proportion to the share that each sector held of the total in the same month in 2000. Annual values are the sum of the monthly values.

Road Oil—All consumption of road oil is assigned to the industrial sector.

All Other Petroleum Products—Consumption of all remaining petroleum products is assigned to the industrial sector.

Note 8. Nuclear Electric Power: See Tables 8.1 and A6. Nuclear electric power is included in the electric power sector.

Note 9. Hydroelectric Pumped Storage: See Tables 7.2a and A6. Pumped-storage hydroelectric power is included in the electric power sector.

Note 10. Renewable Energy: See Tables 10.2a-10.2c. End-use consumption of wood, waste, alcohol fuels, geothermal heat pump and direct use energy, and solar thermal direct use and photovoltaic energy is included in the end-use sectors. Included in the electric power sector are: net electricity generation from conventional hydroelectric power, wood, waste, geothermal, solar, and wind.

Note 11. Electricity: End-use consumption of electricity is based on retail sales of electricity in Table 7.5. "Other," which is primarily for use in government buildings, is added to the commercial sector, except for approximately 5 percent used by railroads and railways and attributed to the transportation sector. Kilowatthours are converted to Btu at the rate of 3,412 Btu per kilowatthour.

Note 12. Electrical System Energy Losses: Electrical system energy losses are calculated as the difference between total primary consumption by the electric power sector-see Table 2.6-and the total energy content of the retail sales of electricity-see Tables 7.5 and A6. Most of these losses occur at steam-electric power plants (conventional and nuclear) in the conversion of heat energy into

mechanical energy to turn electric generators. The loss is a thermodynamically necessary feature of the steam-electric cycle. Part of the energy input-to-output losses is a result of imputing fossil energy equivalent inputs for hydroelectric and other energy sources, since there is no generally accepted practice for measuring those thermal conversion rates. In addition to conversion losses, other losses include power plant use of electricity, transmission and distribution of electricity from power plants to end-use consumers (also called "line losses"), and unaccounted for electricity. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales. Overall, approximately 67 percent of total energy input is lost in conversion; of electricity generated, approximately 5 percent is lost in plant use and 9 percent is lost in transmission and distribution. Calculated electrical system energy losses may be less than actual losses, because primary consumption does not include the energy equivalent of utility purchases of electricity from non-electric utilities and from Canada and Mexico, although they are included in electricity sales

Section 3. Petroleum

Total petroleum imports¹ averaged 12.5 million barrels per day in June 2003, 2 percent lower than the previous month's rate but 7 percent higher than the June 2002 rate.

In June 2003, 20.3 million barrels per day of petroleum products were supplied for domestic use, 2 percent higher than the June 2002 rate. Motor gasoline accounted for 44 percent of the total; distillate fuel oil, 19 percent; and kerosene-type jet fuel, 8 percent.

Motor gasoline product supplied during June 2003 averaged 9.0 million barrels per day, 1 percent lower than the previous month's rate and 2 percent lower than the June 2002 rate. Total motor gasoline stocks were 205 million barrels at the end of June 2003, 3 million barrels below the stock level in the previous month and 12 million barrels below the level 1 year earlier.

Distillate fuel oil product supplied during June 2003 averaged 3.8 million barrels per day, 3 percent higher than the previous month's rate and 6 percent higher than the June 2002 rate. Distillate fuel oil ending stocks for June 2003 were 109 million barrels, 3 million barrels above the stock level in the previous month but 24 million barrels below the level 1 year earlier.

Kerosene-type jet fuel product supplied in June 2003 averaged 1.5 million barrels per day, 5 percent higher than the previous month's rate but 7 percent lower than the June 2002 rate. Kerosene-type jet fuel stocks measured 39 million barrels at the end of June 2003, 1 million barrels below the stock level in the previous month but the same level as 1 year earlier.

Estimates (except of crude production) for the most current month are based on Energy Information Administration (EIA) weekly data and will be revised to conform with data from the EIA Petroleum Reporting System as available. For the most recent month, crude production is an EIA estimate based on historical and provisional data through March 2003.

¹Total import data include imports into the Strategic Petroleum Reserve.

Table 3.1a Petroleum Overview: Field Production, Stock Change, Petroleum Products Supplied, and Stocks

| | Field Production | | | Stock Change ^a | | Petroleum Products Supplied | Stocks ^b |
|-----------------------------------|-----------------------------|----------------------------|---------------------------|---------------------------|--------------------------|-----------------------------|---|
| | Total Domestic ^c | Crude Oil | Natural Gas Plant Liquids | Crude Oil ^d | Petroleum Products | | Crude Oil ^d and Petroleum Products |
| | Thousand Barrels per Day | | | | | | Million Barrels |
| 1973 Average | 10,975 | 9,208 | 1,738 | -11 | 146 | 17,308 | 1,008 |
| 1974 Average | 10,498 | 8,774 | 1,688 | 62 | 117 | 16,653 | ^e 1,074 |
| 1975 Average | 10,045 | 8,375 | 1,633 | ^e 17 | ^e 15 | 16,322 | 1,133 |
| 1976 Average | 9,774 | 8,132 | ^f 1,604 | 39 | -96 | 17,461 | 1,112 |
| 1977 Average | 9,913 | 8,245 | 1,618 | 170 | 378 | 18,431 | 1,312 |
| 1978 Average | 10,328 | 8,707 | 1,567 | 78 | -172 | 18,847 | 1,278 |
| 1979 Average | 10,179 | 8,552 | 1,584 | 148 | 25 | 18,513 | 1,341 |
| 1980 Average | 10,214 | 8,597 | 1,573 | 98 | 42 | 17,056 | ^e 1,392 |
| 1981 Average | 10,230 | 8,572 | 1,609 | ^e 290 | ^e -130 | 16,058 | 1,484 |
| 1982 Average | 10,252 | 8,649 | 1,550 | 136 | -283 | 15,296 | ^e 1,430 |
| 1983 Average | 10,299 | 8,688 | 1,559 | ^e 214 | ^e -234 | 15,231 | 1,454 |
| 1984 Average | 10,554 | 8,879 | 1,630 | 199 | 81 | 15,726 | 1,556 |
| 1985 Average | 10,636 | 8,971 | 1,609 | 50 | -153 | 15,726 | 1,519 |
| 1986 Average | 10,289 | 8,680 | 1,551 | 78 | 124 | 16,281 | 1,593 |
| 1987 Average | 10,008 | 8,349 | 1,595 | 128 | -87 | 16,665 | 1,607 |
| 1988 Average | 9,818 | 8,140 | 1,625 | 1 | -29 | 17,283 | 1,597 |
| 1989 Average | 9,219 | 7,613 | 1,546 | 86 | -129 | 17,325 | 1,581 |
| 1990 Average | 8,994 | 7,355 | 1,559 | -35 | 142 | 16,988 | 1,621 |
| 1991 Average | 9,168 | 7,417 | 1,659 | -42 | 32 | 16,714 | 1,617 |
| 1992 Average | 8,996 | 7,171 | 1,697 | -1 | -68 | 17,033 | ^e 1,592 |
| 1993 Average | ^g 9,836 | 6,847 | 1,736 | 81 | ^e 70 | 17,237 | ^e 1,647 |
| 1994 Average | 8,645 | 6,662 | 1,727 | 18 | -2 | 17,718 | 1,653 |
| 1995 Average | 8,626 | 6,560 | 1,762 | -93 | -153 | 17,725 | 1,563 |
| 1996 Average | 8,607 | 6,465 | 1,830 | -124 | -28 | 18,309 | 1,507 |
| 1997 Average | 8,611 | 6,452 | 1,817 | 51 | 93 | 18,620 | 1,560 |
| 1998 Average | 8,392 | 6,252 | 1,759 | 74 | 165 | 18,917 | 1,647 |
| 1999 Average | 8,107 | 5,881 | 1,850 | -118 | -304 | 19,519 | 1,493 |
| 2000 Average | 8,110 | 5,822 | 1,911 | -70 | (s) | 19,701 | 1,468 |
| 2001 January | 7,528 | 5,799 | 1,398 | 317 | 38 | 20,092 | 1,479 |
| February | 7,891 | 5,780 | 1,732 | -424 | 223 | 19,689 | 1,473 |
| March | 8,127 | 5,880 | 1,833 | 861 | -501 | 19,876 | 1,484 |
| April | 8,062 | 5,863 | 1,831 | 736 | 513 | 19,729 | 1,522 |
| May | 8,146 | 5,829 | 1,912 | -42 | 1,130 | 19,501 | 1,555 |
| June | 8,062 | 5,766 | 1,908 | -671 | 929 | 19,561 | 1,563 |
| July | 8,066 | 5,749 | 1,899 | 164 | 7 | 19,919 | 1,568 |
| August | 8,062 | 5,725 | 1,955 | -160 | -488 | 20,153 | 1,548 |
| September | 8,128 | 5,709 | 2,034 | 79 | 944 | 19,016 | 1,579 |
| October | 8,164 | 5,746 | 2,025 | 142 | -205 | 19,824 | 1,577 |
| November | 8,274 | 5,881 | 2,001 | 36 | 323 | 19,396 | 1,588 |
| December | 8,131 | 5,887 | 1,889 | 87 | -133 | 19,003 | 1,586 |
| Average | 8,054 | 5,801 | 1,868 | 99 | 227 | 19,649 | 1,586 |
| 2002 January | 8,068 | 5,848 | 1,827 | 409 | -270 | 19,454 | 1,591 |
| February | 8,126 | 5,871 | 1,900 | 443 | -951 | 19,444 | 1,576 |
| March | 8,139 | 5,883 | 1,901 | 248 | -364 | 19,676 | 1,573 |
| April | 8,215 | 5,859 | 1,925 | -120 | 641 | 19,552 | 1,588 |
| May | 8,317 | 5,924 | 1,936 | 222 | 504 | 19,728 | 1,611 |
| June | 8,206 | 5,915 | 1,870 | -143 | 316 | 19,875 | 1,616 |
| July | 8,022 | 5,770 | 1,846 | -362 | 190 | 20,076 | 1,611 |
| August | 8,205 | 5,811 | 1,937 | -139 | -328 | 20,221 | 1,596 |
| September | 7,748 | 5,411 | 1,898 | -687 | -56 | 19,461 | 1,574 |
| October | 7,645 | 5,363 | 1,875 | 749 | -782 | 19,678 | 1,573 |
| November | 7,949 | 5,597 | 1,891 | 96 | 85 | 19,991 | 1,578 |
| December | 7,887 | 5,699 | 1,760 | -234 | -751 | 19,943 | 1,548 |
| Average | 8,043 | 5,746 | 1,880 | 40 | -145 | 19,761 | 1,548 |
| 2003 January | ^E 8,030 | ^E 5,842 | 1,756 | -148 | -1,348 | 20,042 | 1,504 |
| February | ^E 8,144 | ^E 5,915 | 1,811 | -91 | -1,501 | 20,396 | 1,460 |
| March | ^E 8,037 | ^E 5,890 | 1,730 | 325 | 99 | 19,682 | 1,473 |
| April | ^E 7,900 | ^E 5,813 | 1,704 | 333 | 420 | 19,770 | 1,495 |
| May | ^{RE} 7,795 | ^{RE} 5,783 | ^R 1,531 | ^R -97 | ^R 1,228 | ^R 19,277 | ^R 1,530 |
| June | ^E 7,980 | ^{PE} 5,855 | ^E 1,720 | ^E -12 | ^E 276 | ^E 20,318 | ^E 1,533 |
| 6-Month Average | ^E 7,979 | ^{PE} 5,849 | ^E 1,707 | ^E 53 | ^E -121 | ^E 19,905 | ^E 1,533 |
| 2002 6-Month Average | 8,179 | 5,884 | 1,893 | 176 | -11 | 19,623 | 1,616 |
| 2001 6-Month Average | 7,970 | 5,820 | 1,769 | 140 | 388 | 19,743 | 1,563 |

^a A negative number indicates a decrease in stocks and a positive number indicates an increase. Distillate stocks in the "Northeast Heating Oil Reserve" are not included.

^b Stocks are at end of period. Distillate stocks in the "Northeast Heating Oil Reserve" are not included.

^c Includes crude oil, natural gas plant liquids, and other liquids.

^d Includes stocks located in the Strategic Petroleum Reserve.

^e See Note 4 at end of section.

^f See Note 6 at end of section.

^g Beginning in 1993, includes fuel ethanol blended into finished motor

gasoline and oxygenate production from merchant MTBE (methyl tertiary butyl ether) plants.

PE=Preliminary estimate. R=Revised. E=Estimate. (s)=Less than +500 barrels per day and greater than -500 barrels per day.

Notes: • Crude oil includes lease condensate. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

Sources: • 1973-1991: Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S1. • 1992 forward: EIA, *Petroleum Supply Monthly*, July 2003, Table S1.

Table 3.1b Petroleum Overview: Imports, Exports, and Net Imports

| | Imports | | | Exports | | | Net Imports ^b |
|-----------------------------------|----------------------------|---------------------------|---------------------------|---------------------------|------------------------|---------------------------|----------------------------|
| | Total | Crude Oil ^a | Petroleum Products | Total | Crude Oil | Petroleum Products | |
| Thousand Barrels per Day | | | | | | | |
| 1973 Average | 6,256 | 3,244 | 3,012 | 231 | 2 | 229 | 6,025 |
| 1974 Average | 6,112 | 3,477 | 2,635 | 221 | 3 | 218 | 5,892 |
| 1975 Average | 6,056 | 4,105 | 1,951 | 209 | 6 | 204 | 5,846 |
| 1976 Average | 7,313 | 5,287 | 2,026 | 223 | 8 | 215 | 7,090 |
| 1977 Average | 8,807 | 6,615 | 2,193 | 243 | 50 | 193 | 8,565 |
| 1978 Average | 8,363 | 6,356 | 2,008 | 362 | 158 | 204 | 8,002 |
| 1979 Average | 8,456 | 6,519 | 1,937 | ^c 471 | 235 | ^c 236 | ^c 7,985 |
| 1980 Average | 6,909 | 5,263 | 1,646 | 544 | 287 | 258 | 6,365 |
| 1981 Average | 5,996 | 4,396 | 1,599 | 595 | 228 | 367 | 5,401 |
| 1982 Average | 5,113 | 3,488 | 1,625 | 815 | 236 | 579 | 4,298 |
| 1983 Average | 5,051 | 3,329 | 1,722 | 739 | 164 | 575 | 4,312 |
| 1984 Average | 5,437 | 3,426 | 2,011 | 722 | 181 | 541 | 4,715 |
| 1985 Average | 5,067 | 3,201 | 1,866 | 781 | 204 | 577 | 4,286 |
| 1986 Average | 6,224 | 4,178 | 2,045 | 785 | 154 | 631 | 5,439 |
| 1987 Average | 6,678 | 4,674 | 2,004 | 764 | 151 | 613 | 5,914 |
| 1988 Average | 7,402 | 5,107 | 2,295 | 815 | 155 | 661 | 6,587 |
| 1989 Average | 8,061 | 5,843 | 2,217 | 859 | 142 | 717 | 7,202 |
| 1990 Average | 8,018 | 5,894 | 2,123 | 857 | 109 | 748 | 7,161 |
| 1991 Average | 7,627 | 5,782 | 1,844 | 1,001 | 116 | 885 | 6,626 |
| 1992 Average | 7,888 | 6,083 | 1,805 | 950 | 89 | 861 | 6,938 |
| 1993 Average | 8,620 | 6,787 | 1,833 | 1,003 | 98 | 904 | 7,618 |
| 1994 Average | 8,996 | 7,063 | 1,933 | 942 | 99 | 843 | 8,054 |
| 1995 Average | 8,835 | 7,230 | 1,605 | 949 | 95 | 855 | 7,886 |
| 1996 Average | 9,478 | 7,508 | 1,971 | 981 | 110 | 871 | 8,498 |
| 1997 Average | 10,162 | 8,225 | 1,936 | 1,003 | 108 | 896 | 9,158 |
| 1998 Average | 10,708 | 8,706 | 2,002 | 945 | 110 | 835 | 9,764 |
| 1999 Average | 10,852 | 8,731 | 2,122 | 940 | 118 | 822 | 9,912 |
| 2000 Average | 11,459 | 9,071 | 2,389 | 1,040 | 50 | 990 | 10,419 |
| 2001 January | 12,555 | 8,933 | 3,623 | 954 | 18 | 936 | 11,601 |
| February | 11,643 | 8,609 | 3,035 | 1,004 | 24 | 980 | 10,639 |
| March | 12,132 | 9,603 | 2,530 | 938 | 37 | 901 | 11,194 |
| April | 12,653 | 10,111 | 2,542 | 942 | 5 | 937 | 11,711 |
| May | 12,529 | 9,885 | 2,644 | 1,069 | 64 | 1,005 | 11,461 |
| June | 11,732 | 9,105 | 2,627 | 976 | 15 | 960 | 10,756 |
| July | 11,760 | 9,552 | 2,208 | 879 | 11 | 868 | 10,881 |
| August | 11,622 | 9,383 | 2,239 | 1,048 | 28 | 1,020 | 10,573 |
| September | 11,818 | 9,339 | 2,478 | 825 | 8 | 817 | 10,993 |
| October | 11,379 | 9,211 | 2,168 | 946 | 11 | 935 | 10,432 |
| November | 11,628 | 9,320 | 2,309 | 960 | 9 | 951 | 10,669 |
| December | 10,994 | 8,839 | 2,154 | 1,109 | 12 | 1,097 | 9,885 |
| Average | 11,871 | 9,328 | 2,543 | 971 | 20 | 951 | 10,900 |
| 2002 January | 11,088 | 8,709 | 2,380 | 861 | 11 | 850 | 10,228 |
| February | 10,904 | 8,753 | 2,151 | 1,175 | 4 | 1,170 | 9,729 |
| March | 11,198 | 8,799 | 2,399 | 853 | 8 | 845 | 10,345 |
| April | 11,765 | 9,301 | 2,464 | 890 | 8 | 882 | 10,876 |
| May | 11,769 | 9,323 | 2,446 | 910 | 7 | 903 | 10,859 |
| June | 11,753 | 9,324 | 2,429 | 880 | 5 | 874 | 10,873 |
| July | 11,624 | 9,184 | 2,440 | 839 | 33 | 806 | 10,785 |
| August | 11,890 | 9,544 | 2,346 | 1,138 | 9 | 1,129 | 10,752 |
| September | 11,075 | 8,797 | 2,278 | 1,015 | 7 | 1,008 | 10,059 |
| October | 11,893 | 9,532 | 2,361 | 962 | 4 | 958 | 10,931 |
| November | 12,268 | 9,654 | 2,613 | 1,026 | 10 | 1,016 | 11,242 |
| December | 11,100 | 8,741 | 2,359 | 1,272 | 2 | 1,270 | 9,828 |
| Average | 11,530 | 9,140 | 2,390 | 984 | 9 | 975 | 10,546 |
| 2003 January | 11,008 | 8,547 | 2,461 | 1,212 | 10 | 1,202 | 9,796 |
| February | 10,764 | 8,303 | 2,460 | 1,067 | 5 | 1,062 | 9,697 |
| March | 11,857 | 9,055 | 2,802 | 1,051 | 10 | 1,042 | 10,806 |
| April | 12,446 | 9,807 | 2,639 | 1,053 | 12 | 1,041 | 11,394 |
| May | ^R 12,814 | ^R 10,078 | ^R 2,736 | ^R 1,097 | ^R 15 | ^R 1,082 | ^R 11,717 |
| June | ^E 12,521 | ^E 9,717 | ^E 2,804 | ^E 973 | ^E 10 | ^E 963 | ^E 11,548 |
| 6-Month Average | ^E 11,914 | ^E 9,261 | ^E 2,653 | ^E 1,076 | ^E 10 | ^E 1,066 | ^E 10,838 |
| 2002 6-Month Average | 11,418 | 9,037 | 2,381 | 924 | 7 | 917 | 10,493 |
| 2001 6-Month Average | 12,217 | 9,384 | 2,833 | 980 | 27 | 953 | 11,237 |

^a Includes crude oil for storage in the Strategic Petroleum Reserve.

^b Net imports equals imports minus exports.

^c See Note 6 at end of section.

R=Revised. E=Estimate.

Notes: • Crude oil includes lease condensate. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the

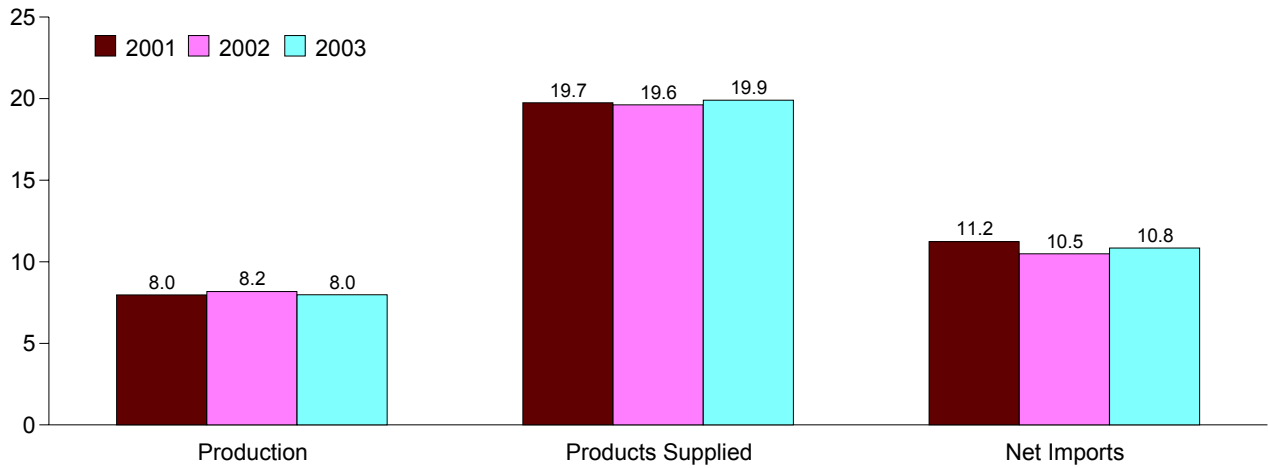
50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

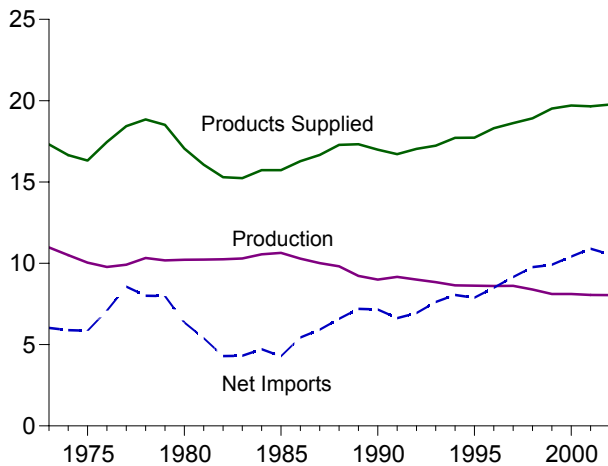
Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S1. • **1992 forward:** EIA, *Petroleum Supply Monthly*, July 2003, Table S1.

Figure 3.1a Petroleum Overview and Production
(Million Barrels per Day)

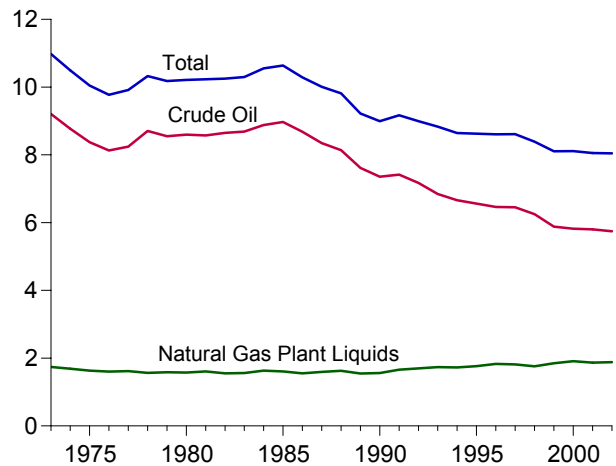
Overview, January-June



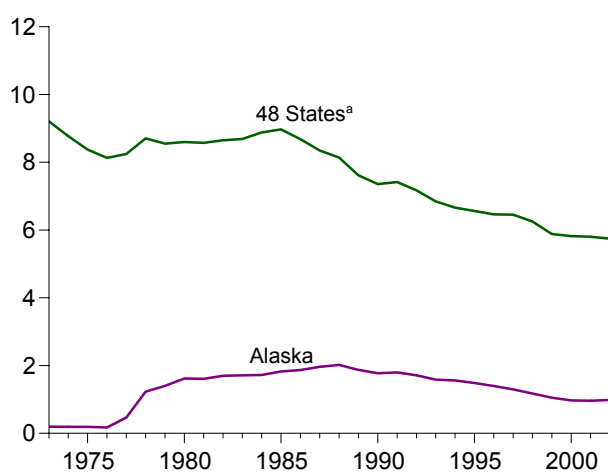
Overview, 1973-2002



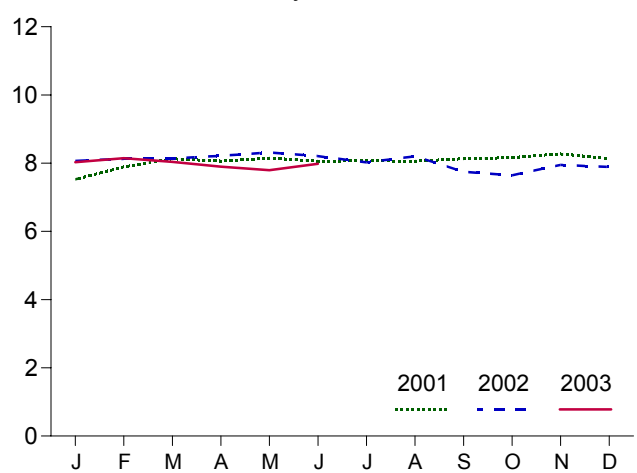
Production, 1973-2002



Crude Oil Production, 1973-2002



Total Production, Monthly

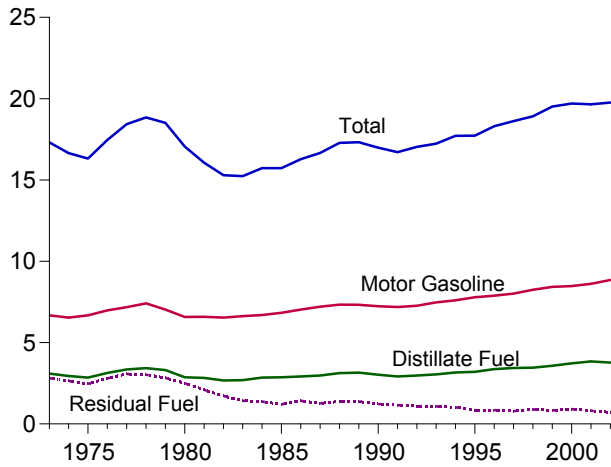


^aUnited States excluding Alaska and Hawaii.
Note: Because vertical scales differ, graphs should not be compared.

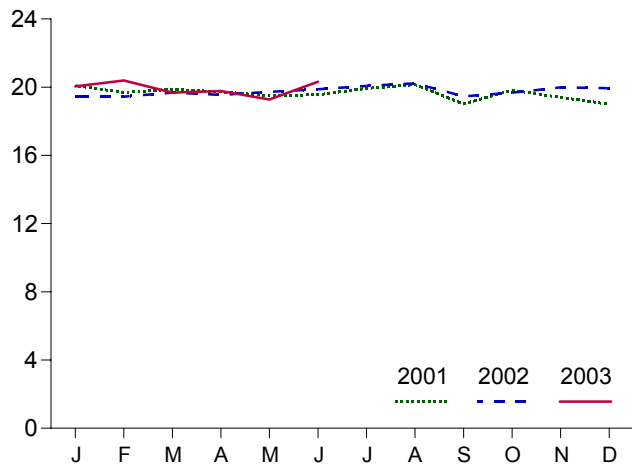
Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.
Sources: Tables 3.1a, 3.1b, and 3.2a.

Figure 3.1b Petroleum Products Supplied, Imports, and Stocks
(Million Barrels per Day, Except as Noted)

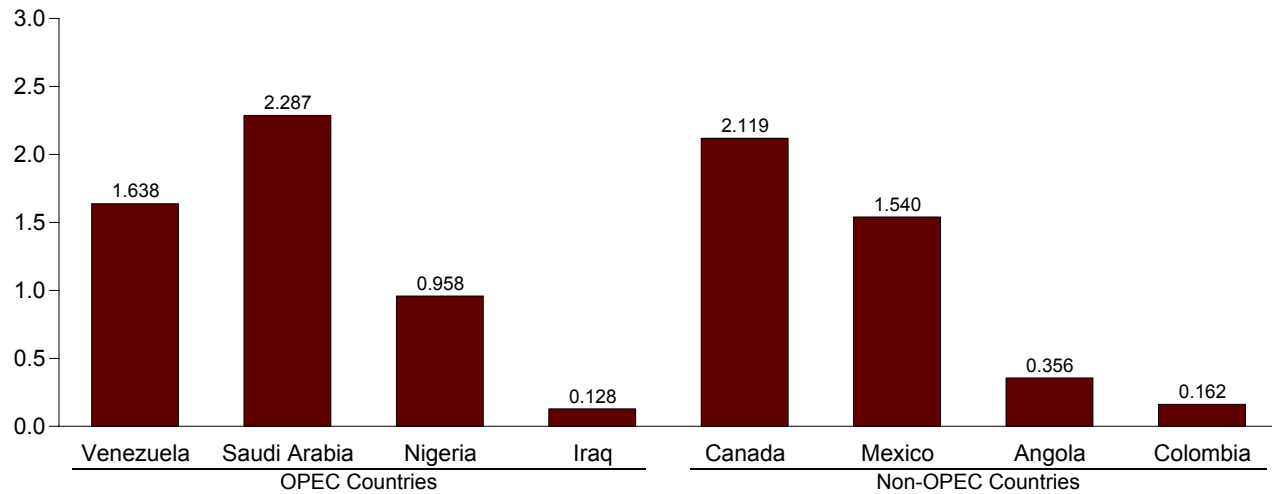
Products Supplied, 1973-2002



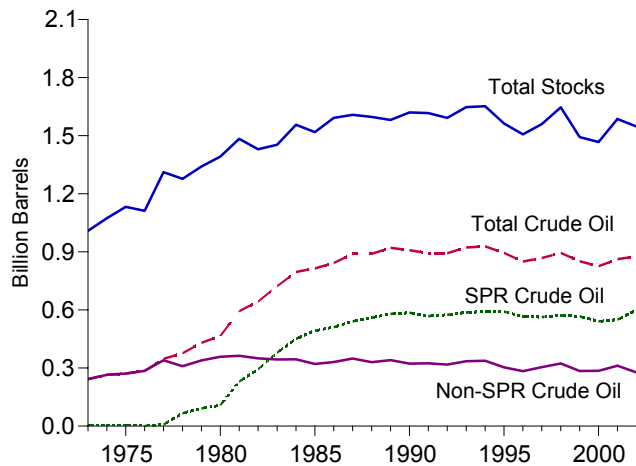
Products Supplied, Monthly



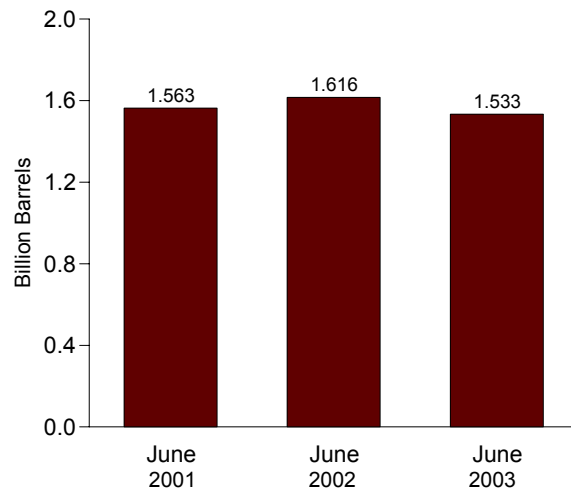
Imports from Selected Countries, May 2003



Stocks, End of Year, 1973-2002



Total Stocks, End of Month



Notes: • OPEC=Organization of Petroleum Exporting Countries. • SPR=Strategic Petroleum Reserves. • Because vertical scales differ, graphs should not be compared.

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.
Sources: Tables 3.1a, 3.2b, 3.3a, 3.3b, 3.3d, 3.3e, 3.3f, 3.4, 3.5, and 3.6.

Table 3.2a Crude Oil Supply and Disposition: Supply

| | Supply | | | | | | |
|-----------------------------|----------------------------|--------------------------|---------------------------|-----------------------|---------------------------|--|--------------------------------------|
| | Field Production | | Imports | | | Unaccounted-for Crude Oil ^b | Crude Oil Used Directly ^c |
| | Total Domestic | Alaskan | Total | SPR ^a | Other | | |
| | Thousand Barrels per Day | | | | | | |
| 1973 Average | 9,208 | 198 | 3,244 | — | 3,244 | 3 | -19 |
| 1974 Average | 8,774 | 193 | 3,477 | — | 3,477 | -25 | -15 |
| 1975 Average | 8,375 | 191 | 4,105 | — | 4,105 | 17 | -17 |
| 1976 Average | 8,132 | 173 | 5,287 | — | 5,287 | 77 | ^d -19 |
| 1977 Average | 8,245 | 464 | 6,615 | 21 | 6,594 | -6 | -14 |
| 1978 Average | 8,707 | 1,229 | 6,356 | ^d 161 | 6,195 | -57 | ^d -15 |
| 1979 Average | 8,552 | 1,401 | 6,519 | 67 | 6,452 | -11 | ^d -14 |
| 1980 Average | 8,597 | 1,617 | 5,263 | 44 | 5,219 | 34 | ^d -14 |
| 1981 Average | 8,572 | 1,609 | 4,396 | 256 | 4,141 | 83 | -58 |
| 1982 Average | 8,649 | 1,696 | 3,488 | 165 | 3,323 | 71 | -59 |
| 1983 Average | 8,688 | 1,714 | 3,329 | 234 | 3,096 | 114 | — |
| 1984 Average | 8,879 | 1,722 | 3,426 | 197 | 3,229 | 185 | — |
| 1985 Average | 8,971 | 1,825 | 3,201 | 118 | 3,083 | 145 | — |
| 1986 Average | 8,680 | 1,867 | 4,178 | 48 | 4,130 | 139 | — |
| 1987 Average | 8,349 | 1,962 | 4,674 | 73 | 4,601 | 145 | — |
| 1988 Average | 8,140 | 2,017 | 5,107 | 51 | 5,055 | 196 | — |
| 1989 Average | 7,613 | 1,874 | 5,843 | 56 | 5,787 | 200 | — |
| 1990 Average | 7,355 | 1,773 | 5,894 | 27 | 5,867 | 258 | — |
| 1991 Average | 7,417 | 1,798 | 5,782 | 0 | 5,782 | 195 | — |
| 1992 Average | 7,171 | 1,714 | 6,083 | 10 | 6,073 | 258 | — |
| 1993 Average | 6,847 | 1,582 | 6,787 | 15 | 6,772 | 168 | — |
| 1994 Average | 6,662 | 1,559 | 7,063 | 12 | 7,051 | 266 | — |
| 1995 Average | 6,560 | 1,484 | 7,230 | 0 | 7,230 | 193 | — |
| 1996 Average | 6,465 | 1,393 | 7,508 | 0 | 7,508 | 215 | — |
| 1997 Average | 6,452 | 1,296 | 8,225 | 0 | 8,225 | 145 | — |
| 1998 Average | 6,252 | 1,175 | 8,706 | 0 | 8,706 | 115 | — |
| 1999 Average | 5,881 | 1,050 | 8,731 | 8 | 8,722 | 191 | — |
| 2000 Average | 5,822 | 970 | 9,071 | 8 | 9,062 | 155 | — |
| 2001 January | 5,799 | 980 | 8,933 | 32 | 8,901 | 392 | — |
| February | 5,780 | 977 | 8,609 | 0 | 8,609 | 25 | — |
| March | 5,880 | 1,009 | 9,603 | 15 | 9,588 | 64 | — |
| April | 5,863 | 986 | 10,111 | 0 | 10,111 | 304 | — |
| May | 5,829 | 957 | 9,885 | 30 | 9,856 | 70 | — |
| June | 5,766 | 935 | 9,105 | 0 | 9,105 | 123 | — |
| July | 5,749 | 927 | 9,552 | 15 | 9,538 | 243 | — |
| August | 5,725 | 928 | 9,383 | 0 | 9,383 | 19 | — |
| September | 5,709 | 892 | 9,339 | 0 | 9,339 | 44 | — |
| October | 5,746 | 895 | 9,211 | 0 | 9,211 | 198 | — |
| November | 5,881 | 1,023 | 9,320 | 17 | 9,302 | -155 | — |
| December | 5,887 | 1,046 | 8,839 | 18 | 8,821 | 61 | — |
| Average | 5,801 | 963 | 9,328 | 11 | 9,318 | 117 | — |
| 2002 January | 5,848 | 1,036 | 8,709 | 33 | 8,675 | 351 | — |
| February | 5,871 | 1,031 | 8,753 | 59 | 8,694 | 129 | — |
| March | 5,883 | 1,036 | 8,799 | 0 | 8,799 | 99 | — |
| April | 5,859 | 1,009 | 9,301 | 0 | 9,301 | 53 | — |
| May | 5,924 | 1,002 | 9,323 | 16 | 9,307 | 283 | — |
| June | 5,915 | 1,019 | 9,324 | 17 | 9,307 | 21 | — |
| July | 5,770 | 931 | 9,184 | 0 | 9,184 | 146 | — |
| August | 5,811 | 965 | 9,544 | 0 | 9,544 | -148 | — |
| September | 5,411 | 886 | 8,797 | 0 | 8,797 | -27 | — |
| October | 5,363 | 983 | 9,532 | 0 | 9,532 | 161 | — |
| November | 5,597 | 908 | 9,654 | 34 | 9,620 | 10 | — |
| December | 5,699 | 1,010 | 8,741 | 34 | 8,707 | 228 | — |
| Average | 5,746 | 984 | 9,140 | 16 | 9,124 | 110 | — |
| 2003 January | ^E 5,842 | ^E 984 | 8,547 | 0 | 8,547 | -190 | — |
| February | ^E 5,915 | ^E 1,015 | 8,303 | 0 | 8,303 | 78 | — |
| March | ^E 5,890 | ^E 1,022 | 9,055 | 0 | 9,055 | 318 | — |
| April | ^E 5,813 | ^E 971 | 9,807 | 0 | 9,807 | 300 | — |
| May | ^{RE} 5,783 | ^{RE} 990 | ^R 10,078 | 0 | ^R 10,078 | ^R -25 | — |
| June | ^{PE} 5,855 | ^{PE} 992 | ^E 9,717 | ^E 0 | ^E 9,717 | ^E 66 | — |
| 6-Month Average | ^{PE} 5,849 | ^{PE} 996 | ^E 9,261 | ^E 0 | ^E 9,261 | ^E 90 | — |
| 2002 6-Month Average | 5,884 | 1,022 | 9,037 | 20 | 9,016 | 158 | — |
| 2001 6-Month Average | 5,820 | 974 | 9,384 | 13 | 9,371 | 165 | — |

^a Strategic Petroleum Reserve.

^b A balancing item.

^c Beginning in January 1983, crude oil used directly as fuel is shown as product supplied.

^d See Note 6 at end of section.

PE=Preliminary estimate. R=Revised. — =Not applicable. E=Estimate.

Notes: • Crude oil includes lease condensate. • Totals may not equal

sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S2. • **1992 forward:** EIA, *Petroleum Supply Monthly*, July 2003, Table S2.

Table 3.2b Crude Oil Supply and Disposition: Disposition and Stocks

| | Disposition | | | | | Stocks ^a | | | |
|-----------------------------|-----------------|---------------------------|-------------------|---------------------|-----------------|-------------------------------|------------------|------------------|------------------|
| | Crude Losses | Stock Change ^b | | Refinery Inputs | Exports | Product Supplied ^d | Total | SPR ^c | Other Primary |
| | | SPR ^c | Other | | | | | | |
| Thousand Barrels per Day | | | | | | Million Barrels | | | |
| 1973 Average | 13 | - | -11 | 12,431 | 2 | - | 242 | - | 242 |
| 1974 Average | 13 | - | 62 | 12,133 | 3 | - | 265 | - | 265 |
| 1975 Average | 13 | - | 17 | 12,442 | 6 | - | 271 | - | 271 |
| 1976 Average | ^e 14 | - | 39 | 13,416 | 8 | - | 285 | - | 285 |
| 1977 Average | 16 | 20 | 150 | 14,602 | 50 | - | 348 | 7 | 340 |
| 1978 Average | 16 | 163 | -84 | 14,739 | 158 | - | 376 | 67 | 309 |
| 1979 Average | 16 | 67 | 81 | 14,648 | 235 | - | 430 | 91 | 339 |
| 1980 Average | ^e 14 | 45 | 52 | 13,481 | 287 | - | ^f 466 | 108 | ^f 358 |
| 1981 Average | 5 | 336 | ^f -46 | 12,470 | 228 | - | 594 | 230 | 363 |
| 1982 Average | 3 | 174 | -38 | 11,774 | 236 | - | ^g 644 | 294 | ^g 350 |
| 1983 Average | 2 | 234 | ^g -20 | 11,685 | 164 | 66 | 723 | 379 | 344 |
| 1984 Average | 2 | 195 | 4 | 12,044 | 181 | 64 | 796 | 451 | 345 |
| 1985 Average | 1 | 117 | -67 | 12,002 | 204 | 60 | 814 | 493 | 321 |
| 1986 Average | (s) | 50 | 28 | 12,716 | 154 | 49 | 843 | 512 | 331 |
| 1987 Average | (s) | 80 | 49 | 12,854 | 151 | 34 | 890 | 541 | 349 |
| 1988 Average | (s) | 52 | -51 | 13,246 | 155 | 40 | 890 | 560 | 330 |
| 1989 Average | (s) | 56 | 30 | 13,401 | 142 | 28 | 921 | 580 | 341 |
| 1990 Average | (s) | 16 | -51 | 13,409 | 109 | 24 | 908 | 586 | 323 |
| 1991 Average | (s) | -47 | 5 | 13,301 | 116 | 18 | 893 | 569 | 325 |
| 1992 Average | (s) | 17 | -18 | 13,411 | 89 | 13 | 893 | 575 | 318 |
| 1993 Average | (s) | 34 | 47 | 13,613 | 98 | 10 | 922 | 587 | 335 |
| 1994 Average | (s) | 13 | 5 | 13,866 | 99 | 9 | 929 | 592 | 337 |
| 1995 Average | (s) | (s) | -93 | 13,973 | 95 | 7 | 895 | 592 | 303 |
| 1996 Average | (s) | -71 | -53 | 14,195 | 110 | 6 | 850 | 566 | 284 |
| 1997 Average | 0 | -7 | 57 | 14,662 | 108 | 2 | 868 | 563 | 305 |
| 1998 Average | (s) | 22 | 52 | 14,889 | 110 | 0 | 895 | 571 | 324 |
| 1999 Average | (s) | -11 | -107 | 14,804 | 118 | 0 | 852 | 567 | 284 |
| 2000 Average | 0 | -73 | 3 | 15,067 | 50 | 0 | 826 | 541 | 286 |
| 2001 January | 0 | 32 | 285 | 14,789 | 18 | 0 | 836 | 542 | 294 |
| February | 0 | (s) | -424 | 14,813 | 24 | 0 | 824 | 542 | 282 |
| March | 0 | 20 | 841 | 14,649 | 37 | 0 | 851 | 542 | 309 |
| April | 0 | 2 | 734 | 15,536 | 5 | 0 | 873 | 542 | 331 |
| May | 0 | 30 | -71 | 15,763 | 64 | 0 | 872 | 543 | 328 |
| June | 0 | 0 | -671 | 15,650 | 15 | 0 | 852 | 543 | 308 |
| July | 0 | 15 | 149 | 15,369 | 11 | 0 | 857 | 544 | 313 |
| August | 0 | 0 | -160 | 15,259 | 28 | 0 | 852 | 544 | 308 |
| September | 0 | 34 | 45 | 15,005 | 8 | 0 | 854 | 545 | 309 |
| October | 0 | 14 | 127 | 15,002 | 11 | 0 | 858 | 545 | 313 |
| November | 0 | 71 | -35 | 15,001 | 9 | 0 | 860 | 547 | 312 |
| December | 0 | 94 | -7 | 14,688 | 12 | 0 | 862 | 550 | 312 |
| Average | 0 | 26 | 73 | 15,128 | 20 | 0 | 862 | 550 | 312 |
| 2002 January | 0 | 141 | 268 | 14,487 | 11 | 0 | 875 | 555 | 320 |
| February | 0 | 191 | 252 | 14,306 | 4 | 0 | 887 | 560 | 327 |
| March | 0 | 50 | 198 | 14,526 | 8 | 0 | 895 | 561 | 334 |
| April | 0 | 175 | -295 | 15,325 | 8 | 0 | 891 | 567 | 325 |
| May | 0 | 146 | 77 | 15,301 | 7 | 0 | 898 | 571 | 327 |
| June | 0 | 173 | -316 | 15,397 | 5 | 0 | 894 | 576 | 318 |
| July | 0 | 67 | -428 | 15,430 | 33 | 0 | 883 | 579 | 304 |
| August | 0 | 121 | -260 | 15,338 | 9 | 0 | 878 | 582 | 296 |
| September | 0 | 166 | -852 | 14,861 | 7 | 0 | 858 | 587 | 271 |
| October | 0 | 77 | 672 | 14,303 | 4 | 0 | 881 | 590 | 291 |
| November | 0 | 209 | -113 | 15,155 | 10 | 0 | 884 | 596 | 288 |
| December | 0 | 103 | -337 | 14,900 | 2 | 0 | 877 | 599 | 278 |
| Average | 0 | 134 | -94 | 14,947 | 9 | 0 | 877 | 599 | 278 |
| 2003 January | 0 | 5 | -153 | 14,337 | 10 | 0 | 872 | 599 | 273 |
| February | 0 | 0 | -91 | 14,382 | 5 | 0 | 870 | 599 | 270 |
| March | 0 | 0 | 325 | 14,929 | 10 | 0 | 880 | 599 | 280 |
| April | 0 | 11 | 322 | 15,575 | 12 | 0 | 890 | 600 | 290 |
| May | 0 | ^R 114 | ^R -211 | ^R 15,919 | ^R 15 | ^E 0 | ^R 887 | 603 | ^R 284 |
| June | ^E 0 | ^E 172 | ^E -184 | ^E 15,642 | ^E 10 | ^E 0 | ^E 890 | ^E 608 | ^E 282 |
| 6-Month Average | ^E 0 | ^E 51 | ^E 2 | ^E 15,138 | ^E 10 | ^E 0 | ^E 890 | ^E 608 | ^E 282 |
| 2002 6-Month Average | 0 | 145 | 31 | 14,895 | 7 | 0 | 894 | 576 | 318 |
| 2001 6-Month Average | 0 | 14 | 126 | 15,202 | 27 | 0 | 852 | 543 | 308 |

^a Stocks are at end of period.
^b A negative number indicates a decrease in stocks and a positive number indicates an increase.
^c Strategic Petroleum Reserve. Crude oil stocks in the SPR include non-U.S. stocks held under foreign or commercial storage agreements.
^d Beginning in January 1983, crude oil used directly as fuel is shown as product supplied.
^e See Note 6 at end of section.
^f Stocks of Alaskan crude oil in transit are included from January 1981 forward. See Note 5 at end of section.
^g See Note 4 at end of section.
^R=Revised. - =Not applicable. ^E=Estimate. (s)=Less than +500 barrels per day and greater than -500 barrels per day.
Notes: • Crude oil includes lease condensate. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.
Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S2. • **1992 forward:** EIA, *Petroleum Supply Monthly*, July 2003, Table S2.

Table 3.3a Petroleum Imports From Bahrain, Iran, Iraq, and Kuwait
(Thousand Barrels per Day)

| | Persian Gulf ^a | | | | | | | |
|-----------------------------------|---------------------------|-----------|------------------|------------------|------------|------------|---------------------|------------|
| | Bahrain | | Iran | | Iraq | | Kuwait ^b | |
| | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil |
| 1973 Average | 11 | 0 | 223 | 216 | 4 | 4 | 47 | 42 |
| 1974 Average | 12 | 0 | 469 | 463 | 0 | 0 | 5 | 5 |
| 1975 Average | 16 | 0 | 280 | 278 | 2 | 2 | 16 | 4 |
| 1976 Average | 3 | 0 | 298 | 298 | 26 | 26 | 5 | 1 |
| 1977 Average | 10 | 0 | 535 | 530 | 74 | 74 | 48 | 42 |
| 1978 Average | 3 | 0 | 555 | 554 | 62 | 62 | 6 | 5 |
| 1979 Average | 1 | 0 | 304 | 297 | 88 | 88 | 8 | 5 |
| 1980 Average | (s) | 0 | 9 | 8 | 28 | 28 | 27 | 27 |
| 1981 Average | 1 | 0 | 0 | 0 | (s) | 0 | 0 | 0 |
| 1982 Average | 1 | 0 | 35 | 35 | 3 | 3 | 5 | 2 |
| 1983 Average | 2 | 0 | 48 | 48 | 10 | 10 | 14 | 7 |
| 1984 Average | 1 | 0 | 10 | 10 | 12 | 12 | 36 | 24 |
| 1985 Average | 4 | 0 | 27 | 27 | 46 | 46 | 21 | 4 |
| 1986 Average | 2 | 0 | 19 | 19 | 81 | 81 | 68 | 28 |
| 1987 Average | 0 | 0 | 98 | 98 | 83 | 82 | 84 | 70 |
| 1988 Average | 2 | 0 | ^c (s) | ^c (s) | 345 | 343 | 92 | 80 |
| 1989 Average | 0 | 0 | 0 | 0 | 449 | 441 | 157 | 155 |
| 1990 Average | 1 | 0 | 0 | 0 | 518 | 514 | 86 | 79 |
| 1991 Average | 2 | 0 | 32 | 32 | 0 | 0 | 6 | 6 |
| 1992 Average | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 39 |
| 1993 Average | 1 | 0 | 0 | 0 | 0 | 0 | 353 | 344 |
| 1994 Average | 1 | 0 | 0 | 0 | 0 | 0 | 312 | 307 |
| 1995 Average | 1 | 0 | 0 | 0 | 0 | 0 | 218 | 213 |
| 1996 Average | 1 | 0 | 0 | 0 | 1 | 1 | 236 | 235 |
| 1997 Average | 0 | 0 | 0 | 0 | 89 | 89 | 253 | 253 |
| 1998 Average | 1 | 0 | 0 | 0 | 336 | 336 | 301 | 300 |
| 1999 Average | 0 | 0 | 0 | 0 | 725 | 725 | 248 | 246 |
| 2000 Average | 1 | 0 | 0 | 0 | 620 | 620 | 272 | 263 |
| 2001 January | 0 | 0 | 0 | 0 | 310 | 310 | 247 | 206 |
| February | 0 | 0 | 0 | 0 | 253 | 253 | 280 | 251 |
| March | 0 | 0 | 0 | 0 | 579 | 579 | 308 | 302 |
| April | 0 | 0 | 0 | 0 | 880 | 880 | 263 | 242 |
| May | 0 | 0 | 0 | 0 | 1,011 | 1,011 | 256 | 240 |
| June | 6 | 0 | 0 | 0 | 810 | 810 | 270 | 270 |
| July | 0 | 0 | 0 | 0 | 710 | 710 | 292 | 287 |
| August | 0 | 0 | 0 | 0 | 563 | 563 | 261 | 256 |
| September | 0 | 0 | 0 | 0 | 1,192 | 1,192 | 259 | 237 |
| October | 0 | 0 | 0 | 0 | 1,177 | 1,177 | 226 | 221 |
| November | 0 | 0 | 0 | 0 | 889 | 889 | 196 | 196 |
| December | 0 | 0 | 0 | 0 | 1,126 | 1,126 | 145 | 140 |
| Average | (s) | 0 | 0 | 0 | 795 | 795 | 250 | 237 |
| 2002 January | 0 | 0 | 0 | 0 | 988 | 988 | 213 | 207 |
| February | 0 | 0 | 0 | 0 | 709 | 709 | 290 | 279 |
| March | 0 | 0 | 0 | 0 | 813 | 813 | 184 | 179 |
| April | 0 | 0 | 0 | 0 | 619 | 619 | 208 | 201 |
| May | 0 | 0 | 0 | 0 | 482 | 482 | 182 | 163 |
| June | 0 | 0 | 0 | 0 | 167 | 167 | 265 | 244 |
| July | 0 | 0 | 0 | 0 | 301 | 301 | 244 | 238 |
| August | 0 | 0 | 0 | 0 | 246 | 246 | 178 | 169 |
| September | 0 | 0 | 0 | 0 | 148 | 148 | 297 | 286 |
| October | 0 | 0 | 0 | 0 | 248 | 248 | 199 | 182 |
| November | 0 | 0 | 0 | 0 | 403 | 403 | 291 | 264 |
| December | 0 | 0 | 0 | 0 | 394 | 394 | 193 | 190 |
| Average | 0 | 0 | 0 | 0 | 459 | 459 | 228 | 216 |
| 2003 January | 4 | 0 | 0 | 0 | 600 | 600 | 166 | 134 |
| February | 11 | 0 | 0 | 0 | 909 | 909 | 241 | 223 |
| March | 0 | 0 | 0 | 0 | 637 | 637 | 251 | 220 |
| April | 0 | 0 | 0 | 0 | 726 | 726 | 284 | 277 |
| May | 0 | 0 | 0 | 0 | 128 | 128 | 204 | 186 |
| 5-Month Average | 3 | 0 | 0 | 0 | 593 | 593 | 229 | 207 |
| 2002 5-Month Average | 0 | 0 | 0 | 0 | 723 | 723 | 214 | 204 |
| 2001 5-Month Average | 0 | 0 | 0 | 0 | 612 | 612 | 271 | 248 |

^a The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil.

^b Imports from the Neutral Zone are reported as originating in either Saudi Arabia or Kuwait depending on the country reported to U.S. Customs.

^c A small amount of Iranian crude oil entered the United States in January 1988 from the Virgin Islands. The oil originated in Iran and was exported to the Virgin Islands prior to the signing of Executive Order 12613 on November 29, 1987.

(s)=Less than 500 barrels per day.

Notes: • Beginning in October 1977, Strategic Petroleum Reserve imports are included. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

Sources: • **Bahrain:** Energy Information Administration (EIA), Form EIA-814, "Monthly Imports Report." • **All Other Data: 1973-1991**—EIA, *Petroleum Supply Annual 1992, Volume 1*, May, 1993, Table S3. **1992 forward**—EIA, *Petroleum Supply Monthly*, July 2003, Table S3.

Table 3.3b Petroleum Imports From Qatar, Saudi Arabia, U.A.E., and Total Persian Gulf
(Thousand Barrels per Day)

| | Persian Gulf ^a | | | | | | | |
|-----------------------------|---------------------------|------------|---------------------------|--------------|----------------------|-----------|--------------------|--------------|
| | Qatar | | Saudi Arabia ^b | | United Arab Emirates | | Total ^a | |
| | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil |
| 1973 Average | 7 | 7 | 486 | 462 | 71 | 71 | 848 | 802 |
| 1974 Average | 17 | 17 | 461 | 438 | 74 | 69 | 1,039 | 992 |
| 1975 Average | 18 | 18 | 715 | 701 | 117 | 117 | 1,165 | 1,121 |
| 1976 Average | 24 | 24 | 1,230 | 1,222 | 254 | 254 | 1,840 | 1,825 |
| 1977 Average | 67 | 67 | 1,380 | 1,373 | 335 | 333 | 2,448 | 2,418 |
| 1978 Average | 64 | 64 | 1,144 | 1,142 | 385 | 385 | 2,219 | 2,212 |
| 1979 Average | 31 | 31 | 1,356 | 1,347 | 281 | 281 | 2,069 | 2,049 |
| 1980 Average | 22 | 22 | 1,261 | 1,250 | 172 | 172 | 1,519 | 1,508 |
| 1981 Average | 7 | 7 | 1,129 | 1,112 | 81 | 77 | 1,219 | 1,196 |
| 1982 Average | 7 | 7 | 552 | 530 | 92 | 81 | 696 | 659 |
| 1983 Average | (s) | 0 | 337 | 321 | 30 | 18 | 442 | 405 |
| 1984 Average | 5 | 4 | 325 | 309 | 117 | 90 | 506 | 450 |
| 1985 Average | (s) | 0 | 168 | 132 | 45 | 35 | 311 | 244 |
| 1986 Average | 13 | 12 | 685 | 618 | 44 | 38 | 912 | 796 |
| 1987 Average | 0 | 0 | 751 | 642 | 61 | 56 | 1,077 | 949 |
| 1988 Average | 0 | 0 | 1,073 | 911 | 29 | 23 | 1,541 | 1,357 |
| 1989 Average | 2 | 2 | 1,224 | 1,116 | 28 | 21 | 1,861 | 1,734 |
| 1990 Average | 4 | 4 | 1,339 | 1,195 | 17 | 9 | 1,966 | 1,801 |
| 1991 Average | 0 | 0 | 1,802 | 1,703 | 3 | 2 | 1,845 | 1,743 |
| 1992 Average | 1 | 0 | 1,720 | 1,597 | 6 | 0 | 1,778 | 1,636 |
| 1993 Average | 1 | 0 | 1,414 | 1,282 | 14 | 12 | 1,782 | 1,637 |
| 1994 Average | 0 | 0 | 1,402 | 1,297 | 13 | 11 | 1,728 | 1,615 |
| 1995 Average | 0 | 0 | 1,344 | 1,260 | 10 | 5 | 1,573 | 1,479 |
| 1996 Average | 0 | 0 | 1,363 | 1,248 | 3 | 3 | 1,604 | 1,488 |
| 1997 Average | 4 | 0 | 1,407 | 1,293 | 2 | 0 | 1,755 | 1,635 |
| 1998 Average | 4 | 1 | 1,491 | 1,404 | 3 | 3 | 2,136 | 2,044 |
| 1999 Average | 10 | 1 | 1,478 | 1,387 | 2 | 0 | 2,464 | 2,360 |
| 2000 Average | 9 | 0 | 1,572 | 1,523 | 15 | 3 | 2,488 | 2,409 |
| 2001 January | 7 | 0 | 1,804 | 1,629 | 138 | 79 | 2,504 | 2,224 |
| February | 0 | 0 | 1,800 | 1,734 | 44 | 0 | 2,377 | 2,239 |
| March | 20 | 0 | 1,788 | 1,730 | 4 | 0 | 2,699 | 2,611 |
| April | 19 | 0 | 1,658 | 1,626 | 84 | 76 | 2,904 | 2,824 |
| May | 30 | 0 | 1,770 | 1,724 | 52 | 35 | 3,120 | 3,011 |
| June | 23 | 2 | 1,764 | 1,694 | 28 | 0 | 2,901 | 2,776 |
| July | 11 | 0 | 1,713 | 1,683 | 10 | 0 | 2,736 | 2,680 |
| August | 10 | 0 | 1,835 | 1,826 | 26 | 17 | 2,695 | 2,661 |
| September | 14 | 0 | 1,478 | 1,439 | 84 | 32 | 3,028 | 2,900 |
| October | 6 | 0 | 1,432 | 1,384 | 16 | 16 | 2,857 | 2,797 |
| November | 10 | 0 | 1,543 | 1,514 | 0 | 0 | 2,637 | 2,598 |
| December | 10 | 0 | 1,370 | 1,357 | 0 | 0 | 2,651 | 2,623 |
| Average | 13 | (s) | 1,662 | 1,611 | 40 | 21 | 2,761 | 2,664 |
| 2002 January | 9 | 0 | 1,456 | 1,430 | 5 | 0 | 2,670 | 2,625 |
| February | 11 | 0 | 1,474 | 1,445 | 0 | 0 | 2,484 | 2,434 |
| March | 0 | 0 | 1,558 | 1,526 | 0 | 0 | 2,556 | 2,517 |
| April | 0 | 0 | 1,556 | 1,538 | 16 | 16 | 2,400 | 2,375 |
| May | 10 | 0 | 1,564 | 1,520 | 0 | 0 | 2,238 | 2,165 |
| June | 10 | 0 | 1,598 | 1,565 | 51 | 51 | 2,090 | 2,026 |
| July | 44 | 35 | 1,392 | 1,354 | 18 | 0 | 1,999 | 1,928 |
| August | 9 | 0 | 1,444 | 1,411 | 25 | 0 | 1,903 | 1,826 |
| September | 44 | 37 | 1,531 | 1,512 | 31 | 17 | 2,052 | 2,000 |
| October | 40 | 32 | 1,690 | 1,633 | 0 | 0 | 2,177 | 2,096 |
| November | 0 | 0 | 1,511 | 1,474 | 17 | 17 | 2,222 | 2,158 |
| December | 0 | 0 | 1,843 | 1,815 | 18 | 16 | 2,449 | 2,415 |
| Average | 15 | 9 | 1,552 | 1,519 | 15 | 10 | 2,269 | 2,213 |
| 2003 January | 0 | 0 | 1,858 | 1,820 | 90 | 34 | 2,718 | 2,588 |
| February | 0 | 0 | 1,437 | 1,397 | 13 | 0 | 2,612 | 2,530 |
| March | 0 | 0 | 1,852 | 1,812 | 0 | 0 | 2,740 | 2,669 |
| April | 0 | 0 | 2,081 | 2,041 | 40 | 19 | 3,131 | 3,064 |
| May | 9 | 0 | 2,287 | 2,226 | 9 | 0 | 2,637 | 2,540 |
| 5-Month Average | 2 | 0 | 1,911 | 1,867 | 31 | 11 | 2,768 | 2,679 |
| 2002 5-Month Average | 6 | 0 | 1,522 | 1,492 | 4 | 3 | 2,470 | 2,423 |
| 2001 5-Month Average | 15 | 0 | 1,764 | 1,688 | 65 | 39 | 2,727 | 2,587 |

^a The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil.

^b Imports from the Neutral Zone are reported as originating in either Saudi Arabia or Kuwait depending on the country reported to U.S. Customs.

(s)=Less than 500 barrels per day.

Notes: • Beginning in October 1977, Strategic Petroleum Reserve imports

are included. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S3. • **1992 forward:** EIA, *Petroleum Supply Monthly*, July 2003, Table S3.

Table 3.3c Petroleum Imports From Algeria, Ecuador, Gabon, Indonesia, and Libya
(Thousand Barrels per Day)

| | Other OPEC ^a | | | | | | | | | |
|-----------------------------|-------------------------|-----------|----------------------|------------|--------------------|------------|-----------|-----------|----------|-----------|
| | Algeria | | Ecuador ^b | | Gabon ^c | | Indonesia | | Libya | |
| | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil |
| 1973 Average | 136 | 120 | 48 | 47 | 0 | 0 | 213 | 200 | 164 | 133 |
| 1974 Average | 190 | 180 | 42 | 42 | 23 | 23 | 300 | 284 | 4 | 4 |
| 1975 Average | 282 | 264 | 57 | 57 | 27 | 27 | 390 | 379 | 232 | 223 |
| 1976 Average | 432 | 408 | 51 | 51 | 28 | 26 | 539 | 537 | 453 | 444 |
| 1977 Average | 559 | 544 | 57 | 55 | 42 | 35 | 541 | 507 | 723 | 704 |
| 1978 Average | 649 | 634 | 54 | 38 | 41 | 38 | 573 | 533 | 654 | 638 |
| 1979 Average | 636 | 608 | 42 | 30 | 42 | 42 | 420 | 380 | 658 | 642 |
| 1980 Average | 488 | 456 | 27 | 17 | 26 | 25 | 348 | 314 | 554 | 548 |
| 1981 Average | 311 | 261 | 48 | 38 | 35 | 35 | 366 | 318 | 319 | 317 |
| 1982 Average | 170 | 90 | 42 | 32 | 40 | 40 | 248 | 226 | 26 | 23 |
| 1983 Average | 240 | 176 | 61 | 56 | 59 | 59 | 338 | 315 | 0 | 0 |
| 1984 Average | 323 | 194 | 55 | 47 | 58 | 57 | 343 | 304 | 1 | 0 |
| 1985 Average | 187 | 84 | 67 | 56 | 52 | 51 | 314 | 292 | 4 | 0 |
| 1986 Average | 271 | 78 | 77 | 64 | 26 | 25 | 318 | 297 | 0 | 0 |
| 1987 Average | 295 | 115 | 29 | 23 | 35 | 35 | 285 | 262 | 0 | 0 |
| 1988 Average | 300 | 58 | 47 | 33 | 16 | 15 | 205 | 186 | 0 | 0 |
| 1989 Average | 269 | 60 | 89 | 80 | 50 | 49 | 183 | 158 | 0 | 0 |
| 1990 Average | 280 | 63 | 49 | 38 | 64 | 64 | 114 | 98 | 0 | 0 |
| 1991 Average | 253 | 44 | 63 | 53 | 84 | 84 | 111 | 102 | 0 | 0 |
| 1992 Average | 196 | 24 | 65 | 62 | 124 | 123 | 78 | 70 | 0 | 0 |
| 1993 Average | 220 | 24 | (b) | (b) | 152 | 151 | 81 | 65 | 0 | 0 |
| 1994 Average | 243 | 21 | (b) | (b) | 194 | 194 | 111 | 92 | 0 | 0 |
| 1995 Average | 234 | 27 | (b) | (b) | (c) | (c) | 88 | 64 | 0 | 0 |
| 1996 Average | 256 | 8 | (b) | (b) | (c) | (c) | 59 | 44 | 0 | 0 |
| 1997 Average | 285 | 6 | (b) | (b) | (c) | (c) | 58 | 51 | 0 | 0 |
| 1998 Average | 290 | 10 | (b) | (b) | (c) | (c) | 66 | 50 | 0 | 0 |
| 1999 Average | 259 | 25 | (b) | (b) | (c) | (c) | 81 | 70 | 0 | 0 |
| 2000 Average | 225 | 1 | (b) | (b) | (c) | (c) | 48 | 36 | 0 | 0 |
| 2001 January | 286 | 0 | (b) | (b) | (c) | (c) | 61 | 20 | 0 | 0 |
| February | 223 | 0 | (b) | (b) | (c) | (c) | 76 | 42 | 0 | 0 |
| March | 279 | 19 | (b) | (b) | (c) | (c) | 76 | 60 | 0 | 0 |
| April | 326 | 0 | (b) | (b) | (c) | (c) | 58 | 52 | 0 | 0 |
| May | 379 | 54 | (b) | (b) | (c) | (c) | 78 | 73 | 0 | 0 |
| June | 265 | 20 | (b) | (b) | (c) | (c) | 65 | 57 | 0 | 0 |
| July | 190 | 0 | (b) | (b) | (c) | (c) | 29 | 28 | 0 | 0 |
| August | 243 | 0 | (b) | (b) | (c) | (c) | 38 | 37 | 0 | 0 |
| September | 200 | 0 | (b) | (b) | (c) | (c) | 26 | 25 | 0 | 0 |
| October | 293 | 0 | (b) | (b) | (c) | (c) | 39 | 29 | 0 | 0 |
| November | 320 | 37 | (b) | (b) | (c) | (c) | 22 | 21 | 0 | 0 |
| December | 326 | 0 | (b) | (b) | (c) | (c) | 51 | 42 | 0 | 0 |
| Average | 278 | 11 | (b) | (b) | (c) | (c) | 51 | 40 | 0 | 0 |
| 2002 January | 265 | 0 | (b) | (b) | (c) | (c) | 80 | 67 | 0 | 0 |
| February | 248 | 0 | (b) | (b) | (c) | (c) | 104 | 84 | 0 | 0 |
| March | 347 | 75 | (b) | (b) | (c) | (c) | 63 | 63 | 0 | 0 |
| April | 366 | 77 | (b) | (b) | (c) | (c) | 60 | 58 | 0 | 0 |
| May | 343 | 53 | (b) | (b) | (c) | (c) | 76 | 76 | 0 | 0 |
| June | 293 | 19 | (b) | (b) | (c) | (c) | 57 | 57 | 0 | 0 |
| July | 160 | 0 | (b) | (b) | (c) | (c) | 15 | 14 | 0 | 0 |
| August | 183 | 0 | (b) | (b) | (c) | (c) | 34 | 34 | 0 | 0 |
| September | 249 | 32 | (b) | (b) | (c) | (c) | 49 | 49 | 0 | 0 |
| October | 239 | 40 | (b) | (b) | (c) | (c) | 68 | 66 | 0 | 0 |
| November | 226 | 21 | (b) | (b) | (c) | (c) | 13 | 13 | 0 | 0 |
| December | 245 | 40 | (b) | (b) | (c) | (c) | 21 | 21 | 0 | 0 |
| Average | 264 | 30 | (b) | (b) | (c) | (c) | 53 | 50 | 0 | 0 |
| 2003 January | 302 | 39 | (b) | (b) | (c) | (c) | 25 | 25 | 0 | 0 |
| February | 226 | 0 | (b) | (b) | (c) | (c) | 15 | 15 | 0 | 0 |
| March | 316 | 40 | (b) | (b) | (c) | (c) | 10 | 10 | 0 | 0 |
| April | 407 | 77 | (b) | (b) | (c) | (c) | 46 | 43 | 0 | 0 |
| May | 377 | 81 | (b) | (b) | (c) | (c) | 10 | 10 | 0 | 0 |
| 5-Month Average | 327 | 48 | (b) | (b) | (c) | (c) | 21 | 21 | 0 | 0 |
| 2002 5-Month Average | 315 | 42 | (b) | (b) | (c) | (c) | 76 | 70 | 0 | 0 |
| 2001 5-Month Average | 300 | 15 | (b) | (b) | (c) | (c) | 70 | 49 | 0 | 0 |

^a The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil.

^b Ecuador withdrew from OPEC on December 31, 1992. As of January 1993, imports from Ecuador appear on Table 3.3f under "Non-OPEC."

^c Gabon withdrew from OPEC on December 31, 1994. As of January 1995, imports from Gabon appear on Table 3.3f under "Non-OPEC."

Notes: • Beginning in October 1977, Strategic Petroleum Reserve imports are included. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

Sources: • 1973-1991: Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S3. • 1992 forward: EIA, *Petroleum Supply Monthly*, July 2003, Table S3.

Table 3.3d Petroleum Imports From Nigeria, Venezuela, Total Other OPEC, and Total OPEC

(Thousand Barrels per Day)

| | Other OPEC ^a | | | | | | Total OPEC ^b | |
|-----------------------------|-------------------------|------------|--------------|--------------|--------------|--------------|-------------------------|--------------|
| | Nigeria | | Venezuela | | Total | | Total | Crude Oil |
| | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | | |
| 1973 Average | 459 | 448 | 1,135 | 344 | 2,156 | 1,293 | 2,993 | 2,095 |
| 1974 Average | 713 | 697 | 979 | 319 | 2,253 | 1,549 | 3,280 | 2,540 |
| 1975 Average | 762 | 746 | 702 | 395 | 2,452 | 2,091 | 3,601 | 3,211 |
| 1976 Average | 1,025 | 1,014 | 700 | 241 | 3,229 | 2,721 | 5,066 | 4,545 |
| 1977 Average | 1,143 | 1,130 | 690 | 250 | 3,754 | 3,225 | 6,193 | 5,643 |
| 1978 Average | 919 | 910 | 646 | 181 | 3,536 | 2,972 | 5,751 | 5,184 |
| 1979 Average | 1,080 | 1,069 | 690 | 293 | 3,569 | 3,063 | 5,637 | 5,112 |
| 1980 Average | 857 | 841 | 481 | 156 | 2,781 | 2,356 | 4,300 | 3,864 |
| 1981 Average | 620 | 611 | 406 | 147 | 2,106 | 1,726 | 3,323 | 2,922 |
| 1982 Average | 514 | 510 | 412 | 155 | 1,451 | 1,075 | 2,146 | 1,734 |
| 1983 Average | 302 | 301 | 422 | 164 | 1,422 | 1,072 | 1,862 | 1,477 |
| 1984 Average | 216 | 207 | 548 | 253 | 1,544 | 1,062 | 2,049 | 1,512 |
| 1985 Average | 293 | 280 | 605 | 306 | 1,522 | 1,069 | 1,830 | 1,312 |
| 1986 Average | 440 | 437 | 793 | 416 | 1,926 | 1,317 | 2,837 | 2,113 |
| 1987 Average | 535 | 529 | 804 | 488 | 1,983 | 1,451 | 3,060 | 2,400 |
| 1988 Average | 618 | 607 | 794 | 439 | 1,981 | 1,339 | 3,520 | 2,696 |
| 1989 Average | 815 | 800 | 873 | 495 | 2,279 | 1,642 | 4,140 | 3,376 |
| 1990 Average | 800 | 784 | 1,025 | 666 | 2,332 | 1,713 | 4,296 | 3,514 |
| 1991 Average | 703 | 683 | 1,035 | 668 | 2,249 | 1,634 | 4,092 | 3,377 |
| 1992 Average | 681 | 665 | 1,170 | 826 | 2,313 | 1,770 | 4,092 | 3,406 |
| 1993 Average | 740 | 722 | 1,300 | 1,010 | 2,493 | 1,972 | 4,273 | 3,609 |
| 1994 Average | 637 | 624 | 1,334 | 1,034 | 2,520 | 1,965 | 4,247 | 3,580 |
| 1995 Average | 627 | 621 | 1,480 | 1,151 | 2,430 | 1,862 | 4,002 | 3,341 |
| 1996 Average | 617 | 595 | 1,676 | 1,303 | 2,609 | 1,950 | 4,211 | 3,438 |
| 1997 Average | 698 | 689 | 1,773 | 1,394 | 2,814 | 2,140 | 4,569 | 3,775 |
| 1998 Average | 696 | 689 | 1,719 | 1,377 | 2,771 | 2,125 | 4,905 | 4,169 |
| 1999 Average | 657 | 623 | 1,493 | 1,150 | 2,489 | 1,869 | 4,953 | 4,228 |
| 2000 Average | 896 | 875 | 1,546 | 1,223 | 2,716 | 2,135 | 5,203 | 4,544 |
| 2001 January | 881 | 842 | 1,796 | 1,431 | 3,023 | 2,294 | 5,527 | 4,517 |
| February | 894 | 859 | 1,500 | 1,250 | 2,693 | 2,150 | 5,071 | 4,389 |
| March | 1,076 | 1,057 | 1,702 | 1,384 | 3,133 | 2,520 | 5,832 | 5,131 |
| April | 1,192 | 1,137 | 1,623 | 1,333 | 3,200 | 2,522 | 6,104 | 5,346 |
| May | 988 | 916 | 1,514 | 1,312 | 2,959 | 2,354 | 6,080 | 5,365 |
| June | 793 | 724 | 1,623 | 1,297 | 2,745 | 2,097 | 5,641 | 4,873 |
| July | 869 | 834 | 1,685 | 1,445 | 2,773 | 2,308 | 5,509 | 4,987 |
| August | 727 | 690 | 1,586 | 1,374 | 2,594 | 2,101 | 5,289 | 4,763 |
| September | 1,057 | 994 | 1,282 | 1,041 | 2,565 | 2,060 | 5,593 | 4,960 |
| October | 842 | 812 | 1,511 | 1,288 | 2,685 | 2,129 | 5,542 | 4,926 |
| November | 696 | 662 | 1,423 | 1,144 | 2,461 | 1,864 | 5,097 | 4,462 |
| December | 614 | 579 | 1,382 | 1,178 | 2,373 | 1,799 | 5,024 | 4,423 |
| Average | 885 | 842 | 1,553 | 1,291 | 2,768 | 2,184 | 5,528 | 4,848 |
| 2002 January | 565 | 540 | 1,450 | 1,233 | 2,359 | 1,839 | 5,029 | 4,465 |
| February | 453 | 426 | 1,444 | 1,222 | 2,249 | 1,732 | 4,733 | 4,165 |
| March | 621 | 590 | 1,404 | 1,148 | 2,435 | 1,877 | 4,991 | 4,394 |
| April | 645 | 584 | 1,134 | 1,014 | 2,206 | 1,734 | 4,606 | 4,108 |
| May | 591 | 576 | 1,312 | 1,117 | 2,323 | 1,822 | 4,561 | 3,987 |
| June | 728 | 702 | 1,188 | 958 | 2,266 | 1,737 | 4,356 | 3,763 |
| July | 607 | 585 | 1,585 | 1,341 | 2,367 | 1,940 | 4,366 | 3,868 |
| August | 820 | 792 | 1,699 | 1,514 | 2,735 | 2,341 | 4,638 | 4,167 |
| September | 547 | 489 | 1,556 | 1,302 | 2,401 | 1,871 | 4,452 | 3,871 |
| October | 597 | 566 | 1,605 | 1,453 | 2,509 | 2,125 | 4,686 | 4,221 |
| November | 596 | 562 | 1,625 | 1,453 | 2,459 | 2,048 | 4,682 | 4,206 |
| December | 670 | 645 | 778 | 652 | 1,715 | 1,358 | 4,164 | 3,774 |
| Average | 621 | 589 | 1,398 | 1,201 | 2,336 | 1,870 | 4,605 | 4,083 |
| 2003 January | 825 | 798 | 406 | 399 | 1,558 | 1,261 | 4,272 | 3,850 |
| February | 536 | 494 | 613 | 559 | 1,390 | 1,068 | 3,990 | 3,598 |
| March | 1,012 | 954 | 1,292 | 1,139 | 2,630 | 2,145 | 5,371 | 4,814 |
| April | 733 | 697 | 1,618 | 1,383 | 2,805 | 2,200 | 5,936 | 5,264 |
| May | 958 | 907 | 1,638 | 1,391 | 2,982 | 2,389 | 5,619 | 4,929 |
| 5-Month Average | 819 | 776 | 1,120 | 980 | 2,287 | 1,825 | 5,053 | 4,503 |
| 2002 5-Month Average | 577 | 545 | 1,348 | 1,146 | 2,316 | 1,803 | 4,786 | 4,226 |
| 2001 5-Month Average | 1,007 | 963 | 1,630 | 1,344 | 3,006 | 2,371 | 5,733 | 4,958 |

^a The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil.

^b OPEC includes the Persian Gulf nations that are displayed on Tables 3.3a and 3.3b except Bahrain, which is not a member of OPEC, and the nations displayed under "Other OPEC" on Tables 3.3c and 3.3d. Ecuador withdrew from OPEC on December 31, 1992; as of January 1993, imports from Ecuador appear on Table 3.3f under "Non-OPEC." Gabon withdrew on December 31, 1994; as of January 1995, imports from Gabon appear on

Table 3.3f under "Non-OPEC." Imports from Bahrain are accounted for under "Other Non-OPEC" on Table 3.3h.

Notes: • Beginning in November 1977, Strategic Petroleum Reserve imports are included. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S3. • **1992 forward:** EIA, *Petroleum Supply Monthly*, July 2003, Table S3.

Table 3.3e Petroleum Imports From Angola, Australia, Bahamas, Brazil, Canada, and China

(Thousand Barrels per Day)

| | Non-OPEC ^a | | | | | | | | | | | |
|-----------------------------------|-----------------------|------------|-----------|-----------|-----------|-----------|------------|-----------|--------------|--------------|-----------|-----------|
| | Angola | | Australia | | Bahamas | | Brazil | | Canada | | China | |
| | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil |
| 1973 Average | 49 | 49 | 2 | 0 | 174 | 0 | 9 | 0 | 1,325 | 1,001 | (s) | 0 |
| 1974 Average | 49 | 48 | 1 | 0 | 164 | 0 | 2 | 0 | 1,070 | 791 | 0 | 0 |
| 1975 Average | 75 | 71 | 5 | 0 | 152 | 0 | 5 | 0 | 846 | 600 | 0 | 0 |
| 1976 Average | 12 | 7 | 2 | 0 | 118 | 0 | 0 | 0 | 599 | 371 | 0 | 0 |
| 1977 Average | 24 | 17 | 3 | 0 | 171 | 0 | 0 | 0 | 517 | 279 | 0 | 0 |
| 1978 Average | 20 | 6 | 5 | 0 | 160 | 0 | 0 | 0 | 467 | 248 | 0 | 0 |
| 1979 Average | 43 | 39 | 6 | 0 | 147 | 0 | 1 | 0 | 538 | 271 | 13 | 13 |
| 1980 Average | 42 | 37 | 1 | 0 | 78 | 0 | 3 | 1 | 455 | 199 | (s) | 0 |
| 1981 Average | 49 | 45 | 5 | 0 | 74 | 0 | 23 | 14 | 447 | 164 | 18 | 0 |
| 1982 Average | 44 | 42 | 5 | (s) | 65 | 0 | 47 | 19 | 482 | 214 | 40 | 8 |
| 1983 Average | 78 | 71 | 4 | 0 | 125 | 0 | 41 | 2 | 547 | 274 | 34 | 6 |
| 1984 Average | 90 | 85 | 38 | 25 | 88 | 0 | 60 | (s) | 630 | 341 | 46 | 15 |
| 1985 Average | 110 | 104 | 37 | 21 | 40 | 0 | 61 | 0 | 770 | 468 | 59 | 36 |
| 1986 Average | 112 | 102 | 41 | 30 | 37 | 0 | 50 | 0 | 807 | 570 | 90 | 68 |
| 1987 Average | 192 | 180 | 58 | 49 | 37 | 0 | 84 | 0 | 848 | 608 | 82 | 63 |
| 1988 Average | 212 | 203 | 64 | 59 | 32 | 0 | 98 | 0 | 999 | 681 | 88 | 82 |
| 1989 Average | 284 | 279 | 36 | 31 | 34 | 0 | 82 | 0 | 931 | 630 | 80 | 76 |
| 1990 Average | 237 | 236 | 53 | 47 | 37 | 0 | 49 | 0 | 934 | 643 | 80 | 77 |
| 1991 Average | 254 | 254 | 26 | 21 | 35 | 0 | 22 | 0 | 1,033 | 743 | 91 | 87 |
| 1992 Average | 336 | 336 | 19 | 17 | 36 | 0 | 20 | 0 | 1,069 | 797 | 90 | 84 |
| 1993 Average | 336 | 336 | 19 | 18 | 28 | 0 | 33 | 0 | 1,181 | 900 | 51 | 50 |
| 1994 Average | 331 | 322 | 17 | 16 | 29 | 0 | 31 | 1 | 1,272 | 983 | 65 | 64 |
| 1995 Average | 367 | 360 | 16 | 16 | 2 | 0 | 8 | 0 | 1,332 | 1,040 | 53 | 53 |
| 1996 Average | 351 | 344 | 31 | 25 | 1 | 0 | 9 | 0 | 1,424 | 1,075 | 57 | 57 |
| 1997 Average | 427 | 425 | 48 | 31 | 1 | 0 | 5 | 0 | 1,563 | 1,198 | 49 | 48 |
| 1998 Average | 468 | 465 | 57 | 31 | 4 | 0 | 26 | 0 | 1,598 | 1,266 | 42 | 42 |
| 1999 Average | 361 | 357 | 42 | 31 | 3 | 0 | 26 | 0 | 1,539 | 1,178 | 21 | 13 |
| 2000 Average | 301 | 295 | 56 | 49 | 0 | 0 | 51 | 5 | 1,807 | 1,348 | 44 | 33 |
| 2001 January | 312 | 300 | 53 | 44 | 0 | 0 | 143 | 35 | 1,935 | 1,342 | 33 | 33 |
| February | 499 | 485 | 27 | 20 | 0 | 0 | 88 | 0 | 1,867 | 1,346 | 2 | 0 |
| March | 374 | 374 | 47 | 20 | 6 | 0 | 81 | 21 | 1,938 | 1,411 | 35 | 14 |
| April | 381 | 381 | 111 | 68 | 14 | 0 | 87 | 31 | 1,852 | 1,391 | 24 | 14 |
| May | 358 | 356 | 31 | 21 | 0 | 0 | 127 | 16 | 1,780 | 1,368 | 31 | 21 |
| June | 302 | 302 | 22 | 22 | 5 | 0 | 67 | 0 | 1,900 | 1,472 | 26 | 0 |
| July | 297 | 285 | 65 | 65 | 0 | 0 | 86 | 0 | 1,690 | 1,270 | 23 | 20 |
| August | 323 | 311 | 20 | 20 | 19 | 0 | 54 | 0 | 1,723 | 1,272 | 57 | 28 |
| September | 334 | 324 | 46 | 46 | 10 | 0 | 80 | 17 | 1,685 | 1,262 | 22 | 0 |
| October | 242 | 222 | 30 | 21 | 26 | 0 | 84 | 32 | 1,734 | 1,316 | 22 | 21 |
| November | 267 | 267 | 21 | 21 | 31 | 0 | 56 | 0 | 1,899 | 1,414 | 0 | 0 |
| December | 263 | 263 | 46 | 46 | 10 | 0 | 33 | 0 | 1,944 | 1,408 | 9 | 0 |
| Average | 328 | 321 | 43 | 34 | 10 | 0 | 82 | 13 | 1,828 | 1,356 | 24 | 13 |
| 2002 January | 310 | 297 | 41 | 41 | 20 | 0 | 48 | 16 | 1,901 | 1,307 | 2 | 0 |
| February | 304 | 290 | 69 | 69 | 26 | 0 | 84 | 52 | 1,897 | 1,374 | 45 | 42 |
| March | 321 | 300 | 42 | 42 | 46 | 0 | 131 | 65 | 1,844 | 1,339 | 4 | 0 |
| April | 384 | 371 | 66 | 66 | 7 | 0 | 163 | 84 | 2,032 | 1,497 | 1 | 0 |
| May | 336 | 336 | 63 | 63 | 19 | 0 | 144 | 77 | 1,969 | 1,496 | 16 | 15 |
| June | 475 | 463 | 21 | 21 | 16 | 0 | 149 | 69 | 1,914 | 1,466 | 51 | 34 |
| July | 308 | 298 | 43 | 43 | 35 | 0 | 114 | 59 | 1,901 | 1,359 | 43 | 32 |
| August | 233 | 220 | 45 | 23 | 47 | 0 | 191 | 119 | 2,020 | 1,526 | 45 | 34 |
| September | 342 | 329 | 87 | 65 | 53 | 0 | 90 | 53 | 1,883 | 1,413 | 16 | 0 |
| October | 258 | 246 | 67 | 67 | 55 | 0 | 132 | 75 | 2,110 | 1,578 | 49 | 48 |
| November | 402 | 390 | 84 | 64 | 37 | 0 | 73 | 17 | 2,083 | 1,484 | 22 | 21 |
| December | 317 | 312 | 61 | 51 | 42 | 0 | 66 | 14 | 2,090 | 1,493 | 15 | 13 |
| Average | 332 | 321 | 57 | 51 | 34 | 0 | 116 | 58 | 1,971 | 1,445 | 26 | 20 |
| 2003 January | 263 | 245 | 20 | 20 | 31 | 0 | 114 | 48 | 2,235 | 1,621 | 19 | 16 |
| February | 265 | 251 | 23 | 23 | 27 | 0 | 110 | 36 | 1,971 | 1,423 | 15 | 14 |
| March | 381 | 381 | 20 | 20 | 41 | 0 | 76 | 15 | 1,872 | 1,406 | 38 | 7 |
| April | 494 | 482 | 12 | 12 | 35 | 0 | 75 | 17 | 1,754 | 1,271 | 20 | 6 |
| May | 356 | 356 | 20 | 20 | 37 | 0 | 67 | 33 | 2,119 | 1,610 | 22 | 7 |
| 5-Month Average | 353 | 344 | 19 | 19 | 34 | 0 | 88 | 30 | 1,992 | 1,468 | 23 | 10 |
| 2002 5-Month Average | 331 | 319 | 56 | 56 | 24 | 0 | 114 | 59 | 1,928 | 1,402 | 13 | 11 |
| 2001 5-Month Average | 382 | 377 | 54 | 35 | 4 | 0 | 106 | 21 | 1,875 | 1,372 | 25 | 17 |

^a The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil.

(s)=Less than 500 barrels per day.

Notes: • Beginning in October 1977, Strategic Petroleum Reserve imports

are included. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

Sources: • 1973-1991: Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S3. • 1992 forward: EIA, *Petroleum Supply Monthly*, July 2003, Table S3.

Table 3.3f Petroleum Imports From Colombia, Ecuador, Gabon, Italy, Malaysia, and Mexico

(Thousand Barrels per Day)

| | Non-OPEC ^a | | | | | | | | | | | |
|----------------------|-----------------------|-----------|----------------------|-----------|--------------------|-----------|-------|-----------|----------|-----------|--------|-----------|
| | Colombia | | Ecuador ^b | | Gabon ^c | | Italy | | Malaysia | | Mexico | |
| | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil |
| 1973 Average | 9 | 2 | - | - | - | - | 125 | 0 | 12 | 1 | 16 | 1 |
| 1974 Average | 5 | 0 | - | - | - | - | 74 | 0 | 12 | 1 | 8 | 2 |
| 1975 Average | 9 | 0 | - | - | - | - | 27 | 0 | 8 | 5 | 71 | 70 |
| 1976 Average | 21 | 6 | - | - | - | - | 39 | 0 | 18 | 16 | 87 | 87 |
| 1977 Average | 17 | 0 | - | - | - | - | 51 | 0 | 66 | 55 | 179 | 177 |
| 1978 Average | 20 | 0 | - | - | - | - | 38 | 0 | 42 | 37 | 318 | 316 |
| 1979 Average | 18 | 0 | - | - | - | - | 30 | 0 | 66 | 52 | 439 | 437 |
| 1980 Average | 4 | 0 | - | - | - | - | 4 | 0 | 70 | 61 | 533 | 507 |
| 1981 Average | 1 | 0 | - | - | - | - | 11 | 0 | 36 | 33 | 522 | 469 |
| 1982 Average | 5 | 0 | - | - | - | - | 18 | (s) | 20 | 18 | 685 | 645 |
| 1983 Average | 10 | 0 | - | - | - | - | 18 | (s) | 4 | 3 | 826 | 766 |
| 1984 Average | 8 | 0 | - | - | - | - | 45 | (s) | 1 | 0 | 748 | 659 |
| 1985 Average | 23 | 0 | - | - | - | - | 60 | (s) | 3 | 1 | 816 | 715 |
| 1986 Average | 87 | 57 | - | - | - | - | 76 | 0 | 12 | 11 | 699 | 621 |
| 1987 Average | 148 | 115 | - | - | - | - | 54 | 1 | 13 | 12 | 655 | 602 |
| 1988 Average | 134 | 106 | - | - | - | - | 65 | 5 | 19 | 19 | 747 | 674 |
| 1989 Average | 172 | 136 | - | - | - | - | 34 | 3 | 39 | 39 | 767 | 716 |
| 1990 Average | 182 | 140 | - | - | - | - | 58 | 2 | 41 | 40 | 755 | 689 |
| 1991 Average | 163 | 123 | - | - | - | - | 47 | 3 | 24 | 24 | 807 | 759 |
| 1992 Average | 126 | 102 | - | - | - | - | 55 | 0 | 10 | 10 | 830 | 787 |
| 1993 Average | 171 | 141 | 81 | 78 | - | - | 31 | 0 | 11 | 10 | 919 | 863 |
| 1994 Average | 161 | 146 | 91 | 91 | - | - | 22 | 0 | 10 | 6 | 984 | 939 |
| 1995 Average | 219 | 207 | 97 | 96 | 229 | 229 | 5 | 0 | 8 | 6 | 1,068 | 1,027 |
| 1996 Average | 234 | 226 | 104 | 96 | 184 | 184 | 8 | 0 | 11 | 6 | 1,244 | 1,207 |
| 1997 Average | 271 | 270 | 115 | 114 | 230 | 230 | 7 | 0 | 23 | 8 | 1,385 | 1,360 |
| 1998 Average | 354 | 349 | 101 | 98 | 207 | 207 | 12 | 0 | 35 | 26 | 1,351 | 1,321 |
| 1999 Average | 468 | 452 | 118 | 114 | 168 | 168 | 10 | 0 | 35 | 21 | 1,324 | 1,254 |
| 2000 Average | 342 | 318 | 128 | 125 | 143 | 143 | 30 | 0 | 45 | 29 | 1,373 | 1,313 |
| 2001 January | 379 | 345 | 103 | 94 | 94 | 94 | 43 | 0 | 41 | 4 | 1,456 | 1,391 |
| February | 321 | 294 | 92 | 90 | 177 | 177 | 44 | 0 | 18 | 0 | 1,120 | 1,058 |
| March | 228 | 204 | 103 | 103 | 152 | 152 | 64 | 0 | 87 | 54 | 1,454 | 1,371 |
| April | 301 | 257 | 123 | 120 | 177 | 177 | 24 | 0 | 39 | 22 | 1,572 | 1,548 |
| May | 323 | 260 | 155 | 149 | 127 | 127 | 49 | 0 | 31 | 0 | 1,312 | 1,266 |
| June | 308 | 248 | 111 | 84 | 155 | 155 | 32 | 0 | 24 | 13 | 1,234 | 1,214 |
| July | 239 | 215 | 126 | 117 | 149 | 149 | 55 | 0 | 13 | 0 | 1,348 | 1,322 |
| August | 350 | 326 | 126 | 113 | 98 | 98 | 19 | 0 | 26 | 10 | 1,471 | 1,422 |
| September | 307 | 268 | 133 | 132 | 86 | 86 | 63 | 0 | 29 | 21 | 1,490 | 1,437 |
| October | 234 | 226 | 184 | 178 | 136 | 136 | 27 | 0 | 59 | 34 | 1,432 | 1,399 |
| November | 278 | 236 | 97 | 97 | 173 | 173 | 47 | 0 | 25 | 12 | 1,765 | 1,717 |
| December | 283 | 242 | 80 | 80 | 159 | 159 | 8 | 0 | 47 | 15 | 1,603 | 1,558 |
| Average | 296 | 260 | 120 | 113 | 140 | 140 | 40 | 0 | 37 | 15 | 1,440 | 1,394 |
| 2002 January | 260 | 228 | 116 | 83 | 206 | 206 | 30 | 0 | 33 | 14 | 1,416 | 1,373 |
| February | 352 | 331 | 84 | 77 | 61 | 61 | 26 | 0 | 11 | 0 | 1,611 | 1,571 |
| March | 242 | 233 | 110 | 104 | 124 | 124 | 54 | 0 | 6 | 0 | 1,473 | 1,437 |
| April | 291 | 266 | 93 | 75 | 164 | 164 | 38 | 0 | 0 | 0 | 1,486 | 1,442 |
| May | 210 | 192 | 91 | 82 | 188 | 188 | 36 | 0 | 30 | 22 | 1,565 | 1,492 |
| June | 229 | 204 | 117 | 105 | 123 | 123 | 16 | 0 | 7 | 0 | 1,519 | 1,474 |
| July | 224 | 203 | 110 | 93 | 206 | 206 | 22 | 0 | 20 | 11 | 1,604 | 1,529 |
| August | 239 | 217 | 79 | 79 | 170 | 170 | 24 | 0 | 38 | 29 | 1,500 | 1,475 |
| September | 275 | 263 | 114 | 102 | 164 | 164 | 24 | 0 | 0 | 0 | 1,453 | 1,417 |
| October | 255 | 232 | 156 | 151 | 88 | 88 | 34 | 0 | 22 | 17 | 1,574 | 1,524 |
| November | 270 | 212 | 153 | 148 | 127 | 127 | 40 | 0 | 23 | 12 | 1,580 | 1,532 |
| December | 289 | 248 | 100 | 100 | 88 | 88 | 58 | 0 | 4 | 0 | 1,781 | 1,734 |
| Average | 260 | 235 | 110 | 100 | 143 | 143 | 34 | 0 | 16 | 9 | 1,547 | 1,500 |
| 2003 January | 141 | 120 | 71 | 71 | 113 | 113 | 25 | 0 | 12 | 11 | 1,621 | 1,566 |
| February | 268 | 240 | 93 | 93 | 168 | 168 | 21 | 0 | 15 | 0 | 1,580 | 1,495 |
| March | 202 | 146 | 82 | 82 | 98 | 98 | 49 | 0 | 8 | 0 | 1,362 | 1,320 |
| April | 211 | 170 | 101 | 95 | 135 | 135 | 56 | 0 | 27 | 21 | 1,687 | 1,657 |
| May | 162 | 133 | 146 | 135 | 129 | 129 | 39 | 0 | 31 | 22 | 1,540 | 1,496 |
| 5-Month Average | 195 | 160 | 99 | 95 | 128 | 128 | 38 | 0 | 19 | 11 | 1,557 | 1,506 |
| 2002 5-Month Average | 269 | 248 | 99 | 84 | 150 | 150 | 37 | 0 | 16 | 7 | 1,508 | 1,461 |
| 2001 5-Month Average | 310 | 271 | 116 | 112 | 145 | 145 | 45 | 0 | 44 | 16 | 1,387 | 1,331 |

^a The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil.

^b Through 1992, Ecuador was a member of OPEC. See Table 3.3c.

^c Through December 1994, Gabon was a member of OPEC. See Table 3.3c.

- =Not applicable. (s)=Less than 500 barrels per day.

Notes: • Beginning in October 1977, Strategic Petroleum Reserve imports are included. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

Sources: • 1973-1991: Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S3. • 1992 forward: EIA, *Petroleum Supply Monthly*, July 2003, Table S3.

Table 3.3g Petroleum Imports From Netherlands, Netherlands Antilles, Norway, Puerto Rico, Russia, and Spain
(Thousand Barrels per Day)

| | Non-OPEC ^a | | | | | | | | | | | |
|----------------------|-----------------------|-----------|----------------------|-----------|--------|-----------|-------------|-----------|---------------------|-----------|-------|-----------|
| | Netherlands | | Netherlands Antilles | | Norway | | Puerto Rico | | Russia ^b | | Spain | |
| | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil |
| 1973 Average | 53 | 0 | 585 | 0 | 1 | 0 | 99 | 0 | 26 | 0 | 26 | 0 |
| 1974 Average | 43 | 0 | 511 | 0 | 1 | 1 | 90 | 0 | 20 | 0 | 12 | 0 |
| 1975 Average | 19 | 4 | 332 | 0 | 17 | 12 | 90 | 0 | 14 | 0 | 1 | 0 |
| 1976 Average | 8 | 0 | 275 | 0 | 36 | 35 | 88 | 0 | 11 | 2 | 1 | 0 |
| 1977 Average | 31 | 4 | 211 | 0 | 50 | 48 | 105 | 0 | 12 | 2 | 10 | 0 |
| 1978 Average | 5 | 2 | 229 | 0 | 104 | 104 | 94 | 0 | 8 | 1 | 3 | 0 |
| 1979 Average | 23 | 7 | 231 | 0 | 75 | 75 | 92 | 0 | 1 | 0 | 4 | 0 |
| 1980 Average | 2 | (s) | 225 | 0 | 144 | 144 | 88 | 0 | 1 | 0 | 1 | 0 |
| 1981 Average | 30 | (s) | 197 | 0 | 119 | 114 | 62 | 0 | 5 | (s) | 1 | (s) |
| 1982 Average | 35 | (s) | 175 | 0 | 102 | 102 | 50 | 0 | 1 | 0 | 3 | (s) |
| 1983 Average | 65 | 3 | 189 | 0 | 66 | 65 | 40 | 0 | 1 | (s) | 2 | (s) |
| 1984 Average | 65 | 3 | 188 | 0 | 114 | 112 | 42 | 0 | 13 | (s) | 11 | 0 |
| 1985 Average | 58 | 0 | 40 | 0 | 32 | 31 | 28 | 0 | 8 | (s) | 29 | 1 |
| 1986 Average | 54 | 0 | 25 | 0 | 60 | 53 | 21 | 0 | 18 | (s) | 53 | 0 |
| 1987 Average | 60 | 0 | 29 | 0 | 80 | 70 | 21 | 0 | 11 | 0 | 55 | 0 |
| 1988 Average | 61 | 0 | 36 | 0 | 67 | 62 | 22 | 0 | 29 | 0 | 68 | 0 |
| 1989 Average | 49 | 0 | 42 | 0 | 138 | 127 | 32 | 0 | 48 | 0 | 67 | 0 |
| 1990 Average | 55 | 0 | 31 | 0 | 102 | 96 | 32 | 0 | 45 | 1 | 47 | 0 |
| 1991 Average | 29 | 0 | 81 | 0 | 82 | 74 | 27 | 0 | 29 | 1 | 33 | 0 |
| 1992 Average | 26 | 0 | 65 | 0 | 127 | 119 | 26 | 0 | 18 | 5 | 32 | 0 |
| 1993 Average | 10 | 0 | 82 | 0 | 142 | 137 | 29 | 0 | 55 | 36 | 37 | 0 |
| 1994 Average | 32 | 0 | 98 | 0 | 202 | 190 | 22 | 0 | 30 | 27 | 37 | 0 |
| 1995 Average | 15 | 0 | 52 | 0 | 273 | 258 | 15 | 0 | 25 | 14 | 16 | 1 |
| 1996 Average | 19 | 0 | 64 | 0 | 313 | 293 | 20 | 0 | 25 | 18 | 29 | 1 |
| 1997 Average | 25 | 0 | 74 | 0 | 309 | 288 | 16 | 0 | 13 | 3 | 21 | 0 |
| 1998 Average | 31 | 0 | 82 | 0 | 236 | 221 | 15 | 0 | 24 | 9 | 18 | 0 |
| 1999 Average | 27 | 0 | 65 | 0 | 304 | 263 | 13 | 0 | 89 | 21 | 10 | 0 |
| 2000 Average | 30 | 1 | 90 | 0 | 343 | 302 | 15 | 0 | 72 | 7 | 25 | 0 |
| 2001 January | 77 | 0 | 141 | 0 | 321 | 229 | 11 | 0 | 190 | 0 | 58 | 0 |
| February | 48 | 0 | 101 | 0 | 395 | 299 | 8 | 0 | 183 | 0 | 47 | 0 |
| March | 48 | 0 | 125 | 0 | 400 | 313 | 5 | 0 | 53 | 0 | 35 | 0 |
| April | 23 | 0 | 105 | 0 | 382 | 325 | 6 | 0 | 115 | 0 | 19 | 0 |
| May | 61 | 0 | 44 | 0 | 411 | 376 | 3 | 0 | 88 | 0 | 31 | 0 |
| June | 56 | 0 | 66 | 0 | 284 | 254 | 12 | 0 | 47 | 0 | 33 | 0 |
| July | 25 | 0 | 70 | 0 | 448 | 363 | 0 | 0 | 81 | 0 | 25 | 0 |
| August | 40 | 0 | 67 | 0 | 287 | 227 | 0 | 0 | 118 | 0 | 11 | 0 |
| September | 34 | 0 | 55 | 0 | 388 | 350 | 3 | 0 | 124 | 0 | 27 | 0 |
| October | 50 | 0 | 75 | 0 | 259 | 211 | 0 | 0 | 34 | 0 | 22 | 0 |
| November | 22 | 0 | 77 | 0 | 387 | 331 | 0 | 0 | 22 | 0 | 16 | 0 |
| December | 33 | 0 | 46 | 0 | 140 | 106 | 0 | 0 | 30 | 0 | 43 | 0 |
| Average | 43 | 0 | 81 | 0 | 341 | 281 | 4 | 0 | 90 | 0 | 31 | 0 |
| 2002 January | 25 | 0 | 120 | 0 | 155 | 135 | 0 | 0 | 61 | 0 | 16 | 0 |
| February | 48 | 0 | 145 | 0 | 264 | 224 | 0 | 0 | 51 | 0 | 10 | 0 |
| March | 77 | 0 | 112 | 0 | 338 | 296 | 0 | 0 | 95 | 12 | 19 | 0 |
| April | 111 | 0 | 94 | 0 | 577 | 523 | 2 | 0 | 192 | 36 | 8 | 0 |
| May | 103 | 0 | 48 | 0 | 519 | 467 | 0 | 0 | 371 | 220 | 23 | 0 |
| June | 69 | 0 | 76 | 0 | 527 | 490 | 0 | 0 | 231 | 78 | 8 | 0 |
| July | 39 | 0 | 51 | 0 | 495 | 448 | 0 | 0 | 220 | 79 | 30 | 0 |
| August | 87 | 0 | 56 | 0 | 478 | 402 | 0 | 0 | 236 | 100 | 29 | 0 |
| September | 21 | 0 | 77 | 0 | 342 | 294 | 0 | 0 | 225 | 104 | 0 | 0 |
| October | 75 | 0 | 71 | 0 | 318 | 308 | 0 | 0 | 295 | 190 | 0 | 0 |
| November | 70 | 0 | 84 | 0 | 409 | 388 | 0 | 0 | 255 | 85 | 19 | 0 |
| December | 61 | 0 | 43 | 0 | 288 | 202 | 0 | 0 | 276 | 108 | 41 | 0 |
| Average | 66 | 0 | 81 | 0 | 393 | 348 | (s) | 0 | 210 | 85 | 17 | 0 |
| 2003 January | 132 | 0 | 49 | 0 | 210 | 104 | 0 | 0 | 190 | 99 | 12 | 0 |
| February | 79 | 0 | 117 | 0 | 255 | 211 | 0 | 0 | 271 | 121 | 26 | 0 |
| March | 110 | 0 | 64 | 0 | 199 | 147 | 0 | 0 | 255 | 16 | 16 | 0 |
| April | 88 | 0 | 83 | 0 | 248 | 148 | 0 | 0 | 129 | 19 | 17 | 0 |
| May | 76 | 0 | 143 | 0 | 303 | 190 | 0 | 0 | 207 | 142 | 49 | 0 |
| 5-Month Average | 98 | 0 | 91 | 0 | 243 | 159 | 0 | 0 | 210 | 79 | 24 | 0 |
| 2002 5-Month Average | 73 | 0 | 103 | 0 | 371 | 330 | (s) | 0 | 156 | 55 | 15 | 0 |
| 2001 5-Month Average | 52 | 0 | 103 | 0 | 382 | 308 | 6 | 0 | 125 | 0 | 38 | 0 |

^a The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil.

^b Imports from other States in the former U.S.S.R. may be included in imports from Russia for the years 1973 through 1992.

(s)=Less than 500 barrels per day.

Notes: • Beginning in October 1977, Strategic Petroleum Reserve imports are included. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

Sources: • 1973-1991: Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S3. • 1992 forward: EIA, *Petroleum Supply Monthly*, July 2003, Table S3.

Table 3.3h Petroleum Imports From Trinidad and Tobago, United Kingdom, U.S. Virgin Islands, Other Non-OPEC, Total Non-OPEC, and Total Imports
(Thousand Barrels per Day)

| | Non-OPEC ^a | | | | | | | | | | Total Imports | |
|-----------------------------|-----------------------|-----------|----------------|------------|---------------------|-----------|-----------------------------|------------|--------------------|--------------------|---------------|--------------|
| | Trinidad and Tobago | | United Kingdom | | U.S. Virgin Islands | | Other Non-OPEC ^b | | Total | | | |
| | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil | Total | Crude Oil |
| 1973 Average | 255 | 60 | 15 | 0 | 329 | 0 | 153 | 36 | 3,263 | 1,149 | 6,256 | 3,244 |
| 1974 Average | 251 | 63 | 8 | 0 | 391 | 0 | 122 | 30 | 2,832 | 937 | 6,112 | 3,477 |
| 1975 Average | 242 | 115 | 14 | (s) | 406 | 0 | 120 | 14 | 2,454 | 893 | 6,056 | 4,105 |
| 1976 Average | 274 | 104 | 31 | 13 | 422 | 0 | 203 | 101 | 2,247 | 742 | 7,313 | 5,287 |
| 1977 Average | 289 | 134 | 126 | 97 | 466 | 0 | 287 | 157 | 2,614 | 971 | 8,807 | 6,615 |
| 1978 Average | 253 | 142 | 180 | 169 | 428 | 0 | 239 | 146 | 2,612 | 1,172 | 8,363 | 6,356 |
| 1979 Average | 190 | 123 | 202 | 197 | 431 | 0 | 269 | 192 | 2,819 | 1,407 | 8,456 | 6,519 |
| 1980 Average | 176 | 115 | 176 | 173 | 388 | 0 | 219 | 162 | 2,609 | 1,399 | 6,909 | 5,263 |
| 1981 Average | 133 | 102 | 375 | 369 | 327 | 0 | 236 | 163 | 2,672 | 1,474 | 5,996 | 4,396 |
| 1982 Average | 112 | 92 | 456 | 441 | 316 | 0 | 306 | 174 | 2,968 | 1,754 | 5,113 | 3,488 |
| 1983 Average | 96 | 83 | 382 | 365 | 282 | 0 | 378 | 215 | 3,189 | 1,853 | 5,051 | 3,329 |
| 1984 Average | 94 | 87 | 402 | 378 | 294 | 0 | 411 | 210 | 3,388 | 1,914 | 5,437 | 3,426 |
| 1985 Average | 113 | 98 | 310 | 278 | 247 | 0 | 394 | 137 | 3,237 | 1,888 | 5,067 | 3,201 |
| 1986 Average | 125 | 93 | 350 | 317 | 244 | 0 | 426 | 144 | 3,387 | 2,065 | 6,224 | 4,178 |
| 1987 Average | 106 | 75 | 352 | 304 | 272 | 0 | 459 | 196 | 3,617 | 2,274 | 6,678 | 4,674 |
| 1988 Average | 97 | 71 | 315 | 254 | 242 | 0 | 487 | 196 | 3,882 | 2,411 | 7,402 | 5,107 |
| 1989 Average | 94 | 73 | 215 | 160 | 321 | 0 | 457 | 197 | 3,921 | 2,467 | 8,061 | 5,843 |
| 1990 Average | 96 | 76 | 189 | 155 | 282 | 0 | 417 | 180 | 3,721 | 2,381 | 8,018 | 5,894 |
| 1991 Average | 88 | 72 | 138 | 106 | 243 | 0 | 282 | 137 | 3,535 | 2,405 | 7,627 | 5,782 |
| 1992 Average | 95 | 70 | 230 | 200 | 249 | 0 | 335 | 149 | 3,796 | 2,676 | 7,888 | 6,083 |
| 1993 Average | 74 | 55 | 350 | 312 | 254 | 0 | 452 | 240 | ^c 4,347 | ^c 3,178 | 8,620 | 6,787 |
| 1994 Average | 77 | 62 | 458 | 396 | 328 | 0 | 450 | 239 | 4,749 | 3,483 | 8,996 | 7,063 |
| 1995 Average | 70 | 62 | 383 | 341 | 278 | 0 | 302 | 181 | 4,833 | 3,889 | 8,835 | 7,230 |
| 1996 Average | 76 | 58 | 308 | 216 | 313 | 0 | 440 | 265 | 5,267 | 4,070 | 9,478 | 7,508 |
| 1997 Average | 61 | 56 | 226 | 169 | 300 | 0 | 422 | 250 | 5,593 | 4,450 | 10,162 | 8,225 |
| 1998 Average | 66 | 53 | 250 | 161 | 293 | 0 | 531 | 288 | 5,803 | 4,537 | 10,708 | 8,706 |
| 1999 Average | 58 | 40 | 365 | 284 | 280 | 1 | 575 | 304 | 5,899 | 4,502 | 10,852 | 8,731 |
| 2000 Average | 85 | 56 | 366 | 291 | 291 | 0 | 618 | 214 | 6,257 | 4,526 | 11,459 | 9,071 |
| 2001 January | 95 | 55 | 417 | 287 | 339 | 0 | 785 | 164 | 7,028 | 4,415 | 12,555 | 8,933 |
| February | 45 | 16 | 378 | 249 | 273 | 0 | 840 | 186 | 6,573 | 4,220 | 11,643 | 8,609 |
| March | 67 | 57 | 253 | 167 | 263 | 0 | 483 | 211 | 6,301 | 4,472 | 12,132 | 9,603 |
| April | 85 | 60 | 254 | 155 | 201 | 0 | 656 | 216 | 6,549 | 4,764 | 12,653 | 10,111 |
| May | 58 | 38 | 418 | 359 | 223 | 0 | 793 | 164 | 6,450 | 4,520 | 12,529 | 9,885 |
| June | 70 | 59 | 241 | 192 | 339 | 0 | 759 | 218 | 6,091 | 4,232 | 11,732 | 9,105 |
| July | 85 | 58 | 368 | 309 | 320 | 0 | 739 | 392 | 6,252 | 4,565 | 11,760 | 9,552 |
| August | 86 | 51 | 314 | 273 | 202 | 0 | 920 | 469 | 6,333 | 4,620 | 11,622 | 9,383 |
| September | 91 | 51 | 229 | 165 | 283 | 0 | 704 | 221 | 6,225 | 4,379 | 11,818 | 9,339 |
| October | 45 | 39 | 365 | 265 | 263 | 0 | 514 | 182 | 5,837 | 4,284 | 11,379 | 9,211 |
| November | 68 | 56 | 367 | 278 | 259 | 0 | 656 | 257 | 6,531 | 4,858 | 11,628 | 9,320 |
| December | 69 | 69 | 286 | 225 | 247 | 0 | 592 | 246 | 5,969 | 4,417 | 10,994 | 8,839 |
| Average | 72 | 51 | 324 | 244 | 268 | 0 | 702 | 244 | 6,343 | 4,480 | 11,871 | 9,328 |
| 2002 January | 53 | 53 | 366 | 284 | 278 | 0 | 604 | 207 | 6,059 | 4,244 | 11,088 | 8,709 |
| February | 84 | 84 | 360 | 279 | 242 | 0 | 398 | 133 | 6,171 | 4,588 | 10,904 | 8,753 |
| March | 72 | 68 | 272 | 220 | 198 | 0 | 631 | 164 | 6,207 | 4,405 | 11,198 | 8,799 |
| April | 59 | 59 | 454 | 380 | 168 | 0 | 772 | 230 | 7,160 | 5,193 | 11,765 | 9,301 |
| May | 71 | 63 | 436 | 351 | 165 | 0 | 804 | 273 | 7,208 | 5,337 | 11,769 | 9,323 |
| June | 89 | 76 | 726 | 613 | 236 | 0 | 799 | 346 | 7,397 | 5,561 | 11,753 | 9,324 |
| July | 72 | 72 | 529 | 481 | 240 | 0 | 951 | 403 | 7,258 | 5,316 | 11,624 | 9,184 |
| August | 58 | 50 | 574 | 480 | 234 | 0 | 872 | 454 | 7,252 | 5,378 | 11,890 | 9,544 |
| September | 104 | 76 | 353 | 278 | 231 | 0 | 769 | 367 | 6,622 | 4,926 | 11,075 | 8,797 |
| October | 112 | 75 | 582 | 486 | 235 | 0 | 718 | 225 | 7,207 | 5,311 | 11,893 | 9,532 |
| November | 102 | 82 | 669 | 632 | 321 | 0 | 762 | 255 | 7,586 | 5,448 | 12,268 | 9,654 |
| December | 85 | 55 | 415 | 376 | 281 | 0 | 534 | 173 | 6,935 | 4,968 | 11,100 | 8,741 |
| Average | 80 | 68 | 478 | 405 | 236 | 0 | 720 | 270 | 6,925 | 5,058 | 11,530 | 9,140 |
| 2003 January | 119 | 73 | 491 | 411 | 179 | 0 | 688 | 181 | 6,736 | 4,698 | 11,008 | 8,547 |
| February | 78 | 44 | 474 | 407 | 250 | 0 | 667 | 179 | 6,773 | 4,706 | 10,764 | 8,303 |
| March | 105 | 78 | 379 | 299 | 328 | 0 | 799 | 226 | 6,486 | 4,242 | 11,857 | 9,055 |
| April | 110 | 82 | 343 | 241 | 245 | 0 | 640 | 189 | 6,510 | 4,543 | 12,446 | 9,807 |
| May | 97 | 82 | 519 | 437 | 258 | 0 | 875 | 358 | 7,195 | 5,149 | 12,814 | 10,078 |
| 5-Month Average | 102 | 72 | 441 | 359 | 252 | 0 | 736 | 228 | 6,741 | 4,668 | 11,793 | 9,171 |
| 2002 5-Month Average | 68 | 65 | 377 | 303 | 210 | 0 | 646 | 203 | 6,565 | 4,754 | 11,351 | 8,979 |
| 2001 5-Month Average | 70 | 46 | 344 | 244 | 260 | 0 | 709 | 188 | 6,580 | 4,482 | 12,313 | 9,440 |

^a The country of origin for petroleum products may not be the country of origin for the crude oil from which the products were produced. For example, refined products imported from West European refining areas may have been produced from Middle East crude oil.

^b Includes Bahrain, which is shown on Table 3.3a.

^c As of January 1993, includes petroleum imported from Ecuador, which withdrew from OPEC on December 31, 1992. As of January 1995, includes petroleum imported from Gabon, which withdrew from OPEC on December 31, 1994.

(s)=Less than 500 barrels per day.

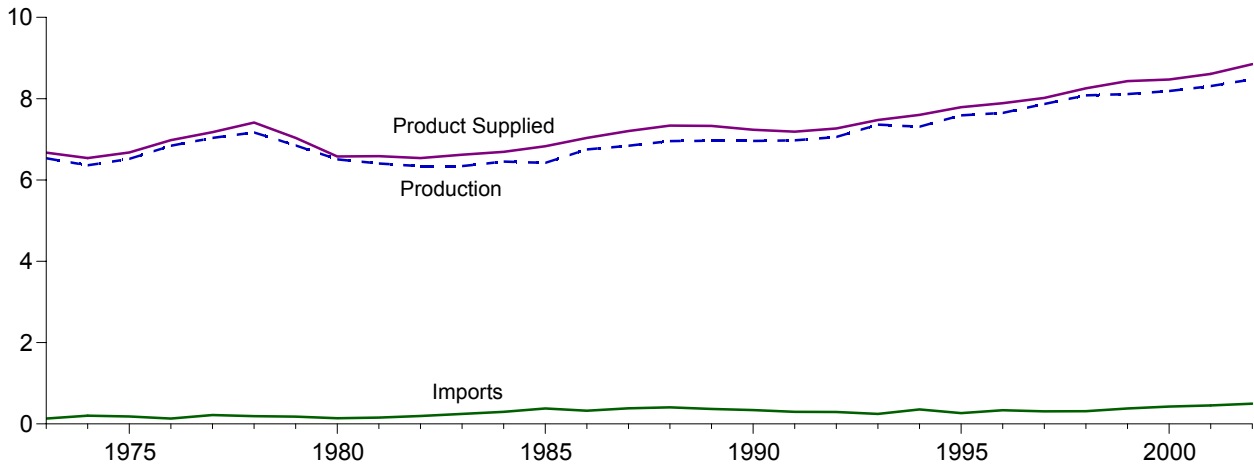
Notes: • Beginning in October 1977, Strategic Petroleum Reserve imports are included. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

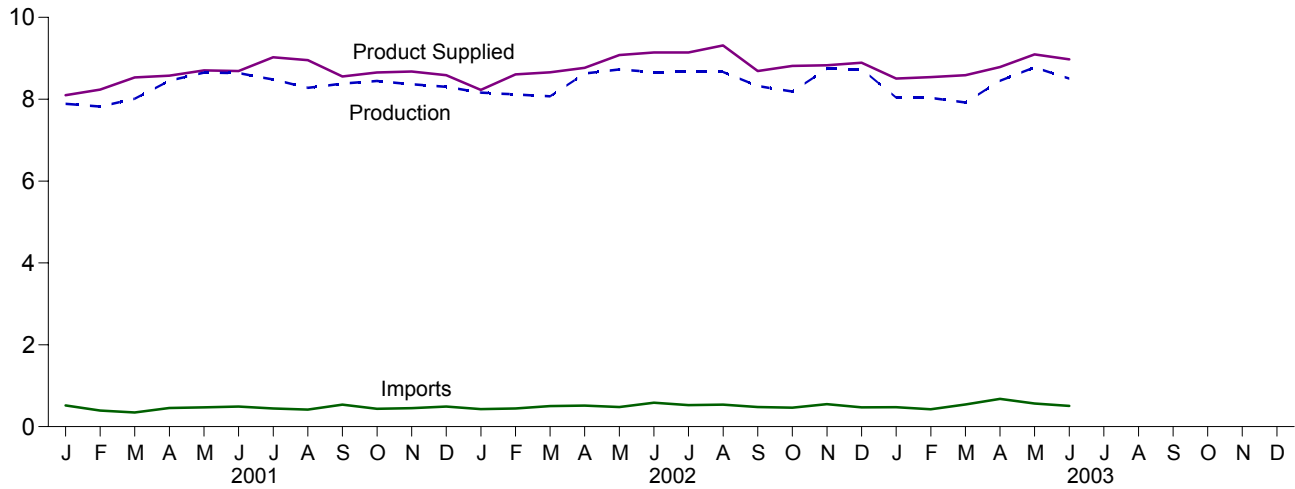
Sources: • 1973-1991: Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S3. • 1992 forward: EIA, *Petroleum Supply Monthly*, July 2003, Table S3.

Figure 3.2 Finished Motor Gasoline
(Million Barrels per Day, Except as Noted)

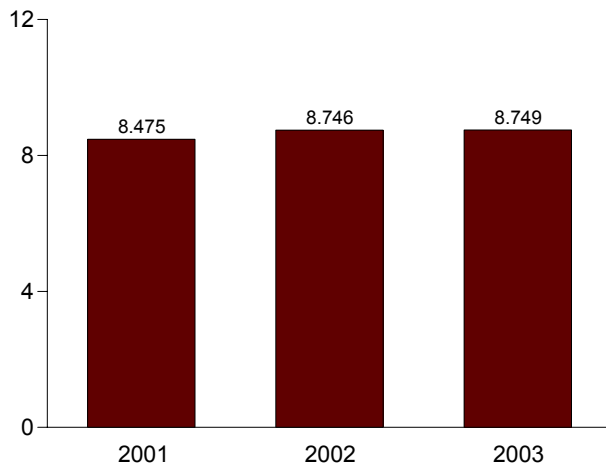
Overview, 1973-2002



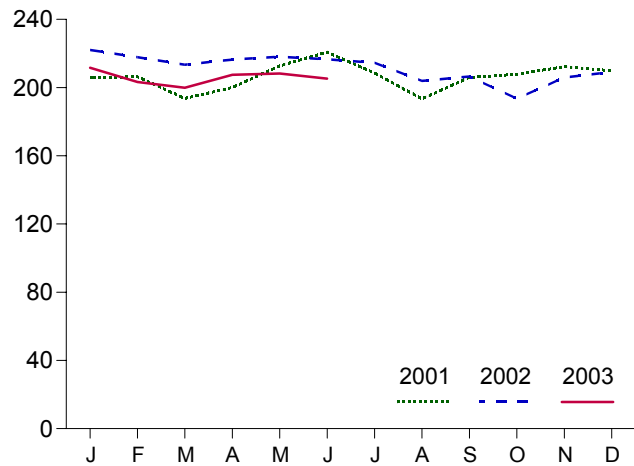
Overview, Monthly



Product Supplied, January-June



Stocks, End of Month



Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>
Source: Table 3.4.

Table 3.4 Finished Motor Gasoline Supply and Disposition

| | Supply | | Disposition | | | Motor Gasoline Stocks ^a | | Oxygenates Stocks ^a |
|-----------------------------|---------------------------|-------------------------|-----------------------------|-------------------------|---------------------------|------------------------------------|-------------------------|--------------------------------|
| | Total Production | Imports ^b | Stock Change ^{b,c} | Exports | Product Supplied | Total ^d | Finished | |
| | Thousand Barrels per Day | | | | | Million Barrels | | |
| 1973 Average | 6,535 | 134 | -9 | 4 | 6,674 | 209 | NA | NA |
| 1974 Average | 6,360 | 204 | 24 | 2 | 6,537 | ^e 218 | NA | NA |
| 1975 Average | 6,520 | 184 | ^e 28 | 2 | 6,675 | 235 | NA | NA |
| 1976 Average | 6,841 | 131 | -10 | 3 | 6,978 | 231 | NA | NA |
| 1977 Average | 7,033 | 217 | 72 | 2 | 7,177 | 258 | NA | NA |
| 1978 Average | 7,169 | 190 | -54 | 1 | 7,412 | 238 | NA | NA |
| 1979 Average | 6,852 | 181 | -2 | (s) | 7,034 | 237 | NA | NA |
| 1980 Average | 6,506 | 140 | 66 | 1 | 6,579 | ^e 261 | NA | NA |
| 1981 Average ^f | 6,405 | 157 | ^e -28 | 2 | 6,588 | 253 | 203 | NA |
| 1982 Average | 6,338 | 197 | -25 | 20 | 6,539 | ^e 235 | ^e 194 | NA |
| 1983 Average | 6,340 | 247 | ^e -45 | 10 | 6,622 | 222 | 186 | NA |
| 1984 Average | 6,453 | 299 | 54 | 6 | 6,693 | 243 | 205 | NA |
| 1985 Average | 6,419 | 381 | -41 | 10 | 6,831 | 223 | 190 | NA |
| 1986 Average | 6,752 | 326 | 11 | 33 | 7,034 | 233 | 194 | NA |
| 1987 Average | 7,841 | 384 | -15 | 35 | 7,206 | 226 | 189 | NA |
| 1988 Average | 6,956 | 405 | 3 | 22 | 7,336 | 228 | 190 | NA |
| 1989 Average | 6,963 | 369 | -35 | 39 | 7,328 | 213 | 177 | NA |
| 1990 Average | 6,959 | 342 | 10 | 55 | 7,235 | 220 | 181 | NA |
| 1991 Average | 6,975 | 297 | 3 | 82 | 7,188 | 219 | 182 | NA |
| 1992 Average | 7,058 | 294 | -11 | 96 | 7,268 | 216 | 178 | NA |
| 1993 Average | ^g 7,360 | 247 | 26 | 105 | ^g 7,476 | 226 | 187 | ^h 13 |
| 1994 Average | 7,312 | 356 | -31 | 97 | 7,601 | 215 | 176 | 17 |
| 1995 Average | 7,588 | 265 | -40 | 104 | 7,789 | 202 | 161 | 12 |
| 1996 Average | 7,647 | 336 | -12 | 104 | 7,891 | 195 | 157 | 13 |
| 1997 Average | 7,870 | 309 | 26 | 137 | 8,017 | 210 | 166 | 12 |
| 1998 Average | 8,082 | 311 | 15 | 125 | 8,253 | 216 | 172 | 14 |
| 1999 Average | 8,111 | 382 | -49 | 111 | 8,431 | 193 | 154 | 14 |
| 2000 Average | 8,186 | 427 | -3 | 144 | 8,472 | 196 | 153 | 12 |
| 2001 January | 7,888 | 519 | 183 | 125 | 8,099 | 206 | 159 | 12 |
| February | 7,822 | 394 | -146 | 128 | 8,234 | 206 | 155 | 12 |
| March | 8,011 | 346 | -320 | 145 | 8,532 | 194 | 145 | 12 |
| April | 8,450 | 455 | 187 | 143 | 8,575 | 200 | 150 | 12 |
| May | 8,651 | 473 | 316 | 102 | 8,706 | 213 | 160 | 12 |
| June | 8,637 | 490 | 310 | 127 | 8,690 | 221 | 169 | 13 |
| July | 8,481 | 443 | -229 | 129 | 9,023 | 209 | 162 | 13 |
| August | 8,277 | 415 | -378 | 117 | 8,953 | 193 | 151 | 13 |
| September | 8,381 | 539 | 248 | 115 | 8,557 | 206 | 158 | 14 |
| October | 8,446 | 435 | 70 | 156 | 8,655 | 208 | 160 | 13 |
| November | 8,366 | 452 | 34 | 107 | 8,677 | 212 | 161 | 13 |
| December | 8,301 | 491 | 7 | 200 | 8,585 | 210 | 161 | 13 |
| Average | 8,312 | 454 | 23 | 133 | 8,610 | 210 | 161 | 13 |
| 2002 January | 8,160 | 428 | 265 | 96 | 8,227 | 222 | 170 | 15 |
| February | 8,117 | 442 | -149 | 102 | 8,607 | 218 | 166 | 14 |
| March | 8,072 | 504 | -183 | 104 | 8,655 | 213 | 160 | 14 |
| April | 8,626 | 512 | 239 | 134 | 8,766 | 216 | 167 | 14 |
| May | 8,729 | 480 | 42 | 88 | 9,078 | 218 | 168 | 15 |
| June | 8,661 | 586 | -25 | 131 | 9,140 | 217 | 168 | 15 |
| July | 8,665 | 526 | -89 | 136 | 9,143 | 215 | 165 | 15 |
| August | 8,666 | 538 | -241 | 133 | 9,313 | 204 | 157 | 14 |
| September | 8,320 | 480 | 1 | 113 | 8,687 | 206 | 157 | 13 |
| October | 8,190 | 465 | -295 | 135 | 8,814 | 194 | 148 | 13 |
| November | 8,738 | 548 | 327 | 130 | 8,829 | 206 | 158 | 13 |
| December | 8,734 | 470 | 124 | 186 | 8,893 | 209 | 162 | 12 |
| Average | 8,475 | 498 | 1 | 124 | 8,848 | 209 | 162 | 12 |
| 2003 January | 8,038 | 474 | -166 | 175 | 8,504 | 212 | 158 | 13 |
| February | 8,031 | 425 | -227 | 143 | 8,540 | 203 | 152 | 14 |
| March | 7,917 | 541 | -229 | 102 | 8,585 | 200 | 145 | 15 |
| April | 8,449 | 679 | 232 | 111 | 8,785 | 208 | 152 | 14 |
| May | ^R 8,780 | ^R 563 | ^R 133 | ^R 113 | ^R 9,097 | 208 | ^R 156 | 15 |
| June | ^E 8,505 | ^E 507 | ^E -85 | ^E 125 | ^E 8,972 | ^E 205 | ^E 152 | NA |
| 6-Month Average | ^E 8,289 | ^E 533 | ^E -56 | ^E 128 | ^E 8,749 | ^E 205 | ^E 152 | NA |
| 2002 6-Month Average | 8,396 | 492 | 34 | 109 | 8,746 | 217 | 168 | 15 |
| 2001 6-Month Average | 8,247 | 447 | 91 | 128 | 8,475 | 221 | 169 | 13 |

^a Stocks are at end of period.

^b From 1981 forward, blending components are excluded.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase.

^d Includes motor gasoline blending components and gasohol, but excludes oxygenates, which are reported separately.

^e See Note 4 at end of section.

^f See Note 2 at end of section.

^g Beginning in 1993, motor gasoline production and product supplied include blending of fuel ethanol and an adjustment to correct for the imbalance of motor gasoline blending components. See Note 2 at end of

section.

^h See Note 1 at end of section.

R=Revised. NA=Not available. E=Estimate. (s)=Less than 500 barrels per day.

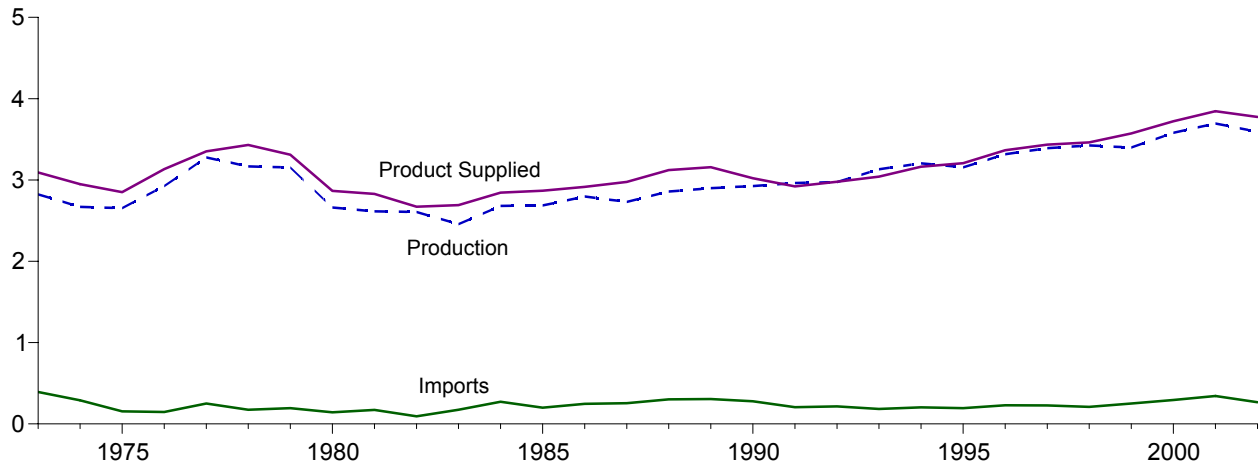
Note: Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

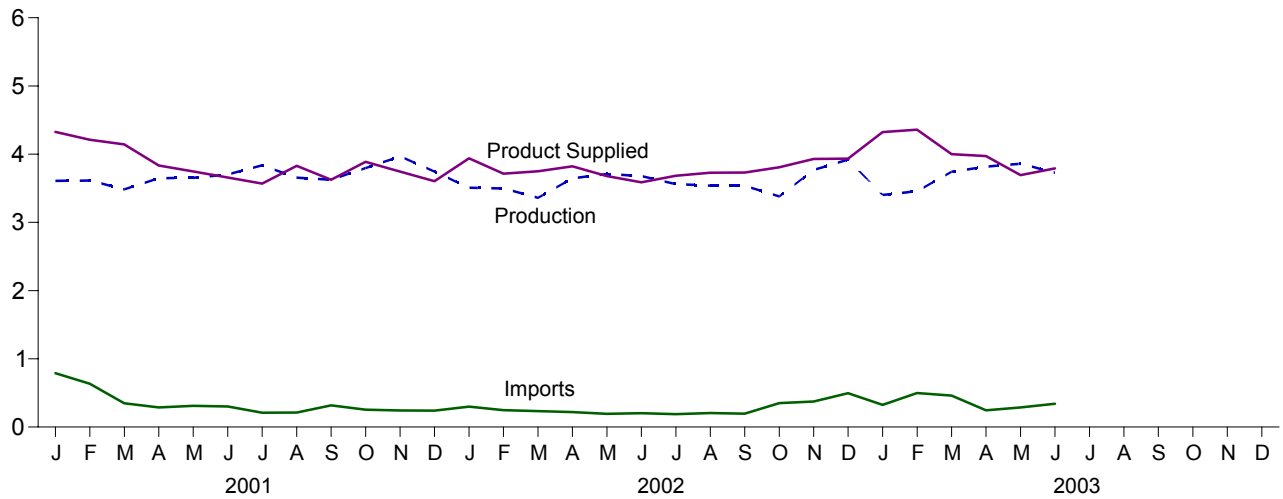
Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S4. • **1992 forward:** EIA, *Petroleum Supply Monthly*, July 2003, Table S4.

Figure 3.3 Distillate Fuel Oil
(Million Barrels per Day, Except as Noted)

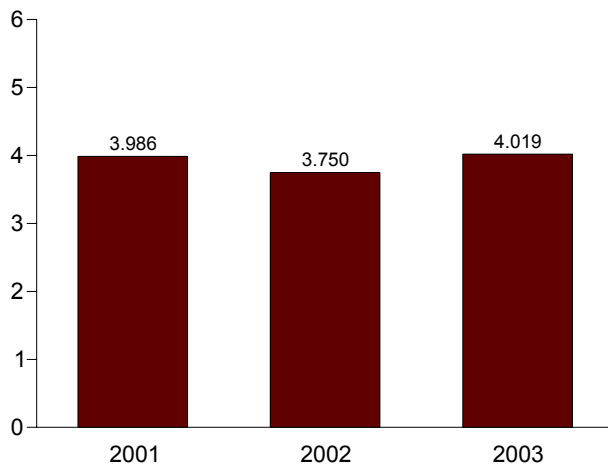
Overview, 1973-2002



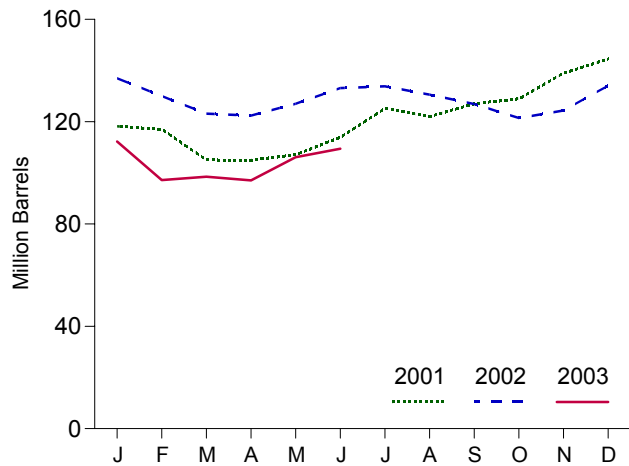
Overview, Monthly



Product Supplied, January-June



Stocks, End of Month



Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>
Source: Table 3.5.

Table 3.5 Distillate Fuel Oil Supply and Disposition

| | Supply | | | Disposition | | | Stocks ^a | | |
|---------------------------|--------------------|------------------|--------------------------------------|---------------------------|------------------|-------------------------------|---------------------|-----------------------------------|--|
| | Total Production | Imports | Crude Oil Used Directly ^b | Stock Change ^c | Exports | Product Supplied ^b | Total | Sulfur Content | |
| | | | | | | | | 0.05 Percent or Less ^d | Greater Than 0.05 Percent ^d |
| Thousand Barrels per Day | | | | | | | Million Barrels | | |
| 1973 Average | 2,822 | 392 | 2 | 115 | 9 | 3,092 | 196 | NA | NA |
| 1974 Average | 2,669 | 289 | 2 | ^e 10 | 2 | 2,948 | ^f 200 | NA | NA |
| 1975 Average | 2,654 | 155 | 2 | ^{e,f} -41 | 1 | 2,851 | 209 | NA | NA |
| 1976 Average | 2,924 | 146 | 1 | -62 | 1 | 3,133 | 186 | NA | NA |
| 1977 Average | 3,278 | 250 | 1 | 176 | 1 | 3,352 | 250 | NA | NA |
| 1978 Average | 3,167 | 173 | 1 | -93 | 3 | 3,432 | 216 | NA | NA |
| 1979 Average | 3,153 | 193 | 1 | 34 | 3 | 3,311 | 229 | NA | NA |
| 1980 Average | 2,662 | 142 | 1 | -64 | 3 | 2,866 | ^f 205 | NA | NA |
| 1981 Average ^g | 2,613 | 173 | 10 | ^f -38 | 5 | 2,829 | 192 | NA | NA |
| 1982 Average | 2,606 | 93 | 10 | -35 | 74 | 2,671 | ^f 179 | NA | NA |
| 1983 Average | 2,456 | 174 | - | ^f -124 | 64 | 2,690 | 140 | NA | NA |
| 1984 Average | 2,681 | 272 | - | 57 | 51 | 2,845 | 161 | NA | NA |
| 1985 Average | 2,687 | 200 | - | -48 | 67 | 2,868 | 144 | NA | NA |
| 1986 Average | 2,798 | 247 | - | 31 | 100 | 2,914 | 155 | NA | NA |
| 1987 Average | 2,731 | 255 | - | -56 | 66 | 2,976 | 134 | NA | NA |
| 1988 Average | 2,859 | 302 | - | -30 | 69 | 3,122 | 124 | NA | NA |
| 1989 Average | 2,899 | 306 | - | -49 | 97 | 3,157 | 106 | NA | NA |
| 1990 Average | 2,925 | 278 | - | 73 | 109 | 3,021 | 132 | NA | NA |
| 1991 Average | 2,962 | 205 | - | 31 | 215 | 2,921 | 144 | NA | NA |
| 1992 Average | 2,974 | 216 | - | -8 | 219 | 2,979 | 141 | NA | NA |
| 1993 Average | 3,132 | 184 | - | 1 | 274 | 3,041 | 141 | ^g 64 | ^g 77 |
| 1994 Average | 3,205 | 203 | - | 12 | 234 | 3,162 | 145 | 73 | 73 |
| 1995 Average | 3,155 | 193 | - | -41 | 183 | 3,207 | 130 | 67 | 63 |
| 1996 Average | 3,316 | 230 | - | -10 | 190 | 3,365 | 127 | 68 | 58 |
| 1997 Average | 3,392 | 228 | - | 32 | 152 | 3,435 | 138 | 68 | 70 |
| 1998 Average | 3,424 | 210 | - | 48 | 124 | 3,461 | 156 | 77 | 79 |
| 1999 Average | 3,399 | 250 | - | -84 | 162 | 3,572 | 125 | 69 | 56 |
| 2000 Average | 3,580 | 295 | - | -20 | 173 | 3,722 | 118 | 72 | 46 |
| 2001 January | 3,609 | 789 | - | 6 | 67 | 4,325 | 118 | 68 | 50 |
| February | 3,612 | 635 | - | -42 | 77 | 4,212 | 117 | 70 | 47 |
| March | 3,483 | 348 | - | -387 | 75 | 4,143 | 105 | 68 | 37 |
| April | 3,650 | 288 | - | -3 | 107 | 3,834 | 105 | 66 | 39 |
| May | 3,652 | 310 | - | 71 | 146 | 3,746 | 107 | 65 | 42 |
| June | 3,702 | 302 | - | 225 | 120 | 3,659 | 114 | 69 | 45 |
| July | 3,837 | 209 | - | 364 | 113 | 3,569 | 125 | 74 | 51 |
| August | 3,654 | 212 | - | -102 | 140 | 3,829 | 122 | 68 | 54 |
| September | 3,625 | 317 | - | 166 | 152 | 3,624 | 127 | 72 | 55 |
| October | 3,796 | 253 | - | 62 | 99 | 3,888 | 129 | 69 | 60 |
| November | 3,968 | 244 | - | 334 | 132 | 3,746 | 139 | 76 | 63 |
| December | 3,744 | 241 | - | 180 | 202 | 3,604 | 145 | 82 | 62 |
| Average | 3,695 | 344 | - | 73 | 119 | 3,847 | 145 | 82 | 62 |
| 2002 January | 3,508 | 298 | - | -244 | 109 | 3,940 | 137 | 80 | 57 |
| February | 3,498 | 248 | - | -248 | 279 | 3,714 | 130 | 78 | 52 |
| March | 3,360 | 234 | - | -223 | 67 | 3,750 | 123 | 74 | 49 |
| April | 3,647 | 219 | - | -23 | 68 | 3,821 | 122 | 74 | 48 |
| May | 3,709 | 193 | - | 149 | 74 | 3,679 | 127 | 77 | 50 |
| June | 3,679 | 204 | - | 203 | 93 | 3,587 | 133 | 79 | 54 |
| July | 3,561 | 188 | - | 22 | 44 | 3,683 | 134 | 77 | 57 |
| August | 3,538 | 205 | - | -104 | 119 | 3,728 | 131 | 71 | 60 |
| September | 3,536 | 196 | - | -124 | 127 | 3,730 | 127 | 68 | 59 |
| October | 3,380 | 350 | - | -175 | 96 | 3,808 | 121 | 66 | 56 |
| November | 3,768 | 373 | - | 99 | 114 | 3,929 | 124 | 71 | 53 |
| December | 3,922 | 496 | - | 312 | 171 | 3,934 | 134 | 81 | 53 |
| Average | 3,592 | 267 | - | -29 | 112 | 3,776 | 134 | 81 | 53 |
| 2003 January | 3,403 | 324 | - | -717 | 119 | 4,325 | 112 | 68 | 44 |
| February | 3,455 | 498 | - | -538 | 132 | 4,359 | 97 | 60 | 37 |
| March | 3,743 | 460 | - | 43 | 161 | 4,000 | 99 | 63 | 35 |
| April | 3,817 | 246 | - | -48 | 139 | 3,972 | 97 | 66 | 31 |
| May | ^R 3,860 | ^R 287 | - | ^R 293 | ^R 162 | ^R 3,692 | ^R 106 | ^R 72 | ^R 34 |
| June | ^E 3,728 | ^E 342 | - | ^E 137 | ^E 142 | ^E 3,791 | ^E 109 | ^E 72 | ^E 38 |
| 6-Month Average | ^E 3,670 | ^E 358 | - | ^E -134 | ^E 143 | ^E 4,019 | ^E 109 | ^E 72 | ^E 38 |
| 2002 6-Month Average | 3,567 | 233 | - | -63 | 113 | 3,750 | 133 | 79 | 54 |
| 2001 6-Month Average | 3,617 | 444 | - | -23 | 99 | 3,986 | 114 | 69 | 45 |

^a Stocks are at end of period. Distillate fuel oil stocks in the "Northeast Heating Oil Reserve" are not included.

^b Beginning in January 1983, crude oil used directly as distillate fuel oil is reported as crude oil product supplied on Table 3.2b rather than as distillate fuel oil product supplied.

^c A negative number indicates a decrease in stocks and a positive number indicates an increase.

^d By weight.

^e See Note 6 at end of section.

^f See Note 4 at end of section.

^g See Note 3 at end of section.

R=Revised. NA=Not available. --=Not applicable. E=Estimate.

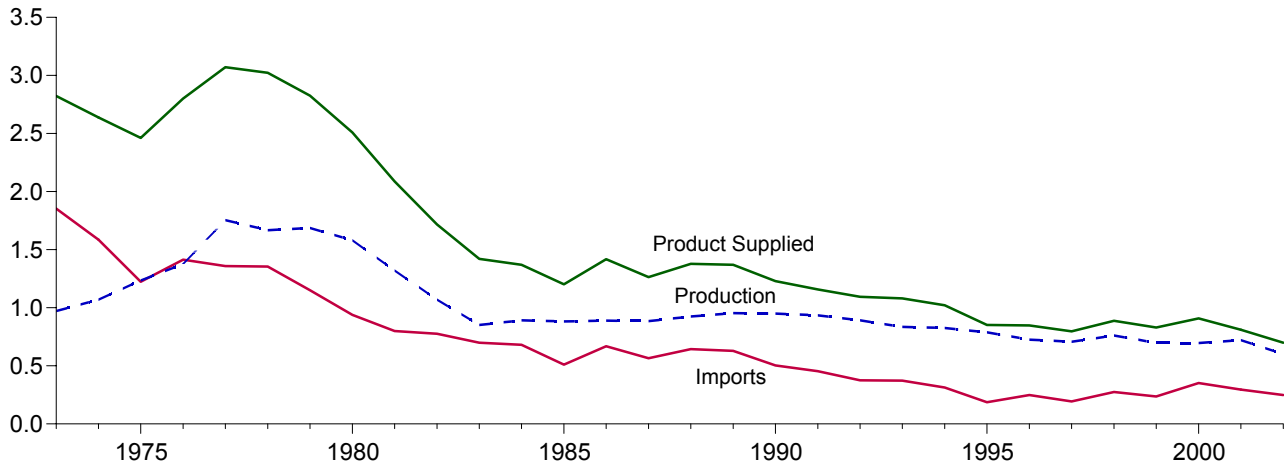
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

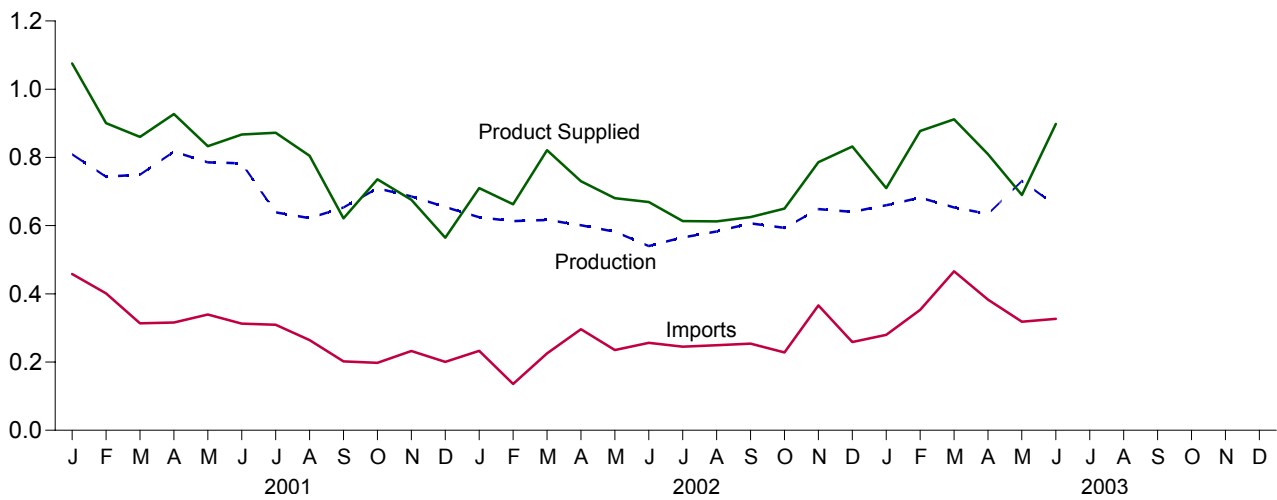
Sources: • 1973-1991: Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S5. • 1992 forward: EIA, *Petroleum Supply Monthly*, July 2003, Table S5.

Figure 3.4 Residual Fuel Oil
(Million Barrels per Day, Except as Noted)

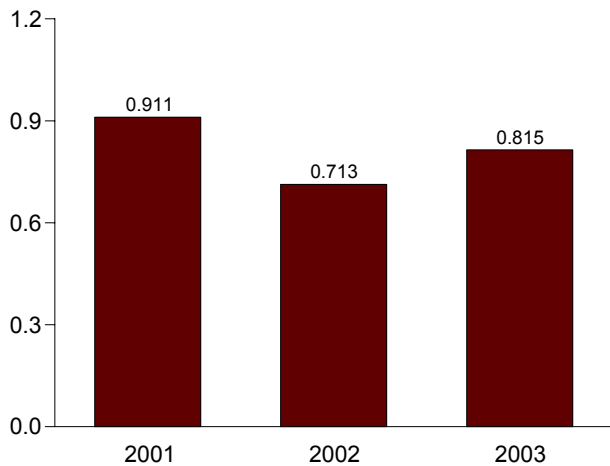
Overview, 1973-2002



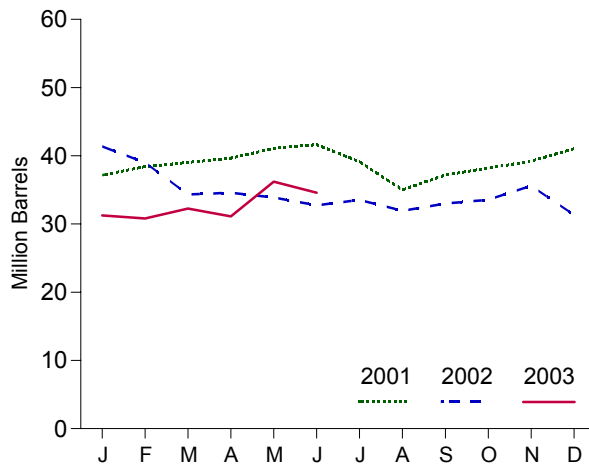
Overview, Monthly



Product Supplied, January-June



Stocks, End of Month



Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>
Source: Table 3.6.

Table 3.6 Residual Fuel Oil Supply and Disposition

| | Supply | | | Disposition | | | Stocks ^c |
|-----------------------------------|--------------------------|-------------------------|--------------------------------------|---------------------------|-------------------------|-------------------------------|------------------------|
| | Total Production | Imports | Crude Oil Used Directly ^a | Stock Change ^b | Exports | Product Supplied ^a | |
| | Thousand Barrels per Day | | | | | | |
| 1973 Average | 971 | 1,853 | 17 | -5 | 23 | 2,822 | 53 |
| 1974 Average | 1,070 | 1,587 | 13 | 17 | 14 | 2,639 | ^d 60 |
| 1975 Average | 1,235 | 1,223 | 15 | ^d -2 | 15 | 2,462 | 74 |
| 1976 Average | 1,377 | 1,413 | 17 | -5 | 12 | 2,801 | 72 |
| 1977 Average | 1,754 | 1,359 | 13 | 48 | 6 | 3,071 | 90 |
| 1978 Average | 1,667 | 1,355 | 13 | 1 | 13 | 3,023 | 90 |
| 1979 Average | 1,687 | 1,151 | 12 | 15 | 9 | 2,826 | 96 |
| 1980 Average | 1,580 | 939 | 12 | -10 | 33 | 2,508 | ^d 92 |
| 1981 Average ^e | 1,321 | 800 | 48 | ^d -37 | 118 | 2,088 | 78 |
| 1982 Average | 1,070 | 776 | 48 | -32 | 209 | 1,716 | ^d 66 |
| 1983 Average | 852 | 699 | - | ^d -55 | 185 | 1,421 | 49 |
| 1984 Average | 891 | 681 | - | 12 | 190 | 1,369 | 53 |
| 1985 Average | 882 | 510 | - | -7 | 197 | 1,202 | 50 |
| 1986 Average | 889 | 669 | - | -8 | 147 | 1,418 | 47 |
| 1987 Average | 885 | 565 | - | (s) | 186 | 1,264 | 47 |
| 1988 Average | 926 | 644 | - | -8 | 200 | 1,378 | 45 |
| 1989 Average | 954 | 629 | - | -2 | 215 | 1,370 | 44 |
| 1990 Average | 950 | 504 | - | 13 | 211 | 1,229 | 49 |
| 1991 Average | 934 | 453 | - | 4 | 226 | 1,158 | 50 |
| 1992 Average | 892 | 375 | - | -20 | 193 | 1,094 | 43 |
| 1993 Average | 835 | 373 | - | 4 | 123 | 1,080 | 44 |
| 1994 Average | 826 | 314 | - | -6 | 125 | 1,021 | 42 |
| 1995 Average | 788 | 187 | - | -13 | 136 | 852 | 37 |
| 1996 Average | 726 | 248 | - | 24 | 102 | 848 | 46 |
| 1997 Average | 708 | 194 | - | -15 | 120 | 797 | 40 |
| 1998 Average | 762 | 275 | - | 12 | 138 | 887 | 45 |
| 1999 Average | 698 | 237 | - | -25 | 129 | 830 | 36 |
| 2000 Average | 696 | 352 | - | 1 | 139 | 909 | 36 |
| 2001 January | 809 | 458 | - | 31 | 160 | 1,075 | 37 |
| February | 743 | 401 | - | 44 | 200 | 901 | 38 |
| March | 750 | 313 | - | 20 | 183 | 860 | 39 |
| April | 817 | 316 | - | 21 | 185 | 927 | 40 |
| May | 786 | 339 | - | 46 | 246 | 833 | 41 |
| June | 783 | 313 | - | 19 | 209 | 867 | 42 |
| July | 639 | 309 | - | -82 | 158 | 872 | 39 |
| August | 622 | 264 | - | -132 | 214 | 805 | 35 |
| September | 653 | 202 | - | 72 | 161 | 621 | 37 |
| October | 710 | 198 | - | 33 | 139 | 736 | 38 |
| November | 685 | 233 | - | 33 | 209 | 676 | 39 |
| December | 655 | 200 | - | 60 | 231 | 565 | 41 |
| Average | 721 | 295 | - | 13 | 191 | 811 | 41 |
| 2002 January | 625 | 233 | - | 10 | 138 | 710 | 41 |
| February | 613 | 136 | - | -84 | 171 | 662 | 39 |
| March | 617 | 225 | - | -151 | 171 | 821 | 34 |
| April | 601 | 296 | - | 9 | 159 | 730 | 35 |
| May | 582 | 235 | - | -23 | 160 | 680 | 34 |
| June | 540 | 256 | - | -38 | 165 | 669 | 33 |
| July | 566 | 245 | - | 26 | 171 | 614 | 34 |
| August | 583 | 249 | - | -52 | 272 | 612 | 32 |
| September | 607 | 254 | - | 36 | 200 | 625 | 33 |
| October | 593 | 228 | - | 18 | 153 | 650 | 34 |
| November | 648 | 366 | - | 68 | 160 | 786 | 36 |
| December | 641 | 259 | - | -138 | 205 | 832 | 31 |
| Average | 601 | 249 | - | -27 | 177 | 700 | 31 |
| 2003 January | 660 | 280 | - | -1 | 231 | 710 | 31 |
| February | 682 | 353 | - | -16 | 173 | 877 | 31 |
| March | 653 | 466 | - | 47 | 161 | 912 | 32 |
| April | 634 | 383 | - | -39 | 247 | 809 | 31 |
| May | ^R 731 | ^R 318 | - | ^R 165 | ^R 195 | ^R 690 | ^R 36 |
| June | ^E 659 | ^E 327 | - | ^E -76 | ^E 164 | ^E 898 | ^E 35 |
| 6-Month Average | ^E 670 | ^E 354 | - | ^E 14 | ^E 195 | ^E 815 | ^E 35 |
| 2002 6-Month Average | 596 | 231 | - | -46 | 160 | 713 | 33 |
| 2001 6-Month Average | 782 | 357 | - | 30 | 197 | 911 | 42 |

^a Beginning in January 1983, crude oil used directly as residual fuel oil is reported as crude oil product supplied on Table 3.2b rather than as residual fuel oil product supplied.

^b A negative number indicates a decrease in stocks and a positive number indicates an increase.

^c Stocks are at end of period.

^d See Note 4 at end of section.

^e See Note 3 at end of section.

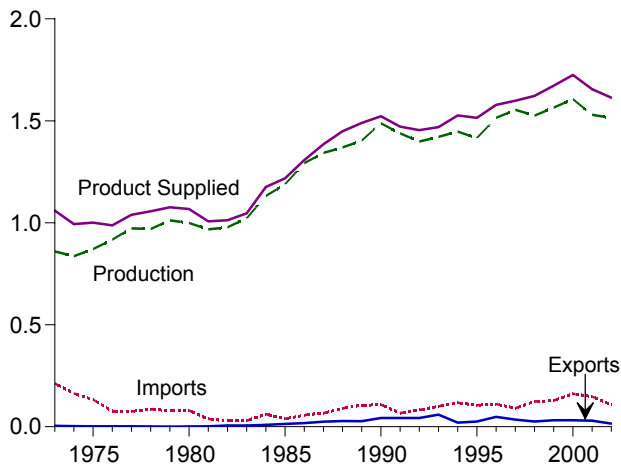
R=Revised. - =Not applicable. E=Estimate. (s)=Less than +500 barrels per day and greater than -500 barrels per day.

Note: Geographic coverage is the 50 States and the District of Columbia. Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

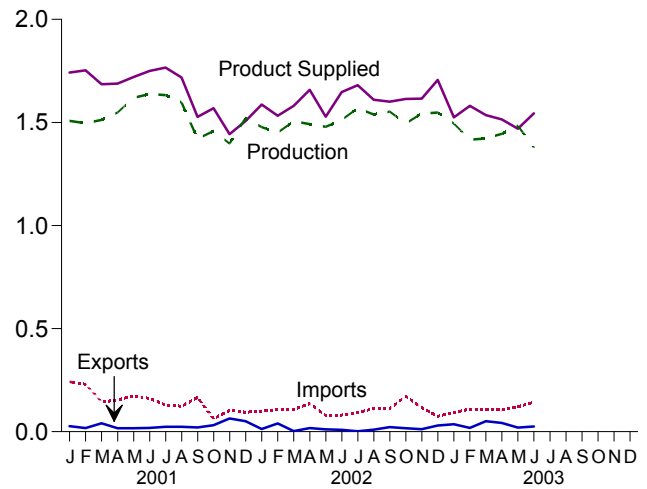
Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S6. • **1992 forward:** EIA, *Petroleum Supply Monthly*, July 2003, Table S6.

Figure 3.5 Jet Fuel
(Million Barrels Per Day, Except as Noted)

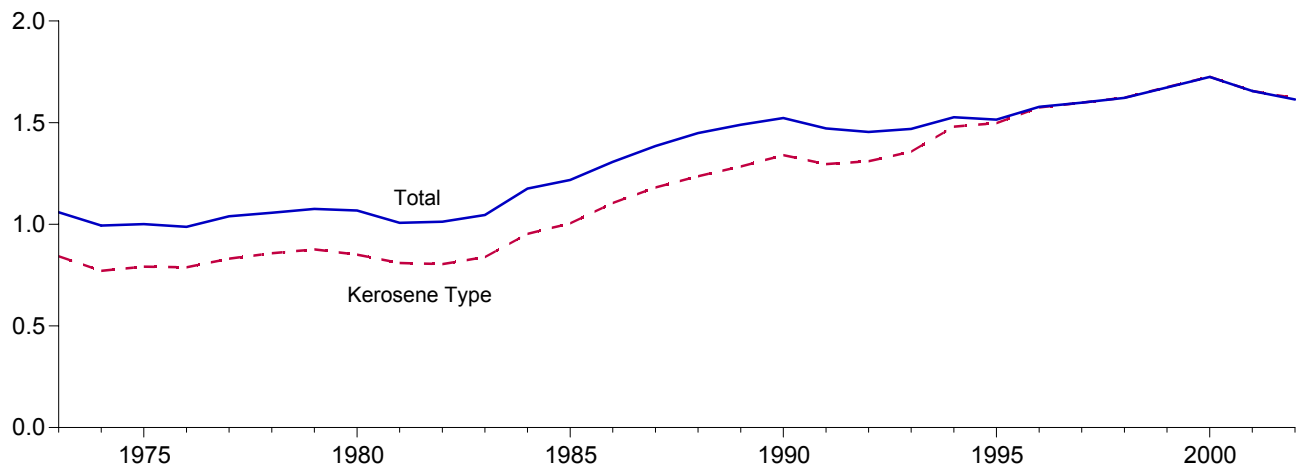
Overview, 1973-2002



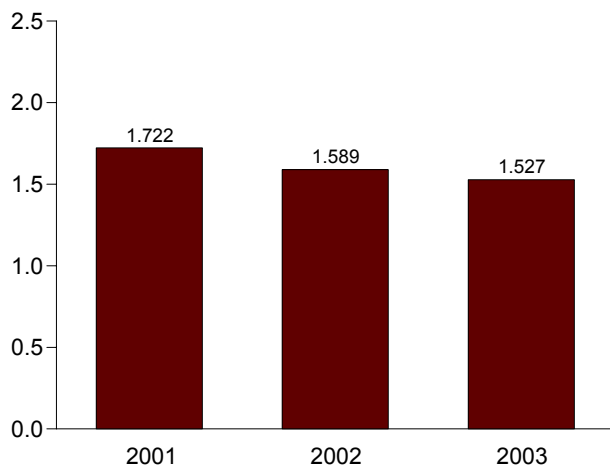
Overview, Monthly



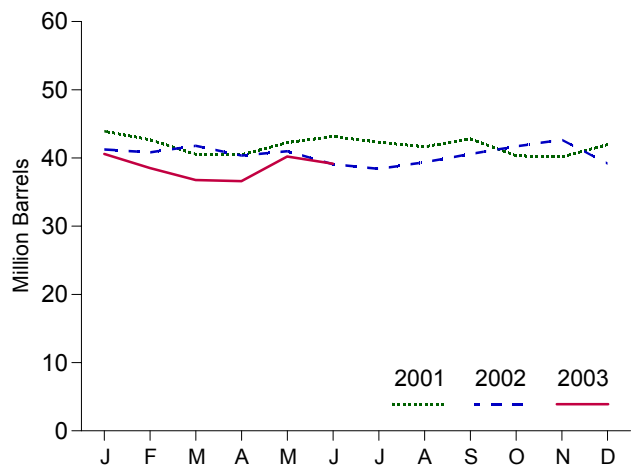
Product Supplied by Type, 1973-2002



Product Supplied, January-June



Stocks, End of Month



Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>
Source: Table 3.7.

Table 3.7 Jet Fuel Supply and Disposition

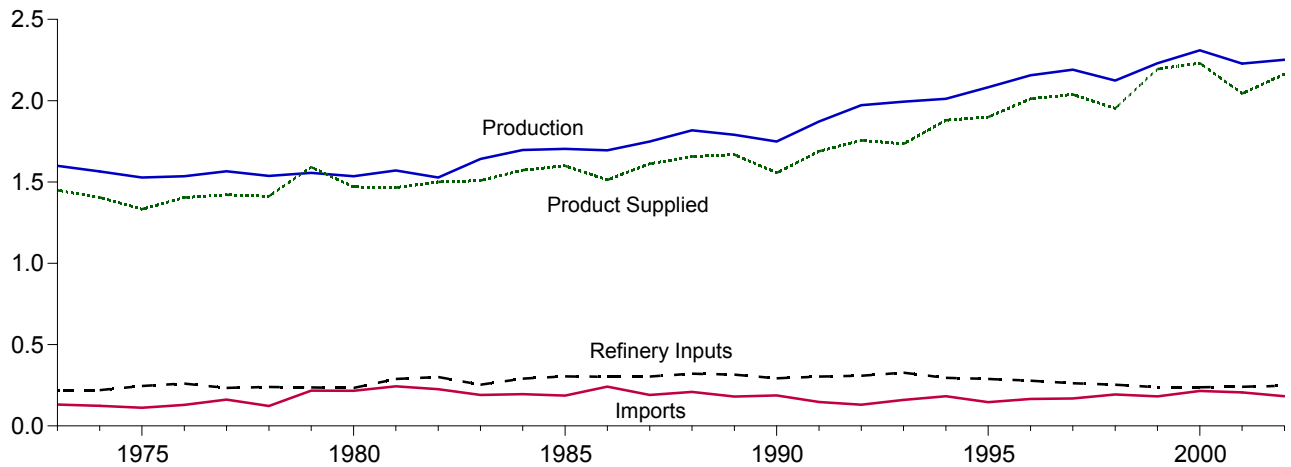
| | Supply | | | Disposition | | | | Stocks ^a | |
|----------------------|--------------------------|---------------|---------|---------------------------|---------|------------------|---------------|---------------------|---------------|
| | Production | | Imports | Stock Change ^b | Exports | Product Supplied | | | |
| | Total | Kerosene Type | | | | Total | Kerosene Type | Total | Kerosene Type |
| | Thousand Barrels per Day | | | | | | | Million Barrels | |
| 1973 Average | 859 | 679 | 212 | 8 | 4 | 1,059 | 842 | 29 | 23 |
| 1974 Average | 836 | 641 | 163 | 2 | 3 | 993 | 771 | 29 | 24 |
| 1975 Average | 871 | 691 | 133 | 2 | 2 | 1,001 | 791 | 30 | 25 |
| 1976 Average | 918 | 731 | 76 | 5 | 2 | 987 | 789 | 32 | 26 |
| 1977 Average | 973 | 787 | 75 | 7 | 2 | 1,039 | 831 | 35 | 28 |
| 1978 Average | 970 | 791 | 86 | -2 | 1 | 1,057 | 858 | 34 | 28 |
| 1979 Average | 1,012 | 835 | 78 | 13 | 1 | 1,076 | 876 | 39 | 33 |
| 1980 Average | 999 | 811 | 80 | 10 | 1 | 1,068 | 851 | 42 | 36 |
| 1981 Average | 968 | 775 | 38 | -4 | 2 | 1,007 | 809 | 41 | 34 |
| 1982 Average | 978 | 778 | 29 | -12 | 6 | 1,013 | 804 | 37 | 31 |
| 1983 Average | 1,022 | 817 | 29 | (s) | 6 | 1,046 | 839 | 39 | 32 |
| 1984 Average | 1,132 | 919 | 62 | 9 | 9 | 1,175 | 953 | 42 | 35 |
| 1985 Average | 1,189 | 983 | 39 | -4 | 13 | 1,218 | 1,005 | 40 | 34 |
| 1986 Average | 1,293 | 1,097 | 57 | 25 | 18 | 1,307 | 1,105 | 50 | 43 |
| 1987 Average | 1,343 | 1,138 | 67 | (s) | 24 | 1,385 | 1,181 | 50 | 42 |
| 1988 Average | 1,370 | 1,164 | 90 | -17 | 28 | 1,449 | 1,236 | 44 | 38 |
| 1989 Average | 1,403 | 1,197 | 106 | -8 | 27 | 1,489 | 1,284 | 41 | 34 |
| 1990 Average | 1,488 | 1,311 | 108 | 31 | 43 | 1,522 | 1,340 | 52 | 46 |
| 1991 Average | 1,438 | 1,274 | 67 | -9 | 43 | 1,471 | 1,296 | 49 | 44 |
| 1992 Average | 1,399 | 1,254 | 82 | -16 | 43 | 1,454 | 1,310 | 43 | 39 |
| 1993 Average | 1,422 | 1,309 | 100 | -7 | 59 | 1,469 | 1,357 | 40 | 38 |
| 1994 Average | 1,448 | 1,410 | 117 | 18 | 20 | 1,527 | 1,480 | 47 | 46 |
| 1995 Average | 1,416 | 1,407 | 106 | -19 | 26 | 1,514 | 1,497 | 40 | 39 |
| 1996 Average | 1,515 | 1,513 | 111 | (s) | 48 | 1,578 | 1,575 | 40 | 40 |
| 1997 Average | 1,554 | 1,554 | 91 | 11 | 35 | 1,599 | 1,598 | 44 | 44 |
| 1998 Average | 1,526 | 1,525 | 124 | 2 | 26 | 1,622 | 1,623 | 45 | 45 |
| 1999 Average | 1,565 | 1,565 | 128 | -11 | 32 | 1,673 | 1,675 | 41 | 40 |
| 2000 Average | 1,606 | 1,606 | 162 | 11 | 32 | 1,725 | 1,725 | 45 | 44 |
| 2001 January | 1,508 | 1,508 | 242 | -20 | 27 | 1,742 | 1,743 | 44 | 44 |
| February | 1,497 | 1,497 | 230 | -44 | 18 | 1,753 | 1,752 | 43 | 43 |
| March | 1,512 | 1,512 | 145 | -69 | 41 | 1,685 | 1,685 | 41 | 41 |
| April | 1,548 | 1,547 | 153 | -4 | 17 | 1,688 | 1,687 | 40 | 40 |
| May | 1,620 | 1,620 | 175 | 59 | 17 | 1,720 | 1,722 | 42 | 42 |
| June | 1,637 | 1,637 | 161 | 30 | 18 | 1,750 | 1,749 | 43 | 43 |
| July | 1,633 | 1,633 | 129 | -27 | 23 | 1,766 | 1,763 | 42 | 42 |
| August | 1,597 | 1,597 | 123 | -21 | 24 | 1,718 | 1,720 | 42 | 42 |
| September | 1,420 | 1,420 | 166 | 38 | 21 | 1,527 | 1,525 | 43 | 43 |
| October | 1,458 | 1,458 | 63 | -79 | 31 | 1,569 | 1,568 | 40 | 40 |
| November | 1,398 | 1,398 | 104 | -6 | 64 | 1,443 | 1,444 | 40 | 40 |
| December | 1,521 | 1,521 | 94 | 58 | 51 | 1,507 | 1,512 | 42 | 42 |
| Average | 1,530 | 1,529 | 148 | -7 | 29 | 1,655 | 1,656 | 42 | 42 |
| 2002 January | 1,477 | 1,477 | 99 | -23 | 13 | 1,587 | 1,591 | 41 | 41 |
| February | 1,451 | 1,451 | 107 | -15 | 40 | 1,532 | 1,532 | 41 | 41 |
| March | 1,505 | 1,505 | 109 | 31 | 3 | 1,581 | 1,581 | 42 | 42 |
| April | 1,492 | 1,491 | 137 | -47 | 18 | 1,658 | 1,674 | 40 | 40 |
| May | 1,479 | 1,479 | 79 | 20 | 11 | 1,527 | 1,535 | 41 | 41 |
| June | 1,512 | 1,512 | 81 | -63 | 9 | 1,647 | 1,656 | 39 | 39 |
| July | 1,569 | 1,568 | 92 | -22 | 2 | 1,680 | 1,679 | 38 | 38 |
| August | 1,539 | 1,538 | 112 | 31 | 10 | 1,610 | 1,616 | 39 | 39 |
| September | 1,552 | 1,552 | 111 | 40 | 22 | 1,601 | 1,609 | 41 | 41 |
| October | 1,495 | 1,495 | 171 | 36 | 17 | 1,614 | 1,629 | 42 | 42 |
| November | 1,543 | 1,543 | 117 | 33 | 12 | 1,616 | 1,615 | 43 | 43 |
| December | 1,548 | 1,547 | 75 | -113 | 30 | 1,706 | 1,722 | 39 | 39 |
| Average | 1,514 | 1,514 | 107 | -8 | 15 | 1,614 | 1,621 | 39 | 39 |
| 2003 January | 1,495 | 1,495 | 94 | 27 | 36 | 1,525 | 1,524 | 41 | 41 |
| February | 1,416 | 1,416 | 109 | -74 | 19 | 1,581 | 1,580 | 39 | 38 |
| March | 1,422 | 1,430 | 107 | -56 | 50 | 1,535 | 1,559 | 37 | 37 |
| April | 1,445 | 1,445 | 106 | -6 | 42 | 1,514 | 1,522 | 37 | 37 |
| May | R 1,484 | R 1,484 | R 121 | R 117 | R 20 | R 1,469 | R 1,469 | R 40 | R 40 |
| June | E 1,378 | E 1,378 | E 143 | E -47 | E 25 | E 1,544 | E 1,544 | E 39 | E 39 |
| 6-Month Average | E 1,441 | E 1,442 | E 113 | E -5 | E 32 | E 1,527 | E 1,532 | E 39 | E 39 |
| 2002 6-Month Average | 1,487 | 1,486 | 102 | -16 | 15 | 1,589 | 1,595 | 39 | 39 |
| 2001 6-Month Average | 1,554 | 1,554 | 184 | -8 | 23 | 1,722 | 1,723 | 43 | 43 |

^a Stocks are at end of period.
^b A negative number indicates a decrease in stocks and a positive number indicates an increase.
^c See Note 4 at end of section.
R=Revised. E=Estimate. (s)=Less than +500 barrels per day and greater than -500 barrels per day.

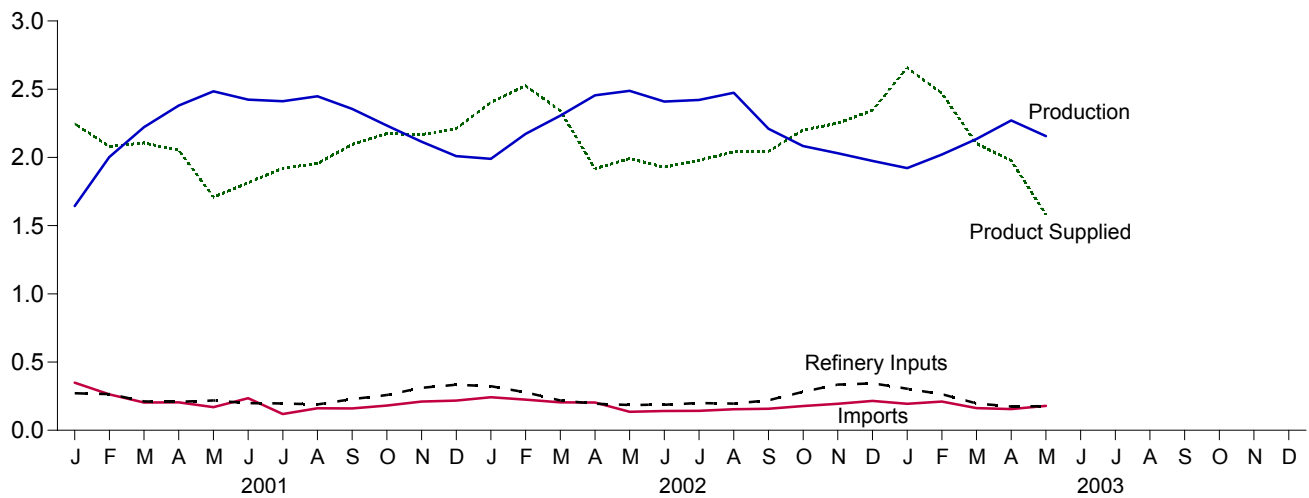
Note: Geographic coverage is the 50 States and the District of Columbia.
Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.
Sources: • 1973-1991: Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S7. • 1992 forward: EIA, *Petroleum Supply Monthly*, July 2003, Table S7.

Figure 3.6 Liquefied Petroleum Gases
(Million Barrels per Day, Except as Noted)

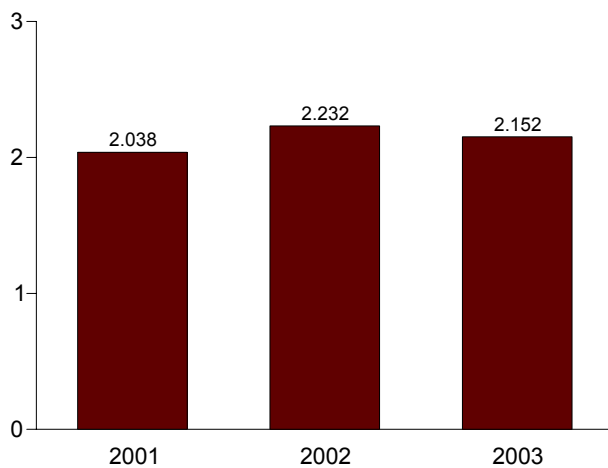
Overview, 1973-2002



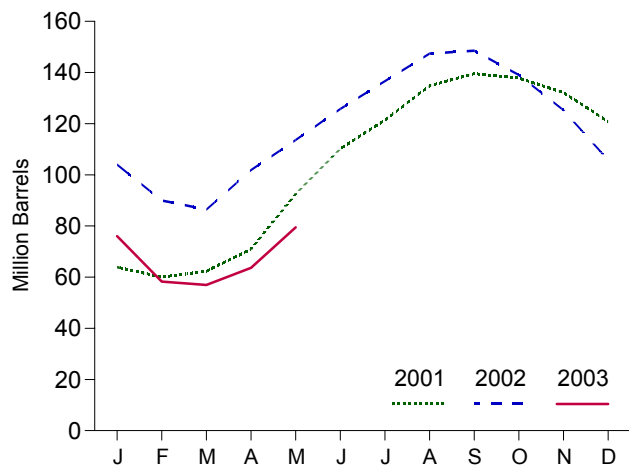
Overview, Monthly



Product Supplied, January-May



Stocks, End of Month



Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/pepo.html>
Source: Table 3.8.

Table 3.8 Liquefied Petroleum Gases Supply and Disposition

| | Supply | | Disposition | | | | Stocks ^b |
|-----------------------------------|--------------------------|------------|---------------------------|-----------------|-----------|------------------|---------------------|
| | Total Production | Imports | Stock Change ^a | Refinery Inputs | Exports | Product Supplied | |
| | Thousand Barrels per Day | | | | | | |
| 1973 Average | 1,600 | 132 | 35 | 220 | 27 | 1,449 | 99 |
| 1974 Average | 1,565 | 123 | 38 | 220 | 25 | 1,406 | ^c 113 |
| 1975 Average | 1,527 | 112 | ^c 35 | 246 | 26 | 1,333 | 125 |
| 1976 Average | 1,535 | 130 | -24 | 260 | 25 | 1,404 | 116 |
| 1977 Average | 1,566 | 161 | 55 | 233 | 18 | 1,422 | 136 |
| 1978 Average | 1,537 | 123 | -12 | 239 | 20 | 1,413 | ^c 132 |
| 1979 Average | 1,556 | 217 | ^c -70 | 236 | 15 | 1,592 | 111 |
| 1980 Average | 1,535 | 216 | 27 | 233 | 21 | 1,469 | ^c 120 |
| 1981 Average | 1,571 | 244 | ^c 18 | 289 | 42 | 1,466 | 135 |
| 1982 Average | ^d 1,527 | 226 | -111 | 300 | 65 | 1,499 | ^c 94 |
| 1983 Average | 1,642 | 190 | ^c -4 | 253 | 73 | 1,509 | ^c 101 |
| 1984 Average | 1,697 | 195 | ^c -19 | 291 | 48 | 1,572 | 101 |
| 1985 Average | 1,704 | 187 | -75 | 304 | 62 | 1,599 | 74 |
| 1986 Average | 1,695 | 242 | 80 | 302 | 42 | 1,512 | 103 |
| 1987 Average | 1,748 | 190 | -15 | 304 | 38 | 1,612 | 97 |
| 1988 Average | 1,817 | 209 | 1 | 321 | 49 | 1,656 | 97 |
| 1989 Average | 1,791 | 181 | -47 | 315 | 35 | 1,668 | 80 |
| 1990 Average | 1,749 | 188 | 48 | 293 | 40 | 1,556 | 98 |
| 1991 Average | 1,871 | 147 | -15 | 304 | 41 | 1,689 | 92 |
| 1992 Average | 1,972 | 131 | -10 | 309 | 49 | 1,755 | 89 |
| 1993 Average | 1,993 | 160 | 49 | 327 | 43 | 1,734 | 106 |
| 1994 Average | 2,012 | 183 | -19 | 296 | 38 | 1,880 | 99 |
| 1995 Average | 2,082 | 146 | -17 | 289 | 58 | 1,899 | 93 |
| 1996 Average | 2,156 | 166 | -19 | 278 | 51 | 2,012 | 86 |
| 1997 Average | 2,190 | 169 | 9 | 263 | 50 | 2,038 | 89 |
| 1998 Average | 2,124 | 194 | 70 | 253 | 42 | 1,952 | 115 |
| 1999 Average | 2,230 | 182 | -71 | 238 | 50 | 2,195 | 89 |
| 2000 Average | 2,310 | 215 | -19 | 238 | 74 | 2,231 | 83 |
| 2001 January | 1,644 | 349 | -601 | 272 | 75 | 2,246 | 64 |
| February | 2,002 | 263 | -140 | 266 | 59 | 2,081 | 60 |
| March | 2,221 | 203 | 75 | 212 | 33 | 2,105 | 62 |
| April | 2,380 | 204 | 288 | 209 | 35 | 2,053 | 71 |
| May | 2,484 | 170 | 696 | 219 | 31 | 1,709 | 93 |
| June | 2,423 | 235 | 589 | 199 | 56 | 1,815 | 110 |
| July | 2,412 | 119 | 363 | 196 | 51 | 1,920 | 121 |
| August | 2,448 | 162 | 432 | 189 | 34 | 1,956 | 135 |
| September | 2,356 | 160 | 158 | 228 | 35 | 2,095 | 140 |
| October | 2,234 | 181 | -55 | 258 | 37 | 2,175 | 138 |
| November | 2,115 | 211 | -191 | 312 | 37 | 2,168 | 132 |
| December | 2,009 | 217 | -361 | 334 | 43 | 2,210 | 121 |
| Average | 2,228 | 206 | 105 | 241 | 44 | 2,044 | 121 |
| 2002 January | 1,990 | 242 | -546 | 323 | 52 | 2,403 | 104 |
| February | 2,173 | 225 | -500 | 277 | 96 | 2,525 | 90 |
| March | 2,306 | 204 | -115 | 218 | 64 | 2,343 | 86 |
| April | 2,455 | 203 | 516 | 194 | 32 | 1,916 | 102 |
| May | 2,488 | 136 | 379 | 186 | 67 | 1,992 | 114 |
| June | 2,409 | 141 | 403 | 187 | 31 | 1,929 | 126 |
| July | 2,421 | 142 | 353 | 199 | 33 | 1,979 | 137 |
| August | 2,475 | 154 | 347 | 195 | 46 | 2,041 | 147 |
| September | 2,210 | 158 | 36 | 220 | 67 | 2,045 | 149 |
| October | 2,083 | 178 | -307 | 282 | 85 | 2,201 | 139 |
| November | 2,030 | 195 | -458 | 334 | 98 | 2,251 | 125 |
| December | 1,974 | 216 | -630 | 344 | 131 | 2,345 | 106 |
| Average | 2,252 | 183 | -42 | 247 | 67 | 2,163 | 106 |
| 2003 January | 1,922 | 194 | -959 | 304 | 113 | 2,657 | 76 |
| February | 2,021 | 210 | -634 | 265 | 130 | 2,470 | 58 |
| March | 2,135 | 162 | -43 | 197 | 43 | 2,101 | 57 |
| April | 2,272 | 156 | 225 | 175 | 51 | 1,977 | 64 |
| May | 2,157 | 179 | 510 | 176 | 67 | 1,582 | 79 |
| 5-Month Average | 2,102 | 180 | -174 | 223 | 80 | 2,152 | 79 |
| 2002 5-Month Average | 2,283 | 201 | -48 | 239 | 62 | 2,232 | 114 |
| 2001 5-Month Average | 2,148 | 238 | 66 | 235 | 46 | 2,038 | 93 |

^a A negative number indicates a decrease in stocks and a positive number indicates an increase.

^b Stocks are at end of period.

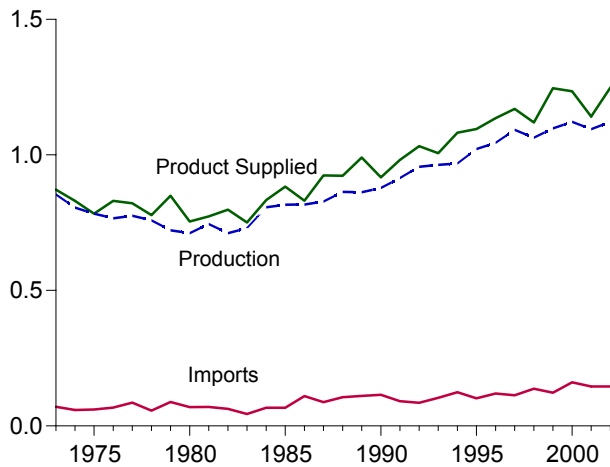
^c See Note 4 at end of section.

^d See Note 6 at end of section.

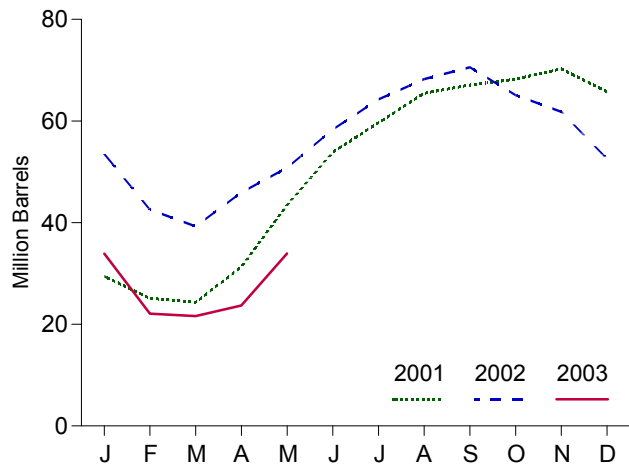
Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.
 Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S8. • **1992 forward:** EIA, *Petroleum Supply Monthly*, July 2003, Table S9.

Figure 3.7 Propane and Propylene
(Million Barrels per Day, Except as Noted)

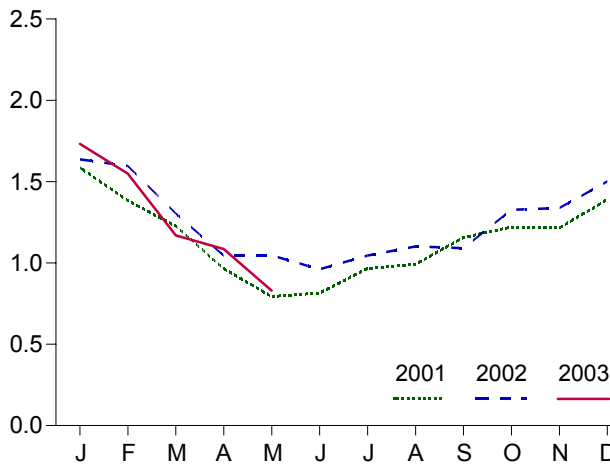
Overview, 1973-2002



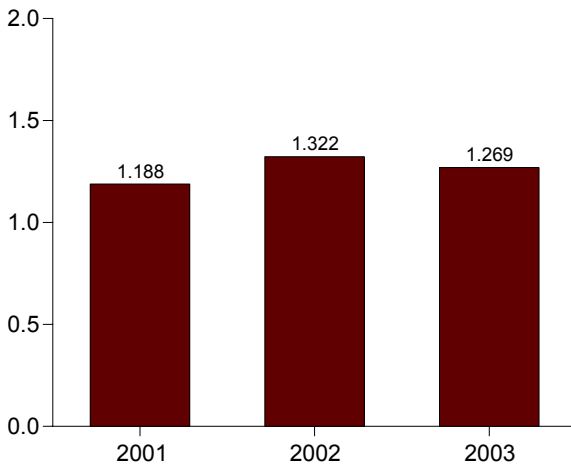
Stocks, End of Month



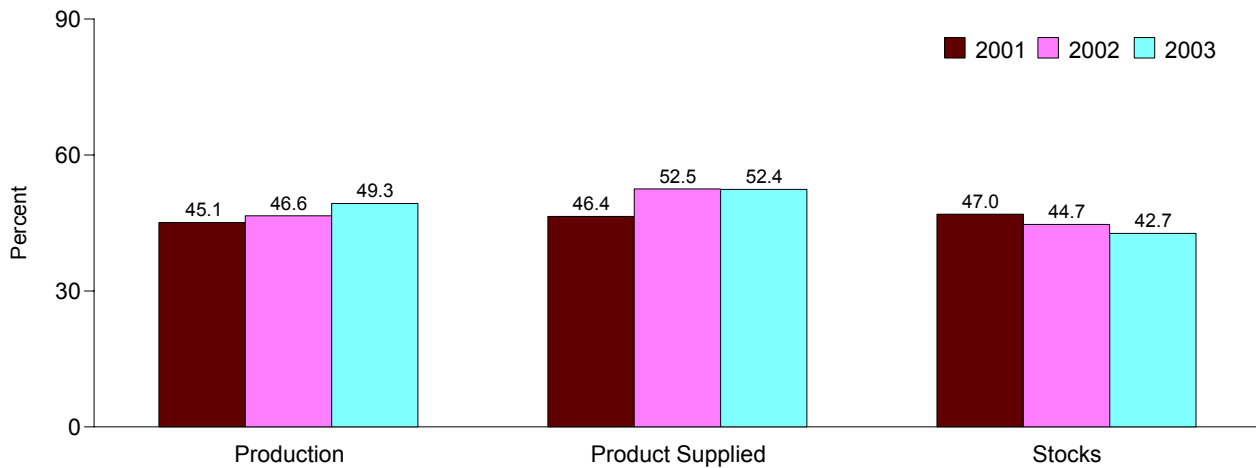
Product Supplied, Monthly



Product Supplied, January-May



Share of Liquefied Petroleum Gases, May



Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.
Source: Table 3.9 and, for calculation of shares, data prior to rounding.

Table 3.9 Propane and Propylene Supply and Disposition (A Subset of Table 3.8)

| | Supply | | Disposition | | | | Stocks ^b |
|----------------------------|--------------------------|---------|---------------------------|-----------------|---------|------------------|---------------------|
| | Total Production | Imports | Stock Change ^a | Refinery Inputs | Exports | Product Supplied | |
| | Thousand Barrels per Day | | | | | | |
| 1973 Average | 854 | 71 | 30 | 8 | 15 | 872 | 65 |
| 1974 Average | 805 | 59 | 11 | 9 | 14 | 830 | 69 |
| 1975 Average | 783 | 60 | 36 | 11 | 13 | 783 | 82 |
| 1976 Average | 766 | 68 | -22 | 12 | 13 | 830 | 74 |
| 1977 Average | 775 | 86 | 21 | 10 | 10 | 821 | 81 |
| 1978 Average | 758 | 57 | 15 | 13 | 9 | 778 | ^c 87 |
| 1979 Average | 721 | 88 | ^c -61 | 14 | 8 | 849 | 64 |
| 1980 Average | 711 | 69 | 4 | 12 | 10 | 754 | ^c 65 |
| 1981 Average | 745 | 70 | ^c 18 | 5 | 18 | 773 | 76 |
| 1982 Average | 711 | 63 | -59 | 4 | 31 | 798 | ^c 54 |
| 1983 Average | 730 | 44 | ^c -24 | 4 | 43 | 751 | ^c 48 |
| 1984 Average | 806 | 67 | ^c 7 | 4 | 30 | 833 | 58 |
| 1985 Average | 816 | 67 | -50 | 3 | 48 | 883 | 39 |
| 1986 Average | 817 | 110 | 64 | 4 | 28 | 831 | 63 |
| 1987 Average | 828 | 88 | -41 | 8 | 24 | 924 | 48 |
| 1988 Average | 863 | 106 | 7 | 8 | 31 | 923 | 50 |
| 1989 Average | 862 | 111 | -52 | 11 | 24 | 990 | 32 |
| 1990 Average | 878 | 115 | 48 | (s) | 28 | 917 | 49 |
| 1991 Average | 915 | 91 | -3 | (s) | 28 | 982 | 48 |
| 1992 Average | 956 | 85 | -24 | (s) | 33 | 1,032 | 39 |
| 1993 Average | 963 | 103 | 34 | (s) | 26 | 1,006 | 51 |
| 1994 Average | 969 | 124 | -13 | 0 | 24 | 1,082 | 46 |
| 1995 Average | 1,021 | 102 | -10 | 0 | 38 | 1,096 | 43 |
| 1996 Average | 1,044 | 119 | (s) | 0 | 28 | 1,136 | 43 |
| 1997 Average | 1,092 | 113 | 3 | 0 | 32 | 1,170 | 44 |
| 1998 Average | 1,064 | 137 | 56 | 0 | 25 | 1,120 | 65 |
| 1999 Average | 1,097 | 122 | -59 | 0 | 33 | 1,246 | 43 |
| 2000 Average | 1,122 | 161 | -5 | 0 | 53 | 1,235 | 41 |
| 2001 January | 957 | 312 | -379 | 0 | 62 | 1,586 | 29 |
| February | 1,048 | 222 | -155 | 0 | 41 | 1,383 | 25 |
| March | 1,072 | 151 | -25 | 0 | 22 | 1,226 | 24 |
| April | 1,110 | 105 | 232 | 0 | 18 | 965 | 31 |
| May | 1,121 | 80 | 392 | 0 | 15 | 794 | 43 |
| June | 1,093 | 103 | 348 | 0 | 32 | 816 | 54 |
| July | 1,102 | 92 | 186 | 0 | 42 | 966 | 60 |
| August | 1,111 | 95 | 187 | 0 | 27 | 992 | 65 |
| September | 1,146 | 92 | 54 | 0 | 27 | 1,157 | 67 |
| October | 1,138 | 146 | 38 | 0 | 26 | 1,220 | 68 |
| November | 1,135 | 175 | 68 | 0 | 26 | 1,216 | 70 |
| December | 1,104 | 176 | -145 | 0 | 35 | 1,390 | 66 |
| Average | 1,095 | 145 | 67 | 0 | 31 | 1,142 | 66 |
| 2002 January | 1,082 | 201 | -396 | 0 | 42 | 1,636 | 53 |
| February | 1,114 | 179 | -391 | 0 | 87 | 1,597 | 43 |
| March | 1,111 | 147 | -106 | 0 | 60 | 1,304 | 39 |
| April | 1,135 | 157 | 222 | 0 | 25 | 1,046 | 46 |
| May | 1,159 | 87 | 157 | 0 | 43 | 1,046 | 51 |
| June | 1,133 | 101 | 252 | 0 | 23 | 960 | 58 |
| July | 1,137 | 120 | 190 | 0 | 22 | 1,045 | 64 |
| August | 1,142 | 116 | 129 | 0 | 28 | 1,101 | 68 |
| September | 1,091 | 131 | 78 | 0 | 54 | 1,091 | 71 |
| October | 1,080 | 144 | -176 | 0 | 74 | 1,327 | 65 |
| November | 1,143 | 170 | -109 | 0 | 85 | 1,337 | 62 |
| December | 1,127 | 193 | -299 | 0 | 119 | 1,501 | 53 |
| Average | 1,121 | 145 | -36 | 0 | 55 | 1,248 | 53 |
| 2003 January | 1,063 | 161 | -602 | 0 | 95 | 1,732 | 34 |
| February | 1,068 | 176 | -422 | 0 | 116 | 1,550 | 22 |
| March | 1,061 | 124 | -15 | 0 | 31 | 1,169 | 22 |
| April | 1,080 | 94 | 69 | 0 | 20 | 1,086 | 24 |
| May | 1,063 | 119 | 331 | 0 | 22 | 829 | 34 |
| 5-Month Average | 1,067 | 134 | -123 | 0 | 56 | 1,269 | 34 |
| 2002 5-Month Average | 1,120 | 154 | -99 | 0 | 51 | 1,322 | 51 |
| 2001 5-Month Average | 1,061 | 173 | 15 | 0 | 32 | 1,188 | 43 |

^a A negative number indicates a decrease in stocks and a positive number indicates an increase.

^b Stocks are at end of period.

^c See Note 4 at end of section.

(s)=Less than 500 barrels per day.

Note: Geographic coverage is the 50 States and the District of Columbia.
Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

Sources: • **1973 through 1975:** U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys*, "Petroleum Statement, Annual." • **1976 through 1980:** Energy Information Administration (EIA), *Energy Data Reports*, Petroleum Statement, Annual." • **1981-1991:** EIA, *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S8. • **1992 forward:** EIA, *Petroleum Supply Monthly*, July 2003, Table S8.

Table 3.10 Other Petroleum Products Supply and Disposition

| | Supply | | Disposition | | | | Stocks ^b |
|-----------------------------------|--------------------------|--------------|---------------------------|-----------------|------------------|--------------------|---------------------|
| | Total Production | Imports | Stock Change ^a | Refinery Inputs | Exports | Products Supplied | |
| | Thousand Barrels per Day | | | | | | |
| 1973 Average | 2,833 | 290 | 1 | 750 | 162 | 2,211 | 179 |
| 1974 Average | 2,722 | 269 | 25 | 665 | 172 | 2,129 | ^c 188 |
| 1975 Average | 2,547 | 144 | ^c -6 | 537 | 158 | 2,001 | 188 |
| 1976 Average | 2,725 | 129 | (s) | 524 | 172 | 2,158 | 188 |
| 1977 Average | 2,939 | 130 | 20 | 514 | 164 | 2,371 | 195 |
| 1978 Average | 3,076 | 80 | -12 | 492 | 165 | 2,511 | 191 |
| 1979 Average | 3,141 | 116 | 24 | 352 | 208 | 2,673 | 200 |
| 1980 Average | 2,957 | 130 | 15 | 310 | 197 | 2,566 | ^c 205 |
| 1981 Average | 2,771 | 188 | ^c -42 | 723 | 197 | 2,081 | 241 |
| 1982 Average | 2,475 | 305 | -68 | 787 | 205 | ^d 1,857 | ^c 216 |
| 1983 Average | 2,437 | 382 | ^c -6 | 712 | 236 | 1,877 | ^c 217 |
| 1984 Average | 2,500 | 503 | ^c -32 | 791 | 236 | 2,007 | 198 |
| 1985 Average | 2,532 | 550 | 22 | 886 | 227 | 1,947 | 206 |
| 1986 Average | 2,704 | 504 | -15 | 888 | 291 | 2,045 | 201 |
| 1987 Average | 2,737 | 543 | -1 | 829 | 264 | 2,187 | 200 |
| 1988 Average | 2,773 | 645 | 22 | 799 | 294 | 2,303 | 208 |
| 1989 Average | 2,771 | 627 | 12 | 797 | 305 | 2,285 | 213 |
| 1990 Average | 2,842 | 705 | -32 | 887 | 289 | 2,402 | 201 |
| 1991 Average | 2,826 | 675 | 18 | 936 | 277 | 2,269 | 208 |
| 1992 Average | 2,928 | 707 | -3 | 906 | 263 | 2,470 | ^c 207 |
| 1993 Average | ^e 3,035 | 770 | ^c -2 | 1,081 | ^e 300 | ^e 2,426 | 206 |
| 1994 Average | 2,973 | 761 | 24 | 861 | 329 | 2,518 | 215 |
| 1995 Average | 3,031 | 708 | -23 | 958 | 348 | 2,457 | 206 |
| 1996 Average | 3,108 | 879 | -11 | 1,014 | 376 | 2,608 | 202 |
| 1997 Average | 3,204 | 945 | 30 | 985 | 402 | 2,733 | 213 |
| 1998 Average | 3,253 | 888 | 18 | 1,002 | 380 | 2,741 | 219 |
| 1999 Average | 3,211 | 943 | -64 | 1,061 | 338 | 2,819 | 196 |
| 2000 Average | 3,154 | 938 | 30 | 991 | 429 | 2,642 | 207 |
| 2001 January | 2,802 | 1,266 | 438 | 544 | 483 | 2,604 | 221 |
| February | 3,045 | 1,111 | 551 | 597 | 499 | 2,509 | 236 |
| March | 2,883 | 1,174 | 180 | 902 | 424 | 2,550 | 242 |
| April | 2,984 | 1,126 | 23 | 984 | 451 | 2,651 | 242 |
| May | 3,120 | 1,177 | -57 | 1,103 | 465 | 2,787 | 241 |
| June | 3,229 | 1,126 | -243 | 1,388 | 430 | 2,780 | 233 |
| July | 3,214 | 998 | -382 | 1,432 | 393 | 2,769 | 221 |
| August | 3,197 | 1,062 | -287 | 1,162 | 492 | 2,893 | 213 |
| September | 3,140 | 1,094 | 261 | 1,048 | 334 | 2,591 | 220 |
| October | 3,061 | 1,038 | -236 | 1,060 | 473 | 2,802 | 213 |
| November | 3,107 | 1,066 | 119 | 965 | 402 | 2,686 | 217 |
| December | 2,858 | 910 | -75 | 941 | 370 | 2,533 | 214 |
| Average | 3,053 | 1,095 | 20 | 1,013 | 434 | 2,681 | 214 |
| 2002 January | 2,931 | 1,079 | 268 | 714 | 441 | 2,586 | 223 |
| February | 3,005 | 993 | 45 | 1,068 | 482 | 2,403 | 224 |
| March | 3,072 | 1,123 | 277 | 955 | 436 | 2,526 | 232 |
| April | 3,178 | 1,097 | -53 | 1,195 | 472 | 2,660 | 231 |
| May | 3,140 | 1,322 | -64 | 1,253 | 503 | 2,771 | 229 |
| June | 3,225 | 1,162 | -164 | 1,204 | 445 | 2,903 | 224 |
| July | 3,295 | 1,246 | -100 | 1,244 | 420 | 2,977 | 221 |
| August | 3,312 | 1,088 | -309 | 1,240 | 550 | 2,918 | 211 |
| September | 3,261 | 1,078 | -45 | 1,131 | 479 | 2,774 | 210 |
| October | 3,039 | 969 | -59 | 1,005 | 471 | 2,592 | 208 |
| November | 3,109 | 1,014 | 16 | 1,024 | 503 | 2,581 | 209 |
| December | 3,071 | 844 | -307 | 1,442 | 547 | 2,233 | 199 |
| Average | 3,137 | 1,085 | -42 | 1,123 | 479 | 2,662 | 199 |
| 2003 January | 3,071 | 1,095 | 468 | 850 | 526 | 2,323 | 213 |
| February | 2,959 | 865 | -13 | 803 | 464 | 2,570 | 213 |
| March | 3,177 | 1,065 | 337 | 830 | 525 | 2,549 | 223 |
| April | 3,079 | 1,070 | 56 | 930 | 451 | 2,712 | 225 |
| May | 3,221 | 1,267 | 11 | 1,205 | 526 | 2,747 | 225 |
| 5-Month Average | 3,104 | 1,077 | 176 | 926 | 499 | 2,579 | 225 |
| 2002 5-Month Average | 3,066 | 1,126 | 96 | 1,035 | 467 | 2,593 | 229 |
| 2001 5-Month Average | 2,965 | 1,172 | 222 | 829 | 464 | 2,622 | 241 |

^a A negative number indicates a decrease in stocks and a positive number indicates an increase.

^b Stocks are at end of period.

^c See Note 4 at end of section.

^d See Note 6 at end of section.

^e Beginning in 1993, other petroleum products production, exports, and products supplied include an adjustment to oxygenates and motor gasoline blending components.

(s)=Less than +500 barrels per day and greater than -500 barrels per day.

Notes: • Other petroleum products include pentanes plus, other

hydrocarbons and alcohol, unfinished oils, gasoline blending components, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, jet fuel, liquefied petroleum gases, and crude oil that is used as fuel. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/petro.html>.

Sources: • 1973-1991: Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1*, May 1993, Table S9. • 1992 forward: EIA, *Petroleum Supply Monthly*, July 2003, Table S10.

Petroleum

Note 1. Survey Respondents: The Energy Information Administration (EIA) uses a number of sources and methods to maintain the survey respondent lists. On a regular basis, survey managers review such industry publications as the *Oil and Gas Journal* and *Oil Daily* for information on facilities or companies starting up or closing down operations. Those sources are augmented by articles in newspapers, letters from respondents indicating changes in status, and information received from survey systems.

To supplement routine frames maintenance and to provide more thorough coverage, a comprehensive frames investigation is conducted every 3 years. This investigation results in the reassessment and recompilation of the complete frame for each survey. The effort also includes the evaluation of the impact of potential frame changes on the historical time series of data from these respondents. The results of this frame study are usually implemented in January to provide a full year under the same frame.

In 1991, the EIA conducted a frame identifier survey of companies that produce, blend, store, or import oxygenates. A summary of the results from the identification survey was published in the *Weekly Petroleum Status Report* dated February 12, 1992, and in the February 1992 issue of the *Petroleum Supply Monthly*. In order to continue to provide relevant information about U.S. and regional gasoline supply, the EIA conducted a second frame identifier survey of those companies during 1992. As a result, numerous respondents were added to the monthly surveys effective in January 1993. See Explanatory Note 7 in the *Petroleum Supply Monthly*.

Note 2. Motor Gasoline: Beginning in January 1981, the EIA expanded its universe to include non-refinery blenders and separated blending components from finished motor gasoline as a reporting category. Also, survey forms were modified to describe refinery operations more accurately.

Beginning with the reporting of January 1993 data, the EIA made adjustments to the product supplied series for finished motor gasoline. It was recognized that motor gasoline statistics published by the EIA through 1992 were underreported because the reporting system was (1) not collecting all fuel ethanol blending, and (2) there was a misreporting of motor gasoline blending components that were blended into finished gasoline. The adjustments are incorporated into EIA's data beginning in January 1993. To facilitate data analysis across the 1992–1993 period, EIA has prepared a table of 1992 data adjusted according to the 1993 basis. See *Petroleum Supply Monthly*, March 1993, Table H3.

Note 3. Distillate and Residual Fuel Oils: The requirement to report crude oil in pipelines or burned on leases as either distillate or residual fuel oil has been eliminated. Prior to January 1981, the refinery input of unfinished oils

typically exceeded the available supply of unfinished oils. That discrepancy was assumed to be due to the redesignation of distillate and residual fuel oils received as such but used as unfinished oil inputs by the receiving refinery. The imbalance between supply and disposition of unfinished oils would then be subtracted from the production of distillate and residual fuel oils. Two-thirds of that difference was subtracted from distillate and one-third from residual. Beginning in January 1981, the EIA modified its survey forms to account for redesignated product and discontinued the above-mentioned adjustment.

Beginning in January 1993, the end-of-month stocks of distillate fuel oil are split into two sulfur categories (0.05 percent sulfur or less and greater than 0.05 percent sulfur) to meet Environmental Protection Agency requirements effective in October 1992. For further details, see the EIA, *Petroleum Supply Monthly*.

Note 4. New Stock Basis: In January 1975, 1979, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys, affecting subsequent stocks reported and stock change calculations. Using the expanded coverage (new basis), the end-of-year stocks, in million barrels, would have been:

Crude Oil: 1982—645 (Total) and 351 (Other Primary).

Crude Oil and Petroleum Products: 1974—1,121; 1980—1,425; and 1982—1,461.

Motor Gasoline: 1974—225; 1980—263 (Total) and 214 (Finished); 1982—244 (Total) and 202 (Finished).

Distillate Fuel Oil: 1974—224; 1980—205; and 1982—186.

Residual Fuel Oil: 1974—75; 1980—91; and 1982—69.

Jet Fuel: 1974—30 (Total) and 24 (Kerosene Type); 1980—42 (Total) and 36 (Kerosene Type); and 1982—39 (Total) and 32 (Kerosene Type).

Liquefied Petroleum Gases: 1974—113; 1978—136; 1980—128; and 1982—102.

Propane and Propylene: 1978—86; 1980—69; and 1982—57.

Other Petroleum Products: 1974—190; 1980—207; and 1982—219.

Stock change calculations beginning in 1975, 1979, 1981, and 1983 were made by using new basis stock levels.

In January 1984, changes were made in the reporting of natural gas liquids. As a result, unfractionated stream, which was formerly included in the “Other Petroleum Products Supply and Disposition” table, is now reported on

a component basis (ethane, propane, normal butane, isobutane, and pentanes plus). Most of these stocks now appear in the "Liquefied Petroleum Gases Supply and Disposition" table. This change affects stocks reported and stock change calculations in each table. Under the new basis, end-of-year 1983 stocks, in million barrels, would have been: 108 for liquefied petroleum gases, 55 for propane and propylene, and 210 for other petroleum products.

In January 1993, changes were made in the monthly surveys to begin collecting bulk terminal and pipeline stocks of oxygenates. This change affected stocks reported and stock change calculations. However, a new basis stock level was not calculated for 1992 end-of-year stocks.

Note 5. Stocks of Alaskan Crude Oil: Stocks of Alaskan Crude oil in transit were included for the first time in January 1981. The major impact of this change is on the reporting of stock change calculations. Using the expanded coverage (new basis), 1980 end-of-year stocks, in million barrels, would have been 488 (Total) and 380 (Other Primary).

Note 6. Data Discrepancies: Due to differences internal to EIA data processing systems, some small discrepancies exist between data in the *Monthly Energy Review (MER)* and the *Petroleum Supply Annual (PSA)* and *Petroleum Supply Monthly (PSM)*. The data that have discrepancies are footnoted in Section 3 tables and summarized here.

| Table | Data Series | Year Average | MER Data | PSA and PSM Data |
|-------|------------------------------|--------------|----------|------------------|
| 3.1a | Natural Gas Plant Production | 1976 | 1,604 | 1,603 |
| 3.1b | Exports, Total | 1979 | 471 | 472 |
| 3.1b | Exports, Petroleum Products | 1979 | 236 | 237 |
| 3.1b | Net Imports | 1979 | 7,985 | 7,984 |
| 3.2a | Crude Used Directly | 1976 | -19 | -18 |
| 3.2a | Imports, SPR | 1978 | 161 | 162 |
| 3.2a | Crude Used Directly | 1978 | -15 | -14 |
| 3.2a | Crude Used Directly | 1979 | -14 | -13 |
| 3.2a | Crude Used Directly | 1980 | -14 | -13 |
| 3.2b | Crude Losses | 1976 | 14 | 15 |
| 3.2b | Crude Losses | 1980 | 14 | 15 |
| 3.5 | Stock Change | 1974 | 10 | 9 |
| 3.5 | Stock Change | 1975 | -41 | -40 |
| 3.8 | Total Production | 1982 | 1,527 | 1,525 |
| 3.1 | Products Supplied | 1982 | 1,857 | 1,856 |

Section 4. Natural Gas

Total dry natural gas production in the United States during April 2003 was forecast as 1.6 trillion cubic feet, 4 percent higher than production during April 2002.

Consumption of natural and supplemental gas in April 2003 was forecast as 1.8 trillion cubic feet, 2 percent lower than the level in April 2002.

Deliveries to residential consumers in April 2003 were forecast as 412 billion cubic feet, 2 percent lower than the previous April's deliveries. Total deliveries to industrial consumers during April 2003 were forecast as 697 billion cubic feet, 1 percent lower than the previous April's level.

Net imports of natural gas in April 2003 were forecast as 275 billion cubic feet, less than 1 percent lower than net imports in the previous April.

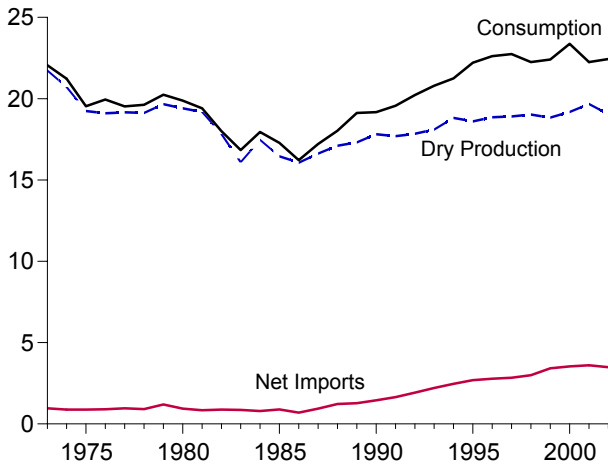
Stocks of working gas¹ in underground natural gas storage reservoirs at the end of April 2003 were forecast as 803 billion cubic feet, 52 percent lower than the level of stocks available 1 year earlier.

Net injections from underground storage during April 2003 were forecast as 135 billion cubic feet, 7 percent greater than the amount of net injections during April 2002.

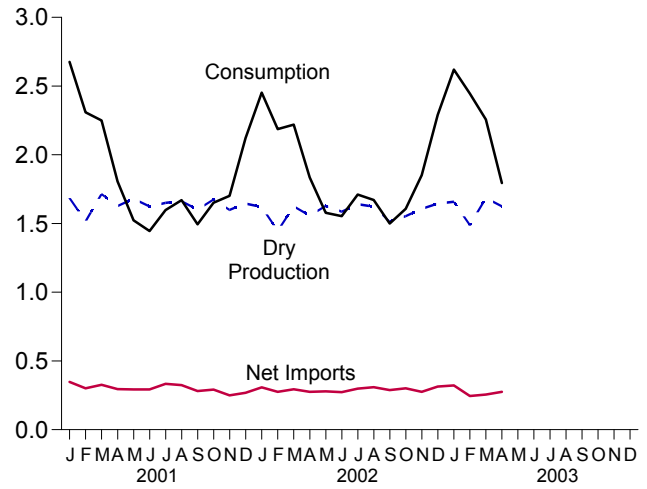
¹Gas available for withdrawal.

Figure 4.1 Natural Gas
(Trillion Cubic Feet)

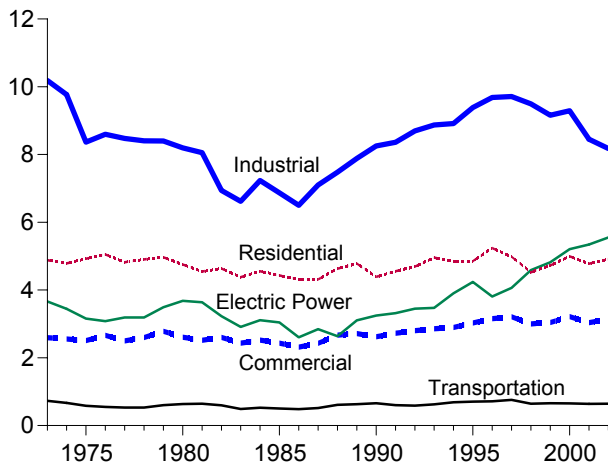
Overview, 1973-2002



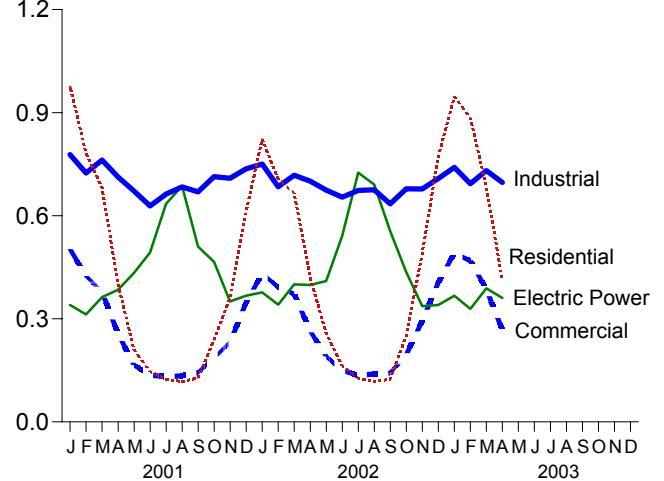
Overview, Monthly



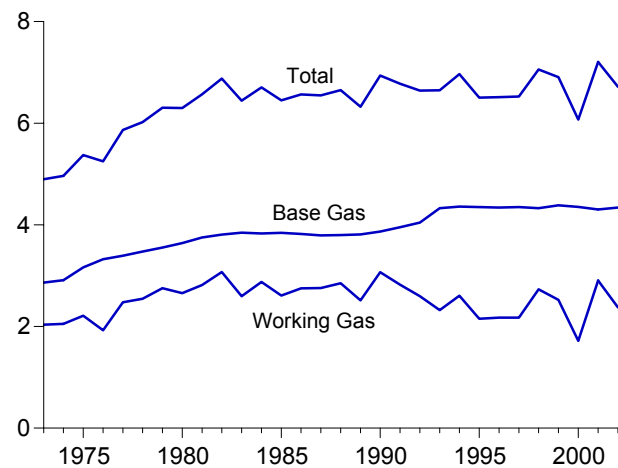
Consumption by Sector, 1973-2002



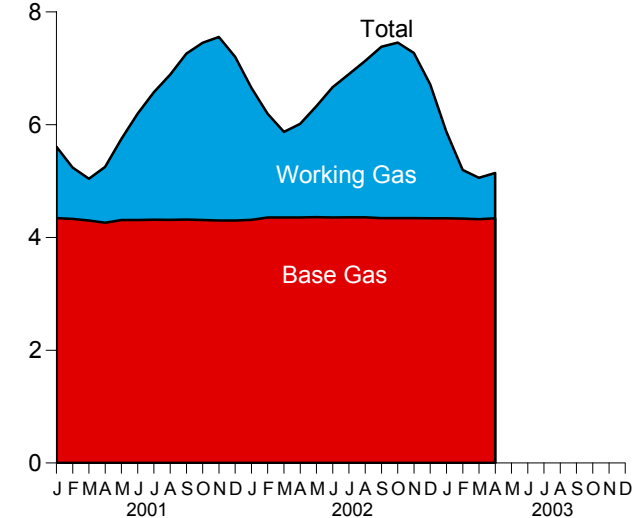
Consumption by Sector, Monthly



Underground Storage, End of Year, 1973-2002



Underground Storage, End of Month



Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/natgas.html>.
Sources: Tables 4.1, 4.4, and 4.5.

Table 4.1 Natural Gas Overview
(Billion Cubic Feet)

| | Dry Gas Production ^a | Supplemental Gaseous Fuels ^b | Imports | Exports | Withdrawals From Storage ^c | Additions to Storage ^c | Balancing Item ^d | Consumption ^e |
|--------------------|---------------------------------|---|---------|---------|---------------------------------------|-----------------------------------|-----------------------------|--------------------------|
| 1973 Total | 21,731 | NA | 1,033 | 77 | 1,533 | 1,974 | -196 | 22,049 |
| 1974 Total | 20,713 | NA | 959 | 77 | 1,701 | 1,784 | -289 | 21,223 |
| 1975 Total | 19,236 | NA | 953 | 73 | 1,760 | 2,104 | -235 | 19,538 |
| 1976 Total | 19,098 | NA | 964 | 65 | 1,921 | 1,756 | -216 | 19,946 |
| 1977 Total | 19,163 | NA | 1,011 | 56 | 1,750 | 2,307 | -41 | 19,521 |
| 1978 Total | 19,122 | NA | 966 | 53 | 2,158 | 2,278 | -287 | 19,627 |
| 1979 Total | 19,663 | NA | 1,253 | 56 | 2,047 | 2,295 | -372 | 20,241 |
| 1980 Total | 19,403 | 155 | 985 | 49 | 1,972 | 1,949 | -640 | 19,877 |
| 1981 Total | 19,181 | 176 | 904 | 59 | 1,930 | 2,228 | -500 | 19,404 |
| 1982 Total | 17,820 | 145 | 933 | 52 | 2,164 | 2,472 | d-537 | 18,001 |
| 1983 Total | 16,094 | 132 | 918 | 55 | 2,270 | 1,822 | d-703 | 16,835 |
| 1984 Total | 17,466 | 110 | 843 | 55 | 2,098 | 2,295 | -217 | 17,951 |
| 1985 Total | 16,454 | 126 | 950 | 55 | 2,397 | 2,163 | -428 | 17,281 |
| 1986 Total | 16,059 | 113 | 750 | 61 | 1,837 | 1,984 | -493 | 16,221 |
| 1987 Total | 16,621 | 101 | 993 | 54 | 1,905 | 1,911 | -444 | 17,211 |
| 1988 Total | 17,103 | 101 | 1,294 | 74 | 2,270 | 2,211 | -453 | 18,030 |
| 1989 Total | 17,311 | 107 | 1,382 | 107 | 2,854 | 2,528 | 101 | 19,119 |
| 1990 Total | 17,810 | 123 | 1,532 | 86 | 1,986 | 2,499 | 307 | 19,174 |
| 1991 Total | 17,698 | 113 | 1,773 | 129 | 2,752 | 2,672 | 27 | 19,562 |
| 1992 Total | 17,840 | 118 | 2,138 | 216 | 2,772 | 2,599 | 176 | 20,228 |
| 1993 Total | 18,095 | 119 | 2,350 | 140 | 2,799 | 2,835 | 401 | 20,790 |
| 1994 Total | 18,821 | 111 | 2,624 | 162 | 2,579 | 2,865 | 139 | 21,247 |
| 1995 Total | 18,599 | 110 | 2,841 | 154 | 3,025 | 2,610 | 396 | 22,207 |
| 1996 Total | 18,854 | 91 | 2,937 | 153 | 2,981 | 2,979 | 878 | 22,610 |
| 1997 Total | 18,902 | 103 | 2,994 | 157 | 2,894 | 2,870 | 871 | 22,737 |
| 1998 Total | 19,024 | 102 | 3,152 | 159 | 2,432 | 2,961 | 657 | 22,246 |
| 1999 Total | 18,832 | 98 | 3,586 | 163 | 2,808 | 2,636 | -119 | 22,406 |
| 2000 Total | 19,182 | 90 | 3,782 | 244 | 3,550 | 2,721 | -271 | 23,368 |
| 2001 January | 1,685 | 9 | 373 | 26 | 600 | 92 | 126 | 2,676 |
| February | 1,515 | 7 | 328 | 27 | 422 | 74 | 138 | 2,310 |
| March | 1,714 | 8 | 358 | 32 | 303 | 116 | 14 | 2,250 |
| April | 1,626 | 6 | 319 | 24 | 70 | 354 | 163 | 1,807 |
| May | 1,681 | 6 | 322 | 29 | 41 | 528 | 31 | 1,524 |
| June | 1,624 | 6 | 317 | 25 | 49 | 498 | -29 | 1,445 |
| July | 1,650 | 7 | 365 | 31 | 66 | 458 | -1 | 1,598 |
| August | 1,661 | 6 | 353 | 29 | 79 | 392 | -10 | 1,670 |
| September | 1,602 | 7 | 315 | 34 | 41 | 420 | -17 | 1,494 |
| October | 1,674 | 7 | 326 | 34 | 93 | 286 | -129 | 1,651 |
| November | 1,599 | 8 | 291 | 42 | 138 | 212 | -81 | 1,701 |
| December | 1,645 | 8 | 310 | 42 | 441 | 80 | -160 | 2,122 |
| Total | 19,676 | 86 | 3,977 | 373 | 2,344 | 3,509 | 45 | 22,246 |
| 2002 January | E 1,620 | E 8 | 343 | 34 | 605 | -59 | R -29 | R 2,452 |
| February | E 1,447 | E 7 | 305 | 30 | 517 | 55 | R -4 | R 2,187 |
| March | E 1,625 | E 8 | 332 | 38 | 425 | 105 | R -27 | R 2,219 |
| April | E 1,558 | E 6 | 315 | 39 | 111 | 237 | R 122 | R 1,836 |
| May | E 1,628 | E 6 | 319 | 39 | 58 | 381 | R -11 | R 1,579 |
| June | E 1,586 | E 5 | 317 | 45 | 56 | 395 | R 28 | R 1,553 |
| July | E 1,641 | E 7 | 344 | 45 | 101 | 341 | R 3 | R 1,711 |
| August | E 1,624 | E 6 | 355 | 47 | 89 | 322 | R -35 | R 1,671 |
| September | E 1,513 | E 6 | 335 | 47 | 72 | 364 | -15 | 1,500 |
| October | E 1,554 | E 7 | 343 | 42 | 145 | 229 | -170 | 1,607 |
| November | E 1,608 | E 7 | 330 | 55 | 322 | 124 | R -237 | R 1,851 |
| December | E 1,644 | E 8 | 369 | 55 | 624 | 66 | R -234 | 2,290 |
| Total | E 19,047 | E 80 | 4,008 | 516 | 3,126 | 2,679 | R -610 | R 22,455 |
| 2003 January | RE 1,659 | E 8 | E 367 | E 45 | 886 | 44 | R -210 | R 2,620 |
| February | E 1,488 | E 4 | E 305 | E 61 | 723 | 48 | R 33 | R 2,445 |
| March | RF 1,686 | RF 4 | RE 326 | RE 70 | R 303 | R 169 | RE 177 | RF 2,257 |
| April | F 1,625 | F 6 | F 334 | F 59 | F 120 | F 255 | E 24 | F 1,795 |
| 4-Month Total | E 6,457 | E 23 | E 1,332 | E 235 | E 2,032 | E 516 | E 24 | E 9,116 |
| 2002 4-Month Total | E 6,250 | E 28 | 1,295 | 142 | 1,658 | 457 | 62 | 8,694 |
| 2001 4-Month Total | 6,540 | 31 | 1,378 | 108 | 1,396 | 636 | 441 | 9,041 |

^a "Marketed Production (Wet)" minus "Extraction Loss." See Table 4.2.

^b See Note 1 at end of section.

^c Data for 1980-2001 cover underground storage and liquefied natural gas storage. All other time periods cover underground storage only. See Note 2 at end of section.

^d See Note 3 at end of section. Since 1980, excludes transit shipments that cross the U.S.-Canada border (i.e., natural gas delivered to its destination via the other country).

^e See Note 4 at end of section.

^f May include unknown quantities of nonhydrocarbon gases.

^g For 1989-1992, a small amount of consumption at independent power producers may be counted in both "Other Industrial" and "Electric Power Sector" on Table 4.4. See Note 5 at end of section.

R=Revised. E=Estimate. NA=Not available. F=Forecast.

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

• Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/natgas.html>.

Sources: • **Dry Gas Production and Supplemental Gaseous Fuels:** 1973-1996: Energy Information Administration (EIA), *Natural Gas Annual*, annual reports. 1997 forward: EIA, *Natural Gas Monthly*, May 2003, Table 2. • **Imports and Exports:** Table 4.3. • **Withdrawals From Storage and Additions to Storage:** 1973-1996: EIA, *Natural Gas Annual 2000*, Table 94. 1997-2001: EIA, *Natural Gas Annual 2001*, Table 1. 2002 forward: Table 4.5. • **Consumption:** Table 4.4.

• **Balancing Item:** Calculated as the sum of consumption, exports, and additions to storage minus dry gas production, supplemental gaseous fuels, imports, and withdrawals from storage. • **Forecast values:** EIA, Short-Term Integrated Forecasting System. See Note 10 at end of section.

Table 4.2 Natural Gas Production
(Billion Cubic Feet)

| | Gross Withdrawals ^a | Repressuring ^b | Nonhydrocarbon Gases Removed ^c | Vented and Flared ^d | Marketed Production ^e | Extraction Loss ^f | Dry Gas Production ^g |
|--------------------|--------------------------------|---------------------------|---|--------------------------------|----------------------------------|------------------------------|---------------------------------|
| 1973 Total | 24,067 | 1,171 | NA | 248 | h 22,648 | 917 | h 21,731 |
| 1974 Total | 22,850 | 1,080 | NA | 169 | h 21,601 | 887 | h 20,713 |
| 1975 Total | 21,104 | 861 | NA | 134 | h 20,109 | 872 | h 19,236 |
| 1976 Total | 20,944 | 859 | NA | 132 | h 19,952 | 854 | h 19,098 |
| 1977 Total | 21,097 | 935 | NA | 137 | h 20,025 | 863 | h 19,163 |
| 1978 Total | 21,309 | 1,181 | NA | 153 | h 19,974 | 852 | h 19,122 |
| 1979 Total | 21,883 | 1,245 | NA | 167 | h 20,471 | 808 | h 19,663 |
| 1980 Total | 21,870 | 1,365 | 199 | 125 | 20,180 | 777 | 19,403 |
| 1981 Total | 21,587 | 1,312 | 222 | 98 | 19,956 | 775 | 19,181 |
| 1982 Total | 20,272 | 1,388 | 208 | 93 | 18,582 | 762 | 17,820 |
| 1983 Total | 18,659 | 1,458 | 222 | 95 | 16,884 | 790 | 16,094 |
| 1984 Total | 20,267 | 1,630 | 224 | 108 | 18,304 | 838 | 17,466 |
| 1985 Total | 19,607 | 1,915 | 326 | 95 | 17,270 | 816 | 16,454 |
| 1986 Total | 19,131 | 1,838 | 337 | 98 | 16,859 | 800 | 16,059 |
| 1987 Total | 20,140 | 2,208 | 376 | 124 | 17,433 | 812 | 16,621 |
| 1988 Total | 20,999 | 2,478 | 460 | 143 | 17,918 | 816 | 17,103 |
| 1989 Total | 21,074 | 2,475 | 362 | 142 | 18,095 | 785 | 17,311 |
| 1990 Total | 21,523 | 2,489 | 289 | 150 | 18,594 | 784 | 17,810 |
| 1991 Total | 21,750 | 2,772 | 276 | 170 | 18,532 | 835 | 17,698 |
| 1992 Total | 22,132 | 2,973 | 280 | 168 | 18,712 | 872 | 17,840 |
| 1993 Total | 22,726 | 3,103 | 414 | 227 | 18,982 | 886 | 18,095 |
| 1994 Total | 23,581 | 3,231 | 412 | 228 | 19,710 | 889 | 18,821 |
| 1995 Total | 23,744 | 3,565 | 388 | 284 | 19,506 | 908 | 18,599 |
| 1996 Total | 24,114 | 3,511 | 518 | 272 | 19,812 | 958 | 18,854 |
| 1997 Total | 24,213 | 3,492 | 599 | 256 | 19,866 | 964 | 18,902 |
| 1998 Total | 24,108 | 3,427 | 617 | 103 | 19,961 | 938 | 19,024 |
| 1999 Total | 23,823 | 3,293 | 615 | 110 | 19,805 | 973 | 18,832 |
| 2000 Total | 24,174 | 3,380 | 505 | 91 | 20,198 | 1,016 | 19,182 |
| 2001 January | 2,101 | 289 | 39 | 7 | 1,766 | 82 | 1,685 |
| February | 1,912 | 277 | 38 | 8 | 1,588 | 73 | 1,515 |
| March | 2,139 | 294 | 42 | 7 | 1,797 | 83 | 1,714 |
| April | 2,023 | 271 | 39 | 8 | 1,705 | 79 | 1,626 |
| May | 2,061 | 253 | 39 | 7 | 1,762 | 81 | 1,681 |
| June | 2,003 | 258 | 35 | 6 | 1,703 | 79 | 1,624 |
| July | 2,035 | 253 | 42 | 9 | 1,730 | 80 | 1,650 |
| August | 2,053 | 264 | 41 | 7 | 1,742 | 81 | 1,661 |
| September | 1,992 | 267 | 38 | 7 | 1,679 | 78 | 1,602 |
| October | 2,088 | 288 | 36 | 7 | 1,755 | 81 | 1,674 |
| November | 2,004 | 285 | 35 | 7 | 1,676 | 78 | 1,599 |
| December | 2,067 | 297 | 39 | 6 | 1,725 | 80 | 1,645 |
| Total | 24,476 | 3,296 | 464 | 86 | 20,630 | 954 | 19,676 |
| 2002 January | E 2,066 | E 325 | E 35 | E 7 | E 1,698 | E 78 | E 1,620 |
| February | E 1,857 | E 306 | E 28 | E 6 | E 1,517 | E 70 | E 1,447 |
| March | E 2,077 | E 335 | E 31 | E 7 | E 1,704 | E 79 | E 1,625 |
| April | E 1,985 | E 314 | E 30 | E 7 | E 1,634 | E 75 | E 1,558 |
| May | E 2,063 | E 318 | E 32 | E 7 | E 1,706 | E 79 | E 1,628 |
| June | E 2,002 | E 302 | E 31 | E 7 | E 1,663 | E 77 | E 1,586 |
| July | E 2,040 | E 280 | E 32 | E 7 | E 1,720 | E 79 | E 1,641 |
| August | E 2,039 | E 298 | E 31 | E 7 | E 1,702 | E 79 | E 1,624 |
| September | E 1,901 | E 278 | E 30 | E 7 | E 1,586 | E 73 | E 1,513 |
| October | E 1,985 | E 317 | E 32 | E 7 | E 1,629 | E 75 | E 1,554 |
| November | E 2,010 | E 285 | E 32 | E 7 | E 1,685 | E 78 | E 1,608 |
| December | E 2,104 | E 340 | E 33 | E 7 | E 1,724 | E 80 | E 1,644 |
| Total | E 24,130 | E 3,699 | E 378 | E 84 | E 19,969 | E 922 | E 19,047 |
| 2003 January | RE 2,111 | RE 332 | E 33 | E 7 | RE 1,739 | E 80 | RE 1,659 |
| February | RE 1,894 | RE 298 | RE 29 | RE 6 | RE 1,560 | RE 72 | RE 1,488 |
| March | RF 2,140 | RF 314 | RF 44 | F 9 | RF 1,773 | RF 87 | RF 1,686 |
| April | F 2,065 | F 302 | F 42 | F 9 | F 1,711 | F 86 | F 1,625 |
| 4-Month Total | E 8,210 | E 1,247 | E 149 | E 32 | E 6,783 | E 326 | E 6,457 |
| 2002 4-Month Total | E 7,986 | E 1,280 | E 125 | E 28 | E 6,553 | E 303 | E 6,250 |
| 2001 4-Month Total | 8,174 | 1,130 | 157 | 30 | 6,857 | 317 | 6,540 |

^a Gas withdrawn from gas and oil wells.
^b The injection of natural gas into oil and gas formations for pressure maintenance and cycling purposes.
^c See Note 6 at end of section.
^d Vented: Natural gas released into the air on the base site or at processing plants. Flared: Natural gas burned in flares on the base site or at gas processing plants.
^e "Gross Withdrawals" minus "Repressuring," "Nonhydrocarbon Gases Removed," and "Vented and Flared." See Note 7 at end of section.
^f See Note 8 at end of section.

^g "Marketed Production (Wet)" minus "Extraction Loss."
^h May include unknown quantities of nonhydrocarbon gases.
R=Revised. NA=Not available. E=Estimate. F=Forecast.
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: <http://www.eia.doe.gov/emeu/mer/natgas.html>.
Sources: • 1973-1996: Energy Information Administration (EIA), *Natural Gas Annual 2000*, Table 93. • 1997 forward: EIA, *Natural Gas Monthly*, May 2003, Table 1. • Forecast values: EIA, Short-Term Integrated Forecasting System. See Note 10 at end of section.

Table 4.3 Natural Gas Trade by Country
(Billion Cubic Feet)

| | Imports | | | | | | | | Exports | | | |
|--------------------|----------------------|------------------------|---------------------|---------------------|--------------------|----------------------------------|--------------------|---------|---------------------|--------------------|---------------------|-------|
| | Algeria ^a | Australia ^a | Canada ^b | Mexico ^b | Qatar ^a | Trinidad and Tobago ^a | Other ^c | Total | Canada ^b | Japan ^a | Mexico ^b | Total |
| 1973 Total | 3 | 0 | 1,028 | 2 | 0 | 0 | 0 | 1,033 | 15 | 48 | 14 | 77 |
| 1974 Total | 0 | 0 | 959 | (s) | 0 | 0 | 0 | 959 | 13 | 50 | 13 | 77 |
| 1975 Total | 5 | 0 | 948 | 0 | 0 | 0 | 0 | 953 | 10 | 53 | 9 | 73 |
| 1976 Total | 10 | 0 | 954 | 0 | 0 | 0 | 0 | 964 | 8 | 50 | 7 | 65 |
| 1977 Total | 11 | 0 | 997 | 2 | 0 | 0 | 0 | 1,011 | (s) | 52 | 4 | 56 |
| 1978 Total | 84 | 0 | 881 | 0 | 0 | 0 | 0 | 966 | (s) | 48 | 4 | 53 |
| 1979 Total | 253 | 0 | 1,001 | 0 | 0 | 0 | 0 | 1,253 | (s) | 51 | 4 | 56 |
| 1980 Total | 86 | 0 | 797 | 102 | 0 | 0 | 0 | 985 | (s) | 45 | 4 | 49 |
| 1981 Total | 37 | 0 | 762 | 105 | 0 | 0 | 0 | 904 | (s) | 56 | 3 | 59 |
| 1982 Total | 55 | 0 | 783 | 95 | 0 | 0 | 0 | 933 | (s) | 50 | 2 | 52 |
| 1983 Total | 131 | 0 | 712 | 75 | 0 | 0 | 0 | 918 | (s) | 53 | 2 | 55 |
| 1984 Total | 36 | 0 | 755 | 52 | 0 | 0 | 0 | 843 | (s) | 53 | 2 | 55 |
| 1985 Total | 24 | 0 | 926 | 0 | 0 | 0 | 0 | 950 | (s) | 53 | 2 | 55 |
| 1986 Total | 0 | 0 | 749 | 0 | 0 | 0 | 2 | 750 | 9 | 50 | 2 | 61 |
| 1987 Total | 0 | 0 | 993 | 0 | 0 | 0 | 0 | 993 | 3 | 49 | 2 | 54 |
| 1988 Total | 17 | 0 | 1,276 | 0 | 0 | 0 | 0 | 1,294 | 20 | 52 | 2 | 74 |
| 1989 Total | 42 | 0 | 1,339 | 0 | 0 | 0 | 0 | 1,382 | 38 | 51 | 17 | 107 |
| 1990 Total | 84 | 0 | 1,448 | 0 | 0 | 0 | 0 | 1,532 | 17 | 53 | 16 | 86 |
| 1991 Total | 64 | 0 | 1,710 | 0 | 0 | 0 | 0 | 1,773 | 15 | 54 | 60 | 129 |
| 1992 Total | 43 | 0 | 2,094 | 0 | 0 | 0 | 0 | 2,138 | 68 | 53 | 96 | 216 |
| 1993 Total | 82 | 0 | 2,267 | 2 | 0 | 0 | 0 | 2,350 | 45 | 56 | 40 | 140 |
| 1994 Total | 51 | 0 | 2,566 | 7 | 0 | 0 | 0 | 2,624 | 53 | 63 | 47 | 162 |
| 1995 Total | 18 | 0 | 2,816 | 7 | 0 | 0 | 0 | 2,841 | 28 | 65 | 61 | 154 |
| 1996 Total | 35 | 0 | 2,883 | 14 | 0 | 0 | 5 | 2,937 | 52 | 68 | 34 | 153 |
| 1997 Total | 66 | 10 | 2,899 | 17 | 0 | 0 | 2 | 2,994 | 56 | 62 | 38 | 157 |
| 1998 Total | 69 | 12 | 3,052 | 15 | 0 | 0 | 5 | 3,152 | 40 | 66 | 53 | 159 |
| 1999 Total | 76 | 12 | 3,368 | 55 | 20 | 51 | 5 | 3,586 | 39 | 64 | 61 | 163 |
| 2000 Total | 47 | 6 | 3,544 | 12 | 46 | 99 | 28 | 3,782 | 73 | 66 | 106 | 244 |
| 2001 January | 5 | 0 | 352 | 2 | 0 | 11 | 2 | 373 | 12 | 6 | 8 | 26 |
| February | 8 | 0 | 305 | 1 | 0 | 7 | 8 | 328 | 15 | 4 | 8 | 27 |
| March | 8 | 0 | 333 | 1 | 2 | 11 | 3 | 358 | 19 | 6 | 7 | 32 |
| April | 5 | 0 | 294 | 2 | 2 | 8 | 7 | 319 | 13 | 6 | 5 | 24 |
| May | 8 | 0 | 295 | (s) | 5 | 10 | 5 | 322 | 13 | 6 | 10 | 29 |
| June | 4 | 0 | 291 | 0 | 3 | 10 | 9 | 317 | 10 | 4 | 11 | 25 |
| July | 8 | 1 | 339 | 0 | 5 | 7 | 5 | 365 | 10 | 6 | 15 | 31 |
| August | 5 | 1 | 334 | 0 | 0 | 8 | 5 | 353 | 8 | 6 | 16 | 29 |
| September | 5 | 0 | 293 | 0 | 5 | 5 | 7 | 315 | 10 | 6 | 18 | 34 |
| October | 2 | 0 | 314 | 0 | 0 | 9 | 0 | 326 | 11 | 8 | 16 | 34 |
| November | 3 | 0 | 283 | (s) | 0 | 5 | 0 | 291 | 21 | 6 | 16 | 42 |
| December | 5 | 0 | 294 | 3 | 0 | 8 | 0 | 310 | 25 | 6 | 11 | 42 |
| Total | 65 | 2 | 3,729 | 10 | 23 | 98 | 50 | 3,977 | 167 | 66 | 141 | 373 |
| 2002 January | 3 | 0 | 334 | 1 | 0 | 5 | 0 | 343 | 16 | 6 | 13 | 34 |
| February | 0 | 0 | 297 | 1 | 0 | 8 | 0 | 305 | 16 | 4 | 11 | 30 |
| March | 0 | 0 | 322 | 0 | 0 | 10 | 0 | 332 | 14 | 6 | 18 | 38 |
| April | 2 | 0 | 297 | 0 | 5 | 10 | 0 | 315 | 13 | 7 | 19 | 39 |
| May | 7 | 0 | 291 | 0 | 6 | 10 | 5 | 319 | 15 | 2 | 23 | 39 |
| June | 5 | 0 | 292 | 0 | 14 | 7 | 0 | 317 | 14 | 6 | 25 | 45 |
| July | 5 | 0 | 323 | 0 | 5 | 11 | 0 | 344 | 12 | 6 | 28 | 45 |
| August | 0 | 0 | 331 | 0 | 3 | 16 | 6 | 355 | 12 | 6 | 29 | 47 |
| September | 0 | 0 | 318 | 0 | 3 | 14 | 0 | 335 | 13 | 6 | 28 | 47 |
| October | 0 | 0 | 315 | 0 | 0 | 22 | 5 | 343 | 10 | 6 | 26 | 42 |
| November | 3 | 0 | 308 | 0 | 0 | 19 | 0 | 330 | 28 | 6 | 21 | 55 |
| December | 3 | 0 | 349 | 0 | 0 | 18 | 0 | 369 | 26 | 6 | 23 | 55 |
| Total | 27 | 0 | 3,777 | 2 | 35 | 151 | 16 | 4,008 | 189 | 63 | 263 | 516 |
| 2003 January | 0 | 0 | 345 | E 1 | 0 | 21 | 0 | E 367 | 18 | 4 | E 23 | E 45 |
| February | 0 | 0 | 284 | E 0 | 0 | 21 | 0 | E 305 | 32 | 6 | E 23 | E 61 |
| March | 3 | 0 | 295 | E 0 | 2 | 26 | 0 | RE 326 | 42 | 6 | E 23 | RE 70 |
| April | NA | NA | NA | NA | NA | NA | NA | F 334 | NA | NA | NA | F 59 |
| 4-Month Total | NA | NA | NA | NA | NA | NA | NA | E 1,332 | NA | NA | NA | E 235 |
| 2002 4-Month Total | 5 | 0 | 1,250 | 2 | 5 | 33 | 0 | 1,295 | 59 | 22 | 61 | 142 |
| 2001 4-Month Total | 25 | 0 | 1,285 | 7 | 5 | 36 | 19 | 1,378 | 59 | 20 | 29 | 108 |

^a As liquefied natural gas.

^b By pipeline, except for very small amounts of liquefied natural gas imported from Canada in 1973, 1977, and 1981 and exported to Mexico beginning in 1998. See Note 9 at end of section.

^c Indonesia 1986 and 2000; the United Arab Emirates 1996-2001; Malaysia 1999 and 2002; Nigeria 2000-2002; Oman 2000-2002; and Brunei 2002.

R=Revised. NA=Not available. E=Estimate. F=Forecast. (s)=Less than 500 million cubic feet.

Notes: • See Note 9 at end of section. • Totals may not equal sum of

components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/natgas.html>.

Sources: • 1973-1994: Energy Information Administration (EIA), Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas."

• 1995-February 2003: EIA, *Natural Gas Monthly*, April 2003, Tables 5 and 6; and Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports." Forecast values: EIA, Short-Term Integrated Forecasting System. See Note 10 at end of section.

Table 4.4 Natural Gas Consumption by Sector
(Billion Cubic Feet)

| | End-Use Sectors | | | | | | | | | | Electric Power Sector ^{e,f} | Total |
|--------------------|-----------------|-------------------------|----------------------|------------------|----------------------|---------|----------------|----------------------------|--------------|-------|--------------------------------------|----------|
| | Residential | Commercial ^a | Lease and Plant Fuel | Industrial | | | Transportation | | | | | |
| | | | | CHP ^b | Non-CHP ^c | Total | Total | Pipeline Fuel ^d | Vehicle Fuel | Total | | |
| | | | | | | | | | | | | |
| 1973 Total | 4,879 | 2,597 | 1,496 | (g) | 8,689 | 8,689 | 10,185 | 728 | NA | 728 | 3,660 | 22,049 |
| 1974 Total | 4,786 | 2,556 | 1,477 | (g) | 8,292 | 8,292 | 9,769 | 669 | NA | 669 | 3,443 | 21,223 |
| 1975 Total | 4,924 | 2,508 | 1,396 | (g) | 6,968 | 6,968 | 8,365 | 583 | NA | 583 | 3,158 | 19,538 |
| 1976 Total | 5,051 | 2,668 | 1,634 | (g) | 6,964 | 6,964 | 8,598 | 548 | NA | 548 | 3,081 | 19,946 |
| 1977 Total | 4,821 | 2,501 | 1,659 | (g) | 6,815 | 6,815 | 8,474 | 533 | NA | 533 | 3,191 | 19,521 |
| 1978 Total | 4,903 | 2,601 | 1,648 | (g) | 6,757 | 6,757 | 8,405 | 530 | NA | 530 | 3,188 | 19,627 |
| 1979 Total | 4,965 | 2,786 | 1,499 | (g) | 6,899 | 6,899 | 8,398 | 601 | NA | 601 | 3,491 | 20,241 |
| 1980 Total | 4,752 | 2,611 | 1,026 | (g) | 7,172 | 7,172 | 8,198 | 635 | NA | 635 | 3,682 | 19,877 |
| 1981 Total | 4,546 | 2,520 | 928 | (g) | 7,128 | 7,128 | 8,055 | 642 | NA | 642 | 3,640 | 19,404 |
| 1982 Total | 4,633 | 2,606 | 1,109 | (g) | 5,831 | 5,831 | 6,941 | 596 | NA | 596 | 3,226 | 18,001 |
| 1983 Total | 4,381 | 2,433 | 978 | (g) | 5,643 | 5,643 | 6,621 | 490 | NA | 490 | 2,911 | 16,835 |
| 1984 Total | 4,555 | 2,524 | 1,077 | (g) | 6,154 | 6,154 | 7,231 | 529 | NA | 529 | 3,111 | 17,951 |
| 1985 Total | 4,433 | 2,432 | 966 | (g) | 5,901 | 5,901 | 6,867 | 504 | NA | 504 | 3,044 | 17,281 |
| 1986 Total | 4,314 | 2,318 | 923 | (g) | 5,579 | 5,579 | 6,502 | 485 | NA | 485 | 2,602 | 16,221 |
| 1987 Total | 4,315 | 2,430 | 1,149 | (g) | 5,953 | 5,953 | 7,103 | 519 | NA | 519 | 2,844 | 17,211 |
| 1988 Total | 4,630 | 2,670 | 1,096 | (g) | 6,383 | 6,383 | 7,479 | 614 | NA | 614 | 2,636 | 18,030 |
| 1989 Total | 4,781 | 2,718 | 1,070 | 914 | 5,903 | 5,903 | 7,886 | 629 | NA | 629 | 3,105 | 19,119 |
| 1990 Total | 4,391 | 2,623 | 1,236 | 1,055 | 5,963 | 5,963 | 8,255 | 660 | (s) | 660 | 3,245 | 19,174 |
| 1991 Total | 4,556 | 2,729 | 1,129 | 1,061 | 6,170 | 6,170 | 8,360 | 601 | (s) | 601 | 3,316 | 19,562 |
| 1992 Total | 4,690 | 2,803 | 1,171 | 1,107 | 6,420 | 6,420 | 8,698 | 588 | 2 | 590 | 3,448 | 20,228 |
| 1993 Total | 4,956 | 2,862 | 1,172 | 1,124 | 6,576 | 7,700 | 8,872 | 624 | 3 | 627 | 3,473 | 20,790 |
| 1994 Total | 4,848 | 2,895 | 1,124 | 1,176 | 6,613 | 7,790 | 8,913 | 685 | 3 | 689 | 3,903 | 21,247 |
| 1995 Total | 4,850 | 3,031 | 1,220 | 1,258 | 6,906 | 8,164 | 9,384 | 700 | 5 | 705 | 4,237 | 22,207 |
| 1996 Total | 5,241 | 3,158 | 1,250 | 1,289 | 7,146 | 8,435 | 9,685 | 711 | 6 | 718 | 4,807 | 22,610 |
| 1997 Total | 4,984 | 3,215 | 1,203 | 1,282 | 7,229 | 8,511 | 9,714 | 751 | 8 | 760 | 4,065 | 22,737 |
| 1998 Total | 4,520 | 2,999 | 1,173 | 1,355 | 6,965 | 8,320 | 9,493 | 635 | 9 | 645 | 4,588 | 22,246 |
| 1999 Total | 4,726 | 3,045 | 1,079 | 1,401 | 6,678 | 8,079 | 9,159 | 645 | 12 | 657 | 4,820 | 22,406 |
| 2000 Total | 4,996 | 3,218 | 1,151 | 1,386 | 6,757 | 8,142 | 9,293 | 642 | 13 | 655 | 5,206 | 23,368 |
| 2001 January | 977 | 503 | 93 | 111 | 573 | 684 | 778 | 76 | E 1 | 77 | 340 | 2,676 |
| February | 781 | 425 | 85 | 98 | 541 | 640 | 724 | 66 | E 1 | 67 | 313 | 2,310 |
| March | 682 | 378 | 95 | 108 | 559 | 667 | 762 | 64 | E 1 | 65 | 363 | 2,250 |
| April | 401 | 257 | 90 | 101 | 522 | 623 | 713 | 51 | E 1 | 52 | 384 | 1,807 |
| May | 209 | 165 | 92 | 103 | 476 | 579 | 672 | 42 | E 1 | 43 | 434 | 1,524 |
| June | 147 | 136 | 89 | 105 | 434 | 539 | 628 | 40 | E 1 | 41 | 493 | 1,445 |
| July | 124 | 131 | 91 | 114 | 458 | 572 | 663 | 44 | E 1 | 46 | 634 | 1,598 |
| August | 117 | 134 | 92 | 119 | 474 | 592 | 684 | 47 | E 1 | 48 | 687 | 1,670 |
| September | 128 | 144 | 89 | 112 | 468 | 581 | 669 | 41 | E 1 | 43 | 510 | 1,494 |
| October | 239 | 186 | 93 | 114 | 506 | 621 | 713 | 46 | E 1 | 47 | 466 | 1,651 |
| November | 361 | 232 | 89 | 109 | 511 | 620 | 709 | 48 | E 1 | 49 | 351 | 1,701 |
| December | 610 | 347 | 92 | 116 | 529 | 645 | 736 | 60 | E 1 | 61 | 367 | 2,122 |
| Total | 4,776 | 3,037 | 1,089 | 1,310 | 6,053 | 7,363 | 8,452 | 624 | 15 | 638 | 5,342 | 22,246 |
| 2002 January | R 823 | R 432 | E 90 | 112 | R 548 | R 661 | R 750 | 69 | E 1 | 70 | 377 | R 2,452 |
| February | R 706 | R 392 | E 80 | 101 | R 503 | R 604 | R 684 | 61 | E 1 | 62 | 341 | R 2,187 |
| March | 666 | R 372 | E 90 | 111 | R 517 | R 628 | R 718 | 62 | E 1 | R 64 | 400 | R 2,219 |
| April | 419 | R 264 | E 86 | 100 | R 515 | R 615 | R 701 | 51 | E 1 | 53 | 399 | R 1,836 |
| May | R 258 | R 190 | E 90 | 107 | R 477 | R 585 | R 674 | 44 | E 1 | R 46 | 410 | R 1,579 |
| June | R 163 | R 150 | E 88 | 108 | R 459 | R 566 | R 654 | 44 | E 1 | 45 | 541 | R 1,553 |
| July | R 127 | R 135 | E 91 | 121 | R 462 | R 583 | R 674 | 48 | E 1 | 49 | 725 | R 1,711 |
| August | 117 | R 139 | E 90 | 119 | R 467 | R 586 | R 675 | 47 | E 1 | 48 | 691 | R 1,671 |
| September | 125 | R 143 | E 84 | 111 | R 440 | R 551 | R 634 | 42 | E 1 | 43 | 555 | 1,500 |
| October | 250 | R 196 | E 86 | 100 | R 492 | R 593 | R 678 | 45 | E 1 | 46 | 436 | 1,607 |
| November | 489 | R 295 | E 89 | 95 | R 493 | R 589 | R 678 | 52 | E 1 | 53 | 337 | R 1,851 |
| December | R 771 | R 405 | E 91 | 92 | R 525 | R 617 | R 708 | 64 | E 1 | 65 | 340 | 2,290 |
| Total | R 4,914 | R 3,114 | E 1,053 | 1,278 | 5,898 | R 7,177 | R 8,229 | R 630 | E 15 | R 645 | 5,553 | R 22,455 |
| 2003 January | 946 | R 492 | RE 92 | 106 | R 543 | R 649 | R 740 | 73 | E 1 | R 75 | 367 | R 2,620 |
| February | R 884 | R 469 | R 82 | R 93 | R 518 | R 611 | R 693 | R 69 | E 1 | R 70 | R 329 | R 2,445 |
| March | RF 684 | RF 385 | RF 92 | RF 113 | RF 526 | RF 639 | RF 731 | RF 67 | E 1 | RF 69 | RF 388 | RF 2,257 |
| April | F 412 | F 268 | F 88 | F 98 | F 510 | F 608 | F 697 | F 56 | E 1 | E 58 | F 361 | F 1,795 |
| 4-Month Total | E 2,926 | E 1,613 | E 354 | E 410 | E 2,097 | E 2,507 | E 2,861 | E 266 | E 5 | E 271 | E 1,445 | E 9,116 |
| 2002 4-Month Total | 2,614 | 1,461 | 345 | 424 | 2,084 | 2,508 | 2,853 | 244 | E 5 | 249 | 1,517 | 8,694 |
| 2001 4-Month Total | 2,841 | 1,561 | 363 | 418 | 2,197 | 2,614 | 2,977 | 256 | E 5 | 261 | 1,400 | 9,041 |

^a All commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See note at end of Section 7. See Table 7.3c for CHP fuel use.
^b Industrial combined-heat-and-power (CHP) and a small number of industrial electricity-only plants. See note at end of Section 7.
^c All industrial sector fuel use other than that in "Lease and Plant Fuel" and "CHP."
^d Natural gas consumed in the operation of pipelines, primarily in compressors.
^e The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.
^f Through 1988, data are for consumption at electric utilities only. Beginning in 1989, data also include consumption at independent power producers.
^g Included in "Non-CHP."
^h For 1989-1992, a small amount of consumption at independent power producers may be counted in both "Other Industrial" and "Electric Power Sector." See Note 5 at end of section.
 R=Revised. E=Estimate. NA=Not available. F=Forecast. (s)=Less than 500 million cubic feet.
 Notes: • Natural gas includes supplemental gaseous fuels. • Totals may not equal sum of

components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
 Web Page: <http://www.eia.doe.gov/emeu/mer/natgas.html>.
 Sources: • Residential, Commercial, Lease and Plant Fuel, and Pipeline Fuel: 1973-1996: Energy Information Administration (EIA), *Natural Gas Annual (NGA) 2000*, Table 95. 1997 forward: EIA, *Natural Gas Monthly (NGM)*, May 2003, Table 3. • Other Industrial Total: 1973-1992: EIA, *NGA 2000*, Table 95. 1993-1996: EIA, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers." 1997 forward: EIA, *Natural Gas Monthly (NGM)*, May 2003, Table 3. • Other Industrial CHP: Table 7.3c. • Electric Power Sector: 1973-1988: Table 7.3e. 1989 forward: Table 7.3b. • Vehicle Fuel: Annual Data, 1990 and 1991: EIA, *NGA 2000*, Table 95. 1992-1995: Science Applications International Corporation, "Alternative Transportation Fuels and Vehicles Data Development," unpublished final report prepared for EIA (McLean, VA, July 1996) and U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy. 1996-2002: EIA, Office of Coal, Nuclear, Electric, and Alternate Fuels. Monthly Estimates: Derived by dividing the annual value by the number of days in the year and then multiplying by the number of days in the month. • All Other Series: Calculated. • Forecast values: EIA, Short-Term Integrated Forecasting System.

Table 4.5 Natural Gas in Underground Storage
(Volumes in Billion Cubic Feet)

| | Natural Gas in Underground Storage, End of Period | | | Change in Working Gas From Same Period Previous Year | | Storage Activity | | |
|---------------------------|---|------------------|--------------------|--|--------------------|--------------------------|-------------------------|-------------------|
| | Base Gas | Working Gas | Total ^a | Volume | Percent | Withdrawals ^b | Injections ^b | Net ^c |
| 1973 Total | 2,864 | 2,034 | 4,898 | 305 | 17.6 | 1,533 | 1,974 | -442 |
| 1974 Total | 2,912 | 2,050 | 4,962 | 16 | .8 | 1,701 | 1,784 | -84 |
| 1975 Total | 3,162 | 2,212 | 5,374 | 162 | 7.9 | 1,760 | 2,104 | -344 |
| 1976 Total | 3,323 | 1,926 | 5,250 | -286 | -12.9 | 1,921 | 1,756 | 165 |
| 1977 Total | 3,391 | 2,475 | 5,866 | 549 | 28.5 | 1,750 | 2,307 | -557 |
| 1978 Total | 3,473 | 2,547 | 6,020 | 72 | 2.9 | 2,158 | 2,278 | -120 |
| 1979 Total | 3,553 | 2,753 | 6,306 | 207 | 8.1 | 2,047 | 2,295 | -248 |
| 1980 Total | 3,642 | 2,655 | 6,297 | -99 | -3.6 | 1,910 | 1,896 | 14 |
| 1981 Total | 3,752 | 2,817 | 6,569 | 162 | 6.1 | 1,887 | 2,180 | -293 |
| 1982 Total | 3,808 | 3,071 | 6,879 | 255 | 9.0 | 2,094 | 2,399 | -306 |
| 1983 Total | 3,847 | 2,595 | 6,442 | -476 | -15.5 | 2,142 | 1,700 | 442 |
| 1984 Total | 3,830 | 2,876 | 6,706 | 281 | 10.8 | 2,064 | 2,252 | -188 |
| 1985 Total | 3,842 | 2,607 | 6,448 | -270 | -9.4 | 2,359 | 2,128 | 231 |
| 1986 Total | 3,819 | 2,749 | 6,567 | 142 | 5.5 | 1,812 | 1,952 | -140 |
| 1987 Total | 3,792 | 2,756 | 6,548 | 7 | .3 | 1,881 | 1,887 | -6 |
| 1988 Total | 3,800 | 2,850 | 6,650 | 94 | 3.4 | 2,244 | 2,174 | 69 |
| 1989 Total | 3,812 | 2,513 | 6,325 | -337 | -11.8 | 2,804 | 2,491 | 313 |
| 1990 Total | 3,868 | 3,068 | 6,936 | 555 | 22.1 | 1,934 | 2,433 | -499 |
| 1991 Total | 3,954 | 2,824 | 6,778 | -244 | -8.0 | 2,689 | 2,608 | 80 |
| 1992 Total | 4,044 | 2,597 | 6,641 | -227 | -8.0 | 2,724 | 2,555 | 168 |
| 1993 Total | 4,327 | 2,322 | 6,649 | -275 | -10.6 | 2,717 | 2,760 | -43 |
| 1994 Total | 4,360 | 2,606 | 6,966 | 284 | 12.2 | 2,508 | 2,796 | -288 |
| 1995 Total | 4,349 | 2,153 | 6,503 | -453 | -17.4 | 2,974 | 2,566 | 408 |
| 1996 Total | 4,341 | 2,173 | 6,513 | 19 | .9 | 2,911 | 2,906 | 6 |
| 1997 Total | 4,350 | 2,175 | 6,525 | 2 | .1 | 2,824 | 2,800 | 24 |
| 1998 Total | 4,326 | 2,730 | 7,056 | 554 | 25.5 | 2,379 | 2,905 | -526 |
| 1999 Total | 4,383 | 2,523 | 6,906 | -207 | -7.6 | 2,772 | 2,598 | 174 |
| 2000 Total | 4,352 | 1,719 | 6,071 | -806 | -31.9 | 3,498 | 2,684 | 814 |
| 2001 January | 4,344 | 1,265 | 5,609 | -495 | -28.1 | 588 | 92 | 496 |
| February | 4,328 | 912 | 5,241 | -391 | -30.0 | 414 | 74 | 339 |
| March | 4,300 | 742 | 5,042 | -412 | -35.7 | 298 | 116 | 183 |
| April | 4,261 | 992 | 5,253 | -210 | -17.5 | 70 | 349 | -279 |
| May | 4,309 | 1,440 | 5,749 | 7 | .5 | 41 | 520 | -479 |
| June | 4,310 | 1,882 | 6,193 | 165 | 9.6 | 49 | 490 | -441 |
| July | 4,315 | 2,261 | 6,576 | 258 | 12.9 | 66 | 451 | -385 |
| August | 4,313 | 2,576 | 6,889 | 377 | 17.1 | 79 | 386 | -307 |
| September | 4,318 | 2,944 | 7,262 | 450 | 18.0 | 41 | 413 | -372 |
| October | 4,310 | 3,144 | 7,454 | 412 | 15.1 | 93 | 282 | -190 |
| November | 4,301 | 3,254 | 7,555 | 812 | 33.2 | 138 | 210 | -73 |
| December | 4,301 | 2,904 | 7,204 | 1,185 | 68.9 | 432 | 80 | 352 |
| Total | 4,301 | 2,904 | 7,204 | 1,185 | 68.9 | 2,309 | 3,464 | -1,156 |
| 2002 January | 4,313 | 2,344 | 6,657 | 1,078 | 85.2 | 605 | 59 | 546 |
| February | 4,356 | 1,838 | 6,194 | 925 | 101.4 | 517 | 55 | 462 |
| March | 4,355 | 1,518 | 5,873 | 776 | 104.7 | 425 | 105 | 320 |
| April | 4,355 | 1,659 | 6,014 | 666 | 67.1 | 111 | 237 | -126 |
| May | 4,361 | 1,968 | 6,329 | 528 | 36.7 | 58 | 381 | -323 |
| June | 4,355 | 2,308 | 6,663 | 426 | 22.6 | 56 | 395 | -339 |
| July | 4,358 | 2,539 | 6,896 | 278 | 12.3 | 101 | 341 | -239 |
| August | 4,357 | 2,773 | 7,130 | 198 | 7.7 | 89 | 322 | -234 |
| September | 4,342 | 3,042 | 7,384 | 97 | 3.3 | 72 | 364 | -292 |
| October | 4,342 | 3,116 | 7,458 | -28 | -9 | 145 | 229 | -84 |
| November | 4,344 | 2,929 | 7,273 | -325 | -10.0 | 322 | 124 | 198 |
| December | 4,340 | 2,375 | 6,715 | -528 | -18.2 | 624 | 66 | 558 |
| Total | 4,340 | 2,375 | 6,715 | -528 | -18.2 | 3,126 | 2,679 | 447 |
| 2003 January | 4,342 | 1,534 | 5,876 | -810 | -34.5 | 886 | 44 | 841 |
| February | 4,334 | 864 | 5,198 | -974 | -53.0 | 723 | 48 | 676 |
| March | ^R 4,324 | ^R 735 | ^R 5,059 | ^R -783 | ^R -51.6 | ^R 303 | ^R 169 | ^R 134 |
| April | ^F 4,340 | ^F 803 | ^F 5,143 | ^F -855 | ^F -51.6 | ^F 120 | ^F 255 | ^F -135 |

^a For total underground storage capacity at the end of each calendar year, see Note 8 at end of section.

^b For 1980-2001, data differ from those shown on Table 4.1, which includes liquefied natural gas storage for that period.

^c Positive numbers indicate that withdrawals are greater than injections. Negative numbers indicate that injections are greater than withdrawals. Net withdrawals or injections may not equal the difference between applicable

ending stocks. See Note 2 at end of section.

R=Revised. F=Forecast.

Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/natgas.html>.

Sources: See end of section.

Natural Gas

Note 1. Supplemental Gaseous Fuels: Any gaseous substance that, introduced into or commingled with natural gas, increases the volume available for disposition. Such substances include, but are not limited to, propane-air, refinery gas, coke oven gas, still gas, manufactured gas, biomass gas, or air or inert gases added for Btu stabilization.

Annual data beginning with 1980 are from the Energy Information Administration (EIA) *Natural Gas Annual (NGA)*. Unknown quantities of supplemental gaseous fuels are included in consumption data for 1979 and earlier years.

Monthly data are considered preliminary until after the publication of the EIA *NGA*. Monthly estimates are based on the annual ratio of supplemental gaseous fuels to the sum of dry gas production, net imports, and net withdrawals from storage. The ratio is applied to the monthly sum of the three elements to compute a monthly supplemental gaseous fuels figure.

Note 2. Storage: Gas in storage at the end of a reporting period may not equal the quantity derived by adding or subtracting net injections or withdrawals from the quantity in storage at the end of the previous period. The difference is due to changes in the quantity of native gas included in the base gas and/or losses in base gas due to migration from storage reservoirs.

Total underground storage capacity at the end of each calendar year since 1975 (first year data were available), in billion cubic feet, was:

| | | |
|----------------|----------------|----------------|
| 1975 ... 6,280 | 1984 ... 8,043 | 1993 ... 7,989 |
| 1976 ... 6,544 | 1985 ... 8,087 | 1994 ... 8,043 |
| 1977 ... 6,678 | 1986 ... 8,145 | 1995 ... 7,953 |
| 1978 ... 6,890 | 1987 ... 8,124 | 1996 ... 7,980 |
| 1979 ... 6,929 | 1988 ... 8,124 | 1997 ... 8,332 |
| 1980 ... 7,434 | 1989 ... 8,124 | 1998 ... 8,179 |
| 1981 ... 7,805 | 1990 ... 8,125 | 1999 ... 8,229 |
| 1982 ... 7,915 | 1991 ... 7,993 | 2000 ... 8,241 |
| 1983 ... 7,985 | 1992 ... 7,932 | 2001 ... 8,415 |

Monthly underground storage data are collected from the Federal Energy Regulatory Commission (FERC) Form FERC-8 (interstate data) and EIA Form EIA-191 (intrastate data). Beginning in January 1991, all data are collected on the revised Form EIA-191. Injection and withdrawal data from the FERC-8/EIA-191 survey are adjusted to correspond to data from Form EIA-176 following publication of the EIA *NGA*.

The final monthly and annual storage and withdrawal data for 1980–2000 include both underground and liquefied natural gas (LNG) storage. Annual data on LNG additions and withdrawals are from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying the ratio to the annual LNG data.

Note 3. Balancing Item: The balancing item for natural gas represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas disposition. The differences may be due to quantities lost or to the effects of data reporting problems. Reporting problems include differences due to the net result of conversions of flow data metered at varying temperature and pressure bases and converted to a standard temperature and pressure base; the effect of variations in company accounting and billing practices; differences between billing cycle and calendar period time frames; and imbalances resulting from the merger of data reporting systems which vary in scope, format, definitions, and type of respondents.

The increase of 0.2 trillion cubic feet (Tcf) in the “Balancing Item” category in 1983, followed by a decline of 0.5 Tcf in 1984, reflected unusually large differences resulting from the use of the annual billing cycle (essentially December 15 through the following December 14) consumption data in conjunction with calendar year supply data. Record cold temperatures during the last half of December 1983 resulted in a reported 0.3 Tcf increase in net withdrawals from underground storage for peak shaving as compared with the same period in 1982, but the effect of this cold weather was reflected primarily in 1984 consumption data. For underground storage data, see Table F2 in the May 1985 Energy Information Administration (EIA) *Natural Gas Monthly NGM*, which was published in July 1985.

Note 4. Consumption: Consumption includes pipeline fuel use, lease and plant fuel use, and deliveries to consuming sectors.

Final data for series other than “Other Industrial CHP” and “Electric Power Sector” are from the EIA *NGA*. Monthly data are considered preliminary until after publication of the EIA *NGA*. For more detailed information on the methods of estimating preliminary and final monthly data, see the EIA *NGM*.

Note 5. Consumption, 1989-1992: Prior to 1993, deliveries to nonutility generators were not separately collected from natural gas companies on Form EIA-176, “Annual Report of Natural and Supplemental Gas Supply and Disposition.” As a result, for 1989 through 1992, those volumes are probably included in both the industrial and electric power sectors and double-counted in total consumption. In 1993, 0.28 trillion cubic feet was reported as delivered to nonutility generators.

Note 6. Nonhydrocarbon Gases Removed: Annual data on nonhydrocarbon gases removed from marketed production—carbon dioxide, helium, hydrogen sulfide, and nitrogen—are from the EIA *NGA*. Data are not available prior to 1980. Monthly data are reported by three States and computed for six States. Monthly data are preliminary until after publication of the EIA *NGA*. Differences between annual data published in the EIA *NGA* and the sum of the preliminary monthly data (January–December) are allocated proportionally to the months to create final monthly data. For further information on methods of estimating

preliminary monthly data, see the EIA *NGM*.

Note 7. Production.

Annual data—Final annual data are from the EIA *NGA*.

Estimated monthly data—Data for the two most recent months presented are estimated. Some of the data for earlier months are also estimated or computed. For a discussion of computation and estimation procedures, see the EIA *NGM*.

Preliminary monthly data—Monthly data are considered preliminary until after publication of the EIA *NGA*. Preliminary monthly data are gathered from reports to the Interstate Oil Compact Commission and the U.S. Minerals Management Service. Volumetric data are converted, as necessary, to a standard 14.73 psi pressure base. Unless there are major changes, data are not revised until after publication of the EIA *NGA*.

Final monthly data—Differences between annual data in the EIA *NGA* and the sum of preliminary monthly data (January–December) are allocated proportionally to the months to create final monthly data.

Note 8. Extraction Loss: Extraction loss is the reduction in volume of natural gas resulting from the removal of natural gas liquid constituents at natural gas processing plants.

Annual data are from the EIA *NGA*, where they are estimated on the basis of the type and quantity of liquid products extracted from the gas stream and the calculated volume of such products at standard conditions. For a detailed explanation of the calculations used to derive estimated extraction losses, see the EIA *NGA*.

Preliminary monthly data are estimated on the basis of extraction loss as an annual percentage of marketed production. This percentage is applied to each month's marketed production to estimate monthly extraction loss.

Monthly data are revised and considered final after the publication of the EIA *NGA*. Final monthly data are estimated by allocating annual extraction loss data to the months on the basis of total natural gas marketed production data from the EIA *NGA*.

Note 9. Imports and Exports: The United States imports natural gas via pipeline from Canada and Mexico and imports liquefied natural gas (LNG) via tanker from Algeria, Australia, Indonesia, Nigeria, Oman, Qatar, Trinidad and Tobago, and the United Arab Emirates. In addition, very small amounts of LNG arrived from Canada in 1973 (667 million cubic feet), 1977 (572 million cubic feet), and 1981 (6 million cubic feet). The United States exports natural gas via pipeline to Canada and Mexico and exports LNG via tanker to Japan. Also, small amounts of LNG have gone to Mexico since 1998.

Annual and final monthly data are from the annual EIA Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas," which requires data to be reported by month for the calendar year.

Preliminary monthly data are EIA estimates. For a discussion of estimation procedures, see the EIA *NGM*. Preliminary data are revised after the publication of the EIA *U.S. Imports and Exports of Natural Gas*.

Note 10. Forecast Values: Data values preceded by "F" in this section are forecast values. They are derived from EIA's Short-Term Integrated Forecasting System (STIFS). The model is driven primarily by data and assumptions about key macroeconomic variables, the world oil price, and weather. The natural gas forecast relies on other variables as well, such as gas wellhead prices, electric power generation by other sources, and U.S. gas import capacity. Each month, EIA staff review the model output and make adjustments, if appropriate, based on their knowledge of developments in the natural gas industry.

The STIFS model results are published monthly in EIA's *Short-Term Energy Outlook*, which is available from the National Energy Information Center (202-586-8800) and accessible on the world wide web at <http://www.eia.doe.gov>. Documentation for the model and instructions for downloading and operating it on a personal computer are provided.

Table 4.5 Sources

Storage Activity

1973-1975: Energy Information Administration (EIA) *Natural Gas Annual 1994, Volume 2*, Table 9.

1976-1979: EIA, *Natural Gas Production and Consumption 1979*, Table 1.

1980-1995: EIA, *Historical Natural Gas Annual 1930 Through 2000*, Table 11.

1996: EIA, *Natural Gas Monthly*, February 2003, Table 9.

1997 forward: EIA, *Natural Gas Monthly*, May 2003, Table 9.

Forecast values: EIA, Short-Term Integrated Forecasting System. See Note 10 on this page.

Other Data

1973 and 1974: American Gas Association (AGA), *Gas Facts, 1972 Data*, Table 57, *Gas Facts, 1973 Data*, Table 57, and *Gas Facts, 1974 Data*, Table 40.

1975 and 1976: Federal Energy Administration (FEA), Form FEA-G318-M-O, "Underground Gas Storage Report," and Federal Power Commission (FPC), Form FPC-8, "Underground Gas Storage Report."

1977 and 1978: EIA, Form FEA-G-318-M-O, "Underground Gas Storage Report," and Federal Energy Regulatory Commission (FERC), Form FERC-8, "Underground Gas Storage Report."

1979-1995: EIA, Form EIA-191, "Underground Gas Storage Report," and FERC, Form FERC-8, "Underground Gas Storage Report."

1996: EIA, *Natural Gas Monthly*, February 2003, Table 9.

1997 forward: EIA, *Natural Gas Monthly*, May 2003, Table 9.

Forecast values: EIA, Short-Term Integrated Forecasting System. See Note 10 on this page.

Section 5. Crude Oil and Natural Gas Resource Development

The June 2003 rotary rig count was 1,067, 3 percent higher than the count in May 2003 and 27 percent higher than the count in June 2002. Of the total number of rigs in operation, 958 were onshore and 109 were offshore. For June 2003, the number of onshore rigs was up 31 percent and the number of offshore rigs was down 1 percent from the June 2002 count. Rotary rigs drilling for natural gas as a share of total rigs stood at 85 percent in June 2003.

Total footage drilled in June 2003 was 16.3 million feet, 1 percent higher than the footage drilled in May 2003 and up 44 percent from that drilled in June 2002.

The number of exploratory and development crude oil and natural gas wells drilled during June 2003 was 2,202, up 2 percent from the number drilled in May 2003 and up 24

percent from the number drilled in June 2002. The number of crude oil wells drilled was 459, and the number of natural gas wells was 1,743, 10 percent higher and 28 percent higher, respectively, than their June 2002 levels.

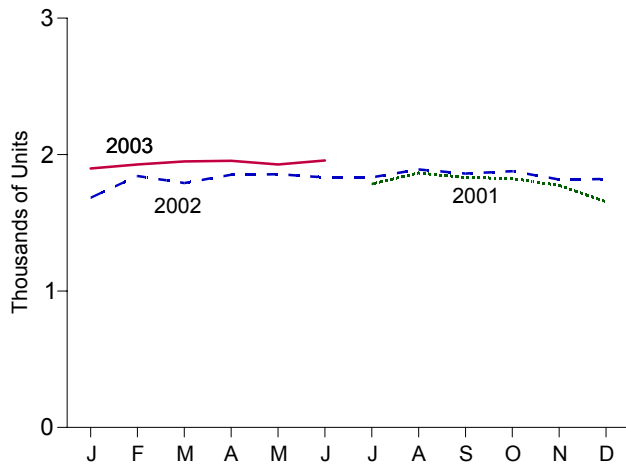
The number of dry holes drilled in June 2003 was 384, up 2 percent from the number drilled in May 2003 and up 25 percent from the number drilled in June 2002.

There were 2.0 thousand well service rigs active in June 2003, 2 percent more than the previous month and 7 percent more than the count a year ago.

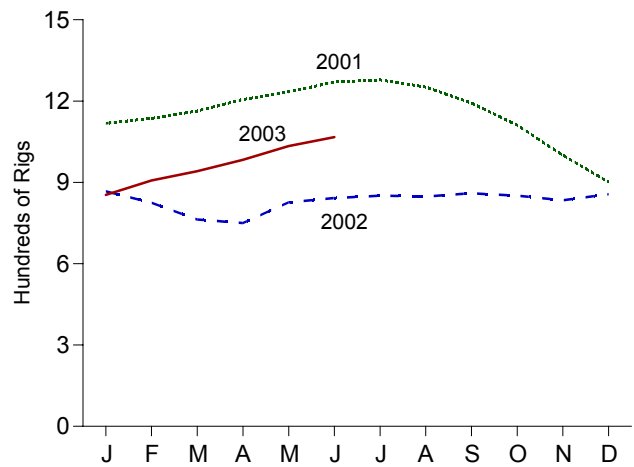
The number of seismic crews active in the 48 States onshore in June 2003 was 25, 7 fewer than a year earlier. The number of crews active in the 48 States offshore was 12, 4 fewer than a year earlier. Two crews were active in Alaska in June 2003, the same as a year ago.

Figure 5.1 Crude Oil and Natural Gas Resource Development Indicators

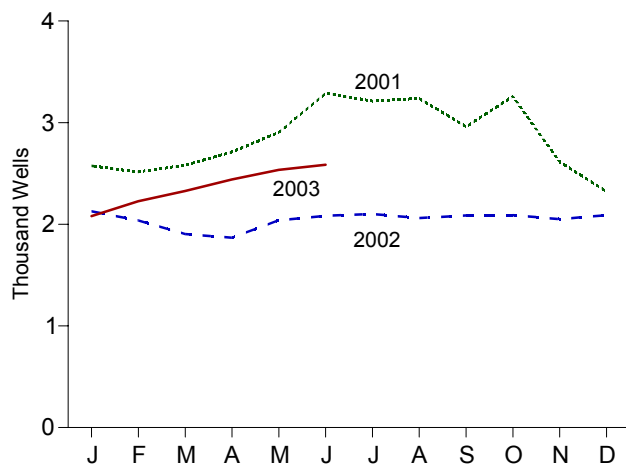
Active Well Service Rig Count



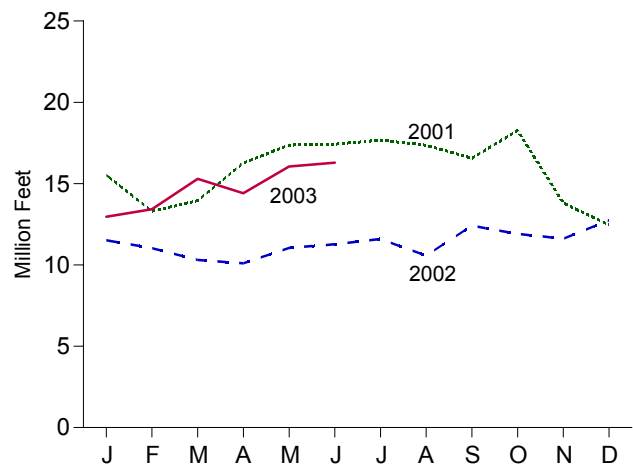
Rotary Rigs in Operation



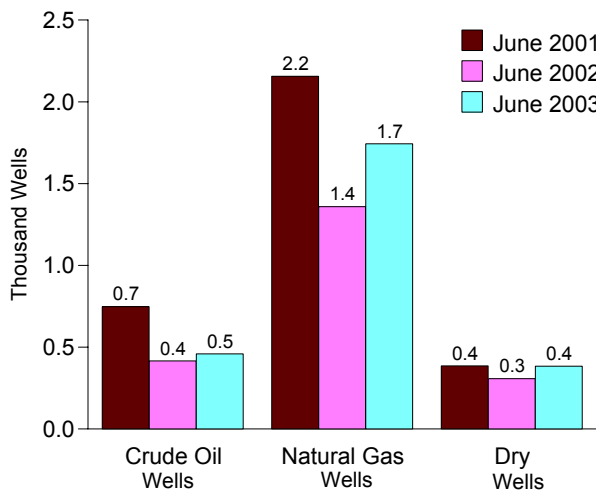
Wells Drilled



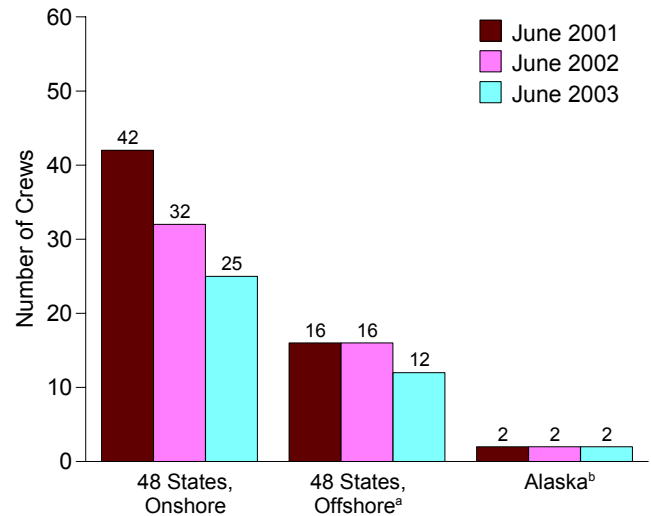
Footage Drilled



Wells Drilled by Type



Maximum U.S. Active Seismic Crew Counts



^aFederal and State Jurisdiction waters of Gulf of Mexico.
^bAll onshore.

Web Page: <http://www.eia.doe.gov/emeu/mer/resource.html>.
 Sources: Tables 5.1-5.3.

Table 5.1 Crude Oil and Natural Gas Drilling Activity Measurements

| | Rotary Rigs in Operation ^a | | | | | Total Footage Drilled ^c | Active Well Service Rig Count ^d |
|---------------------------------|---------------------------------------|------------|--------------|-------------|--------------------|------------------------------------|--|
| | By Site | | By Objective | | Total ^b | | |
| | Onshore | Offshore | Crude Oil | Natural Gas | | | |
| | Average | | | | | | |
| 1973 Average | 1,110 | 84 | NA | NA | 1,194 | 138,223 | NA |
| 1974 Average | 1,378 | 94 | NA | NA | 1,472 | 153,374 | NA |
| 1975 Average | 1,554 | 106 | NA | NA | 1,660 | 180,494 | NA |
| 1976 Average | 1,529 | 129 | NA | NA | 1,658 | 186,982 | NA |
| 1977 Average | 1,834 | 167 | NA | NA | 2,001 | 215,866 | NA |
| 1978 Average | 2,074 | 185 | NA | NA | 2,259 | 238,669 | NA |
| 1979 Average | 1,970 | 207 | NA | NA | 2,177 | 244,798 | NA |
| 1980 Average | 2,678 | 231 | NA | NA | 2,909 | 314,654 | NA |
| 1981 Average | 3,714 | 256 | NA | NA | 3,970 | 413,112 | NA |
| 1982 Average | 2,862 | 243 | NA | NA | 3,105 | 378,295 | NA |
| 1983 Average | 2,033 | 199 | NA | NA | 2,232 | 317,986 | NA |
| 1984 Average | 2,215 | 213 | NA | NA | 2,428 | 371,392 | NA |
| 1985 Average | 1,774 | 206 | NA | NA | 1,980 | 313,045 | NA |
| 1986 Average | 865 | 99 | NA | NA | 964 | 181,856 | NA |
| 1987 Average | 841 | 95 | NA | NA | 936 | 162,178 | NA |
| 1988 Average | 813 | 123 | 554 | 354 | 936 | 156,354 | NA |
| 1989 Average | 764 | 105 | 453 | 401 | 869 | 134,439 | NA |
| 1990 Average | 902 | 108 | 532 | 464 | 1,010 | 153,701 | NA |
| 1991 Average | 779 | 81 | 482 | 351 | 860 | 143,021 | NA |
| 1992 Average | 669 | 52 | 373 | 331 | 721 | 121,124 | NA |
| 1993 Average | 672 | 82 | 373 | 364 | 754 | 135,118 | NA |
| 1994 Average | 673 | 102 | 335 | 427 | 775 | 124,809 | NA |
| 1995 Average | 622 | 101 | 323 | 385 | 723 | 117,832 | NA |
| 1996 Average | 671 | 108 | 306 | 464 | 779 | 129,045 | NA |
| 1997 Average | 821 | 122 | 376 | 564 | 943 | 156,661 | NA |
| 1998 Average | 703 | 123 | 264 | 560 | 827 | 143,454 | NA |
| 1999 Average | 519 | 106 | 128 | 496 | 625 | 99,410 | NA |
| 2000 Average | 778 | 140 | 197 | 720 | 918 | 141,392 | NA |
| 2001 January | 944 | 174 | 239 | 879 | 1,118 | 15,525 | NA |
| February | 973 | 163 | 237 | 898 | 1,136 | 13,296 | NA |
| March | 996 | 167 | 248 | 913 | 1,163 | 13,953 | NA |
| April | 1,037 | 169 | 247 | 957 | 1,206 | 16,268 | NA |
| May | 1,063 | 171 | 235 | 997 | 1,234 | 17,374 | NA |
| June | 1,107 | 163 | 219 | 1,050 | 1,270 | 17,418 | NA |
| July | 1,121 | 157 | 219 | 1,058 | 1,278 | 17,672 | 1,784 |
| August | 1,105 | 147 | 219 | 1,032 | 1,252 | 17,363 | 1,865 |
| September | 1,049 | 144 | 220 | 972 | 1,193 | 16,563 | 1,832 |
| October | 978 | 133 | 198 | 913 | 1,111 | 18,264 | 1,824 |
| November | 866 | 134 | 174 | 825 | 1,000 | 13,806 | 1,774 |
| December | 778 | 123 | 147 | 754 | 901 | 12,465 | 1,654 |
| Average | 1,003 | 153 | 217 | 939 | 1,156 | 189,967 | NA |
| 2002 January | 741 | 126 | 141 | 725 | 867 | 11,513 | 1,683 |
| February | 702 | 123 | 144 | 679 | 825 | 11,031 | 1,843 |
| March | 649 | 114 | 144 | 617 | 763 | 10,303 | 1,791 |
| April | 645 | 105 | 136 | 612 | 750 | 10,102 | 1,852 |
| May | 721 | 105 | 134 | 690 | 826 | 11,039 | 1,856 |
| June | 732 | 110 | 138 | 704 | 842 | 11,274 | 1,832 |
| July | 740 | 111 | 133 | 716 | 851 | 11,590 | 1,832 |
| August | 737 | 111 | 125 | 721 | 848 | 10,576 | 1,891 |
| September | 746 | 114 | 122 | 736 | 860 | 12,410 | 1,861 |
| October | 740 | 111 | 140 | 709 | 851 | 11,907 | 1,878 |
| November | 725 | 109 | 146 | 683 | 834 | 11,612 | 1,817 |
| December | 742 | 114 | 137 | 714 | 856 | 12,747 | 1,821 |
| Average | 717 | 113 | 137 | 691 | 830 | 136,104 | 1,830 |
| 2003 January | 743 | 111 | 132 | 718 | 854 | 12,962 | 1,898 |
| February | 797 | 110 | 153 | 750 | 907 | 13,429 | 1,928 |
| March | 836 | 105 | 171 | 767 | 941 | 15,297 ^R | 1,950 |
| April | 877 | 106 | 185 | 795 | 983 | 14,409 | 1,954 |
| May | 921 | 113 | 167 | 864 | 1,034 | 16,047 | 1,927 |
| June | 958 | 109 | 152 | 910 | 1,067 | 16,287 | 1,957 |
| 6-Month Average ... | 854 | 109 | 159 | 800 | 963 | 88,431 | 1,936 |
| 2002 6-Month Average ... | 697 | 114 | 139 | 670 | 811 | 65,262 | 1,810 |
| 2001 6-Month Average ... | 1,023 | 167 | 237 | 951 | 1,190 | 93,834 | NA |

^a Rotary rigs in operation are reported weekly. Monthly data are averages of 4- or 5-week reporting periods, not calendar months. Multi-month data are averages of the reported data over the covered months, not averages of the weekly data. Annual data are averages over 52 or 53 weeks, not calendar years. Published data are rounded to the nearest whole number.

^b Sum of rigs drilling for crude oil, rigs drilling for natural gas, and other rigs (not shown) drilling for miscellaneous purposes, such as service wells, injection wells, and stratigraphic tests.

^c Values shown are totals.

^d See Glossary.

R=Revised. NA=Not available.

Note: Geographic coverage is the 50 States and the District of Columbia. Web Page: <http://www.eia.doe.gov/emeu/mer/resource.html>.

Sources: • **Rotary Rigs in Operation:** By Site - Baker Hughes, Inc., Houston, Texas, *Rotary Rigs Running--by State*. By Type - Baker Hughes, Inc., Houston, Texas, weekly phone recording. • **Total Footage Drilled:** Energy Information Administration computations, which are based on well reports submitted to the American Petroleum Institute by the Petroleum Information Corporation, Denver, Colorado. • **Active Well Service Rig Count:** Weatherford International, Inc., Houston, Texas.

Table 5.2 Crude Oil and Natural Gas Wells Drilled
(Number of Wells)

| | Exploratory | | | | Development | | | | Total | | | |
|--------------------|-------------|-------------|--------|---------|-------------|-------------|--------|----------|-----------|-------------|--------|--------|
| | Crude Oil | Natural Gas | Dry | Total | Crude Oil | Natural Gas | Dry | Total | Crude Oil | Natural Gas | Dry | Total |
| 1973 Total | 642 | 1,067 | 5,952 | 7,661 | 9,525 | 5,866 | 4,368 | 19,759 | 10,167 | 6,933 | 10,320 | 27,420 |
| 1974 Total | 859 | 1,190 | 6,833 | 8,882 | 12,788 | 5,948 | 5,283 | 24,019 | 13,647 | 7,138 | 12,116 | 32,901 |
| 1975 Total | 982 | 1,248 | 7,129 | 9,359 | 15,966 | 6,879 | 6,517 | 29,362 | 16,948 | 8,127 | 13,646 | 38,721 |
| 1976 Total | 1,086 | 1,346 | 6,772 | 9,204 | 16,602 | 8,063 | 6,986 | 31,651 | 17,688 | 9,409 | 13,758 | 40,855 |
| 1977 Total | 1,164 | 1,548 | 7,283 | 9,995 | 17,581 | 10,574 | 7,702 | 35,857 | 18,745 | 12,122 | 14,985 | 45,852 |
| 1978 Total | 1,171 | 1,771 | 7,965 | 10,907 | 18,010 | 12,642 | 8,586 | 39,238 | 19,181 | 14,413 | 16,551 | 50,145 |
| 1979 Total | 1,321 | 1,907 | 7,437 | 10,665 | 19,530 | 13,347 | 8,662 | 41,539 | 20,851 | 15,254 | 16,099 | 52,204 |
| 1980 Total | 1,764 | 2,081 | 9,039 | 12,884 | 30,875 | 15,252 | 11,599 | 57,726 | 32,639 | 17,333 | 20,638 | 70,610 |
| 1981 Total | 2,636 | 2,514 | 12,349 | 17,499 | 40,962 | 17,652 | 15,440 | 74,054 | 43,598 | 20,166 | 27,789 | 91,553 |
| 1982 Total | 2,431 | 2,125 | 11,247 | 15,803 | 36,768 | 16,854 | 14,972 | 68,594 | 39,199 | 18,979 | 26,219 | 84,397 |
| 1983 Total | 2,023 | 1,593 | 10,148 | 13,764 | 35,097 | 12,971 | 14,005 | 62,073 | 37,120 | 14,564 | 24,153 | 75,837 |
| 1984 Total | 2,198 | 1,521 | 11,278 | 14,997 | 40,407 | 15,606 | 14,403 | 70,416 | 42,605 | 17,127 | 25,681 | 85,413 |
| 1985 Total | 1,679 | 1,190 | 8,924 | 11,793 | 33,439 | 12,978 | 12,132 | 58,549 | 35,118 | 14,168 | 21,056 | 70,342 |
| 1986 Total | 1,084 | 793 | 5,549 | 7,426 | 18,013 | 7,723 | 7,129 | 32,865 | 19,097 | 8,516 | 12,678 | 40,291 |
| 1987 Total | 925 | 754 | 5,049 | 6,728 | 15,239 | 7,301 | 6,063 | 28,603 | 16,164 | 8,055 | 11,112 | 35,331 |
| 1988 Total | 855 | 743 | 4,693 | 6,291 | 12,781 | 7,812 | 5,348 | 25,941 | 13,636 | 8,555 | 10,041 | 32,232 |
| 1989 Total | 607 | 705 | 3,924 | 5,236 | 9,597 | 8,834 | 4,264 | 22,695 | 10,204 | 9,539 | 8,188 | 27,931 |
| 1990 Total | 654 | 689 | 3,715 | 5,058 | 11,544 | 10,355 | 4,598 | 26,497 | 12,198 | 11,044 | 8,313 | 31,555 |
| 1991 Total | 592 | 534 | 3,314 | 4,440 | 11,178 | 8,992 | 4,282 | 24,452 | 11,770 | 9,526 | 7,596 | 28,892 |
| 1992 Total | 493 | 423 | 2,513 | 3,429 | 8,264 | 7,786 | 3,605 | 19,655 | 8,757 | 8,209 | 6,118 | 23,084 |
| 1993 Total | 502 | 548 | 2,469 | 3,519 | 7,905 | 9,469 | 3,859 | 21,233 | 8,407 | 10,017 | 6,328 | 24,752 |
| 1994 Total | 570 | 726 | 2,405 | 3,701 | 6,151 | 8,812 | 2,902 | 17,865 | 6,721 | 9,538 | 5,307 | 21,566 |
| 1995 Total | 542 | 570 | 2,198 | 3,310 | 7,085 | 7,784 | 2,877 | 17,746 | 7,627 | 8,354 | 5,075 | 21,056 |
| 1996 Total | 483 | 570 | 2,136 | 3,189 | 7,831 | 8,732 | 3,146 | 19,709 | 8,314 | 9,302 | 5,282 | 22,898 |
| 1997 Total | 428 | 536 | 2,110 | 3,074 | 10,008 | 10,791 | 3,592 | 24,391 | 10,436 | 11,327 | 5,702 | 27,465 |
| 1998 Total | 291 | 504 | 1,647 | 2,442 | 6,773 | 10,804 | 3,193 | 20,770 | 7,064 | 11,308 | 4,840 | 23,212 |
| 1999 Total | 154 | 539 | 1,195 | 1,888 | 4,022 | 10,338 | 2,169 | 16,529 | 4,176 | 10,877 | 3,364 | 18,417 |
| 2000 Total | 264 | 609 | 1,288 | 2,161 | 7,094 | 15,846 | 2,737 | 25,677 | 7,358 | 16,455 | 4,025 | 27,838 |
| 2001 January | 19 | 74 | 101 | 194 | 669 | 1,480 | 231 | 2,380 | 688 | 1,554 | 332 | 2,574 |
| February | 29 | 76 | 94 | 199 | 599 | 1,511 | 206 | 2,316 | 628 | 1,587 | 300 | 2,515 |
| March | 28 | 51 | 90 | 169 | 661 | 1,563 | 188 | 2,412 | 689 | 1,614 | 278 | 2,581 |
| April | 28 | 81 | 127 | 236 | 649 | 1,610 | 217 | 2,476 | 677 | 1,691 | 344 | 2,712 |
| May | 28 | 84 | 136 | 248 | 736 | 1,678 | 241 | 2,655 | 764 | 1,762 | 377 | 2,903 |
| June | 31 | 89 | 128 | 248 | 717 | 2,067 | 258 | 3,042 | 748 | 2,156 | 386 | 3,290 |
| July | 31 | 89 | 153 | 273 | 651 | 2,070 | 218 | 2,939 | 682 | 2,159 | 371 | 3,212 |
| August | 27 | 104 | 132 | 263 | 670 | 2,056 | 248 | 2,974 | 697 | 2,160 | 380 | 3,237 |
| September | 18 | R 95 | 119 | R 232 | 619 | R 1,912 | 198 | R 2,729 | 637 | 2,007 | 317 | 2,961 |
| October | 29 | 104 | 144 | 277 | 764 | 1,997 | 220 | 2,981 | 793 | 2,101 | 364 | 3,258 |
| November | 20 | 88 | 131 | 239 | 549 | 1,651 | 175 | 2,375 | 569 | 1,739 | 306 | 2,614 |
| December | 26 | 53 | 89 | 168 | 462 | 1,500 | 192 | 2,154 | 488 | 1,553 | 281 | 2,322 |
| Total | 314 | R 988 | 1,444 | R 2,746 | 7,746 | R 21,095 | 2,592 | R 31,433 | 8,060 | 22,083 | 4,036 | 34,179 |
| 2002 January | 16 | 60 | 108 | 184 | 409 | 1,328 | 207 | 1,944 | 425 | 1,388 | 315 | 2,128 |
| February | 16 | 56 | 103 | 175 | 418 | 1,247 | 198 | 1,863 | 434 | 1,303 | 300 | 2,038 |
| March | 16 | 51 | 96 | 163 | 419 | 1,137 | 185 | 1,741 | 435 | 1,188 | 281 | 1,904 |
| April | 15 | 51 | 94 | 160 | 395 | 1,130 | 182 | 1,707 | 410 | 1,181 | 276 | 1,867 |
| May | 15 | 57 | 103 | 175 | 388 | 1,278 | 199 | 1,865 | 403 | 1,335 | 302 | 2,040 |
| June | 15 | 58 | 106 | 179 | 401 | 1,301 | 202 | 1,904 | 416 | 1,359 | 308 | 2,083 |
| July | 16 | 59 | 106 | 181 | 406 | 1,309 | 205 | 1,920 | 422 | 1,368 | 311 | 2,101 |
| August | 14 | 59 | 105 | 178 | 362 | 1,322 | 200 | 1,884 | 376 | 1,381 | 305 | 2,062 |
| September | 14 | 61 | 106 | 181 | 354 | 1,349 | 203 | 1,906 | 368 | 1,410 | 309 | 2,087 |
| October | 16 | 58 | 106 | 180 | 406 | 1,300 | 203 | 1,909 | 422 | 1,358 | 309 | 2,089 |
| November | 16 | 56 | 104 | 176 | 424 | 1,252 | 199 | 1,875 | 440 | 1,308 | 303 | 2,051 |
| December | 15 | 59 | 106 | 180 | 398 | 1,309 | 203 | 1,910 | 413 | 1,368 | 309 | 2,090 |
| Total | 184 | 685 | 1,243 | 2,112 | 4,780 | 15,262 | 2,386 | 22,428 | 4,964 | 15,947 | 3,629 | 24,540 |
| 2003 January | 15 | 59 | 106 | 180 | 383 | 1,316 | 202 | 1,901 | 398 | 1,375 | 308 | 2,081 |
| February | 17 | 62 | 113 | 192 | 444 | 1,375 | 216 | 2,035 | 461 | 1,437 | 329 | 2,227 |
| March | 19 | 63 | 118 | 200 | 496 | 1,406 | 226 | 2,128 | 515 | 1,469 | 344 | 2,328 |
| April | 21 | 65 | 123 | 209 | 536 | 1,458 | 238 | 2,232 | 557 | 1,523 | 361 | 2,441 |
| May | 19 | 72 | 129 | 220 | 486 | 1,582 | 247 | 2,315 | 505 | 1,654 | 376 | 2,535 |
| June | 17 | 76 | 132 | 225 | 442 | 1,667 | 252 | 2,361 | 459 | 1,743 | 384 | 2,586 |
| 6-Month Total | 108 | 397 | 721 | 1,226 | 2,787 | 8,804 | 1,381 | 12,972 | 2,895 | 9,201 | 2,102 | 14,198 |
| 2002 6-Month Total | 93 | 333 | 610 | 1,036 | 2,430 | 7,421 | 1,173 | 11,024 | 2,523 | 7,754 | 1,783 | 12,060 |
| 2001 6-Month Total | 163 | 455 | 676 | 1,294 | 4,031 | 9,909 | 1,341 | 15,281 | 4,194 | 10,364 | 2,017 | 16,575 |

R=Revised.

Notes: • These well counts include only the original drilling of a hole intended to discover or further develop already discovered crude oil or natural gas resources. Other drilling activities, such as drilling an old well deeper, drilling of laterals from the original well, drilling of service and injection wells, and drilling for resources other than crude oil or natural gas are excluded. Due to the methodology used to estimate ultimate well counts from the

available partially reported data, the counts shown on this page are frequently revised. See notes at end of section. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/resource.html>.

Sources: Energy Information Administration computations, which are based on well reports submitted by the Petroleum Information Corporation, Denver, Colorado.

Table 5.3 Maximum U.S. Active Seismic Crew Counts
(Number of Crews)

| | 48 States, Onshore | | | | 48 States, Offshore ^a | | | | Alaska ^b | | | | Total |
|-----------------|-------------------------|----|---|--------------------|----------------------------------|----|---|--------------------|-------------------------|---|---|--------------------|-------|
| | Dimensions ^c | | | Total ^d | Dimensions ^c | | | Total ^d | Dimensions ^c | | | Total ^d | |
| | 2 | 3 | 4 | | 2 | 3 | 4 | | 2 | 3 | 4 | | |
| 2001 | | | | | | | | | | | | | |
| January | 5 | 38 | 1 | 44 | 9 | 7 | 0 | 17 | 0 | 0 | 0 | 0 | 61 |
| February | 6 | 38 | 1 | 45 | 8 | 7 | 0 | 16 | 0 | 0 | 0 | 0 | 61 |
| March | 6 | 38 | 1 | 45 | 9 | 9 | 0 | 18 | 0 | 0 | 0 | 0 | 63 |
| April | 7 | 39 | 1 | 47 | 9 | 9 | 0 | 18 | 0 | 0 | 0 | 0 | 65 |
| May | 7 | 37 | 1 | 45 | 9 | 8 | 0 | 17 | 1 | 1 | 0 | 2 | 64 |
| June | 6 | 35 | 1 | 42 | 9 | 7 | 0 | 16 | 1 | 1 | 0 | 2 | 60 |
| July | 6 | 35 | 1 | 42 | 8 | 8 | 0 | 16 | 0 | 0 | 0 | 0 | 58 |
| August | 8 | 32 | 1 | 41 | 7 | 8 | 0 | 15 | 0 | 0 | 0 | 0 | 56 |
| September | 8 | 30 | 1 | 39 | 6 | 9 | 0 | 15 | 0 | 0 | 0 | 0 | 54 |
| October | 5 | 33 | 1 | 39 | 9 | 10 | 0 | 19 | 0 | 0 | 0 | 0 | 58 |
| November | 7 | 34 | 1 | 42 | 7 | 10 | 0 | 17 | 0 | 0 | 0 | 0 | 59 |
| December | 7 | 33 | 1 | 41 | 8 | 9 | 0 | 17 | 0 | 0 | 0 | 0 | 58 |
| 2002 | | | | | | | | | | | | | |
| January | 6 | 32 | 0 | 38 | 8 | 6 | 0 | 14 | 1 | 1 | 0 | 2 | 54 |
| February | 9 | 31 | 0 | 40 | 9 | 6 | 0 | 15 | 1 | 1 | 0 | 2 | 57 |
| March | 9 | 26 | 0 | 35 | 10 | 7 | 0 | 17 | 1 | 1 | 0 | 2 | 54 |
| April | 7 | 25 | 0 | 32 | 9 | 7 | 0 | 16 | 1 | 1 | 0 | 2 | 50 |
| May | 8 | 24 | 0 | 32 | 9 | 8 | 0 | 17 | 1 | 1 | 0 | 2 | 51 |
| June | 9 | 23 | 0 | 32 | 9 | 7 | 0 | 16 | 1 | 1 | 0 | 2 | 50 |
| July | 8 | 26 | 0 | 34 | 8 | 8 | 0 | 16 | 1 | 1 | 0 | 2 | 52 |
| August | 7 | 26 | 0 | 33 | 8 | 7 | 0 | 15 | 1 | 1 | 0 | 2 | 50 |
| September | 9 | 28 | 0 | 37 | 10 | 7 | 0 | 17 | 1 | 1 | 0 | 2 | 56 |
| October | 8 | 30 | 0 | 38 | 10 | 7 | 0 | 17 | 1 | 1 | 0 | 2 | 57 |
| November | 8 | 27 | 0 | 35 | 8 | 5 | 0 | 13 | 1 | 1 | 0 | 2 | 50 |
| December | 8 | 22 | 0 | 31 | 7 | 4 | 0 | 11 | 1 | 0 | 0 | 1 | 43 |
| 2003 | | | | | | | | | | | | | |
| January | 8 | 19 | 1 | 28 | 8 | 4 | 0 | 12 | 0 | 0 | 0 | 0 | 40 |
| February | 9 | 20 | 0 | 29 | 8 | 4 | 0 | 12 | 0 | 0 | 0 | 0 | 41 |
| March | 8 | 20 | 0 | 28 | 7 | 4 | 0 | 11 | 1 | 1 | 0 | 2 | 41 |
| April | 7 | 20 | 0 | 27 | 7 | 4 | 0 | 11 | 1 | 1 | 0 | 2 | 40 |
| May | 7 | 17 | 0 | 24 | 8 | 4 | 0 | 12 | 1 | 1 | 0 | 2 | 38 |
| June | 7 | 18 | 0 | 25 | 8 | 4 | 0 | 12 | 1 | 1 | 0 | 2 | 39 |

^a Federal and State Jurisdiction waters of the Gulf of Mexico.

^b All onshore.

^c In **two-dimensional** (2D) reflection seismic surveying both the sound source and the sound detectors (numbering up to a hundred or more per shot) are moved along a straight line. The resultant product can be thought of as a vertical sonic cross-section of the subsurface beneath the survey line. It is constructed by summing many compressional (pressure) wave reflections from the various sound source and sound detector locations at the halfway sound path points beneath each location (common depth point stacking). In **three-dimensional** (3D) reflection seismic surveying the sound detectors (numbering up to a thousand or more) are spread out over an area and the sound source is moved from location to location through the area. The resultant product can be thought of as a cube of common depth point stacked reflections. Advantages over 2D include the additional dimension, the fact that many more reflections are available for stacking at each point, which provides greatly improved resolution of subsurface

features, and elimination of the "ghost" or "side swipe" reflections from nearby offline features that 2D surveys are prone to (except, of course, along the outer faces of the cube). **Four dimensional** (4D) reflection seismic surveying is the exact repetition of a 3D survey at two or more time intervals. The primary application of 4D is mapping the movement of fluid interfaces in producing oil and gas reservoirs.

^d Includes crews with unknown survey dimension.

Notes: • "48 States" is the United States excluding Alaska and Hawaii.
• Data are reported on the first and fifteenth of each month, except January when they are reported only on the fifteenth. When semi-monthly values differ for the month, the larger of the two values is shown here. Consequently this table reflects the maximum number of crews at work at any time during the month.

Web Page: <http://www.eia.doe.gov/emeu/mer/resource.html>.

Source: *World Geophysical News*, IHS Energy Group, Denver, CO. used with permission.

Crude Oil and Natural Gas Resource Development

Table 5.2 Notes

Three well types are considered in the *Monthly Energy Review (MER)* drilling statistics: “completed for crude oil,” “completed for natural gas,” and “dry hole.” Wells that productively encounter both crude oil and natural gas are categorized as “completed for crude oil.” Both development wells and exploratory wells (new field wildcats, new pool tests, and extension tests) are included in the statistics. All other classes of wells drilled in connection with the search for producible hydrocarbons are excluded.

Prior to the March 1985 *MER*, drilling statistics consisted of completion data for the above types and classes of wells as reported to the American Petroleum Institute (API) during a given month. Due to time lags between the date of well completion and the date of completion reporting to the API, as-reported well completions proved to be an inaccurate indicator of drilling activity. During 1982, for example,

as-reported well completions rose, while the number of actual completions fell. Consequently, the drilling statistics published since the March 1985 *MER* are Energy Information Administration (EIA) estimates produced by statistically imputing well counts and footage based on the partial data available from the API. These estimates are subject to continuous revision as new data, some of which pertain to earlier months and years, become available. Additional information about the EIA estimation methodology may be found in “Estimating Well Completions,” the feature article published in the March 1985 *MER*.

Users of the well completion and footage figures published by the Energy Information Administration (EIA) prior to August 1998 should be aware that these data have been revised. The published well completion and footage figures are produced by the Well Completion Estimation Procedure (WELCOM) based on drilling records provided under contract to the EIA. Problems in the files received by EIA necessitated revision of the historical series for well completions and footage drilled. Queries regarding this matter may be directed to William Trapmann (202-586-6408 or william.trapmann@eia.doe.gov).

Section 6. Coal

Coal production in June 2003 totaled 87 million short tons, 2 percent higher than in June 2002.

Coal consumed by the electric power sector in April 2003 was forecast as 71 million short tons, 1 percent lower than the level in April 2002.

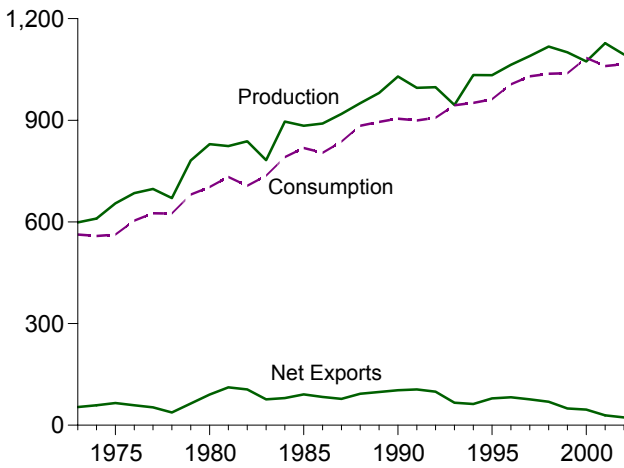
Electric power sector coal stocks were forecast as 145

million short tons at the end of April 2003, 4 percent lower than the level a year earlier.

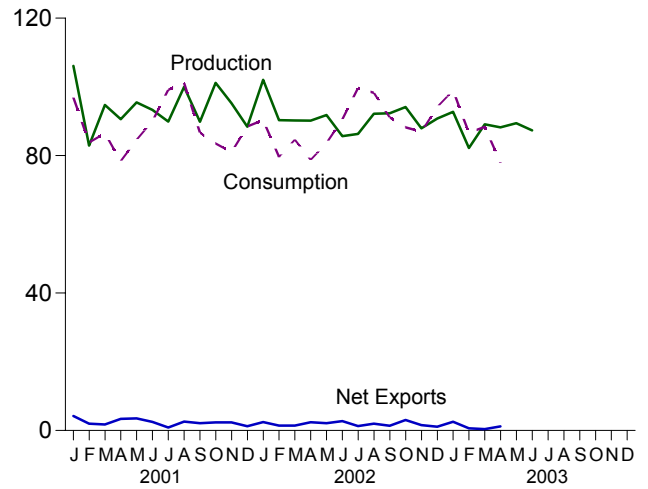
Coal exports in April 2003 totaled 4 million short tons, less than 1 percent lower than exports in April 2002. Coal imports in April 2003 totaled 2 million short tons, 98 percent higher than imports in April 2002.

Figure 6.1 Coal
(Million Short Tons)

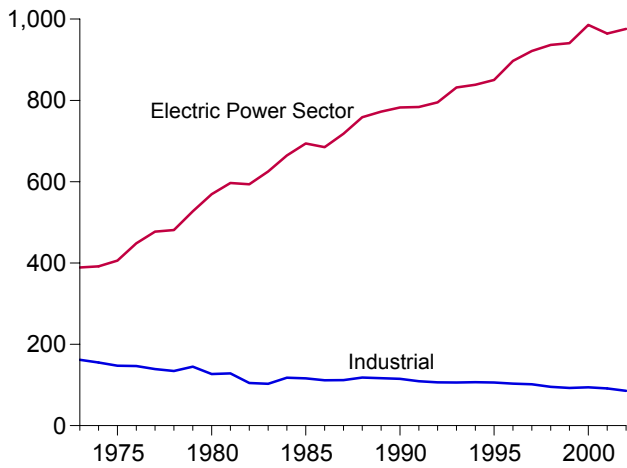
Overview, 1973-2002



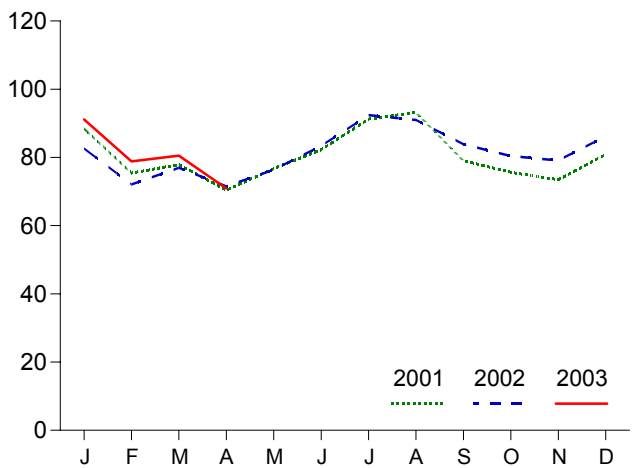
Overview, Monthly



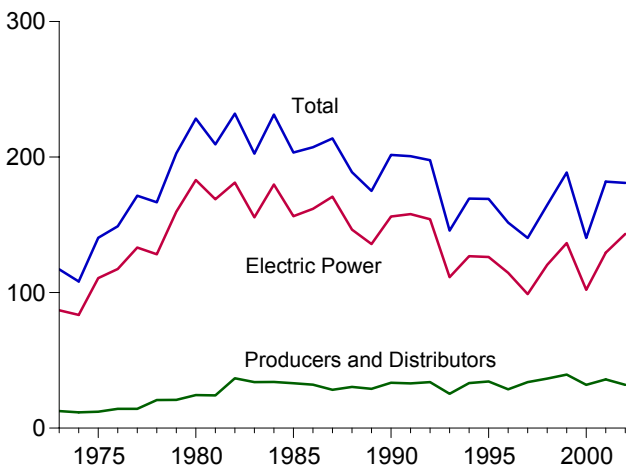
Consumption by Sector, 1973-2002



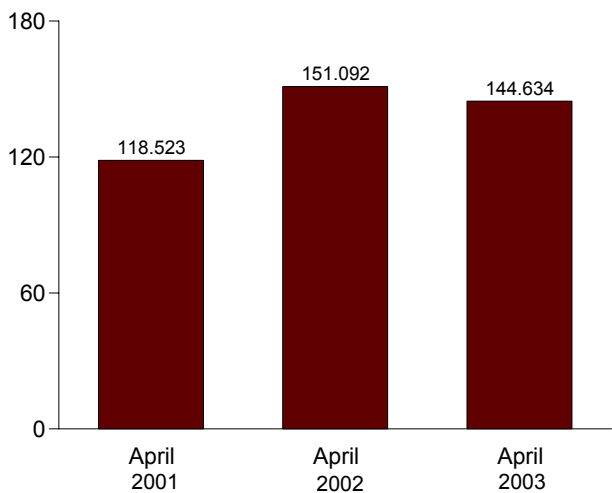
Electric Power Sector Consumption, Monthly



Stocks, End of Year, 1973-2002



Electric Power Sector Stocks, End of Month



Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/coal.html>.
Sources: Tables 6.1, 6.2, and 6.3.

Table 6.1 Coal Overview
(Thousand Short Tons)

| | Production ^a | Waste Coal ^{b,c} | Imports | Exports | Stock Change ^d | Losses and Unaccounted for ^e | Consumption |
|---------------------------------|-------------------------|---------------------------|---------------|---------------|---------------------------|---|------------------|
| 1973 Total | 598,568 | NA | 127 | 53,587 | (f) | ^g -17,476 | 562,584 |
| 1974 Total | 610,023 | NA | 2,080 | 60,661 | -8,918 | 1,958 | 558,402 |
| 1975 Total | 654,641 | NA | 940 | 66,309 | 32,154 | -5,522 | 562,640 |
| 1976 Total | 684,913 | NA | 1,203 | 60,021 | 8,508 | 13,797 | 603,790 |
| 1977 Total | 697,205 | NA | 1,647 | 54,312 | 22,644 | -3,395 | 625,291 |
| 1978 Total | 670,164 | NA | 2,953 | 40,714 | -4,938 | 12,116 | 625,225 |
| 1979 Total | 781,134 | NA | 2,059 | 66,042 | 36,206 | 421 | 680,524 |
| 1980 Total | 829,700 | NA | 1,194 | 91,742 | 25,595 | 10,827 | 702,730 |
| 1981 Total | 823,775 | NA | 1,043 | 112,541 | -18,983 | -1,366 | 732,627 |
| 1982 Total | 838,112 | NA | 742 | 106,277 | 22,614 | 3,052 | 706,911 |
| 1983 Total | 782,091 | NA | 1,271 | 77,772 | -29,453 | -1,629 | 736,672 |
| 1984 Total | 895,921 | NA | 1,286 | 81,483 | 28,716 | -4,288 | 791,296 |
| 1985 Total | 883,638 | NA | 1,952 | 92,680 | -27,934 | 2,796 | 818,049 |
| 1986 Total | 890,315 | NA | 2,212 | 85,518 | 3,953 | -1,175 | 804,231 |
| 1987 Total | 918,762 | NA | 1,747 | 79,607 | 6,461 | -2,499 | 836,941 |
| 1988 Total | 950,265 | NA | 2,134 | 95,023 | -24,949 | -1,316 | 883,642 |
| 1989 Total | 980,729 | 1,407 | 2,851 | 100,815 | -13,744 | 2,916 | 895,000 |
| 1990 Total | 1,029,076 | 3,339 | 2,699 | 105,804 | 26,542 | -1,730 | 904,498 |
| 1991 Total | 995,984 | 3,950 | 3,390 | 108,969 | -947 | -3,925 | 899,227 |
| 1992 Total | 997,545 | 6,287 | 3,803 | 102,516 | -2,997 | 461 | 907,655 |
| 1993 Total | 945,424 | 8,137 | 8,181 | 74,519 | -51,943 | -4,916 | 944,081 |
| 1994 Total | 1,033,504 | 8,227 | 8,870 | 71,359 | 23,617 | 4,340 | 951,286 |
| 1995 Total | 1,032,974 | 8,561 | 9,473 | 88,547 | -275 | 632 | 962,104 |
| 1996 Total | 1,063,856 | 8,778 | 8,115 | 90,473 | -17,456 | 1,411 | 1,006,321 |
| 1997 Total | 1,089,932 | 8,096 | 7,487 | 83,545 | -11,253 | 3,678 | 1,029,544 |
| 1998 Total | 1,117,535 | 8,690 | 8,724 | 78,048 | 24,228 | -4,430 | 1,037,103 |
| 1999 Total | 1,100,431 | 8,683 | 9,089 | 58,476 | 23,988 | -2,906 | 1,038,647 |
| 2000 Total | 1,073,612 | 9,089 | 12,513 | 58,489 | -48,309 | 938 | 1,084,095 |
| 2001 January | 106,110 | (c) | 1,303 | 5,512 | -2,118 | 7,122 | R 96,897 |
| February | 82,900 | (c) | 1,252 | 3,236 | 3,824 | -6,680 | 83,772 |
| March | 94,761 | (c) | 1,355 | 3,094 | 12,607 | -6,084 | 86,499 |
| April | 90,578 | (c) | 1,253 | 4,623 | 10,439 | -1,603 | 78,372 |
| May | 95,505 | (c) | 1,435 | 4,966 | 8,320 | -950 | 84,605 |
| June | 93,310 | (c) | 1,436 | 3,911 | -1,833 | 2,644 | 90,025 |
| July | 89,884 | (c) | 2,289 | 3,166 | -6,626 | -3,524 | 99,157 |
| August | 100,000 | (c) | 1,772 | 4,364 | -6,805 | 3,108 | 101,105 |
| September | 89,845 | (c) | 1,986 | 4,125 | -871 | R 1,872 | 86,705 |
| October | 101,145 | (c) | 1,649 | 4,002 | 9,947 | 5,334 | 83,511 |
| November | 95,244 | (c) | 2,057 | 4,413 | 8,420 | 3,455 | R 81,013 |
| December | 88,407 | (c) | 2,001 | 3,256 | 6,325 | R -7,658 | 88,485 |
| Total | 1,127,689 | (c) | 19,787 | 48,666 | 41,630 | -2,966 | 1,060,146 |
| 2002 January | 102,070 | (c) | 1,439 | 3,873 | 4,878 | 4,445 | 90,312 |
| February | 90,325 | (c) | 1,222 | 2,630 | 5,411 | 3,856 | 79,650 |
| March | 90,224 | (c) | 1,339 | 2,749 | 1,556 | 2,603 | 84,655 |
| April | 90,160 | (c) | 1,208 | 3,584 | 8,517 | 522 | 78,745 |
| May | 91,795 | (c) | 1,227 | 3,330 | 2,718 | 3,303 | 83,670 |
| June | 85,635 | (c) | 1,422 | 4,128 | -5,658 | -1,961 | 90,549 |
| July | 86,291 | (c) | 1,573 | 2,843 | -9,943 | -4,666 | 99,629 |
| August | 92,163 | (c) | 1,555 | 3,529 | -12,830 | 4,743 | 98,276 |
| September | 92,314 | (c) | 1,526 | 2,884 | 1,851 | -2,001 | 91,105 |
| October | 94,137 | (c) | 1,369 | 4,407 | 5,742 | -2,853 | 88,211 |
| November | 87,932 | (c) | 1,393 | 2,930 | 4,858 | -5,378 | 86,915 |
| December | 90,760 | (c) | 1,602 | 2,712 | -8,064 | 3,587 | 94,126 |
| Total | 1,093,806 | (c) | 16,875 | 39,601 | -963 | 6,201 | 1,065,842 |
| 2003 January | 92,757 | (c) | 1,134 | 3,680 | -7,192 | -1,567 | 98,969 |
| February | 82,228 | (c) | 1,804 | 2,428 | R -8,400 | R 3,389 | R 86,614 |
| March | 89,092 | (c) | 2,017 | 2,410 | R 9,966 | R -9,616 | 88,349 |
| April | 88,205 | (c) | 2,390 | 3,571 | F 10,056 | F -943 | F 77,911 |
| May | 89,444 | (c) | NA | NA | NA | NA | NA |
| June | 87,322 | (c) | NA | NA | NA | NA | NA |
| 6-Month Total | 529,048 | (c) | NA | NA | NA | NA | NA |
| 2002 6-Month Total | 550,209 | (c) | 7,857 | 20,295 | 17,423 | 12,768 | 507,580 |
| 2001 6-Month Total | 563,164 | (c) | 8,034 | 25,341 | 31,239 | -5,552 | 520,169 |

^a Beginning in 2001, includes bituminous refuse.

^b Waste coal (including anthracite culm, bituminous gob, fine coal, and lignite waste) consumed by independent power producers. For 1989-2000, waste coal is counted as a supply-side item to balance the same amount of waste coal included in "Consumption."

^c Beginning in 2001, bituminous refuse is included in "Production"; to avoid double counting, waste coal is not counted as a separate supply-side item for 2001 forward.

^d A negative value indicates a decrease in stocks; a positive value indicates an increase.

^e "Losses and Unaccounted for" is calculated as the sum of production, imports,

and waste coal, minus exports, stock change, and consumption.

^f Included in "Losses and Unaccounted for."

^g Includes stock change.

R=Revised. NA=Not available. F=Forecast.

Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

• For methodology used to calculate production, consumption, and stock, see Notes 1, 2, and 3 at end of section.

Web Page: <http://www.eia.doe.gov/emeu/mer/coal.html>.

Sources: See end of section.

Table 6.2 Coal Consumption by Sector
(Thousand Short Tons)

| | End-Use Sectors | | | | | | | | | | Electric Power Sector ^{e,f} | Total |
|--------------------|-----------------|------------------|--------------------|---------|------------------|----------------------|----------|----------|----------------|-----|--------------------------------------|-----------|
| | Residential | Commercial | | | Coke Plants | Industrial | | | Transportation | | | |
| | | CHP ^a | Other ^b | Total | | Other Industrial | | Total | | | | |
| | | | | | CHP ^c | Non-CHP ^d | Total | Total | | | | |
| 1973 Total | 4,113 | (g) | 7,004 | 7,004 | 94,101 | (h) | 68,038 | 68,038 | 162,139 | 116 | 389,212 | 562,584 |
| 1974 Total | 3,653 | (g) | 7,764 | 7,764 | 90,191 | (h) | 64,903 | 64,903 | 155,094 | 80 | 391,811 | 558,402 |
| 1975 Total | 2,823 | (g) | 6,587 | 6,587 | 83,598 | (h) | 63,646 | 63,646 | 147,244 | 24 | 405,962 | 562,640 |
| 1976 Total | 2,586 | (g) | 6,330 | 6,330 | 84,704 | (h) | 61,787 | 61,787 | 146,491 | 12 | 448,371 | 603,790 |
| 1977 Total | 2,507 | (g) | 6,447 | 6,447 | 77,739 | (h) | 61,463 | 61,463 | 139,202 | 9 | 477,126 | 625,291 |
| 1978 Total | 2,188 | (g) | 7,323 | 7,323 | 71,394 | (h) | 63,085 | 63,085 | 134,479 | (h) | 481,235 | 625,225 |
| 1979 Total | 1,678 | (g) | 6,710 | 6,710 | 77,368 | (h) | 67,717 | 67,717 | 145,085 | (h) | 527,051 | 680,524 |
| 1980 Total | 1,355 | (g) | 5,097 | 5,097 | 66,657 | (h) | 60,347 | 60,347 | 127,004 | (h) | 569,274 | 702,730 |
| 1981 Total | 1,336 | (g) | 6,085 | 6,085 | 61,014 | (h) | 67,395 | 67,395 | 128,409 | (h) | 596,797 | 732,627 |
| 1982 Total | 1,401 | (g) | 6,839 | 6,839 | 40,908 | (h) | 64,097 | 64,097 | 105,005 | (h) | 593,666 | 706,911 |
| 1983 Total | 1,352 | (g) | 7,096 | 7,096 | 37,033 | (h) | 65,980 | 65,980 | 103,013 | (h) | 625,211 | 736,672 |
| 1984 Total | 1,643 | (g) | 7,486 | 7,486 | 44,022 | (h) | 73,745 | 73,745 | 117,767 | (h) | 664,399 | 791,296 |
| 1985 Total | 1,556 | (g) | 6,223 | 6,223 | 41,056 | (h) | 75,372 | 75,372 | 116,429 | (h) | 693,841 | 818,049 |
| 1986 Total | 1,533 | (g) | 6,134 | 6,134 | 35,924 | (h) | 75,583 | 75,583 | 111,508 | (h) | 685,056 | 804,231 |
| 1987 Total | 1,383 | (g) | 5,531 | 5,531 | 36,957 | (h) | 75,175 | 75,175 | 112,132 | (h) | 717,894 | 863,941 |
| 1988 Total | 1,426 | (g) | 5,704 | 5,704 | 41,888 | (h) | 76,252 | 76,252 | 118,140 | (h) | 758,372 | 883,642 |
| 1989 Total | 1,172 | 1,125 | 3,871 | 4,996 | 40,508 | 24,867 | 51,268 | 76,134 | 116,643 | (h) | 772,190 | 895,000 |
| 1990 Total | 1,210 | 1,191 | 4,323 | 5,514 | 38,877 | 27,781 | 48,549 | 76,330 | 115,207 | (h) | 782,567 | 904,498 |
| 1991 Total | 975 | 1,228 | 3,891 | 5,119 | 33,854 | 27,021 | 48,384 | 75,405 | 109,259 | (h) | 783,874 | 899,227 |
| 1992 Total | 1,046 | 1,175 | 3,932 | 5,107 | 32,366 | 28,244 | 45,799 | 74,042 | 106,408 | (h) | 795,094 | 907,655 |
| 1993 Total | 1,058 | 1,373 | 3,791 | 5,164 | 31,323 | 28,886 | 46,006 | 74,892 | 106,215 | (h) | 831,645 | 944,081 |
| 1994 Total | 902 | 1,344 | 3,767 | 5,111 | 31,740 | 29,707 | 45,471 | 75,179 | 106,919 | (h) | 838,354 | 951,286 |
| 1995 Total | 755 | 1,419 | 3,633 | 5,052 | 33,011 | 29,363 | 43,693 | 73,055 | 106,067 | (h) | 850,230 | 962,104 |
| 1996 Total | 721 | 1,660 | 3,625 | 5,285 | 31,706 | 29,434 | 42,254 | 71,689 | 103,395 | (h) | 896,921 | 1,006,321 |
| 1997 Total | 711 | 1,738 | 4,015 | 5,752 | 30,203 | 29,853 | 41,661 | 71,515 | 101,718 | (h) | 921,364 | 1,029,544 |
| 1998 Total | 534 | 1,443 | 2,879 | 4,322 | 28,189 | 28,553 | 38,887 | 67,439 | 95,628 | (h) | 936,619 | 1,037,103 |
| 1999 Total | 585 | 1,490 | 2,803 | 4,293 | 28,108 | 27,763 | 36,975 | 64,738 | 92,846 | (h) | 940,922 | 1,038,647 |
| 2000 Total | 454 | 1,547 | 2,126 | 3,673 | 28,939 | 28,031 | 37,177 | 65,208 | 94,147 | (h) | 985,821 | 1,084,095 |
| 2001 January | 57 | 131 | 332 | 463 | 2,176 | 2,424 | 3,381 | 5,805 | 7,981 | (h) | 88,395 | 96,897 |
| February | 45 | 132 | 235 | 367 | 2,145 | 2,012 | 3,802 | 5,813 | 7,958 | (h) | 75,401 | 83,772 |
| March | 42 | 129 | 207 | 336 | 2,466 | 2,220 | 3,517 | 5,737 | 8,202 | (h) | 77,919 | 86,499 |
| April | 41 | 99 | 234 | 333 | 2,320 | 2,047 | 3,246 | 5,293 | 7,613 | (h) | 70,384 | 78,372 |
| May | 26 | 105 | 105 | 209 | 2,337 | 1,965 | 3,327 | 5,292 | 7,629 | (h) | 76,741 | 84,605 |
| June | 29 | 117 | 118 | 235 | 2,268 | 2,123 | 3,123 | 5,247 | 7,515 | (h) | 82,246 | 90,025 |
| July | 36 | 144 | 144 | 288 | 2,206 | 2,267 | 3,117 | 5,385 | 7,591 | (h) | 91,242 | 99,157 |
| August | 36 | 162 | 130 | 293 | 2,249 | 2,318 | 3,021 | 5,339 | 7,588 | (h) | 93,189 | 101,105 |
| September | 24 | 122 | 75 | 197 | 2,145 | 2,115 | 3,204 | 5,319 | 7,464 | (h) | 79,020 | 86,705 |
| October | 31 | 100 | 153 | 253 | 2,203 | 2,081 | 3,307 | 5,388 | 7,592 | (h) | 75,635 | 83,511 |
| November | 42 | 97 | 243 | 340 | 1,846 | 2,041 | 3,314 | 5,355 | 7,201 | (h) | 73,431 | 81,013 |
| December | 71 | 110 | 464 | 574 | 1,715 | 2,141 | 3,153 | 5,294 | 7,010 | (h) | 80,831 | 88,485 |
| Total | 481 | 1,448 | 2,441 | 3,888 | 26,075 | 25,755 | 39,514 | 65,268 | 91,344 | (h) | 964,433 | 1,060,146 |
| 2002 January | 53 | 132 | 301 | 433 | 1,818 | 2,340 | 3,078 | 5,418 | 7,236 | (h) | 82,589 | 90,312 |
| February | 47 | 106 | 271 | 377 | 1,723 | 2,038 | 3,386 | 5,424 | 7,147 | (h) | 72,079 | 79,650 |
| March | 44 | 134 | 223 | 357 | 1,873 | 2,209 | 3,232 | 5,441 | 7,315 | (h) | 76,939 | 84,655 |
| April | 39 | 102 | 214 | 316 | 1,867 | 2,054 | 2,975 | 5,028 | 6,895 | (h) | 71,495 | 78,745 |
| May | 30 | 104 | 136 | 240 | 1,928 | 1,994 | 3,061 | 5,055 | 6,983 | (h) | 76,417 | 83,670 |
| June | 27 | 120 | 101 | 221 | 1,846 | 2,165 | 2,916 | 5,081 | 6,927 | (h) | 83,373 | 90,549 |
| July | 38 | 136 | 172 | 307 | 1,819 | 2,312 | 2,769 | 5,081 | 6,900 | (h) | 92,384 | 99,629 |
| August | 34 | 137 | 137 | 274 | 1,894 | 2,154 | 2,933 | 5,087 | 6,981 | (h) | 90,987 | 98,276 |
| September | 24 | 123 | 74 | 197 | 1,883 | 2,148 | 2,941 | 5,089 | 6,972 | (h) | 83,912 | 91,105 |
| October | 32 | 118 | 142 | 260 | 2,072 | 2,211 | 3,255 | 5,466 | 7,538 | (h) | 80,381 | 88,211 |
| November | 48 | 121 | 270 | 391 | 1,910 | 2,149 | 3,297 | 5,447 | 7,356 | (h) | 79,120 | 86,915 |
| December | 64 | 136 | 380 | 516 | 1,904 | 2,292 | 3,167 | 5,460 | 7,364 | (h) | 86,183 | 94,126 |
| Total | 481 | 1,469 | 2,419 | 3,888 | 22,537 | 26,066 | 37,011 | 63,077 | 85,615 | (h) | 975,858 | 1,065,842 |
| 2003 January | 59 | 146 | 329 | 475 | 1,940 | 2,484 | 2,902 | 5,386 | 7,326 | (h) | 91,109 | 98,969 |
| February | 49 | 127 | 271 | 398 | 1,957 | 2,169 | 3,203 | 5,372 | 7,329 | (h) | 78,838 | 86,614 |
| March | 36 | 110 | 183 | 293 | 2,103 | 2,079 | 3,303 | 5,382 | 7,485 | (h) | 80,535 | 88,349 |
| April | F 43 | F 99 | F 248 | F 346 | F 2,159 | F 2,012 | F 2,451 | F 4,463 | F 6,622 | (h) | F 70,899 | F 77,911 |
| 4-Month Total | E 187 | E 482 | E 1,031 | E 1,513 | E 8,160 | E 8,744 | E 11,859 | E 20,603 | E 28,762 | (h) | E 321,381 | E 351,843 |
| 2002 4-Month Total | 183 | 474 | 1,009 | 1,483 | 7,281 | 8,640 | 12,672 | 21,312 | 28,593 | (h) | 303,102 | 333,362 |
| 2001 4-Month Total | 185 | 492 | 1,008 | 1,500 | 9,106 | 8,703 | 13,945 | 22,648 | 31,755 | (h) | 312,100 | 345,540 |

^a Commercial combined-heat-and-power (CHP) and a small number of commercial electricity-only plants, such as those at hospitals and universities. See note at end of Section 7.

^b All commercial sector fuel use other than that in "Commercial CHP."

^c Industrial combined-heat-and-power (CHP) and a small number of industrial electricity-only plants. See note at end of Section 7.

^d All industrial sector fuel use other than that in "Coke Plants" and "Industrial CHP."

^e The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

^f Through 1988, data are for consumption at electric utilities only. Beginning

in 1989, data also include consumption at independent power producers.

^g Included in "Commercial Other."

^h Included in "Industrial Non-CHP."

R=Revised. E=Estimate. F=Forecast.

Notes: • For sector-specific reporting and estimating information, see Note 2 at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/coal.html>.

Sources: See end of section. Forecast values: Energy Information Administration, Short-Term Integrated Forecasting System. See Note 4 at end of section.

Table 6.3 Coal Stocks by Sector
(Thousand Short Tons)

| | Producers and Distributors | End-Use Sectors | | | | | Electric Power Sector ^{b,c} | Total |
|--------------|----------------------------|----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------------------------|----------------------|
| | | Residential and Commercial | Industrial | | | Total | | |
| | | | Coke Plants | Other ^a | Total | | | |
| 1973 Year | 12,530 | 290 | 6,998 | 10,370 | 17,368 | 17,658 | 86,967 | 117,155 |
| 1974 Year | 11,634 | 280 | 6,209 | 6,605 | 12,814 | 13,094 | 83,509 | 108,237 |
| 1975 Year | 12,108 | 233 | 8,797 | 8,529 | 17,326 | 17,559 | 110,724 | 140,391 |
| 1976 Year | 14,221 | 240 | 9,902 | 7,100 | 17,002 | 17,242 | 117,436 | 148,899 |
| 1977 Year | 14,225 | 220 | 12,816 | 11,063 | 23,879 | 24,099 | 133,219 | 171,543 |
| 1978 Year | 20,695 | 360 | 8,278 | 9,048 | 17,326 | 17,686 | 128,225 | 166,606 |
| 1979 Year | 20,826 | 340 | 10,155 | 11,777 | 21,932 | 22,272 | 159,714 | 202,812 |
| 1980 Year | 24,379 | NA | 9,067 | 11,951 | 21,018 | 21,018 | 183,010 | 228,407 |
| 1981 Year | 24,149 | NA | 6,475 | 9,906 | 16,381 | 16,381 | 168,893 | 209,423 |
| 1982 Year | 36,784 | NA | 4,642 | 9,479 | 14,121 | 14,121 | 181,132 | 232,038 |
| 1983 Year | 33,931 | NA | 4,346 | 8,710 | 13,056 | 13,056 | 155,598 | 202,584 |
| 1984 Year | 34,090 | NA | 6,166 | 11,317 | 17,483 | 17,483 | 179,727 | 231,300 |
| 1985 Year | 33,133 | NA | 3,420 | 10,438 | 13,857 | 13,857 | 156,376 | 203,367 |
| 1986 Year | 32,093 | NA | 2,992 | 10,429 | 13,420 | 13,420 | 161,806 | 207,319 |
| 1987 Year | 28,321 | NA | 3,884 | 10,777 | 14,662 | 14,662 | 170,797 | 213,780 |
| 1988 Year | 30,418 | NA | 3,137 | 8,768 | 11,906 | 11,906 | 146,507 | 188,831 |
| 1989 Year | 29,000 | NA | 2,864 | 7,363 | 10,227 | 10,227 | 135,860 | 175,087 |
| 1990 Year | 33,418 | NA | 3,329 | 8,716 | 12,044 | 12,044 | 156,166 | 201,629 |
| 1991 Year | 32,971 | NA | 2,773 | 7,061 | 9,835 | 9,835 | 157,876 | 200,682 |
| 1992 Year | 33,993 | NA | 2,597 | 6,965 | 9,562 | 9,562 | 154,130 | 197,685 |
| 1993 Year | 25,284 | NA | 2,401 | 6,716 | 9,117 | 9,117 | 111,341 | 145,742 |
| 1994 Year | 33,219 | NA | 2,657 | 6,585 | 9,243 | 9,243 | 126,897 | 169,358 |
| 1995 Year | 34,444 | NA | 2,632 | 5,702 | 8,334 | 8,334 | 126,304 | 169,083 |
| 1996 Year | 28,648 | NA | 2,667 | 5,688 | 8,355 | 8,355 | 114,623 | 151,627 |
| 1997 Year | 33,973 | NA | 1,978 | 5,597 | 7,576 | 7,576 | 98,826 | 140,374 |
| 1998 Year | 36,530 | NA | 2,026 | 5,545 | 7,571 | 7,571 | 120,501 | 164,602 |
| 1999 Year | 39,475 | NA | 1,943 | 5,569 | 7,511 | 7,511 | ^c 141,604 | 188,590 |
| 2000 Year | 31,905 | NA | 1,494 | 4,587 | 6,081 | 6,081 | 102,296 | 140,282 |
| 2001 January | 35,489 | NA | 1,630 | 4,500 | 6,130 | 6,130 | 96,545 | 138,164 |
| February | 37,589 | NA | 1,766 | 4,413 | 6,178 | 6,178 | 98,220 | 141,987 |
| March | 39,214 | NA | 1,902 | 4,325 | 6,227 | 6,227 | 109,154 | 154,595 |
| April | 40,265 | NA | 1,813 | 4,433 | 6,246 | 6,246 | 118,523 | 165,034 |
| May | 39,568 | NA | 1,724 | 4,540 | 6,265 | 6,265 | 127,521 | 173,354 |
| June | 38,554 | NA | 1,635 | 4,648 | 6,283 | 6,283 | 126,683 | 171,521 |
| July | 39,485 | NA | 1,616 | 4,789 | 6,405 | 6,405 | 119,005 | 164,895 |
| August | 38,498 | NA | 1,597 | 4,930 | 6,526 | 6,526 | 113,066 | 158,090 |
| September | 34,822 | NA | 1,577 | 5,070 | 6,647 | 6,647 | 115,750 | 157,219 |
| October | 33,531 | NA | 1,506 | 5,382 | 6,888 | 6,888 | 126,747 | 167,166 |
| November | 32,956 | NA | 1,508 | 5,694 | 7,202 | 7,202 | 135,428 | 175,586 |
| December | 35,900 | NA | 1,510 | 6,006 | 7,516 | 7,516 | 138,496 | 181,912 |
| 2002 January | 39,548 | NA | 1,388 | 5,618 | 7,006 | 7,006 | 140,236 | 186,790 |
| February | 41,589 | NA | 1,309 | 5,230 | 6,539 | 6,539 | 144,073 | 192,201 |
| March | 40,284 | NA | 1,230 | 4,842 | 6,072 | 6,072 | 147,401 | 193,757 |
| April | 44,961 | NA | 1,306 | 4,916 | 6,221 | 6,221 | 151,092 | 202,274 |
| May | 43,946 | NA | 1,381 | 4,990 | 6,371 | 6,371 | 154,676 | 204,993 |
| June | 41,288 | NA | 1,456 | 5,064 | 6,520 | 6,520 | 151,526 | 199,334 |
| July | 40,496 | NA | 1,469 | 5,321 | 6,790 | 6,790 | 142,105 | 189,392 |
| August | 36,489 | NA | 1,483 | 5,578 | 7,060 | 7,060 | 133,012 | 176,561 |
| September | 35,662 | NA | 1,496 | 5,834 | 7,330 | 7,330 | 135,421 | 178,413 |
| October | 35,191 | NA | 1,385 | 5,820 | 7,205 | 7,205 | 141,758 | 184,154 |
| November | 36,954 | NA | 1,274 | 5,806 | 7,080 | 7,080 | 144,979 | 189,013 |
| December | 31,968 | NA | 1,163 | 5,792 | 6,955 | 6,955 | 142,026 | 180,949 |
| 2003 January | 31,489 | NA | 1,186 | 5,311 | 6,497 | 6,497 | 135,771 | 173,757 |
| February | ^F 30,489 | NA | 1,210 | 4,830 | 6,040 | 6,040 | ^R 128,828 | ^R 165,357 |
| March | ^F 31,274 | NA | 1,327 | 4,349 | 5,676 | 5,676 | ^F 138,373 | 175,323 |
| April | ^F 34,698 | NA | ^F 1,359 | ^F 4,688 | ^F 6,047 | ^F 6,047 | ^F 144,634 | ^F 185,379 |

^a Includes transportation sector.

^b The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

^c Through 1998, data are for stocks at electric utilities only. Beginning in 1999, data also include stocks at independent power producers.

R=Revised, NA=Not available, F=Forecast.

Notes: • Stocks are at end of period. • For sector-specific reporting and

estimating information, see Note 3 at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/coal.html>.

Sources: See end of section. **Forecast values:** Energy Information Administration, Short-Term Integrated Forecasting System. See Note 4 at end of section.

Coal

Note 1. Production: Preliminary monthly estimates of national coal production are the sum of weekly estimates developed by the Energy Information Administration (EIA) and published in the *Weekly Coal Production* report. When a week extends into a new month, production is allocated on a daily basis and added to the appropriate month. Weekly estimates are based on Association of American Railroads data showing the number of railcars loaded with coal during the week by Class I and certain other railroads. This number is converted into tons of coal by EIA by using the average number of tons of coal per railcar loaded reported in the most recent “Quarterly Freight Commodity Statistics” from the Surface Transportation Board. If an average coal tonnage per railcar loaded is not available for a specific railroad, the national average is used. To derive the estimate of total weekly production, the total rail tonnage for the week is divided by the ratio of quarterly production shipped by rail and total quarterly production. Data for the corresponding quarter of previous years are used to derive this ratio. This method ensures that the seasonal variations are preserved in the production estimates.

When preliminary quarterly data become available, the monthly and weekly estimates are adjusted to conform to the quarterly figure. The adjustment procedure uses State-level production data and is explained in EIA’s *Quarterly Coal Report*. Initial estimates of annual production published in January of the following year are based on preliminary production data covering the first 9 months (three quarters) and weekly/monthly estimates for the fourth quarter. The fourth quarter estimates may or may not be revised when preliminary data become available in March of the following year, depending on the magnitude of the difference between the estimates and the preliminary data. In any event, all quarterly, monthly, and weekly production figures are adjusted to conform to the final annual production data published in the *Monthly Energy Review* in the fall of the following year.

Note 2. Consumption: Coal consumption data are reported by major end-use sector. Forecast data for the most recent months (designated by an “F”) are derived from forecasted values shown in the EIA *Short-Term Energy Outlook* (DOE/EIA-0202) table titled “U.S. Coal Supply and Demand: Mid World Oil Price Case.” The monthly estimates are based on the quarterly values, which are released in March, June, September, and December. The estimates are revised quarterly as collected data become available from the data sources. Sector-specific information follows.

Residential and Commercial—Coal consumption by the residential and commercial sectors is reported to the Energy Information Administration (EIA) for the two sectors combined; EIA estimates the amount consumed by the sectors individually. To create the estimates, it is first assumed that an occupied coal-heated housing unit

consumes fuel at the same Btu rate as an oil-heated housing unit. Then, for the years in which data are available on the number of occupied housing units by heating source (1973-1981 and subsequent odd-numbered years), residential consumption of coal is estimated by the following steps: a ratio is created of the number of occupied housing units heated by coal to the number of occupied housing units heated by oil; that ratio is then multiplied times the Btu quantity of oil consumed by the residential sector to derive an estimate of the Btu quantity of coal consumed by the residential sector; and, finally, the amount estimated as the residential sector consumption is subtracted from the residential and commercial sectors’ combined consumption to derive the commercial sector’s estimated consumption. The 1999 share is applied to 2000 and succeeding years, and the other missing years’ shares are interpolated.

Industrial Coke Plants—Prior to 1980, monthly coke plant consumption data were taken directly from reported data. From 1980-1987, coke plant consumption estimates were derived by proportioning reported quarterly data by using the ratios of monthly-to-quarterly consumption data in 1979, the last year in which monthly data were reported. Beginning in January 1988, monthly coke plant consumption estimates are derived from the reported quarterly data by using monthly ratios of raw steel production data from the American Iron and Steel Institute. The ratios are the monthly raw steel production from open hearth and basic oxygen process furnaces as a proportion of the quarterly production from those kinds of furnaces.

Industrial Other—Prior to 1978, monthly consumption data for the other industrial sector (all industrial users minus coke plants) were derived by using reported data to modify baseline consumption figures from the most recent Bureau of the Census Annual Survey of Manufactures or Census of Manufactures. For 1978 and 1979, monthly estimates were derived from data reported on Forms EIA-3 and EIA-6. From 1980-1987, monthly figures were estimated by proportioning quarterly data by using the ratios of monthly-to-quarterly consumption data in 1979, the last year in which monthly data were reported on Form EIA-3. Quarterly consumption data were derived by adding beginning stocks at manufacturing plants to current receipts and subtracting ending stocks at manufacturing plants. In this calculation, current receipts were the greater of either reported receipts from manufacturing plants (Form EIA-3) or reported shipments to the other industrial sector (Form EIA-6), thereby ensuring that agriculture, forestry, fishing, mining, and construction consumption data were included where appropriate. Starting in January 1988, monthly consumption for the other industrial sector is estimated from reported quarterly data by using ratios derived from industrial production indices published by the Board of Governors of the Federal Reserve System. Indices for six major industry groups are used as the basis for calculating the ratios: food manufacturing, which is North American Industry Classification System (NAICS) code 333; paper manufacturing, NAICS 322; chemical manufacturing, NAICS 325; petroleum and coal products, NAICS 324;

nonmetallic mineral products manufacturing, NAICS 327; and primary metal manufacturing, NAICS 331. The monthly ratios are computed as the monthly sum of the weighted indices as a proportion of the quarterly sum of the weighted indices by using the 1977 proportion as the weights.

Electric Power Sector—Monthly consumption data for electric power plants are taken directly from reported data.

Note 3. Stocks: Coal stocks data are reported by major end-use sector. Forecast data for the most recent months (designated by an “F”) are derived from forecasted values shown in the EIA *Short-Term Energy Outlook* (DOE/EIA-0202) table titled “U.S. Coal Supply and Demand: Mid World Oil Price Case.” The monthly estimates are based on the quarterly values, which are released in March, June, September, and December. The estimates are revised quarterly as collected data become available from the data sources. Sector-specific information follows.

Producers and Distributors—Quarterly stocks at producers and distributors are taken directly from reported data. Monthly data are estimated by using one-third of the current quarterly change to indicate the monthly change in stocks.

Residential and Commercial—Prior to 1980, stock estimates for the residential and commercial sector were taken directly from reported data. Beginning in 1980, stock estimates for the sector were considered to be statistically insignificant and are no longer collected.

Industrial Coke Plants—Prior to 1980, monthly stocks at coke plants were taken directly from reported data. From 1980 forward, coke plant stocks are estimated by using one-third of the current quarterly change to indicate the monthly change in stocks. Quarterly stocks are taken directly from data reported on Form EIA-5.

Industrial Other—Prior to 1978, stocks for the other industrial sector were derived by using reported data to modify baseline figures from a one-time Bureau of Mines survey of consumers. For 1978–1982, monthly estimates were derived by judgmentally proportioning reported quarterly data based on representative seasonal patterns of supply and demand. From 1983 forward, other industrial coal stocks are estimated as indicated above for coke plants. Quarterly stocks are taken directly from data reported on Form EIA-3 and therefore include only manufacturing industries; data for agriculture, forestry, fishing, mining, and construction stocks are not available.

Electric Power—Monthly stocks data at electric power plants are taken directly from reported data.

Other Power Producers—Annual stocks data are taken directly from reported data. Monthly data are estimated by EIA based on industry analysis.

Note 4. Forecast Values: Data values preceded by “F” in this section are forecast values. They are derived from EIA’s Short-Term Integrated Forecasting System (STIFS). The model is driven primarily by data and assumptions about key macroeconomic variables, the world oil price, and weather. The coal forecast relies on other variables as well, such as alternative fuel prices (natural gas and oil) and power generation by sources other than fossil fuels, including nuclear and hydroelectric power. Each month, EIA staff review the model output and make adjustments, if appropriate, based on their knowledge of developments in the coal industry.

The STIFS model results are published monthly in EIA’s *Short-Term Energy Outlook*, which is available from the National Energy Information Center (202-586-8800) and accessible on the world wide web at <http://www.eia.doe.gov>. Documentation for the model and instructions for downloading and operating it on a personal computer are provided.

Note 5. Additional Information: EIA’s *Quarterly Coal Report* provides additional information about coal data and estimation procedures.

Table 6.1 Sources

Production

1973–September 1977: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977 forward: Energy Information Administration (EIA), *Weekly Coal Production*.

Waste Coal

EIA, Form EIA-860B, “Annual Electric Generator Report-Nonutility” and predecessor form.

Imports and Exports

U.S. Department of Commerce, Bureau of the Census, Monthly Reports IM-145 (Imports) and EM-545 (Exports).

Stocks Change

Calculated from data in Table 6.3.

Losses and Unaccounted for

Calculated.

Consumption

Table 6.2.

Table 6.2 Sources

Residential and Commercial

1973–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*.

January–September 1977: DOI, BOM, Form 6-1400, “Monthly Coal Report, Retail Dealers-Upper Lake Docks.”

October 1977–1979: Energy Information Administration (EIA), Form EIA-2, “Monthly Coal Report, Retail Dealers-Upper Lake Docks.”

1980–1997: EIA, Form EIA-6, “Coal Distribution Report,” quarterly.

1998 forward: DOI, Mine Safety and Health Administration, Form 7000-2, “Quarterly Mine Employment and Coal Production.”

Industrial Coke Plants

1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1980: EIA, Form EIA-5/5A, “Coke and Coal Chemicals-Monthly/Annual Supplement.”

1981–1984: EIA, Form EIA-5/5A, “Coke Plant Report-Quarterly/Annual Supplement.”

1985 forward: EIA, Form EIA-5, “Coke Plant Report-Quarterly.”

Industrial Other

1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1979: EIA, Form EIA-3, “Monthly Coal Consumption Report-Manufacturing Plants.”

1980 forward: EIA, Form EIA-3, “Quarterly Coal Consumption Report-Manufacturing Plants,” and Form EIA-6, “Coal Distribution Report,” quarterly.

Transportation

1973–1976: DOI, BOM, *Minerals Yearbook*.

January–September 1977: DOI, BOM, Form 6-1400, “Monthly Coal Report, Retail Dealers-Upper Lake Docks.”

October–December 1977: EIA, Form EIA-6, “Coal Distribution Report,” quarterly.

Electric Power

1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1988: EIA, Form EIA-759 (formerly Form FPC-4), “Monthly Power Plant Report.”

1989–2000: Table 7.3b

2001: EIA, Form EIA-906, “Power Plant Report.”

Table 6.3 Sources

Producers and Distributors

1973–1979: DOI, BOM, Form 6-1419Q, “Distribution of Bituminous Coal and Lignite Shipments.”

1980 forward: Energy Information Administration (EIA), Form EIA-6, “Coal Distribution Report,” quarterly.

Residential and Commercial

1973–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*.

January–September 1977: DOI, BOM, Form 6-1400, “Monthly Coal Report, Retail Dealers-Upper Lake Docks.”

October 1977–1979: EIA, Form EIA-2, “Monthly Coal Report, Retail Dealers-Upper Lake Docks.”

Industrial Coke Plants

1973–September 1977: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1980: Energy Information Administration (EIA), Form EIA-5/5A, “Coke and Coal Chemicals-Monthly/Annual.”

1981–1984: EIA, Form EIA 5/5A, “Coke Plant Report-Quarterly/Annual Supplement.”

1985 forward: EIA, Form EIA-5, “Coke Plant Report-Quarterly.”

Industrial Other

1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.

October 1977–1979: EIA, Form EIA-3, “Monthly Coal Consumption Report-Manufacturing Plants.”

1980 forward: EIA, Form EIA-3, “Quarterly Coal Consumption Report-Manufacturing Plants,” and Form EIA-6, “Coal Distribution Report,” quarterly.

Electric Power

Table 7.4.

Section 7. Electricity

Overview. In 2002, net generation of electricity totaled 3.8 trillion kilowatthours, up 3 percent compared with the total in 2001. Of the total generated, 96 percent came from the electric power sector; 4 percent was generated by combined-heat-and power plants and electricity-only plants in the industrial and commercial sectors. The Nation imported 36 billion kilowatthours and exported 13 billion kilowatthours of electricity in 2002.

Net Generation. In April 2003, total net generation of electricity was forecast as 286 billion kilowatthours, 1 percent lower than in April 2002.

Consumption of Combustible Fuels. The consumption of coal for electricity generation and useful thermal output by all sectors was forecast as 73 million short tons in April 2003, 1 percent lower than in April 2002. Total petroleum consumption was forecast as 21 million barrels, 58 percent higher than a year earlier, and natural gas consumption was

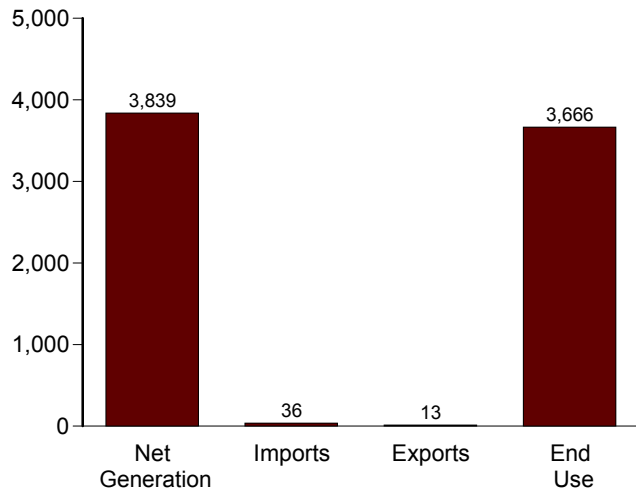
forecast as 465 billion cubic feet, 8 percent lower than a year ago.

Stocks of Coal and Petroleum. Stocks of coal held by the electric power sector in April 2003 were forecast as 145 million short tons, 4 percent below the level held a year earlier. Total petroleum was forecast as 36 million barrels in April 2003, 26 percent lower than a year earlier.

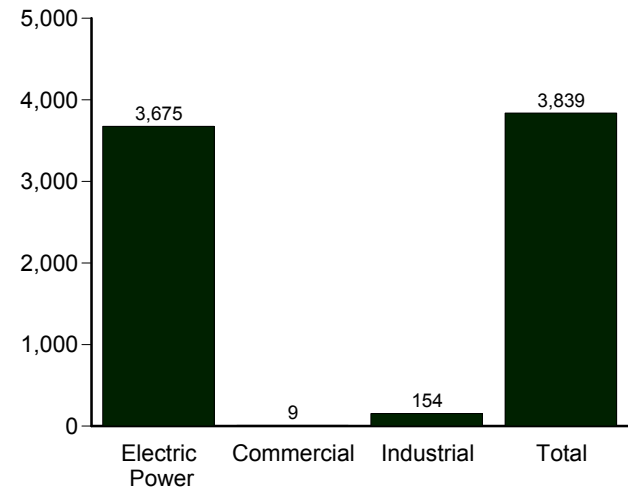
Retail Sales of Electricity. Total retail sales of electricity in April 2003 were forecast as 264 billion kilowatthours, 2 percent more than sales in April 2002. Sales to residential users in April 2003 were forecast as 93 billion kilowatthours, 8 percent higher than a year ago; commercial sector sales were forecast as 80 billion kilowatthours, 6 percent lower than a year ago; and industrial sector sales were forecast as 82 billion kilowatthours, 2 percent more than a year ago.

Figure 7.1 Electricity Overview
(Billion Kilowatthours)

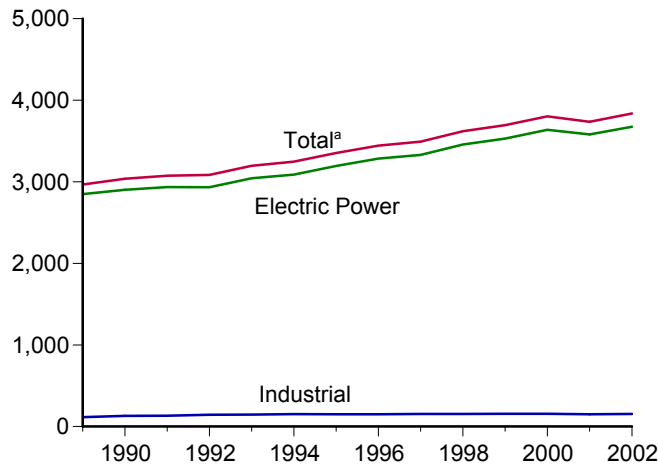
Overview, 2002



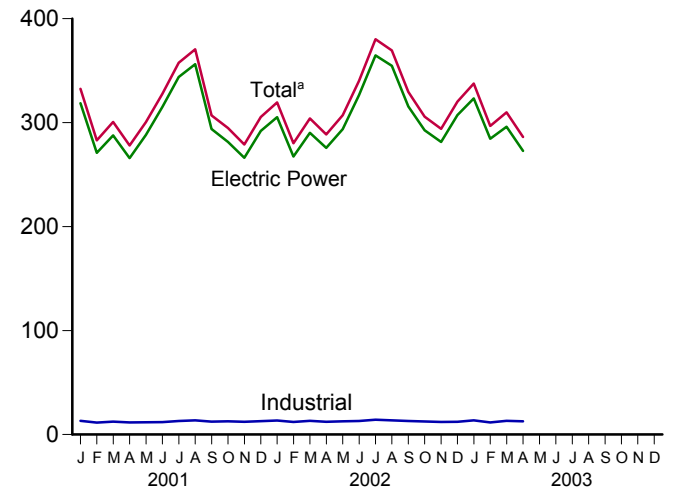
Net Generation, 2002



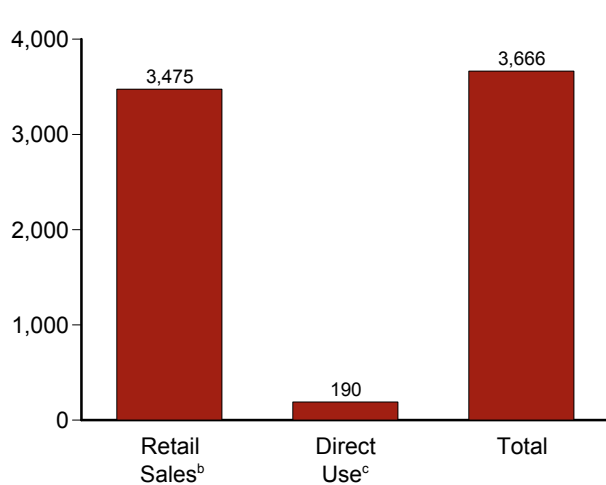
Net Generation by Sector, 1989-2002



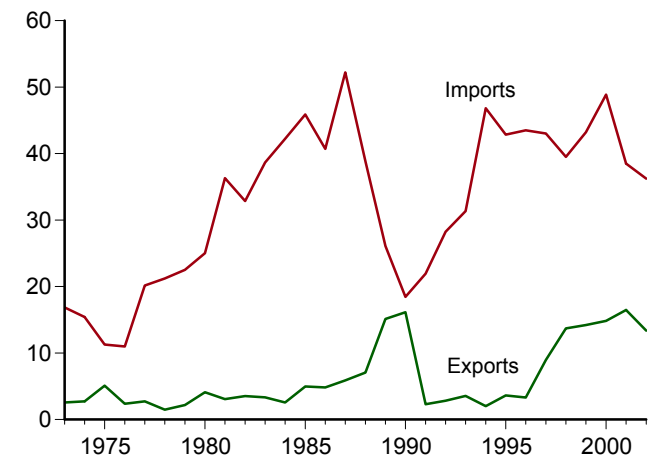
Net Generation by Sector, Monthly



End Use, 2002



Trade, 1973-2002



^aIncludes commercial sector.

^bElectricity retail sales to ultimate customers reported by electric utilities and other energy service providers.

^cCommercial and industrial facility use of onsite net electricity generation;

and electricity sales among adjacent or co-located facilities for which revenue information is not available.

Note: Because vertical scales differ, graphs should not be compared.

Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>.

Sources: Table 7.1.

Table 7.1 Electricity Overview
(Billion Kilowatthours)

| | Net Generation | | | | Imports ^d | Exports ^d | Losses and Unaccounted for ^e | End Use | | |
|--------------------|------------------------------------|--------------------------------|--------------------------------|---------|----------------------|----------------------|---|---------------------------|-------------------------|-------|
| | Electric Power Sector ^a | Commercial Sector ^b | Industrial Sector ^c | Total | | | | Retail Sales ^f | Direct Use ^g | Total |
| 1973 Total | 1,861 | NA | 3 | 1,864 | 17 | 3 | 165 | 1,713 | NA | 1,713 |
| 1974 Total | 1,867 | NA | 3 | 1,870 | 15 | 3 | 177 | 1,706 | NA | 1,706 |
| 1975 Total | 1,918 | NA | 3 | 1,921 | 11 | 5 | 180 | 1,747 | NA | 1,747 |
| 1976 Total | 2,038 | NA | 3 | 2,041 | 11 | 2 | 194 | 1,855 | NA | 1,855 |
| 1977 Total | 2,124 | NA | 3 | 2,127 | 20 | 3 | 197 | 1,948 | NA | 1,948 |
| 1978 Total | 2,206 | NA | 3 | 2,209 | 21 | 1 | 211 | 2,018 | NA | 2,018 |
| 1979 Total | 2,247 | NA | 3 | 2,251 | 23 | 2 | 200 | 2,071 | NA | 2,071 |
| 1980 Total | 2,286 | NA | 3 | 2,290 | 25 | 4 | 216 | 2,094 | NA | 2,094 |
| 1981 Total | 2,295 | NA | 3 | 2,298 | 36 | 3 | 184 | 2,147 | NA | 2,147 |
| 1982 Total | 2,241 | NA | 3 | 2,244 | 33 | 4 | 187 | 2,086 | NA | 2,086 |
| 1983 Total | 2,310 | NA | 3 | 2,313 | 39 | 3 | 198 | 2,151 | NA | 2,151 |
| 1984 Total | 2,416 | NA | 3 | 2,419 | 42 | 3 | 173 | 2,286 | NA | 2,286 |
| 1985 Total | 2,470 | NA | 3 | 2,473 | 46 | 5 | 190 | 2,324 | NA | 2,324 |
| 1986 Total | 2,487 | NA | 3 | 2,490 | 41 | 5 | 158 | 2,369 | NA | 2,369 |
| 1987 Total | 2,572 | NA | 3 | 2,575 | 52 | 6 | 164 | 2,457 | NA | 2,457 |
| 1988 Total | 2,704 | NA | 3 | 2,707 | 39 | 7 | 161 | 2,578 | NA | 2,578 |
| 1989 Total | 2,848 | 4 | 115 | 2,967 | 26 | 15 | 223 | 2,647 | 108 | 2,755 |
| 1990 Total | 2,901 | 6 | 131 | 3,038 | 18 | 16 | 214 | 2,713 | 114 | 2,827 |
| 1991 Total | 2,936 | 6 | 133 | 3,074 | 22 | 2 | 213 | 2,762 | 118 | 2,880 |
| 1992 Total | 2,934 | 6 | 143 | 3,084 | 28 | 3 | 224 | 2,763 | 122 | 2,886 |
| 1993 Total | 3,044 | 7 | 146 | 3,197 | 31 | 4 | 236 | 2,861 | 128 | 2,989 |
| 1994 Total | 3,089 | 8 | 151 | 3,248 | 47 | 2 | 224 | 2,935 | 134 | 3,069 |
| 1995 Total | 3,194 | 8 | 151 | 3,353 | 43 | 4 | 235 | 3,013 | 144 | 3,157 |
| 1996 Total | 3,284 | 9 | 151 | 3,444 | 43 | 3 | 237 | 3,101 | 146 | 3,247 |
| 1997 Total | 3,329 | 9 | 154 | 3,492 | 43 | 9 | 232 | 3,146 | 148 | 3,294 |
| 1998 Total | 3,457 | 9 | 154 | 3,620 | 40 | 14 | 221 | 3,264 | 161 | 3,425 |
| 1999 Total | 3,530 | 9 | 156 | 3,695 | 43 | 14 | 229 | 3,312 | 183 | 3,495 |
| 2000 Total | 3,638 | 8 | 157 | 3,802 | 49 | 15 | 231 | 3,421 | 183 | 3,605 |
| 2001 January | 319 | 1 | 13 | 332 | 3 | 2 | 9 | 309 | E 16 | 325 |
| February | 271 | 1 | 11 | 283 | 3 | 3 | -2 | 271 | E 15 | 286 |
| March | 288 | 1 | 12 | 301 | 4 | 2 | 19 | 267 | E 16 | 283 |
| April | 266 | 1 | 12 | 278 | 4 | 1 | 12 | 253 | E 16 | 268 |
| May | 288 | 1 | 12 | 300 | 4 | 2 | 26 | 261 | E 16 | 277 |
| June | 315 | 1 | 12 | 328 | 4 | 1 | 27 | 288 | E 16 | 303 |
| July | 344 | 1 | 13 | 358 | 4 | 1 | 30 | 314 | E 16 | 330 |
| August | 356 | 1 | 14 | 371 | 4 | 1 | 27 | 330 | E 16 | 346 |
| September | 294 | 1 | 12 | 307 | 2 | 1 | -2 | 294 | E 16 | 309 |
| October | 281 | 1 | 13 | 295 | 2 | 1 | 14 | 265 | E 16 | 281 |
| November | 266 | 1 | 12 | 279 | 2 | 1 | 13 | 251 | E 16 | 267 |
| December | 292 | 1 | 13 | 305 | 3 | 1 | 26 | 266 | E 16 | 282 |
| Total | 3,580 | 7 | 149 | 3,737 | 39 | 16 | 199 | 3,370 | E 190 | 3,560 |
| 2002 January | 305 | 1 | 14 | 319 | 3 | 1 | 13 | 293 | E 16 | 309 |
| February | 267 | 1 | 12 | 280 | 3 | 1 | 2 | 265 | E 15 | 280 |
| March | 290 | 1 | 13 | 304 | 3 | 2 | 21 | 268 | E 16 | 284 |
| April | 276 | 1 | 12 | 289 | 3 | 1 | 15 | 260 | E 16 | 275 |
| May | 294 | 1 | 13 | 307 | 2 | 2 | 22 | 270 | E 16 | 286 |
| June | 327 | 1 | 13 | 340 | 3 | 1 | 27 | 299 | E 16 | 315 |
| July | 365 | 1 | 14 | 380 | 4 | 1 | 29 | 338 | E 16 | 354 |
| August | 355 | 1 | 14 | 369 | 4 | 1 | 17 | 339 | E 16 | 356 |
| September | 316 | 1 | 13 | 330 | 3 | 1 | 5 | 311 | E 16 | 326 |
| October | 293 | 1 | 12 | 306 | 2 | 1 | 7 | 284 | E 16 | 300 |
| November | 281 | 1 | 12 | 294 | 2 | 1 | 17 | 263 | E 16 | 279 |
| December | 307 | 1 | 12 | 320 | 2 | 1 | 20 | 285 | E 16 | 301 |
| Total | 3,675 | 9 | 154 | 3,839 | 36 | 13 | 196 | 3,475 | E 190 | 3,666 |
| 2003 January | 323 | 1 | 14 | 338 | 3 | 1 | 15 | 308 | E 16 | 324 |
| February | R 285 | R 1 | 12 | R 297 | 3 | 2 | R (s) | 283 | E 15 | 298 |
| March | RF 296 | F 1 | F 13 | RF 310 | 3 | 3 | RE 19 | RF 275 | E 16 | R 291 |
| April | F 273 | F 1 | F 13 | F 286 | 3 | 2 | E 9 | F 264 | E 16 | 280 |
| 4-Month Total | E 1,177 | E 3 | E 51 | E 1,230 | 11 | 8 | E 43 | E 1,130 | E 63 | 1,193 |
| 2002 4-Month Total | 1,139 | 2 | 51 | 1,192 | 13 | 4 | 52 | 1,086 | E 63 | 1,149 |
| 2001 4-Month Total | 1,143 | 2 | 49 | 1,194 | 14 | 8 | 38 | 1,100 | E 63 | 1,163 |

^a The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

^b Commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See note at end of section.

^c Industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See note at end of section. Through 1988, includes industrial hydroelectric power only.

^d Electricity transmitted across U.S. borders with Canada and Mexico.

^e Energy losses that occur between the point of generation and delivery to the customer, and data collection frame differences and nonsampling error. See Note 12 at end of Section 2 for discussion on electrical system energy losses.

^f Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.

^g Commercial and industrial facility use of onsite net electricity generation; and electricity sales among adjacent or co-located facilities for which revenue information is not available.

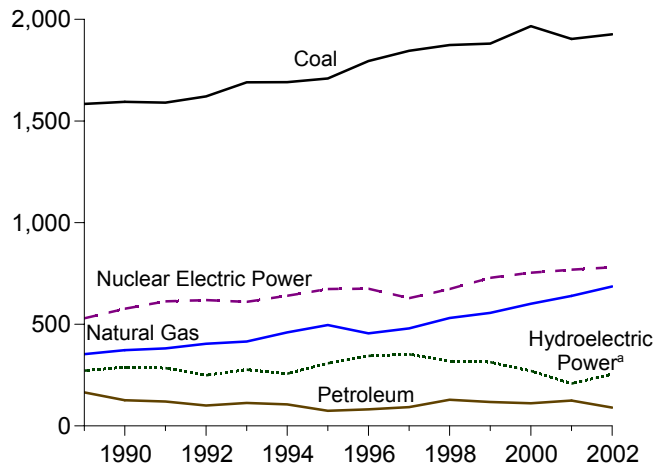
R=Revised. E=Estimate. NA=Not available. F=Forecast. (s)=Less than 0.5 billion kilowatthours.

Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia. Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>.

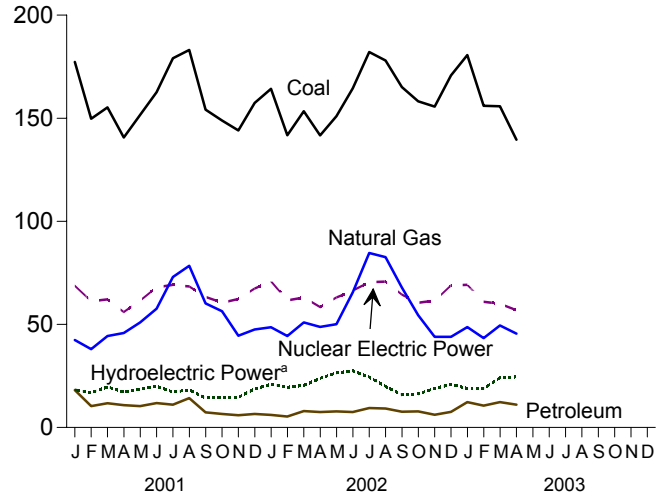
Sources: • **Net Generation:** Tables 7.2a-7.2c. • **Imports and Exports:** See end of section. • **Losses and Unaccounted for:** Calculated as the sum of total net generation and imports minus total end use and exports. • **End Use:** Table 7.5. • **Forecast Values:** Energy Information Administration, Short-Term Integrated Forecasting System. See Note 10 at end of Section 4 for related information.

Figure 7.2 Electricity Net Generation
(Billion Kilowatthours)

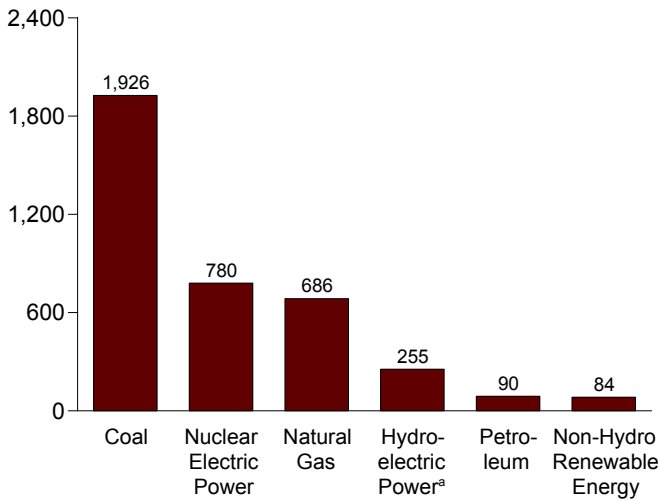
Total (All Sectors), Major Sources, 1989-2002



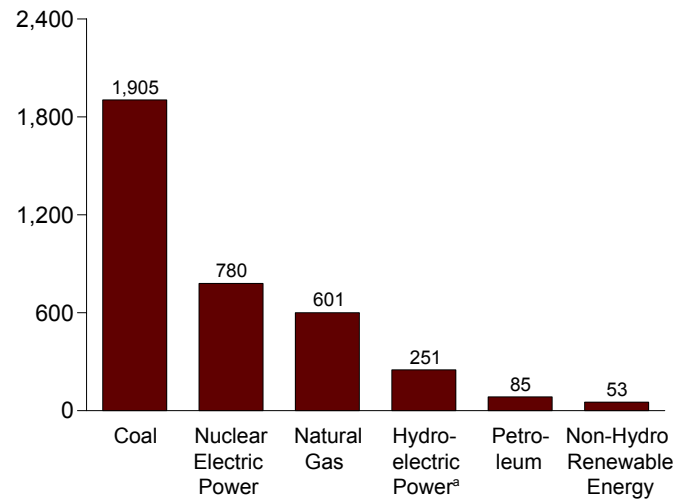
Total (All Sectors), Major Sources, Monthly



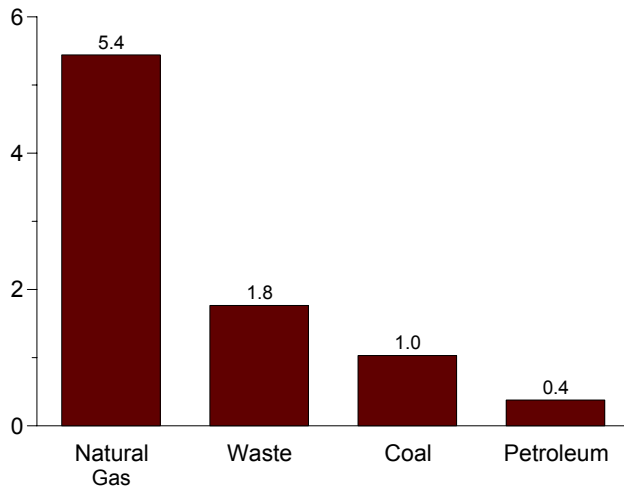
Total (All Sectors), Major Sources, 2002



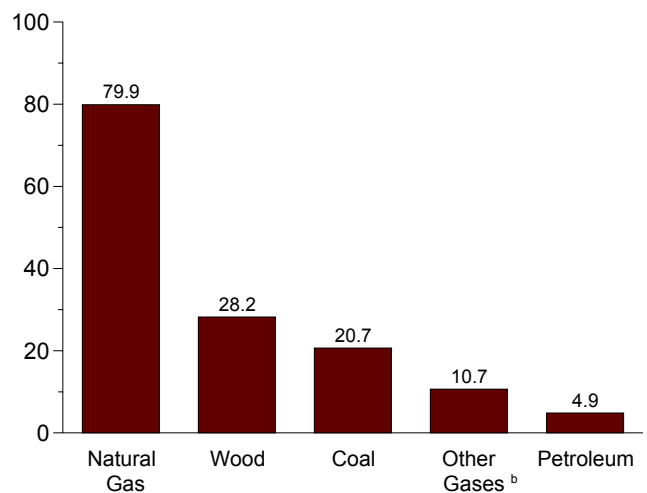
Electric Power Sector, Major Sources, 2002



Commercial Sector, Major Sources, 2002



Industrial Sector, Major Sources, 2002



^aConventional and pumped storage hydroelectric power.

^bBlast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>
Sources: Tables 7.2a, 7.2b, and 7.2c.

Table 7.2a Electricity Net Generation: Total (All Sectors)
(Million Kilowatthours)

| | Fossil Fuels | | | | Nuclear Electric Power | Hydro-electric Pumped Storage ^e | Renewable Energy | | | | | Total ⁱ | |
|-------------------------|-----------------------|-------------------------|--------------------------|--------------------------|------------------------|--|------------------------------------|---------------------|---------------------|---------------------|--------------------|--------------------|------------------------|
| | Coal ^a | Petro-leum ^b | Natural Gas ^c | Other Gases ^d | | | Conven-tional Hydro-electric Power | Wood ^f | Waste ^g | Geo-thermal | Solar ^h | | Wind |
| 1973 Total | 847,651 | 314,343 | 340,858 | NA | 83,479 | (j) | 275,431 | 130 | 198 | 1,966 | NA | NA | 1,864,057 |
| 1974 Total | 828,433 | 300,931 | 320,065 | NA | 113,976 | (j) | 304,212 | 69 | 182 | 2,453 | NA | NA | 1,870,319 |
| 1975 Total | 852,786 | 289,095 | 299,778 | NA | 172,505 | (j) | 303,153 | 18 | 174 | 3,246 | NA | NA | 1,920,755 |
| 1976 Total | 944,391 | 319,988 | 294,624 | NA | 191,104 | (j) | 286,924 | 84 | 182 | 3,616 | NA | NA | 2,040,914 |
| 1977 Total | 985,219 | 358,179 | 305,505 | NA | 250,883 | (j) | 223,599 | 308 | 173 | 3,582 | NA | NA | 2,127,447 |
| 1978 Total | 975,742 | 365,060 | 305,391 | NA | 276,403 | (j) | 283,465 | 197 | 140 | 2,978 | NA | NA | 2,209,377 |
| 1979 Total | 1,075,037 | 303,525 | 329,485 | NA | 255,155 | (j) | 283,076 | 300 | 198 | 3,889 | NA | NA | 2,250,665 |
| 1980 Total | 1,161,562 | 245,994 | 346,240 | NA | 251,116 | (j) | 279,182 | 275 | 158 | 5,073 | NA | NA | 2,289,600 |
| 1981 Total | 1,203,203 | 206,421 | 345,777 | NA | 272,674 | (j) | 263,845 | 245 | 123 | 5,686 | NA | NA | 2,297,973 |
| 1982 Total | 1,192,004 | 146,797 | 305,260 | NA | 282,773 | (j) | 312,374 | 196 | 125 | 4,843 | NA | NA | 2,244,372 |
| 1983 Total | 1,259,424 | 144,499 | 274,098 | NA | 293,677 | (j) | 335,291 | 216 | 163 | 6,075 | NA | 3 | 2,313,446 |
| 1984 Total | 1,341,681 | 119,808 | 297,394 | NA | 327,634 | (j) | 324,311 | 461 | 425 | 7,741 | 5 | 6 | 2,419,465 |
| 1985 Total | 1,402,128 | 100,202 | 291,946 | NA | 383,691 | (j) | 284,311 | 743 | 640 | 9,325 | 11 | 6 | 2,473,002 |
| 1986 Total | 1,385,831 | 136,585 | 248,508 | NA | 414,038 | (j) | 294,005 | 492 | 685 | 10,308 | 14 | 4 | 2,490,471 |
| 1987 Total | 1,463,781 | 118,493 | 272,621 | NA | 455,270 | (j) | 252,856 | 783 | 694 | 10,775 | 10 | 4 | 2,575,288 |
| 1988 Total | 1,540,653 | 148,900 | 252,801 | NA | 526,973 | (j) | 226,101 | 936 | 738 | 10,300 | 9 | 1 | 2,707,411 |
| 1989 Total ^k | 1,583,779 | 164,518 | 352,629 | 7,862 | 529,359 | (j) | 271,977 | 27,237 | 9,163 | 14,593 | 251 | 2,112 | 2,967,306 |
| 1990 Total | 1,594,011 | 126,621 | 372,765 | 10,383 | 576,862 | -3,508 | 292,866 | 32,522 | 13,260 | 15,434 | 367 | 2,789 | 3,037,988 |
| 1991 Total | 1,590,623 | 119,752 | 381,553 | 11,336 | 612,565 | -4,541 | 288,994 | 33,725 | 15,665 | 15,966 | 472 | 2,951 | 3,073,799 |
| 1992 Total | 1,621,206 | 100,154 | 404,074 | 13,270 | 618,776 | -4,177 | 253,088 | 36,529 | 17,816 | 16,138 | 400 | 2,888 | 3,083,882 |
| 1993 Total | 1,690,070 | 112,788 | 414,927 | 12,956 | 610,291 | -4,036 | 280,494 | 37,623 | 18,333 | 16,789 | 462 | 3,006 | 3,197,191 |
| 1994 Total | 1,690,694 | 105,901 | 460,219 | 13,319 | 640,440 | -3,378 | 260,126 | 37,937 | 19,129 | 15,535 | 487 | 3,447 | 3,247,522 |
| 1995 Total | 1,709,426 | 74,554 | 496,058 | 13,870 | 673,402 | -2,725 | 310,833 | 36,521 | 20,405 | 13,378 | 497 | 3,164 | 3,353,487 |
| 1996 Total | 1,795,196 | 81,411 | 455,056 | 14,356 | 674,729 | -3,088 | 347,162 | 36,800 | 20,911 | 14,329 | 521 | 3,234 | 3,444,188 |
| 1997 Total | 1,845,016 | 92,555 | 479,399 | 13,351 | 628,644 | -4,040 | 356,453 | 36,948 | 21,709 | 14,726 | 511 | 3,288 | 3,492,172 |
| 1998 Total | 1,873,516 | 128,800 | 531,257 | 13,492 | 673,702 | -4,467 | 323,336 | 36,338 | 22,448 | 14,774 | 502 | 3,026 | 3,620,295 |
| 1999 Total | 1,881,087 | 118,061 | 556,396 | 14,126 | 728,254 | -6,097 | 319,536 | 37,041 | 22,572 | 14,827 | 495 | 4,488 | 3,694,810 |
| 2000 Total | 1,966,265 | 111,221 | 601,038 | 13,955 | 753,893 | -5,539 | 275,573 | 37,595 | 23,131 | 14,093 | 493 | 5,593 | 3,802,105 |
| 2001 January | 177,287 | 18,112 | 42,389 | 718 | 68,707 | -589 | 18,852 | 3,191 | 1,819 | 1,229 | 7 | 389 | 332,493 |
| February | 149,735 | 10,342 | 37,967 | 676 | 61,272 | -707 | 17,473 | 2,697 | 1,636 | 1,073 | 13 | 431 | 282,940 |
| March | 155,269 | 11,733 | 44,364 | 769 | 62,141 | -773 | 20,477 | 2,853 | 1,779 | 1,190 | 31 | 532 | 300,707 |
| April | 140,671 | 10,863 | 45,843 | 698 | 56,003 | -796 | 18,013 | 2,821 | 1,783 | 1,095 | 39 | 685 | 278,079 |
| May | 151,593 | 10,390 | 50,934 | 785 | 61,512 | -623 | 19,176 | 2,740 | 1,826 | 1,071 | 81 | 635 | 300,492 |
| June | 162,616 | 11,823 | 57,603 | 733 | 68,023 | -774 | 20,728 | 2,891 | 1,841 | 1,088 | 91 | 670 | 327,694 |
| July | 179,060 | 11,042 | 73,030 | 840 | 69,166 | -871 | 18,079 | 3,053 | 1,913 | 1,179 | 92 | 635 | 357,614 |
| August | 183,116 | 14,229 | 78,410 | 848 | 68,389 | -715 | 18,914 | 3,179 | 1,905 | 1,167 | 85 | 577 | 370,533 |
| September | 154,158 | 7,342 | 60,181 | 767 | 63,378 | -928 | 15,256 | 2,874 | 1,788 | 1,139 | 65 | 490 | 306,929 |
| October | 148,931 | 6,534 | 56,376 | 737 | 60,461 | -615 | 15,235 | 3,046 | 1,809 | 1,162 | 21 | 607 | 294,734 |
| November | 144,117 | 5,931 | 44,491 | 699 | 62,342 | -811 | 15,413 | 2,879 | 1,784 | 1,157 | 14 | 470 | 278,934 |
| December | 157,402 | 6,539 | 47,541 | 770 | 67,431 | -623 | 19,346 | 2,975 | 1,882 | 1,190 | 4 | 616 | 305,496 |
| Total | 1,903,956 | 124,880 | 639,129 | 9,039 | 768,826 | -8,823 | 216,961 | 35,200 | 21,765 | 13,741 | 543 | 6,737 | 3,736,644 |
| 2002 January | 164,255 | 6,079 | 48,656 | 995 | 70,926 | -758 | 21,652 | 3,249 | 1,913 | 1,197 | 11 | 797 | 319,385 |
| February | 141,769 | 5,314 | 44,343 | 809 | 61,658 | -593 | 20,145 | 2,849 | 1,656 | 1,038 | 24 | 716 | 280,118 |
| March | 153,359 | 7,924 | 50,975 | 969 | 63,041 | -692 | 21,051 | 2,966 | 1,940 | 1,163 | 33 | 874 | 303,995 |
| April | 141,669 | 7,497 | 48,793 | 1,000 | 58,437 | -592 | 24,492 | 2,987 | 1,818 | 1,033 | 46 | 1,044 | 288,603 |
| May | 151,011 | 7,826 | 50,064 | 1,078 | 63,032 | -547 | 27,038 | 2,928 | 1,949 | 1,127 | 58 | 1,106 | 307,063 |
| June | 164,530 | 7,473 | 65,567 | 1,073 | 66,372 | -872 | 28,360 | 3,085 | 1,958 | 1,051 | 96 | 1,147 | 340,238 |
| July | 182,105 | 9,395 | 84,595 | 1,175 | 70,421 | -1,007 | 25,417 | 3,216 | 2,051 | 1,160 | 86 | 901 | 380,161 |
| August | 178,027 | 9,186 | 82,621 | 1,203 | 70,778 | -875 | 20,767 | 3,163 | 1,975 | 1,125 | 75 | 982 | 369,442 |
| September | 165,119 | 7,625 | 67,886 | 1,064 | 64,481 | -785 | 16,651 | 3,101 | 1,912 | 1,095 | 53 | 760 | 329,566 |
| October | 158,177 | 7,829 | 54,480 | 972 | 60,493 | -688 | 16,934 | 3,041 | 1,896 | 1,133 | 31 | 752 | 305,777 |
| November | 155,625 | 6,164 | 43,931 | 908 | 61,520 | -674 | 19,614 | 3,005 | 1,789 | 1,102 | 28 | 663 | 294,041 |
| December | 170,796 | 7,545 | 43,928 | 872 | 68,905 | -688 | 21,522 | 2,953 | 1,999 | 1,135 | 4 | 764 | 320,162 |
| Total | 1,926,442 | 89,856 | 685,840 | 12,116 | 780,064 | -8,769 | 263,642 | 36,544 | 22,858 | 13,357 | 544 | 10,506 | 3,838,552 |
| 2003 January | 180,632 | 12,338 | 48,721 | 913 | 69,211 | -760 | 19,714 | 2,976 | 1,741 | 1,144 | 13 | 558 | 337,545 |
| February | ^R 156,063 | ^R 10,560 | ^R 43,326 | ^R 733 | ^R 60,942 | ^R -774 | ^R 19,630 | ^R 2,681 | ^R 1,619 | ^R 1,028 | ^R 18 | ^R 692 | ^R 296,772 |
| March | ^{RF} 155,767 | ^{RF} 12,336 | ^{RF} 49,470 | ^{RF} 878 | ^{RF} 59,997 | ^{RF} -820 | ^{RF} 24,966 | ^{RF} 2,969 | ^{RF} 1,829 | ^{RF} 1,287 | ^{RF} 34 | ^{RF} 878 | ^{RF} 309,960 |
| April | ^F 139,598 | ^F 11,028 | ^F 45,549 | ^F 1,076 | ^F 56,829 | ^F -606 | ^F 25,113 | ^F 3,078 | ^F 1,778 | ^F 1,341 | ^F 43 | ^F 940 | ^F 286,160 |
| 4-Month Total | ^E 632,060 | ^E 46,262 | ^E 187,065 | ^E 3,600 | ^E 246,979 | ^E -2,961 | ^E 89,423 | ^E 11,704 | ^E 6,968 | ^E 4,801 | ^E 109 | ^E 3,067 | ^E 1,230,437 |
| 2002 4-Month Total | 601,052 | 26,814 | 192,766 | 3,772 | 254,062 | -2,634 | 87,340 | 12,052 | 7,327 | 4,430 | 114 | 3,431 | 1,192,102 |
| 2001 4-Month Total | 622,962 | 51,050 | 170,563 | 2,861 | 248,123 | -2,865 | 74,815 | 11,562 | 7,018 | 4,587 | 89 | 2,037 | 1,194,219 |

^a Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

^b Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil.

^c Natural gas, including a small amount of supplemental gaseous fuels.

^d Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

^e Pumped storage facility production minus energy used for pumping.

^f Wood, black liquor, and other wood waste.

^g Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

^h Solar thermal and photovoltaic energy.

ⁱ "Total" includes batteries, chemicals, hydrogen, pitch, purchased steam,

sulfur, and miscellaneous technologies, which are not separately displayed.

^j Included in "Conventional Hydroelectric Power."

^k Hydroelectric data through 1988 are for generation at electric utilities and industrial plants only; beginning in 1989, data also include generation at independent power producers and commercial plants. For all other series, data through 1988 are for generation at electric utilities only; beginning in 1989, data also include generation at independent power producers, commercial plants, and industrial plants.

R=Revised. E=Estimate. NA=Not available. F=Forecast.

Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>.

Sources: See sources for Tables 7.2b and 7.2c.

Table 7.2b Electricity Net Generation: Electric Power Sector
(Million Kilowatthours)

| | Fossil Fuels | | | | Nuclear Electric Power | Hydro-electric Pumped Storage ^e | Renewable Energy | | | | | | Total ⁱ |
|-------------------------|-------------------|-------------------------|--------------------------|--------------------------|------------------------|--|------------------------------------|-------------------|--------------------|-------------|--------------------|---------|--------------------|
| | Coal ^a | Petro-leum ^b | Natural Gas ^c | Other Gases ^d | | | Conven-tional Hydro-electric Power | Wood ^f | Waste ^g | Geo-thermal | Solar ^h | Wind | |
| 1973 Total | 847,651 | 314,343 | 340,858 | NA | 83,479 | (j) | 272,083 | 130 | 198 | 1,966 | NA | NA | 1,860,710 |
| 1974 Total | 828,433 | 300,931 | 320,065 | NA | 113,976 | (j) | 301,032 | 69 | 182 | 2,453 | NA | NA | 1,867,139 |
| 1975 Total | 852,786 | 289,095 | 299,778 | NA | 172,505 | (j) | 300,407 | 18 | 174 | 3,246 | NA | NA | 1,917,649 |
| 1976 Total | 944,391 | 319,988 | 294,624 | NA | 191,104 | (j) | 283,707 | 84 | 182 | 3,616 | NA | NA | 2,037,696 |
| 1977 Total | 985,219 | 358,179 | 305,505 | NA | 250,883 | (j) | 220,475 | 308 | 173 | 3,582 | NA | NA | 2,124,323 |
| 1978 Total | 975,742 | 365,060 | 305,391 | NA | 276,403 | (j) | 280,419 | 197 | 140 | 2,978 | NA | NA | 2,206,331 |
| 1979 Total | 1,075,037 | 303,525 | 329,485 | NA | 255,155 | (j) | 279,783 | 300 | 198 | 3,889 | NA | NA | 2,247,372 |
| 1980 Total | 1,161,562 | 245,994 | 346,240 | NA | 251,116 | (j) | 276,021 | 275 | 158 | 5,073 | NA | NA | 2,286,439 |
| 1981 Total | 1,203,203 | 206,421 | 345,777 | NA | 272,674 | (j) | 260,684 | 245 | 123 | 5,686 | NA | NA | 2,294,812 |
| 1982 Total | 1,192,004 | 146,797 | 305,260 | NA | 282,773 | (j) | 309,213 | 196 | 125 | 4,843 | NA | NA | 2,241,211 |
| 1983 Total | 1,259,424 | 144,499 | 274,098 | NA | 293,677 | (j) | 332,130 | 216 | 163 | 6,075 | NA | 3 | 2,310,285 |
| 1984 Total | 1,341,681 | 119,808 | 297,394 | NA | 327,634 | (j) | 321,150 | 461 | 425 | 7,741 | 5 | 6 | 2,416,304 |
| 1985 Total | 1,402,128 | 100,202 | 291,946 | NA | 383,691 | (j) | 281,149 | 743 | 640 | 9,325 | 11 | 6 | 2,469,841 |
| 1986 Total | 1,385,831 | 136,585 | 248,508 | NA | 414,038 | (j) | 290,844 | 492 | 685 | 10,308 | 14 | 4 | 2,487,310 |
| 1987 Total | 1,463,781 | 118,493 | 272,621 | NA | 455,270 | (j) | 249,695 | 783 | 694 | 10,775 | 10 | 4 | 2,572,127 |
| 1988 Total | 1,540,653 | 148,900 | 252,801 | NA | 526,973 | (j) | 222,940 | 936 | 738 | 10,300 | 9 | 1 | 2,704,250 |
| 1989 Total ^k | 1,562,366 | 159,005 | 297,295 | 454 | 529,355 | (j) | 269,189 | 5,582 | 7,743 | 14,593 | 251 | 2,112 | 2,848,227 |
| 1990 Total | 1,572,109 | 118,864 | 309,486 | 621 | 576,862 | -3,508 | 289,753 | 7,032 | 11,500 | 15,434 | 367 | 2,789 | 2,901,322 |
| 1991 Total | 1,568,846 | 112,798 | 317,773 | 719 | 612,565 | -4,541 | 286,019 | 7,736 | 13,854 | 15,966 | 472 | 2,951 | 2,935,561 |
| 1992 Total | 1,597,714 | 92,238 | 334,274 | 1,212 | 618,776 | -4,177 | 250,016 | 8,491 | 15,924 | 16,138 | 400 | 2,888 | 2,934,374 |
| 1993 Total | 1,665,464 | 105,425 | 342,222 | 967 | 610,291 | -4,036 | 277,524 | 9,152 | 16,223 | 16,789 | 462 | 3,006 | 3,043,897 |
| 1994 Total | 1,666,276 | 98,677 | 385,689 | 1,092 | 640,440 | -3,378 | 254,005 | 9,232 | 16,984 | 15,535 | 487 | 3,447 | 3,088,725 |
| 1995 Total | 1,686,056 | 68,146 | 419,179 | 1,927 | 673,402 | -1,927 | 305,410 | 7,597 | 17,986 | 13,378 | 497 | 3,164 | 3,194,230 |
| 1996 Total | 1,771,973 | 74,783 | 378,757 | 1,341 | 674,729 | -3,088 | 341,159 | 8,386 | 17,816 | 14,329 | 521 | 3,234 | 3,284,141 |
| 1997 Total | 1,820,762 | 86,479 | 399,596 | 1,533 | 628,644 | -4,040 | 350,648 | 8,680 | 18,485 | 14,726 | 511 | 3,288 | 3,329,375 |
| 1998 Total | 1,850,193 | 122,211 | 449,293 | 2,315 | 673,702 | -4,467 | 317,867 | 8,608 | 19,233 | 14,774 | 502 | 3,026 | 3,457,416 |
| 1999 Total | 1,858,618 | 111,539 | 472,996 | 1,607 | 728,254 | -6,097 | 314,663 | 8,961 | 19,493 | 14,827 | 495 | 4,488 | 3,529,982 |
| 2000 Total | 1,943,111 | 105,192 | 517,978 | 2,028 | 753,893 | -5,539 | 271,338 | 8,916 | 20,307 | 14,093 | 493 | 5,593 | 3,637,529 |
| 2001 January | 175,303 | 17,396 | 35,261 | 40 | 68,707 | -589 | 18,611 | 757 | 1,624 | 1,229 | 7 | 389 | 318,736 |
| February | 148,059 | 9,817 | 31,636 | 42 | 61,272 | -707 | 17,232 | 625 | 1,478 | 1,073 | 13 | 431 | 270,971 |
| March | 153,452 | 11,207 | 37,453 | 45 | 62,141 | -773 | 20,133 | 678 | 1,611 | 1,190 | 31 | 532 | 287,700 |
| April | 139,034 | 10,416 | 39,413 | 43 | 56,003 | -796 | 17,723 | 616 | 1,585 | 1,095 | 39 | 685 | 265,855 |
| May | 150,043 | 9,934 | 44,283 | 51 | 61,512 | -623 | 18,875 | 659 | 1,643 | 1,071 | 81 | 635 | 288,166 |
| June | 160,888 | 11,413 | 50,854 | 51 | 68,023 | -774 | 20,430 | 756 | 1,658 | 1,088 | 91 | 670 | 315,148 |
| July | 177,142 | 10,587 | 65,546 | 59 | 69,166 | -871 | 17,832 | 748 | 1,719 | 1,179 | 92 | 635 | 343,834 |
| August | 181,053 | 13,771 | 70,693 | 57 | 68,389 | -715 | 18,593 | 767 | 1,714 | 1,167 | 85 | 577 | 356,152 |
| September | 152,450 | 6,926 | 53,012 | 47 | 63,378 | -928 | 15,009 | 702 | 1,592 | 1,139 | 65 | 490 | 293,882 |
| October | 147,218 | 6,081 | 49,147 | 44 | 60,461 | -615 | 15,024 | 631 | 1,610 | 1,162 | 21 | 607 | 281,391 |
| November | 142,473 | 5,520 | 37,494 | 46 | 62,342 | -811 | 15,211 | 655 | 1,584 | 1,157 | 14 | 470 | 266,155 |
| December | 155,711 | 6,082 | 40,147 | 60 | 67,431 | -623 | 19,076 | 701 | 1,667 | 1,190 | 4 | 616 | 292,063 |
| Total | 1,882,826 | 119,149 | 554,940 | 586 | 768,826 | -8,823 | 213,749 | 8,294 | 19,486 | 13,741 | 543 | 6,737 | 3,580,053 |
| 2002 January | 162,430 | 5,609 | 40,993 | 179 | 70,926 | -758 | 21,367 | 760 | 1,668 | 1,197 | 11 | 797 | 305,224 |
| February | 140,185 | 4,924 | 37,469 | 99 | 61,658 | -593 | 19,830 | 616 | 1,451 | 1,038 | 24 | 716 | 267,484 |
| March | 151,590 | 7,477 | 43,470 | 142 | 63,041 | -692 | 20,726 | 690 | 1,711 | 1,163 | 33 | 874 | 290,254 |
| April | 139,984 | 7,089 | 42,283 | 106 | 58,437 | -592 | 24,091 | 638 | 1,597 | 1,033 | 46 | 1,044 | 275,755 |
| May | 149,307 | 7,417 | 43,159 | 112 | 63,032 | -547 | 26,642 | 619 | 1,730 | 1,127 | 58 | 1,106 | 293,780 |
| June | 162,678 | 7,070 | 58,393 | 95 | 66,372 | -872 | 28,038 | 694 | 1,740 | 1,051 | 96 | 1,147 | 326,537 |
| July | 180,076 | 8,920 | 76,276 | 126 | 70,421 | -1,007 | 25,143 | 744 | 1,807 | 1,160 | 86 | 901 | 364,739 |
| August | 176,138 | 8,721 | 74,484 | 142 | 70,778 | -875 | 20,526 | 752 | 1,756 | 1,125 | 75 | 982 | 354,650 |
| September | 163,301 | 7,236 | 60,533 | 105 | 64,481 | -785 | 16,440 | 700 | 1,670 | 1,095 | 53 | 760 | 315,645 |
| October | 156,324 | 7,370 | 48,094 | 154 | 60,493 | -688 | 16,611 | 698 | 1,630 | 1,133 | 31 | 752 | 292,622 |
| November | 153,833 | 5,724 | 37,652 | 124 | 61,520 | -674 | 19,151 | 686 | 1,546 | 1,102 | 28 | 663 | 281,368 |
| December | 168,893 | 7,058 | 37,715 | 74 | 68,905 | -688 | 20,968 | 723 | 1,755 | 1,135 | 4 | 764 | 307,344 |
| Total | 1,904,739 | 84,615 | 600,523 | 1,456 | 780,064 | -8,769 | 259,533 | 8,320 | 20,061 | 13,357 | 544 | 10,506 | 3,675,402 |
| 2003 January | 178,525 | 11,653 | 41,095 | 111 | 69,211 | -760 | 19,295 | 820 | 1,534 | 1,144 | 13 | 558 | 323,247 |
| February | R 154,267 | R 10,021 | R 36,813 | R 97 | R 60,942 | R -774 | R 19,263 | R 700 | R 1,429 | R 1,028 | R 18 | R 692 | R 284,501 |
| March | RF 153,986 | RF 11,647 | RF 42,058 | RF 129 | RF 59,997 | RF -820 | RF 24,584 | RF 696 | RF 1,597 | RF 1,287 | RF 34 | RF 878 | RF 296,075 |
| April | F 137,859 | F 10,399 | F 39,061 | F 109 | F 56,829 | F -606 | F 24,682 | F 634 | F 1,543 | F 1,341 | F 43 | F 940 | F 272,834 |
| 4-Month Total | E 624,637 | E 43,721 | E 159,026 | E 446 | E 246,979 | E -2,961 | E 87,824 | E 2,850 | E 6,103 | E 4,801 | E 109 | E 3,067 | E 1,176,657 |
| 2002 4-Month Total | 594,190 | 25,099 | 164,216 | 525 | 254,062 | -2,634 | 86,014 | 2,703 | 6,427 | 4,430 | 114 | 3,431 | 1,138,717 |
| 2001 4-Month Total | 615,849 | 48,835 | 143,763 | 171 | 248,123 | -2,865 | 73,698 | 2,676 | 6,299 | 4,587 | 89 | 2,037 | 1,143,263 |

^a Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.
^b Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil.
^c Natural gas, including a small amount of supplemental gaseous fuels.
^d Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.
^e Pumped storage facility production minus energy used for pumping.
^f Wood, black liquor, and other wood waste.
^g Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.
^h Solar thermal and photovoltaic energy.
ⁱ "Total" includes batteries, chemicals, hydrogen, pitch, purchased steam,

sulfur, and miscellaneous technologies, which are not separately displayed.
^j Included in "Conventional Hydroelectric Power."
^k Through 1988, data are for generation at electric utilities only. Beginning in 1989, data also include generation at independent power producers.
R=Revised, E=Estimate, NA=Not available, F=Forecast.
Notes: • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.
Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>.
Sources: See end of section.

Table 7.2c Electricity Net Generation: Commercial and Industrial Sectors
(Million Kilowatthours)

| | Commercial Sector ^a | | | | | Industrial Sector ^b | | | | | | | |
|---------------------------------|--------------------------------|-------------------------|--------------------------|--------------------|--------------------|--------------------------------|-------------------------|--------------------------|--------------------------|--------------------------|-------------------|--------------------|--------------------|
| | Coal ^c | Petro-leum ^d | Natural Gas ^e | Waste ^f | Total ^g | Coal ^c | Petro-leum ^d | Natural Gas ^e | Other Gases ^h | Hydro-power ⁱ | Wood ^j | Waste ^f | Total ^k |
| 1989 Total | 736 | 558 | 2,155 | 527 | 4,251 | 20,677 | 4,955 | 53,179 | 7,297 | 2,722 | 21,557 | 893 | 114,828 |
| 1990 Total | 796 | 589 | 3,272 | 812 | 5,837 | 21,107 | 7,169 | 60,007 | 9,641 | 2,975 | 25,379 | 949 | 130,830 |
| 1991 Total | 775 | 413 | 3,213 | 883 | 5,659 | 21,002 | 6,540 | 60,567 | 10,501 | 2,844 | 25,863 | 927 | 132,579 |
| 1992 Total | 749 | 302 | 3,867 | 961 | 6,228 | 22,743 | 7,615 | 65,933 | 11,953 | 2,950 | 27,916 | 932 | 143,280 |
| 1993 Total | 864 | 334 | 4,471 | 1,018 | 7,000 | 23,742 | 7,028 | 68,234 | 11,890 | 2,871 | 28,358 | 1,092 | 146,294 |
| 1994 Total | 850 | 417 | 4,929 | 1,162 | 7,619 | 23,568 | 6,808 | 69,600 | 12,112 | 6,028 | 28,650 | 983 | 151,178 |
| 1995 Total | 998 | 379 | 5,162 | 1,519 | 8,232 | 22,372 | 6,030 | 71,717 | 11,943 | 5,304 | 28,868 | 900 | 151,025 |
| 1996 Total | 1,051 | 369 | 5,249 | 2,176 | 9,030 | 22,172 | 6,260 | 71,049 | 13,015 | 5,878 | 28,354 | 919 | 151,017 |
| 1997 Total | 1,040 | 427 | 4,725 | 2,342 | 8,701 | 23,214 | 5,649 | 75,078 | 11,814 | 5,685 | 28,225 | 882 | 154,097 |
| 1998 Total | 985 | 383 | 4,879 | 2,335 | 8,748 | 22,337 | 6,206 | 77,085 | 11,170 | 5,349 | 27,693 | 880 | 154,132 |
| 1999 Total | 995 | 434 | 4,607 | 2,393 | 8,563 | 21,474 | 6,088 | 78,793 | 12,519 | 4,758 | 28,060 | 686 | 156,264 |
| 2000 Total | 1,097 | 432 | 4,262 | 1,985 | 7,903 | 22,056 | 5,597 | 78,798 | 11,927 | 4,135 | 28,652 | 839 | 156,673 |
| 2001 January | 88 | 61 | 361 | 110 | 629 | 1,895 | 654 | 6,767 | 678 | 234 | 2,433 | 85 | 13,128 |
| February | 86 | 39 | 311 | 104 | 548 | 1,590 | 486 | 6,019 | 633 | 235 | 2,071 | 54 | 11,421 |
| March | 83 | 38 | 321 | 102 | 553 | 1,734 | 489 | 6,590 | 724 | 338 | 2,172 | 66 | 12,454 |
| April | 65 | 32 | 331 | 115 | 550 | 1,572 | 416 | 6,099 | 655 | 283 | 2,204 | 83 | 11,674 |
| May | 73 | 33 | 334 | 127 | 575 | 1,477 | 424 | 6,317 | 734 | 293 | 2,080 | 55 | 11,751 |
| June | 84 | 33 | 344 | 129 | 598 | 1,644 | 377 | 6,405 | 682 | 291 | 2,134 | 54 | 11,949 |
| July | 101 | 36 | 455 | 134 | 732 | 1,818 | 419 | 7,030 | 781 | 242 | 2,304 | 60 | 13,048 |
| August | 115 | 39 | 525 | 129 | 814 | 1,949 | 419 | 7,191 | 791 | 316 | 2,410 | 62 | 13,566 |
| September | 84 | 31 | 388 | 128 | 636 | 1,625 | 386 | 6,782 | 720 | 243 | 2,171 | 68 | 12,412 |
| October | 72 | 36 | 384 | 126 | 622 | 1,640 | 417 | 6,845 | 693 | 206 | 2,415 | 73 | 12,721 |
| November | 68 | 29 | 327 | 118 | 548 | 1,576 | 381 | 6,670 | 653 | 198 | 2,223 | 82 | 12,230 |
| December | 77 | 32 | 354 | 141 | 611 | 1,614 | 425 | 7,040 | 710 | 265 | 2,272 | 73 | 12,822 |
| Total | 995 | 438 | 4,434 | 1,464 | 7,416 | 20,135 | 5,293 | 79,755 | 8,454 | 3,145 | 26,888 | 815 | 149,175 |
| 2002 January | 88 | 27 | 364 | 143 | 630 | 1,737 | 442 | 7,299 | 816 | 279 | 2,487 | 102 | 13,531 |
| February | 72 | 29 | 307 | 118 | 533 | 1,512 | 361 | 6,566 | 710 | 309 | 2,232 | 87 | 12,100 |
| March | 90 | 32 | 380 | 135 | 646 | 1,679 | 415 | 7,124 | 828 | 318 | 2,275 | 93 | 13,095 |
| April | 66 | 22 | 329 | 142 | 575 | 1,618 | 386 | 6,181 | 894 | 387 | 2,349 | 80 | 12,274 |
| May | 69 | 24 | 309 | 149 | 566 | 1,634 | 384 | 6,596 | 966 | 382 | 2,308 | 70 | 12,717 |
| June | 87 | 27 | 406 | 144 | 674 | 1,765 | 376 | 6,768 | 978 | 313 | 2,390 | 74 | 13,026 |
| July | 106 | 43 | 887 | 155 | 1,200 | 1,924 | 431 | 7,433 | 1,049 | 266 | 2,471 | 90 | 14,222 |
| August | 107 | 41 | 829 | 137 | 1,121 | 1,783 | 424 | 7,307 | 1,061 | 234 | 2,411 | 82 | 13,671 |
| September | 91 | 29 | 665 | 164 | 953 | 1,727 | 361 | 6,688 | 959 | 207 | 2,401 | 79 | 12,968 |
| October | 81 | 29 | 390 | 177 | 681 | 1,773 | 430 | 5,996 | 817 | 320 | 2,343 | 89 | 12,475 |
| November | 83 | 26 | 267 | 148 | 528 | 1,709 | 413 | 6,012 | 784 | 460 | 2,318 | 95 | 12,144 |
| December | 91 | 49 | 309 | 154 | 607 | 1,812 | 438 | 5,904 | 798 | 550 | 2,229 | 91 | 12,211 |
| Total | 1,031 | 379 | 5,442 | 1,766 | 8,714 | 20,672 | 4,863 | 79,874 | 10,659 | 4,025 | 28,213 | 1,031 | 154,435 |
| 2003 January | 90 | 98 | 376 | 132 | 703 | 2,017 | 587 | 7,250 | 802 | 413 | 2,155 | 75 | 13,595 |
| February | R 86 | R 77 | R 293 | R 121 | R 584 | R 1,710 | R 462 | R 6,220 | R 636 | R 362 | R 1,980 | R 69 | R 11,688 |
| March | RF 92 | RF 49 | RF 370 | RF 138 | RF 659 | RF 1,689 | RF 640 | RF 7,042 | RF 749 | RF 373 | RF 2,272 | RF 94 | RF 13,226 |
| April | F 71 | F 36 | F 343 | F 153 | F 620 | F 1,667 | F 593 | F 6,146 | F 967 | F 415 | F 2,443 | F 83 | F 12,706 |
| 4-Month Total | E 339 | E 260 | E 1,382 | E 545 | E 2,565 | E 7,083 | E 2,281 | E 26,657 | E 3,154 | E 1,563 | E 8,850 | E 320 | E 51,215 |
| 2002 4-Month Total | 317 | 110 | 1,380 | 539 | 2,384 | 6,545 | 1,605 | 27,170 | 3,247 | 1,293 | 9,343 | 362 | 51,000 |
| 2001 4-Month Total | 322 | 170 | 1,324 | 431 | 2,280 | 6,791 | 2,045 | 25,475 | 2,690 | 1,091 | 8,880 | 288 | 48,676 |

^a Commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See note at end of section.

^b Industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See note at end of section.

^c Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

^d Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil.

^e Natural gas, including a small amount of supplemental gaseous fuels.

^f Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

^g Includes a small amount of other gases, wood, and other, which are not separately displayed.

^h Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

ⁱ Conventional hydroelectric power.

^j Wood, black liquor, and other wood waste.

^k Includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies, which are not separately displayed.

R=Revised. E=Estimate. F=Forecast.

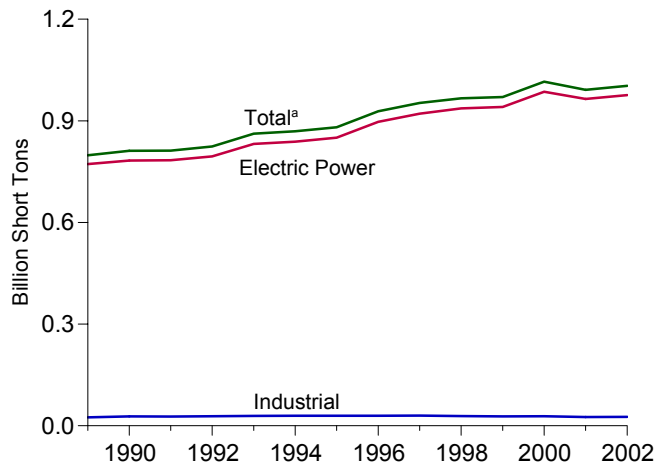
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>.

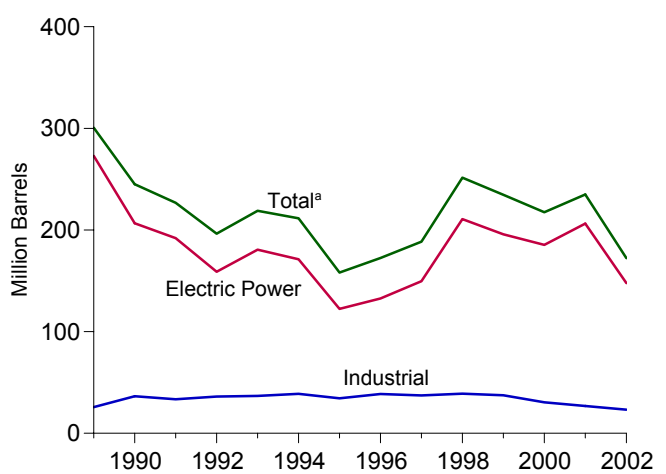
Sources: • **1989-1997:** Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-860B, "Annual Electric Generator Report-Nonutility." • **2001:** EIA, Form EIA-860, "Annual Electric Generator Report" and Form EIA-906, "Power Plant Report." • **2002-February 2003:** EIA, Form EIA-906, "Power Plant Report." • **March and April 2003:** EIA, Short-Term Integrated Forecasting System.

Figure 7.3a Consumption of Selected Combustible Fuels for Electricity Generation and Useful Thermal Output

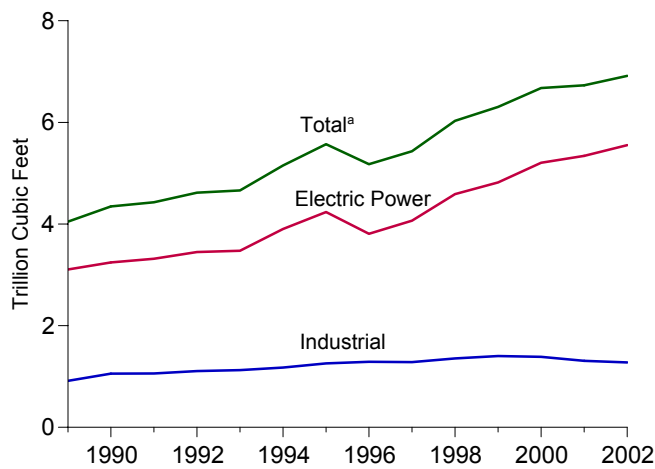
Coal by Sector, 1989-2002



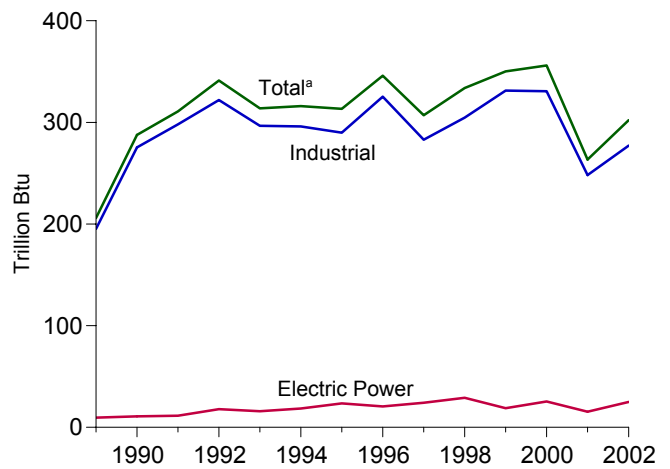
Petroleum by Sector, 1989-2002



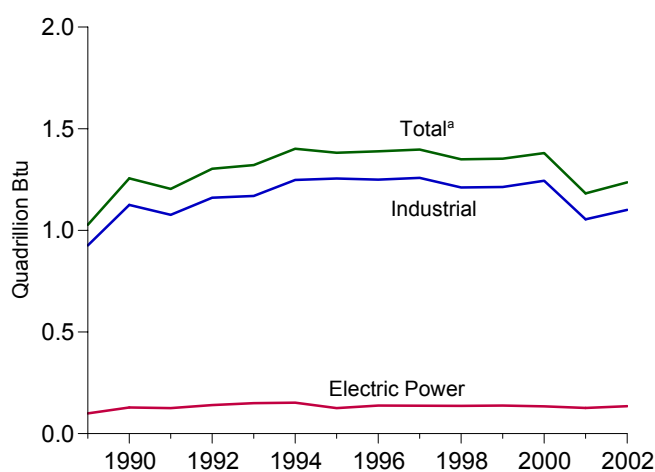
Natural Gas by Sector, 1989-2002



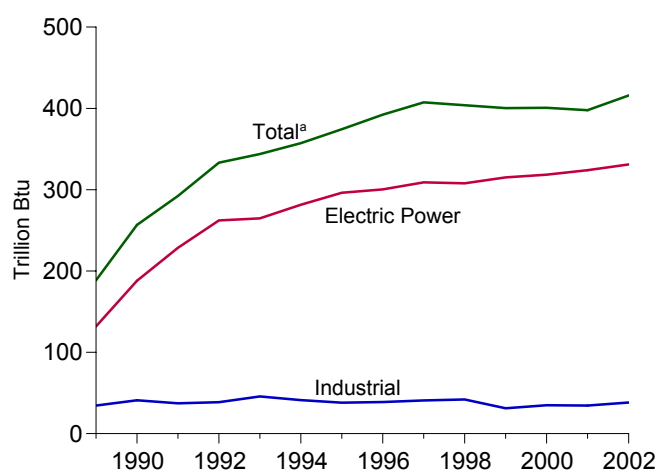
Other Gases^b by Sector, 1989-2002



Wood by Sector, 1989-2002



Waste by Sector, 1989-2002



^aIncludes commercial sector.

^bBlast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>.
Sources: Tables 7.3a, 7.3b, and 7.3c.

Table 7.3a Consumption of Combustible Fuels for Electricity Generation and Useful Thermal Output: Total (All Sectors)

| | Petroleum | | | | | | Natural Gas ^f | Other Gases ^g | Wood ^h | Waste ⁱ | Other ^j |
|---------------------------------|-----------------------------|----------------------------------|--------------------------------|----------------------------|-----------------------------|----------------------------|---------------------------|--------------------------|-------------------------|-------------------------|------------------------|
| | Coal ^a | Distillate Fuel Oil ^b | Residual Fuel Oil ^c | Other Liquids ^d | Petroleum Coke ^e | Total ^e | | | | | |
| | | | | | | | | | | | |
| 1989 Total | 798,181 | 29,143 | 266,211 | 656 | 915 | 300,583 | 4,049 | 206 | 1,028 | 189 | 88 |
| 1990 Total | 811,538 | 20,194 | 209,314 | 1,332 | 2,832 | 244,998 | 4,346 | 288 | 1,256 | 257 | 86 |
| 1991 Total | 812,124 | 19,590 | 193,073 | 1,215 | 2,566 | 226,708 | 4,429 | 311 | 1,204 | 292 | 114 |
| 1992 Total | 824,512 | 16,852 | 160,941 | 1,695 | 3,366 | 196,318 | 4,618 | 341 | 1,303 | 333 | 92 |
| 1993 Total | 861,904 | 19,293 | 176,992 | 1,571 | 4,200 | 218,855 | 4,662 | 314 | 1,321 | 344 | 85 |
| 1994 Total | 869,405 | 25,177 | 164,047 | 1,539 | 4,157 | 211,547 | 5,151 | 316 | 1,401 | 357 | 92 |
| 1995 Total | 881,012 | 21,697 | 112,168 | 1,322 | 4,590 | 158,140 | 5,572 | 313 | 1,382 | 374 | 97 |
| 1996 Total | 928,015 | 22,444 | 124,607 | 2,468 | 4,596 | 172,499 | 5,178 | 346 | 1,389 | 392 | 91 |
| 1997 Total | 952,955 | 22,893 | 134,623 | 526 | 6,095 | 188,517 | 5,433 | 307 | 1,397 | 407 | 103 |
| 1998 Total | 966,615 | 30,006 | 189,267 | 1,230 | 6,196 | 251,486 | 6,030 | 334 | 1,349 | 404 | 95 |
| 1999 Total | 970,175 | 30,616 | 172,319 | 1,812 | 5,989 | 234,694 | 6,305 | 350 | 1,352 | 400 | 101 |
| 2000 Total | 1,015,398 | 34,572 | 156,673 | 2,904 | 4,669 | 217,494 | 6,677 | 356 | 1,380 | 401 | 109 |
| 2001 January | ^R 90,951 | ^R 8,634 | 23,486 | 230 | 393 | 34,316 | 458 | 21 | 106 | 34 | 8 |
| February | 77,545 | 3,112 | ^R 14,659 | 144 | 357 | ^R 19,701 | 417 | 21 | 93 | 29 | 7 |
| March | 80,268 | ^R 3,439 | 16,644 | 157 | 354 | 22,010 | 477 | 23 | 98 | 33 | 8 |
| April | 72,530 | 2,941 | 16,015 | 103 | 297 | 20,545 | 491 | 20 | 96 | 33 | 7 |
| May | 78,810 | 2,521 | 15,051 | 90 | 346 | ^R 19,389 | 543 | 22 | 91 | 33 | 7 |
| June | 84,486 | 2,135 | 17,885 | 92 | 359 | 21,905 | 604 | 22 | 96 | 34 | 7 |
| July | 93,653 | 2,063 | 15,922 | 103 | 425 | 20,214 | 756 | 25 | 99 | 35 | 8 |
| August | 95,669 | 2,931 | 20,845 | 116 | 414 | 25,964 | 814 | 24 | 103 | 35 | 9 |
| September | ^R 81,256 | 1,477 | 10,425 | 95 | 386 | 13,929 | 629 | 22 | 96 | 32 | 8 |
| October | 77,816 | 1,617 | 8,846 | 89 | 408 | 12,593 | 587 | 21 | 104 | 33 | 8 |
| November | 75,568 | 1,318 | 8,492 | 89 | 343 | ^R 11,613 | 465 | 21 | 98 | 33 | 9 |
| December | 83,082 | 1,538 | 8,867 | 110 | 449 | ^R 12,759 | 489 | 22 | 100 | 35 | 9 |
| Total | 991,635 | 33,724 | 177,137 | 1,418 | 4,532 | 234,940 | 6,731 | 263 | 1,182 | 398 | 94 |
| 2002 January | 85,061 | 1,792 | 8,367 | 193 | 486 | 12,784 | 496 | 26 | 110 | 36 | 8 |
| February | 74,222 | 1,111 | 6,918 | 96 | 426 | 10,255 | 447 | 22 | 96 | 31 | 7 |
| March | 79,282 | 1,683 | 10,675 | 161 | 440 | 14,721 | 519 | 26 | 100 | 35 | 8 |
| April | 73,650 | 1,627 | 9,645 | 69 | 448 | 13,582 | 504 | 25 | 103 | 34 | 7 |
| May | 78,515 | 2,036 | 9,828 | 162 | 550 | 14,776 | 523 | 25 | 99 | 35 | 8 |
| June | 85,658 | 1,714 | 9,595 | 152 | 547 | 14,198 | 656 | 27 | 104 | 35 | 7 |
| July | 94,831 | 2,609 | 12,552 | 251 | 520 | 18,011 | 858 | 29 | 108 | 37 | 9 |
| August | 93,278 | 2,309 | 12,436 | 247 | 531 | 17,645 | 820 | 28 | 105 | 35 | 7 |
| September | 86,184 | 1,517 | 10,147 | 159 | 471 | 14,176 | 675 | 26 | 105 | 35 | 9 |
| October | 82,710 | 1,945 | 10,327 | 167 | 456 | 14,718 | 543 | 24 | 105 | 35 | 11 |
| November | 81,390 | 1,278 | 8,963 | 174 | 459 | 12,710 | 438 | 23 | 100 | 34 | 7 |
| December | 88,611 | 1,593 | 10,421 | 195 | 497 | 14,697 | 438 | 22 | 103 | 37 | 8 |
| Total | 1,003,393 | 21,213 | 119,875 | 2,027 | 5,832 | 172,274 | 6,917 | 302 | 1,236 | 416 | 98 |
| 2003 January | 93,739 | 5,235 | 15,522 | 398 | 527 | 23,791 | 480 | 22 | 97 | 32 | 4 |
| February | ^R 81,134 | ^R 4,228 | ^R 13,434 | ^R 542 | ^R 438 | ^R 20,395 | ^R 427 | ^R 19 | ^R 92 | ^R 30 | ^R 4 |
| March | ^F 82,724 | ^{RF} 3,746 | ^{RF} 16,677 | ^{RF} 228 | ^F 352 | ^{RF} 22,410 | ^{RF} 507 | ^{RF} 21 | ^{RF} 99 | ^F 33 | ^F 7 |
| April | ^F 73,010 | ^F 5,999 | ^F 12,845 | ^F 113 | ^F 493 | ^F 21,422 | ^F 465 | ^F 27 | ^F 108 | ^F 33 | ^F 7 |
| 4-Month Total | ^E 330,607 | ^E 19,208 | ^E 58,477 | ^E 1,281 | ^E 1,810 | ^E 88,018 | ^E 1,878 | ^E 88 | ^E 396 | ^E 129 | ^E 21 |
| 2002 4-Month Total | 312,216 | 6,212 | 35,605 | 519 | 1,801 | 51,342 | 1,966 | 99 | 408 | 135 | 31 |
| 2001 4-Month Total | 321,294 | 18,125 | 70,804 | 634 | 1,402 | 96,572 | 1,842 | 85 | 393 | 129 | 29 |

^a Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

^b For 1989-2000, electric utility data are for light oil (fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel).

^c For 1989-2000, electric utility data are for heavy oil (fuel oil nos. 5 and 6, and small amounts of fuel oil no. 4).

^d Jet fuel, kerosene, other petroleum liquids, and waste oil.

^e Petroleum coke is converted from short tons to barrels by multiplying by 5.

^f Natural gas, including a small amount of supplemental gaseous fuels.

^g Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

^h Wood, black liquor, and other wood waste.

ⁱ Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

^j Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

R=Revised. E=Estimate. F=Forecast.

Notes: • Data are for fuels consumed to produce electricity and useful thermal output at electricity-only and combined-heat-and-power (CHP) plants. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>.

Sources: See sources for Tables 7.3b and 7.3c.

Table 7.3b Consumption of Combustible Fuels for Electricity Generation and Useful Thermal Output: Electric Power Sector

| | Coal ^a | Petroleum | | | | | Natural Gas ^f | Other Gases ^g | Wood ^h | Waste ⁱ | Other ^j |
|---------------------------------|-----------------------------|----------------------------------|--------------------------------|----------------------------|-----------------------------|----------------------------|---------------------------|--------------------------|------------------------|-------------------------|-------------------------|
| | | Distillate Fuel Oil ^b | Residual Fuel Oil ^c | Other Liquids ^d | Petroleum Coke ^e | Total ^e | | | | | |
| | | Thousand Barrels | | | | | | | | | |
| Thousand Short Tons | Thousand Barrels | | | | | Thousand Short Tons | Thousand Barrels | Billion Cubic Feet | Trillion Btu | | |
| 1989 Total | 772,190 | 26,156 | 244,179 | 10 | 517 | 272,931 | 3,105 | 9 | 100 | 132 | 3 |
| 1990 Total | 782,567 | 16,567 | 184,915 | 26 | 1,008 | 206,550 | 3,245 | 11 | 129 | 188 | (s) |
| 1991 Total | 783,874 | 14,359 | 172,625 | 59 | 974 | 191,911 | 3,316 | 11 | 126 | 229 | 4 |
| 1992 Total | 795,094 | 12,623 | 138,726 | 128 | 1,494 | 158,948 | 3,448 | 18 | 140 | 262 | 5 |
| 1993 Total | 831,645 | 14,849 | 152,481 | 239 | 2,611 | 180,625 | 3,473 | 16 | 150 | 265 | 5 |
| 1994 Total | 838,354 | 20,612 | 138,222 | 771 | 2,315 | 171,178 | 3,903 | 19 | 152 | 282 | 3 |
| 1995 Total | 850,230 | 18,553 | 90,023 | 499 | 2,674 | 122,447 | 4,237 | 24 | 125 | 296 | 2 |
| 1996 Total | 896,921 | 18,780 | 99,951 | 653 | 2,642 | 132,593 | 3,807 | 20 | 138 | 300 | 2 |
| 1997 Total | 921,364 | 18,989 | 113,669 | 152 | 3,372 | 149,668 | 4,065 | 24 | 137 | 309 | 1 |
| 1998 Total | 936,619 | 23,300 | 166,528 | 431 | 4,102 | 210,769 | 4,588 | 29 | 137 | 308 | 2 |
| 1999 Total | 940,922 | 24,058 | 152,493 | 544 | 3,735 | 195,769 | 4,820 | 19 | 138 | 315 | 1 |
| 2000 Total | 985,821 | 30,016 | 138,513 | 454 | 3,275 | 185,358 | 5,206 | 25 | 134 | 318 | 1 |
| 2001 January | 88,395 | 7,957 | 21,521 | 49 | 296 | 31,009 | 340 | 1 | 12 | 27 | 0 |
| February | 75,401 | 2,649 | 13,088 | 35 | 269 | 17,116 | 313 | 1 | 9 | 24 | 0 |
| March | 77,919 | 2,916 | 15,061 | 31 | 264 | 19,331 | 363 | 1 | 10 | 27 | 0 |
| April | 70,384 | 2,582 | 14,517 | 25 | 213 | 18,190 | 384 | 1 | 9 | 27 | 0 |
| May | 76,741 | 2,148 | 13,676 | 24 | 243 | 17,065 | 434 | 1 | 10 | 27 | 0 |
| June | 82,246 | 1,823 | 16,541 | 29 | 274 | 19,763 | 493 | 1 | 12 | 28 | 0 |
| July | 91,242 | 1,741 | 14,593 | 32 | 323 | 17,980 | 634 | 2 | 11 | 29 | 0 |
| August | 93,189 | 2,598 | 19,436 | 39 | 337 | 23,756 | 687 | 1 | 11 | 29 | 0 |
| September | 79,020 | 1,214 | 9,125 | 27 | 309 | 11,910 | 510 | 1 | 10 | 27 | 0 |
| October | ^R 75,635 | 1,335 | 7,490 | 27 | 298 | 10,339 | 466 | 1 | 10 | 27 | 0 |
| November | 73,431 | 1,050 | 7,116 | 27 | 262 | 9,502 | 351 | 1 | 10 | 26 | 0 |
| December | 80,831 | 1,262 | 7,341 | 31 | 339 | 10,330 | 367 | 1 | 11 | 27 | 0 |
| Total | 964,433 | 29,274 | 159,504 | 377 | 3,427 | 206,291 | 5,342 | 15 | 126 | 324 | 0 |
| 2002 January | 82,589 | 1,547 | 7,168 | 71 | 357 | 10,572 | 377 | 3 | 12 | 28 | (s) |
| February | 72,079 | 939 | 5,903 | 46 | 322 | 8,495 | 341 | 2 | 10 | 24 | (s) |
| March | 76,939 | 1,492 | 9,430 | 58 | 338 | 12,667 | 400 | 2 | 12 | 27 | (s) |
| April | 71,495 | 1,470 | 8,607 | 22 | 320 | 11,698 | 399 | 2 | 11 | 27 | (s) |
| May | 76,417 | 1,780 | 8,797 | 87 | 431 | 12,817 | 410 | 2 | 9 | 28 | (s) |
| June | 83,373 | 1,503 | 8,607 | 96 | 430 | 12,354 | 541 | 2 | 11 | 28 | (s) |
| July | 92,384 | 2,301 | 11,316 | 180 | 397 | 15,780 | 725 | 2 | 12 | 30 | (s) |
| August | 90,987 | 1,988 | 11,225 | 168 | 413 | 15,446 | 691 | 2 | 12 | 29 | (s) |
| September | 83,912 | 1,336 | 9,029 | 106 | 377 | 12,356 | 555 | 2 | 11 | 28 | (s) |
| October | 80,381 | 1,719 | 9,091 | 81 | 338 | 12,580 | 436 | 2 | 11 | 27 | (s) |
| November | 79,120 | 1,086 | 7,873 | 82 | 346 | 10,770 | 337 | 2 | 11 | 26 | (s) |
| December | 86,183 | 1,310 | 8,999 | 96 | 374 | 12,275 | 340 | 1 | 12 | 29 | (s) |
| Total | 975,858 | 18,471 | 106,044 | 1,092 | 4,441 | 147,810 | 5,553 | 25 | 135 | 331 | 1 |
| 2003 January | 91,109 | 4,441 | 14,061 | 251 | 402 | 20,764 | 367 | 2 | 15 | 27 | (s) |
| February | ^R 78,838 | ^R 3,691 | ^R 11,984 | ^R 387 | ^R 343 | ^R 17,778 | ^R 329 | ^R 12 | ^R 12 | ^R 24 | (s) |
| March | ^F 80,535 | ^{RF} 3,455 | ^{RF} 14,672 | ^{RF} 54 | ^F 260 | ^R 19,480 | ^{RF} 388 | ^F 2 | ^F 11 | ^{RF} 26 | ^F (s) |
| April | ^F 70,899 | ^F 5,772 | ^F 11,254 | ^F 12 | ^F 304 | 18,557 | ^F 361 | ^F 2 | ^F 11 | ^F 26 | ^F (s) |
| 4-Month Total | ^E 321,381 | ^E 17,359 | ^E 51,971 | ^E 705 | ^E 1,309 | ^E 76,580 | ^E 1,445 | ^E 8 | ^E 49 | ^E 103 | ^E (s) |
| 2002 4-Month Total | 303,102 | 5,447 | 31,107 | 196 | 1,336 | 43,433 | 1,517 | 9 | 45 | 106 | (s) |
| 2001 4-Month Total | 312,100 | 16,105 | 64,188 | 140 | 1,043 | 85,646 | 1,400 | 5 | 41 | 104 | 0 |

^a Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

^b For 1989-2000, electric utility data are for light oil (fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel).

^c For 1989-2000, electric utility data are for heavy oil (fuel oil nos. 5 and 6, and small amounts of fuel oil no. 4).

^d Jet fuel, kerosene, other petroleum liquids, and waste oil.

^e Petroleum coke is converted from short tons to barrels by multiplying by 5.

^f Natural gas, including a small amount of supplemental gaseous fuels.

^g Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

^h Wood, black liquor, and other wood waste.

ⁱ Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

^j Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

R=Revised. E=Estimate. (s)=Less than 0.5 trillion Btu. F=Forecast.

Notes: • Data are for fuels consumed to produce electricity and useful thermal output at electricity-only and combined-heat-and-power (CHP) plants. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>.

Sources: • **1989-1997:** Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report" and Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-759, "Monthly Power Plant Report" and Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001:** EIA, Form EIA-860, "Annual Electric Generator Report" and Form EIA-906, "Power Plant Report." • **2002-February 2003:** EIA, Form EIA-906, "Power Plant Report." • **March and April 2003:** EIA, Short-Term Integrated Forecasting System.

Table 7.3c Consumption of Selected Combustible Fuels for Electricity Generation and Useful Thermal Output: Commercial and Industrial Sectors

| | Commercial Sector ^a | | | | Industrial Sector ^b | | | | | | |
|---------------------------------|--------------------------------|------------------------|--------------------------|--------------------|--------------------------------|------------------------|--------------------------|--------------------------|-------------------|--------------------|--------------------|
| | Coal ^c | Petroleum ^d | Natural Gas ^e | Waste ^f | Coal ^c | Petroleum ^d | Natural Gas ^e | Other Gases ^g | Wood ^h | Waste ^f | Other ⁱ |
| | Thousand Short Tons | Thousand Barrels | Billion Cubic Feet | Trillion Btu | Thousand Short Tons | Thousand Barrels | Billion Cubic Feet | Trillion Btu | | | |
| 1989 Total | 1,125 | 1,967 | 30 | 22 | 24,867 | 25,685 | 914 | 195 | 926 | 35 | 85 |
| 1990 Total | 1,191 | 2,056 | 46 | 28 | 27,781 | 36,392 | 1,055 | 275 | 1,125 | 41 | 86 |
| 1991 Total | 1,228 | 1,337 | 52 | 26 | 27,021 | 33,460 | 1,061 | 298 | 1,076 | 37 | 110 |
| 1992 Total | 1,175 | 1,235 | 62 | 32 | 28,244 | 36,135 | 1,107 | 322 | 1,161 | 39 | 87 |
| 1993 Total | 1,373 | 1,515 | 65 | 33 | 28,886 | 36,715 | 1,124 | 297 | 1,169 | 46 | 80 |
| 1994 Total | 1,344 | 1,625 | 72 | 35 | 29,707 | 38,744 | 1,176 | 296 | 1,248 | 41 | 89 |
| 1995 Total | 1,419 | 1,245 | 78 | 40 | 29,363 | 34,448 | 1,258 | 290 | 1,255 | 38 | 95 |
| 1996 Total | 1,660 | 1,246 | 82 | 53 | 29,434 | 38,661 | 1,289 | 325 | 1,249 | 39 | 89 |
| 1997 Total | 1,738 | 1,584 | 87 | 58 | 29,853 | 37,265 | 1,282 | 283 | 1,259 | 41 | 102 |
| 1998 Total | 1,443 | 1,807 | 87 | 54 | 28,553 | 38,910 | 1,355 | 305 | 1,211 | 42 | 93 |
| 1999 Total | 1,490 | 1,613 | 84 | 54 | 27,763 | 37,312 | 1,401 | 331 | 1,213 | 31 | 99 |
| 2000 Total | 1,547 | 1,615 | 85 | 47 | 28,031 | 30,520 | 1,386 | 331 | 1,244 | 35 | 108 |
| 2001 January | 131 | 240 | 6 | 3 | 2,424 | 3,067 | 111 | 20 | 94 | 4 | 8 |
| February | 132 | 157 | 6 | 3 | 2,012 | 2,428 | 98 | 20 | 83 | 2 | 7 |
| March | 129 | 163 | 6 | 3 | 2,220 | 2,516 | 108 | 21 | 88 | 3 | 8 |
| April | 99 | 139 | 6 | 3 | 2,047 | 2,217 | 101 | 19 | 87 | 3 | 7 |
| May | 105 | 143 | 6 | 3 | 1,965 | 2,181 | 103 | 21 | 81 | 2 | 7 |
| June | 117 | 142 | 6 | 3 | 2,123 | 2,000 | 105 | 21 | 84 | 2 | 7 |
| July | 144 | 153 | 8 | 4 | 2,267 | 2,081 | 114 | 23 | 88 | 2 | 8 |
| August | 162 | 169 | 9 | 4 | 2,318 | 2,039 | 119 | 23 | 92 | 2 | 9 |
| September | 122 | 127 | 7 | 3 | 2,115 | ^R 1,892 | 112 | 21 | 86 | 2 | 8 |
| October | 100 | 140 | 7 | 3 | 2,081 | 2,114 | 114 | 19 | 94 | 3 | 8 |
| November | 97 | 120 | 6 | 3 | 2,041 | 1,992 | 109 | 19 | 88 | 4 | 9 |
| December | 110 | 141 | 6 | 3 | 2,141 | 2,288 | 116 | 21 | 89 | 4 | 9 |
| Total | 1,448 | 1,832 | 79 | 39 | 25,755 | 26,817 | 1,310 | 248 | 1,054 | 35 | 94 |
| 2002 January | 132 | 81 | 6 | 4 | 2,340 | 2,131 | 112 | 23 | 97 | 4 | 8 |
| February | 106 | 84 | 5 | 3 | 2,038 | 1,675 | 101 | 20 | 86 | 3 | 7 |
| March | 134 | 97 | 7 | 4 | 2,209 | 1,957 | 111 | 23 | 88 | 4 | 8 |
| April | 102 | 74 | 6 | 4 | 2,054 | 1,810 | 100 | 23 | 92 | 3 | 7 |
| May | 104 | 79 | 6 | 4 | 1,994 | 1,880 | 107 | 23 | 90 | 3 | 8 |
| June | 120 | 87 | 7 | 4 | 2,165 | 1,758 | 108 | 25 | 93 | 3 | 7 |
| July | 136 | 143 | 11 | 4 | 2,312 | 2,089 | 121 | 27 | 96 | 3 | 9 |
| August | 137 | 137 | 11 | 4 | 2,154 | 2,062 | 119 | 25 | 92 | 3 | 6 |
| September | 123 | 85 | 9 | 4 | 2,148 | 1,735 | 111 | 24 | 93 | 3 | 9 |
| October | 118 | 96 | 6 | 4 | 2,211 | 2,042 | 100 | 22 | 93 | 4 | 11 |
| November | 121 | 83 | 5 | 4 | 2,149 | 1,857 | 95 | 21 | 88 | 4 | 7 |
| December | 136 | 151 | 6 | 4 | 2,292 | 2,271 | 92 | 21 | 91 | 4 | 8 |
| Total | 1,469 | 1,197 | 85 | 47 | 26,066 | 23,267 | 1,278 | 277 | 1,101 | 38 | 97 |
| 2003 January | 146 | 322 | 6 | 3 | 2,484 | 2,705 | 106 | 20 | 82 | 3 | 4 |
| February | ^R 127 | ^R 270 | ^R 5 | 3 | ^R 2,169 | ^R 2,347 | ^R 93 | ^R 17 | ^R 79 | 3 | ^R 3 |
| March | ^F 110 | ^{RF} 161 | ^{RF} 6 | ^{RF} 4 | ^F 2,079 | ^{RF} 2,768 | ^{RF} 113 | ^{RF} 19 | ^{RF} 87 | ^F 3 | ^F 7 |
| April | ^F 99 | ^F 122 | ^F 5 | ^F 4 | ^F 2,012 | ^F 2,743 | ^F 98 | ^F 25 | ^F 97 | ^F 3 | ^F 7 |
| 4-Month Total | ^E 482 | ^E 875 | ^E 23 | ^E 14 | ^E 8,744 | ^E 10,564 | ^E 410 | ^E 80 | ^E 346 | ^E 12 | ^E 21 |
| 2002 4-Month Total | 474 | 336 | 25 | 15 | 8,640 | 7,573 | 424 | 90 | 363 | 14 | 30 |
| 2001 4-Month Total | 492 | 698 | 24 | 12 | 8,703 | 10,228 | 418 | 80 | 352 | 12 | 29 |

^a Commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See note at end of section.

^b Industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See note at end of section.

^c Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

^d Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil.

^e Natural gas, including a small amount of supplemental gaseous fuels.

^f Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

^g Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

^h Wood, black liquor, and other wood waste.

ⁱ Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

R=Revised. E=Estimate. F=Forecast.

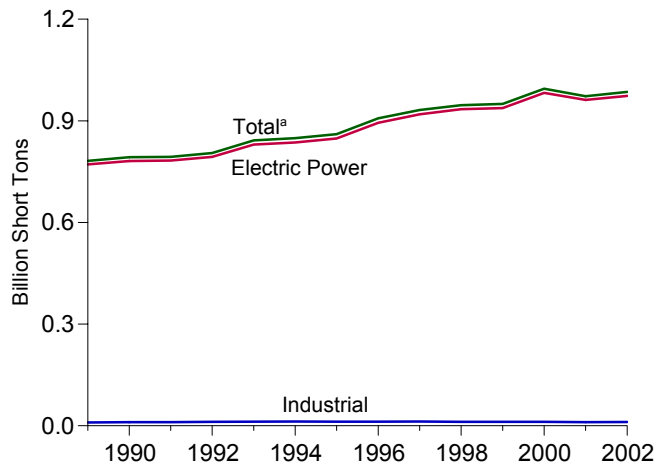
Notes: • Data are for fuels consumed to produce electricity and useful thermal output at electricity-only and combined-heat-and-power (CHP) plants. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>.

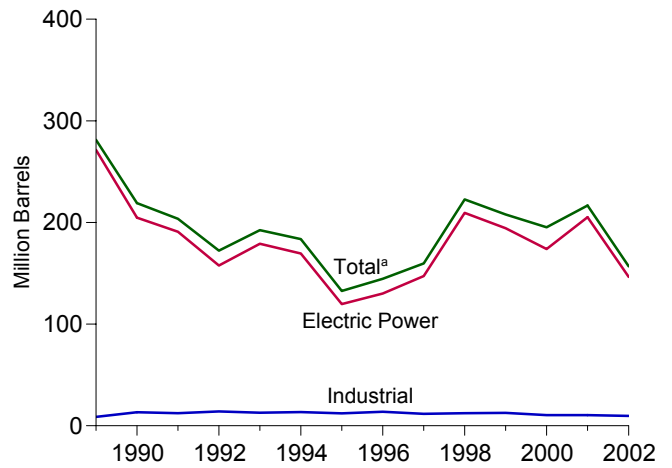
Sources: • **1989-1997:** Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001:** EIA, Form EIA-860, "Annual Electric Generator Report" and Form EIA-906, "Power Plant Report." • **2002-February:** EIA, Form EIA-906, "Power Plant Report." • **March and April 2003:** EIA, Short-Term Integrated Forecasting System.

Figure 7.3b Consumption of Selected Combustible Fuels for Electricity Generation

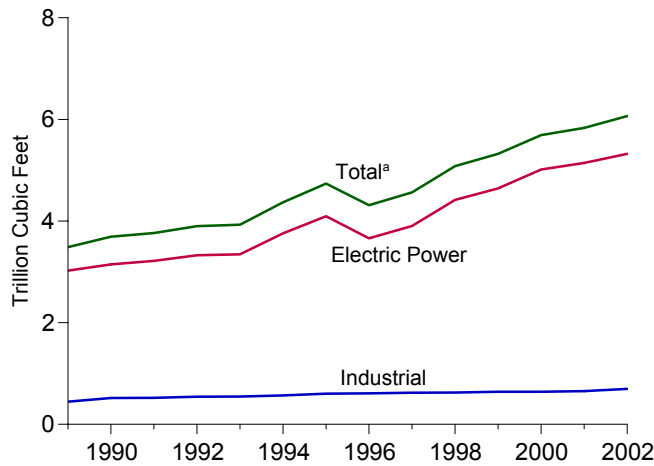
Coal by Sector, 1989-2002



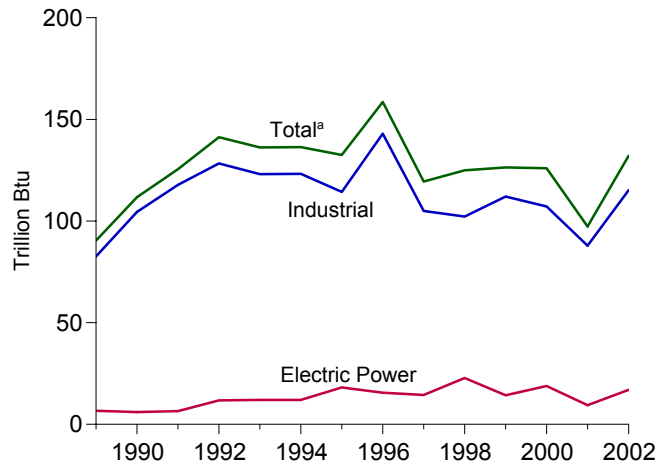
Petroleum by Sector, 1989-2002



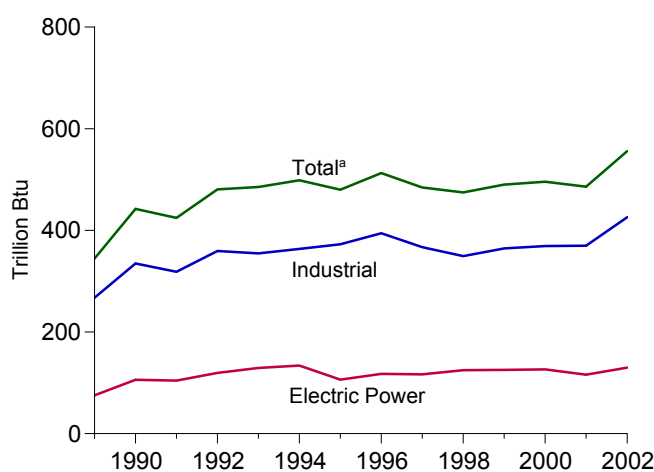
Natural Gas by Sector, 1989-2002



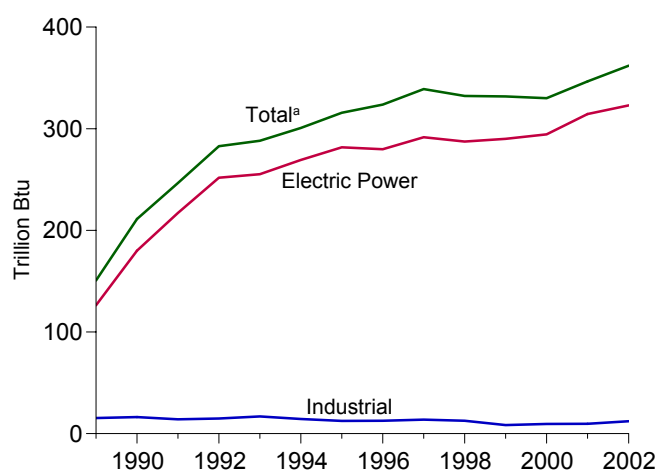
Other Gases^b by Sector, 1989-2002



Wood by Sector, 1989-2002



Waste by Sector, 1989-2002



^aIncludes commercial sector.

^bBlast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Note: Because vertical scales differ, graphs should not be compared.
 Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>.
 Sources: Tables 7.3d, 7.3e, and 7.3f.

Table 7.3d Consumption of Combustible Fuels for Electricity Generation: Total (All Sectors)

| | Coal ^a | Petroleum | | | | Total ^e | Natural Gas ^f | Other Gases ^g | Wood ^h | Waste ⁱ | Other ^j |
|--------------------------------------|-----------------------------|----------------------------------|--------------------------------|----------------------------|-----------------------------|----------------------------|---------------------------|--------------------------|-------------------------|-------------------------|------------------------|
| | | Distillate Fuel Oil ^b | Residual Fuel Oil ^c | Other Liquids ^d | Petroleum Coke ^e | | | | | | |
| | | Thousand Short Tons | Thousand Barrels | | Thousand Short Tons | | | | | | |
| 1973 Total | 389,212 | 47,058 | 513,190 | NA | 507 | 562,781 | 3,660 | NA | 1 | 2 | NA |
| 1974 Total | 391,811 | 53,128 | 483,146 | NA | 625 | 539,399 | 3,443 | NA | 1 | 2 | NA |
| 1975 Total | 405,962 | 38,907 | 467,221 | NA | 70 | 506,479 | 3,158 | NA | (s) | 2 | NA |
| 1976 Total | 448,371 | 41,843 | 514,077 | NA | 68 | 556,261 | 3,081 | NA | 1 | 2 | NA |
| 1977 Total | 477,126 | 48,837 | 574,869 | NA | 98 | 624,193 | 3,191 | NA | 3 | 2 | NA |
| 1978 Total | 481,235 | 47,520 | 588,319 | NA | 398 | 637,830 | 3,188 | NA | 2 | 1 | NA |
| 1979 Total | 527,051 | 30,691 | 492,606 | NA | 268 | 524,636 | 3,491 | NA | 3 | 2 | NA |
| 1980 Total | 569,274 | 29,051 | 391,163 | NA | 179 | 421,110 | 3,682 | NA | 3 | 2 | NA |
| 1981 Total | 596,797 | 21,313 | 329,798 | NA | 139 | 351,806 | 3,640 | NA | 3 | 1 | NA |
| 1982 Total | 593,666 | 15,337 | 234,434 | NA | 149 | 250,517 | 3,226 | NA | 2 | 1 | NA |
| 1983 Total | 625,211 | 16,512 | 228,984 | NA | 261 | 246,804 | 2,911 | NA | 2 | 2 | NA |
| 1984 Total | 664,399 | 15,190 | 189,289 | NA | 252 | 205,736 | 3,111 | NA | 5 | 4 | NA |
| 1985 Total | 693,841 | 14,635 | 158,779 | NA | 231 | 174,571 | 3,044 | NA | 8 | 7 | NA |
| 1986 Total | 685,056 | 14,326 | 126,156 | NA | 313 | 232,046 | 2,602 | NA | 5 | 7 | NA |
| 1987 Total | 717,894 | 15,367 | 184,011 | NA | 348 | 201,116 | 2,844 | NA | 8 | 7 | NA |
| 1988 Total | 758,372 | 18,769 | 229,327 | NA | 409 | 250,141 | 2,636 | NA | 10 | 8 | NA |
| 1989 Total ^K | 781,672 | 27,733 | 249,820 | 303 | 667 | 281,192 | 3,485 | 90 | 345 | 151 | 39 |
| 1990 Total | 792,457 | 18,143 | 190,849 | 437 | 1,914 | 218,997 | 3,692 | 112 | 442 | 211 | 36 |
| 1991 Total | 793,666 | 16,564 | 177,780 | 380 | 1,789 | 203,669 | 3,765 | 125 | 425 | 247 | 59 |
| 1992 Total | 805,140 | 14,493 | 144,467 | 759 | 2,504 | 172,241 | 3,900 | 141 | 481 | 283 | 40 |
| 1993 Total | 842,153 | 16,845 | 159,059 | 715 | 3,169 | 192,462 | 3,929 | 136 | 485 | 288 | 34 |
| 1994 Total | 848,796 | 22,365 | 145,225 | 929 | 3,020 | 183,618 | 4,367 | 136 | 498 | 301 | 40 |
| 1995 Total | 860,594 | 19,615 | 95,507 | 680 | 3,355 | 132,578 | 4,738 | 133 | 480 | 316 | 42 |
| 1996 Total | 907,209 | 20,252 | 106,055 | 1,712 | 3,322 | 144,626 | 4,312 | 159 | 513 | 324 | 37 |
| 1997 Total | 931,949 | 20,309 | 118,741 | 237 | 4,086 | 159,715 | 4,565 | 119 | 484 | 339 | 36 |
| 1998 Total | 946,295 | 25,062 | 172,728 | 549 | 4,860 | 222,640 | 5,081 | 125 | 475 | 332 | 36 |
| 1999 Total | 949,802 | 25,951 | 158,187 | 974 | 4,552 | 207,871 | 5,322 | 126 | 490 | 332 | 41 |
| 2000 Total | 994,933 | 31,675 | 143,381 | 1,450 | 3,744 | 195,228 | 5,691 | 126 | 496 | 330 | 46 |
| 2001 January | 89,136 | 8,185 | 22,181 | 132 | 333 | ^R 32,164 | 380 | 8 | 42 | 29 | 3 |
| February | 76,002 | 2,835 | ^R 13,589 | 86 | 302 | 18,020 | 348 | 7 | 37 | 26 | 3 |
| March | 78,613 | 3,141 | 15,552 | 87 | 295 | 20,256 | 402 | 8 | 39 | 29 | 3 |
| April | 71,022 | 2,738 | 15,006 | 62 | 247 | 19,039 | 422 | 8 | 38 | 29 | 3 |
| May | 77,344 | 2,317 | 14,109 | 55 | 290 | 17,931 | 474 | 9 | 39 | 29 | 3 |
| June | 82,959 | 1,963 | 16,985 | 57 | 310 | 20,555 | 532 | 8 | 42 | 30 | 3 |
| July | 92,001 | 1,885 | 15,029 | 65 | 370 | 18,829 | 678 | 9 | 41 | 31 | 3 |
| August | 93,954 | 2,750 | 19,888 | 75 | 364 | 24,532 | 733 | 9 | 43 | 30 | 4 |
| September | 79,751 | 1,330 | 9,571 | 60 | 340 | 12,659 | 553 | 8 | 43 | 29 | 4 |
| October | ^R 76,327 | 1,460 | ^R 7,955 | 55 | 344 | 11,191 | 509 | 8 | 43 | 29 | 4 |
| November | 74,073 | 1,161 | 7,591 | 56 | 293 | 10,271 | 390 | 7 | 39 | 28 | 4 |
| December | ^R 81,509 | ^R 1,384 | 7,857 | 67 | 383 | 11,224 | 410 | 8 | 40 | 29 | 4 |
| Total | 972,691 | 31,150 | 165,312 | 855 | 3,871 | 216,672 | 5,832 | 97 | 486 | 347 | 41 |
| 2002 January | 83,361 | 1,660 | 7,510 | 109 | 409 | 11,327 | 423 | 12 | 49 | 30 | 4 |
| February | 72,770 | 1,025 | 6,186 | 71 | 362 | 9,095 | 379 | 10 | 43 | 26 | 4 |
| March | 77,695 | 1,584 | 9,915 | 100 | 378 | 13,492 | 446 | 11 | 45 | 30 | 4 |
| April | 72,275 | 1,540 | 8,967 | 39 | 376 | 12,429 | 437 | 10 | 46 | 29 | 4 |
| May | 77,210 | 1,892 | 9,137 | 117 | 472 | 13,506 | 454 | 11 | 44 | 31 | 4 |
| June | 84,186 | 1,605 | 8,950 | 117 | 472 | 13,032 | 585 | 11 | 48 | 31 | 4 |
| July | 93,273 | 2,444 | 11,671 | 207 | 445 | 16,549 | 779 | 13 | 49 | 33 | 5 |
| August | 91,758 | 2,141 | 11,653 | 201 | 456 | 16,277 | 742 | 13 | 49 | 31 | 3 |
| September | 84,683 | 1,434 | 9,422 | 127 | 420 | 13,083 | 600 | 11 | 47 | 31 | 5 |
| October | 81,211 | 1,842 | 9,510 | 118 | 391 | 13,423 | 473 | 11 | 45 | 30 | 6 |
| November | 79,926 | 1,185 | 8,178 | 115 | 396 | 11,456 | 373 | 11 | 45 | 29 | 3 |
| December | 87,025 | 1,433 | 9,424 | 129 | 431 | 13,141 | 374 | 10 | 46 | 32 | 4 |
| Total | 985,374 | 19,787 | 110,523 | 1,450 | 5,010 | 156,809 | 6,065 | 132 | 556 | 362 | 48 |
| 2003 January | 92,030 | 4,816 | 14,529 | 298 | 460 | 21,941 | 408 | 10 | 50 | 29 | 2 |
| February | ^R 79,659 | ^R 3,956 | ^R 12,367 | ^R 415 | ^R 388 | ^R 18,679 | ^R 365 | ^R 8 | ^R 44 | ^R 26 | ^R 2 |
| March | ^{RF} 79,681 | ^{RF} 3,587 | ^{RF} 15,340 | ^{RF} 123 | ^{RF} 518 | ^{RF} 21,640 | ^{RF} 437 | ^{RF} 9 | ^{RF} 45 | ^{RF} 29 | ^{RF} 3 |
| April | ^F 71,467 | ^F 5,851 | ^F 11,777 | ^F 53 | ^F 443 | ^F 19,898 | ^F 403 | ^F 12 | ^F 48 | ^F 29 | ^F 4 |
| 4-Month Total | ^E 322,837 | ^E 18,210 | ^E 54,013 | ^E 888 | ^E 1,809 | ^E 82,158 | ^E 1,613 | ^E 39 | ^E 187 | ^E 112 | ^E 10 |
| 2002 4-Month Total | 306,102 | 5,810 | 32,579 | 319 | 1,527 | 46,342 | 1,685 | 42 | 183 | 115 | 15 |
| 2001 4-Month Total | 314,773 | 16,900 | 66,327 | 366 | 1,177 | 89,479 | 1,553 | 32 | 157 | 112 | 13 |

^a Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

^b For 1973-1979, gas turbine and internal combustion plant use of petroleum. For 1980-2000, electric utility data are for light oil (fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.)

^c For 1973-1979, steam plant use of petroleum. For 1980-2000, electric utility data are for heavy oil (fuel oil nos. 5 and 6, and small amounts of fuel oil no. 4.)

^d Jet fuel, kerosene, other petroleum liquids, and waste oil.

^e Petroleum coke is converted from short tons to barrels by multiplying by 5.

^f Natural gas, including a small amount of supplemental gaseous fuels.

^g Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

^h Wood, black liquor, and other wood waste.

ⁱ Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

^j Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

^k Through 1988, data are for consumption at electric utilities only. Beginning in 1989, data also include consumption at independent power producers, commercial plants, and industrial plants.

^R=Revised. ^E=Estimate. ^{NA}=Not available. ^(s)=Less than 0.5 trillion Btu. ^F=Forecast.

Notes: • Data are for fuels consumed to produce electricity; they exclude fuels consumed to produce useful thermal output. Consumption for electricity generation at combined-heat-and-power (CHP) plants is estimated. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>
Sources: See sources for Tables 7.3e and 7.3f.

Table 7.3e Consumption of Combustible Fuels for Electricity Generation: Electric Power Sector

| | Coal ^a | Petroleum | | | | | Natural Gas ^f | Other Gases ^g | Wood ^h | Waste ⁱ | Other ^j |
|-------------------------|-------------------|----------------------------------|--------------------------------|----------------------------|-----------------------------|---------------------|--------------------------|--------------------------|-------------------|--------------------|--------------------|
| | | Distillate Fuel Oil ^b | Residual Fuel Oil ^c | Other Liquids ^d | Petroleum Coke ^e | Total ^e | | | | | |
| | | Thousand Short Tons | Thousand Barrels | | | Thousand Short Tons | | | | | |
| 1973 Total | 389,212 | 47,058 | 513,190 | NA | 507 | 562,781 | 3,660 | NA | 1 | 2 | NA |
| 1974 Total | 391,811 | 53,128 | 483,146 | NA | 625 | 539,399 | 3,443 | NA | 1 | 2 | NA |
| 1975 Total | 405,962 | 38,907 | 467,221 | NA | 70 | 506,479 | 3,158 | NA | (s) | 2 | NA |
| 1976 Total | 448,371 | 41,843 | 514,077 | NA | 68 | 556,261 | 3,081 | NA | 1 | 2 | NA |
| 1977 Total | 477,126 | 48,837 | 574,869 | NA | 98 | 624,193 | 3,191 | NA | 3 | 2 | NA |
| 1978 Total | 481,235 | 47,520 | 588,319 | NA | 398 | 637,830 | 3,188 | NA | 2 | 1 | NA |
| 1979 Total | 527,051 | 30,691 | 492,606 | NA | 268 | 524,636 | 3,491 | NA | 3 | 2 | NA |
| 1980 Total | 569,274 | 29,051 | 391,163 | NA | 179 | 421,110 | 3,682 | NA | 3 | 2 | NA |
| 1981 Total | 596,797 | 21,313 | 329,798 | NA | 139 | 351,806 | 3,640 | NA | 3 | 1 | NA |
| 1982 Total | 593,666 | 15,337 | 234,434 | NA | 149 | 250,517 | 3,226 | NA | 2 | 1 | NA |
| 1983 Total | 625,211 | 16,512 | 228,984 | NA | 261 | 246,804 | 2,911 | NA | 2 | 2 | NA |
| 1984 Total | 664,399 | 15,190 | 189,289 | NA | 252 | 205,736 | 3,111 | NA | 5 | 4 | NA |
| 1985 Total | 693,841 | 14,635 | 158,779 | NA | 231 | 174,571 | 3,044 | NA | 8 | 7 | NA |
| 1986 Total | 685,056 | 14,326 | 216,156 | NA | 313 | 232,046 | 2,602 | NA | 5 | 7 | NA |
| 1987 Total | 717,894 | 15,367 | 184,011 | NA | 348 | 201,116 | 2,844 | NA | 8 | 7 | NA |
| 1988 Total | 758,372 | 18,769 | 229,327 | NA | 409 | 250,141 | 2,636 | NA | 10 | 8 | NA |
| 1989 Total ^k | 771,551 | 26,036 | 242,708 | 9 | 517 | 271,340 | 3,024 | 7 | 75 | 126 | 2 |
| 1990 Total | 781,301 | 16,394 | 183,285 | 25 | 1,008 | 204,745 | 3,147 | 6 | 106 | 180 | (s) |
| 1991 Total | 782,653 | 14,255 | 171,629 | 58 | 974 | 190,810 | 3,216 | 6 | 104 | 217 | 4 |
| 1992 Total | 793,390 | 12,469 | 137,681 | 118 | 1,490 | 157,719 | 3,325 | 12 | 120 | 252 | 3 |
| 1993 Total | 829,851 | 14,559 | 151,407 | 213 | 2,571 | 179,034 | 3,344 | 12 | 129 | 255 | 3 |
| 1994 Total | 836,113 | 20,241 | 137,198 | 667 | 2,256 | 169,387 | 3,758 | 12 | 134 | 269 | 2 |
| 1995 Total | 847,854 | 18,066 | 88,895 | 441 | 2,452 | 119,663 | 4,094 | 18 | 106 | 282 | 2 |
| 1996 Total | 894,400 | 18,472 | 98,795 | 567 | 2,467 | 130,168 | 3,660 | 16 | 117 | 280 | 2 |
| 1997 Total | 919,009 | 18,646 | 112,423 | 130 | 3,201 | 147,202 | 3,903 | 14 | 117 | 292 | 1 |
| 1998 Total | 934,126 | 23,166 | 165,875 | 411 | 3,999 | 209,447 | 4,416 | 23 | 125 | 287 | 2 |
| 1999 Total | 937,888 | 23,875 | 151,921 | 514 | 3,607 | 194,345 | 4,644 | 14 | 125 | 290 | 1 |
| 2000 Total | 982,713 | 29,722 | 138,047 | 403 | 3,155 | 173,832 | 5,014 | 19 | 126 | 294 | 1 |
| 2001 January | 88,115 | 7,825 | 21,466 | 47 | 283 | 30,755 | 324 | 1 | 10 | 26 | 0 |
| February | 75,146 | 2,614 | 13,041 | 34 | 259 | 16,983 | 297 | 1 | 8 | 23 | 0 |
| March | 77,661 | 2,912 | 15,019 | 31 | 253 | 19,230 | 347 | 1 | 9 | 26 | 0 |
| April | 70,149 | 2,580 | 14,463 | 25 | 201 | 18,074 | 370 | 1 | 8 | 26 | 0 |
| May | 76,518 | 2,144 | 13,638 | 24 | 235 | 16,983 | 419 | 1 | 9 | 26 | 0 |
| June | 82,009 | 1,821 | 16,513 | 29 | 267 | 19,698 | 477 | (s) | 11 | 27 | 0 |
| July | 90,994 | 1,738 | 14,574 | 32 | 316 | 17,923 | 618 | 1 | 11 | 28 | 0 |
| August | 92,943 | 2,593 | 19,416 | 39 | 323 | 23,661 | 669 | 1 | 10 | 28 | 0 |
| September | 78,793 | 1,204 | 9,111 | 27 | 300 | 11,841 | 493 | 1 | 10 | 26 | 0 |
| October | 75,409 | 1,327 | 7,477 | 27 | 289 | 10,273 | 449 | 1 | 10 | 26 | 0 |
| November | 73,198 | 1,041 | 7,106 | 27 | 252 | 9,433 | 333 | 1 | 9 | 25 | 0 |
| December | 80,589 | 1,257 | 7,326 | 31 | 330 | 10,265 | 349 | 1 | 10 | 27 | 0 |
| Total | 961,523 | 29,056 | 159,150 | 374 | 3,308 | 205,119 | 5,142 | 9 | 116 | 314 | 0 |
| 2002 January | 82,362 | 1,541 | 7,074 | 69 | 343 | 10,401 | 358 | 2 | 12 | 27 | (s) |
| February | 71,916 | 937 | 5,817 | 45 | 310 | 8,350 | 322 | 1 | 9 | 23 | (s) |
| March | 76,762 | 1,490 | 9,419 | 57 | 327 | 12,601 | 381 | 1 | 11 | 26 | (s) |
| April | 71,342 | 1,468 | 8,602 | 22 | 309 | 11,638 | 381 | 1 | 10 | 26 | (s) |
| May | 76,275 | 1,775 | 8,778 | 86 | 414 | 12,707 | 391 | 1 | 9 | 27 | (s) |
| June | 83,211 | 1,502 | 8,588 | 95 | 413 | 12,250 | 521 | 1 | 11 | 28 | (s) |
| July | 92,213 | 2,299 | 11,222 | 178 | 381 | 15,604 | 704 | 1 | 12 | 29 | (s) |
| August | 90,747 | 1,985 | 11,212 | 167 | 397 | 15,347 | 671 | 2 | 12 | 28 | (s) |
| September | 83,729 | 1,335 | 9,017 | 105 | 370 | 12,305 | 535 | 1 | 11 | 27 | (s) |
| October | 80,199 | 1,717 | 9,074 | 80 | 326 | 12,503 | 418 | 1 | 11 | 26 | (s) |
| November | 78,948 | 1,083 | 7,784 | 81 | 337 | 10,630 | 319 | 1 | 11 | 25 | (s) |
| December | 85,999 | 1,279 | 8,906 | 95 | 364 | 12,098 | 321 | 1 | 12 | 29 | (s) |
| Total | 973,704 | 18,412 | 105,492 | 1,079 | 4,290 | 146,433 | 5,321 | 17 | 130 | 323 | 1 |
| 2003 January | 90,900 | 4,349 | 13,974 | 237 | 392 | 20,522 | 343 | 1 | 14 | 26 | (s) |
| February | R 78,666 | R 3,641 | R 11,906 | R 364 | R 336 | R 17,589 | R 308 | RF 1 | RF 11 | R 23 | (s) |
| March | RF 78,726 | RF 3,431 | RF 14,609 | RF 53 | RF 470 | RF 20,441 | F 372 | F 1 | RF 11 | RF 25 | F (s) |
| April | F 70,532 | F 5,730 | F 11,202 | F 12 | F 345 | F 18,668 | F 346 | F 1 | F 10 | F 25 | F (s) |
| 4-Month Total | E 318,824 | E 17,150 | E 51,691 | E 666 | E 1,543 | E 77,220 | E 1,369 | E 5 | E 46 | E 100 | E (s) |
| 2002 4-Month Total | 302,383 | 5,437 | 30,912 | 193 | 1,290 | 42,989 | 1,441 | 6 | 43 | 103 | (s) |
| 2001 4-Month Total | 311,072 | 15,932 | 63,990 | 137 | 997 | 85,042 | 1,337 | 3 | 36 | 101 | 0 |

^a Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.
^b For 1973-1979, gas turbine and internal combustion plant use of petroleum. For 1980-2000, electric utility data are for light oil (fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.)
^c For 1973-1979, steam plant use of petroleum. For 1980-2000, electric utility data are for heavy oil (fuel oil nos. 5 and 6, and small amounts of fuel oil no. 4.)
^d Jet fuel, kerosene, other petroleum liquids, and waste oil.
^e Petroleum coke is converted from short tons to barrels by multiplying by 5.
^f Natural gas, including a small amount of supplemental gaseous fuels.
^g Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.
^h Wood, black liquor, and other wood waste.
ⁱ Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.
^j Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and

miscellaneous technologies.
^k Through 1988, data are for consumption at electric utilities only. Beginning in 1989, data also include consumption at independent power producers.
R=Revised. E=Estimate. NA=Not available. (s)=Less than 0.5 trillion Btu. F=Forecast.
Notes: • Data are for fuels consumed to produce electricity; they exclude fuels consumed to produce useful thermal output. Consumption for electricity generation at combined-heat-and-power (CHP) plants is estimated. • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>.
Sources: See end of section.

Table 7.3f Estimated Consumption of Selected Combustible Fuels for Electricity Generation: Commercial and Industrial Sectors

| | Commercial Sector ^a | | | | Industrial Sector ^b | | | | | | |
|---------------------------------|--------------------------------|------------------------|--------------------------|--------------------|--------------------------------|------------------------|--------------------------|--------------------------|-------------------|--------------------|--------------------|
| | Coal ^c | Petroleum ^d | Natural Gas ^e | Waste ^f | Coal ^c | Petroleum ^d | Natural Gas ^e | Other Gases ^g | Wood ^h | Waste ^f | Other ⁱ |
| | Thousand Short Tons | Thousand Barrels | Billion Cubic Feet | Trillion Btu | Thousand Short Tons | Thousand Barrels | Billion Cubic Feet | Trillion Btu | | | |
| 1989 Total | 414 | 1,165 | 18 | 9 | 9,707 | 8,688 | 444 | 83 | 267 | 15 | 37 |
| 1990 Total | 417 | 953 | 28 | 15 | 10,740 | 13,299 | 517 | 104 | 335 | 16 | 36 |
| 1991 Total | 403 | 576 | 27 | 15 | 10,610 | 12,283 | 522 | 118 | 318 | 14 | 55 |
| 1992 Total | 371 | 429 | 33 | 16 | 11,379 | 14,093 | 542 | 128 | 359 | 15 | 37 |
| 1993 Total | 404 | 672 | 37 | 16 | 11,898 | 12,755 | 547 | 123 | 355 | 17 | 31 |
| 1994 Total | 404 | 694 | 41 | 17 | 12,279 | 13,537 | 568 | 123 | 364 | 14 | 38 |
| 1995 Total | 569 | 649 | 43 | 21 | 12,171 | 12,265 | 601 | 114 | 373 | 13 | 40 |
| 1996 Total | 656 | 645 | 42 | 31 | 12,153 | 13,813 | 610 | 143 | 394 | 13 | 35 |
| 1997 Total | 630 | 790 | 39 | 34 | 12,311 | 11,723 | 623 | 105 | 367 | 14 | 36 |
| 1998 Total | 440 | 802 | 41 | 32 | 11,728 | 12,392 | 625 | 102 | 349 | 13 | 35 |
| 1999 Total | 481 | 931 | 39 | 33 | 11,432 | 12,595 | 639 | 112 | 364 | 8 | 39 |
| 2000 Total | 514 | 823 | 37 | 26 | 11,706 | 10,459 | 640 | 107 | 369 | 10 | 45 |
| 2001 January | 41 | 144 | 3 | 2 | 980 | ^R 1,265 | 54 | 7 | 32 | 1 | 3 |
| February | 46 | 88 | 2 | 2 | 809 | 949 | 49 | 7 | 28 | 1 | 3 |
| March | 46 | 89 | 3 | 2 | 906 | 937 | 53 | 7 | 30 | 1 | 3 |
| April | 35 | 74 | 3 | 2 | 837 | 892 | 50 | 7 | 30 | 1 | 3 |
| May | 40 | 77 | 3 | 2 | 786 | 871 | 53 | 8 | 29 | 1 | 3 |
| June | 44 | 75 | 3 | 2 | 907 | 782 | 53 | 7 | 31 | 1 | 3 |
| July | 56 | 80 | 4 | 2 | 951 | 826 | 57 | 8 | 31 | 1 | 3 |
| August | 65 | 91 | 4 | 2 | 947 | 781 | 60 | 8 | 32 | 1 | 4 |
| September | 49 | 72 | 3 | 2 | 909 | ^R 746 | 57 | 7 | 33 | 1 | 4 |
| October | 36 | 84 | 3 | 2 | 882 | ^R 834 | 57 | 7 | 33 | 1 | 4 |
| November | 35 | 68 | 3 | 2 | 840 | 770 | 54 | 7 | 30 | 1 | 4 |
| December | 38 | 82 | 3 | 2 | 883 | 876 | 59 | 7 | 30 | 1 | 4 |
| Total | 532 | 1,023 | 36 | 22 | 10,636 | 10,530 | 654 | 88 | 370 | 10 | 41 |
| 2002 January | 48 | 51 | 3 | 2 | 951 | 875 | 62 | 9 | 37 | 1 | 4 |
| February | 32 | 56 | 3 | 2 | 822 | 689 | 55 | 9 | 34 | 1 | 3 |
| March | 45 | 60 | 4 | 2 | 888 | 831 | 61 | 9 | 34 | 1 | 4 |
| April | 37 | 41 | 3 | 2 | 896 | 751 | 53 | 9 | 35 | 1 | 4 |
| May | 36 | 45 | 3 | 2 | 899 | 754 | 60 | 9 | 35 | 1 | 4 |
| June | 46 | 54 | 3 | 2 | 928 | 728 | 60 | 10 | 37 | 1 | 4 |
| July | 46 | 88 | 7 | 2 | 1,014 | 857 | 68 | 12 | 37 | 1 | 4 |
| August | 50 | 86 | 7 | 2 | 961 | 844 | 65 | 11 | 37 | 1 | 3 |
| September | 48 | 57 | 5 | 2 | 906 | 722 | 59 | 10 | 37 | 1 | 5 |
| October | 45 | 62 | 3 | 3 | 967 | 858 | 52 | 9 | 35 | 1 | 6 |
| November | 38 | 53 | 3 | 2 | 939 | 772 | 51 | 9 | 34 | 1 | 3 |
| December | 41 | 106 | 3 | 2 | 985 | 938 | 50 | 9 | 35 | 1 | 4 |
| Total | 513 | 758 | 45 | 27 | 11,157 | 9,618 | 699 | 115 | 426 | 12 | 47 |
| 2003 January | 48 | 228 | 3 | 2 | 1,082 | 1,192 | 62 | 9 | 36 | 1 | 2 |
| February | ^R 41 | ^R 186 | 2 | 2 | ^R 952 | ^R 904 | ^R 54 | ^R 7 | ^R 33 | 1 | ^R 2 |
| March | ^{RF} 46 | ^{RF} 105 | ^F 3 | ^F 2 | ^{RF} 909 | ^{RF} 1,094 | ^F 62 | ^F 8 | ^{RF} 34 | ^F 1 | ^F 3 |
| April | ^F 36 | ^F 77 | ^F 3 | ^F 2 | ^F 899 | ^F 1,153 | ^F 54 | ^F 10 | ^F 38 | ^F 1 | ^F 4 |
| 4-Month Total | ^E 171 | ^E 596 | ^E 12 | ^E 9 | ^E 3,841 | ^E 4,342 | ^E 232 | ^E 34 | ^E 140 | ^E 4 | ^E 10 |
| 2002 4-Month Total | 162 | 207 | 12 | 8 | 3,557 | 3,145 | 232 | 37 | 141 | 4 | 15 |
| 2001 4-Month Total | 169 | 394 | 10 | 7 | 3,532 | 4,043 | 205 | 28 | 120 | 4 | 13 |

^a Commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See note at end of section.

^b Industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See note at end of section.

^c Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

^d Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil.

^e Natural gas, including a small amount of supplemental gaseous fuels.

^f Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

^g Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

^h Wood, black liquor, and other wood waste.

ⁱ Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

R=Revised. E=Estimate. F=Forecast.

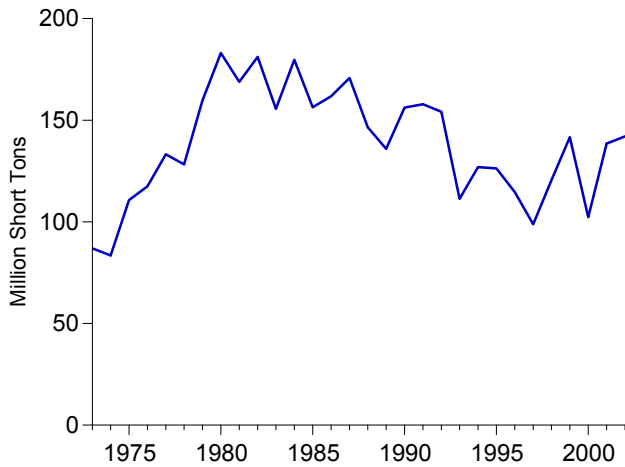
Notes: • Estimates are for fuels consumed to produce electricity; they exclude fuels consumed to produce useful thermal output. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>.

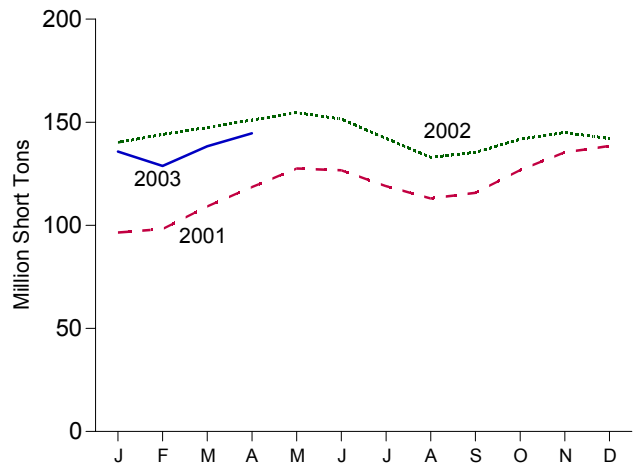
Sources: • **1989-1997:** Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001:** EIA, Form EIA-860, "Annual Electric Generator Report" and Form EIA-906, "Power Plant Report." • **2002-February 2003:** EIA, Form EIA-906, "Power Plant Report." • **March and April 2003:** EIA, Short-Term Integrated Forecasting System.

Figure 7.4 Stocks of Coal and Petroleum: Electric Power Sector

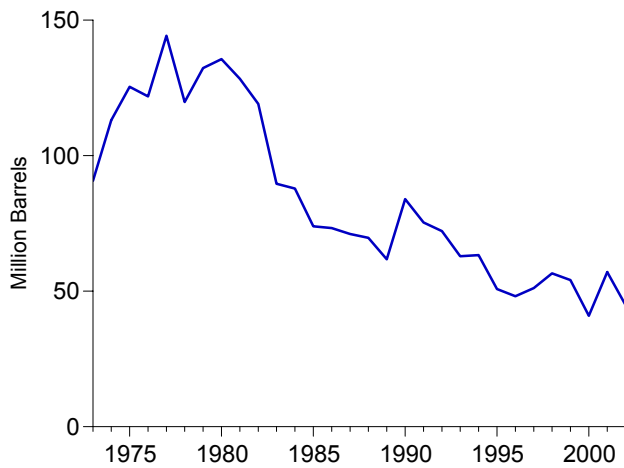
Coal, 1973-2002



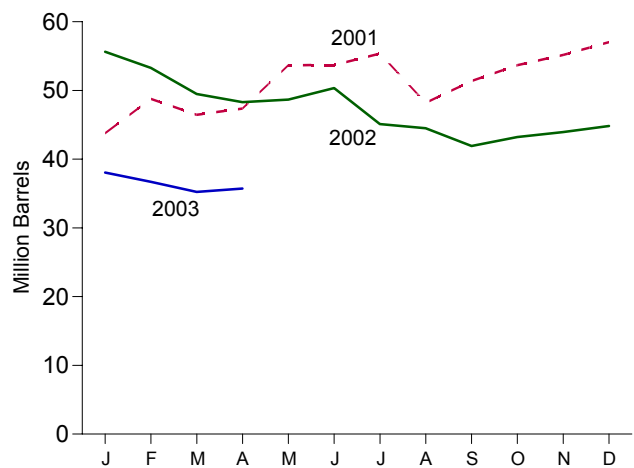
Coal, Monthly



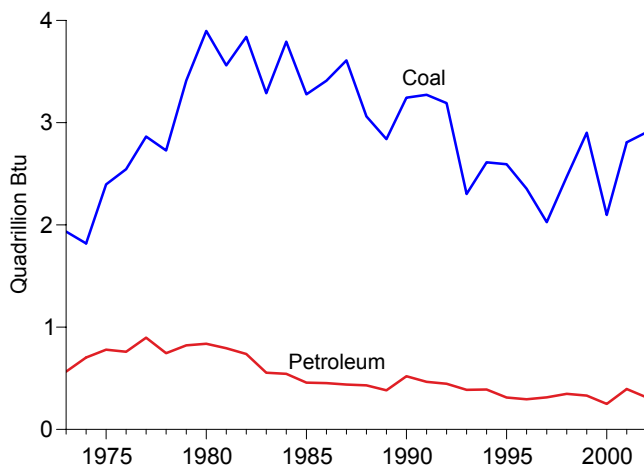
Total Petroleum, 1973-2002



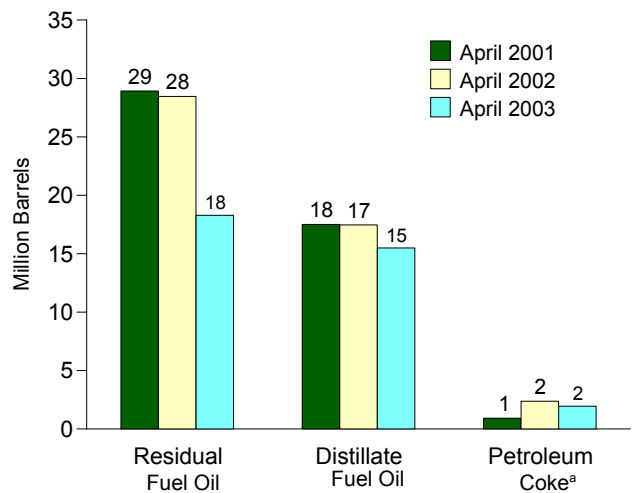
Total Petroleum, Monthly



Coal and Petroleum Stocks, 1973-2002



Petroleum by Type, End of Month



^aConverted from short tons to barrels by multiplying by 5.
Note: Because vertical scales differ, graphs should not be compared.

Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>.
Source: Table 7.4.

Table 7.4 Stocks of Coal and Petroleum: Electric Power Sector

| | Petroleum | | | | |
|--------------------------------------|----------------------|----------------------------------|--------------------------------|-----------------------------|----------------------|
| | Coal ^a | Distillate Fuel Oil ^b | Residual Fuel Oil ^c | Petroleum Coke ^d | Total ^d |
| | | | | Thousand Short Tons | Thousand Barrels |
| 1973 Total | 86,967 | 10,095 | 79,121 | 312 | 90,776 |
| 1974 Total | 83,509 | 15,199 | 97,718 | 35 | 113,091 |
| 1975 Total | 110,724 | 16,432 | 108,825 | 31 | 125,413 |
| 1976 Total | 117,436 | 14,703 | 106,993 | 32 | 121,857 |
| 1977 Total | 133,219 | 19,281 | 124,750 | 44 | 144,252 |
| 1978 Total | 128,225 | 16,386 | 102,402 | 198 | 119,778 |
| 1979 Total | 159,714 | 20,301 | 111,121 | 183 | 132,338 |
| 1980 Total | 183,010 | 30,023 | 105,351 | 52 | 135,635 |
| 1981 Total | 168,893 | 26,094 | 102,042 | 42 | 128,345 |
| 1982 Total | 181,132 | 23,369 | 95,515 | 41 | 119,090 |
| 1983 Total | 155,598 | 18,801 | 70,573 | 55 | 89,652 |
| 1984 Total | 179,727 | 19,116 | 68,503 | 50 | 87,870 |
| 1985 Total | 156,376 | 16,386 | 57,304 | 49 | 73,933 |
| 1986 Total | 161,806 | 16,269 | 56,841 | 40 | 73,313 |
| 1987 Total | 170,797 | 15,759 | 55,069 | 51 | 71,084 |
| 1988 Total | 146,507 | 15,099 | 54,187 | 86 | 69,714 |
| 1989 Total | 135,860 | 13,824 | 47,446 | 105 | 61,795 |
| 1990 Total | 156,166 | 16,471 | 67,030 | 94 | 83,970 |
| 1991 Total | 157,876 | 16,357 | 58,636 | 70 | 75,343 |
| 1992 Total | 154,130 | 15,714 | 56,135 | 67 | 72,183 |
| 1993 Total | 111,341 | 15,674 | 46,770 | 89 | 62,890 |
| 1994 Total | 126,897 | 16,644 | 46,344 | 69 | 63,333 |
| 1995 Total | 126,304 | 15,392 | 35,102 | 65 | 50,821 |
| 1996 Total | 114,623 | 15,216 | 32,473 | 91 | 48,146 |
| 1997 Total | 98,826 | 15,456 | 33,336 | 469 | 51,138 |
| 1998 Total | 120,501 | 16,343 | 37,451 | 559 | 56,591 |
| 1999 Total ^e | 141,604 | 17,995 | 34,256 | 372 | 54,109 |
| 2000 Total | 102,296 | 15,127 | 24,748 | 211 | 40,932 |
| 2001 January | 96,545 | 17,526 | 25,010 | 248 | 43,775 |
| February | 98,220 | 18,121 | 29,617 | 207 | 48,775 |
| March | 109,154 | 17,505 | 27,966 | 196 | 46,450 |
| April | 118,523 | 17,513 | 28,933 | 184 | 47,365 |
| May | 127,521 | 17,827 | 34,970 | 177 | 53,681 |
| June | 126,683 | 18,996 | 33,171 | 308 | 53,707 |
| July | 119,005 | 19,778 | 34,054 | 308 | 55,374 |
| August | 113,066 | 18,515 | 28,384 | 262 | 48,209 |
| September | 115,750 | 18,864 | 30,494 | 402 | 51,369 |
| October | 126,747 | 18,957 | 32,530 | 438 | 53,675 |
| November | 135,428 | 19,473 | 33,463 | 445 | 55,161 |
| December | 138,496 | 20,486 | 34,594 | 390 | 57,031 |
| 2002 January | 140,236 | 18,448 | 35,150 | 409 | 55,641 |
| February | 144,073 | 18,286 | 32,991 | 401 | 53,279 |
| March | 147,401 | 18,776 | 28,426 | 458 | 49,495 |
| April | 151,092 | 17,463 | 28,460 | 476 | 48,301 |
| May | 154,676 | 18,188 | 28,450 | 406 | 48,669 |
| June | 151,526 | 17,886 | 30,571 | 378 | 50,347 |
| July | 142,105 | 16,982 | 26,651 | 295 | 45,111 |
| August | 133,012 | 17,124 | 25,445 | 387 | 44,503 |
| September | 135,421 | 16,756 | 22,853 | 461 | 41,916 |
| October | 141,758 | 16,718 | 23,926 | 517 | 43,226 |
| November | 144,979 | 16,748 | 25,012 | 437 | 43,944 |
| December | 142,026 | 17,104 | 25,689 | 409 | 44,837 |
| 2003 January | 135,771 | 15,431 | 20,870 | 350 | 38,051 |
| February | ^R 128,828 | ^R 14,564 | ^R 20,621 | ^R 306 | ^R 36,713 |
| March | ^F 138,373 | ^{RF} 15,463 | ^{RF} 18,081 | ^F 341 | ^{RF} 35,248 |
| April | ^F 144,634 | ^F 15,490 | ^F 18,290 | ^F 390 | ^F 35,728 |

^a Anthracite, bituminous coal, subbituminous coal, and lignite.

^b For 1973-1979, gas turbine and internal combustion plant stocks of petroleum. For 1980-2001, electric utility data are for light oil (fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel).

^c For 1973-1979, steam plant stocks of petroleum. For 1980-2001, electric utility data are for heavy oil (fuel oil nos. 5 and 6, and small amounts of fuel oil no. 4).

^d Petroleum coke is converted from short tons to barrels by multiplying by 5.

^e Through 1998, data are for stocks at electric utilities only. Beginning in 1999, data also include stocks at independent power producers.

R=Revised. F=Forecast.

Notes: • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Stocks

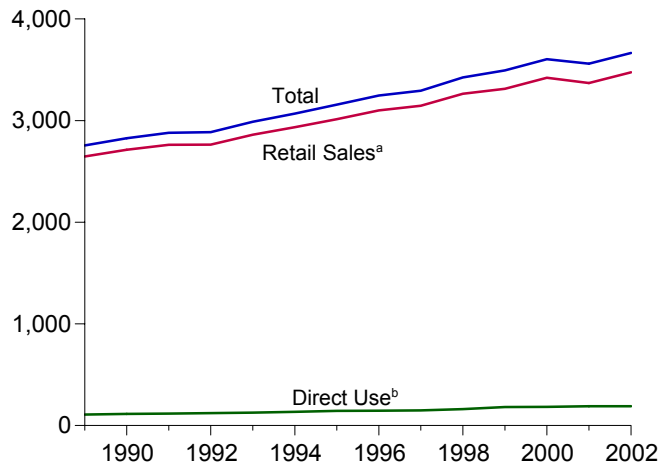
are at end of year. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>.

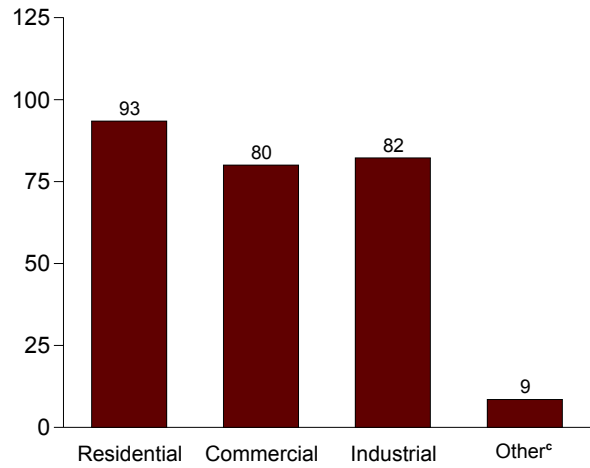
Sources: • **1973-September 1977:** Federal Power Commission, Form FPC-4, "Monthly Power Plant Report." • **October 1977-1981:** Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report." • **1982-1988:** Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report." • **1989-1997:** EIA, Form EIA-759, "Monthly Power Plant Report" and Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-759, "Monthly Power Plant Report" and Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001:** EIA, Form EIA-860, "Annual Electric Generator Report" and Form EIA-906, "Power Plant Report." • **2002-February 2003:** EIA, Form EIA-906, "Power Plant Report." • **March and April 2003:** EIA, Short-Term Integrated Forecasting System.

Figure 7.5 Electricity End Use
(Billion Kilowatthours)

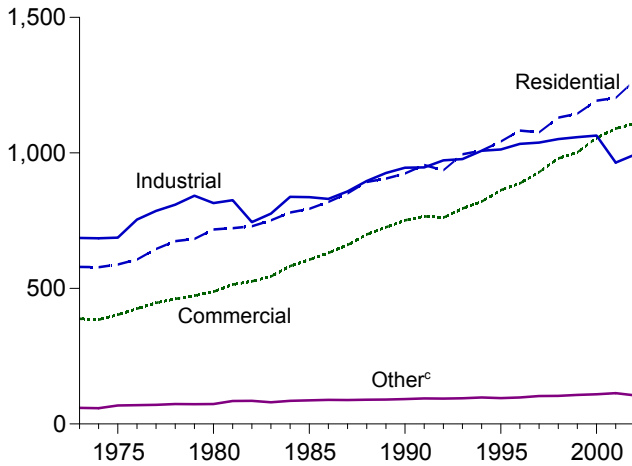
Electricity End Use Overview, 1989-2002



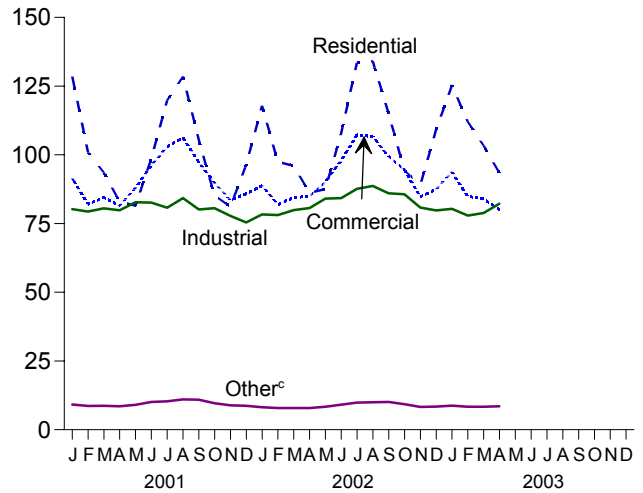
Retail Sales^a by Sector, April 2003



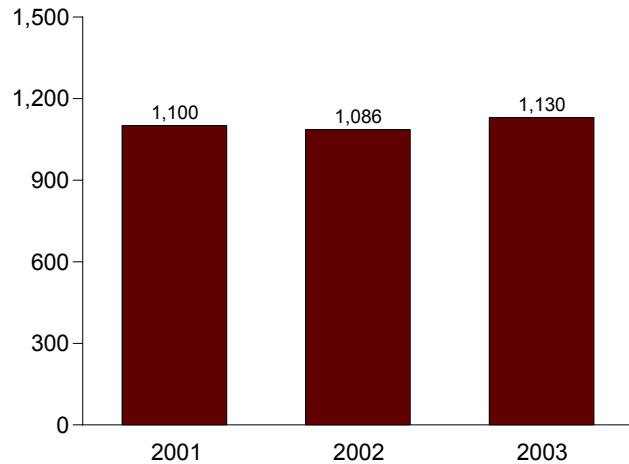
Retail Sales^a by Sector, 1973-2002



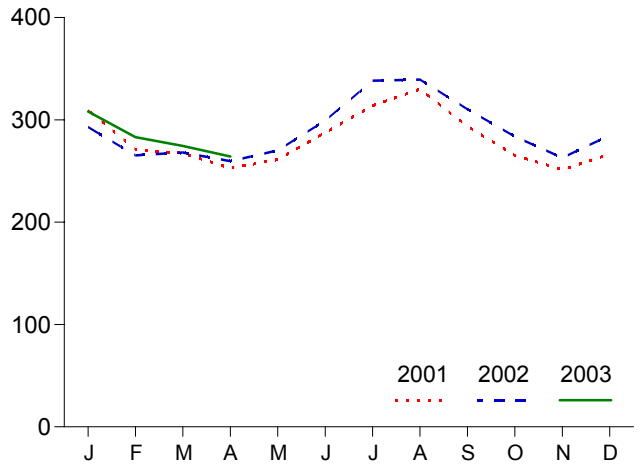
Retail Sales^a by Sector, Monthly



Retail Sales^a Total, January-April



Retail Sales^a Total, Monthly



^aElectricity retail sales to ultimate customers reported by electric utilities and other energy service providers.

^bCommercial and industrial facility use of onsite net electricity generation; and electricity sales among adjacent or co-located facilities for which revenue information is not available.

^cPublic street and highway lighting, other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

Note: Because vertical scales differ, graphs should not be compared.

Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>.

Source: Table 7.5.

Table 7.5 Electricity End Use
(Million Kilowatthours)

| | Retail Sales ^a | | | | | Direct Use ^c | Total |
|---------------------------------|---------------------------|----------------------|----------------------|---------------------|-----------------------|-------------------------|----------------------|
| | Residential | Commercial | Industrial | Other ^b | Total | | |
| 1973 Total | 579,231 | 388,266 | 686,085 | 59,326 | 1,712,909 | NA | 1,712,909 |
| 1974 Total | 578,184 | 384,826 | 684,875 | 58,039 | 1,705,924 | NA | 1,705,924 |
| 1975 Total | 588,140 | 403,049 | 687,680 | 68,222 | 1,747,091 | NA | 1,747,091 |
| 1976 Total | 606,452 | 425,094 | 754,069 | 69,631 | 1,855,246 | NA | 1,855,246 |
| 1977 Total | 645,239 | 446,514 | 786,037 | 70,571 | 1,948,361 | NA | 1,948,361 |
| 1978 Total | 674,466 | 461,163 | 809,078 | 73,215 | 2,017,922 | NA | 2,017,922 |
| 1979 Total | 682,819 | 473,307 | 841,903 | 73,070 | 2,071,099 | NA | 2,071,099 |
| 1980 Total | 717,495 | 488,155 | 815,067 | 73,732 | 2,094,449 | NA | 2,094,449 |
| 1981 Total | 722,265 | 514,338 | 825,743 | 84,756 | 2,147,103 | NA | 2,147,103 |
| 1982 Total | 729,520 | 526,397 | 744,949 | 85,575 | 2,086,441 | NA | 2,086,441 |
| 1983 Total | 750,948 | 543,788 | 775,999 | 80,219 | 2,150,955 | NA | 2,150,955 |
| 1984 Total | 780,092 | 582,621 | 837,836 | 85,248 | 2,285,796 | NA | 2,285,796 |
| 1985 Total | 793,934 | 605,989 | 836,772 | 87,279 | 2,323,974 | NA | 2,323,974 |
| 1986 Total | 819,088 | 630,520 | 830,531 | 88,615 | 2,368,753 | NA | 2,368,753 |
| 1987 Total | 850,410 | 660,433 | 858,233 | 88,196 | 2,457,272 | NA | 2,457,272 |
| 1988 Total | 892,866 | 699,100 | 896,498 | 89,598 | 2,578,062 | NA | 2,578,062 |
| 1989 Total | 905,525 | 725,861 | 925,659 | 89,765 | 2,646,809 | 108,145 | 2,754,954 |
| 1990 Total | 924,019 | 751,027 | 945,522 | 91,988 | 2,712,555 | 114,036 | 2,826,591 |
| 1991 Total | 955,417 | 765,664 | 946,583 | 94,339 | 2,762,003 | 118,033 | 2,880,036 |
| 1992 Total | 935,939 | 761,271 | 972,714 | 93,442 | 2,763,365 | 122,251 | 2,885,616 |
| 1993 Total | 994,781 | 794,573 | 977,164 | 94,944 | 2,861,462 | 127,503 | 2,988,966 |
| 1994 Total | 1,008,482 | 820,269 | 1,007,981 | 97,830 | 2,934,563 | 134,111 | 3,068,674 |
| 1995 Total | 1,042,501 | 862,685 | 1,012,693 | 95,407 | 3,013,287 | 144,063 | 3,157,350 |
| 1996 Total | 1,082,512 | 887,445 | 1,033,631 | 97,539 | 3,101,127 | 145,857 | 3,246,984 |
| 1997 Total | 1,075,880 | 928,633 | 1,038,197 | 102,901 | 3,145,610 | 148,428 | 3,294,039 |
| 1998 Total | 1,130,109 | 979,401 | 1,051,203 | 103,518 | 3,264,231 | 160,897 | 3,425,128 |
| 1999 Total | 1,144,923 | 1,001,996 | 1,058,217 | 106,952 | 3,312,087 | 182,508 | 3,494,595 |
| 2000 Total | 1,192,446 | 1,055,232 | 1,064,239 | 109,496 | 3,421,414 | 183,263 | 3,604,677 |
| 2001 | | | | | | | |
| January | 128,464 | 91,407 | 80,245 | 9,167 | 309,283 | E 16,165 | 325,448 |
| February | 101,026 | 82,072 | 79,349 | 8,636 | 271,083 | E 14,601 | 285,683 |
| March | 93,568 | 84,477 | 80,533 | 8,730 | 267,307 | E 16,165 | 283,472 |
| April | 82,937 | 81,538 | 79,824 | 8,525 | 252,823 | E 15,644 | 268,467 |
| May | 81,539 | 87,955 | 82,736 | 9,038 | 261,269 | E 16,165 | 277,434 |
| June | 98,689 | 96,153 | 82,616 | 10,075 | 287,533 | E 15,644 | 303,177 |
| July | 119,819 | 102,863 | 80,766 | 10,355 | 313,803 | E 16,165 | 329,968 |
| August | 128,472 | 106,234 | 84,259 | 11,024 | 329,988 | E 16,165 | 346,154 |
| September | 105,385 | 97,267 | 80,133 | 10,925 | 293,709 | E 15,644 | 309,353 |
| October | 85,207 | 89,818 | 80,569 | 9,660 | 265,255 | E 16,165 | 281,420 |
| November | 81,188 | 83,539 | 77,774 | 8,902 | 251,404 | E 15,644 | 267,048 |
| December | 96,354 | 85,830 | 75,421 | 8,717 | 266,322 | E 16,165 | 282,488 |
| Total | 1,202,647 | 1,089,154 | 964,224 | 113,756 | 3,369,781 | E 190,332 | 3,560,113 |
| 2002 | | | | | | | |
| January | 117,854 | 88,712 | 78,304 | 8,162 | 293,032 | E 16,165 | 309,198 |
| February | 97,402 | 81,921 | 78,113 | 7,880 | 265,317 | E 14,601 | 279,917 |
| March | 96,011 | 84,432 | 79,861 | 7,862 | 268,165 | E 16,165 | 284,331 |
| April | 86,185 | 84,922 | 80,674 | 7,861 | 259,643 | E 15,644 | 275,287 |
| May | 87,577 | 90,154 | 84,072 | 8,344 | 270,147 | E 16,165 | 286,312 |
| June | 107,956 | 97,916 | 84,266 | 9,135 | 299,274 | E 15,644 | 314,917 |
| July | 133,517 | 107,299 | 87,631 | 9,879 | 338,327 | E 16,165 | 354,492 |
| August | 134,080 | 106,652 | 88,669 | 9,996 | 339,397 | E 16,165 | 355,562 |
| September | 115,061 | 99,405 | 85,978 | 10,077 | 310,521 | E 15,644 | 326,165 |
| October | 94,328 | 94,491 | 85,647 | 9,282 | 283,748 | E 16,165 | 299,914 |
| November | 89,012 | 84,738 | 80,816 | 8,308 | 262,874 | E 15,644 | 278,517 |
| December | 109,190 | 87,430 | 79,768 | 8,389 | 284,777 | E 16,165 | 300,942 |
| Total | 1,268,172 | 1,108,072 | 993,800 | 105,177 | 3,475,221 | E 190,332 | 3,665,553 |
| 2003 | | | | | | | |
| January | 125,307 | 93,712 | 80,351 | 8,743 | 308,113 | E 16,165 | 324,278 |
| February | ^R 112,021 | ^R 84,886 | ^R 77,901 | ^R 8,327 | ^R 283,136 | E 14,601 | ^R 297,737 |
| March | ^{RF} 103,338 | ^{RF} 83,976 | ^{RF} 78,868 | ^{RF} 8,378 | ^{RF} 274,560 | E 16,165 | ^R 290,726 |
| April | ^F 93,425 | ^F 80,038 | ^F 82,218 | ^F 8,536 | ^F 264,217 | E 15,644 | 279,861 |
| 4-Month Total | E 434,091 | E 342,611 | E 319,339 | E 33,985 | E 1,130,027 | E 62,575 | 1,192,601 |
| 2002 4-Month Total | 397,453 | 339,987 | 316,951 | 31,766 | 1,086,157 | E 62,575 | 1,148,732 |
| 2001 4-Month Total | 405,994 | 339,494 | 319,950 | 35,058 | 1,100,496 | E 62,575 | 1,163,071 |

^a Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.

^b Public street and highway lighting, other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

^c Commercial and industrial facility use of onsite net electricity generation; and electricity sales among adjacent or co-located facilities for which revenue information is not available.

R=Revised. E=Estimate. NA=Not available. F=Forecast.

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

• Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/elect.html>.

Sources: **Retail Sales**: • **1973-September 1977**: Federal Power Commission (FPC), Form FPC-5, "Monthly Statement of Electric Operating Revenue and Income." • **October 1977-February 1980**: Federal Energy Regulatory

Commission (FERC), Form FPC-5, "Monthly Statement of Electric Operating Revenue and Income." • **March 1980-1982**: FERC, Form FPC-5, "Electric Utility Company Monthly Statement." • **1983**: Energy Information Administration (EIA), Form EIA-826, "Monthly Electric Utility Sales and Revenue Report with State Distributions" (formerly "Electric Utility Company Monthly Statement"). • **1984-1989**: EIA, Form EIA-861, "Annual Electric Utility Report." • **1990-February 2003**: EIA, *Electric Power Monthly*, April 2003, Table 5.1. • **March and April 2003**: EIA, Short-Term Integrated Forecasting System (STIFS). **Direct Use, Annual**: • **1989-1997**: EIA, Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000**: EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001 and 2002**: EIA, Form EIA-861, "Annual Electric Power Industry Report." **Direct Use, Monthly**: • **2001 and 2002**: Estimates are derived by dividing the annual value by the number of days in the year and then multiplying by the number of days in the month. • **2003**: Same values as 2002.

Electricity

Note. Classification of Power Plants Into Energy-Use Sectors

The Energy Information Administration (EIA) classifies power plants (both electricity-only and combined-heat-and-power plants) into energy-use sectors based on the North American Industry Classification System (NAICS), which replaced the Standard Industrial Classification (SIC) system in 1997. Plants with a NAICS code of 22 are assigned to the Electric Power Sector. Those with NAICS codes beginning with 11 (agriculture, forestry, fishing, and hunting); 21 (mining, including oil and gas extraction); 23 (construction); 31-33 (manufacturing); 2212 (natural gas distribution); and 22131 (water supply and irrigation systems) are assigned to the Industrial Sector. Those with all other codes are assigned to the Commercial Sector. Form EIA-860, "Annual Electric Generator Report," asks respondents to indicate the primary purpose of the facility by assigning a NAICS code from the universal list at: www.census.gov/epcd/naics02/naicod02.htm.

Table 7.1 Sources: Imports and Exports of Electricity

Electricity Trade With Canada and Mexico, 1973-1989:

1973–September 1977: Unpublished Federal Power Commission data.

October 1977–1980: Unpublished Economic Regulatory Administration (ERA) data.

1981: Department of Energy (DOE), Office of Energy Emergency Operations, "Report on Electric Energy Exchanges with Canada and Mexico for Calendar Year 1981," April 1982 (revised June 1982).

1982 and 1983: DOE, ERA, *Electricity Exchanges Across International Borders*.

1984–1986: DOE, ERA, *Electricity Transactions Across International Borders*.

1987 and 1988: DOE, ERA, Form ERA-781R, "Annual Report of International Electrical Export/Import Data."

1989: DOE, Fossil Energy, Form FE-781R, "Annual Report of International Electrical Export/Import Data."

Electricity Trade with Canada, 1990 Forward:

National Energy Board of Canada, data for total sales (firm and interruptible; which exclude non-revenue, inadvertent, and service) from Canada to the United States, and data for total purchases (which exclude non-revenue, inadvertent,

and service) by Canada from the United States.

Electricity Trade with Mexico, 1990 Forward:

DOE, Fossil Energy, Office of Fuels Programs, Form FE-781R, "Annual Report of International Electrical Export/Import Data."

Table 7.2b Sources:

1973–September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."

October 1977–1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."

1982–1988: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."

1989–1997: EIA, Form EIA-759, "Monthly Power Plant Report" and Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-759, "Monthly Power Plant Report" and Form EIA-860B, "Annual Electric Generator Report-Nonutility."

2001: EIA, Form EIA-860, "Annual Electric Generator Report" and Form EIA-906, "Power Plant Report."

2002–February 2003: EIA, Form EIA-906, "Power Plant Report."

March and April 2003: EIA, Short-Term Integrated Forecasting System.

Table 7.3e Sources:

1973–September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."

October 1977–1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."

1982–1988: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."

1989–1997: EIA, Form EIA-759, "Monthly Power Plant Report" and Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-759, "Monthly Power Plant Report" and Form EIA-860B, "Annual Electric Generator Report-Nonutility."

2001: EIA, Form EIA-860, "Annual Electric Generator Report" and Form EIA-906, "Power Plant Report."

2002–February 2003: EIA, Form EIA-906, "Power Plant Report."

March and April 2003: EIA, Short-Term Integrated Forecasting System.

Section 8. Nuclear Energy

U.S. nuclear electricity net generation during April 2003 was forecast as 57 net terawatthours (billion kilowatthours) of electricity, 3 percent less than the level in April 2002.

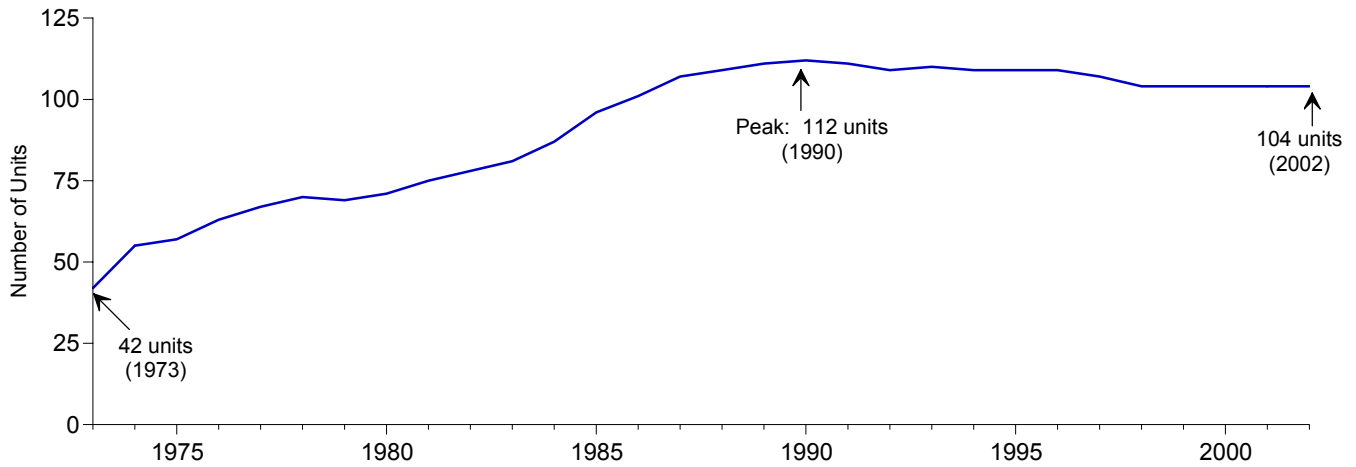
Nuclear units generated at an estimated average capacity factor of 80.1 percent in April 2003, 2.3 percentage points lower than the capacity factor in April 2002.

The nuclear share of total electricity net generation in April 2003 was forecast as 19.9 percent, compared with 20.2 percent 1 year earlier.

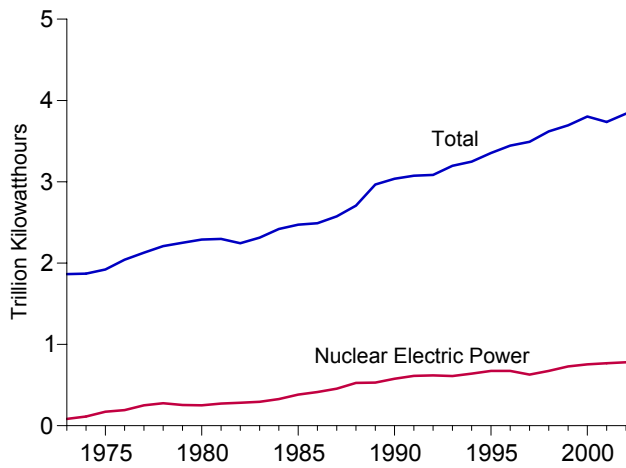
On April 30, 2003, there were 104 operable nuclear generating units in the United States, with a collective net summer capacity of 98.6 million kilowatts of electricity.

Figure 8.1 Nuclear Energy Overview

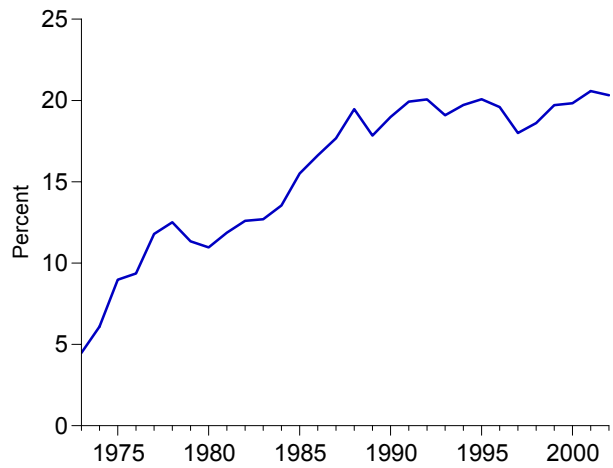
Operable Units, End of Year, 1973-2002



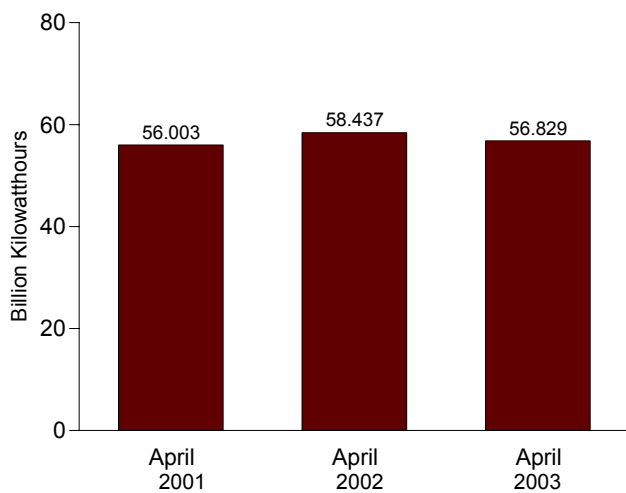
Electricity Net Generation, 1973-2002



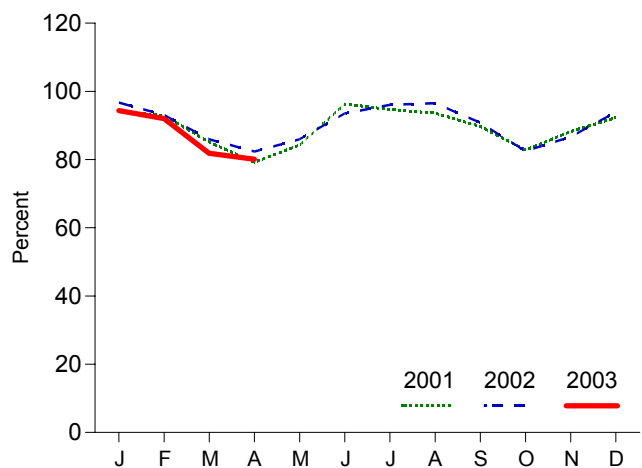
Nuclear Share of Electricity Net Generation, 1973-2002



Nuclear Electricity Net Generation



Capacity Factor, Monthly



Web Page: <http://www.eia.doe.gov/emeu/mer/nuclear.html>.
Sources: Table 7.1 and 8.1.

Table 8.1 Nuclear Energy Overview

| | Total Operable Units ^{a,b} | Net Summer Capacity of Operable Units ^{b,c} | Nuclear Electricity Net Generation | Nuclear Share of Electricity Net Generation | Capacity Factor ^d |
|----------------------------|-------------------------------------|--|------------------------------------|---|------------------------------|
| | Number | Million Kilowatts | Million Kilowatthours | Percent | |
| 1973 Year | 42 | 22.683 | 83,479 | 4.5 | 53.5 |
| 1974 Year | 55 | 31.867 | 113,976 | 6.1 | 47.8 |
| 1975 Year | 57 | 37.267 | 172,505 | 9.0 | 55.9 |
| 1976 Year | 63 | 43.822 | 191,104 | 9.4 | 54.7 |
| 1977 Year | 67 | 46.303 | 250,883 | 11.8 | 63.3 |
| 1978 Year | 70 | 50.824 | 276,403 | 12.5 | 64.5 |
| 1979 Year | 69 | 49.747 | 255,155 | 11.3 | 58.4 |
| 1980 Year | 71 | 51.810 | 251,116 | 11.0 | 56.3 |
| 1981 Year | 75 | 56.042 | 272,674 | 11.9 | 58.2 |
| 1982 Year | 78 | 60.035 | 282,773 | 12.6 | 56.6 |
| 1983 Year | 81 | 63.009 | 293,677 | 12.7 | 54.4 |
| 1984 Year | 87 | 69.652 | 327,634 | 13.5 | 56.3 |
| 1985 Year | 96 | 79.397 | 383,691 | 15.5 | 58.0 |
| 1986 Year | 101 | 85.241 | 414,038 | 16.6 | 56.9 |
| 1987 Year | 107 | 93.583 | 455,270 | 17.7 | 57.4 |
| 1988 Year | 109 | 94.695 | 526,973 | 19.5 | 63.5 |
| 1989 Year | 111 | 98.161 | 529,355 | 17.8 | 62.2 |
| 1990 Year | 112 | 99.624 | 576,862 | 19.0 | 66.0 |
| 1991 Year | 111 | 99.589 | 612,565 | 19.9 | 70.2 |
| 1992 Year | 109 | 98.985 | 618,776 | 20.1 | 70.9 |
| 1993 Year | 110 | 99.041 | 610,291 | 19.1 | 70.5 |
| 1994 Year | 109 | 99.148 | 640,440 | 19.7 | 73.8 |
| 1995 Year | 109 | 99.515 | 673,402 | 20.1 | 77.4 |
| 1996 Year | 109 | 100.784 | 674,729 | 19.6 | 76.2 |
| 1997 Year | 107 | 99.716 | 628,644 | 18.0 | 71.1 |
| 1998 Year | 104 | 97.070 | 673,702 | 18.6 | 78.2 |
| 1999 Year | 104 | 97.411 | 728,254 | 19.7 | 85.3 |
| 2000 Year | 104 | 97.860 | 753,893 | 19.8 | 88.1 |
| 2001 January | 104 | 98.159 | 68,707 | 20.7 | 94.1 |
| February | 104 | 98.159 | 61,272 | 21.7 | 92.9 |
| March | 104 | 98.159 | 62,141 | 20.7 | 85.1 |
| April | 104 | 98.159 | 56,003 | 20.1 | 79.2 |
| May | 104 | 98.159 | 61,512 | 20.5 | 84.3 |
| June | 104 | 98.159 | 68,023 | 20.8 | 96.3 |
| July | 104 | 98.159 | 69,166 | 19.3 | 94.7 |
| August | 104 | 98.159 | 68,389 | 18.5 | 93.6 |
| September | 104 | 98.159 | 63,378 | 20.6 | 89.7 |
| October | 104 | 98.159 | 60,461 | 20.5 | 82.8 |
| November | 104 | 98.159 | 62,342 | 22.3 | 88.2 |
| December | 104 | 98.159 | 67,431 | 22.1 | 92.3 |
| Year | 104 | 98.159 | 768,826 | 20.6 | 89.4 |
| 2002 January | 104 | 98.564 | 70,926 | 22.2 | 96.7 |
| February | 104 | 98.564 | 61,658 | 22.0 | 93.1 |
| March | 104 | 98.564 | 63,041 | 20.7 | 86.0 |
| April | 104 | 98.564 | 58,437 | 20.2 | 82.4 |
| May | 104 | 98.564 | 63,032 | 20.5 | 86.0 |
| June | 104 | 98.564 | 66,372 | 19.5 | 93.5 |
| July | 104 | 98.564 | 70,421 | 18.5 | 96.0 |
| August | 104 | 98.564 | 70,778 | 19.2 | 96.5 |
| September | 104 | 98.564 | 64,481 | 19.6 | 90.9 |
| October | 104 | 98.564 | 60,493 | 19.8 | 82.5 |
| November | 104 | 98.564 | 61,520 | 20.9 | 86.7 |
| December | 104 | 98.564 | 68,905 | 21.5 | 94.0 |
| Year | 104 | 98.564 | 780,064 | 20.3 | 90.4 |
| 2003 January | 104 | 98.564 | 69,211 | 20.5 | 94.4 |
| February | 104 | 98.564 | ^R 60,942 | ^R 20.5 | ^R 92.0 |
| March | 104 | 98.564 | ^{RF} 59,997 | ^{RF} 19.4 | ^{RE} 81.8 |
| April | 104 | 98.564 | ^F 56,829 | ^F 19.9 | ^E 80.1 |
| 4 Months | 104 | 98.564 | ^E 246,979 | ^E 20.1 | ^E 87.0 |
| 2002 4 Months | 104 | 98.564 | 254,062 | 21.3 | 89.5 |
| 2001 4 Months | 104 | 98.159 | 248,123 | 20.8 | 87.8 |

^a Total of nuclear generating units holding full-power licenses, or equivalent permission to operate, at the end of the period—see Note 1 at end of section. Although Browns Ferry 1 was shut down in 1985, the unit has remained fully licensed and thus has continued to be counted as operable during the shutdown; in May 2002, the Tennessee Valley Authority announced its intention to have the unit resume operation in 2007—see Note 1(a) at end of section. For additional information on nuclear generating units, see *Annual Energy Review 2001*, November 2002, Table 9.1.

^b At end of period.

^c For the definition of "Net Summer Capacity," see Note 2(a) at end of section.

^d For an explanation of the method of calculating the capacity factor, see Note 2 at end of section.

R=Revised. E=Estimate. F=Forecast.

Notes: • See Note 1 at end of section for discussion of reactor unit coverage. • Nuclear electricity net generation totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/nuclear.html>.

Sources: See end of section.

Nuclear Energy

Note 1. A reactor is generally defined as operable while it possessed a full-power license from the Nuclear Regulatory Commission or its predecessor the Atomic Energy Commission, or equivalent permission to operate, at the end of the year or month shown. The definition is liberal in that it does not exclude units retaining full-power licenses during long, non-routine shutdowns that for a time rendered them unable to generate electricity. Examples are:

(a) In 1985 the five then-active Tennessee Valley Authority (TVA) units (Browns Ferry 1, 2, and 3 and Sequoyah 1 and 2) were shut down under a regulatory forced outage. Browns Ferry 1 remains shut down and has been defueled, while the other units were idle for several years, restarting in 1991, 1995, 1988, and 1988, respectively. All five units are counted as operable during the shutdowns. Browns Ferry 1 is the only one of the five TVA plants that has not returned to service. Because it is still fully licensed to operate, it continues to meet the definition of operable.

(b) Shippingport was shut down from 1974 through 1976 for conversion to a light-water breeder reactor, but is counted as operable from 1957 until its retirement in 1982.

(c) Calvert Cliffs 2 was shut down in 1989 and 1990 for replacement of pressurizer heater sleeves but is counted as operable during those years.

Exceptions to the definition are Shoreham and Three Mile Island 2. Shoreham was granted a full-power license in April 1989, but was shut down two months later and never restarted. In 1991, the license was changed to Possession Only. Although not operable at the end of the year, Shoreham is counted as operable during 1989. A major accident closed Three Mile Island 2 in 1979, and although the unit retained its full-power license for several years, it is considered permanently shut down since that year.

Note 2. Capacity: Nuclear generating units may have more than one type of net capacity rating, including the following:

(a) Net Summer Capacity—The steady hourly output that generating equipment is expected to supply to system load,

exclusive of auxiliary power, as demonstrated by test at the time of summer peak demand. Auxiliary power of a typical nuclear power plant is about 5 percent of gross generation.

b) Net Design Capacity or Net Design Electrical Rating (DER)—The nominal net electrical output of a unit, specified by the utility and used for plant design.

The monthly capacity factors are computed as the actual monthly generation divided by the maximum possible generation for that month. The maximum possible generation is the number of hours in the month multiplied by the net summer capacity at the end of the month. That fraction is then multiplied by 100 to obtain a percentage. Annual capacity factors are averages of the monthly values for that year.

Table 8.1 Sources

Total Operable Units and Net Summer Capacity of Operable Units: 1973-1982: Compiled from various sources, primarily DOE, Office of Nuclear Reactor Programs, "U.S. Central Station Nuclear Electric Generating Units: Significant Milestones." 1983 forward: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report," and monthly updates as appropriate. For a list of currently operable units, see: http://eia.doe.gov/cneaf/nuclear/page/nuc_reactors/operational.html.

Nuclear Electricity Net Generation and Nuclear Share of Electricity Net Generation: See Table 7.2a for actual data. The forecast value is derived from EIA's Short-Term Integrated Forecasting System. See Note 10 at end of Section 4 for related information.

Capacity Factor: EIA, Office of Coal, Nuclear, Electric and Alternate Fuels for actual data. The forecast value is derived from EIA's Short-Term Integrated Forecasting System. See Note 10 at end of Section 4 for related information.

Section 9. Energy Prices

Crude Oil. The average price of domestic crude oil at the wellhead was \$25.46 per barrel in April 2003, 15 percent above the level of April 2002. The refiner acquisition cost of imported crude oil in April 2003 was \$24.37 per barrel, 2 percent above the April 2002 level. The average cost of domestic crude oil in April 2003 was \$28.54, 18 percent more than the April 2002 average.

Motor Gasoline. The national city average retail price of unleaded regular gasoline at all types of stations was \$1.54 per gallon in May 2003, 9 percent higher than the price in May 2002. The price of unleaded premium gasoline averaged \$1.73 in May 2003, 6 percent higher than the price in May 2002.

Residual Fuel Oil. The average price, excluding taxes, of residual fuel oil sold to end users in April 2003 was 64 cents per gallon, 21 percent lower than the previous month's price but 15 percent higher than the April 2002 average. The average resale price, excluding taxes, of residual fuel oil in April 2003 was 57 cents, 26 percent lower than the March 2003 price but 12 percent higher than the price 1 year earlier.

Aviation Fuel. The average price of aviation gasoline sold to end users in April 2003 was withheld to avoid disclosure of individual company data. The average price, excluding taxes, of kerosene-type jet fuel sold to end users in April 2003 was 82 cents per gallon, 21 percent lower than the previous month's average price but 18 percent higher than the April 2002 average price.

No. 2 Distillate Fuel Oil. The April 2003 national average price, excluding taxes, of heating oil sold to residential customers was \$1.35 per gallon, 13 percent lower than the March 2003 price but 21 percent higher than the April 2002 price. The average price of No. 2 fuel oil sold to all end users was 89 cents per gallon in April 2003, 19 percent lower than the March 2003 price but 24 percent higher than the price 1 year earlier.

Electricity. The average retail price of electricity sold to all ultimate consumers in the United States in February 2003 (latest month for which data are available) was 7.02 cents per kilowatthour, less than 1 percent higher than the average price in February 2002. The price of electricity sold to residential consumers in February 2003 averaged 8.00 cents per kilowatthour, 2 percent lower than the February 2002 price. The price of electricity sold to commercial consumers averaged 7.76 cents per kilowatthour in February 2003, 1 percent higher than the February 2002 price. The price of electricity sold to other consumers was 6.95 cents per kilowatthour, 2 percent higher than the February 2002 price. The price of electricity sold to industrial users in February 2003 averaged 4.82 cents per kilowatthour, 1 percent higher than the price 1 year earlier.

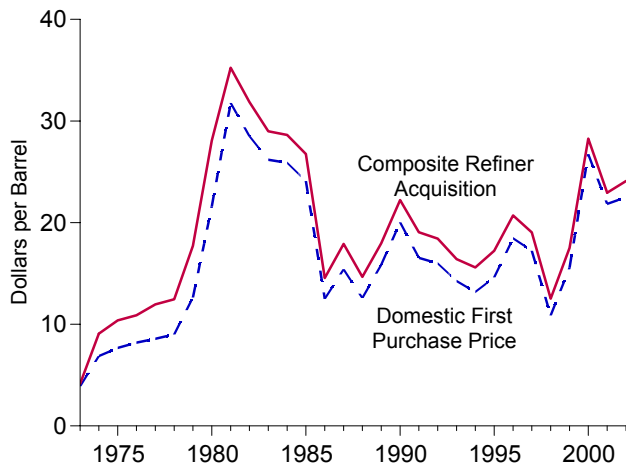
Beginning with January 1986, new series of national average price estimates were based on a statistically derived sample of both publicly and privately owned electric utilities. Previously, average price estimates were derived from selected privately owned electric utilities and were not national averages.

Natural Gas. The average wellhead price of natural gas for February 2003 (latest month for which data are available) was estimated as \$5.45 per thousand cubic feet, 155 percent higher than the February 2002 price.

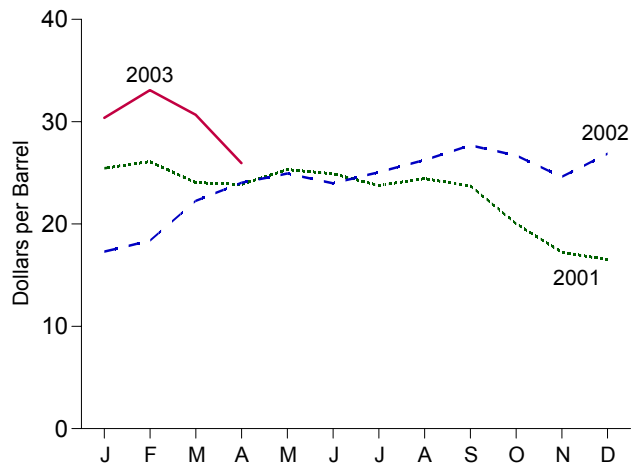
The average price of natural gas delivered to the electric power sector was \$5.31 per thousand cubic feet in January 2003 (latest month for which data are available), 70 percent higher than the January 2002 price. The average price of natural gas used by residential consumers in February 2003 was \$8.40 per thousand cubic feet, 16 percent higher than the February 2002 price. The average price of natural gas used by commercial consumers in February 2003 was \$7.83 per thousand cubic feet, 22 percent higher than the February 2002 price. The average price of natural gas used by industrial consumers in February 2003 was \$6.14 per thousand cubic feet, 65 percent above the February 2002 price.

Figure 9.1 Petroleum Prices

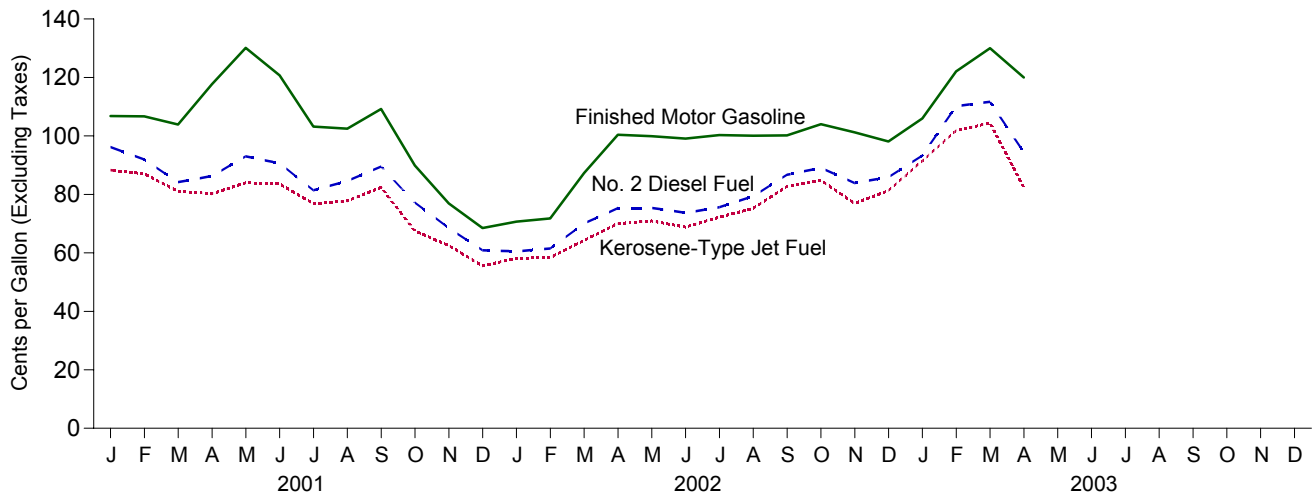
Crude Oil Prices, 1973-2002



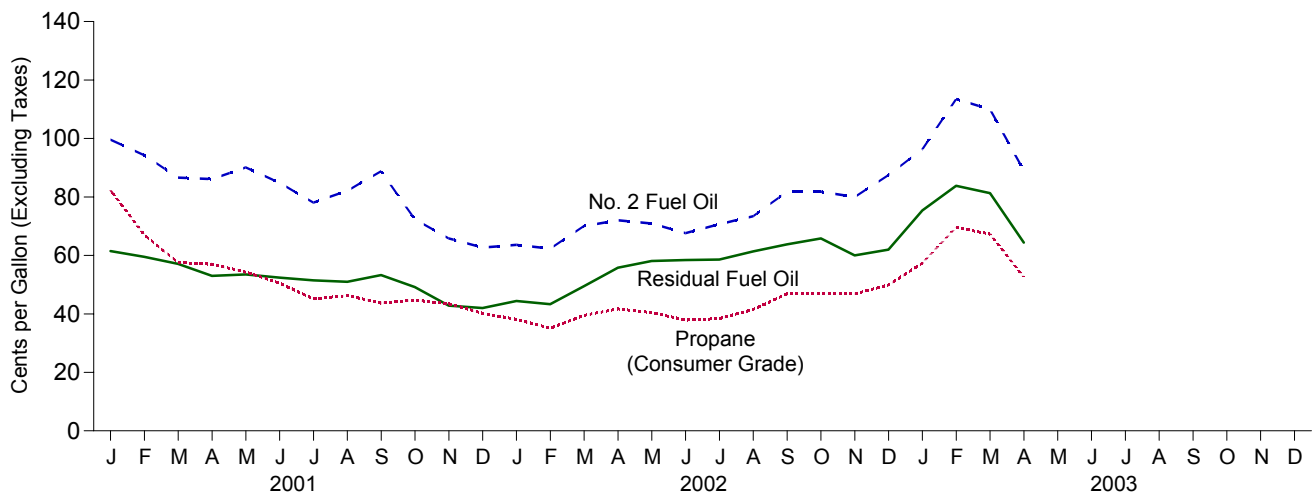
Composite Refiner Acquisition Cost, Monthly



Refiner Prices to End Users: Motor Gasoline, Diesel Fuel, and Jet Fuel, Monthly



Refiner Prices to End Users: No. 2 Fuel Oil, Propane, and Residual Fuel, Monthly



Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.
Sources: Tables 9.1, 9.5, and 9.7.

Table 9.1 Crude Oil Price Summary
(Dollars per Barrel)

| | Domestic First Purchase Price ^b | F.O.B. Cost of Imports ^c | Landed Cost of Imports ^d | Refiner Acquisition Cost ^a | | |
|---------------------------|--|-------------------------------------|-------------------------------------|---------------------------------------|--------------------|--------------------|
| | | | | Domestic | Imported | Composite |
| 1973 Average | 3.89 | ^e 5.21 | ^e 6.41 | ^E 4.17 | ^E 4.08 | ^E 4.15 |
| 1974 Average | 6.87 | 10.91 | 12.32 | 7.18 | 12.52 | 9.07 |
| 1975 Average | 7.67 | 11.18 | 12.70 | 8.39 | 13.93 | 10.38 |
| 1976 Average | 8.19 | 12.15 | 13.32 | 8.84 | 13.48 | 10.89 |
| 1977 Average | 8.57 | 13.24 | 14.36 | 9.55 | 14.53 | 11.96 |
| 1978 Average | 9.00 | 13.29 | 14.35 | 10.61 | 14.57 | 12.46 |
| 1979 Average | 12.64 | 20.07 | 21.45 | 14.27 | 21.67 | 17.72 |
| 1980 Average | 21.59 | 32.37 | 33.67 | 24.23 | 33.89 | 28.07 |
| 1981 Average | 31.77 | 35.15 | 36.47 | 34.33 | 37.05 | 35.24 |
| 1982 Average | 28.52 | 32.02 | 33.18 | 31.22 | 33.55 | 31.87 |
| 1983 Average | 26.19 | 27.81 | 28.93 | 28.87 | 29.30 | 28.99 |
| 1984 Average | 25.88 | 27.60 | 28.54 | 28.53 | 28.88 | 28.63 |
| 1985 Average | 24.09 | 25.84 | 26.67 | 26.66 | 26.99 | 26.75 |
| 1986 Average | 12.51 | 12.52 | 13.49 | 14.82 | 14.00 | 14.55 |
| 1987 Average | 15.40 | 16.69 | 17.65 | 17.76 | 18.13 | 17.90 |
| 1988 Average | 12.58 | 13.25 | 14.08 | 14.74 | 14.56 | 14.67 |
| 1989 Average | 15.86 | 16.89 | 17.68 | 17.87 | 18.08 | 17.97 |
| 1990 Average | 20.03 | 20.37 | 21.13 | 22.59 | 21.76 | 22.22 |
| 1991 Average | 16.54 | 16.89 | 18.02 | 19.33 | 18.70 | 19.06 |
| 1992 Average | 15.99 | 16.77 | 17.75 | 18.63 | 18.20 | 18.43 |
| 1993 Average | 14.25 | 14.71 | 15.72 | 16.67 | 16.14 | 16.41 |
| 1994 Average | 13.19 | 14.18 | 15.18 | 15.67 | 15.51 | 15.59 |
| 1995 Average | 14.62 | 15.69 | 16.78 | 17.33 | 17.14 | 17.23 |
| 1996 Average | 18.46 | 19.32 | 20.31 | 20.77 | 20.64 | 20.71 |
| 1997 Average | 17.23 | 16.94 | 18.11 | 19.61 | 18.53 | 19.04 |
| 1998 Average | 10.87 | 10.76 | 11.84 | 13.18 | 12.04 | 12.52 |
| 1999 Average | 15.56 | 16.47 | 17.23 | 17.90 | 17.26 | 17.51 |
| 2000 Average | 26.72 | 26.27 | 27.53 | 29.11 | 27.70 | 28.26 |
| 2001 January | 24.64 | 22.46 | 24.04 | 26.83 | 24.49 | 25.45 |
| February | 25.27 | 23.01 | 24.23 | 27.66 | 24.97 | 26.09 |
| March | 22.98 | 20.88 | 22.89 | 25.64 | 23.01 | 24.05 |
| April | 23.39 | 21.71 | 23.06 | 25.12 | 22.99 | 23.87 |
| May | 24.06 | 22.71 | 24.14 | 26.37 | 24.63 | 25.31 |
| June | 23.43 | 22.74 | 23.83 | 26.30 | 23.95 | 24.92 |
| July | 22.82 | 21.43 | 22.88 | 25.13 | 22.76 | 23.76 |
| August | 23.08 | 22.02 | 23.29 | 25.44 | 23.77 | 24.44 |
| September | 22.37 | 21.01 | 22.22 | 25.48 | 22.51 | 23.73 |
| October | 18.73 | 17.15 | 18.38 | 21.79 | 18.76 | 20.04 |
| November | 16.40 | 15.03 | 16.24 | 18.99 | 16.06 | 17.24 |
| December | 15.54 | 15.22 | 16.05 | 17.34 | 15.95 | 16.52 |
| Average | 21.84 | 20.46 | 21.82 | 24.33 | 22.00 | 22.95 |
| 2002 January | 15.89 | 16.05 | 17.25 | 17.85 | 16.93 | 17.31 |
| February | 16.92 | 17.68 | 19.16 | 18.70 | 18.13 | 18.37 |
| March | 20.04 | 21.64 | 22.22 | 21.57 | 22.78 | 22.26 |
| April | 22.14 | 23.06 | 24.16 | 24.27 | 23.87 | 24.03 |
| May | 23.51 | 23.16 | 24.49 | 25.78 | 24.29 | 24.94 |
| June | 22.59 | 22.63 | 23.95 | 24.81 | 23.33 | 23.98 |
| July | 23.51 | 23.71 | 25.00 | 25.37 | 24.82 | 25.06 |
| August | 24.76 | 24.57 | 26.02 | 26.87 | 25.77 | 26.24 |
| September | 26.08 | 25.78 | 26.61 | 28.43 | 27.14 | 27.68 |
| October | 25.29 | 24.34 | 25.59 | 27.82 | 25.99 | 26.70 |
| November | 23.38 | 22.42 | 24.23 | 26.02 | 23.68 | 24.60 |
| December | 25.29 | 25.86 | 27.06 | 27.25 | 26.57 | 26.87 |
| Average | 22.51 | 22.62 | 23.95 | 24.65 | 23.68 | 24.09 |
| 2003 January | 28.35 | 29.16 | 30.34 | 30.47 | 30.32 | 30.38 |
| February | 31.85 | ^R 29.78 | ^R 31.33 | 33.98 | 32.42 | 33.08 |
| March | ^R 30.09 | ^R 26.25 | ^R 29.04 | ^R 32.68 | ^R 29.31 | ^R 30.68 |
| April | 25.46 | 22.23 | 24.92 | 28.54 | 24.37 | 25.95 |

^a See Note 4 at end of section.

^b See Note 1 at end of section.

^c See Note 2 at end of section.

^d See Note 3 at end of section.

^e Based on October, November, and December data only.

^R=Revised. ^E=Estimate.

Notes: • Values for Domestic First Purchase Price and Refiner Acquisition Cost for the current month and for F.O.B. and Landed Costs of Imports for the

current 2 months are preliminary. • F.O.B. and landed costs through 1980

reflect the period of reporting; prices since then reflect the period of loading.

• Annual averages are the averages of the monthly prices, weighted by volume.

• Geographic coverage is the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and all U.S. Territories and Possessions.

Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.
Sources: See end of section.

Table 9.2 F.O.B. Costs of Crude Oil Imports From Selected Countries
(Dollars per Barrel)

| | Selected Countries | | | | | | Persian Gulf Nations ^a | Total OPEC ^b | Total Non-OPEC | |
|---------------------------------|--------------------|------------------|--------------------|--------------------|--------------------|--------------------|-----------------------------------|-------------------------|--------------------|--------------------|
| | Angola | Colombia | Mexico | Nigeria | Saudi Arabia | United Kingdom | | | | Venezuela |
| 1973 Average ^c | W | W | NA | 7.81 | 3.25 | NA | 5.39 | 3.68 | 5.43 | 4.80 |
| 1974 Average | 11.87 | W | W | 12.44 | 10.17 | NA | 10.71 | 10.60 | 11.33 | 9.59 |
| 1975 Average | 10.97 | (^d) | 11.44 | 11.82 | 10.87 | NA | 11.04 | 10.88 | 11.34 | 10.62 |
| 1976 Average | 12.02 | (^d) | 12.22 | 13.08 | 11.62 | W | 11.39 | 11.65 | 12.23 | 11.70 |
| 1977 Average | 13.29 | (^d) | 13.42 | 14.44 | 12.38 | 14.11 | 12.63 | 12.56 | 13.29 | 12.97 |
| 1978 Average | 13.32 | (^d) | 13.24 | 14.05 | 12.70 | 13.82 | 12.38 | 12.77 | 13.31 | 13.23 |
| 1979 Average | 19.85 | (^d) | 20.27 | 21.69 | 17.28 | 21.70 | 16.90 | 18.77 | 19.88 | 20.92 |
| 1980 Average | 33.45 | W | 31.06 | 35.93 | 28.17 | 34.36 | 24.81 | 28.92 | 32.21 | 32.85 |
| 1981 Average | 35.55 | (^d) | 33.01 | 38.31 | 32.60 | 36.06 | 28.95 | 33.00 | 35.17 | 35.12 |
| 1982 Average | 31.86 | (^d) | 28.08 | 35.13 | 33.73 | 33.42 | 23.74 | 33.55 | 33.48 | 30.58 |
| 1983 Average | 28.14 | (^d) | 25.20 | 29.81 | 27.53 | 29.91 | 21.48 | 27.70 | 28.46 | 27.20 |
| 1984 Average | 27.46 | (^d) | 26.39 | 29.51 | 27.67 | 28.87 | 24.23 | 27.48 | 27.79 | 27.45 |
| 1985 Average | 26.30 | (^d) | 25.33 | 28.04 | 22.04 | 27.64 | 23.64 | 23.31 | 25.67 | 25.96 |
| 1986 Average | 13.30 | 12.34 | 11.84 | 14.35 | 11.36 | 13.84 | 10.92 | 11.35 | 12.21 | 12.87 |
| 1987 Average | 17.27 | 17.84 | 16.36 | 18.47 | 15.12 | 18.28 | 15.08 | 15.97 | 16.43 | 16.99 |
| 1988 Average | 13.70 | 13.61 | 12.18 | 15.16 | 12.16 | 14.80 | 12.96 | 12.38 | 13.43 | 13.05 |
| 1989 Average | 17.66 | 17.89 | 15.96 | 18.31 | 16.29 | 17.89 | 16.09 | 16.61 | 17.06 | 16.72 |
| 1990 Average | 20.23 | 20.75 | 19.26 | 22.46 | 20.36 | 23.43 | 19.55 | 18.54 | 20.40 | 20.32 |
| 1991 Average | 18.47 | 18.49 | 15.37 | 20.29 | 14.62 | 20.81 | 14.91 | 15.22 | 16.99 | 16.77 |
| 1992 Average | 18.41 | 18.02 | 15.26 | 19.98 | 15.85 | 19.61 | 14.39 | 16.35 | 16.87 | 16.66 |
| 1993 Average | 16.23 | 15.87 | 13.74 | 17.79 | 13.77 | 16.64 | 12.46 | 14.21 | 14.78 | 14.65 |
| 1994 Average | 15.40 | 14.99 | 13.68 | 16.32 | 14.12 | 15.66 | 12.21 | 13.97 | 14.00 | 14.34 |
| 1995 Average | 16.58 | 16.73 | 15.64 | 17.40 | W | 16.94 | 13.86 | W | 15.36 | 16.02 |
| 1996 Average | 20.71 | 21.33 | 19.14 | 21.27 | 19.28 | 19.43 | 17.73 | 19.22 | 18.94 | 19.65 |
| 1997 Average | 18.81 | 18.85 | 16.72 | 19.43 | 15.16 | 18.59 | 15.33 | 15.24 | 16.26 | 17.51 |
| 1998 Average | 12.11 | 12.56 | 10.49 | 12.97 | 8.87 | 12.52 | 9.31 | 9.09 | 10.20 | 11.21 |
| 1999 Average | 17.46 | 17.20 | 15.89 | 17.32 | 17.65 | 19.14 | 14.33 | 17.15 | 15.90 | 16.84 |
| 2000 Average | 27.90 | 29.04 | 25.39 | 28.70 | 24.62 | 27.21 | 24.45 | 24.72 | 25.56 | 26.77 |
| 2001 January | 24.28 | 26.72 | 21.31 | 26.46 | 19.79 | 25.87 | 20.97 | 19.62 | 21.55 | 23.14 |
| February | 25.68 | 27.06 | 21.39 | 26.82 | 20.58 | W | 20.43 | 20.94 | 22.22 | 23.67 |
| March | 21.97 | 23.63 | 18.77 | 24.70 | 20.46 | W | 19.12 | 20.37 | 20.83 | 20.94 |
| April | 24.71 | 25.04 | 19.78 | W | 20.83 | W | 21.12 | 20.36 | 21.74 | 21.69 |
| May | 27.45 | 26.23 | 21.20 | 28.74 | 20.54 | 28.19 | 20.10 | 20.13 | 21.77 | 23.62 |
| June | 26.87 | 26.81 | 21.39 | 27.63 | 20.80 | W | 17.95 | 20.73 | 21.48 | 23.66 |
| July | 23.85 | 25.86 | 19.18 | 24.98 | W | 24.88 | 18.68 | 21.03 | 20.58 | 22.25 |
| August | 24.10 | 25.23 | 20.49 | 25.78 | 18.93 | W | 19.67 | 20.49 | 21.26 | 22.59 |
| September | 24.03 | 22.78 | 20.82 | 24.60 | 16.24 | 23.81 | 17.11 | 16.56 | 18.88 | 22.42 |
| October | 19.70 | 20.40 | 16.45 | 20.14 | 14.23 | 20.48 | 14.76 | 14.37 | 15.76 | 18.17 |
| November | 17.49 | 18.44 | 14.32 | 19.02 | 14.93 | W | 11.90 | 14.25 | 14.05 | 15.68 |
| December | 17.49 | 18.48 | 14.26 | 19.08 | 15.34 | W | 12.80 | 15.21 | 14.55 | 15.65 |
| Average | 23.25 | 24.25 | 18.89 | 24.85 | 18.98 | 23.30 | 18.01 | 18.89 | 19.73 | 21.04 |
| 2002 January | 19.12 | 18.93 | 14.25 | 19.63 | W | 19.24 | 13.55 | 17.56 | 15.89 | 16.18 |
| February | 18.76 | 19.37 | 15.91 | 20.70 | 21.20 | W | 14.84 | 19.88 | 17.65 | 17.70 |
| March | 22.65 | 23.88 | 20.21 | 24.39 | 23.41 | W | 19.30 | 23.12 | 21.49 | 21.74 |
| April | 24.36 | 25.57 | 22.42 | 25.66 | 23.17 | W | 20.02 | 23.40 | 22.49 | 23.40 |
| May | 24.35 | 26.11 | 22.83 | W | 23.19 | 24.52 | 19.90 | 22.78 | 22.26 | 23.72 |
| June | 22.93 | 24.30 | 22.02 | 24.39 | 23.55 | 23.24 | 20.50 | 23.56 | 22.26 | 22.83 |
| July | 24.63 | W | 22.50 | 26.01 | 25.11 | 25.39 | 21.71 | 24.98 | 23.44 | 23.92 |
| August | 25.93 | 26.10 | 23.70 | 27.28 | 25.10 | W | 22.67 | 25.33 | 24.12 | 24.89 |
| September | 27.97 | 29.11 | 25.25 | 28.56 | 24.67 | 28.41 | 23.98 | 24.71 | 25.09 | 26.27 |
| October | 26.57 | 27.03 | 23.74 | 27.32 | 23.38 | 28.20 | 21.65 | 22.99 | 22.89 | 25.33 |
| November | 23.58 | 24.14 | 20.75 | 24.83 | 25.12 | 25.10 | 20.18 | 24.58 | 22.33 | 22.49 |
| December | 28.75 | 27.75 | 24.25 | 29.98 | 26.75 | W | 23.41 | 26.64 | 26.53 | 25.51 |
| Average | 24.08 | 24.59 | 21.60 | 25.37 | 23.91 | 24.43 | 20.12 | 23.33 | 22.15 | 22.94 |
| 2003 January | 31.59 | 32.94 | 28.32 | 31.76 | 27.76 | 31.66 | W | 27.81 | 29.08 | 29.21 |
| February | 33.49 | 35.25 | 28.44 | 33.64 | ^R 26.67 | 32.97 | ^R 28.50 | ^R 27.17 | ^R 28.65 | 30.53 |
| March | ^R 29.34 | 31.28 | ^R 24.98 | ^R 30.82 | ^R 24.25 | ^R 28.78 | ^R 22.83 | ^R 24.57 | ^R 25.22 | ^R 26.99 |
| April | 24.88 | 24.85 | 21.56 | 24.96 | 19.43 | W | 20.93 | 19.60 | 20.57 | 23.29 |

^a Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

^b Current members are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela. Ecuador withdrew at the end of 1992 and Gabon withdrew at the end of 1994.

^c Based on October, November, and December data only.

^d No data reported.

R=Revised. NA=Not available. W=Value withheld to avoid disclosure of individual company data.

Notes: • The Free on Board (F.O.B.) cost at the country of origin excludes all costs related to insurance and transportation. See Note 2 at end of

section. • Values for the current 2 months are preliminary. • Prices through 1980 reflect the period of reporting; prices since then reflect the period of loading. • Annual averages are averages of the monthly prices, including prices not published, weighted by volume. • Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements whereby the actual purchase price is not established at the time the crude oil is acquired for importation into the United States, are not included in the published data until the actual prices have been determined and reported. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.

Sources: See end of section.

Table 9.3 Landed Costs of Crude Oil Imports From Selected Countries
(Dollars per Barrel)

| | Selected Countries | | | | | | | | Persian Gulf Nations ^a | Total OPEC ^b | Total Non-OPEC |
|---------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-----------------------------------|-------------------------|--------------------|
| | Angola | Canada | Colombia | Mexico | Nigeria | Saudi Arabia | United Kingdom | Venezuela | | | |
| 1973 Average ^c | W | 5.33 | W | NA | 9.08 | 5.37 | NA | 5.99 | 5.91 | 6.85 | 5.64 |
| 1974 Average | 12.48 | 11.48 | W | W | 13.16 | 11.63 | NA | 11.25 | 12.21 | 12.49 | 11.81 |
| 1975 Average | 11.81 | 12.84 | (^d) | 12.61 | 12.70 | 12.50 | NA | 12.36 | 12.64 | 12.70 | 12.70 |
| 1976 Average | 12.71 | 13.36 | (^d) | 12.64 | 13.81 | 13.06 | W | 11.89 | 13.03 | 13.32 | 13.35 |
| 1977 Average | 14.04 | 14.13 | (^d) | 13.82 | 15.29 | 13.69 | 14.83 | 13.11 | 13.85 | 14.35 | 14.42 |
| 1978 Average | 14.07 | 14.41 | (^d) | 13.56 | 14.88 | 13.94 | 14.53 | 12.84 | 14.01 | 14.34 | 14.38 |
| 1979 Average | 21.06 | 20.22 | (^d) | 20.77 | 22.97 | 18.95 | 22.97 | 17.65 | 20.42 | 21.29 | 22.10 |
| 1980 Average | 34.76 | 30.11 | W | 31.77 | 37.15 | 29.80 | 35.68 | 25.92 | 30.59 | 33.56 | 33.99 |
| 1981 Average | 36.84 | 32.32 | (^d) | 33.70 | 39.66 | 34.20 | 37.29 | 29.91 | 34.61 | 36.60 | 36.14 |
| 1982 Average | 33.08 | 27.15 | (^d) | 28.63 | 36.16 | 34.99 | 34.25 | 24.93 | 34.94 | 34.81 | 31.47 |
| 1983 Average | 29.31 | 25.63 | (^d) | 25.78 | 30.85 | 29.27 | 30.87 | 22.94 | 29.37 | 29.84 | 28.08 |
| 1984 Average | 28.49 | 26.56 | (^d) | 26.85 | 30.36 | 29.20 | 29.45 | 25.19 | 29.07 | 29.06 | 28.14 |
| 1985 Average | 27.39 | 25.71 | (^d) | 25.63 | 28.96 | 24.72 | 28.36 | 24.43 | 25.50 | 26.86 | 26.53 |
| 1986 Average | 14.09 | 13.43 | 12.85 | 12.17 | 15.29 | 12.84 | 14.63 | 11.52 | 12.92 | 13.46 | 13.52 |
| 1987 Average | 18.20 | 17.04 | 18.43 | 16.69 | 19.32 | 16.81 | 18.78 | 15.76 | 17.47 | 17.64 | 17.66 |
| 1988 Average | 14.48 | 13.50 | 14.47 | 12.58 | 15.88 | 13.37 | 15.82 | 13.66 | 13.51 | 14.18 | 13.96 |
| 1989 Average | 18.36 | 16.81 | 18.10 | 16.35 | 19.19 | 17.34 | 18.74 | 16.78 | 17.37 | 17.78 | 17.54 |
| 1990 Average | 21.51 | 20.48 | 22.34 | 19.64 | 23.33 | 21.82 | 22.65 | 20.31 | 20.55 | 21.23 | 20.98 |
| 1991 Average | 19.90 | 17.16 | 19.55 | 15.89 | 21.39 | 17.22 | 21.37 | 15.92 | 17.34 | 18.08 | 17.93 |
| 1992 Average | 19.36 | 17.04 | 18.46 | 15.60 | 20.78 | 17.48 | 20.63 | 15.13 | 17.58 | 17.81 | 17.67 |
| 1993 Average | 17.40 | 15.27 | 16.54 | 14.11 | 18.73 | 15.40 | 17.92 | 13.39 | 15.26 | 15.68 | 15.78 |
| 1994 Average | 16.36 | 14.83 | 15.80 | 14.09 | 17.21 | 15.11 | 16.64 | 13.12 | 15.00 | 15.08 | 15.29 |
| 1995 Average | 17.66 | 16.65 | 17.45 | 16.19 | 18.25 | 16.84 | 17.91 | 14.81 | 16.78 | 16.61 | 16.95 |
| 1996 Average | 21.86 | 19.94 | 22.02 | 19.64 | 21.95 | 20.49 | 20.88 | 18.59 | 20.45 | 20.14 | 20.47 |
| 1997 Average | 20.24 | 17.63 | 19.71 | 17.30 | 20.64 | 17.52 | 20.64 | 16.35 | 17.44 | 17.73 | 18.45 |
| 1998 Average | 13.37 | 11.62 | 13.26 | 11.04 | 14.14 | 11.16 | 13.55 | 10.16 | 11.18 | 11.46 | 12.22 |
| 1999 Average | 18.37 | 17.54 | 18.09 | 16.12 | 17.63 | 17.48 | 18.26 | 15.58 | 17.37 | 16.94 | 17.51 |
| 2000 Average | 29.57 | 26.69 | 29.68 | 26.03 | 30.04 | 26.58 | 29.26 | 26.05 | 26.77 | 27.29 | 27.80 |
| 2001 January | 26.56 | 21.98 | 28.27 | 21.51 | 28.37 | 23.58 | 28.29 | 22.89 | 23.51 | 24.08 | 24.01 |
| February | 27.48 | 22.48 | 28.71 | 21.61 | 28.75 | 23.00 | 29.12 | 22.15 | 22.96 | 23.90 | 24.61 |
| March | 24.87 | 21.57 | 26.21 | 19.52 | 27.40 | 22.62 | 26.29 | 21.13 | 22.49 | 23.21 | 22.46 |
| April | 26.63 | 21.35 | 26.71 | 19.57 | 27.01 | 22.58 | 25.95 | 22.54 | 22.23 | 23.26 | 22.79 |
| May | 28.58 | 22.63 | 27.83 | 21.22 | 29.33 | 22.63 | 28.27 | 21.91 | 22.47 | 23.67 | 24.73 |
| June | 28.40 | 22.53 | 28.86 | 21.34 | 29.31 | 22.65 | 26.91 | 20.41 | 22.25 | 23.26 | 24.40 |
| July | 25.59 | 22.60 | 27.45 | 19.79 | 26.68 | 22.54 | 26.02 | 20.27 | 22.28 | 22.43 | 23.51 |
| August | 25.54 | 23.95 | 26.31 | 21.14 | 27.01 | 21.78 | 25.91 | 21.21 | 22.06 | 22.70 | 23.93 |
| September | 25.66 | 22.55 | 24.86 | 21.40 | 26.45 | 19.21 | 24.83 | 19.40 | 19.91 | 21.06 | 23.55 |
| October | 21.21 | 18.48 | 21.77 | 17.19 | 22.34 | 16.31 | 21.27 | 16.26 | 16.99 | 17.58 | 19.28 |
| November | 18.91 | 14.84 | 20.22 | 14.82 | 20.41 | 16.44 | W | 13.62 | 16.17 | 16.12 | 16.37 |
| December | 18.49 | 14.65 | 18.92 | 14.64 | 19.98 | 16.32 | W | 14.40 | 15.87 | 16.02 | 16.09 |
| Average | 25.13 | 20.72 | 25.88 | 19.37 | 26.55 | 20.98 | 25.32 | 19.81 | 20.73 | 21.52 | 22.17 |
| 2002 January | 20.03 | 15.66 | 19.86 | 14.87 | 20.41 | 18.92 | 20.49 | 15.10 | 17.92 | 17.51 | 16.96 |
| February | 19.70 | 18.00 | 20.32 | 16.29 | 21.57 | 22.00 | 20.83 | 16.47 | 20.69 | 19.68 | 18.55 |
| March | 22.99 | 20.05 | 24.54 | 20.39 | 24.33 | 23.93 | 23.72 | 20.80 | 23.29 | 22.76 | 21.72 |
| April | 25.24 | 23.37 | 26.22 | 22.90 | 26.47 | 24.22 | 25.35 | 22.02 | 24.09 | 24.05 | 24.26 |
| May | 25.56 | 23.97 | 25.85 | 23.45 | 26.56 | 24.48 | 25.93 | 21.92 | 24.30 | 24.09 | 24.78 |
| June | 24.48 | 23.15 | 24.99 | 22.58 | 25.55 | 24.61 | 25.12 | 22.30 | 24.47 | 23.97 | 23.93 |
| July | 25.66 | 24.38 | 25.99 | 23.09 | 26.89 | 25.96 | 26.36 | 23.34 | 25.73 | 25.04 | 24.96 |
| August | 26.99 | 25.63 | 27.00 | 24.21 | 27.75 | 26.61 | 27.00 | 24.43 | 26.53 | 26.10 | 25.92 |
| September | 28.93 | 26.00 | 29.77 | 25.72 | 29.44 | 25.67 | 28.20 | 25.45 | 25.74 | 26.16 | 27.14 |
| October | 27.75 | 25.16 | 28.07 | 24.20 | 28.59 | 24.98 | 28.90 | 23.06 | 24.89 | 24.72 | 26.32 |
| November | 25.06 | 23.24 | 25.28 | 21.37 | 26.51 | 26.35 | 26.96 | 22.02 | 25.84 | 24.52 | 23.94 |
| December | 30.20 | 24.53 | 28.42 | 24.63 | 30.58 | 28.20 | 29.38 | 25.09 | 27.91 | 28.07 | 26.29 |
| Average | 25.38 | 22.98 | 25.24 | 22.10 | 26.46 | 24.92 | 26.32 | 21.92 | 24.29 | 23.93 | 23.97 |
| 2003 January | 33.28 | 27.91 | 34.11 | 28.71 | 33.40 | 30.56 | 32.89 | 29.38 | 30.22 | 30.79 | 29.99 |
| February | 35.83 | 30.10 | 36.79 | 29.28 | 35.65 | ^R 29.25 | 34.74 | ^R 30.80 | ^R 29.85 | ^R 30.73 | 31.93 |
| March | ^R 32.00 | ^R 29.93 | ^R 32.73 | ^R 26.20 | ^R 34.57 | ^R 26.74 | ^R 31.32 | ^R 26.51 | ^R 27.44 | ^R 28.55 | ^R 29.52 |
| April | 28.34 | 26.05 | 26.15 | 22.26 | 31.63 | 23.16 | 28.41 | 23.18 | 23.30 | 24.26 | 25.55 |

^a Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

^b Current members are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela. Ecuador withdrew at the end of 1992 and Gabon withdrew at the end of 1994.

^c Based on October, November, and December data only.

^d No data reported.

^R=Revised. NA=Not available. W=Value withheld to avoid disclosure of individual company data.

Notes: • See Note 3 at end of section. • Values for the current 2 months are preliminary. • Prices through 1980 reflect the period of reporting; prices since then reflect the period of loading. • Annual averages are averages of

the monthly prices, including prices not published, weighted by volume. • Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements whereby the actual purchase price is not established at the time the crude oil is acquired for importation into the United States, are not included in the published data until the actual prices have been determined and reported. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.

Sources: • **October 1973-September 1977:** Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report." • **October 1977-December 1977:** Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report." • **1978 forward:** EIA, *Petroleum Marketing Monthly*, July 2003, Table 25.

Table 9.4 Motor Gasoline Retail Prices, U.S. City Average
(Cents per Gallon, Including Taxes)

| | Leaded Regular | Unleaded Regular | Unleaded Premium | All Types ^a |
|---------------------------------|----------------|------------------|--------------------|------------------------|
| 1973 Average | 38.8 | NA | NA | NA |
| 1974 Average | 53.2 | NA | NA | NA |
| 1975 Average | 56.7 | NA | NA | NA |
| 1976 Average | 59.0 | 61.4 | NA | NA |
| 1977 Average | 62.2 | 65.6 | NA | NA |
| 1978 Average | 62.6 | 67.0 | NA | 65.2 |
| 1979 Average | 85.7 | 90.3 | NA | 88.2 |
| 1980 Average | 119.1 | 124.5 | NA | 122.1 |
| 1981 Average ^b | 131.1 | 137.8 | ^c 147.0 | 135.3 |
| 1982 Average | 122.2 | 129.6 | 141.5 | 128.1 |
| 1983 Average | 115.7 | 124.1 | 138.3 | 122.5 |
| 1984 Average | 112.9 | 121.2 | 136.6 | 119.8 |
| 1985 Average | 111.5 | 120.2 | 134.0 | 119.6 |
| 1986 Average | 85.7 | 92.7 | 108.5 | 93.1 |
| 1987 Average | 89.7 | 94.8 | 109.3 | 95.7 |
| 1988 Average | 89.9 | 94.6 | 110.7 | 96.3 |
| 1989 Average | 99.8 | 102.1 | 119.7 | 106.0 |
| 1990 Average | 114.9 | 116.4 | 134.9 | 121.7 |
| 1991 Average | NA | 114.0 | 132.1 | 119.6 |
| 1992 Average | NA | 112.7 | 131.6 | 119.0 |
| 1993 Average | NA | 110.8 | 130.2 | 117.3 |
| 1994 Average | NA | 111.2 | 130.5 | 117.4 |
| 1995 Average | NA | 114.7 | 133.6 | 120.5 |
| 1996 Average | NA | 123.1 | 141.3 | 128.8 |
| 1997 Average | NA | 123.4 | 141.6 | 129.1 |
| 1998 Average | NA | 105.9 | 125.0 | 111.5 |
| 1999 Average | NA | 116.5 | 135.7 | 122.1 |
| 2000 Average | NA | 151.0 | 169.3 | 156.3 |
| 2001 January | NA | 147.2 | 165.7 | 152.5 |
| February | NA | 148.4 | 167.1 | 153.8 |
| March | NA | 144.7 | 163.8 | 150.3 |
| April | NA | 156.4 | 174.8 | 161.7 |
| May | NA | 172.9 | 193.4 | 181.2 |
| June | NA | 164.0 | 188.1 | 173.1 |
| July | NA | 148.2 | 169.5 | 156.5 |
| August | NA | 142.7 | 163.6 | 150.9 |
| September | NA | 153.1 | 172.6 | 160.9 |
| October | NA | 136.2 | 156.0 | 144.2 |
| November | NA | 126.3 | 142.7 | 132.4 |
| December | NA | 113.1 | 131.2 | 120.0 |
| Average | NA | 146.1 | 165.7 | 153.1 |
| 2002 January | NA | 113.9 | 132.3 | 120.9 |
| February | NA | 113.0 | 133.0 | 121.0 |
| March | NA | 124.1 | 145.0 | 132.4 |
| April | NA | 140.7 | 162.2 | 149.3 |
| May | NA | 142.1 | 162.5 | 150.8 |
| June | NA | 140.4 | 160.6 | 148.9 |
| July | NA | 141.2 | 160.7 | 149.6 |
| August | NA | 142.3 | 162.0 | 150.8 |
| September | NA | 142.2 | 161.9 | 150.7 |
| October | NA | 144.9 | 164.3 | 153.5 |
| November | NA | 144.8 | 164.3 | 153.4 |
| December | NA | 139.4 | 158.9 | 147.7 |
| Average | NA | 135.8 | 157.8 | 144.1 |
| 2003 January | NA | 147.3 | 166.6 | 155.7 |
| February | NA | 164.1 | 182.8 | 168.6 |
| March | NA | 174.8 | 192.4 | 179.1 |
| April | NA | 165.9 | 184.6 | 170.4 |
| May | NA | 154.2 | 172.9 | 158.7 |

^a Also includes types of motor gasoline not shown separately.

^b In September 1981, the Bureau of Labor Statistics changed the weights used in the calculation of average motor gasoline prices. From September 1981 forward, gasohol is included in the average for all types, and unleaded premium is weighted more heavily.

^c Based on September through December data only.

NA=Not available.

Notes: • See Note 5 at end of section. • Geographic coverage for

1973-1977 is 56 urban areas. Geographic coverage for 1978 forward is 85 urban areas.

Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.

Sources: • **Monthly Data:** U.S. Department of Labor, Bureau of Labor Statistics, *Consumer Prices: Energy*. • **Annual Data: 1973—Platt's Oil Price Handbook and Oilmanac**, 1974, 51st Edition. **1974 forward**—calculated by the Energy Information Administration as the simple averages of monthly data.

Table 9.5 Refiner Prices of Residual Fuel Oil
(Cents per Gallon, Excluding Taxes)

| | Residual Fuel Oil Sulfur Content Less Than or Equal to 1 Percent | | Residual Fuel Oil Sulfur Content Greater Than 1 Percent | | Average | |
|---------------------------|--|-----------------------|---|-----------------------|---------------------|-----------------------|
| | Sales for Resale | Sales to End Users | Sales for Resale | Sales to End Users | Sales for Resale | Sales to End Users |
| 1978 Average | 29.3 | 31.4 | 24.5 | 27.5 | 26.3 | 29.8 |
| 1979 Average | 45.0 | 46.8 | 36.6 | 38.9 | 39.9 | 43.6 |
| 1980 Average | 60.8 | 67.5 | 47.9 | 52.3 | 52.8 | 60.7 |
| 1981 Average | 74.8 | 82.9 | 62.2 | 67.3 | 66.3 | 75.6 |
| 1982 Average | 69.5 | 74.7 | 57.2 | 61.1 | 61.2 | 67.6 |
| 1983 Average | 64.3 | 69.5 | 59.1 | 61.1 | 60.9 | 65.1 |
| 1984 Average | 68.5 | 72.0 | 63.9 | 65.9 | 65.4 | 68.7 |
| 1985 Average | 61.0 | 64.4 | 56.0 | 58.2 | 57.7 | 61.0 |
| 1986 Average | 32.8 | 37.2 | 28.9 | 31.7 | 30.5 | 34.3 |
| 1987 Average | 41.2 | 44.7 | 36.2 | 39.6 | 38.5 | 42.3 |
| 1988 Average | 33.3 | 37.2 | 27.1 | 30.0 | 30.0 | 33.4 |
| 1989 Average | 40.7 | 43.6 | 33.1 | 34.4 | 36.0 | 38.5 |
| 1990 Average | 47.2 | 50.5 | 37.2 | 40.0 | 41.3 | 44.4 |
| 1991 Average | 36.4 | 40.2 | 29.2 | 30.6 | 31.4 | 34.0 |
| 1992 Average | 35.1 | 38.9 | 28.6 | 31.2 | 30.8 | 33.6 |
| 1993 Average | 33.7 | 39.7 | 25.6 | 30.3 | 29.3 | 33.7 |
| 1994 Average | 34.5 | 40.1 | 28.7 | 33.0 | 31.7 | 35.2 |
| 1995 Average | 38.3 | 43.6 | 33.8 | 37.7 | 36.3 | 39.2 |
| 1996 Average | 45.6 | 52.6 | 38.9 | 43.3 | 42.0 | 45.5 |
| 1997 Average | 41.5 | 48.8 | 36.6 | 40.3 | 38.7 | 42.3 |
| 1998 Average | 29.9 | 35.4 | 26.9 | 28.7 | 28.0 | 30.5 |
| 1999 Average | 38.2 | 40.5 | 32.9 | 36.2 | 35.4 | 37.4 |
| 2000 Average | 62.7 | 70.8 | 51.2 | 56.6 | 56.6 | 60.2 |
| 2001 January | 64.6 | 74.0 | 48.5 | 55.9 | 56.4 | 61.5 |
| February | 62.5 | 69.7 | 49.5 | 55.1 | 55.9 | 59.5 |
| March | 57.6 | 66.6 | 47.8 | 52.9 | 51.8 | 57.1 |
| April | 57.5 | 64.0 | 41.8 | 48.9 | 48.3 | 53.0 |
| May | 58.4 | 63.9 | 44.2 | 50.2 | 50.3 | 53.5 |
| June | 53.0 | 64.1 | 42.4 | 49.0 | 47.9 | 52.4 |
| July | 50.0 | 63.2 | 42.2 | 47.2 | 46.3 | 51.5 |
| August | 50.4 | 59.7 | 41.3 | 48.0 | 45.7 | 51.0 |
| September | 51.2 | 62.2 | 44.9 | 51.2 | 48.9 | 53.3 |
| October | 44.8 | 59.2 | 40.0 | 46.6 | 42.4 | 49.2 |
| November | 40.5 | 52.3 | 31.9 | 40.2 | 36.9 | 42.8 |
| December | 40.0 | 51.2 | 30.7 | 39.6 | 36.3 | 42.0 |
| Average | 52.3 | 64.2 | 42.8 | 49.2 | 47.6 | 53.1 |
| 2002 January | 40.8 | 50.8 | 33.7 | 41.8 | 38.5 | 44.4 |
| February | 38.0 | 51.2 | 33.7 | 41.0 | 36.6 | 43.3 |
| March | 45.7 | 53.2 | 39.6 | 48.1 | 43.8 | 49.5 |
| April | 53.2 | 59.1 | 47.8 | 55.0 | 51.1 | 55.8 |
| May | 56.3 | 64.0 | 52.1 | 56.6 | 54.5 | 58.1 |
| June | 53.7 | 63.5 | 52.7 | 57.1 | 53.3 | 58.4 |
| July | 55.8 | 63.9 | 50.7 | 56.8 | 53.8 | 58.6 |
| August | 60.6 | 67.4 | 55.3 | 59.2 | 58.2 | 61.4 |
| September | 60.1 | 67.8 | 56.3 | 62.6 | 58.5 | 63.8 |
| October | 64.5 | 72.7 | 55.0 | 63.6 | 60.7 | 65.8 |
| November | 58.9 | 73.6 | 59.3 | 54.6 | 59.0 | 60.0 |
| December | 67.6 | 73.9 | 59.5 | 56.6 | 64.0 | 62.0 |
| Average | 54.4 | 63.9 | 50.7 | 54.4 | 52.9 | 56.8 |
| 2003 January | 79.5 | 86.1 | NA | 70.9 | 72.2 | 75.4 |
| February | 93.9 | 95.6 | 74.8 | 77.0 | 85.8 | 83.8 |
| March | ^R 88.1 | ^R 97.4 | ^R 62.5 | 72.3 | ^R 77.2 | ^R 81.3 |
| April | 60.1 | 78.1 | 53.4 | 59.3 | 57.0 | 64.4 |

R=Revised. NA=Not available.

Notes: • Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and commercial consumers. • Values for the current month

are preliminary. • Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at end of section. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.

Source: EIA, *Petroleum Marketing Monthly*, July 2003, Table 19.

Table 9.6 Refiner Prices of Petroleum Products for Resale
(Cents per Gallon, Excluding Taxes)

| | Finished Motor Gasoline ^a | Finished Aviation Gasoline | Kerosene-Type Jet Fuel | Kerosene | No. 2 Fuel Oil | No. 2 Diesel Fuel | Propane (Consumer Grade) |
|---------------------------|--------------------------------------|----------------------------|------------------------|--------------------|----------------|--------------------|--------------------------|
| 1978 Average | 43.4 | 53.7 | 38.6 | 40.4 | 36.9 | 36.5 | 23.7 |
| 1979 Average | 63.7 | 72.1 | 66.0 | 62.4 | 56.9 | 57.4 | 29.1 |
| 1980 Average | 94.1 | 112.8 | 86.8 | 86.4 | 80.3 | 80.1 | 41.5 |
| 1981 Average | 106.4 | 125.0 | 101.2 | 106.6 | 97.6 | 97.2 | 46.6 |
| 1982 Average | 97.3 | 122.8 | 95.3 | 101.8 | 91.4 | 91.4 | 42.7 |
| 1983 Average | 88.2 | 117.8 | 85.4 | 89.2 | 81.5 | 80.8 | 48.4 |
| 1984 Average | 83.2 | 116.5 | 83.0 | 91.6 | 82.1 | 80.3 | 45.0 |
| 1985 Average | 83.5 | 113.0 | 79.4 | 87.4 | 77.6 | 77.2 | 39.8 |
| 1986 Average | 53.1 | 91.2 | 49.5 | 60.6 | 48.6 | 45.2 | 29.0 |
| 1987 Average | 58.9 | 85.9 | 53.8 | 59.2 | 52.7 | 53.4 | 25.2 |
| 1988 Average | 57.7 | 85.0 | 49.5 | 54.9 | 47.3 | 47.3 | 24.0 |
| 1989 Average | 65.4 | 95.0 | 58.3 | 66.9 | 56.5 | 56.7 | 24.7 |
| 1990 Average | 78.6 | 106.3 | 77.3 | 83.9 | 69.7 | 69.4 | 38.6 |
| 1991 Average | 69.9 | 100.1 | 65.0 | 72.2 | 62.2 | 61.5 | 34.9 |
| 1992 Average | 67.7 | 99.1 | 60.5 | 63.2 | 57.9 | 59.1 | 32.8 |
| 1993 Average | 62.6 | 96.5 | 57.7 | 60.4 | 54.4 | 57.0 | 35.1 |
| 1994 Average | 59.9 | 93.3 | 53.4 | 61.8 | 50.6 | 52.9 | 32.4 |
| 1995 Average | 62.6 | 97.5 | 53.9 | 58.0 | 51.1 | 53.8 | 34.4 |
| 1996 Average | 71.3 | 105.5 | 64.6 | 71.4 | 63.9 | 65.9 | 46.1 |
| 1997 Average | 70.0 | 106.5 | 61.3 | 65.3 | 59.0 | 60.6 | 41.6 |
| 1998 Average | 52.6 | 91.2 | 45.0 | 46.5 | 42.2 | 44.4 | 28.8 |
| 1999 Average | 64.5 | 100.7 | 53.3 | 55.0 | 49.3 | 54.6 | 34.2 |
| 2000 Average | 96.3 | 133.0 | 88.0 | 96.9 | 88.6 | 89.8 | 59.5 |
| 2001 January | 94.1 | 131.0 | 88.3 | 106.4 | 90.0 | 90.6 | 86.4 |
| February | 93.8 | 132.0 | 87.1 | 93.4 | 82.4 | 85.9 | 66.9 |
| March | 91.0 | 129.3 | 80.5 | 83.6 | 76.2 | 78.1 | 60.1 |
| April | 106.3 | 140.5 | 79.6 | 83.0 | 79.1 | 82.6 | 58.5 |
| May | 115.3 | 147.0 | 83.5 | 86.6 | 82.3 | 89.9 | 56.2 |
| June | 98.5 | 135.0 | 82.7 | 82.6 | 79.0 | 85.4 | 48.7 |
| July | 84.0 | 120.9 | 75.7 | 74.7 | 72.7 | 75.6 | 43.5 |
| August | 90.6 | 125.9 | 77.4 | 81.3 | 76.6 | 80.9 | 45.3 |
| September | 94.1 | 132.0 | 80.2 | 80.1 | 78.7 | 84.2 | 46.4 |
| October | 74.0 | 109.7 | 67.8 | 73.1 | 68.2 | 71.3 | 46.0 |
| November | 63.4 | 100.5 | 61.9 | 63.5 | 60.6 | 61.5 | 41.6 |
| December | 58.3 | 94.9 | 55.3 | 58.6 | 56.6 | 54.7 | 38.1 |
| Average | 88.6 | 125.6 | 76.3 | 82.1 | 75.6 | 78.4 | 54.0 |
| 2002 January | 61.1 | 96.5 | 57.3 | 62.1 | 57.5 | 54.6 | 37.6 |
| February | 62.7 | 98.5 | 57.4 | 60.9 | 57.7 | 56.8 | 36.6 |
| March | 78.1 | 103.2 | 64.2 | 69.2 | 64.6 | 66.7 | 39.9 |
| April | 86.8 | 116.5 | 69.5 | 69.9 | 68.3 | 70.9 | 41.7 |
| May | 85.9 | 114.4 | 69.6 | 71.1 | 68.4 | 70.6 | 40.8 |
| June | 85.6 | 116.7 | 67.9 | 69.4 | 65.8 | 68.2 | 37.9 |
| July | 87.8 | 118.9 | 71.5 | 73.2 | 68.7 | 71.0 | 37.5 |
| August | 87.4 | 115.5 | 74.0 | 76.4 | 71.3 | 75.7 | 41.5 |
| September | 88.9 | 119.2 | 81.6 | 87.4 | 78.3 | 83.6 | 47.0 |
| October | 93.4 | 123.8 | 83.8 | 88.8 | 79.6 | 86.1 | 48.9 |
| November | 84.9 | 118.4 | 74.9 | 82.3 | 74.8 | 78.7 | 49.4 |
| December | 85.9 | 113.2 | 79.9 | 87.9 | 80.8 | 82.0 | 53.2 |
| Average | 82.8 | 113.7 | 71.3 | 75.7 | 69.3 | 72.4 | 43.1 |
| 2003 January | 94.6 | 124.9 | 89.5 | 97.8 | 89.5 | 89.2 | 60.5 |
| February | 110.0 | 130.2 | 102.8 | 118.6 | 107.8 | 108.1 | 72.8 |
| March | ^R 112.6 | ^R 135.8 | ^R 101.7 | ^R 110.3 | 104.5 | ^R 102.1 | ^R 69.1 |
| April | 99.8 | 129.4 | 82.8 | 87.1 | 82.7 | 86.9 | 53.9 |

^a See Note 5 at end of section.

R=Revised.

Notes: • Sales for resale are those made to purchasers other than ultimate consumers. Sales to end users are shown in Table 9.7; they are sales made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial

consumers. • Values for the current month are preliminary. • Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at end of section. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.

Source: EIA, *Petroleum Marketing Monthly*, July 2003, Table 4.

Table 9.7 Refiner Prices of Petroleum Products to End Users
(Cents per Gallon, Excluding Taxes)

| | Finished Motor Gasoline ^a | Finished Aviation Gasoline | Kerosene-Type Jet Fuel | Kerosene | No. 2 Fuel Oil | No. 2 Diesel Fuel | Propane (Consumer Grade) |
|---------------------------|--------------------------------------|----------------------------|------------------------|--------------|--------------------|--------------------|--------------------------|
| 1978 Average | 48.4 | 51.6 | 38.7 | 42.1 | 40.0 | 37.7 | 33.5 |
| 1979 Average | 71.3 | 68.9 | 54.7 | 58.5 | 51.6 | 58.5 | 35.7 |
| 1980 Average | 103.5 | 108.4 | 86.8 | 90.2 | 78.8 | 81.8 | 48.2 |
| 1981 Average | 114.7 | 130.3 | 102.4 | 112.3 | 91.4 | 99.5 | 56.5 |
| 1982 Average | 106.0 | 131.2 | 96.3 | 108.9 | 90.5 | 94.2 | 59.2 |
| 1983 Average | 95.4 | 125.5 | 87.8 | 96.1 | 91.6 | 82.6 | 70.9 |
| 1984 Average | 90.7 | 123.4 | 84.2 | 103.6 | 91.6 | 82.3 | 73.7 |
| 1985 Average | 91.2 | 120.1 | 79.6 | 103.0 | 84.9 | 78.9 | 71.7 |
| 1986 Average | 62.4 | 101.1 | 52.9 | 79.0 | 56.0 | 47.8 | 74.5 |
| 1987 Average | 66.9 | 90.7 | 54.3 | 77.0 | 58.1 | 55.1 | 70.1 |
| 1988 Average | 67.3 | 89.1 | 51.3 | 73.8 | 54.4 | 50.0 | 71.4 |
| 1989 Average | 75.6 | 99.5 | 59.2 | 70.9 | 58.7 | 58.5 | 61.5 |
| 1990 Average | 88.3 | 112.0 | 76.6 | 92.3 | 73.4 | 72.5 | 74.5 |
| 1991 Average | 79.7 | 104.7 | 65.2 | 83.8 | 66.5 | 64.8 | 73.0 |
| 1992 Average | 78.7 | 102.7 | 61.0 | 78.8 | 62.7 | 61.9 | 64.3 |
| 1993 Average | 75.9 | 99.0 | 58.0 | 75.4 | 60.2 | 60.2 | 67.3 |
| 1994 Average | 73.8 | 95.7 | 53.4 | 66.0 | 57.2 | 55.4 | 53.0 |
| 1995 Average | 76.5 | 100.5 | 54.0 | 58.9 | 56.2 | 56.0 | 49.2 |
| 1996 Average | 84.7 | 111.6 | 65.1 | 74.0 | 67.3 | 68.1 | 60.5 |
| 1997 Average | 83.9 | 112.8 | 61.3 | 74.5 | 63.6 | 64.2 | 55.2 |
| 1998 Average | 67.3 | 97.5 | 45.2 | 50.1 | 48.2 | 49.4 | 40.5 |
| 1999 Average | 78.1 | 105.9 | 54.3 | 60.5 | 55.8 | 58.4 | 45.8 |
| 2000 Average | 110.6 | 130.6 | 89.9 | 112.3 | 92.7 | 93.5 | 60.3 |
| 2001 January | 106.8 | 128.5 | 88.3 | 126.0 | 99.6 | 96.2 | 82.3 |
| February | 106.7 | 129.2 | 87.0 | 122.1 | 94.3 | 91.9 | 67.0 |
| March | 103.9 | 124.5 | 81.1 | 112.8 | 86.6 | 84.2 | 57.6 |
| April | 117.7 | 134.9 | 80.2 | 100.6 | 86.1 | 86.3 | 57.0 |
| May | 130.1 | 150.9 | 84.0 | 94.1 | 90.1 | 93.0 | 54.3 |
| June | 120.7 | 145.1 | 83.6 | 93.8 | 84.8 | 90.6 | 50.5 |
| July | 103.2 | 134.6 | 76.8 | 83.4 | 78.1 | 81.4 | 45.1 |
| August | 102.5 | 136.3 | 77.8 | 84.2 | 82.1 | 84.6 | 46.3 |
| September | 109.2 | 142.4 | 82.4 | 94.9 | 88.8 | 89.5 | 43.7 |
| October | 89.9 | 125.3 | 67.5 | 94.2 | 72.4 | 77.2 | 44.7 |
| November | 76.9 | 119.4 | 62.5 | 100.9 | 65.8 | 68.5 | 43.5 |
| December | 68.5 | 115.8 | 55.6 | 98.1 | 62.7 | 60.9 | 40.2 |
| Average | 103.2 | 132.3 | 77.5 | 104.5 | 82.9 | 84.2 | 50.6 |
| 2002 January | 70.7 | 121.2 | 58.1 | 98.3 | 63.6 | 60.5 | 38.1 |
| February | 71.8 | 118.5 | 58.4 | 97.7 | 62.3 | 61.5 | 35.1 |
| March | 87.3 | 125.2 | 64.3 | 99.3 | 70.1 | 70.1 | 39.5 |
| April | 100.4 | 133.4 | 70.0 | NA | 72.0 | 75.3 | 41.7 |
| May | 99.9 | 128.4 | 70.9 | 91.5 | 70.9 | 75.4 | 40.5 |
| June | 99.1 | 127.3 | 68.8 | 83.8 | 67.6 | 73.7 | 37.9 |
| July | 100.3 | 139.1 | 72.2 | 80.6 | 70.7 | 75.6 | 38.4 |
| August | 100.1 | 136.1 | 75.2 | 79.8 | 73.4 | 79.4 | 41.5 |
| September | 100.2 | 139.1 | 82.8 | NA | 81.8 | 86.7 | 46.9 |
| October | 104.0 | 140.3 | 84.8 | 110.2 | 81.8 | 89.1 | 47.1 |
| November | 101.2 | 138.5 | 76.9 | 103.8 | 80.0 | 83.9 | 46.9 |
| December | 98.1 | 139.8 | 81.3 | 115.2 | 87.5 | 85.9 | 49.9 |
| Average | 94.7 | 131.7 | 72.2 | 98.5 | 73.7 | 76.2 | 41.9 |
| 2003 January | 106.0 | 139.7 | 91.5 | 121.0 | 96.3 | 93.3 | 57.4 |
| February | 122.1 | W | 101.8 | 137.4 | 113.5 | 110.2 | 69.6 |
| March | ^R 130.0 | W | ^R 104.4 | 138.7 | ^R 110.0 | ^R 111.7 | 67.3 |
| April | 120.0 | W | 82.4 | 127.8 | 89.0 | 94.4 | 52.6 |

^a See Note 5 at end of section.

R=Revised. NA=Not available. W=Value withheld to avoid disclosure of individual company data.

Notes: • Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial consumers. Sales for resale are shown in Table 9.6; they are sales made to purchasers other than

ultimate consumers. • Values for the current month are preliminary. • Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at end of section. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.

Source: EIA, *Petroleum Marketing Monthly*, July 2003, Table 2.

Table 9.8a No. 2 Distillate Prices to Residences: Northeastern States
(Cents per Gallon, Excluding Taxes)

| | Maine | New Hampshire | Vermont | Massachusetts | Rhode Island | Connecticut | New York | New Jersey | Pennsylvania |
|---------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| 1978 Average | 48.6 | 50.3 | 50.8 | 48.8 | 50.7 | 50.1 | 50.1 | 49.6 | 48.8 |
| 1979 Average | 68.8 | 72.5 | 72.5 | 70.9 | 72.8 | 72.0 | 71.2 | 71.0 | 69.8 |
| 1980 Average | 96.3 | 100.4 | 101.5 | 97.8 | 101.1 | 98.3 | 98.2 | 97.9 | 96.4 |
| 1981 Average | 120.4 | 123.7 | 125.4 | 121.3 | 123.8 | 121.7 | 123.2 | 121.5 | 118.1 |
| 1982 Average | 115.5 | 117.4 | 120.1 | 117.6 | 120.1 | 118.3 | 120.5 | 117.4 | 113.7 |
| 1983 Average | 102.8 | 104.1 | 112.9 | 109.1 | 110.5 | 109.1 | 112.1 | 107.9 | 105.8 |
| 1984 Average | 103.9 | 108.4 | 111.9 | 111.6 | 111.4 | 112.1 | 115.5 | 111.0 | 107.9 |
| 1985 Average | 99.7 | 102.4 | 107.7 | 107.0 | 106.7 | 108.0 | 111.3 | 105.9 | 102.3 |
| 1986 Average | 74.4 | 75.9 | 86.6 | 82.1 | 82.8 | 89.0 | 91.1 | 90.2 | 81.4 |
| 1987 Average | 74.7 | 76.5 | 81.1 | 80.6 | 82.5 | 83.4 | 85.2 | 84.3 | 76.9 |
| 1988 Average | 77.7 | 78.2 | 82.6 | 82.1 | 83.6 | 85.3 | 86.3 | 84.8 | 77.8 |
| 1989 Average | 89.4 | 89.3 | 90.5 | 92.6 | 93.9 | 92.9 | 95.8 | 91.8 | 85.1 |
| 1990 Average | 98.9 | 102.8 | 107.0 | 108.4 | 108.6 | 109.8 | 112.5 | 108.7 | 102.6 |
| 1991 Average | 96.0 | 91.6 | 101.9 | 103.0 | 99.9 | 106.2 | 111.3 | 104.0 | 99.7 |
| 1992 Average | 87.1 | 85.6 | 92.1 | 92.5 | 91.2 | 94.7 | 102.8 | 93.9 | 89.0 |
| 1993 Average | 82.6 | 82.8 | 90.4 | 89.7 | 89.3 | 91.9 | 100.1 | 92.4 | 86.3 |
| 1994 Average | 81.8 | 79.2 | 87.6 | 87.0 | 88.5 | 89.0 | 96.6 | 89.5 | 85.7 |
| 1995 Average | 78.7 | 77.9 | 85.3 | 84.4 | 87.4 | 86.4 | 95.5 | 88.8 | 82.6 |
| 1996 Average | 97.2 | 94.0 | 96.9 | 97.6 | 98.6 | 98.6 | 106.3 | 102.4 | 95.3 |
| 1997 Average | 94.2 | 94.2 | 98.7 | 96.0 | 98.9 | 96.3 | 106.5 | 103.3 | 95.0 |
| 1998 Average | 78.8 | 78.8 | 87.3 | 81.8 | 86.8 | 83.1 | 94.8 | 89.2 | 81.4 |
| 1999 Average | 81.3 | 77.0 | 85.4 | 83.6 | 85.8 | 85.2 | 96.9 | 91.3 | 81.5 |
| 2000 Average | 129.7 | 128.1 | 125.5 | 127.3 | 125.9 | 129.1 | 144.2 | 140.4 | 122.4 |
| 2001 January | 132.5 | 134.9 | 132.8 | 132.7 | 133.9 | 136.8 | 147.7 | 146.3 | 133.1 |
| February | 129.5 | 133.3 | 130.8 | 129.5 | 129.4 | 132.0 | 143.5 | 140.6 | 127.9 |
| March | 125.6 | 130.1 | 129.1 | 125.6 | 125.5 | 129.0 | 139.9 | 133.8 | 121.5 |
| April | 122.9 | 126.7 | 128.0 | 124.3 | 124.1 | 127.2 | 139.6 | 131.8 | 116.8 |
| May | 121.8 | 124.5 | 124.8 | 122.7 | 122.4 | 125.1 | 137.3 | 130.8 | 111.1 |
| June | 121.6 | 125.5 | 125.0 | 119.8 | 121.6 | 119.1 | 133.2 | 128.7 | 105.7 |
| July | 117.8 | 121.2 | 122.7 | 113.8 | 117.2 | 113.1 | 126.9 | 123.2 | 101.0 |
| August | 115.2 | 118.9 | 121.9 | 113.5 | 118.0 | 110.8 | 127.2 | 118.3 | 103.6 |
| September | 118.7 | 118.4 | 123.0 | 115.9 | 119.7 | 116.2 | 129.1 | 120.0 | 104.9 |
| October | 114.6 | 117.6 | 121.1 | 113.4 | 117.4 | 113.4 | 125.9 | 118.0 | 102.6 |
| November | 110.2 | 114.8 | 118.9 | 109.9 | 113.9 | 109.2 | 123.3 | 114.2 | 101.2 |
| December | 108.7 | 114.2 | 117.3 | 106.9 | 111.3 | 107.4 | 119.8 | 112.2 | 99.7 |
| Average | 121.7 | 125.6 | 126.1 | 122.1 | 123.6 | 123.9 | 136.3 | 131.4 | 115.9 |
| 2002 January | 109.6 | 113.2 | 117.4 | 107.5 | 112.1 | 108.4 | 121.7 | 113.9 | 103.3 |
| February | 108.7 | 114.1 | 117.2 | 106.9 | 110.9 | 106.7 | 121.0 | 113.5 | 100.7 |
| March | 112.2 | 109.6 | 116.2 | 111.0 | 107.7 | 109.3 | 119.0 | 117.0 | 104.8 |
| April | 111.8 | 108.8 | 117.6 | 113.8 | 112.0 | 109.7 | 120.0 | 120.0 | 106.2 |
| May | 111.8 | 108.4 | 118.1 | 113.6 | 109.8 | 109.2 | 117.6 | 118.9 | 104.2 |
| June | 110.9 | 104.7 | 114.3 | 110.6 | 105.7 | 110.5 | 115.9 | 116.5 | 102.9 |
| July | 109.7 | 101.3 | 111.5 | 111.1 | 105.6 | 106.7 | 114.4 | 113.4 | 95.3 |
| August | 107.7 | 102.2 | 112.1 | 112.4 | 107.8 | 107.6 | NA | 115.2 | 95.8 |
| September | 111.3 | 106.0 | 115.0 | 113.7 | 110.6 | 111.1 | 116.6 | 120.7 | 101.8 |
| October | 116.6 | 111.4 | 118.0 | 116.2 | 110.5 | 112.4 | 119.4 | 123.7 | 106.6 |
| November | 115.8 | 113.4 | 118.0 | 118.5 | 114.4 | 115.5 | 125.0 | 127.6 | 110.6 |
| December | 119.3 | 118.1 | 120.4 | 125.0 | 120.8 | 121.5 | 130.1 | 135.3 | 117.4 |
| Average | 112.9 | 111.8 | 117.2 | 114.1 | 112.4 | 111.9 | 121.8 | 121.9 | 106.4 |
| 2003 January | 127.9 | 127.4 | 126.5 | 135.4 | 132.3 | 130.9 | 138.7 | 146.5 | 127.5 |
| February | 142.5 | 145.0 | 138.9 | 153.8 | 151.8 | 149.7 | 156.1 | 167.4 | 147.7 |
| March | ^R 147.0 | ^R 148.4 | ^R 144.0 | ^R 153.0 | ^R 151.4 | ^R 152.5 | ^R 160.0 | ^R 170.9 | ^R 153.7 |
| April | 129.4 | 132.6 | 131.9 | 136.7 | 131.7 | 133.9 | 141.0 | 146.5 | 131.4 |

R=Revised. NA=Not available.

Notes: • States are grouped in Tables 9.8a, 9.8b, and 9.8c by geographic region of the country. • Values for the current month are preliminary. • Prices prior to 1983 are Energy Information Administration (EIA) estimates.

See Note 6 at end of section.

Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.

Source: EIA, *Petroleum Marketing Monthly*, July 2003, Table 18.

Table 9.8b No. 2 Distillate Prices to Residences: Selected South Atlantic and Midwestern States

(Cents per Gallon, Excluding Taxes)

| | Delaware | District of Columbia | Maryland | Virginia | West Virginia | Ohio | Michigan | Indiana | Illinois | Wisconsin | Minnesota |
|---------------------|--------------------|----------------------|--------------------|--------------|---------------|--------------|--------------------|--------------|--------------|--------------------|--------------|
| 1978 Average | 47.8 | 50.7 | 49.2 | 49.1 | 46.2 | 47.4 | 47.9 | 48.5 | 46.5 | 44.7 | 47.8 |
| 1979 Average | 68.2 | 74.2 | 70.1 | 70.4 | 65.1 | 68.6 | 70.9 | 72.7 | 68.8 | 67.3 | 72.4 |
| 1980 Average | 95.4 | 102.6 | 97.9 | 98.5 | 92.2 | 91.9 | 97.8 | 99.6 | 95.8 | 91.5 | 99.9 |
| 1981 Average | 117.3 | 127.4 | 121.4 | 120.5 | 115.0 | 113.2 | 118.3 | 118.5 | 114.9 | 109.1 | 118.4 |
| 1982 Average | 111.3 | 124.5 | 117.1 | 117.7 | 109.3 | 110.2 | 113.9 | 114.3 | 110.9 | 107.8 | 115.1 |
| 1983 Average | 106.0 | 117.0 | 110.3 | 108.7 | 101.0 | 101.3 | 106.4 | 100.7 | 100.4 | 101.2 | 103.1 |
| 1984 Average | 109.6 | 118.7 | 113.5 | 110.5 | 102.1 | 102.1 | 105.0 | 103.1 | 100.1 | 101.0 | 104.1 |
| 1985 Average | 104.6 | 114.3 | 108.8 | 106.3 | 98.0 | 99.7 | 102.1 | 99.1 | 97.5 | 98.3 | 101.9 |
| 1986 Average | 85.0 | 93.1 | 91.4 | 86.6 | 74.6 | 77.7 | 81.0 | 74.8 | NA | 75.6 | 79.2 |
| 1987 Average | 79.3 | 91.8 | 86.6 | 79.5 | 76.4 | 74.7 | 77.5 | 75.4 | 79.8 | 75.1 | 74.6 |
| 1988 Average | 80.1 | 91.6 | 87.0 | 80.5 | 74.2 | 74.7 | 77.5 | 75.4 | 77.6 | 73.9 | 73.5 |
| 1989 Average | 88.2 | 98.6 | 93.8 | 87.0 | 83.0 | 81.6 | 85.3 | 83.2 | 80.9 | 81.1 | 82.4 |
| 1990 Average | 105.8 | 107.8 | 111.9 | 110.6 | 99.1 | 98.1 | 100.9 | 99.3 | 96.1 | 94.2 | 101.4 |
| 1991 Average | 99.7 | 112.2 | 108.4 | 101.1 | 93.4 | 91.0 | 94.2 | 91.8 | 92.7 | 89.5 | 91.1 |
| 1992 Average | 92.3 | 105.7 | 100.0 | 92.8 | 86.4 | 83.6 | 87.2 | 81.2 | 87.7 | 81.6 | 82.6 |
| 1993 Average | 89.9 | 104.5 | 98.1 | 89.3 | 85.6 | 84.0 | 87.2 | 81.0 | 84.4 | 82.3 | 83.2 |
| 1994 Average | 89.4 | 100.0 | 95.0 | 85.3 | 80.9 | 81.2 | 86.3 | 81.2 | 78.4 | 81.1 | 80.6 |
| 1995 Average | 87.0 | 101.0 | 93.6 | 84.4 | 81.5 | 80.8 | 86.0 | 81.6 | 78.5 | 81.2 | 80.1 |
| 1996 Average | 98.4 | 117.8 | 106.3 | 95.2 | 96.0 | 92.1 | 97.7 | 91.2 | 89.3 | 89.9 | 90.9 |
| 1997 Average | 98.4 | 117.4 | 105.7 | 94.8 | 96.2 | 91.3 | 94.2 | 86.5 | 87.0 | 93.3 | 89.9 |
| 1998 Average | 85.8 | 102.2 | 90.2 | 85.6 | 81.8 | 76.7 | 80.4 | 74.8 | 73.5 | 80.1 | 73.8 |
| 1999 Average | 88.4 | 101.1 | 90.7 | 87.0 | 78.9 | 82.0 | 88.3 | 79.3 | 71.6 | 84.7 | 77.4 |
| 2000 Average | 127.0 | W | 135.1 | 126.9 | 125.1 | 122.0 | NA | 120.7 | 109.5 | 117.1 | 115.6 |
| 2001 January | 139.8 | W | 150.3 | 141.4 | 137.1 | 131.7 | NA | 127.0 | 122.7 | 128.1 | 124.9 |
| February | 137.6 | W | 146.5 | 133.4 | 127.3 | 126.9 | NA | 123.1 | 118.9 | 126.6 | 120.4 |
| March | 129.3 | W | 140.8 | 122.8 | 119.1 | 117.4 | NA | 114.1 | 115.7 | 120.1 | 114.7 |
| April | 123.2 | W | 137.2 | 117.4 | 117.1 | 117.5 | NA | 112.3 | NA | 119.3 | 118.0 |
| May | 113.3 | W | 128.7 | 112.8 | 113.7 | 120.5 | NA | 117.8 | 111.3 | 121.9 | 118.7 |
| June | 110.8 | W | 123.2 | 112.7 | 112.5 | 112.9 | NA | 109.8 | 105.6 | 117.1 | 114.0 |
| July | 102.0 | W | 116.9 | 106.6 | 104.5 | 104.7 | NA | 102.9 | 102.2 | 110.6 | 106.4 |
| August | 101.5 | W | 117.0 | 107.6 | 109.3 | 110.4 | NA | 111.7 | 111.8 | 117.6 | 115.4 |
| September | 106.2 | W | 120.0 | 110.4 | 112.0 | 119.1 | 136.4 | 118.0 | 118.3 | 122.1 | 116.3 |
| October | NA | W | 117.7 | 106.9 | 104.3 | 108.4 | 122.1 | 108.3 | 109.5 | 112.8 | 105.5 |
| November | 110.3 | W | 117.1 | 102.4 | NA | 100.8 | 112.0 | 98.2 | 98.2 | 106.1 | 99.9 |
| December | 108.8 | W | 114.3 | 97.8 | 95.5 | 95.0 | 108.3 | 93.4 | 91.7 | 96.5 | 91.0 |
| Average | 123.4 | 143.1 | 134.2 | 120.2 | 113.9 | 116.0 | NA | 113.3 | 112.1 | 118.0 | 112.2 |
| 2002 January | 114.2 | W | 115.8 | 101.7 | 96.8 | 94.2 | 102.6 | 91.9 | 86.7 | 96.8 | 91.5 |
| February | 111.0 | W | 115.1 | 99.9 | 95.7 | 94.3 | 102.4 | 95.7 | 84.2 | 95.6 | 91.9 |
| March | 113.0 | W | 117.6 | 101.6 | 99.5 | 101.3 | 103.6 | 93.8 | 83.9 | 100.3 | 94.0 |
| April | 117.3 | 129.2 | 119.1 | 99.9 | 101.2 | 103.1 | 106.5 | 94.9 | 84.6 | 105.1 | 101.9 |
| May | 106.2 | NA | 114.2 | 96.4 | 102.0 | 101.4 | 106.3 | W | 82.9 | 106.5 | 100.7 |
| June | 100.5 | 111.5 | 111.5 | 96.4 | 101.6 | 97.4 | 107.1 | W | NA | 101.7 | 101.8 |
| July | 98.5 | W | 109.4 | 97.3 | 101.7 | 95.8 | 107.4 | W | 96.6 | 103.7 | 101.8 |
| August | 99.7 | W | 110.9 | 99.5 | 102.5 | 100.5 | 108.0 | W | NA | 103.3 | 105.3 |
| September | 111.2 | W | 116.4 | 102.5 | 107.2 | 107.1 | 113.9 | W | 101.2 | 111.7 | 111.0 |
| October | 114.8 | 129.2 | 120.1 | 108.0 | 111.2 | 114.2 | 121.3 | W | 106.7 | 118.0 | 116.6 |
| November | 119.8 | W | 124.7 | 110.3 | 113.9 | 115.6 | 122.5 | 114.1 | 112.6 | 120.2 | 114.9 |
| December | 129.0 | W | 131.3 | 119.0 | 120.9 | 119.5 | 124.9 | 121.0 | NA | 121.5 | 116.9 |
| Average | 116.5 | W | 120.1 | 104.9 | 105.4 | 105.8 | 111.2 | 102.5 | 98.0 | 107.2 | 105.2 |
| 2003 January | 138.4 | W | 141.4 | 130.5 | 131.7 | 129.4 | 130.7 | 130.3 | 125.0 | 127.1 | 122.0 |
| February | 161.7 | W | 159.9 | 146.4 | 155.5 | 144.8 | 148.5 | 146.7 | 134.9 | 137.0 | 136.5 |
| March | ^R 167.5 | W | ^R 166.8 | 142.5 | 155.9 | 141.2 | ^R 148.9 | 142.4 | 130.1 | ^R 140.5 | 136.7 |
| April | 142.6 | NA | 145.5 | 125.2 | 131.5 | 126.0 | 131.8 | W | NA | 125.6 | 120.9 |

R=Revised. NA=Not available. W=Value withheld to avoid disclosure of individual company data.

Notes: • States are grouped in Tables 9.8a, 9.8b, and 9.8c by geographic region of the country. • Values for the current month are preliminary.

• Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at end of section.

Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.

Source: EIA, *Petroleum Marketing Monthly*, July 2003, Table 18.

Table 9.8c No. 2 Distillate Prices to Residences: Selected Western States and U.S. Average

(Cents per Gallon, Excluding Taxes)

| | Idaho | Washington | Oregon | Alaska | U.S. Average |
|---------------------------|--------------------|--------------|--------------|--------------|--------------|
| 1978 Average | 43.6 | 48.6 | 45.8 | 53.2 | 49.0 |
| 1979 Average | 62.1 | 69.7 | 68.0 | 68.2 | 70.4 |
| 1980 Average | 91.6 | 100.8 | 97.3 | 97.8 | 97.4 |
| 1981 Average | 110.4 | 116.5 | 111.4 | 118.0 | 119.4 |
| 1982 Average | 110.4 | 117.6 | 111.6 | 117.4 | 116.0 |
| 1983 Average | 101.8 | 109.0 | 103.6 | 108.8 | 107.8 |
| 1984 Average | 98.5 | 102.6 | 99.3 | 106.9 | 109.1 |
| 1985 Average | 97.2 | 101.1 | 97.1 | 108.3 | 105.3 |
| 1986 Average | 73.8 | 77.5 | 70.4 | 94.9 | 83.6 |
| 1987 Average | 68.8 | 79.5 | 72.5 | 86.5 | 80.3 |
| 1988 Average | 68.8 | 78.5 | 70.9 | 86.9 | 81.3 |
| 1989 Average | 77.8 | 87.4 | 80.2 | 96.4 | 90.0 |
| 1990 Average | 97.4 | 102.9 | 97.0 | 110.1 | 106.3 |
| 1991 Average | 95.1 | 101.6 | 93.3 | 105.0 | 101.9 |
| 1992 Average | 85.7 | 94.0 | 87.6 | 94.1 | 93.4 |
| 1993 Average | 86.2 | 99.9 | 91.8 | 96.1 | 91.1 |
| 1994 Average | 78.9 | 95.0 | 88.7 | 86.5 | 88.4 |
| 1995 Average | 83.9 | 96.2 | 89.4 | 83.4 | 86.7 |
| 1996 Average | 93.3 | 108.0 | 98.9 | 90.9 | 98.9 |
| 1997 Average | 95.3 | 113.9 | 103.1 | 97.3 | 98.4 |
| 1998 Average | 78.4 | 97.8 | 86.1 | 85.2 | 85.2 |
| 1999 Average | 76.2 | 106.5 | 93.8 | 96.6 | 87.6 |
| 2000 Average | 117.0 | 144.5 | 136.8 | 133.7 | 131.1 |
| 2001 January | 120.8 | 144.0 | 134.3 | NA | 138.6 |
| February | 114.0 | 145.4 | 134.4 | 147.5 | 134.3 |
| March | 109.4 | 141.9 | 129.7 | NA | 129.4 |
| April | 110.1 | 141.8 | 130.3 | NA | 127.3 |
| May | 114.0 | 144.6 | 133.8 | 145.6 | 124.9 |
| June | 111.9 | 141.3 | 130.0 | 140.6 | 120.3 |
| July | 100.3 | 122.7 | 115.4 | 131.8 | 113.6 |
| August | 101.2 | 119.0 | 116.8 | 124.6 | 114.3 |
| September | 107.7 | 127.9 | 120.6 | NA | 117.5 |
| October | 100.2 | NA | 111.0 | 131.1 | 114.2 |
| November | 90.2 | 118.1 | 103.6 | 125.7 | 111.0 |
| December | 75.8 | 110.2 | 95.0 | 119.9 | 108.0 |
| Average | 103.8 | 133.6 | 121.1 | 137.7 | 125.0 |
| 2002 January | 74.7 | 109.2 | 93.6 | 114.0 | 109.7 |
| February | 74.5 | 108.6 | 94.3 | 114.5 | 108.6 |
| March | 79.2 | 118.2 | 104.4 | 110.4 | 109.9 |
| April | 87.1 | 124.5 | 108.0 | 111.8 | 111.2 |
| May | 82.5 | 125.3 | 107.6 | 108.4 | 108.9 |
| June | 79.1 | 122.2 | 104.3 | 105.8 | 104.9 |
| July | 87.5 | 118.5 | NA | 102.6 | 102.9 |
| August | 89.9 | 117.0 | 108.2 | 108.1 | 103.8 |
| September | 96.6 | 124.2 | 115.6 | 110.0 | 109.9 |
| October | 102.6 | 128.6 | 118.6 | 110.6 | 114.6 |
| November | 103.2 | 131.3 | 119.4 | 113.0 | 117.9 |
| December | 103.0 | 131.2 | 118.1 | 114.6 | 123.8 |
| Average | 89.1 | 121.4 | 106.3 | 109.4 | 112.8 |
| 2003 January | 107.2 | 137.1 | 124.5 | 116.7 | 133.3 |
| February | 126.5 | 156.1 | 144.6 | 121.1 | 150.7 |
| March | ^R 133.9 | 179.5 | 158.8 | 137.4 | 153.9 |
| April | 121.0 | 155.5 | 131.4 | 132.8 | 134.5 |

R=Revised. NA=Not available.

Notes: • States are grouped in Tables 9.8a, 9.8b, and 9.8c by geographic region of the country. • Values for the current month are preliminary. • Prices prior to 1983 are Energy Information Administration (EIA) estimates.

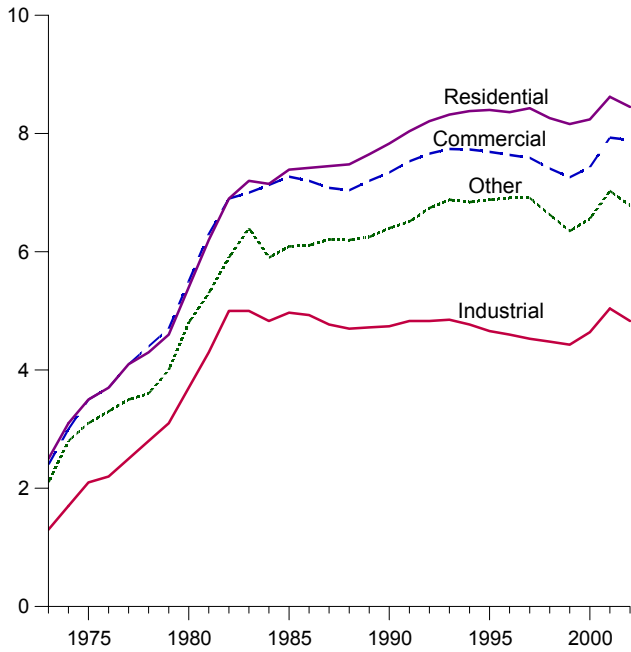
See Note 6 at end of section.

Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.

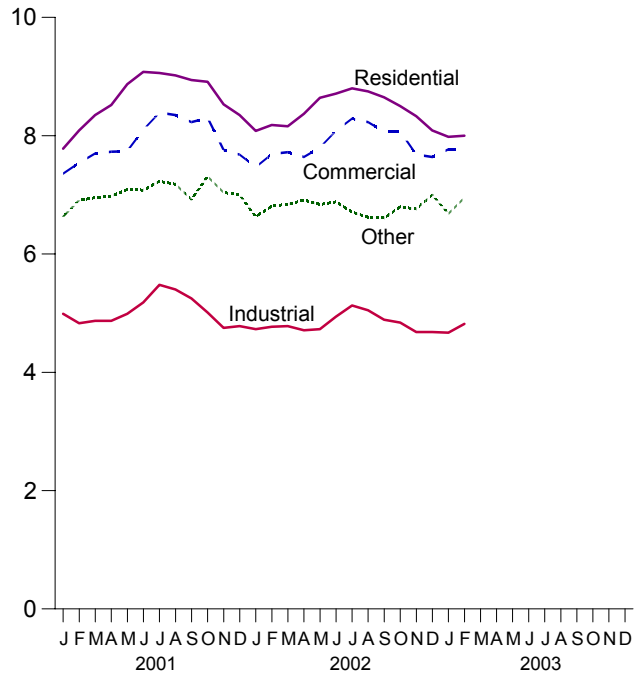
Source: EIA, *Petroleum Marketing Monthly*, July 2003, Table 18.

Figure 9.2 Average Retail Prices of Electricity
(Cents per Kilowatthour)

By Sector, 1973-2002



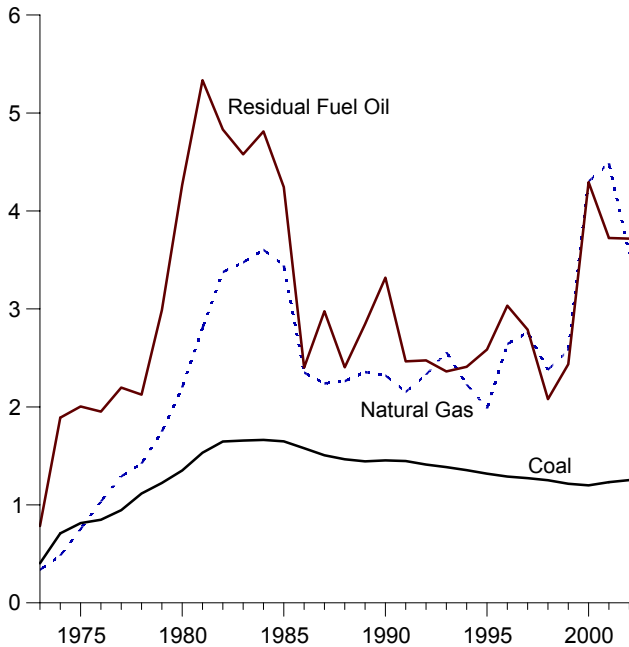
By Sector, Monthly



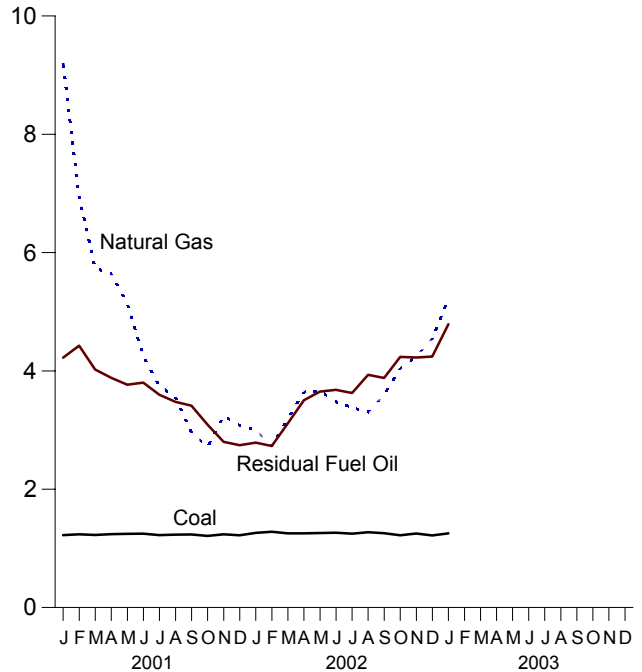
Note: Excludes taxes.
Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.
Source: Table 9.9.

Figure 9.3 Cost of Fossil-Fuel Receipts at Electric Generating Plants
(Dollars per Million Btu)

Costs, 1973-2002



Costs, Monthly



Note: Because vertical scales differ, graphs should not be compared.
Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.
Source: Table 9.10.

Table 9.9 Average Retail Prices of Electricity
(Cents per Kilowatthour, Excluding Taxes)

| | Residential | Commercial | Industrial | Other ^a | Total |
|-----------------------------------|-------------|-------------|-------------|--------------------|-------------|
| 1973 Average | 2.5 | 2.4 | 1.3 | 2.1 | 2.0 |
| 1974 Average | 3.1 | 3.0 | 1.7 | 2.8 | 2.5 |
| 1975 Average | 3.5 | 3.5 | 2.1 | 3.1 | 2.9 |
| 1976 Average | 3.7 | 3.7 | 2.2 | 3.3 | 3.1 |
| 1977 Average | 4.1 | 4.1 | 2.5 | 3.5 | 3.4 |
| 1978 Average | 4.3 | 4.4 | 2.8 | 3.6 | 3.7 |
| 1979 Average | 4.6 | 4.7 | 3.1 | 4.0 | 4.0 |
| 1980 Average | 5.4 | 5.5 | 3.7 | 4.8 | 4.7 |
| 1981 Average | 6.2 | 6.3 | 4.3 | 5.3 | 5.5 |
| 1982 Average | 6.9 | 6.9 | 5.0 | 5.9 | 6.1 |
| 1983 Average | 7.2 | 7.0 | 5.0 | 6.4 | 6.3 |
| 1984 Average | 7.15 | 7.13 | 4.83 | 5.90 | 6.25 |
| 1985 Average | 7.39 | 7.27 | 4.97 | 6.09 | 6.44 |
| 1986 Average | 7.42 | 7.20 | 4.93 | 6.11 | 6.44 |
| 1987 Average | 7.45 | 7.08 | 4.77 | 6.21 | 6.37 |
| 1988 Average | 7.48 | 7.04 | 4.70 | 6.20 | 6.35 |
| 1989 Average | 7.65 | 7.20 | 4.72 | 6.25 | 6.45 |
| 1990 Average | 7.83 | 7.34 | 4.74 | 6.40 | 6.57 |
| 1991 Average | 8.04 | 7.53 | 4.83 | 6.51 | 6.75 |
| 1992 Average | 8.21 | 7.66 | 4.83 | 6.74 | 6.82 |
| 1993 Average | 8.32 | 7.74 | 4.85 | 6.88 | 6.93 |
| 1994 Average | 8.38 | 7.73 | 4.77 | 6.84 | 6.91 |
| 1995 Average | 8.40 | 7.69 | 4.66 | 6.88 | 6.89 |
| 1996 Average | 8.36 | 7.64 | 4.60 | 6.91 | 6.86 |
| 1997 Average | 8.43 | 7.59 | 4.53 | 6.91 | 6.85 |
| 1998 Average | 8.26 | 7.41 | 4.48 | 6.63 | 6.74 |
| 1999 Average | 8.16 | 7.26 | 4.43 | 6.35 | 6.64 |
| 2000 Average | 8.24 | 7.43 | 4.64 | 6.56 | 6.81 |
| 2001 January | 7.78 | 7.36 | 4.99 | 6.63 | 6.90 |
| February | 8.09 | 7.54 | 4.83 | 6.91 | 6.93 |
| March | 8.35 | 7.70 | 4.87 | 6.95 | 7.05 |
| April | 8.52 | 7.73 | 4.87 | 6.98 | 7.06 |
| May | 8.87 | 7.74 | 4.99 | 7.09 | 7.20 |
| June | 9.08 | 8.10 | 5.18 | 7.08 | 7.56 |
| July | 9.06 | 8.39 | 5.48 | 7.23 | 7.86 |
| August | 9.02 | 8.35 | 5.40 | 7.18 | 7.82 |
| September | 8.94 | 8.23 | 5.25 | 6.92 | 7.62 |
| October | 8.91 | 8.30 | 5.01 | 7.31 | 7.46 |
| November | 8.53 | 7.76 | 4.75 | 7.04 | 7.05 |
| December | 8.35 | 7.68 | 4.78 | 7.00 | 7.08 |
| Average | 8.62 | 7.93 | 5.04 | 7.03 | 7.32 |
| 2002 January | 8.08 | 7.47 | 4.73 | 6.63 | 6.96 |
| February | 8.18 | 7.69 | 4.77 | 6.81 | 6.99 |
| March | 8.16 | 7.72 | 4.78 | 6.84 | 6.98 |
| April | 8.37 | 7.64 | 4.71 | 6.91 | 6.95 |
| May | 8.64 | 7.80 | 4.73 | 6.84 | 7.09 |
| June | 8.71 | 8.08 | 4.94 | 6.88 | 7.39 |
| July | 8.80 | 8.29 | 5.13 | 6.71 | 7.62 |
| August | 8.75 | 8.23 | 5.05 | 6.62 | 7.56 |
| September | 8.65 | 8.07 | 4.89 | 6.61 | 7.36 |
| October | 8.50 | 8.07 | 4.84 | 6.80 | 7.20 |
| November | 8.33 | 7.68 | 4.68 | 6.76 | 6.95 |
| December | 8.09 | 7.64 | 4.68 | 7.00 | 6.97 |
| Average | 8.45 | 7.89 | 4.83 | 6.78 | 7.19 |
| 2003 January | 7.98 | 7.77 | 4.67 | 6.68 | 7.02 |
| February | 8.00 | 7.76 | 4.82 | 6.95 | 7.02 |
| 2-Month Average | 7.99 | 7.77 | 4.75 | 6.79 | 7.02 |
| 2002 2-Month Average | 8.13 | 7.58 | 4.75 | 6.72 | 6.97 |
| 2001 2-Month Average | 7.92 | 7.45 | 4.91 | 6.76 | 6.92 |

^a Public street and highway lighting, other sales to public authorities, sales to railroads and railways, and interdepartmental sales.

Notes: • Prices are calculated by dividing revenue by sales. Revenue may not correspond to sales for a particular month because of energy service provider billing and accounting procedures. That lack of correspondence could result in uncharacteristic increases or decreases in the monthly prices. See Note 7 at end of section. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.

Sources: • **1973-September 1977:** Federal Power Commission, Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income."
• **October 1977-February 1980:** Federal Energy Regulatory Commission (FERC), Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income."
• **March 1980-1982:** FERC, Form FERC-5, "Electric Utility Company Monthly Statement."
• **1983:** Energy Information Administration (EIA), Form EIA-826, "Electric Utility Company Monthly Statement."
• **1984-1989:** EIA, Form EIA-861, "Annual Electric Utility Report."
• **1990 forward:** EIA, *Electric Power Monthly*, May 2003, Table 5.3.

Table 9.10 Cost of Fossil-Fuel Receipts at Electric Generating Plants
(Cents per Million Btu)

| | Coal | Petroleum | | Natural Gas ^c | All Fossil Fuels |
|---------------------------------|-------|--------------------------------|--------------------|--------------------------|------------------|
| | | Residual Fuel Oil ^a | Total ^b | | |
| 1973 Average | 40.5 | 78.5 | 80.0 | 33.8 | 47.6 |
| 1974 Average | 70.9 | 189.0 | 191.0 | 48.2 | 91.4 |
| 1975 Average | 81.4 | 200.5 | 202.3 | 75.2 | 104.4 |
| 1976 Average | 84.8 | 195.2 | 199.0 | 103.4 | 111.9 |
| 1977 Average | 94.7 | 219.8 | 224.9 | 129.1 | 129.7 |
| 1978 Average | 111.6 | 212.5 | 219.1 | 142.2 | 141.1 |
| 1979 Average | 122.4 | 298.8 | 307.2 | 174.9 | 163.9 |
| 1980 Average | 135.1 | 426.7 | 435.1 | 219.9 | 192.8 |
| 1981 Average | 153.2 | 533.4 | 542.5 | 280.5 | 225.6 |
| 1982 Average | 164.7 | 483.2 | 492.2 | 337.6 | 224.9 |
| 1983 Average | 165.6 | 457.8 | 462.8 | 347.4 | 220.6 |
| 1984 Average | 166.4 | 481.2 | 486.3 | 360.3 | 219.1 |
| 1985 Average | 164.8 | 424.4 | 431.7 | 344.4 | 209.4 |
| 1986 Average | 157.9 | 240.1 | 243.7 | 235.1 | 175.0 |
| 1987 Average | 150.6 | 297.6 | 301.1 | 224.0 | 170.6 |
| 1988 Average | 146.6 | 240.5 | 243.9 | 226.3 | 164.3 |
| 1989 Average | 144.5 | 284.6 | 289.3 | 235.5 | 167.5 |
| 1990 Average | 145.5 | 331.9 | 335.3 | 232.1 | 168.8 |
| 1991 Average | 144.7 | 246.5 | 252.7 | 215.3 | 160.2 |
| 1992 Average | 141.2 | 247.5 | 251.4 | 232.8 | 158.9 |
| 1993 Average | 138.5 | 236.2 | 237.3 | 256.0 | 159.4 |
| 1994 Average | 135.5 | 240.9 | 242.3 | 223.0 | 152.5 |
| 1995 Average | 131.8 | 258.6 | 256.6 | 198.4 | 145.2 |
| 1996 Average | 128.9 | 303.4 | 302.6 | 264.1 | 151.8 |
| 1997 Average | 127.3 | 278.8 | 273.0 | 276.0 | 152.0 |
| 1998 Average | 125.2 | 207.9 | 202.1 | 238.1 | 143.5 |
| 1999 Average | 121.6 | 243.6 | 235.9 | 257.4 | 143.8 |
| 2000 Average | 120.0 | 429.4 | 417.9 | 430.2 | 173.5 |
| 2001 January | 122.3 | R 422.3 | 457.7 | R 920.7 | 214.1 |
| February | 123.9 | R 442.6 | 441.4 | 694.7 | 189.1 |
| March | 122.6 | R 402.4 | 401.1 | 573.8 | 178.3 |
| April | 123.9 | 388.4 | 388.6 | R 563.7 | 191.9 |
| May | 124.5 | 376.7 | 378.6 | 514.2 | 186.3 |
| June | 124.8 | 380.1 | 369.7 | 425.1 | 178.3 |
| July | 122.5 | 359.7 | 349.2 | R 374.3 | 176.4 |
| August | 123.3 | 347.7 | 331.2 | 355.8 | 169.6 |
| September | 123.4 | 341.3 | 316.0 | 295.5 | 156.4 |
| October | 121.0 | 309.0 | 287.5 | 271.5 | 142.2 |
| November | 123.7 | 280.0 | 268.8 | R 324.1 | 145.1 |
| December | 122.0 | 274.5 | 256.1 | R 307.6 | 141.7 |
| Average | 123.2 | R 372.6 | 369.3 | 448.7 | 173.0 |
| 2002 January ^d | 126.2 | 278.7 | R 254.1 | R 299.9 | R 162.8 |
| February | 128.2 | R 273.0 | R 244.9 | R 272.9 | R 158.6 |
| March | 125.3 | 311.3 | R 271.6 | R 319.0 | R 170.6 |
| April | 125.5 | 350.4 | R 316.6 | R 364.1 | R 185.7 |
| May | 126.0 | R 365.0 | R 335.1 | R 366.4 | R 187.7 |
| June | 126.3 | 368.0 | R 335.5 | R 347.7 | R 190.6 |
| July | 124.8 | 362.6 | R 328.7 | R 338.0 | R 193.0 |
| August | 127.3 | 393.5 | R 350.0 | R 330.3 | R 192.2 |
| September | 125.7 | 388.0 | R 342.1 | R 359.3 | R 188.6 |
| October | 122.2 | R 423.7 | R 377.3 | R 404.0 | R 185.1 |
| November | 125.1 | R 422.6 | R 396.4 | R 424.8 | R 188.0 |
| December | 122.0 | R 424.3 | R 389.4 | R 454.1 | R 198.7 |
| Average | 125.3 | R 372.7 | R 336.3 | R 354.7 | R 183.8 |
| 2003 January | 125.3 | 479.0 | 437.4 | 522.8 | 209.0 |

^a For 1973-2001, electric utility data are for heavy oil (fuel oil nos. 5 and 6, and small amounts of fuel oil no. 4).

^b Distillate fuel oil, residual fuel oil, petroleum coke, jet fuel, kerosene, other petroleum, and waste oil. For 1973-1982, data do not include refined motor oil, bunker oil, and liquefied petroleum gas. For 1973-1989, data do not include petroleum coke.

^c Natural gas, including a small amount of supplemental gaseous fuels.

^d Through 2001, data are for electric utilities only. Beginning in 2002, data also

include independent power producers, and electric generating plants in the commercial and industrial sectors. See Note 8 at end of section for plant coverage.

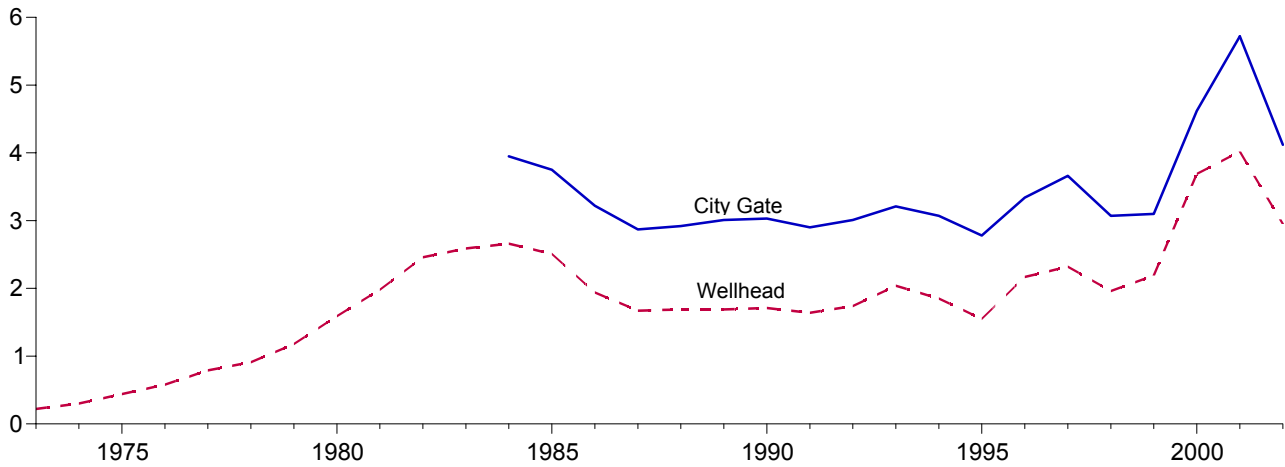
Notes: • Receipts are purchases of fuel. • Yearly costs are averages of monthly values, weighted by quantities in Btu. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.

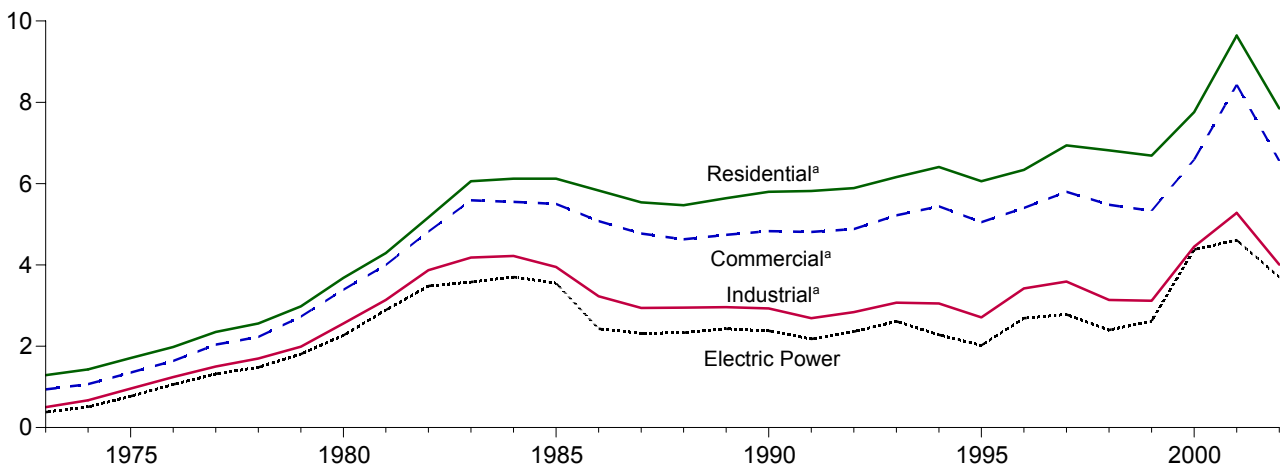
Sources: See end of section.

Figure 9.4 Natural Gas Prices
(Dollars per Thousand Cubic Feet)

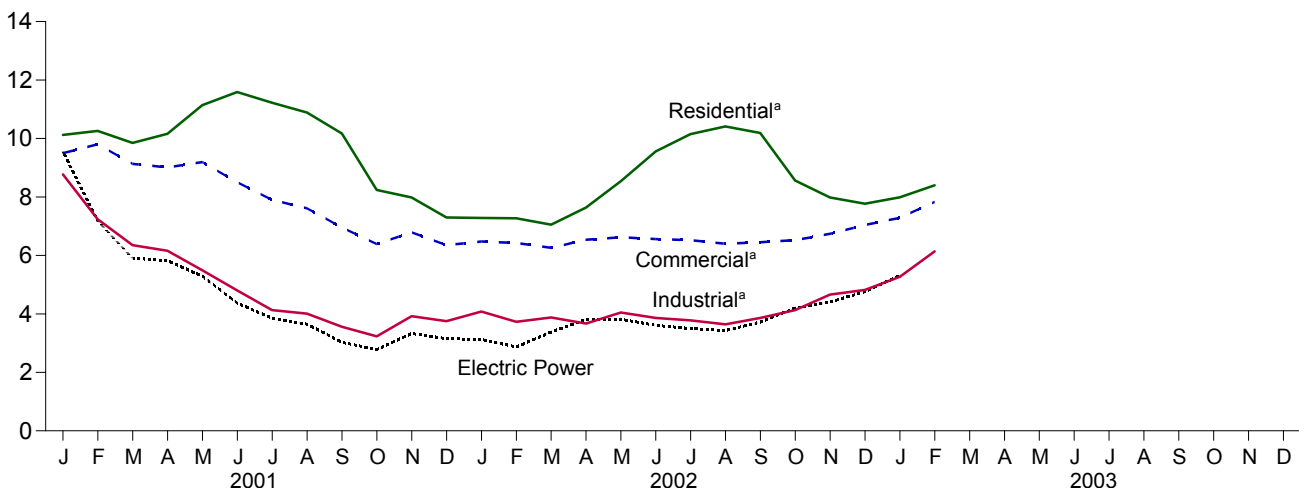
Selected Prices, 1973-2002



Consuming Sectors, 1973-2002



Consuming Sectors, Monthly



^aIncludes taxes.

Note: Because vertical scales differ, graphs should not be compared.

Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.

Source: Table 9.11.

Table 9.11 Natural Gas Prices
(Dollars per Thousand Cubic Feet)

| | Wellhead Price | City Gate Price | Consuming Sectors ^a | | | | | | | |
|----------------------|----------------|-----------------|--------------------------------|-----------------------------------|-------------------------|-----------------------------------|-------------------------|-----------------------------------|-----------------------------|-----------------------------------|
| | | | Residential | | Commercial ^b | | Industrial ^c | | Electric Power ^d | |
| | | | Price ^e | Percentage of Sector ^f | Price ^e | Percentage of Sector ^f | Price ^e | Percentage of Sector ^f | Price | Percentage of Sector ^f |
| 1973 Average | 0.22 | NA | 1.29 | NA | 0.94 | NA | 0.50 | NA | 0.38 | 92.1 |
| 1974 Average | .30 | NA | 1.43 | NA | 1.07 | NA | .67 | NA | .51 | 92.7 |
| 1975 Average | .44 | NA | 1.71 | NA | 1.35 | NA | .96 | NA | .77 | 96.1 |
| 1976 Average | .58 | NA | 1.98 | NA | 1.64 | NA | 1.24 | NA | 1.06 | 96.2 |
| 1977 Average | .79 | NA | 2.35 | NA | 2.04 | NA | 1.50 | NA | 1.32 | 97.1 |
| 1978 Average | .91 | NA | 2.56 | NA | 2.23 | NA | 1.70 | NA | 1.48 | 98.0 |
| 1979 Average | 1.18 | NA | 2.98 | NA | 2.73 | NA | 1.99 | NA | 1.81 | 96.1 |
| 1980 Average | 1.59 | NA | 3.68 | NA | 3.39 | NA | 2.56 | NA | 2.27 | 96.9 |
| 1981 Average | 1.98 | NA | 4.29 | NA | 4.00 | NA | 3.14 | NA | 2.89 | 97.6 |
| 1982 Average | 2.46 | NA | 5.17 | NA | 4.82 | NA | 3.87 | 85.1 | 3.48 | 92.6 |
| 1983 Average | 2.59 | NA | 6.06 | NA | 5.59 | NA | 4.18 | 80.7 | 3.58 | 93.9 |
| 1984 Average | 2.66 | 3.95 | 6.12 | NA | 5.55 | NA | 4.22 | 74.7 | 3.70 | 94.4 |
| 1985 Average | 2.51 | 3.75 | 6.12 | NA | 5.50 | NA | 3.95 | 68.8 | 3.55 | 94.0 |
| 1986 Average | 1.94 | 3.22 | 5.83 | NA | 5.08 | NA | 3.23 | 59.8 | 2.43 | 91.7 |
| 1987 Average | 1.67 | 2.87 | 5.54 | NA | 4.77 | 93.1 | 2.94 | 47.4 | 2.32 | 91.6 |
| 1988 Average | 1.69 | 2.92 | 5.47 | NA | 4.63 | 90.7 | 2.95 | 42.6 | 2.33 | 89.6 |
| 1989 Average | 1.69 | 3.01 | 5.64 | 99.9 | 4.74 | 89.1 | 2.96 | 36.9 | 2.43 | 88.6 |
| 1990 Average | 1.71 | 3.03 | 5.80 | 99.3 | 4.83 | 86.6 | 2.93 | 35.2 | 2.38 | 89.2 |
| 1991 Average | 1.64 | 2.90 | 5.82 | 99.2 | 4.81 | 85.1 | 2.69 | 32.7 | 2.18 | 93.2 |
| 1992 Average | 1.74 | 3.01 | 5.89 | 99.1 | 4.88 | 83.2 | 2.84 | 30.3 | 2.36 | 93.2 |
| 1993 Average | 2.04 | 3.21 | 6.16 | 99.1 | 5.22 | 83.9 | 3.07 | 29.7 | 2.61 | 93.4 |
| 1994 Average | 1.85 | 3.07 | 6.41 | 99.1 | 5.44 | 79.3 | 3.05 | 25.5 | 2.28 | 93.5 |
| 1995 Average | 1.55 | 2.78 | 6.06 | 99.1 | 5.05 | 76.7 | 2.71 | 24.5 | 2.02 | 92.0 |
| 1996 Average | 2.17 | 3.34 | 6.34 | 99.1 | 5.40 | 77.6 | 3.42 | 19.4 | 2.69 | 92.2 |
| 1997 Average | 2.32 | 3.66 | 6.94 | 98.8 | 5.80 | 70.8 | 3.59 | 18.1 | 2.78 | 91.0 |
| 1998 Average | 1.96 | 3.07 | 6.82 | 97.7 | 5.48 | 67.0 | 3.14 | 16.1 | 2.40 | 82.5 |
| 1999 Average | 2.19 | 3.10 | 6.69 | 95.2 | 5.33 | 66.1 | 3.12 | 18.7 | 2.62 | 75.3 |
| 2000 Average | 3.69 | 4.62 | 7.76 | 92.6 | 6.59 | 62.9 | 4.45 | 19.8 | 4.38 | 64.3 |
| 2001 January | 6.82 | 8.91 | 10.12 | NA | 9.50 | 72.7 | 8.77 | 22.1 | 9.55 | 41.6 |
| February | 5.08 | 7.08 | 10.26 | NA | 9.80 | 71.6 | 7.24 | 21.7 | 7.18 | 38.4 |
| March | 4.37 | 6.10 | 9.85 | NA | 9.13 | 69.0 | 6.35 | 20.4 | 5.91 | 40.9 |
| April | 4.52 | 6.30 | 10.16 | NA | 9.01 | 66.3 | 6.16 | 19.5 | 5.82 | 48.2 |
| May | 4.36 | 5.77 | 11.14 | NA | 9.19 | 60.7 | 5.49 | 17.9 | 5.29 | 48.7 |
| June | 3.80 | 5.38 | 11.59 | NA | 8.50 | 59.3 | 4.80 | 17.6 | 4.37 | 44.5 |
| July | 3.36 | 4.03 | 11.22 | NA | 7.90 | 54.2 | 4.13 | 18.5 | 3.85 | 45.8 |
| August | 3.34 | 4.32 | 10.89 | NA | 7.61 | 53.6 | 4.01 | 18.0 | 3.65 | 41.4 |
| September | 2.94 | 3.66 | 10.17 | NA | 6.96 | 53.8 | 3.56 | 18.2 | 3.03 | 42.1 |
| October | 2.81 | 3.37 | 8.24 | NA | 6.39 | 59.9 | 3.23 | 18.7 | 2.78 | 36.9 |
| November | 3.42 | 4.02 | 7.98 | NA | 6.79 | 64.8 | 3.92 | 18.7 | 3.33 | 33.4 |
| December | 3.44 | 3.90 | 7.30 | NA | 6.35 | 67.9 | 3.75 | 19.4 | 3.15 | 35.4 |
| Average | 4.02 | 5.72 | 9.64 | 92.3 | 8.43 | 65.8 | 5.28 | 19.3 | 4.61 | 41.9 |
| 2002 January | E 2.35 | 4.03 | R 7.28 | NA | R 6.48 | R 78.9 | 4.08 | R 17.5 | d 3.13 | d 80.8 |
| February | E 2.14 | R 3.78 | R 7.27 | NA | R 6.43 | R 79.1 | 3.73 | R 18.0 | R 2.87 | 87.4 |
| March | E 2.52 | 3.83 | R 7.05 | NA | R 6.26 | R 79.5 | 3.88 | R 17.7 | R 3.38 | 86.1 |
| April | E 3.02 | 4.16 | R 7.64 | NA | R 6.54 | R 75.8 | 3.67 | R 23.3 | R 3.81 | 84.4 |
| May | E 3.01 | 4.06 | R 8.54 | NA | R 6.62 | R 73.0 | 4.05 | R 21.1 | R 3.82 | 81.8 |
| June | E 2.94 | 4.14 | R 9.56 | NA | R 6.56 | R 72.2 | 3.86 | R 22.6 | R 3.61 | 78.7 |
| July | E 2.89 | 3.90 | R 10.15 | NA | R 6.52 | R 71.8 | 3.78 | R 20.9 | R 3.50 | 74.5 |
| August | E 2.77 | 3.61 | R 10.41 | NA | R 6.40 | R 69.6 | 3.64 | R 19.5 | R 3.43 | 78.6 |
| September | E 2.98 | 4.07 | R 10.19 | NA | R 6.45 | R 68.8 | 3.86 | R 19.7 | R 3.72 | 79.1 |
| October | E 3.35 | 4.28 | R 8.56 | NA | R 6.52 | R 72.8 | 4.13 | R 18.9 | R 4.20 | 81.0 |
| November | E 3.59 | 4.58 | R 7.98 | NA | R 6.74 | R 79.1 | 4.66 | R 19.6 | R 4.41 | 84.9 |
| December | E 3.84 | R 4.63 | R 7.77 | NA | R 7.04 | R 80.2 | R 4.82 | R 20.8 | R 4.76 | 88.2 |
| Average | E 2.95 | R 4.12 | R 7.85 | NA | R 6.56 | R 76.7 | 4.01 | R 19.9 | R 3.70 | 81.1 |
| 2003 January | E 4.47 | 5.01 | R 7.99 | NA | R 7.29 | R 81.3 | 5.27 | R 22.8 | 5.31 | 83.8 |
| February | E 5.45 | 5.71 | 8.40 | NA | 7.83 | 78.8 | 6.14 | 22.0 | NA | NA |
| 2-Month Average | E 4.96 | 5.33 | 8.19 | NA | 7.55 | 80.1 | 5.68 | 22.4 | NA | NA |
| 2002 2-Month Average | 2.25 | 3.91 | 7.28 | NA | 6.46 | 79.0 | 3.91 | 17.7 | NA | NA |
| 2001 2-Month Average | 5.95 | 8.09 | 10.18 | NA | 9.63 | 72.2 | 8.04 | 17.7 | NA | NA |

^a See Note 9 at end of section.

^b Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See note at end of Section 7.

^c Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See note at end of Section 7.

^d The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 2001, data are for electric utilities only; beginning in 2002, data also include independent power producers. See Note 8 at end of section for plant coverage.

^e Includes taxes.

^f The percentage of the sector's consumption in Table 4.4 for which price data are available.

R=Revised. NA=Not available. E=Estimate.

Notes: • Prices are for natural gas, including a small amount of supplemental gaseous fuels. • Prices are intended to include all taxes. See Note 9 at end of section. • Wellhead annual and year-to-date prices are simple averages of the monthly prices; all other annual and year-to-date prices are volume-weighted averages of the monthly prices. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/prices.html>.

Sources: See end of section.

Energy Prices

Note 1. The average domestic first purchase price represents the average price at which all domestic crude oil is purchased. Prior to February 1976, the price represented an estimate of the average of posted prices; beginning with February 1976, the price represents an average of actual first purchase prices. The data series was previously called "Actual Domestic Wellhead Price."

Note 2. F.O.B. literally means "Free on Board." It denotes a transaction whereby the seller makes the product available with an agreement on a given port at a given price; it is the responsibility of the buyer to arrange for the transportation and insurance.

Note 3. The landed cost of imported crude oil from selected countries does not represent the total cost of all imported crude. Prior to April 1975, imported crude costs to U.S. company-owned refineries in the Caribbean were not included in the landed cost, and costs of crude oil from countries that export only small amounts to the United States were also excluded. Beginning in April 1975, however, coverage was expanded to include U.S. company-owned refineries in the Caribbean. Landed costs do not include supplemental fees.

Note 4. Beginning with January 1981, refiner acquisition costs of crude oil are from data collected on Energy Information Administration (EIA) Form EIA-14, "Refiners' Monthly Cost Report." Those costs were previously published from data collected on Economic Regulatory Administration (ERA) Form ERA-49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report." Form ERA-49 was discontinued with the decontrol of crude oil on January 28, 1981. Crude oil purchases and costs are defined for Form EIA-14 in accordance with conventions used for Form ERA-49. The respondents for the two forms are also essentially the same. However, due to possible different interpretations of the filing requirements and a different method for handling prior period adjustments, care must be taken when comparing the data collected on the two forms.

The refiner acquisition cost of crude oil is the average price paid by refiners for crude oil booked into their refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned. Domestic crude oil is that oil produced in the United States or from the outer continental shelf as defined in 43 USC Section 1331. Imported crude oil is either that oil reported on Form ERA-51, "Transfer Pricing Report," or any crude oil that is not domestic oil. The composite cost is the weighted average of domestic and imported crude oil costs.

Crude oil costs and volumes reported on Form ERA-49 excluded unfinished oils but included the Strategic Petroleum Reserve (SPR). Crude oil costs and volumes reported on Federal Energy Administration (FEA) Form

FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report," included unfinished oils but excluded SPR. Imported averages derived from Form ERA-49 exclude oil purchased for SPR, whereas the composite averages derived from Form ERA-49 include SPR. None of the prices derived from Form EIA-14 include either unfinished oils or SPR.

Note 5. Several different series of motor gasoline prices are published in this section. U.S. city average retail prices of motor gasoline are calculated monthly by the Bureau of Labor Statistics during the development of the Consumer Price Index (CPI). These prices include all Federal, State, and local taxes paid at the time of sale. From 1974-1977, prices were collected in 56 urban areas. From 1978 forward, prices were collected from a new sample of service stations in 85 urban areas selected to represent all urban consumers-about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-serve).

Refiner prices of finished motor gasoline for resale and to end users are determined by the EIA in a monthly survey of refiners and gas plant operators (Form EIA-782A). The prices do not include any Federal, State, or local taxes paid at the time of sale. Estimates of prices prior to January 1983 are based on Form FEA-P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices," and also exclude all Federal, State, or local taxes paid at the time of sale. Sales for resale are those made to purchasers who are other-than-ultimate consumers. Sales to end users are sales made directly to the consumer of the product, including bulk consumers (such as agriculture, industry, and utilities) and residential and commercial consumers.

Note 6. Starting in January 1983, Form EIA-782, "Monthly Petroleum Product Sales Report," replaced 10 previous surveys. Every attempt was made to continue the most important price series. However, prices published through December 1982 and those published since January 1983 do not necessarily form continuous data series due to changes in survey forms, definitions, instructions, populations, samples, processing systems, and statistical procedures. To provide historical data, continuous series were generated for annual data 1978-1982 and for monthly data 1981 and 1982 by estimating the prices that would have been published had Form EIA-782 survey and system been in operation at that time. This form of estimation was performed after detailed adjustment was made for product and sales type matching and for discontinuity due to other factors. An important difference between the previous and present prices is the distinction between wholesale and resale and between retail and end user. The resale category continues to include sales among resellers. However, sales to bulk consumers, such as utility, industrial, and commercial accounts previously included in the wholesale category,

are now counted as made to end users. The end-user category continues to include retail sales through company-owned and operated outlets but also includes sales to the bulk consumers such as agriculture, industry, and electric utilities. Additional information may be found in “Estimated Historic Time Series for the EIA-782,” a feature article reprinted from the December 1983 [3] *Petroleum Marketing Monthly*, published by EIA.

Note 7. Preliminary monthly data are based on submissions from over 250 publicly and privately owned electric utilities reporting on Form EIA-826, “Monthly Electric Utility Sales and Revenue Report With State Distributions.” These utilities are statistically chosen as a cutoff sample from more than 3,000 electric utilities that report annually on Form EIA-861, “Annual Electric Utility Report.” Preliminary annual values are the sum of the monthly revenues divided by the sum of the monthly sales. When final Form EIA-861 annual data become available each year, their ratios to the preliminary Form EIA-826 values are used to derive adjusted final monthly values. Prior to January 1986, only privately owned electric utilities were included in the monthly survey and the sample was chosen using stratification techniques through December 1992.

Note 8. Data for 1973–1982 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units combined totaled 25 megawatts or greater. From 1974–1982, peaking units were included in the data and counted towards the 25-megawatt-or-greater total. Data for 1983–1990 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units combined totaled 50 megawatts or greater. Data for 1991–2001 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units and combined-cycle units together totaled 50 megawatts or greater. Data for 2002 forward cover the aforementioned regulated generating plants plus unregulated generating plants (independent power producers, as well as combined-heat-and-power generating plants and electricity-only plants in the commercial and industrial sector) whose total facility fossil-fueled nameplate generating capacity is 50 or more megawatts, regardless of unit type.

Note 9. Natural gas prices are intended to include all taxes. Instructions on the data collection forms specifically direct that all Federal, State, and local taxes, surcharges, and/or adjustments billed to consumers are to be included. However, sales and other taxes itemized on more than 3,000 consumers’ bills are sometimes excluded by the reporting utilities. Delivered-to-consumers prices for 1987 forward represent natural gas delivered and sold to residential, commercial, industrial, and electric power consumers. They do not include the price of natural gas delivered to industrial and commercial consumers on behalf of third parties. Volumes of natural gas delivered on behalf of third parties are included in the consumption data shown in Table 4.4.

Additional information is available in the EIA *Natural Gas Monthly*, Appendix C.

Table 9.1 Sources

Domestic First Purchase Price

1973–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*, “Crude Petroleum and Petroleum Products” chapter.

1977: Federal Energy Administration (FEA), based on Form FEA-P124, “Domestic Crude Oil Purchaser’s Monthly Report.”

1978 forward: Energy Information Administration (EIA), *Petroleum Marketing Monthly*, July 2003, Table 1.

F.O.B. and Landed Cost of Imports

December 1973–September 1977: Federal Energy Administration, Form FEA-F701-M-0, “Transfer Pricing Report.”

October–December 1977: EIA, Form FEA-F701-M-0, “Transfer Pricing Report.”

1978 forward: EIA, *Petroleum Marketing Monthly*, July 2003, Table 1.

Refiner Acquisition Cost

1973: EIA estimates. The domestic price was derived by adding estimated transportation costs to the reported domestic first purchase price. The imported price was derived by adding an estimated ocean transport cost to the average “Free Alongside Ship” value published by the U.S. Bureau of the Census.

1974–1976: DOI, BOM, *Minerals Yearbook*, “Crude Petroleum and Petroleum Products” chapter.

1977: January–September, FEA, based on Form FEA-P110-M-1, “Refiners’ Monthly Cost Allocation Report.”

October–December, EIA, based on Form FEA-P110-M-1, “Refiners’ Monthly Cost Allocation Report.”

1978 forward: EIA, *Petroleum Marketing Monthly*, July 2003, Table 1.

Table 9.2 Sources

October 1973–September 1977: Federal Energy Administration, Form FEA-F701-M-0, “Transfer Pricing Report.”

October 1977–December 1977: Energy Information Administration (EIA), Form FEA-F701-M-0, “Transfer Pricing Report.”

1978 forward: EIA, *Petroleum Marketing Monthly*, July 2003, Table 24.

Table 9.10 Sources

1973–July 1977: Federal Power Commission, Form FPC-423, “Monthly Report on Cost and Quality of Fuels for Electric Utility Plants.”

June 1977–December 1977: Federal Energy Regulatory Commission, Form FERC-423, “Monthly Report on Cost and Quality of Fuels for Electric Utility Plants.”

1978 and 1979: Energy Information Administration (EIA), Form FERC-423, "Monthly Report on Cost and Quality of Fuels for Electric Utility Plants."

1980–1989: EIA, *Electric Power Monthly*, April issues.

1990–2001: EIA, *Electric Power Monthly*, March 2003, Table 26.

2002 forward: Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report on Cost and Quality of Fuels for Electric Utility Plants," and EIA, Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report."

Table 9.11 Sources

Wellhead Price:

1973–1996: Energy Information Administration (EIA), *Natural Gas Annual 2000*, Table 96. 1997 forward: EIA, *Natural Gas Monthly*, May 2003, Table 4.

City Gate Price:

1984–1987: EIA, *Natural Gas Monthly*, March 1990, Table 4; 1988–1992: EIA, *Natural Gas Monthly*, March 1995, Table 4; 1993–1996: EIA, *Natural Gas Monthly*, December 1999, Table 4. 1997 forward: EIA, *Natural Gas Monthly*, May 2003, Table 4.

Residential, Commercial, and Industrial Sector Prices:

1973–1996: EIA, *Natural Gas Annual 2001*, Table 96. 1997 forward: EIA, *Natural Gas Monthly*, May 2003, Table 4.

Percentage of Residential, Commercial, and Industrial Sectors, Annual

Calculated from EIA, *Natural Gas Annual, Volume 1*, report series, Table 1, "Summary Statistics for Natural Gas in the United States," as total amount of natural gas delivered to the sector's consumers minus the amount delivered for the account of others (to derive the amount on system) divided by the total amount delivered to the sector.

Percentage of Commercial, and Industrial Sectors, Monthly

EIA, table titled, "Percentage of Total Deliveries

Represented by Onsystem Sales, by State," in the *Natural Gas Monthly* issues as follows:

| | |
|-----------------------------|-----------|
| April 1988–March 1989 | Table C-1 |
| April 1989–December 1991 | Table 33 |
| January 1992–February 1993 | Table 32 |
| March 1993–October 1995 | Table 28 |
| November 1995–December 1997 | Table 24 |
| January 1998–Present | Table 25 |

Electric Power Sector Price:

1973–1996: EIA, *Natural Gas Annual 2001*, Table 96. 1997–2001: EIA, *Natural Gas Monthly*, March 2003, Table 4. 2002 and 2003: Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report on Cost and Quality of Fuels for Electric Utility Plants," and EIA, Form EIA-423 "Monthly Cost and Quality of Fuels for Electric Plants Report."

Percentage of Electric Power Sector:

1973–2001: Calculated by EIA as the quantity of natural gas receipts reported on FERC Form-423, "Monthly Report on Cost and Quantity of Fuels for Electric Utility Plants" (and predecessor forms) divided by the quantity of natural gas consumed in the electric power sector, as shown on *Monthly Energy Review* Table 7.3b. Natural gas receipts, 1973–1975: Federal Power Commission, "Annual Summary of Cost and Quality of Steam-Electric Plant Fuels," 1973 edition (page ii), 1974 edition (page ii), and 1975 edition (Table 3); 1976–1981: EIA, *Electric Power Annual*, November 1982, Table 68; 1982–1985: EIA, *Electric Power Annual 1986*, September 1987, Table 16; 1986–1995: EIA, *Electric Power Monthly*, December 1986, Table 26; 1996–2000: EIA, *Electric Power Monthly*, March 2002, Table 26; and 2001: EIA, *Electric Power Monthly*, March 2003, Table 26. 2002 and 2003: Calculated by EIA as the quantity of natural gas receipts reported on FERC Form-423, "Monthly Report on Cost and Quantity of Fuels for Electric Utility Plants" (and published in EIA, *Electric Power Monthly*, March 2003, Table 26), and Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report," divided by the quantity of natural gas consumed in the electric power sector, as shown on *Monthly Energy Review* Table 7.3b.

Section 10. Renewable Energy

Sources. The Nation consumed 5.9 quadrillion Btu of renewable energy in 2002, accounting for 6 percent¹ of total energy consumption during the year. At 2.7 quadrillion Btu, conventional hydroelectric power was the largest component of the renewable energy total, measuring 45 percent of the total. Wood was the next largest component at 2.0 quadrillion Btu and 34 percent of the total. Waste, the third largest component of the renewable energy total, contributed 0.6 quadrillion Btu in 2002, a 9-percent share of the total.

Electric Power Sector. In 2002, the electric power sector consumed 3.5 quadrillion Btu of renewable energy resources, 1.1 quadrillion Btu more than all of the end-use sectors combined and a share of 59 percent of the total. Conventional hydroelectric power recorded 2.6 quadrillion Btu in 2002, for 75 percent of the electric power sector total. Waste, at 0.3 quadrillion Btu, was the second largest

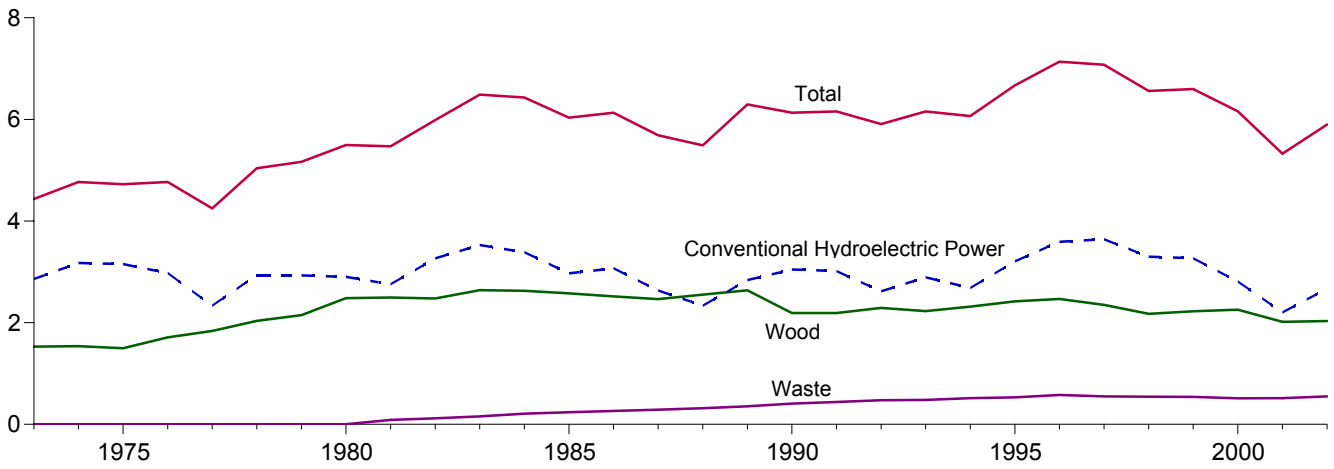
source consumed for electricity generation, followed by geothermal and wood.

End-Use Sectors. Of the end-use sectors, the industrial sector was the largest consumer of renewable energy in 2002. Industrial facilities used 1.7 quadrillion Btu of renewable energy in 2002, 87 percent in the form of wood. The residential sector was the next largest end-use sector in the use of renewable energy, consuming 0.4 quadrillion Btu--84 percent in the form of wood, 14 percent solar, and 2 geothermal. The transportation sector consumed renewable energy in the form of alcohol fuels used in the blending of motor gasoline; in 2002, alcohol fuel use was 0.2 quadrillion Btu. The commercial sector used 0.1 quadrillion Btu in 2002, 48 percent of it as waste and 42 percent as wood.

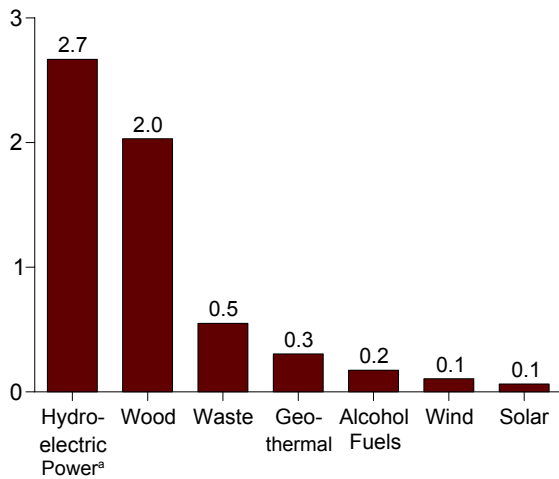
¹A small amount of alcohol fuel (ethanol blended into motor gasoline) is both fossil fuel (as petroleum) and renewable energy and is counted in both those subtotals but counted only once in total energy consumption.

Figure 10.1 Renewable Energy Consumption
(Quadrillion Btu)

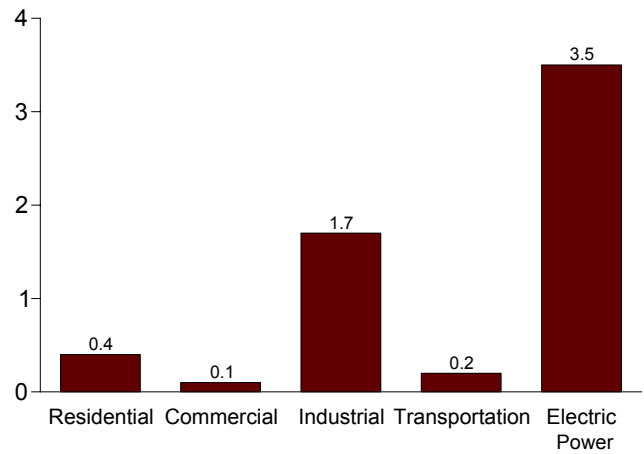
Total and Major Sources, 1973-2002



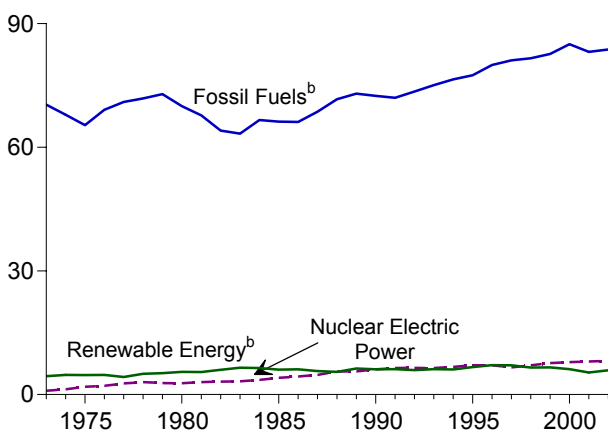
By Source, 2002



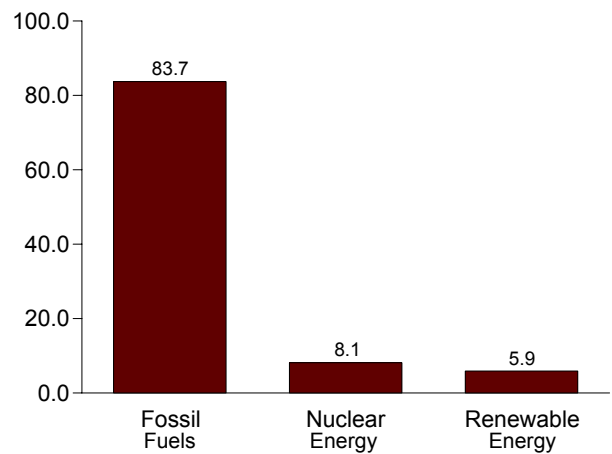
By Sector, 2002



Compared With Other Resources, 1973-2002



Compared With Other Resources, 2002



^aConventional hydroelectric power.

^bA small amount of alcohol (ethanol blended into motor gasoline) is both fossil fuel (as petroleum) and renewable energy and is counted in both

those subtotals but counted only once in total energy consumption.

Sources: Tables 1.3 and 10.1-10.2c

Web Page: <http://www.eia.doe.gov/emeu/mer/renew.html>.

Table 10.1 Renewable Energy Consumption by Source
(Trillion Btu)

| | Conventional Hydroelectric Power ^a | Wood ^b | Waste ^c | Alcohol Fuels ^d | Geothermal ^e | Solar ^f | Wind ^g | Total |
|---------------------------------|---|-------------------|--------------------|----------------------------|-------------------------|--------------------|-------------------|------------------|
| 1973 Total | 2,861 | 1,527 | 2 | NA | 43 | NA | NA | 4,433 |
| 1974 Total | 3,177 | 1,538 | 2 | NA | 53 | NA | NA | 4,769 |
| 1975 Total | 3,155 | 1,497 | 2 | NA | 70 | NA | NA | 4,723 |
| 1976 Total | 2,976 | 1,711 | 2 | NA | 78 | NA | NA | 4,768 |
| 1977 Total | 2,333 | 1,837 | 2 | NA | 77 | NA | NA | 4,249 |
| 1978 Total | 2,937 | 2,036 | 1 | NA | 64 | NA | NA | 5,039 |
| 1979 Total | 2,931 | 2,150 | 2 | NA | 84 | NA | NA | 5,166 |
| 1980 Total | 2,900 | 2,483 | 2 | NA | 110 | NA | NA | 5,494 |
| 1981 Total | 2,758 | 2,495 | 88 | 7 | 123 | NA | NA | 5,471 |
| 1982 Total | 3,266 | 2,477 | 119 | 19 | 105 | NA | NA | 5,985 |
| 1983 Total | 3,527 | 2,639 | 157 | 35 | 129 | NA | (s) | 6,488 |
| 1984 Total | 3,386 | 2,629 | 208 | 43 | 165 | (s) | (s) | 6,431 |
| 1985 Total | 2,970 | 2,576 | 236 | 52 | 198 | (s) | (s) | 6,033 |
| 1986 Total | 3,071 | 2,518 | 263 | 60 | 219 | (s) | (s) | 6,132 |
| 1987 Total | 2,635 | 2,465 | 289 | 69 | 229 | (s) | (s) | 5,687 |
| 1988 Total | 2,334 | 2,552 | 315 | 70 | 217 | (s) | (s) | 5,489 |
| 1989 Total | 2,837 | 2,637 | 354 | 71 | 317 | 55 | 22 | 6,294 |
| 1990 Total | 3,046 | 2,191 | 408 | 63 | 336 | 60 | 29 | 6,133 |
| 1991 Total | 3,016 | 2,190 | 440 | 73 | 346 | 63 | 31 | 6,158 |
| 1992 Total | 2,617 | 2,290 | 473 | 83 | 349 | 64 | 30 | 5,907 |
| 1993 Total | 2,892 | 2,227 | 479 | 97 | 364 | 66 | 31 | 6,156 |
| 1994 Total | 2,683 | 2,315 | 515 | 109 | 338 | 69 | 36 | 6,065 |
| 1995 Total | 3,205 | 2,420 | 531 | 117 | 294 | 70 | 33 | 6,669 |
| 1996 Total | 3,590 | 2,467 | 577 | 84 | 316 | 71 | 33 | 7,137 |
| 1997 Total | 3,640 | 2,350 | 551 | 106 | 325 | 70 | 34 | 7,075 |
| 1998 Total | 3,297 | 2,175 | 542 | 117 | 328 | 70 | 31 | 6,561 |
| 1999 Total | 3,268 | 2,224 | 540 | 122 | 331 | 69 | 46 | 6,599 |
| 2000 Total | 2,811 | 2,257 | 511 | 139 | 317 | 66 | 57 | 6,158 |
| 2001 January | 191 | 177 | 43 | 15 | 28 | 5 | 4 | 463 |
| February | 177 | 157 | 38 | 12 | 24 | 5 | 4 | 418 |
| March | 208 | 169 | 43 | 12 | 27 | 5 | 5 | 470 |
| April | 183 | 165 | 43 | 11 | 25 | 5 | 7 | 438 |
| May | 195 | 162 | 42 | 11 | 24 | 6 | 6 | 447 |
| June | 210 | 165 | 43 | 12 | 25 | 6 | 7 | 467 |
| July | 183 | 170 | 45 | 11 | 27 | 6 | 6 | 449 |
| August | 192 | 174 | 44 | 10 | 26 | 6 | 6 | 459 |
| September | 155 | 165 | 42 | 12 | 26 | 6 | 5 | 410 |
| October | 155 | 175 | 43 | 16 | 26 | 5 | 6 | 426 |
| November | 156 | 167 | 43 | 13 | 26 | 5 | 5 | 415 |
| December | 196 | 171 | 45 | 13 | 27 | 5 | 6 | 463 |
| Total | 2,201 | 2,017 | 514 | 147 | 311 | 65 | 68 | 5,324 |
| 2002 January | 219 | 177 | 47 | 13 | 27 | 5 | 8 | 496 |
| February | 204 | 156 | 41 | 12 | 24 | 5 | 7 | 449 |
| March | 213 | 167 | 46 | 12 | 26 | 5 | 9 | 479 |
| April | 248 | 168 | 45 | 12 | 24 | 5 | 11 | 512 |
| May | 274 | 167 | 46 | 14 | 26 | 6 | 11 | 542 |
| June | 287 | 170 | 46 | 12 | 24 | 6 | 12 | 556 |
| July | 257 | 176 | 48 | 15 | 26 | 6 | 9 | 537 |
| August | 210 | 172 | 46 | 14 | 26 | 6 | 10 | 484 |
| September | 168 | 170 | 46 | 15 | 25 | 5 | 8 | 437 |
| October | 171 | 172 | 46 | 17 | 26 | 5 | 8 | 446 |
| November | 198 | 165 | 45 | 20 | 25 | 5 | 7 | 465 |
| December | 218 | 171 | 48 | 19 | 26 | 5 | 8 | 494 |
| Total | 2,668 | 2,031 | 550 | 174 | 304 | 64 | 106 | 5,897 |
| 2003 January | 199 | 165 | 44 | 17 | 26 | 5 | 6 | 462 |
| February | ^R 199 | ^R 153 | ^R 40 | 20 | 23 | 5 | ^R 7 | ^R 446 |
| March | ^R 253 | ^R 166 | ^R 44 | 17 | 29 | 5 | ^R 9 | ^R 524 |
| April | 254 | 173 | 44 | 20 | 30 | 5 | 10 | 536 |
| 4-Month Total | 905 | 657 | 173 | 73 | 109 | 20 | 31 | 1,968 |
| 2002 4-Month Total | 884 | 669 | 179 | 49 | 101 | 20 | 35 | 1,936 |
| 2001 4-Month Total | 759 | 668 | 167 | 50 | 104 | 21 | 21 | 1,789 |

^a Hydroelectricity generated by pumped storage is not included in renewable energy.

^b Wood, black liquor, and other wood waste.

^c Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

^d Ethanol blended into motor gasoline.

^e Geothermal electricity net generation, heat pump, and direct use energy.

^f Solar thermal and photovoltaic electricity net generation, and solar thermal

direct use energy.

^g Wind electricity net generation.

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/renew.html>.

Sources: Tables 10.2a, 10.2b, and 10.2c.

**Table 10.2a Estimated Renewable Energy Consumption:
Residential and Commercial Sectors**
(Trillion Btu)

| | Residential Sector | | | | Commercial Sector ^a | | | | |
|--------------------------|--------------------|-------------------------|--------------------|-------|--------------------------------|-------------------|--------------------|-------------------------|-------|
| | Wood ^b | Geothermal ^c | Solar ^d | Total | Hydropower ^e | Wood ^b | Waste ^f | Geothermal ^c | Total |
| 1973 Total | 354 | NA | NA | 354 | NA | 7 | NA | NA | 7 |
| 1974 Total | 371 | NA | NA | 371 | NA | 7 | NA | NA | 7 |
| 1975 Total | 425 | NA | NA | 425 | NA | 8 | NA | NA | 8 |
| 1976 Total | 482 | NA | NA | 482 | NA | 9 | NA | NA | 9 |
| 1977 Total | 542 | NA | NA | 542 | NA | 10 | NA | NA | 10 |
| 1978 Total | 622 | NA | NA | 622 | NA | 12 | NA | NA | 12 |
| 1979 Total | 728 | NA | NA | 728 | NA | 14 | NA | NA | 14 |
| 1980 Total | 859 | NA | NA | 859 | NA | 21 | NA | NA | 21 |
| 1981 Total | 869 | NA | NA | 869 | NA | 21 | NA | NA | 21 |
| 1982 Total | 937 | NA | NA | 937 | NA | 22 | NA | NA | 22 |
| 1983 Total | 925 | NA | NA | 925 | NA | 22 | NA | NA | 22 |
| 1984 Total | 923 | NA | NA | 923 | NA | 22 | NA | NA | 22 |
| 1985 Total | 899 | NA | NA | 899 | NA | 24 | NA | NA | 24 |
| 1986 Total | 876 | NA | NA | 876 | NA | 27 | NA | NA | 27 |
| 1987 Total | 852 | NA | NA | 852 | NA | 29 | NA | NA | 29 |
| 1988 Total | 885 | NA | NA | 885 | NA | 32 | NA | NA | 32 |
| 1989 Total | 918 | 5 | 53 | 976 | 1 | 36 | 22 | 3 | 61 |
| 1990 Total | 581 | 6 | 56 | 642 | 1 | 39 | 28 | 3 | 71 |
| 1991 Total | 613 | 6 | 58 | 677 | 1 | 41 | 26 | 3 | 72 |
| 1992 Total | 645 | 6 | 60 | 711 | 1 | 44 | 32 | 3 | 81 |
| 1993 Total | 548 | 7 | 62 | 616 | 1 | 46 | 33 | 3 | 84 |
| 1994 Total | 537 | 6 | 64 | 607 | 1 | 46 | 35 | 4 | 86 |
| 1995 Total | 596 | 7 | 65 | 667 | 1 | 46 | 40 | 5 | 92 |
| 1996 Total | 595 | 7 | 65 | 667 | 1 | 50 | 53 | 5 | 110 |
| 1997 Total | 433 | 8 | 65 | 506 | 1 | 49 | 58 | 6 | 113 |
| 1998 Total | 387 | 8 | 65 | 459 | 1 | 48 | 54 | 7 | 111 |
| 1999 Total | 414 | 9 | 64 | 486 | 1 | 52 | 54 | 7 | 114 |
| 2000 Total | 433 | 9 | 61 | 503 | 1 | 53 | 47 | 8 | 109 |
| 2001 January | 35 | 1 | 5 | 40 | (s) | 4 | 3 | 1 | 7 |
| February | 31 | 1 | 5 | 37 | (s) | 3 | 3 | 1 | 7 |
| March | 35 | 1 | 5 | 40 | (s) | 4 | 3 | 1 | 7 |
| April | 33 | 1 | 5 | 39 | (s) | 3 | 3 | 1 | 7 |
| May | 35 | 1 | 5 | 40 | (s) | 4 | 3 | 1 | 7 |
| June | 33 | 1 | 5 | 39 | (s) | 3 | 3 | 1 | 8 |
| July | 35 | 1 | 5 | 40 | (s) | 4 | 4 | 1 | 8 |
| August | 35 | 1 | 5 | 40 | (s) | 4 | 4 | 1 | 8 |
| September | 33 | 1 | 5 | 39 | (s) | 3 | 3 | 1 | 7 |
| October | 35 | 1 | 5 | 40 | (s) | 3 | 3 | 1 | 7 |
| November | 33 | 1 | 5 | 39 | (s) | 3 | 3 | 1 | 7 |
| December | 35 | 1 | 5 | 40 | (s) | 4 | 3 | 1 | 8 |
| Total | 407 | 9 | 60 | 476 | 1 | 41 | 39 | 8 | 89 |
| 2002 January | 30 | 1 | 5 | 36 | (s) | 4 | 4 | 1 | 8 |
| February | 27 | 1 | 4 | 32 | (s) | 3 | 3 | 1 | 7 |
| March | 30 | 1 | 5 | 36 | (s) | 4 | 4 | 1 | 8 |
| April | 29 | 1 | 5 | 34 | (s) | 3 | 4 | 1 | 8 |
| May | 30 | 1 | 5 | 36 | (s) | 3 | 4 | 1 | 8 |
| June | 29 | 1 | 5 | 34 | (s) | 3 | 4 | 1 | 8 |
| July | 30 | 1 | 5 | 36 | (s) | 3 | 4 | 1 | 8 |
| August | 30 | 1 | 5 | 36 | (s) | 3 | 4 | 1 | 8 |
| September | 29 | 1 | 5 | 34 | (s) | 3 | 4 | 1 | 8 |
| October | 30 | 1 | 5 | 36 | (s) | 3 | 4 | 1 | 9 |
| November | 29 | 1 | 5 | 34 | (s) | 3 | 4 | 1 | 8 |
| December | 30 | 1 | 5 | 36 | (s) | 4 | 4 | 1 | 8 |
| Total | 350 | 10 | 58 | 419 | 1 | 41 | 47 | 9 | 97 |
| 2003 January | 30 | 1 | 5 | 36 | (s) | 4 | 3 | 1 | 7 |
| February | 27 | 1 | 4 | 32 | (s) | 3 | 3 | 1 | 7 |
| March | 30 | 1 | 5 | 36 | (s) | R 4 | RF 4 | 1 | R 8 |
| April | 29 | 1 | 5 | 34 | (s) | 3 | F 4 | 1 | 8 |
| 4-Month Total | 115 | 3 | 19 | 138 | (s) | 14 | E 14 | 3 | 31 |
| 2002 4-Month Total | 115 | 3 | 19 | 138 | (s) | 14 | 15 | 3 | 32 |
| 2001 4-Month Total | 134 | 3 | 20 | 157 | (s) | 14 | 12 | 3 | 29 |

^a Commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See note at end of Section 7.

^b Wood, black liquor, and other wood waste.

^c Geothermal heat pump and direct use energy.

^d Solar thermal direct use energy and photovoltaic electricity generation. Small amounts of commercial sector use are included in the residential sector.

^e Conventional hydroelectric power.

^f Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

R=Revised. E=Estimate. F=Forecast. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/renew.html>.

Sources: See end of section.

**Table 10.2b Estimated Renewable Energy Consumption:
Industrial and Transportation Sectors**
(Trillion Btu)

| | Industrial Sector ^a | | | | | Transportation Sector |
|--------------------------|--------------------------------|-------------------|--------------------|-------------------------|------------------|----------------------------|
| | Hydropower ^b | Wood ^c | Waste ^d | Geothermal ^e | Total | Alcohol Fuels ^f |
| 1973 Total | 35 | 1,165 | NA | NA | 1,200 | NA |
| 1974 Total | 33 | 1,159 | NA | NA | 1,192 | NA |
| 1975 Total | 32 | 1,063 | NA | NA | 1,096 | NA |
| 1976 Total | 33 | 1,220 | NA | NA | 1,253 | NA |
| 1977 Total | 33 | 1,281 | NA | NA | 1,314 | NA |
| 1978 Total | 32 | 1,400 | NA | NA | 1,432 | NA |
| 1979 Total | 34 | 1,405 | NA | NA | 1,439 | NA |
| 1980 Total | 33 | 1,600 | NA | NA | 1,633 | NA |
| 1981 Total | 33 | 1,602 | 87 | NA | 1,722 | 7 |
| 1982 Total | 33 | 1,516 | 118 | NA | 1,667 | 19 |
| 1983 Total | 33 | 1,690 | 155 | NA | 1,879 | 35 |
| 1984 Total | 33 | 1,679 | 204 | NA | 1,916 | 43 |
| 1985 Total | 33 | 1,645 | 230 | NA | 1,908 | 52 |
| 1986 Total | 33 | 1,610 | 256 | NA | 1,899 | 60 |
| 1987 Total | 33 | 1,576 | 282 | NA | 1,891 | 69 |
| 1988 Total | 33 | 1,625 | 308 | NA | 1,965 | 70 |
| 1989 Total | 28 | 1,584 | 200 | 2 | 1,814 | 71 |
| 1990 Total | 31 | 1,442 | 192 | 2 | 1,667 | 63 |
| 1991 Total | 30 | 1,410 | 185 | 2 | 1,626 | 73 |
| 1992 Total | 31 | 1,461 | 179 | 2 | 1,672 | 83 |
| 1993 Total | 30 | 1,483 | 181 | 2 | 1,696 | 97 |
| 1994 Total | 62 | 1,580 | 199 | 3 | 1,844 | 109 |
| 1995 Total | 55 | 1,652 | 195 | 3 | 1,905 | 117 |
| 1996 Total | 61 | 1,683 | 224 | 3 | 1,971 | 84 |
| 1997 Total | 58 | 1,731 | 184 | 3 | 1,976 | 106 |
| 1998 Total | 55 | 1,603 | 180 | 3 | 1,841 | 117 |
| 1999 Total | 49 | 1,620 | 171 | 4 | 1,843 | 122 |
| 2000 Total | 42 | 1,636 | 145 | 4 | 1,828 | 139 |
| 2001 January | 2 | 127 | 14 | (s) | 144 | 15 |
| February | 2 | 113 | 11 | (s) | 127 | 12 |
| March | 3 | 121 | 13 | (s) | 137 | 12 |
| April | 3 | 119 | 13 | (s) | 135 | 11 |
| May | 3 | 114 | 12 | (s) | 130 | 11 |
| June | 3 | 116 | 12 | (s) | 131 | 12 |
| July | 2 | 121 | 12 | (s) | 136 | 11 |
| August | 3 | 125 | 12 | (s) | 140 | 10 |
| September | 2 | 117 | 12 | (s) | 132 | 12 |
| October | 2 | 127 | 13 | (s) | 142 | 16 |
| November | 2 | 120 | 14 | (s) | 136 | 13 |
| December | 3 | 122 | 14 | (s) | 139 | 13 |
| Total | 32 | 1,443 | 150 | 5 | 1,630 | 147 |
| 2002 January | 3 | 131 | 15 | (s) | 150 | 13 |
| February | 3 | 117 | 14 | (s) | 134 | 12 |
| March | 3 | 122 | 15 | (s) | 141 | 12 |
| April | 4 | 126 | 14 | (s) | 144 | 12 |
| May | 4 | 124 | 14 | (s) | 142 | 14 |
| June | 3 | 127 | 14 | (s) | 144 | 12 |
| July | 3 | 130 | 14 | (s) | 148 | 15 |
| August | 2 | 126 | 14 | (s) | 143 | 14 |
| September | 2 | 127 | 14 | (s) | 143 | 15 |
| October | 3 | 127 | 15 | (s) | 146 | 17 |
| November | 5 | 121 | 15 | (s) | 141 | 20 |
| December | 6 | 125 | 15 | (s) | 146 | 19 |
| Total | 41 | 1,505 | 172 | 5 | 1,722 | 174 |
| 2003 January | 4 | 116 | 14 | (s) | 135 | 17 |
| February | ^R 4 | ^R 110 | ^R 13 | (s) | ^R 127 | 20 |
| March | 4 | ^R 122 | 15 | (s) | ^R 141 | 17 |
| April | 4 | 130 | 14 | (s) | 149 | 20 |
| 4-Month Total | 16 | 479 | 56 | 2 | 552 | 73 |
| 2002 4-Month Total | 13 | 496 | 58 | 2 | 569 | 49 |
| 2001 4-Month Total | 11 | 480 | 50 | 2 | 543 | 50 |

^a Industrial sector fuel use, including that at industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See note at end of Section 7.

^b Conventional hydroelectric power.

^c Wood, black liquor, and other wood waste.

^d Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

^e Geothermal heat pump and direct use energy.

^f Ethanol blended into motor gasoline.

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/renew.html>.

Sources: See end of section.

Table 10.2c Renewable Energy Consumption: Electric Power Sector and Total
(Trillion Btu)

| | Electric Power Sector ^{a,b} | | | | | | | Renewable Energy Consumption Total |
|--------------------|--------------------------------------|-------------------|--------------------|-------------------------|--------------------|-------------------|--------------------|------------------------------------|
| | Hydropower ^c | Wood ^d | Waste ^e | Geothermal ^f | Solar ^g | Wind ^h | Total | |
| 1973 Total | 2,827 | 1 | 2 | 43 | NA | NA | 2,873 | 4,433 |
| 1974 Total | 3,143 | 1 | 2 | 53 | NA | NA | 3,199 | 4,769 |
| 1975 Total | 3,122 | (s) | 2 | 70 | NA | NA | 3,194 | 4,723 |
| 1976 Total | 2,943 | 1 | 2 | 78 | NA | NA | 3,024 | 4,768 |
| 1977 Total | 2,301 | 3 | 2 | 77 | NA | NA | 2,383 | 4,249 |
| 1978 Total | 2,905 | 2 | 1 | 64 | NA | NA | 2,973 | 5,039 |
| 1979 Total | 2,897 | 3 | 2 | 84 | NA | NA | 2,986 | 5,166 |
| 1980 Total | 2,867 | 3 | 2 | 110 | NA | NA | 2,982 | 5,494 |
| 1981 Total | 2,725 | 3 | 1 | 123 | NA | NA | 2,852 | 5,471 |
| 1982 Total | 3,233 | 2 | 1 | 105 | NA | NA | 3,341 | 5,985 |
| 1983 Total | 3,494 | 2 | 2 | 129 | NA | (s) | 3,627 | 6,488 |
| 1984 Total | 3,353 | 5 | 4 | 165 | (s) | (s) | 3,527 | 6,431 |
| 1985 Total | 2,937 | 8 | 7 | 198 | (s) | (s) | 3,150 | 6,033 |
| 1986 Total | 3,038 | 5 | 7 | 219 | (s) | (s) | 3,270 | 6,132 |
| 1987 Total | 2,602 | 8 | 7 | 229 | (s) | (s) | 2,846 | 5,687 |
| 1988 Total | 2,302 | 10 | 8 | 217 | (s) | (s) | 2,536 | 5,489 |
| 1989 Total | ^b 2,808 | ^b 100 | ^b 132 | ^b 308 | ^b 3 | ^b 22 | ^b 3,372 | 6,294 |
| 1990 Total | 3,014 | 129 | 188 | 326 | 4 | 29 | 3,689 | 6,133 |
| 1991 Total | 2,985 | 126 | 229 | 335 | 5 | 31 | 3,710 | 6,158 |
| 1992 Total | 2,586 | 140 | 262 | 338 | 4 | 30 | 3,360 | 5,907 |
| 1993 Total | 2,861 | 150 | 265 | 351 | 5 | 31 | 3,662 | 6,156 |
| 1994 Total | 2,620 | 152 | 282 | 325 | 5 | 36 | 3,420 | 6,065 |
| 1995 Total | 3,149 | 125 | 296 | 280 | 5 | 33 | 3,889 | 6,669 |
| 1996 Total | 3,528 | 138 | 300 | 300 | 5 | 33 | 4,305 | 7,137 |
| 1997 Total | 3,581 | 137 | 309 | 309 | 5 | 34 | 4,375 | 7,075 |
| 1998 Total | 3,241 | 137 | 308 | 311 | 5 | 31 | 4,032 | 6,561 |
| 1999 Total | 3,218 | 138 | 315 | 312 | 5 | 46 | 4,034 | 6,599 |
| 2000 Total | 2,768 | 134 | 318 | 296 | 5 | 57 | 3,579 | 6,158 |
| 2001 January | 189 | 12 | 27 | 26 | (s) | 4 | 257 | 463 |
| February | 175 | 9 | 24 | 23 | (s) | 4 | 235 | 418 |
| March | 204 | 10 | 27 | 25 | (s) | 5 | 272 | 470 |
| April | 180 | 9 | 27 | 23 | (s) | 7 | 246 | 438 |
| May | 192 | 10 | 27 | 23 | 1 | 6 | 259 | 447 |
| June | 207 | 12 | 28 | 23 | 1 | 7 | 277 | 467 |
| July | 181 | 11 | 29 | 25 | 1 | 6 | 253 | 449 |
| August | 189 | 11 | 29 | 25 | 1 | 6 | 260 | 459 |
| September | 152 | 10 | 27 | 24 | 1 | 5 | 219 | 410 |
| October | 152 | 10 | 27 | 24 | (s) | 6 | 220 | 426 |
| November | 154 | 10 | 26 | 24 | (s) | 5 | 220 | 415 |
| December | 194 | 11 | 27 | 25 | (s) | 6 | 263 | 463 |
| Total | 2,169 | 126 | 324 | 289 | 6 | 68 | 2,982 | 5,324 |
| 2002 January | 216 | 12 | 28 | 25 | (s) | 8 | 290 | 496 |
| February | 201 | 10 | 24 | 22 | (s) | 7 | 264 | 449 |
| March | 210 | 12 | 27 | 22 | (s) | 9 | 282 | 479 |
| April | 244 | 11 | 27 | 22 | (s) | 11 | 314 | 512 |
| May | 270 | 9 | 28 | 24 | 1 | 11 | 343 | 542 |
| June | 284 | 11 | 28 | 22 | 1 | 12 | 358 | 556 |
| July | 254 | 12 | 30 | 24 | 1 | 9 | 331 | 537 |
| August | 208 | 12 | 29 | 24 | 1 | 10 | 283 | 484 |
| September | 166 | 11 | 28 | 23 | 1 | 8 | 237 | 437 |
| October | 168 | 11 | 27 | 24 | (s) | 8 | 238 | 446 |
| November | 194 | 11 | 26 | 23 | (s) | 7 | 261 | 465 |
| December | 212 | 12 | 29 | 24 | (s) | 8 | 285 | 494 |
| Total | 2,626 | 135 | 331 | 281 | 6 | 106 | 3,485 | 5,897 |
| 2003 January | 195 | 15 | 27 | 24 | (s) | 6 | 267 | 462 |
| February | ^R 195 | ^R 12 | ^R 24 | 22 | (s) | ^R 7 | ^R 260 | ^R 446 |
| March | ^{RF} 249 | ^F 11 | ^{RF} 26 | ^F 27 | ^F (s) | ^{RF} 9 | ^{RF} 323 | ^R 524 |
| April | ^F 250 | ^F 11 | ^F 26 | ^F 28 | ^F (s) | ^F 10 | ^F 325 | 536 |
| 4-Month Total | ^E 889 | ^E 49 | ^E 103 | ^E 101 | ^E 1 | ^E 31 | ^E 1,174 | 1,968 |
| 2002 4-Month Total | 870 | 45 | 106 | 93 | 1 | 35 | 1,150 | 1,936 |
| 2001 4-Month Total | 748 | 41 | 104 | 96 | 1 | 21 | 1,011 | 1,789 |

^a The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

^b Through 1988, data are for consumption at electric utilities only. Beginning in 1989, data also include consumption at independent power producers.

^c Conventional hydroelectric power.

^d Wood, black liquor, and other wood waste.

^e Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

^f Geothermal electricity net generation.

^g Solar thermal and photovoltaic electricity net generation.

^h Wind electricity net generation.

R=Revised. E=Estimate. NA=Not available. F=Forecast. (s)=Less than 0.5 trillion Btu.

Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/renew.html>.

Sources: **Wood and Waste** • 1973-1988: Table 7.3d. • 1989 forward: Table 7.3b. **Hydropower, Geothermal, Solar, and Wind**: Tables 7.2b and A6. **Electric Power Sector Total**: Calculated as the sum of the individual fuels. **Renewable Energy Consumption Total**: Table 10.1. **Forecast values**: Energy Information Administration, Short-Term Integrated Forecasting System. See Note 10 at end of Section 4 for more information about forecast values.

Renewable Energy

Tables 10.2a and 10.2b Sources

Wood, Residential

1973–1979: Energy Information Administration (EIA), *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.

1980–1983: EIA, *Estimates of U.S. Wood Energy Consumption 1980–1983*, Table ES1.

1984: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 1.

1985 and 1986: Values interpolated.

1987: EIA, *Estimates of Biofuels Consumption in the United States During 1987*, Table 2.

1988: Value interpolated.

1989: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 1.

1990–2000: EIA, *Renewable Energy Annual*, annual reports, Table 6. Includes revisions published in the EIA, *Annual Energy Review 2000*, Table 10.2a.

2001 forward: EIA, Office of Coal, Nuclear, Electric and Alternate Fuels (CNEAF), estimates.

Wood, Commercial

1973–1979: EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.

1980–1983: EIA, *Estimates of U.S. Wood Energy Consumption 1980–1983*, Table ES1.

1984–EIA, CNEAF, estimate.

1985–1992: Values interpolated.

1993–2000: EIA, *Renewable Energy Annual*, annual reports, Table 6. Includes revisions published in the EIA, *Annual Energy Review 2000*, Table 10.2a.

2001 forward: EIA, CNEAF, estimates.

Wood, Industrial

1973–1979: EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.

1980–1983: EIA, *Estimates of U.S. Wood Energy Consumption 1980–1983*, Table ES1.

1984: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 1.

1985 and 1986: Values interpolated.

1987: EIA, *Estimates of Biofuels Consumption in the United States During 1987*, Table 2.

1988: Value interpolated.

1989: American Paper Institute, *Fact Sheet on 1990 Energy Use in the U.S. Pulp and Paper Industry* (July 1991), total pulp and paper industry wood consumption, minus nonutility power producers' use of wood to produce electricity (see Table 10.3b).

1990–2000: EIA, *Renewable Energy Annual 2001* (November 2002), Table B1, and CNEAF staff for subsequent data updates.

2001 forward: EIA, CNEAF, estimates.

Waste, Commercial

Table 7.3c

Waste, Industrial

1981: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8, total waste consumption, minus electric utilities' use of waste to produce electricity (see Table 10.3a).

1982 and 1983: EIA, CNEAF, estimates for total waste consumption, minus electric utilities' use of waste to produce electricity (see Table 10.3a).

1984: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8, total waste consumption, minus electric utilities' use of waste to produce electricity (see Table 10.3a).

1985 and 1986: Values interpolated.

1987: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8, total waste consumption, minus electric utilities' use of waste to produce electricity (see Table 10.3a).

1988: Value interpolated.

1989: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8, total waste consumption, minus electric utilities' and nonutility power producers' use of waste to produce electricity (see Tables 10.3a and 10.3b).

1990–2000: EIA, *Renewable Energy Annual 2001* (November 2002), Table B1, and CNEAF staff for subsequent data updates.

2001 forward: EIA, CNEAF, estimates.

Hydroelectric, Commercial

Hydroelectric total (all sectors) from Table 7.2a minus electric power sector hydroelectric from Table 7.2b minus industrial sector hydroelectric from Table 7.2c, times the fossil-fueled steam-electric plants heat rate from Table A6.

Hydroelectric, Industrial

1973–1978: Federal Power Commission (FPC), Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and FPC, Form FPC-12C, "Industrial Electric Generating Capacity," for all other plants, and Table A6.

1979–FPC, Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and EIA estimates for all other plants; and Table A6.

1980–1988: Estimated by EIA as the average generation over the 6-year period of 1974–1979, and Table A6.

1989 forward: Tables 7.2c and A6.

Alcohol Fuels

1981: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 10.

1982 and 1983: EIA, CNEAF, estimates.

1984: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 10.

1985 and 1986: Values interpolated.

1987: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 10.

1988: Value interpolated.

1989: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 10.

1990: EIA, *Estimates of U.S. Biomass Energy Consumption 1992*, Table D1.
1991: Value interpolated.
1992: EIA, *Estimates of U.S. Biomass Energy Consumption 1992*, Table D1.
1993 forward: EIA, *Petroleum Supply Monthly (PSM)*, Tables 2 and 28, and *Monthly Energy Review (MER)* Table A1. Ten percent of the “Field Production” of “Oxygenated Finished Motor Gasoline” from *PSM* Table 2 is added to the “Refinery Input of Fuel Ethanol” from *PSM* Table 28. The sum is multiplied by the conversion factor of 3.539 million Btu per barrel as shown in the *MER* Table A1.

Geothermal

1989 forward: John Lund, Oregon Institute of Technology Geoheat Center, unpublished data.

Solar

1989–1991: EIA, CNEAF, estimates.
1992–2000: EIA *Renewable Energy Annual*, annual reports, Table 2. Includes revisions published in the EIA, *Annual Energy Review 2000*, Table 10.2a and 10.2b.
2001 forward: EIA, CNEAF, estimates.

Section 11. International Petroleum

Crude Oil Production. World crude oil production during April 2003 was 69 million barrels per day, down 1.0 million barrels per day from the level in the previous month.

Organization of Petroleum Exporting Countries (OPEC) production during April 2003 averaged 28 million barrels per day, down by 0.9 million barrels per day from the level during the previous month. During April 2003, production increased in Venezuela by 165 thousand barrels per day; Saudi Arabia by 140 thousand barrels per day; Kuwait by 100 thousand barrels per day; Algeria by 90 thousand by per day; and Libya by 25 thousand barrels per day. Production decreased in Iraq by 1.3 million barrels per day; Nigeria by 65 thousand barrels per day; Indonesia by 20 thousand barrels per day; and Iran by 5 thousand barrels per day. Production remained unchanged in the United Arab Emirates and Qatar.

Among the non-OPEC nations, production during April 2003 increased in China by 60 thousand barrels per day and Russia by 54 thousand barrels per day. Production decreased in Norway by 85 thousand barrels per day; the United States by 77 thousand barrels per day; Canada by 55 thousand barrels per day; the United Kingdom by 45

thousand barrels per day; and Mexico by 35 thousand barrels per day. Production remained unchanged in Egypt.

Petroleum Consumption. In March 2003, consumption in all Organization for Economic Cooperation and Development (OECD) countries was 48.1 million barrels per day, 2 percent¹ higher than the March 2002 rate. Comparing March rates in 2003 and 2002, consumption was higher in 2003 in Japan (+12 percent); Canada (+6 percent); and the United States (less than +1 percent). The March 2003 consumption rate was lower in Germany (-4 percent); South Korea (-3 percent); Italy and the United Kingdom (each -2 percent); and France (-1 percent), compared with the rate 1 year earlier.

Petroleum Stocks. For all OECD countries, petroleum stocks at the end of March 2003 totaled 3.7 billion barrels, 4 percent¹ lower than the ending stock level in March 2002. Stock levels were higher in March 2003 in France (+7 percent) and Italy (+3 percent). Stock levels were lower in South Korea (-16 percent); Germany and the United States (both -6 percent); Canada (-3 percent); Japan (-2 percent); and the United Kingdom (less than -1 percent), compared with levels 1 year earlier.

¹Percentage changes are based on unrounded data.

Table 11.1a World Crude Oil Production: OPEC Members
(Thousand Barrels per Day)

| | Algeria | Indonesia | Iran | Iraq | Kuwait ^a | Libya | Nigeria | Qatar | Saudi Arabia ^a | United Arab Emirates | Venezuela | OPEC ^b |
|--------------------|---------|-----------|-------|-------|---------------------|-------|---------|-------|---------------------------|----------------------|-----------|-------------------|
| 1973 Average | 1,097 | 1,339 | 5,861 | 2,018 | 3,020 | 2,175 | 2,054 | 570 | 7,596 | 1,533 | 3,366 | 30,629 |
| 1974 Average | 1,009 | 1,375 | 6,022 | 1,971 | 2,546 | 1,521 | 2,255 | 518 | 8,480 | 1,679 | 2,976 | 30,351 |
| 1975 Average | 983 | 1,307 | 5,350 | 2,262 | 2,084 | 1,480 | 1,783 | 438 | 7,075 | 1,664 | 2,346 | 26,771 |
| 1976 Average | 1,075 | 1,504 | 5,883 | 2,415 | 2,145 | 1,933 | 2,067 | 497 | 8,577 | 1,936 | 2,294 | 30,327 |
| 1977 Average | 1,152 | 1,686 | 5,663 | 2,348 | 1,969 | 2,063 | 2,085 | 445 | 9,245 | 1,999 | 2,238 | 30,893 |
| 1978 Average | 1,231 | 1,635 | 5,242 | 2,563 | 2,131 | 1,983 | 1,897 | 487 | 8,301 | 1,831 | 2,165 | 29,464 |
| 1979 Average | 1,224 | 1,591 | 3,168 | 3,477 | 2,500 | 2,092 | 2,302 | 508 | 9,532 | 1,831 | 2,356 | 30,581 |
| 1980 Average | 1,106 | 1,577 | 1,662 | 2,514 | 1,656 | 1,787 | 2,055 | 472 | 9,900 | 1,709 | 2,168 | 26,606 |
| 1981 Average | 1,002 | 1,605 | 1,380 | 1,000 | 1,125 | 1,140 | 1,433 | 405 | 9,815 | 1,474 | 2,102 | 22,481 |
| 1982 Average | 987 | 1,339 | 2,214 | 1,012 | 823 | 1,150 | 1,295 | 330 | 6,483 | 1,250 | 1,895 | 18,778 |
| 1983 Average | 968 | 1,343 | 2,440 | 1,005 | 1,064 | 1,105 | 1,241 | 295 | 5,086 | 1,149 | 1,801 | 17,497 |
| 1984 Average | 1,014 | 1,412 | 2,174 | 1,209 | 1,157 | 1,087 | 1,388 | 394 | 4,663 | 1,146 | 1,798 | 17,442 |
| 1985 Average | 1,037 | 1,325 | 2,250 | 1,433 | 1,023 | 1,059 | 1,495 | 301 | 3,388 | 1,193 | 1,677 | 16,181 |
| 1986 Average | 945 | 1,390 | 2,035 | 1,690 | 1,419 | 1,034 | 1,467 | 308 | 4,870 | 1,330 | 1,787 | 18,275 |
| 1987 Average | 1,048 | 1,343 | 2,298 | 2,079 | 1,585 | 972 | 1,341 | 293 | 4,265 | 1,541 | 1,752 | 18,517 |
| 1988 Average | 1,040 | 1,342 | 2,240 | 2,685 | 1,492 | 1,175 | 1,450 | 346 | 5,086 | 1,565 | 1,903 | 20,324 |
| 1989 Average | 1,095 | 1,409 | 2,810 | 2,897 | 1,783 | 1,150 | 1,716 | 380 | 5,064 | 1,860 | 1,907 | 22,071 |
| 1990 Average | 1,175 | 1,462 | 3,088 | 2,040 | 1,175 | 1,375 | 1,810 | 406 | 6,410 | 2,117 | 2,137 | 23,195 |
| 1991 Average | 1,230 | 1,592 | 3,312 | 305 | 190 | 1,483 | 1,892 | 395 | 8,115 | 2,386 | 2,375 | 23,275 |
| 1992 Average | 1,214 | 1,504 | 3,429 | 425 | 1,058 | 1,433 | 1,943 | 423 | 8,332 | 2,266 | 2,371 | 24,398 |
| 1993 Average | 1,162 | 1,511 | 3,540 | 512 | 1,852 | 1,361 | 1,960 | 413 | 8,198 | 2,159 | 2,450 | 25,119 |
| 1994 Average | 1,180 | 1,510 | 3,618 | 553 | 2,025 | 1,378 | 1,931 | 415 | 8,120 | 2,193 | 2,588 | 25,510 |
| 1995 Average | 1,202 | 1,503 | 3,643 | 560 | 2,057 | 1,390 | 1,993 | 442 | 8,231 | 2,233 | 2,750 | 26,004 |
| 1996 Average | 1,242 | 1,547 | 3,686 | 579 | 2,062 | 1,401 | 2,001 | 510 | 8,218 | 2,278 | 2,938 | 26,461 |
| 1997 Average | 1,277 | 1,520 | 3,664 | 1,155 | 2,007 | 1,446 | 2,132 | 550 | 8,362 | 2,316 | 3,280 | 27,710 |
| 1998 Average | 1,246 | 1,518 | 3,634 | 2,150 | 2,085 | 1,390 | 2,153 | 696 | 8,389 | 2,345 | 3,167 | 28,774 |
| 1999 Average | 1,202 | 1,472 | 3,557 | 2,508 | 1,898 | 1,319 | 2,130 | 665 | 7,833 | 2,169 | 2,826 | 27,579 |
| 2000 Average | 1,254 | 1,423 | 3,696 | 2,571 | 2,079 | 1,410 | 2,165 | 737 | 8,404 | 2,368 | 3,155 | 29,262 |
| 2001 January | 1,295 | 1,435 | 3,935 | 1,735 | 2,169 | 1,450 | 2,285 | 775 | 8,700 | 2,460 | 3,100 | 29,339 |
| February | 1,265 | 1,440 | 3,785 | 2,195 | 2,100 | 1,400 | 2,255 | 735 | 8,320 | 2,400 | 3,030 | 28,925 |
| March | 1,265 | 1,395 | 3,835 | 2,855 | 2,070 | 1,390 | 2,285 | 735 | 8,300 | 2,440 | 3,000 | 29,570 |
| April | 1,250 | 1,352 | 3,785 | 2,930 | 1,982 | 1,380 | 2,210 | 715 | 7,950 | 2,350 | 2,920 | 28,824 |
| May | 1,265 | 1,362 | 3,685 | 2,905 | 1,965 | 1,360 | 2,210 | 725 | 8,000 | 2,297 | 2,890 | 28,594 |
| June | 1,285 | 1,382 | 3,785 | 1,105 | 2,001 | 1,370 | 2,205 | 735 | 8,050 | 2,280 | 2,900 | 27,098 |
| July | 1,295 | 1,370 | 3,875 | 2,145 | 1,992 | 1,380 | 2,140 | 735 | 8,250 | 2,260 | 2,890 | 28,332 |
| August | 1,295 | 1,360 | 3,785 | 2,875 | 2,006 | 1,380 | 2,207 | 725 | 8,070 | 2,247 | 2,880 | 28,830 |
| September | 1,265 | 1,350 | 3,655 | 2,673 | 1,942 | 1,350 | 2,360 | 685 | 7,800 | 2,170 | 2,720 | 27,970 |
| October | 1,245 | 1,340 | 3,535 | 2,911 | 1,922 | 1,320 | 2,350 | 685 | 7,670 | 2,140 | 2,750 | 27,868 |
| November | 1,255 | 1,340 | 3,535 | 2,805 | 1,913 | 1,310 | 2,350 | 665 | 7,670 | 2,140 | 2,740 | 27,723 |
| December | 1,255 | 1,310 | 3,491 | 2,025 | 1,913 | 1,310 | 2,290 | 655 | 7,600 | 2,140 | 2,750 | 26,739 |
| Average | 1,270 | 1,369 | 3,724 | 2,432 | 1,998 | 1,367 | 2,256 | 714 | 8,031 | 2,276 | 2,880 | 28,317 |
| 2002 January | 1,221 | 1,310 | 3,385 | 2,315 | 1,850 | 1,260 | 2,150 | 625 | 7,300 | 2,060 | 2,630 | 26,106 |
| February | 1,215 | 1,280 | 3,365 | 2,545 | 1,803 | 1,280 | 2,100 | 625 | 7,210 | 2,050 | 2,600 | 26,073 |
| March | 1,235 | 1,280 | 3,385 | 2,515 | 1,850 | 1,290 | 2,120 | 635 | 7,310 | 2,055 | 2,620 | 26,295 |
| April | 1,245 | 1,270 | 3,375 | 1,215 | 1,860 | 1,300 | 2,130 | 655 | 7,455 | 2,070 | 2,530 | 25,105 |
| May | 1,275 | 1,270 | 3,395 | 1,865 | 1,880 | 1,310 | 2,070 | 675 | 7,450 | 2,060 | 2,730 | 25,980 |
| June | 1,285 | 1,270 | 3,415 | 1,525 | 1,890 | 1,320 | 2,060 | 665 | 7,500 | 2,060 | 2,735 | 25,725 |
| July | 1,305 | 1,265 | 3,425 | 1,835 | 1,910 | 1,330 | 2,050 | 675 | 7,700 | 2,080 | 2,735 | 26,310 |
| August | 1,315 | 1,260 | 3,440 | 1,505 | 1,910 | 1,330 | 2,100 | 685 | 7,730 | 2,090 | 2,765 | 26,130 |
| September | 1,345 | 1,260 | 3,485 | 1,825 | 1,930 | 1,350 | 2,143 | 695 | 7,880 | 2,103 | 2,955 | 26,971 |
| October | 1,395 | 1,260 | 3,535 | 2,425 | 1,930 | 1,350 | 2,140 | 725 | 7,900 | 2,113 | 2,980 | 27,753 |
| November | 1,383 | 1,250 | 3,535 | 2,395 | 1,940 | 1,350 | 2,150 | 730 | 8,100 | 2,100 | 2,972 | 27,905 |
| December | 1,445 | 1,230 | 3,585 | 2,325 | 1,970 | 1,350 | 2,200 | 755 | 8,050 | 2,140 | 1,020 | 26,069 |
| Average | 1,306 | 1,267 | 3,444 | 2,023 | 1,894 | 1,319 | 2,118 | 679 | 7,634 | 2,082 | 2,604 | 26,370 |
| 2003 January | 1,490 | 1,230 | 3,660 | 2,555 | 1,990 | 1,375 | R 2,310 | 760 | 8,570 | 2,200 | 630 | R 26,769 |
| February | 1,495 | 1,225 | 3,735 | 2,490 | 2,050 | 1,400 | R 2,360 | 785 | 8,870 | 2,250 | 1,450 | R 28,110 |
| March | 1,555 | 1,200 | 3,760 | 1,373 | 2,300 | 1,405 | R 2,030 | 785 | 9,460 | 2,450 | 2,390 | R 28,708 |
| April | 1,645 | 1,180 | 3,755 | 53 | 2,400 | 1,430 | 1,965 | 785 | 9,600 | 2,450 | 2,555 | 27,818 |
| 4-Mo. Avg. .. | 1,547 | 1,209 | 3,727 | 1,609 | 2,186 | 1,402 | 2,163 | 779 | 9,127 | 2,339 | 1,757 | 27,845 |
| 2002 4-Mo. Avg. .. | 1,229 | 1,285 | 3,378 | 2,145 | 1,842 | 1,282 | 2,126 | 635 | 7,320 | 2,059 | 2,595 | 25,897 |
| 2001 4-Mo. Avg. .. | 1,269 | 1,405 | 3,837 | 2,430 | 2,081 | 1,405 | 2,259 | 740 | 8,321 | 2,413 | 3,013 | 29,173 |

^a Includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone from 1973 through July 1990 and in June 1991. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. In April 2003, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 630 thousand barrels per day.

^b Current members of OPEC are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela. Ecuador and Gabon, which withdrew from OPEC membership at the end of

1992 and 1994, respectively, are excluded from all OPEC totals.

R=Revised.

Notes: • Crude oil includes lease condensate but excludes natural gas plant liquids. • Monthly data are often preliminary figures and may not average to the annual totals because of rounding or because updates to the preliminary monthly data are not available.

Web Page: <http://www.eia.doe.gov/emeu/mer/inter.html>.

Sources: See end of section.

Table 11.1b World Crude Oil Production: Persian Gulf Nations, Non-OPEC, and World
(Thousand Barrels per Day)

| | Persian Gulf Nations ^a | Selected Non-OPEC Producers | | | | | | | | Total Non-OPEC | World | |
|-----------------|-----------------------------------|-----------------------------|-------|-------|--------|--------|-----------------|---------|----------------|----------------|----------|---------------|
| | | Canada | China | Egypt | Mexico | Norway | Former U.S.S.R. | Russia | United Kingdom | | | United States |
| 1973 Average | 20,668 | 1,798 | 1,090 | 165 | 465 | 32 | 8,324 | NA | 2 | 9,208 | 25,050 | 55,679 |
| 1974 Average | 21,282 | 1,551 | 1,315 | 150 | 571 | 35 | 8,912 | NA | 2 | 8,774 | 25,366 | 55,716 |
| 1975 Average | 18,934 | 1,430 | 1,490 | 235 | 705 | 189 | 9,523 | NA | 12 | 8,375 | 26,058 | 52,828 |
| 1976 Average | 21,514 | 1,314 | 1,670 | 330 | 831 | 279 | 10,060 | NA | 245 | 8,132 | 27,018 | 57,344 |
| 1977 Average | 21,725 | 1,321 | 1,874 | 415 | 981 | 280 | 10,603 | NA | 768 | 8,245 | 28,814 | 59,707 |
| 1978 Average | 20,606 | 1,316 | 2,082 | 485 | 1,209 | 356 | 11,105 | NA | 1,082 | 8,707 | 30,694 | 60,158 |
| 1979 Average | 21,066 | 1,500 | 2,122 | 525 | 1,461 | 403 | 11,384 | NA | 1,568 | 8,552 | 32,094 | 62,674 |
| 1980 Average | 17,961 | 1,435 | 2,114 | 595 | 1,936 | 528 | 11,706 | NA | 1,622 | 8,597 | 32,994 | 59,600 |
| 1981 Average | 15,245 | 1,285 | 2,012 | 598 | 2,313 | 501 | 11,850 | NA | 1,811 | 8,572 | 33,595 | 56,076 |
| 1982 Average | 12,156 | 1,271 | 2,045 | 670 | 2,748 | 520 | 11,912 | NA | 2,065 | 8,649 | 34,703 | 53,481 |
| 1983 Average | 11,081 | 1,356 | 2,120 | 727 | 2,689 | 614 | 11,972 | NA | 2,291 | 8,688 | 35,759 | 53,256 |
| 1984 Average | 10,784 | 1,438 | 2,296 | 822 | 2,780 | 697 | 11,861 | NA | 2,480 | 8,879 | 37,047 | 54,489 |
| 1985 Average | 9,630 | 1,471 | 2,505 | 887 | 2,745 | 788 | 11,585 | NA | 2,530 | 8,971 | 37,801 | 53,982 |
| 1986 Average | 11,696 | 1,474 | 2,620 | 813 | 2,435 | 870 | 11,895 | NA | 2,539 | 8,680 | 37,952 | 56,227 |
| 1987 Average | 12,103 | 1,535 | 2,690 | 896 | 2,548 | 1,022 | 12,050 | NA | 2,406 | 8,349 | 38,149 | 56,666 |
| 1988 Average | 13,457 | 1,616 | 2,730 | 848 | 2,512 | 1,158 | 12,053 | NA | 2,232 | 8,140 | 38,413 | 58,737 |
| 1989 Average | 14,837 | 1,560 | 2,757 | 865 | 2,520 | 1,554 | 11,715 | NA | 1,802 | 7,613 | 37,792 | 59,863 |
| 1990 Average | 15,278 | 1,553 | 2,774 | 873 | 2,553 | 1,704 | 10,975 | NA | 1,820 | 7,355 | 37,371 | 60,566 |
| 1991 Average | 14,741 | 1,548 | 2,835 | 874 | 2,680 | 1,890 | 9,992 | NA | 1,797 | 7,417 | 36,932 | 60,207 |
| 1992 Average | 15,970 | 1,605 | 2,845 | 881 | 2,669 | 2,229 | 8,541 | 7,632 | 1,825 | 7,171 | 35,815 | 60,213 |
| 1993 Average | 16,715 | 1,679 | 2,890 | 890 | 2,673 | 2,350 | - | 6,730 | 1,915 | 6,847 | 35,117 | 60,236 |
| 1994 Average | 16,964 | 1,746 | 2,939 | 896 | 2,685 | 2,521 | - | 6,135 | 2,375 | 6,662 | 35,481 | 60,991 |
| 1995 Average | 17,208 | 1,805 | 2,990 | 920 | 2,618 | 2,768 | - | 5,995 | 2,489 | 6,560 | 36,331 | 62,335 |
| 1996 Average | 17,367 | 1,837 | 3,131 | 922 | 2,855 | 3,104 | - | 5,850 | 2,568 | 6,465 | 37,250 | 63,711 |
| 1997 Average | 18,095 | 1,922 | 3,200 | 856 | 3,023 | 3,143 | - | 5,920 | 2,518 | 6,452 | 37,980 | 65,690 |
| 1998 Average | 19,337 | 1,981 | 3,198 | 834 | 3,070 | 3,017 | - | 5,854 | 2,616 | 6,252 | 38,147 | 66,921 |
| 1999 Average | 18,667 | 1,907 | 3,195 | 852 | 2,906 | 3,018 | - | 6,079 | 2,684 | 5,881 | 38,269 | 65,848 |
| 2000 Average | 19,892 | 1,977 | 3,249 | 748 | 3,012 | 3,197 | - | 6,479 | 2,275 | 5,822 | 39,081 | 68,342 |
| 2001 January | 19,809 | 2,032 | 3,220 | 731 | 3,117 | 3,230 | - | E 6,875 | 2,338 | 5,799 | 39,706 | 69,045 |
| February | 19,570 | 2,052 | 3,330 | 720 | 3,166 | 3,057 | - | E 6,966 | 2,279 | 5,780 | 39,656 | 68,581 |
| March | 20,270 | 2,070 | 3,376 | 716 | 3,181 | 3,128 | - | E 6,808 | 2,323 | 5,880 | 39,703 | 69,273 |
| April | 19,747 | 2,046 | 3,302 | 712 | 3,037 | 3,203 | - | E 6,855 | 2,318 | 5,863 | 39,551 | 68,374 |
| May | 19,612 | 2,027 | 3,310 | 651 | 3,060 | 2,939 | - | E 6,917 | 2,262 | 5,829 | 39,080 | 67,674 |
| June | 17,991 | 1,971 | 3,312 | 685 | 3,170 | 2,928 | - | E 6,956 | 2,128 | 5,766 | 39,004 | 66,103 |
| July | 19,292 | 1,953 | 3,262 | 688 | 3,216 | 3,262 | - | E 7,124 | 2,234 | 5,749 | 39,745 | 68,077 |
| August | 19,743 | 1,954 | 3,303 | 693 | 3,205 | 2,872 | - | E 7,125 | 2,211 | 5,725 | 39,437 | 68,267 |
| September | 18,960 | 2,009 | 3,288 | 697 | 3,207 | 3,154 | - | E 7,189 | 2,230 | 5,709 | 39,922 | 67,892 |
| October | 18,898 | 2,046 | 3,313 | 692 | 3,022 | 3,256 | - | E 7,233 | 2,361 | 5,746 | 39,914 | 67,782 |
| November | 18,763 | 2,082 | 3,316 | 698 | 3,198 | 3,124 | - | E 7,306 | 2,280 | 5,881 | 40,308 | 68,031 |
| December | 17,859 | 2,110 | 3,272 | 700 | 3,305 | 3,249 | - | E 7,233 | 2,418 | 5,887 | 40,841 | 67,579 |
| Average | 19,210 | 2,029 | 3,300 | 698 | 3,157 | 3,117 | - | E 7,049 | 2,282 | 5,801 | 39,740 | 68,057 |
| 2002 January | 17,570 | 2,091 | 3,365 | 627 | 3,253 | 3,079 | - | E 7,017 | 2,396 | 5,848 | 40,350 | 66,456 |
| February | 17,633 | 2,167 | 3,330 | 629 | 3,142 | 3,150 | - | E 7,094 | 2,392 | 5,871 | 40,469 | 66,542 |
| March | 17,785 | 2,159 | 3,350 | 624 | 3,125 | 2,787 | - | E 7,157 | 2,334 | 5,883 | 40,088 | 66,383 |
| April | 16,665 | 2,204 | 3,333 | 630 | 3,178 | 3,157 | - | E 7,179 | 2,388 | 5,859 | 40,679 | 65,784 |
| May | 17,360 | 2,130 | 3,365 | 667 | 3,136 | 3,028 | - | E 7,184 | 2,338 | 5,924 | 40,398 | 66,378 |
| June | 17,090 | 2,155 | 3,415 | 635 | 3,158 | 2,918 | - | E 7,337 | 2,323 | 5,915 | 40,499 | 66,224 |
| July | 17,660 | 2,201 | 3,395 | 628 | 3,145 | 3,114 | - | E 7,441 | 2,114 | 5,770 | 40,413 | 66,723 |
| August | 17,395 | 2,165 | 3,490 | 624 | 3,214 | 2,896 | - | E 7,574 | 1,953 | 5,811 | 40,412 | 66,542 |
| September | 17,953 | 2,135 | 3,430 | 628 | 3,162 | 2,752 | - | E 7,686 | 2,186 | 5,411 | 40,155 | 67,126 |
| October | 18,663 | 2,179 | 3,447 | 625 | 3,257 | 2,993 | - | E 7,735 | 2,364 | 5,363 | 40,704 | 68,457 |
| November | 18,835 | 2,224 | 3,379 | 629 | 3,080 | 3,059 | - | E 7,753 | 2,350 | 5,597 | 40,691 | 68,596 |
| December | 18,859 | 2,238 | 3,371 | 630 | 3,269 | 2,962 | - | E 7,721 | 2,375 | 5,699 | 40,808 | 66,877 |
| Average | 17,792 | 2,171 | 3,390 | 631 | 3,177 | 2,990 | - | E 7,408 | 2,292 | E 5,746 | 40,472 | 66,842 |
| 2003 January | 19,769 | R 2,220 | 3,354 | 630 | 3,330 | 2,935 | - | E 7,765 | R 2,256 | E 5,842 | R 40,932 | R 67,701 |
| February | 20,215 | R 2,215 | 3,375 | 630 | 3,325 | 3,015 | - | E 7,831 | R 2,275 | E 5,915 | R 41,236 | R 69,346 |
| March | 20,163 | R 2,235 | 3,385 | 625 | 3,317 | 2,960 | - | E 7,868 | R 2,295 | E 5,890 | R 41,134 | R 69,842 |
| April | 19,078 | 2,180 | 3,445 | 625 | 3,282 | 2,875 | - | E 7,922 | 2,250 | E 5,813 | 41,029 | 68,847 |
| 4-Mo. Avg. | 19,802 | 2,213 | 3,390 | 627 | 3,313 | 2,945 | - | E 7,846 | 2,269 | E 5,864 | 41,079 | 68,924 |
| 2002 4-Mo. Avg. | 17,414 | 2,155 | 3,345 | 627 | 3,175 | 3,040 | - | 7,112 | 2,377 | 5,865 | 40,393 | 66,289 |
| 2001 4-Mo. Avg. | 19,857 | 2,050 | 3,306 | 720 | 3,125 | 3,157 | - | 6,874 | 2,315 | 5,831 | 39,655 | 68,828 |

^a The Persian Gulf Nations are Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. Production from the Neutral Zone between Kuwait and Saudi Arabia is included in "Persian Gulf Nations."

R=Revised. NA=Not available. --=Not applicable. E=Estimate.

Notes: • Crude oil includes lease condensate but excludes natural gas plant liquids. • Monthly data are often preliminary figures and may not

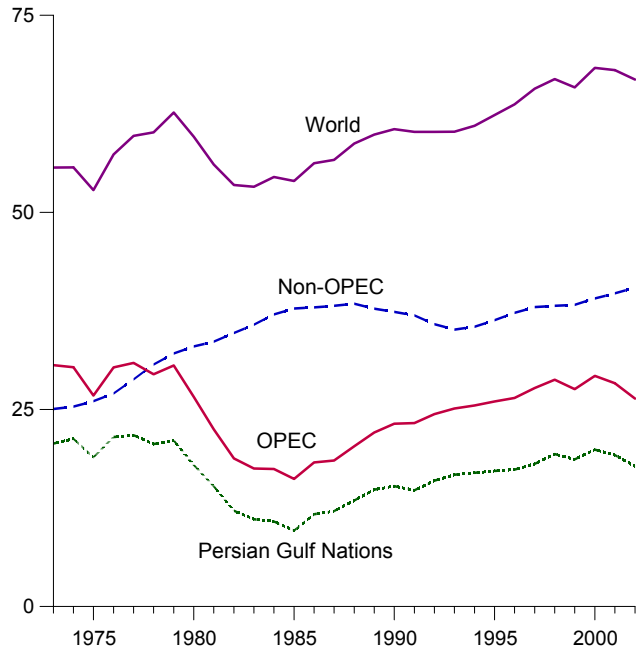
average to the annual totals because of rounding or because updates to the preliminary monthly data are not available. • Data for countries may not sum to World totals due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/inter.html>.

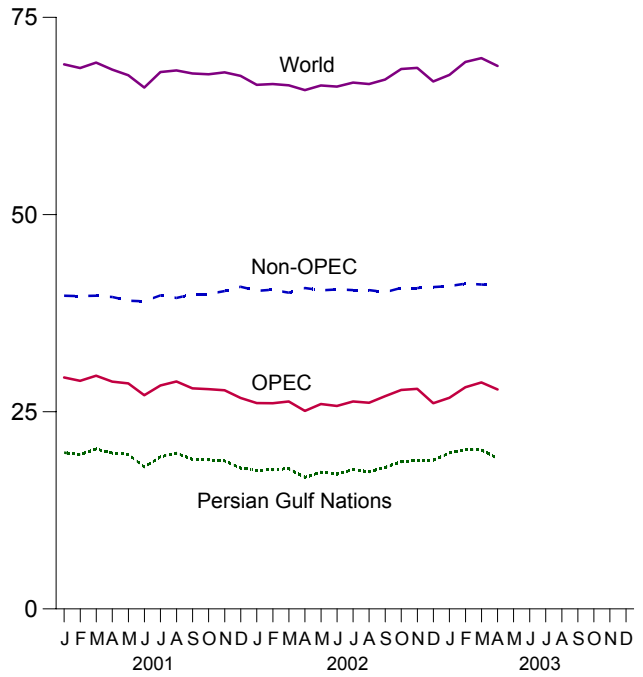
Sources: See end of section.

Figure 11.1a Crude Oil Production Overview
(Million Barrels per Day)

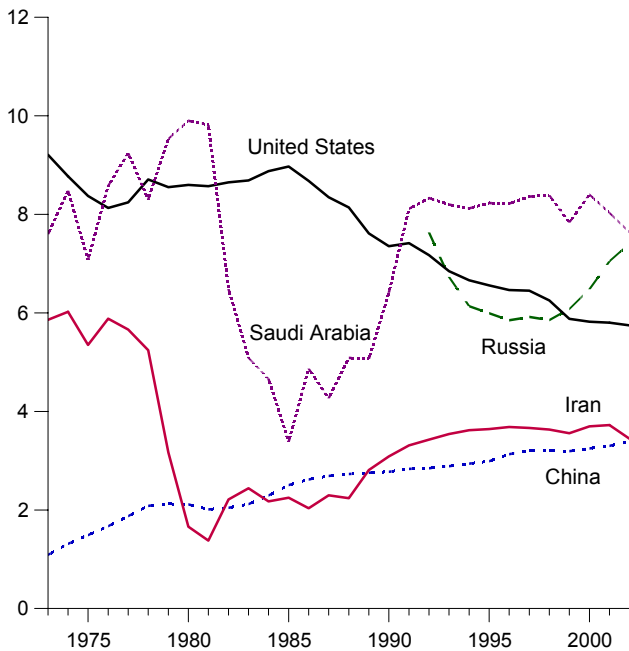
World Production, 1973-2002



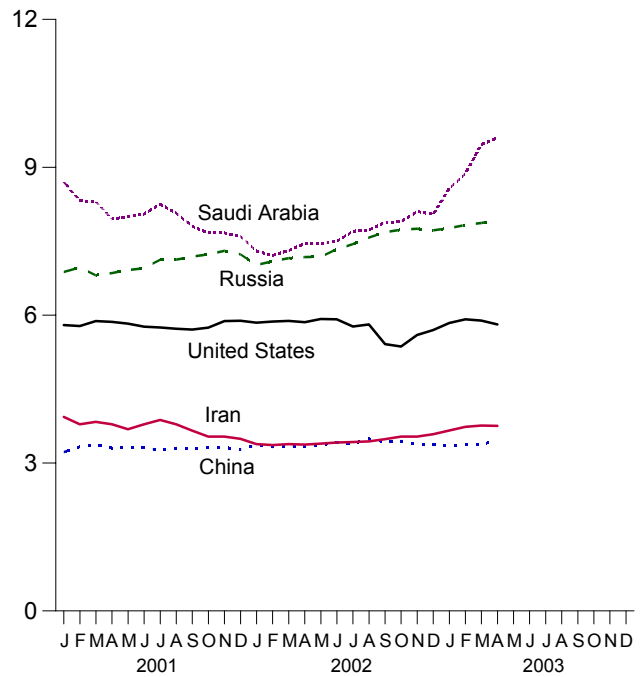
World Production, Monthly



Selected Producers, 1973-2002

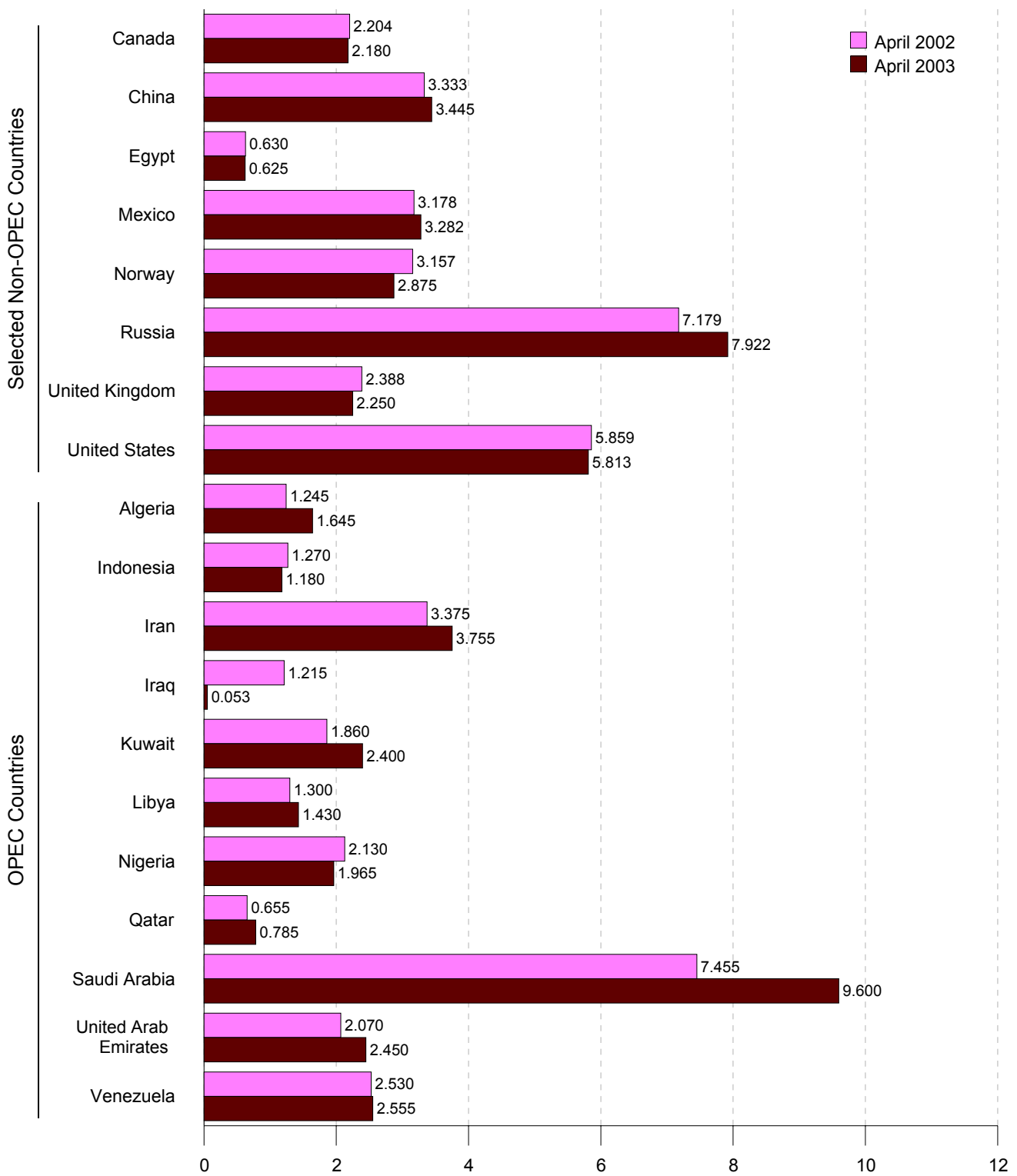


Selected Producers, Monthly



Note: OPEC is the Organization of Petroleum Exporting Countries.
Web Page: <http://www.eia.doe.gov/emeu/mer/inter.html>
Sources: Tables 11.1a and 11.1b.

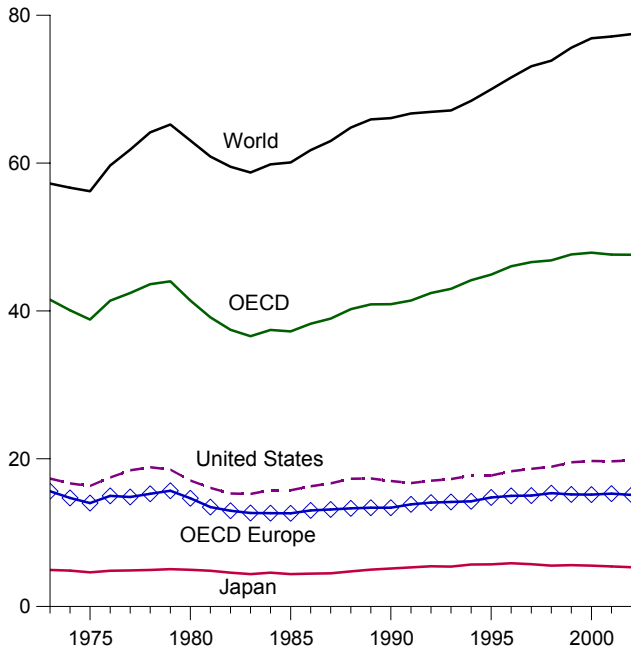
Figure 11.1b Crude Oil Production by Selected Country
(Million Barrels per Day)



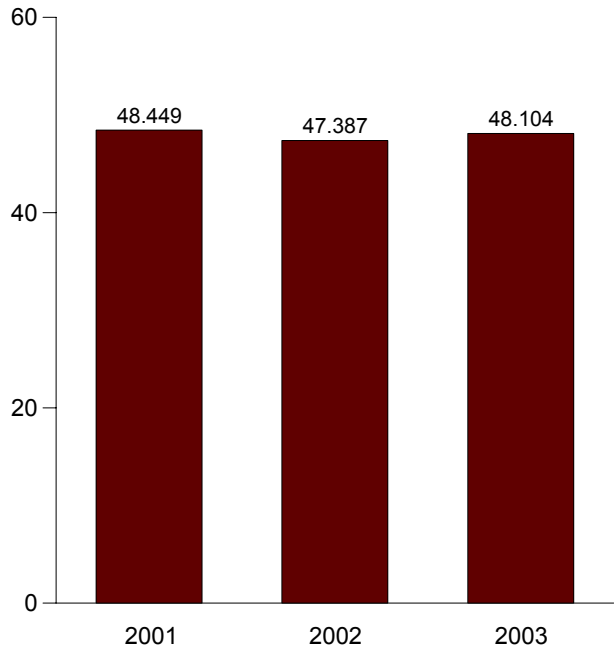
Note: OPEC is the Organization of Petroleum Exporting Countries.
 Web Page: <http://www.eia.doe.gov/emeu/mer/inter.html>.
 Sources: Tables 11.1a and 11.1b.

Figure 11.2 Petroleum Consumption in OECD Countries
(Million Barrels per Day)

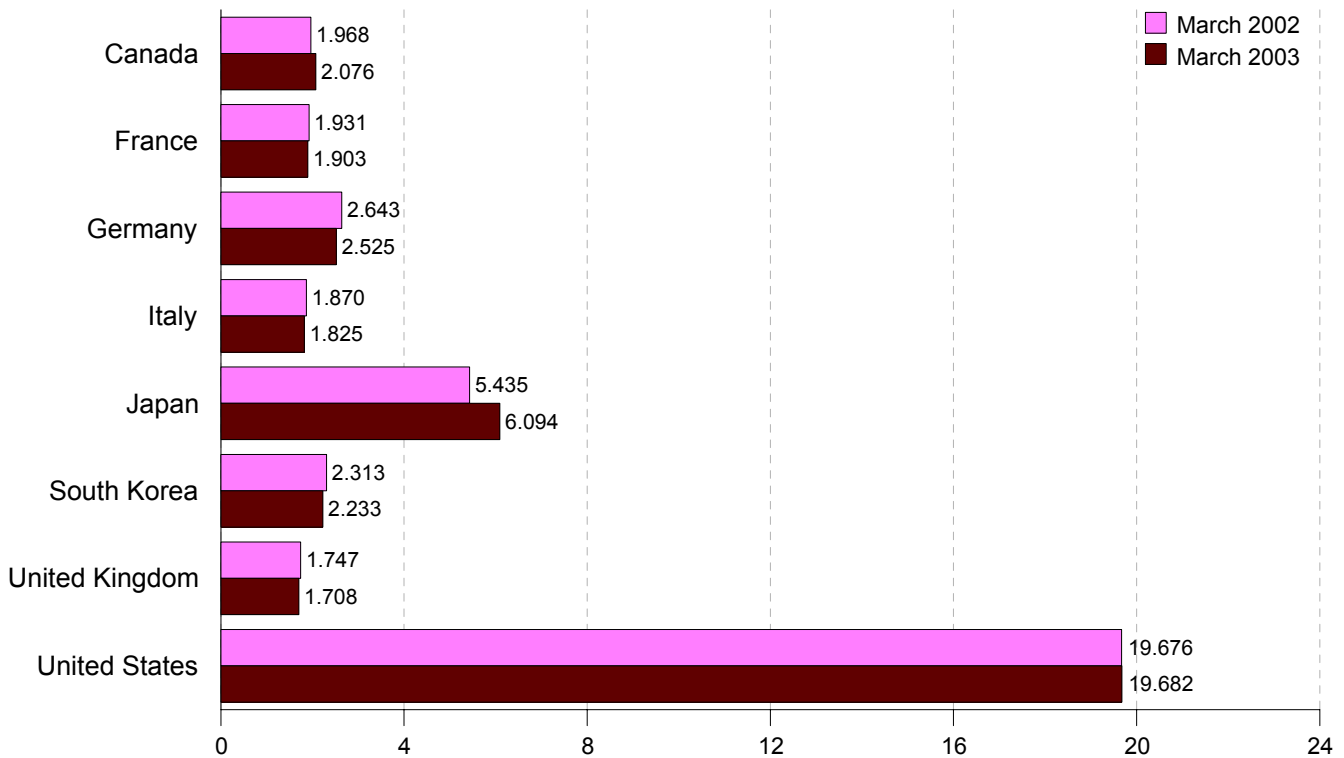
Overview, 1973-2002



OECD Total, March



By Selected OECD Country



Notes: • OECD is the Organization for Economic Cooperation and Development.
• Because vertical scales differ, graphs should not be compared.

Web Page: <http://www.eia.doe.gov/emeu/mer/inter.html>.
Source: Table 11.2.

Table 11.2 Petroleum Consumption in OECD Countries
(Thousand Barrels per Day)

| | Canada | France | Germany ^a | Italy | Japan | South Korea | United Kingdom | United States | OECD Europe ^b | Other OECD ^c | OECD ^d | World |
|-----------------|---------|--------|----------------------|-------|-------|-------------|----------------|---------------|--------------------------|-------------------------|-------------------|----------|
| 1973 Average | 1,729 | 2,601 | 3,324 | 2,068 | 4,949 | 281 | 2,341 | 17,308 | 15,598 | 1,658 | 41,523 | 57,237 |
| 1974 Average | 1,779 | 2,447 | 3,030 | 2,004 | 4,864 | 287 | 2,210 | 16,653 | 14,699 | 1,806 | 40,089 | 56,677 |
| 1975 Average | 1,779 | 2,252 | 2,957 | 1,855 | 4,621 | 311 | 1,911 | 16,322 | 13,998 | 1,794 | 38,825 | 56,198 |
| 1976 Average | 1,818 | 2,420 | 3,206 | 1,971 | 4,837 | 357 | 1,892 | 17,461 | 14,964 | 1,946 | 41,382 | 59,673 |
| 1977 Average | 1,850 | 2,294 | 3,212 | 1,897 | 4,880 | 422 | 1,905 | 18,431 | 14,810 | 2,035 | 42,429 | 61,826 |
| 1978 Average | 1,902 | 2,408 | 3,290 | 1,952 | 4,945 | 482 | 1,938 | 18,847 | 15,247 | 2,194 | 43,616 | 64,158 |
| 1979 Average | 1,971 | 2,463 | 3,373 | 2,039 | 5,050 | 525 | 1,971 | 18,513 | 15,668 | 2,278 | 44,005 | 65,220 |
| 1980 Average | 1,873 | 2,256 | 3,082 | 1,934 | 4,960 | 537 | 1,725 | 17,056 | 14,640 | 2,342 | 41,408 | 63,067 |
| 1981 Average | 1,768 | 2,023 | 2,804 | 1,874 | 4,848 | 536 | 1,590 | 16,058 | 13,452 | 2,479 | 39,141 | 60,903 |
| 1982 Average | 1,578 | 1,880 | 2,743 | 1,781 | 4,582 | 534 | 1,590 | 15,296 | 12,965 | 2,484 | 37,439 | 59,503 |
| 1983 Average | 1,448 | 1,835 | 2,661 | 1,750 | 4,395 | 561 | 1,531 | 15,231 | 12,650 | 2,303 | 36,588 | 58,739 |
| 1984 Average | 1,472 | 1,754 | 2,662 | 1,646 | 4,576 | 587 | 1,849 | 15,726 | 12,629 | 2,442 | 37,432 | 59,831 |
| 1985 Average | 1,504 | 1,775 | 2,700 | 1,717 | 4,384 | 569 | 1,634 | 15,726 | 12,603 | 2,441 | 37,228 | 60,091 |
| 1986 Average | 1,506 | 1,772 | 2,860 | 1,738 | 4,439 | 607 | 1,649 | 16,281 | 13,009 | 2,436 | 38,277 | 61,759 |
| 1987 Average | 1,548 | 1,789 | 2,767 | 1,855 | 4,484 | 639 | 1,603 | 16,665 | 13,142 | 2,479 | 38,957 | 62,999 |
| 1988 Average | 1,693 | 1,797 | 2,744 | 1,836 | 4,752 | 731 | 1,697 | 17,283 | 13,291 | 2,489 | 40,238 | 64,819 |
| 1989 Average | 1,733 | 1,857 | 2,581 | 1,930 | 4,983 | 843 | 1,738 | 17,325 | 13,359 | 2,638 | 40,881 | 65,917 |
| 1990 Average | 1,690 | 1,818 | 2,664 | 1,872 | 5,140 | 1,025 | 1,752 | 16,988 | 13,368 | 2,706 | 40,917 | 66,083 |
| 1991 Average | 1,622 | 1,935 | 2,828 | 1,863 | 5,284 | 1,202 | 1,801 | 16,714 | 13,827 | 2,751 | 41,400 | 66,721 |
| 1992 Average | 1,643 | 1,926 | 2,843 | 1,937 | 5,446 | 1,456 | 1,803 | 17,033 | 14,073 | 2,773 | 42,424 | 66,933 |
| 1993 Average | 1,688 | 1,875 | 2,900 | 1,852 | 5,401 | 1,690 | 1,815 | 17,237 | 14,140 | 2,826 | 42,982 | 67,123 |
| 1994 Average | 1,727 | 1,833 | 2,879 | 1,841 | 5,674 | 1,856 | 1,837 | 17,718 | 14,226 | 2,966 | 44,167 | 68,420 |
| 1995 Average | 1,755 | 1,896 | 2,875 | 2,048 | 5,711 | 2,007 | 1,845 | 17,725 | 14,756 | 2,963 | 44,917 | 69,993 |
| 1996 Average | 1,797 | 1,935 | 2,911 | 2,058 | 5,867 | 2,155 | 1,845 | 18,309 | 14,964 | 2,951 | 46,042 | 71,581 |
| 1997 Average | 1,923 | 1,957 | 2,915 | 1,908 | 5,728 | 2,260 | 1,805 | 18,620 | 15,009 | 3,073 | 46,614 | 73,099 |
| 1998 Average | 1,947 | 2,030 | 2,921 | 1,945 | 5,528 | 1,930 | 1,789 | 18,917 | 15,335 | 3,185 | 46,841 | 73,859 |
| 1999 Average | 2,029 | 2,027 | 2,836 | 1,841 | 5,587 | 2,075 | 1,739 | 19,519 | 15,169 | 3,267 | 47,646 | 75,610 |
| 2000 Average | 2,073 | 2,021 | 2,775 | 1,867 | 5,528 | 2,146 | 1,721 | 19,701 | 15,146 | 3,282 | 47,876 | 76,896 |
| 2001 January | 1,987 | 2,165 | 2,692 | 1,824 | 6,059 | 2,443 | 1,723 | 20,092 | 15,256 | 3,218 | 49,057 | NA |
| February | 2,009 | 2,098 | 2,638 | 1,915 | 6,391 | 2,299 | 1,725 | 19,689 | 15,235 | 3,300 | 48,924 | NA |
| March | 1,870 | 2,008 | 2,782 | 1,803 | 5,872 | 2,253 | 1,838 | 19,876 | 15,196 | 3,380 | 48,449 | NA |
| April | 1,781 | 2,009 | 2,699 | 1,709 | 5,120 | 1,997 | 1,742 | 19,729 | 14,692 | 3,143 | 46,463 | NA |
| May | 1,904 | 1,894 | 2,715 | 1,801 | 4,914 | 1,992 | 1,692 | 19,501 | 14,805 | 3,324 | 46,441 | NA |
| June | 1,883 | 1,963 | 2,877 | 1,771 | 4,850 | 2,048 | 1,664 | 19,561 | 14,902 | 3,230 | 46,475 | NA |
| July | 1,897 | 2,046 | 2,978 | 1,912 | 5,131 | 1,827 | 1,656 | 19,919 | 15,350 | 3,185 | 47,310 | NA |
| August | 2,045 | 1,984 | 3,058 | 1,824 | 5,210 | 1,922 | 1,690 | 20,153 | 15,434 | 3,251 | 48,015 | NA |
| September | 1,795 | 2,081 | 2,913 | 2,027 | 4,962 | 2,164 | 1,769 | 19,016 | 15,802 | 3,025 | 46,766 | NA |
| October | 1,927 | 2,056 | 2,882 | 1,902 | 4,939 | 1,939 | 1,683 | 19,824 | 15,529 | 3,249 | 47,408 | NA |
| November | 1,974 | 2,076 | 2,925 | 1,905 | 5,480 | 2,265 | 1,762 | 19,396 | 15,878 | 3,206 | 48,200 | NA |
| December | 1,850 | 2,026 | 2,587 | 1,999 | 6,171 | 2,549 | 1,654 | 19,003 | 15,336 | 3,177 | 48,086 | NA |
| Average | 1,910 | 2,033 | 2,813 | 1,866 | 5,421 | 2,140 | 1,716 | 19,649 | 15,285 | 3,224 | 47,629 | 77,125 |
| 2002 January | 1,958 | 2,190 | 2,578 | 1,951 | 5,691 | 2,431 | 1,666 | 19,454 | R 15,312 | R 3,188 | R 48,034 | NA |
| February | 1,972 | 2,042 | 2,679 | 2,037 | 6,014 | 2,296 | 1,734 | 19,444 | R 15,370 | R 3,383 | R 48,478 | NA |
| March | 1,968 | 1,931 | 2,643 | 1,870 | 5,435 | 2,313 | 1,747 | 19,676 | R 14,837 | R 3,157 | R 47,387 | NA |
| April | 1,894 | 1,907 | 2,670 | 1,833 | 4,882 | 2,172 | 1,704 | 19,552 | R 14,837 | R 3,282 | R 46,619 | NA |
| May | 1,917 | 1,761 | 2,486 | 1,815 | 4,491 | 1,892 | 1,670 | 19,728 | R 14,322 | R 3,198 | R 45,548 | NA |
| June | 1,993 | 1,912 | 2,770 | 1,835 | 4,569 | 1,913 | 1,624 | 19,875 | R 14,793 | R 3,146 | R 46,290 | NA |
| July | 2,021 | 2,070 | 2,916 | 1,945 | 5,053 | 1,893 | 1,697 | 20,076 | R 15,506 | R 3,240 | R 47,789 | NA |
| August | 2,051 | 1,842 | 2,784 | 1,761 | 5,023 | 1,992 | 1,703 | 20,221 | R 14,799 | R 3,250 | R 47,336 | NA |
| September | 2,006 | 1,974 | 2,928 | 1,846 | 5,065 | 2,135 | 1,672 | 19,461 | R 15,286 | R 3,229 | R 47,182 | NA |
| October | 2,075 | 2,046 | 2,767 | 1,938 | 5,127 | 2,145 | 1,720 | 19,678 | R 15,621 | R 3,324 | R 47,975 | NA |
| November | 2,036 | 1,953 | 2,742 | 1,798 | 5,947 | 2,362 | 1,748 | 19,991 | R 15,318 | R 3,150 | R 48,839 | NA |
| December | 2,036 | 1,884 | 2,638 | 1,873 | 6,606 | 2,582 | 1,695 | 19,943 | R 15,156 | R 3,328 | R 49,652 | NA |
| Average | 1,998 | 1,959 | 2,716 | 1,874 | 5,322 | 2,177 | 1,698 | 19,761 | R 15,095 | R 3,239 | R 47,591 | R 77,463 |
| 2003 January | R 2,019 | 2,149 | 2,354 | 1,801 | 6,078 | 2,547 | 1,685 | 20,042 | R 14,951 | R 3,251 | R 48,887 | NA |
| February | R 2,137 | 2,218 | 2,693 | 2,051 | 6,503 | 2,438 | 1,815 | 20,396 | R 15,966 | R 3,345 | R 50,784 | NA |
| March | 2,076 | 1,903 | 2,525 | 1,825 | 6,094 | 2,233 | 1,708 | 19,682 | 14,727 | 3,291 | 48,104 | NA |
| 3-Mo. Avg. | 2,075 | 2,086 | 2,518 | 1,887 | 6,216 | 2,405 | 1,733 | 20,028 | 15,190 | 3,294 | 49,208 | NA |
| 2002 3-Mo. Avg. | 1,966 | 2,055 | 2,632 | 1,950 | 5,703 | 2,348 | 1,715 | 19,527 | 15,167 | 3,238 | 47,950 | NA |
| 2001 3-Mo. Avg. | 1,954 | 2,090 | 2,706 | 1,845 | 6,098 | 2,333 | 1,763 | 19,892 | 15,229 | 3,300 | 48,806 | NA |

^a Data are for unified Germany, i.e., the former East Germany and West Germany.

^b "OECD Europe" consists of Austria, Belgium, Czech Republic (beginning in 1993), Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

^c "Other OECD" consists of Australia, Mexico, New Zealand, and the U.S. Territories.

^d The Organization for Economic Cooperation and Development (OECD) consists of Canada, Japan, the United States, "OECD Europe" and "Other

OECD."

R=Revised. NA=Not available.

Notes: • Data through 1996 are final. Subsequent data are preliminary.

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

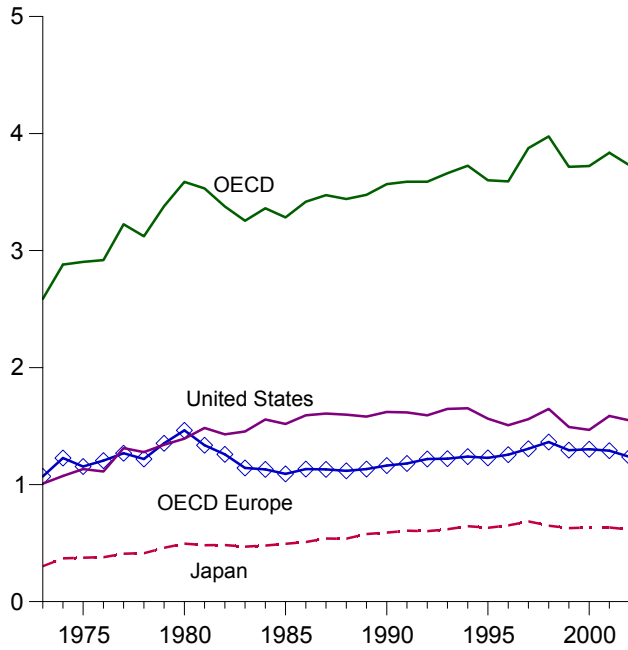
• U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/inter.html>.

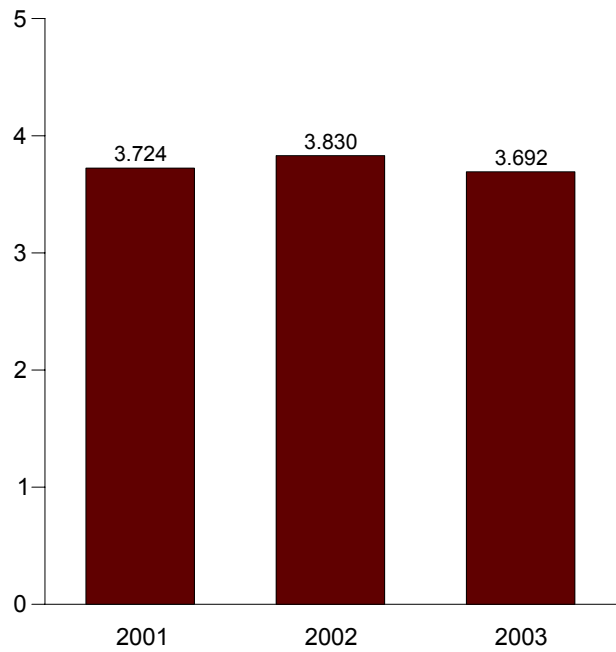
Sources: • **United States:** Table 3.1a. • **All Other Data:** 1973-1979—International Energy Agency (IEA), *Annual Oil and Gas Statistics of OECD Countries*. 1980 forward—IEA, quarterly and monthly computer tapes supporting *Quarterly Oil Statistics and Energy Balances*.

Figure 11.3 Petroleum Stocks in OECD Countries
(Billion Barrels)

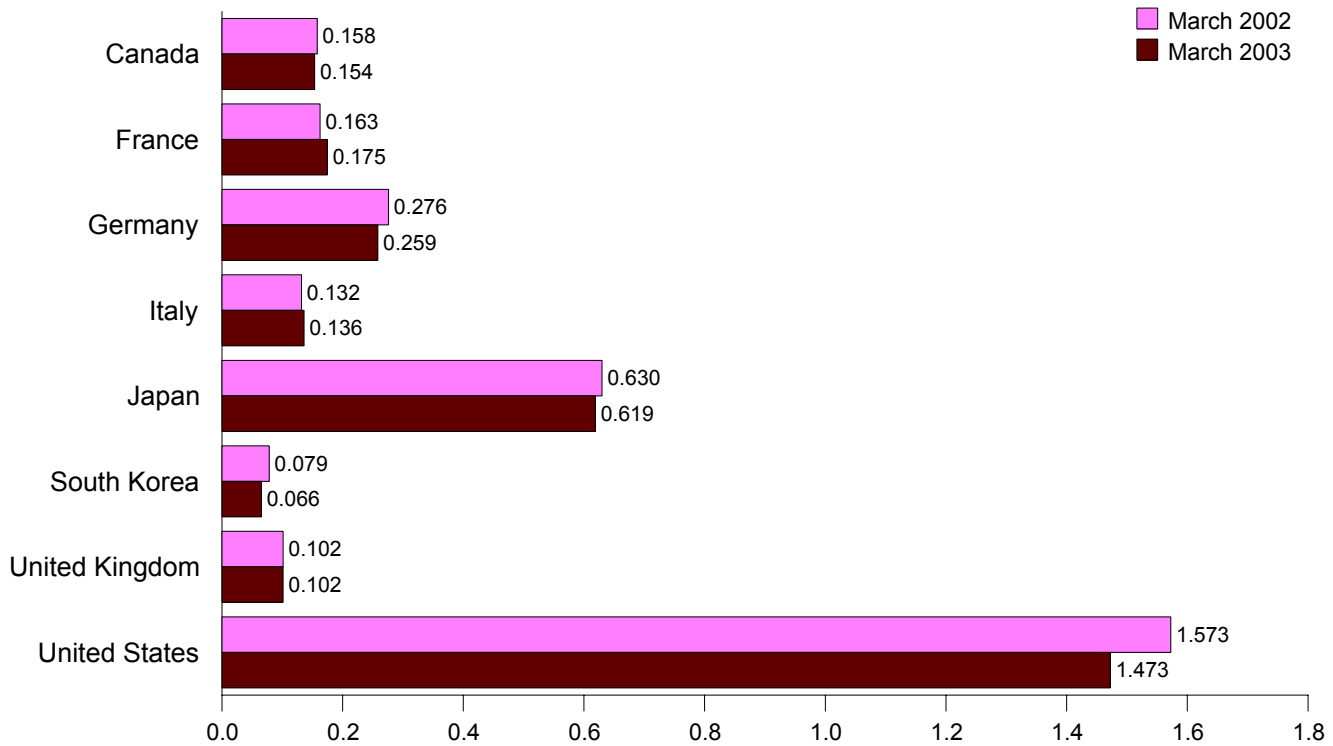
Overview, End of Year, 1973-2002



OECD Stocks, End of Month, March



By Selected OECD Country



Notes: • OECD is the Organization for Economic Cooperation and Development.
• Because vertical scales differ, graphs should not be compared.

Web Page: <http://www.eia.doe.gov/emeu/mer/inter.html>.
Source: Table 11.3

Table 11.3 Petroleum Stocks in OECD Countries
(Million Barrels)

| | Canada | France | Germany ^a | Italy | Japan | South Korea | United Kingdom | United States | OECD Europe ^b | Other OECD ^c | OECD ^d |
|--------------------|--------|--------|----------------------|-------|-------|-------------|----------------|---------------|--------------------------|-------------------------|-------------------|
| 1973 Year | 140 | 201 | 181 | 152 | 303 | NA | 156 | 1,008 | 1,070 | 67 | 2,588 |
| 1974 Year | 145 | 249 | 213 | 167 | 370 | NA | 191 | 1,074 | 1,227 | 64 | 2,880 |
| 1975 Year | 174 | 225 | 187 | 143 | 375 | NA | 165 | 1,133 | 1,154 | 67 | 2,903 |
| 1976 Year | 153 | 234 | 208 | 143 | 380 | NA | 165 | 1,112 | 1,205 | 68 | 2,918 |
| 1977 Year | 167 | 239 | 225 | 161 | 409 | NA | 148 | 1,312 | 1,268 | 68 | 3,224 |
| 1978 Year | 144 | 201 | 238 | 154 | 413 | NA | 157 | 1,278 | 1,219 | 68 | 3,122 |
| 1979 Year | 150 | 226 | 272 | 163 | 460 | NA | 169 | 1,341 | 1,353 | 75 | 3,379 |
| 1980 Year | 164 | 243 | 319 | 170 | 495 | NA | 168 | 1,392 | 1,464 | 72 | 3,587 |
| 1981 Year | 161 | 214 | 297 | 167 | 482 | NA | 143 | 1,484 | 1,337 | 67 | 3,531 |
| 1982 Year | 136 | 193 | 272 | 179 | 484 | NA | 125 | 1,430 | 1,258 | 68 | 3,376 |
| 1983 Year | 121 | 153 | 249 | 149 | 470 | NA | 118 | 1,454 | 1,142 | 68 | 3,255 |
| 1984 Year | 128 | 152 | 239 | 159 | 479 | NA | 112 | 1,556 | 1,130 | 69 | 3,362 |
| 1985 Year | 113 | 139 | 233 | 157 | 494 | NA | 123 | 1,519 | 1,092 | 66 | 3,284 |
| 1986 Year | 111 | 127 | 252 | 155 | 509 | NA | 124 | 1,593 | 1,133 | 72 | 3,418 |
| 1987 Year | 126 | 127 | 259 | 169 | 540 | NA | 121 | 1,607 | 1,130 | 71 | 3,474 |
| 1988 Year | 116 | 140 | 266 | 155 | 538 | NA | 112 | 1,597 | 1,118 | 71 | 3,440 |
| 1989 Year | 114 | 138 | 271 | 164 | 577 | NA | 118 | 1,581 | 1,133 | 71 | 3,476 |
| 1990 Year | 121 | 140 | 265 | 172 | 590 | NA | 112 | 1,621 | 1,163 | 73 | 3,568 |
| 1991 Year | 119 | 153 | 288 | 160 | 606 | NA | 119 | 1,617 | 1,181 | 65 | 3,588 |
| 1992 Year | 107 | 146 | 310 | 174 | 603 | NA | 113 | 1,592 | 1,219 | 67 | 3,588 |
| 1993 Year | 105 | 158 | 309 | 163 | 618 | NA | 118 | 1,647 | 1,221 | 69 | 3,661 |
| 1994 Year | 119 | 158 | 312 | 164 | 645 | NA | 115 | 1,653 | 1,240 | 69 | 3,726 |
| 1995 Year | 109 | 159 | 301 | 162 | 630 | NA | 107 | 1,563 | 1,228 | 71 | 3,601 |
| 1996 Year | 103 | 158 | 300 | 152 | 651 | NA | 108 | 1,507 | 1,256 | 74 | 3,591 |
| 1997 Year | 115 | 164 | 298 | 147 | 685 | 88 | 105 | 1,560 | 1,306 | 122 | 3,876 |
| 1998 Year | 118 | 161 | 321 | 153 | 649 | 85 | 109 | 1,647 | 1,364 | 112 | 3,975 |
| 1999 Year | 109 | 163 | 287 | 148 | 629 | 84 | 105 | 1,493 | 1,294 | 106 | 3,715 |
| 2000 Year | 112 | 174 | 270 | 157 | 634 | 89 | 103 | 1,468 | 1,302 | 117 | 3,723 |
| 2001 January | 113 | 168 | 273 | 163 | 628 | 80 | 100 | 1,479 | 1,292 | 116 | 3,707 |
| February | 111 | 172 | 275 | 159 | 620 | 86 | 102 | 1,473 | 1,293 | 118 | 3,701 |
| March | 117 | 171 | 267 | 158 | 636 | 80 | 105 | 1,484 | 1,292 | 116 | 3,724 |
| April | 116 | 171 | 268 | 159 | 646 | 86 | 103 | 1,522 | 1,283 | 107 | 3,761 |
| May | 119 | 171 | 266 | 156 | 647 | 80 | 103 | 1,555 | 1,280 | 109 | 3,790 |
| June | 116 | 171 | 259 | 149 | 641 | 83 | 107 | 1,563 | 1,278 | 113 | 3,794 |
| July | 123 | 164 | 258 | 149 | 636 | 90 | 107 | 1,568 | 1,271 | 112 | 3,801 |
| August | 123 | 168 | 256 | 156 | 647 | 93 | 104 | 1,548 | 1,284 | 116 | 3,812 |
| September | 129 | 167 | 253 | 152 | 654 | 92 | 102 | 1,579 | 1,282 | 122 | 3,858 |
| October | 129 | 170 | 255 | 151 | 670 | 95 | 111 | 1,577 | 1,281 | 119 | 3,872 |
| November | 127 | 165 | 257 | 153 | 656 | 96 | 110 | 1,588 | 1,276 | 113 | 3,857 |
| December | 124 | 167 | 269 | 151 | 634 | 88 | 112 | 1,586 | 1,290 | 113 | 3,836 |
| 2002 January | 156 | 164 | 277 | 140 | 631 | 79 | R 110 | 1,591 | R 1,299 | 113 | R 3,869 |
| February | 160 | 167 | 276 | 138 | 620 | 71 | R 105 | 1,576 | R 1,304 | 115 | R 3,846 |
| March | 158 | 163 | 276 | 132 | 630 | 79 | R 102 | 1,573 | R 1,280 | 110 | R 3,830 |
| April | 159 | 164 | 276 | 133 | 624 | 74 | R 104 | 1,588 | R 1,272 | 114 | R 3,830 |
| May | 156 | 173 | 274 | 136 | 626 | 77 | R 100 | 1,611 | R 1,283 | 110 | R 3,864 |
| June | 152 | 170 | 269 | 132 | 634 | 87 | R 110 | 1,616 | 1,287 | 112 | 3,887 |
| July | 157 | 169 | 264 | 137 | 633 | 84 | R 108 | 1,611 | R 1,276 | R 112 | R 3,873 |
| August | 159 | 171 | 264 | 142 | 633 | 83 | R 101 | 1,596 | R 1,274 | R 124 | R 3,869 |
| September | 160 | 174 | 259 | 136 | 627 | 80 | R 99 | 1,574 | R 1,255 | R 117 | R 3,813 |
| October | 159 | 176 | 254 | 140 | 628 | 80 | R 106 | 1,573 | R 1,276 | R 111 | 3,827 |
| November | 156 | 170 | 253 | 143 | 616 | 78 | R 106 | 1,578 | R 1,252 | R 114 | 3,795 |
| December | 153 | 175 | 253 | 138 | 615 | 69 | R 97 | 1,548 | R 1,237 | R 105 | R 3,728 |
| 2003 January | R 151 | R 170 | 258 | 140 | 618 | 69 | R 99 | 1,504 | R 1,239 | R 107 | R 3,688 |
| February | R 154 | R 162 | 253 | 128 | 614 | 69 | R 98 | 1,460 | R 1,213 | R 110 | R 3,620 |
| March | 154 | 175 | 259 | 136 | 619 | 66 | 102 | 1,473 | 1,265 | 115 | 3,692 |

^a Through December 1990, the data for Germany are for the former West Germany only. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

^b "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom, and, for 1997 forward, Czech Republic, Hungary, and Poland.

^c "Other OECD" consists of Australia, New Zealand, and the U.S. Territories, and, for 1997 forward, Mexico.

^d The Organization for Economic Cooperation and Development (OECD) consists of Canada, Japan, the United States, "OECD Europe" and "Other OECD."

R=Revised. NA=Not available.

Notes: • Stocks are at end of period. • Petroleum stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined products. Petroleum stocks include all nonmilitary petroleum held for storage,

regardless of ownership, within each country in bulk terminals, refinery tanks, pipeline tankage, intercoastal tankers, tankers in port, and inland ship bunkers. Data exclude oil held in pipelines (except for those in the United States), rail and truck cars, sea-going ships' bunkers, service stations, retail stores, and tankers at sea. • In the United States in January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys, thereby affecting subsequent stocks reported. New-basis end-of-year U.S. stocks, in million barrels, would have been 1,121 in 1974, 1,425 in 1980, and 1,461 in 1982. • Data through 1996 are final. Subsequent data are preliminary. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: <http://www.eia.doe.gov/emeu/mer/inter.html>.

Sources: • **United States:** Table 3.1a. • **All Other Data:** International Energy Agency, quarterly and monthly computer tapes supporting *Quarterly Oil Statistics and Energy Balances*.

International Petroleum

Tables 11.1a and 11.1b Sources

United States: See Table 3.1a.

All Other Countries: Monthly Data

2001 forward: Energy Information Administration (EIA), *International Petroleum Monthly*.

All Other Countries: Annual Data

1973–1979: Energy Information Administration (EIA), *International Energy Annual 1981*, Table 8.

1980–2001: Office of Energy Markets and End Use, International Energy Database, February 2003.

2002: Average of monthly data.

World: Monthly Data

2001 forward: EIA, *International Petroleum Monthly*, sum of all countries' monthly data.

World: Annual Data

1973–1979: EIA, *International Energy Annual 1981*, Table 8.

1980–2001: Office of Energy Markets and End Use, International Energy Database, February 2003.

2002: Average of monthly data.

Appendix A. Thermal Conversion Factors

The thermal conversion factors presented in the following tables can be used to estimate the heat content in British thermal units (Btu) of a given amount of energy measured in physical units, such as barrels or cubic feet. For example, 10 barrels of asphalt has a heat content of approximately 66.36 million Btu (10 barrels x 6.636 million Btu per barrel = 66.36 million Btu).

The heat content rates (i.e., thermal conversion factors) provided in this section represent the gross (or upper) energy content of the fuels. Gross heat content rates are applied in all Btu calculations for the *Monthly Energy Review* and are commonly used in energy calculations in the United States; net (or lower) heat content rates are typically used in European energy calculations. The difference between the two rates is the amount of energy that is consumed to vaporize water that is created during the combustion process. Generally, the difference ranges from 2 percent to 10 percent, depending on the specific fuel and its hydrogen content. Some fuels, such as unseasoned wood, can be more than 40 percent different in their gross

and net heat content rates. See **British Thermal Unit (Btu)** in the Glossary for more information.

Thermal conversion factors for hydrocarbon mixes (Table A1) are weighted averages of the thermal conversion factors for each hydrocarbon included in the mix. For example, in calculating the thermal conversion factor for a 60-40 butane-propane mixture, the thermal conversion factor for butane is weighted 1.5 times the thermal conversion factor for propane.

In general, the annual thermal conversion factors presented in Tables A2 through A6 are computed from final annual data or from the best available data and labeled “preliminary.” Often, the previous year’s factor is used as a preliminary value until data become available to calculate the factor appropriate to the year. The source of each factor is described in the section entitled “Thermal Conversion Factor Source Documentation,” which follows Table A6 in this appendix.

Table A1. Approximate Heat Content of Petroleum Products (Million Btu per Barrel)

| Petroleum Product | Heat Content | Petroleum Product | Heat Content |
|-------------------------------------|--------------|---|--------------|
| Asphalt | 6.636 | Natural Gasoline and Isopentane | 4.620 |
| Aviation Gasoline | 5.048 | Pentanes Plus | 4.620 |
| Butane | 4.326 | Petrochemical Feedstocks | |
| Butane-Propane Mixture ^a | 4.130 | Naptha Less Than 401°F | 5.248 |
| Distillate Fuel Oil | 5.825 | Other Oils Equal to or Greater Than 401°F | 5.825 |
| Ethane | 3.082 | Still Gas | 6.000 |
| Ethane-Propane Mixture ^b | 3.308 | Petroleum Coke | 6.024 |
| Isobutane | 3.974 | Plant Condensate | 5.418 |
| Jet Fuel, Kerosene Type | 5.670 | Propane | 3.836 |
| Jet Fuel, Naptha Type | 5.355 | Residual Fuel Oil | 6.287 |
| Kerosene | 5.670 | Road Oil | 6.636 |
| Lubricants | 6.065 | Special Naphthas | 5.248 |
| Motor Gasoline | | Still Gas | 6.000 |
| Conventional ^c | 5.253 | Unfinished Oils | 5.825 |
| Reformulated ^c | 5.150 | Unfractionated Stream | 5.418 |
| Oxygenated ^c | 5.150 | Waxes | 5.537 |
| Fuel Ethanol ^d | 3.539 | Miscellaneous | 5.796 |

^a 60 percent butane and 40 percent propane

^b 70 percent ethane and 30 percent propane

^c See Table A3 for motor gasoline annual weighted averages beginning in 1994.

^d Fuel ethanol, which is derived from agricultural feedstocks (primarily corn), is not a petroleum product but is blended into motor gasoline. Its gross heat content (3.539 million Btu per barrel) is used in *Monthly Energy Review* calculations; its net heat content (3.192 million Btu per barrel) is used in the Energy Information Administration’s *Renewable Energy Annual* calculations.

Web Page: <http://www.eia.doe.gov/emeu/mer/append.html>.

Source: See “Thermal Conversion Factor Source Documentation,” which follows Table A6.

**Table A2. Approximate Heat Content of Crude Oil, Total Petroleum,
and Natural Gas Plant Liquids**
(Million Btu per Barrel)

| | Crude Oil ^a | | | Total Petroleum ^b | | Natural Gas Plant Liquids Production |
|-------------------------|------------------------|---------|---------|------------------------------|---------|--|
| | Production | Imports | Exports | Imports | Exports | |
| 1973 | 5.800 | 5.817 | 5.800 | 5.897 | 5.752 | 4.049 |
| 1974 | 5.800 | 5.827 | 5.800 | 5.884 | 5.774 | 4.011 |
| 1975 | 5.800 | 5.821 | 5.800 | 5.858 | 5.748 | 3.984 |
| 1976 | 5.800 | 5.808 | 5.800 | 5.856 | 5.745 | 3.964 |
| 1977 | 5.800 | 5.810 | 5.800 | 5.834 | 5.797 | 3.941 |
| 1978 | 5.800 | 5.802 | 5.800 | 5.839 | 5.808 | 3.925 |
| 1979 | 5.800 | 5.810 | 5.800 | 5.810 | 5.832 | 3.955 |
| 1980 | 5.800 | 5.812 | 5.800 | 5.796 | 5.820 | 3.914 |
| 1981 | 5.800 | 5.818 | 5.800 | 5.775 | 5.821 | 3.930 |
| 1982 | 5.800 | 5.826 | 5.800 | 5.775 | 5.820 | 3.872 |
| 1983 | 5.800 | 5.825 | 5.800 | 5.774 | 5.800 | 3.839 |
| 1984 | 5.800 | 5.823 | 5.800 | 5.745 | 5.850 | 3.812 |
| 1985 | 5.800 | 5.832 | 5.800 | 5.736 | 5.814 | 3.815 |
| 1986 | 5.800 | 5.903 | 5.800 | 5.808 | 5.832 | 3.797 |
| 1987 | 5.800 | 5.901 | 5.800 | 5.820 | 5.858 | 3.804 |
| 1988 | 5.800 | 5.900 | 5.800 | 5.820 | 5.840 | 3.800 |
| 1989 | 5.800 | 5.906 | 5.800 | 5.833 | 5.857 | 3.826 |
| 1990 | 5.800 | 5.934 | 5.800 | 5.849 | 5.833 | 3.822 |
| 1991 | 5.800 | 5.948 | 5.800 | 5.873 | 5.823 | 3.807 |
| 1992 | 5.800 | 5.953 | 5.800 | 5.877 | 5.777 | 3.804 |
| 1993 | 5.800 | 5.954 | 5.800 | 5.883 | 5.779 | 3.801 |
| 1994 | 5.800 | 5.950 | 5.800 | 5.861 | 5.779 | 3.794 |
| 1995 | 5.800 | 5.938 | 5.800 | 5.855 | 5.746 | 3.796 |
| 1996 | 5.800 | 5.947 | 5.800 | 5.847 | 5.736 | 3.777 |
| 1997 | 5.800 | 5.954 | 5.800 | 5.862 | 5.734 | 3.762 |
| 1998 | 5.800 | 5.953 | 5.800 | 5.861 | 5.720 | 3.769 |
| 1999 | 5.800 | 5.942 | 5.800 | 5.840 | 5.699 | 3.744 |
| 2000 | 5.800 | 5.959 | 5.800 | 5.849 | 5.658 | 3.733 |
| 2001 | 5.800 | 5.976 | 5.800 | 5.862 | 5.752 | 3.735 |
| 2002 | 5.800 | 5.971 | 5.800 | 5.863 | 5.688 | 3.729 |
| 2003 ^E | 5.800 | 5.971 | 5.800 | 5.863 | 5.688 | 3.729 |

^a Crude oil, including lease condensate.

^b Crude oil, including lease condensate, and petroleum products.

E=Estimate.

Web Page: <http://www.eia.doe.gov/emeu/mer/append.html>.

Source: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A3. Approximate Heat Content of Petroleum Product Weighted Averages
(Million Btu per Barrel)

| | Consumption | | | | | | Imports | Exports | Liquefied Petroleum Gases Consumption | Motor Gasoline Consumption |
|-------------------------|-----------------|------------|------------|----------------|------------------------------------|-------|---------|---------|---------------------------------------|----------------------------|
| | End-Use Sectors | | | | Electric Power Sector ^a | Total | | | | |
| | Residential | Commercial | Industrial | Transportation | | | | | | |
| 1973 | 5.205 | 5.749 | 5.568 | 5.395 | 6.245 | 5.515 | 5.983 | 5.752 | 3.746 | 5.253 |
| 1974 | 5.196 | 5.740 | 5.538 | 5.394 | 6.238 | 5.504 | 5.959 | 5.773 | 3.730 | 5.253 |
| 1975 | 5.192 | 5.704 | 5.528 | 5.392 | 6.250 | 5.494 | 5.935 | 5.747 | 3.715 | 5.253 |
| 1976 | 5.215 | 5.726 | 5.538 | 5.395 | 6.251 | 5.504 | 5.980 | 5.743 | 3.711 | 5.253 |
| 1977 | 5.213 | 5.733 | 5.555 | 5.400 | 6.249 | 5.518 | 5.908 | 5.796 | 3.677 | 5.253 |
| 1978 | 5.213 | 5.716 | 5.553 | 5.404 | 6.251 | 5.519 | 5.955 | 5.814 | 3.669 | 5.253 |
| 1979 | 5.298 | 5.769 | 5.418 | 5.428 | 6.258 | 5.494 | 5.811 | 5.864 | 3.680 | 5.253 |
| 1980 | 5.245 | 5.803 | 5.376 | 5.440 | 6.254 | 5.479 | 5.748 | 5.841 | 3.674 | 5.253 |
| 1981 | 5.191 | 5.751 | 5.313 | 5.432 | 6.258 | 5.448 | 5.659 | 5.837 | 3.643 | 5.253 |
| 1982 | 5.167 | 5.751 | 5.263 | 5.422 | 6.258 | 5.415 | 5.664 | 5.829 | 3.615 | 5.253 |
| 1983 | 5.022 | 5.642 | 5.273 | 5.415 | 6.255 | 5.406 | 5.677 | 5.800 | 3.614 | 5.253 |
| 1984 | 5.129 | 5.700 | 5.223 | 5.422 | 6.251 | 5.395 | 5.613 | 5.867 | 3.599 | 5.253 |
| 1985 | 5.115 | 5.660 | 5.221 | 5.423 | 6.247 | 5.387 | 5.572 | 5.819 | 3.603 | 5.253 |
| 1986 | 5.130 | 5.691 | 5.286 | 5.427 | 6.257 | 5.418 | 5.624 | 5.839 | 3.640 | 5.253 |
| 1987 | 5.095 | 5.659 | 5.253 | 5.430 | 6.249 | 5.403 | 5.599 | 5.860 | 3.659 | 5.253 |
| 1988 | 5.118 | 5.657 | 5.248 | 5.434 | 6.250 | 5.410 | 5.618 | 5.842 | 3.652 | 5.253 |
| 1989 | 5.057 | 5.619 | 5.234 | 5.440 | 6.240 | 5.410 | 5.641 | 5.869 | 3.683 | 5.253 |
| 1990 | 4.950 | 5.617 | 5.272 | 5.444 | 6.244 | 5.411 | 5.614 | 5.838 | 3.625 | 5.253 |
| 1991 | 4.912 | 5.590 | 5.190 | 5.442 | 6.246 | 5.384 | 5.636 | 5.827 | 3.614 | 5.253 |
| 1992 | 4.942 | 5.577 | 5.188 | 5.445 | 6.238 | 5.378 | 5.623 | 5.774 | 3.624 | 5.253 |
| 1993 | 4.942 | 5.571 | 5.195 | 5.438 | 6.230 | 5.379 | 5.620 | 5.777 | 3.606 | 5.253 |
| 1994 | 4.936 | 5.580 | 5.165 | 5.426 | 6.213 | 5.361 | 5.534 | 5.777 | 3.635 | ^b 5.230 |
| 1995 | 4.925 | 5.546 | 5.133 | 5.419 | 6.188 | 5.341 | 5.483 | 5.740 | 3.623 | 5.215 |
| 1996 | 4.869 | 5.494 | 5.129 | 5.421 | 6.195 | 5.336 | 5.468 | 5.728 | 3.613 | 5.216 |
| 1997 | 4.870 | 5.459 | 5.133 | 5.417 | 6.199 | 5.336 | 5.469 | 5.726 | 3.616 | 5.213 |
| 1998 | 4.842 | 5.440 | 5.149 | 5.414 | 6.210 | 5.349 | 5.462 | 5.710 | 3.614 | 5.212 |
| 1999 | 4.749 | 5.349 | 5.105 | 5.415 | 6.205 | 5.328 | 5.421 | 5.684 | 3.616 | 5.211 |
| 2000 | 4.754 | 5.388 | 5.072 | 5.423 | 6.189 | 5.326 | 5.432 | 5.651 | 3.607 | 5.210 |
| 2001 | 4.824 | 5.422 | 5.120 | 5.421 | 6.195 | 5.345 | 5.443 | 5.751 | 3.614 | 5.210 |
| 2002 ^E | 4.824 | 5.422 | 5.120 | 5.421 | 6.195 | 5.324 | 5.451 | 5.687 | 3.613 | 5.208 |
| 2003 ^E | 4.824 | 5.422 | 5.120 | 5.421 | 6.195 | 5.324 | 5.451 | 5.687 | 3.613 | 5.208 |

^a The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

^b There is a discontinuity in this time series between 1993 and 1994; beginning in 1994, the single constant factor is replaced by a factor that is a quantity-weighted average of motor gasoline's major components. See Table A1.

E=Estimate.

Note: Weighted averages of the products included in each category are calculated by using heat content values shown in Table A1.

Web Page: <http://www.eia.doe.gov/emeu/mer/append.html>.

Source: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A4. Approximate Heat Content of Natural Gas
(Btu per Cubic Foot)

| | Production | | Consumption | | | Imports | Exports |
|-------------------------|------------|-------|-----------------|------------------------------------|-------|---------|---------|
| | Marketed | Dry | End-Use Sectors | Electric Power Sector ^a | Total | | |
| 1973 | 1,093 | 1,021 | 1,020 | 1,024 | 1,021 | 1,026 | 1,023 |
| 1974 | 1,097 | 1,024 | 1,024 | 1,022 | 1,024 | 1,027 | 1,016 |
| 1975 | 1,095 | 1,021 | 1,020 | 1,026 | 1,021 | 1,026 | 1,014 |
| 1976 | 1,093 | 1,020 | 1,019 | 1,023 | 1,020 | 1,025 | 1,013 |
| 1977 | 1,093 | 1,021 | 1,019 | 1,029 | 1,021 | 1,026 | 1,013 |
| 1978 | 1,088 | 1,019 | 1,016 | 1,034 | 1,019 | 1,030 | 1,013 |
| 1979 | 1,092 | 1,021 | 1,018 | 1,035 | 1,021 | 1,037 | 1,013 |
| 1980 | 1,098 | 1,026 | 1,024 | 1,035 | 1,026 | 1,022 | 1,013 |
| 1981 | 1,103 | 1,027 | 1,025 | 1,035 | 1,027 | 1,014 | 1,011 |
| 1982 | 1,107 | 1,028 | 1,026 | 1,036 | 1,028 | 1,018 | 1,011 |
| 1983 | 1,115 | 1,031 | 1,031 | 1,030 | 1,031 | 1,024 | 1,010 |
| 1984 | 1,109 | 1,031 | 1,030 | 1,035 | 1,031 | 1,005 | 1,010 |
| 1985 | 1,112 | 1,032 | 1,031 | 1,038 | 1,032 | 1,002 | 1,011 |
| 1986 | 1,110 | 1,030 | 1,029 | 1,034 | 1,030 | 997 | 1,008 |
| 1987 | 1,112 | 1,031 | 1,031 | 1,032 | 1,031 | 999 | 1,011 |
| 1988 | 1,109 | 1,029 | 1,029 | 1,028 | 1,029 | 1,002 | 1,018 |
| 1989 | 1,107 | 1,031 | 1,031 | 1,028 | 1,031 | 1,004 | 1,019 |
| 1990 | 1,105 | 1,029 | 1,030 | 1,027 | 1,029 | 1,012 | 1,018 |
| 1991 | 1,108 | 1,030 | 1,031 | 1,025 | 1,030 | 1,014 | 1,022 |
| 1992 | 1,110 | 1,030 | 1,031 | 1,025 | 1,030 | 1,011 | 1,018 |
| 1993 | 1,106 | 1,027 | 1,028 | 1,025 | 1,027 | 1,020 | 1,016 |
| 1994 | 1,105 | 1,028 | 1,029 | 1,025 | 1,028 | 1,022 | 1,011 |
| 1995 | 1,106 | 1,026 | 1,027 | 1,021 | 1,026 | 1,021 | 1,011 |
| 1996 | 1,109 | 1,026 | 1,027 | 1,020 | 1,026 | 1,022 | 1,011 |
| 1997 | 1,107 | 1,026 | 1,027 | 1,020 | 1,026 | 1,023 | 1,011 |
| 1998 | 1,109 | 1,031 | 1,033 | 1,024 | 1,031 | 1,023 | 1,011 |
| 1999 | 1,107 | 1,027 | 1,028 | 1,022 | 1,027 | 1,022 | 1,006 |
| 2000 | 1,107 | 1,025 | 1,026 | 1,021 | 1,025 | 1,023 | 1,006 |
| 2001 | 1,105 | 1,028 | 1,029 | 1,023 | 1,028 | 1,023 | 1,010 |
| 2002 ^E | 1,105 | 1,028 | 1,029 | 1,020 | 1,028 | 1,023 | 1,010 |
| 2003 ^E | 1,105 | 1,028 | 1,029 | 1,020 | 1,028 | 1,023 | 1,010 |

^a The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

E=Estimate.

Web Page: <http://www.eia.doe.gov/emeu/mer/append.html>.

Source: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A5. Approximate Heat Content of Coal and Coal Coke
(Million Btu per Short Ton)

| | Coal | | | | | | | | Coal Coke | |
|-------------------|-------------|----------------------------|--------------------|--------|------------------------------------|--------|---------|---------|-----------|---------------------|
| | Production | Consumption | | | | | Imports | Exports | | Imports and Exports |
| | | End-Use Sectors | | | Electric Power Sector ^b | Total | | | | |
| | | Residential and Commercial | Industrial | | | | | | | |
| | Coke Plants | | Other ^a | | | | | | | |
| 1973 | 23.376 | 22.831 | 26.780 | 22.586 | 22.246 | 23.057 | 25.000 | 26.596 | 24.800 | |
| 1974 | 23.072 | 22.479 | 26.778 | 22.419 | 21.781 | 22.677 | 25.000 | 26.700 | 24.800 | |
| 1975 | 22.897 | 22.261 | 26.782 | 22.436 | 21.642 | 22.506 | 25.000 | 26.562 | 24.800 | |
| 1976 | 22.855 | 22.774 | 26.781 | 22.530 | 21.679 | 22.498 | 25.000 | 26.601 | 24.800 | |
| 1977 | 22.597 | 22.919 | 26.787 | 22.322 | 21.508 | 22.265 | 25.000 | 26.548 | 24.800 | |
| 1978 | 22.248 | 22.466 | 26.789 | 22.207 | 21.275 | 22.017 | 25.000 | 26.478 | 24.800 | |
| 1979 | 22.454 | 22.242 | 26.788 | 22.452 | 21.364 | 22.100 | 25.000 | 26.548 | 24.800 | |
| 1980 | 22.415 | 22.543 | 26.790 | 22.690 | 21.295 | 21.947 | 25.000 | 26.384 | 24.800 | |
| 1981 | 22.308 | 22.474 | 26.794 | 22.585 | 21.085 | 21.713 | 25.000 | 26.160 | 24.800 | |
| 1982 | 22.239 | 22.695 | 26.797 | 22.712 | 21.194 | 21.674 | 25.000 | 26.223 | 24.800 | |
| 1983 | 22.052 | 22.775 | 26.798 | 22.691 | 21.133 | 21.576 | 25.000 | 26.291 | 24.800 | |
| 1984 | 22.010 | 22.844 | 26.799 | 22.543 | 21.101 | 21.573 | 25.000 | 26.402 | 24.800 | |
| 1985 | 21.870 | 22.646 | 26.798 | 22.020 | 20.959 | 21.366 | 25.000 | 26.307 | 24.800 | |
| 1986 | 21.913 | 22.947 | 26.798 | 22.198 | 21.084 | 21.462 | 25.000 | 26.292 | 24.800 | |
| 1987 | 21.922 | 23.404 | 26.799 | 22.381 | 21.136 | 21.517 | 25.000 | 26.291 | 24.800 | |
| 1988 | 21.823 | 23.571 | 26.799 | 22.360 | 20.900 | 21.328 | 25.000 | 26.299 | 24.800 | |
| 1989 | 21.765 | 23.650 | 26.800 | 22.347 | 20.898 | 21.307 | 25.000 | 26.160 | 24.800 | |
| 1990 | 21.822 | 23.137 | 26.799 | 22.457 | 20.779 | 21.197 | 25.000 | 26.202 | 24.800 | |
| 1991 | 21.681 | 23.114 | 26.799 | 22.460 | 20.730 | 21.120 | 25.000 | 26.188 | 24.800 | |
| 1992 | 21.682 | 23.105 | 26.799 | 22.250 | 20.709 | 21.068 | 25.000 | 26.161 | 24.800 | |
| 1993 | 21.418 | 22.994 | 26.800 | 22.123 | 20.677 | 21.010 | 25.000 | 26.335 | 24.800 | |
| 1994 | 21.394 | 23.112 | 26.800 | 22.068 | 20.589 | 20.929 | 25.000 | 26.329 | 24.800 | |
| 1995 | 21.326 | 23.118 | 26.800 | 21.950 | 20.543 | 20.880 | 25.000 | 26.180 | 24.800 | |
| 1996 | 21.322 | 23.011 | 26.800 | 22.105 | 20.547 | 20.870 | 25.000 | 26.174 | 24.800 | |
| 1997 | 21.296 | 22.494 | 26.800 | 22.172 | 20.518 | 20.830 | 25.000 | 26.251 | 24.800 | |
| 1998 | 21.418 | 21.620 | 27.426 | 23.164 | 20.516 | 20.881 | 25.000 | 26.800 | 24.800 | |
| 1999 | 21.070 | 23.880 | 27.426 | 22.489 | 20.490 | 20.818 | 25.000 | 26.081 | 24.800 | |
| 2000 | 21.072 | 25.020 | 27.426 | 22.433 | 20.511 | 20.828 | 25.000 | 26.117 | 24.800 | |
| 2001 | 20.443 | 24.905 | 27.426 | 23.209 | 20.279 | 20.655 | 25.000 | 25.998 | 24.800 | |
| 2002 ^P | 20.620 | 24.836 | 27.426 | 23.361 | 20.479 | 20.814 | 25.000 | 26.062 | 24.800 | |
| 2003 ^E | 20.620 | 24.836 | 27.426 | 23.361 | 20.479 | 20.814 | 25.000 | 26.062 | 24.800 | |

^a Includes transportation.

^b The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

P=Preliminary. E=Estimate.

Web Page: <http://www.eia.doe.gov/emeu/mer/append.html>.

Source: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A6. Approximate Heat Rates for Electricity
(Btu per Kilowatthour)

| | Electricity Net Generation | | | Electricity Consumption ^e |
|-------------------------|--|--|---------------------------------------|--------------------------------------|
| | Fossil-Fueled Steam-Electric Plants ^{a,b} | Nuclear Steam-Electric Plants ^c | Geothermal Energy Plants ^d | |
| 1973 | 10,389 | 10,903 | 21,674 | 3,412 |
| 1974 | 10,442 | 11,161 | 21,674 | 3,412 |
| 1975 | 10,406 | 11,013 | 21,611 | 3,412 |
| 1976 | 10,373 | 11,047 | 21,611 | 3,412 |
| 1977 | 10,435 | 10,769 | 21,611 | 3,412 |
| 1978 | 10,361 | 10,941 | 21,611 | 3,412 |
| 1979 | 10,353 | 10,879 | 21,545 | 3,412 |
| 1980 | 10,388 | 10,908 | 21,639 | 3,412 |
| 1981 | 10,453 | 11,030 | 21,639 | 3,412 |
| 1982 | 10,454 | 11,073 | 21,629 | 3,412 |
| 1983 | 10,520 | 10,905 | 21,290 | 3,412 |
| 1984 | 10,440 | 10,843 | 21,303 | 3,412 |
| 1985 | 10,447 | 10,622 | 21,263 | 3,412 |
| 1986 | 10,446 | 10,579 | 21,263 | 3,412 |
| 1987 | 10,419 | 10,442 | 21,263 | 3,412 |
| 1988 | 10,324 | 10,602 | 21,096 | 3,412 |
| 1989 | 10,432 | 10,583 | 21,096 | 3,412 |
| 1990 | 10,402 | 10,582 | 21,096 | 3,412 |
| 1991 | 10,436 | 10,484 | 20,997 | 3,412 |
| 1992 | 10,342 | 10,471 | 20,914 | 3,412 |
| 1993 | 10,309 | 10,504 | 20,914 | 3,412 |
| 1994 | 10,316 | 10,452 | 20,914 | 3,412 |
| 1995 | 10,312 | 10,507 | 20,914 | 3,412 |
| 1996 | 10,340 | 10,503 | 20,960 | 3,412 |
| 1997 | 10,213 | 10,494 | 20,960 | 3,412 |
| 1998 | 10,197 | 10,491 | 21,017 | 3,412 |
| 1999 | 10,226 | 10,450 | 21,017 | 3,412 |
| 2000 | 10,201 | 10,429 | 21,017 | 3,412 |
| 2001 | ^b 10,146 | 10,442 | 21,017 | 3,412 |
| 2002 ^P | 10,119 | 10,442 | 21,017 | 3,412 |
| 2003 ^E | 10,119 | 10,442 | 21,017 | 3,412 |

^a Used as the thermal conversion factor for hydroelectric, solar, and wind electricity net generation.

^b Through 2000, heat rates are for electric utilities only. Beginning in 2001, heat rates are for the electric power sector, which comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

^c Used as the thermal conversion factor for nuclear electricity net generation.

^d Used as the thermal conversion factor for geothermal electricity net generation.

^e Used as the thermal conversion factor for electricity retail sales, and electricity imports and exports.

P=Preliminary. E=Estimate.

Web Page: <http://www.eia.doe.gov/emeu/mer/append.html>.

Source: See "Thermal Conversion Factor Source Documentation," which follows this table.

Thermal Conversion Factor Source Documentation

Approximate Heat Content of Petroleum and Natural Gas Plant Liquids

Asphalt. The Energy Information Administration (EIA) adopted the thermal conversion factor of 6.636 million British thermal units (Btu) per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Aviation Gasoline. EIA adopted the Bureau of Mines thermal conversion factor of 5.048 million Btu per barrel for "Gasoline, Aviation" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

Butane. EIA adopted the Bureau of Mines thermal conversion factor of 4.326 million Btu per barrel in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Butane-Propane Mixture. EIA adopted the Bureau of Mines calculation of 4.130 million Btu per barrel based on an assumed mixture of 60 percent butane and 40 percent propane. See **Butane** and **Propane**.

Crude Oil, Exports. Assumed by EIA to be 5.800 million Btu per barrel or equal to the thermal conversion factor for crude oil produced in the United States. See **Crude Oil and Lease Condensate, Production**.

Crude Oil, Imports. Calculated annually by EIA by weighting the thermal conversion factor of each type of crude oil imported by the quantity imported. Thermal conversion factors for each type were calculated on a foreign country basis through 1996, by determining the average American Petroleum Institute (API) gravity of crude imported from each foreign country from Form ERA-60 in 1977, or for 1997 and later, by determining the weighted average API gravity from the Form EIA-814, and converting average API gravity to average Btu content by using National Bureau of Standards, Miscellaneous Publication No. 97, *Thermal Properties of Petroleum Products*, 1933.

Crude Oil and Lease Condensate, Production. EIA adopted the thermal conversion factor of 5.800 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

Crude Oil and Petroleum Products, Exports. Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product exported and crude oil exported weighted by the quantity of each petroleum

product and crude oil exported. See **Crude Oil, Exports and Petroleum Products, Exports**.

Crude Oil and Petroleum Products, Imports. Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product and each type of crude oil imported weighted by the quantity of each petroleum product and each type of crude oil imported. See **Crude Oil, Imports and Petroleum Products, Imports**.

Distillate Fuel Oil. EIA adopted the Bureau of Mines thermal conversion factor of 5.825 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Value of Various Fuels, Adopted January 3, 1950."

Ethane. EIA adopted the Bureau of Mines thermal conversion factor of 3.082 million Btu per barrel in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Ethane-Propane Mixture. EIA calculated 3.308 million Btu per barrel based on an assumed mixture of 70 percent ethane and 30 percent propane. See **Ethane** and **Propane**.

Fuel Ethanol Blended into Motor Gasoline. EIA adopted the thermal conversion factor of 3.539 million Btu per barrel published in "Oxygenate Flexibility for Future Fuels," a paper presented by William J. Piel of the ARCO Chemical Company at the National Conference on Reformulated Gasolines and Clean Air Act Implementation, Washington, D.C., October 1991.

Isobutane. EIA adopted the Bureau of Mines thermal conversion factor of 3.974 million Btu per barrel in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Jet Fuel, Kerosene Type. EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel for "Jet Fuel, Commercial" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

Jet Fuel, Naphtha Type. EIA adopted the Bureau of Mines thermal conversion factor of 5.355 million Btu per barrel for "Jet Fuel, Military" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

Kerosene. EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

Liquefied Petroleum Gases. 1973 forward: Calculated annually by EIA as a weighted average by multiplying the quantity consumed of each of the component products by each product's conversion factor, listed in this appendix, and dividing the sum of those heat contents by the sum of the quantities consumed. The component products are ethane (including ethylene), propane (including propylene), normal butane (including butylene), butane-propane mixtures, ethane-propane mixtures, and isobutane. Quantities consumed are from: 1973 through 1980: EIA, Energy Data Reports, *Petroleum Statement, Annual*, Table 1. 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

Lubricants. EIA adopted the thermal conversion factor of 6.065 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Miscellaneous Products. EIA adopted the thermal conversion factor of 5.796 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Motor Gasoline. 1973 through 1993: EIA adopted the Bureau of Mines thermal conversion factor of 5.253 million Btu per barrel for "Gasoline, Motor Fuel" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics. 1994 forward: EIA calculated national annual quantity-weighted average conversion factors for conventional, reformulated, and oxygenated motor gasolines (shown in appendix Table A1). The factor for conventional motor gasoline is 5.253 million Btu per barrel, as used for previous years. The factors for reformulated and oxygenated gasolines, both currently 5.150 million Btu per barrel, are based on data published in the Environmental Protection Agency, Office of Mobile Sources, National Vehicle and Fuel Emissions Laboratory report EPA 420-F-95-003, Fuel Economy Impact Analysis of Reformulated Gasoline.

Natural Gas Plant Liquids, Production. Calculated annually by EIA as the average of the thermal conversion factors of each natural gas plant liquid produced weighted by the quantity of each natural gas plant liquid produced.

Natural Gasoline. EIA adopted the thermal conversion factor of 4.620 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Pentanes Plus. EIA assumed the thermal conversion factor to be 4.620 million Btu per barrel or equal to that for natural gasoline. See **Natural Gasoline**.

Petrochemical Feedstocks, Naphtha Less Than 401 Degrees Fahrenheit. Assumed by EIA to be 5.248 million Btu per barrel, equal to the thermal conversion factor for special naphthas. See **Special Naphthas**.

Petrochemical Feedstocks, Oils Equal to or Greater Than 401 Degrees Fahrenheit. Assumed by EIA to be 5.825 million Btu per barrel, equal to the thermal conversion factor for distillate fuel oil. See **Distillate Fuel Oil**.

Petrochemical Feedstocks, Still Gas. Assumed by EIA to be 6.000 million Btu per barrel, equal to the thermal conversion factor for still gas. See **Still Gas**.

Petroleum Coke. EIA adopted the thermal conversion factor of 6.024 million Btu per barrel as reported in Btu per short ton in the Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Value of Various Fuels, Adopted January 3, 1950." The Bureau of Mines calculated this factor by dividing 30.120 million Btu per short ton, as given in the referenced Bureau of Mines internal memorandum, by 5.0 barrels per short ton, as given in the Bureau of Mines Form 6-1300-M and successor EIA forms.

Petroleum Products, Total Consumption. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed, weighted by the quantity of each petroleum product consumed.

Petroleum Products, Consumption by the Electric Power Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the electric power sector, weighted by the quantity of each petroleum product consumed at by the electric power sector.

Petroleum Products, Consumption by Industrial Users. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed in the industrial sector, weighted by the estimated quantity of each petroleum product consumed in the industrial sector.

Petroleum Products, Consumption by Residential and Commercial Users. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the residential and commercial sector, weighted by the estimated quantity of each petroleum product consumed in the residential and commercial sector.

Petroleum Products, Consumption by Transportation Users. Calculated annually by EIA as the average of the thermal conversion factor for all petroleum products consumed in the transportation sector, weighted by the estimated quantity of each petroleum product consumed in the transportation sector.

Petroleum Products, Exports. Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product, weighted by the quantity of each petroleum product exported.

Petroleum Products, Imports. Calculated annually by EIA as the average of the thermal conversion factors for each

petroleum product imported, weighted by the quantity of each petroleum product imported.

Plant Condensate. Estimated to be 5.418 million Btu per barrel by EIA from data provided by McClanahan Consultants, Inc., Houston, Texas.

Propane. EIA adopted the Bureau of Mines thermal conversion factor of 3.836 million Btu per barrel in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Residual Fuel Oil. EIA adopted the thermal conversion factor of 6.287 million Btu per barrel as reported in the Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

Road Oil. EIA adopted the Bureau of Mines thermal conversion factor of 6.636 million Btu per barrel, which was assumed to be equal to that of asphalt (see **Asphalt**) and was first published by the Bureau of Mines in the *Petroleum Statement, Annual, 1970*.

Special Naphthas. EIA adopted the Bureau of Mines thermal conversion factor of 5.248 million Btu per barrel, which was assumed to be equal to that of total gasoline (aviation and motor) factor and was first published in the *Petroleum Statement, Annual, 1970*.

Still Gas. EIA adopted the Bureau of Mines estimated thermal conversion factor of 6.000 million Btu per barrel and first published in the *Petroleum Statement, Annual, 1970*.

Unfinished Oils. EIA assumed the thermal conversion factor to be 5.825 million Btu per barrel or equal to that for distillate fuel oil (see **Distillate Fuel Oil**) and first published in the *Annual Report to Congress, Volume 3, 1977*.

Unfractionated Stream. EIA assumed the thermal conversion factor to be 5.418 million Btu per barrel or equal to that for plant condensate (see **Plant Condensate**) and first published in the *Annual Report to Congress, Volume 2, 1981*.

Waxes. EIA adopted the thermal conversion factor of 5.537 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Approximate Heat Content of Natural Gas

Natural Gas, Total Consumption. 1973-1979: EIA adopted the thermal conversion factor calculated annually by the American Gas Association (AGA) and published in

Gas Facts, an AGA annual publication. 1980 forward: Calculated annually by EIA by dividing the total heat content of natural gas consumed by the total quantity of natural gas consumed. The heat content and quantity consumed are from Form EIA-176. Published sources are: 1980-1989: EIA, *Natural Gas Annual 1992, Volume 2*, Table 15. 1990-1992: EIA, *Natural Gas Annual 1992, Volume 2*, Table 16. 1993 forward: 1992 value used as an estimate.

Natural Gas, Consumption by the Electric Power Sector. Calculated annually by EIA by dividing the total heat content of natural gas consumed by the electric power sector by the total quantity received by the electric power sector.

Natural Gas, Consumption by the End-Use Sectors. Calculated annually by EIA by dividing the heat content of all natural gas consumed less the heat content of natural gas consumed by the electric power sector by the quantity of all natural gas consumed less the quantity of natural gas consumed by the electric power sector.

Natural Gas, Exports. Calculated annually by EIA by dividing the heat content of exported natural gas by the quantity of natural gas exported, both reported on Form FPC-14.

Natural Gas, Imports. Calculated annually by EIA by dividing the heat content of imported natural gas by the quantity of natural gas imported, both reported on Form FPC-14.

Natural Gas Production, Dry. Assumed by EIA to be equal to the thermal conversion factor for the consumption of dry natural gas. See **Natural Gas Total Consumption**.

Natural Gas Production, Marketed (Wet). Calculated annually by EIA by adding the heat content of dry natural gas production and the total heat content of natural gas plant liquids production and dividing this sum by the total quantity of marketed (wet) natural gas production.

Approximate Heat Content of Coal and Coal Coke

Coal, Total Consumption. Calculated annually by EIA by dividing the sum of the heat content of coal (including waste coal) consumption by the total tonnage.

Coal, Consumption by the Electric Power Sector. Calculated annually by dividing the total heat content of coal (including waste coal) by total consumption tonnage of the electric power sector.

Coal, Consumption by End-Use Sectors. Calculated annually by EIA by dividing the sum of the heat content of

coal (including waste coal) consumed by the end-use sectors by the sum of the total tonnage.

Coal, Exports. Calculated annually by EIA by dividing the sum of the heat content of coal exported by the sum of the total tonnage.

Coal, Imports. Calculated annually by EIA by dividing the sum of the heat content of coal imported by the sum of the total tonnage.

Coal, Production. Calculated annually by EIA by dividing the sum of the total heat content of coal (including some anthracite culm and, for 2001 forward, bituminous refuse) produced by the sum of the total tonnage.

Coal Coke, Imports and Exports. EIA adopted the Bureau of Mines estimate of 24.800 million Btu per short ton.

Approximate Heat Rates for Electricity

Fossil-Fueled Steam-Electric Plant Generation. There is no generally accepted practice for measuring the thermal conversion rates for power plants that generate electricity from hydroelectric, wood and waste, wind, photovoltaic, or solar thermal energy sources. Therefore, EIA used data from Form EIA-767, "Steam-Electric Plant Operation and Design Report," to calculate a rate factor that is equal to the prevailing annual average heat rate factor for fossil-fueled steam-electric power plants in the United States. By using that factor, it is possible to evaluate fossil fuel requirements for replacing those sources during periods of interruption, such as droughts. The heat content of a kilowatthour of electricity produced, regardless of the generation process, is

3,412 Btu. 1973-1988: The weighted annual average heat rate for fossil-fueled steam-electric power plants in the United States, as published in EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 9. 1989 forward: Calculated annually by EIA by using the heat rate reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms EIA-860A, EIA-860B, and EIA-867), and the generation on Form EIA-906, "Power Plant Report" (and predecessor forms).

Geothermal Energy Plant Generation. 1973-1981: Calculated annually by EIA by weighting the annual average heat rates of operating geothermal units by the installed nameplate capacities as reported on Form FPC-12. 1982 forward: Estimated annually by EIA on the basis of an informal survey of relevant plants.

Nuclear Steam-Electric Plant Generation. 1973-1991: Calculated annually by EIA by dividing the total heat content consumed in nuclear generating units by the total (net) electricity generated by nuclear generating units. The heat content and electricity generation are reported on Form FERC-1, "Annual Report of Major Electric Utilities, Licenses, and Others"; Form EIA-412, "Annual Report of Public Electric Utilities"; and predecessor forms. The factors for 1982 through 1984 were published in the following EIA reports-1982: *Historical Plant Cost and Annual Production Expenses for Selected Electric Plants 1982*, page 215. 1983 and 1984: *Electric Plant Cost and Power Production Expenses 1991*, Table 13. 1985 forward: Calculated annually by EIA by using the heat rate reported on Form EIA-860, "Annual Electric Generator Report," and the generation reported on Form EIA-906, "Power Plant Report" (and predecessor forms).

Appendix B. Metric and Other Physical Conversion Factors

Data presented in the *Monthly Energy Review* 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 | .453 592 37 ^a | = | kilograms (kg) |
| | pounds uranium oxide (lb U ₃ O 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 ^b | = | 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 ^b | = | square centimeters (cm ²) |
| Temperature | degrees Fahrenheit (°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) |

^aExact conversion.

^bCalculated by the Energy Information Administration.

^cTo convert degrees Celsius (°C) to degrees Fahrenheit (°F) exactly, multiply by 9/5, then add 32.

^dThe Btu used in this table is the International Table Btu adopted by the Fifth International Conference on 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 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 B610, National Institute of Standards and Technology, Gaithersburg, MD 20899, or on telephone number 301-975-4220.

Web Page: <http://www.eia.doe.gov/emeu/mer/append.html>.

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 |
| 1,0 ¹² | tera | T | 10 ⁻¹² | pico | p |
| 1,0 ¹⁵ | peta | P | 10 ⁻¹⁵ | femto | f |
| 1,0 ¹⁸ | exa | E | 10 ⁻¹⁸ | atto | a |
| 1,0 ²¹ | zetta | Z | 10 ⁻²¹ | zepto | z |
| 1,0 ²⁴ | yotta | Y | 10 ⁻²⁴ | yocto | y |

Web Page: <http://www.eia.doe.gov/emeu/mer/append.html>.

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 | <i>multiplied by</i> | Conversion Factor | equals | 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 | ords (cd) | x | 1.25 ^b | = | shorts tons |
| | ords (cd) | x | 128 ^a | = | cubic feet (ft ³) |

^aExact conversion.

^bCalculated by the Energy Information Administration.

Web Page: <http://www.eia.doe.gov/emeu/mer/append.html>.

Source: U.S. Department of Commerce, National Institute of Standards and Technology, *Specifications, Tolerances, 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. List of Energy Plugs

Energy Plugs are synopses of products that have been released recently by the Energy Information Administration. They appear on a regular basis at the front of the *Monthly Energy Review*. Following is a list of the Energy Plug titles that have been published over the past four years. For a

complete list of all features that have appeared in the *Monthly Energy Review* since the first article was published in March 1975, go to the Energy Plug web site at: <http://www.eia.doe.gov/emeu/plugs/plugsrgt.html>.

| Title | Cover Date |
|---|----------------|
| 2003 | |
| <i>Annual Energy Outlook 2003</i> | January 2003 |
| <i>Performance Profiles of Major Energy Producers 2001</i> | February 2003 |
| <i>Voluntary Reporting of Greenhouse Gases 2001</i> | March 2003 |
| <i>Electric Power Annual 2001</i> | April 2003 |
| <i>International Energy Outlook 2003</i> | May 2003 |
| <i>Uranium Industry Annual 2002</i> | June 2003 |
| 2002 | |
| <i>Performance Profiles of Major Energy Producers 2000</i> | January 2002 |
| <i>Voluntary Reporting of Greenhouse Gases 2000</i> | February 2002 |
| <i>Analysis of Corporate Average Fuel Economy Standards for Light Trucks and Increased Alternative Fuel Use</i> | March 2002 |
| <i>Summer 2002 Motor Gasoline Outlook</i> | April 2002 |
| <i>International Energy Outlook 2002</i> | April 2002 |
| <i>Weekly Natural Gas Storage Report</i> | May 2002 |
| <i>International Energy Annual 2000</i> | May 2002 |
| <i>Delivered Energy Consumption Projections by Industry</i> | June 2002 |
| <i>Uranium Industry Annual 2001</i> | June 2002 |
| <i>Biomass for Electricity Generation</i> | July 2002 |
| <i>Measuring Changes in Energy Efficiency</i> | July 2002 |
| <i>Foreign Direct Investment in U.S. Energy in 2000</i> | August 2002 |
| <i>U.S. Natural Gas Markets: Relationship Between Henry Hub Spot Prices and U.S. Wellhead Prices</i> | August 2002 |
| <i>Diesel Fuel Price Pass-through</i> | September 2002 |
| <i>Winter Fuels Outlook: 2002-2003</i> | October 2002 |
| <i>Annual Energy Review 2001</i> | November 2002 |
| <i>Renewable Energy Annual 2001</i> | December 2002 |
| 2001 | |
| <i>Energy Education Resources</i> | January 2001 |
| <i>Impact of Interruptible Natural Gas Service on Northeast Heating Oil Demand</i> | February 2001 |
| <i>Performance Profiles of Major Energy Producers 1999</i> | February 2001 |
| <i>Renewable Energy 2000: Issues and Trends</i> | March 2001 |
| <i>Summer 2001 Motor Gasoline Outlook</i> | April 2001 |
| <i>International Energy Outlook 2001</i> | April 2001 |
| <i>State Energy Data Report 1999: Consumption Estimates</i> | May 2001 |
| <i>The Transition to Ultra-Low-Sulfur Diesel Fuel: Effects on Prices and Supply</i> | May 2001 |
| <i>Energy Market Maps</i> | June 2001 |
| <i>Coal Industry Annual 1999</i> | July 2001 |
| <i>Annual Energy Review 2000</i> | August 2001 |
| <i>World Energy "Areas To Watch"</i> | August 2001 |
| <i>Electric Power Annual 2000, Volume I</i> | September 2001 |
| <i>Winter Fuels Outlook: 2001-2002</i> | October 2001 |
| <i>Fuel Oil and Kerosene Sales 2000</i> | October 2001 |
| <i>The Majors' Shift to Natural Gas</i> | October 2001 |

2001 (Continued)

| | |
|--|---------------|
| <i>Annual Energy Outlook 2002, Early Release</i> | November 2001 |
| <i>Emissions of Greenhouse Gases in the United States 2000</i> | November 2001 |
| <i>State Energy Price and Expenditure Report 1999</i> | November 2001 |
| <i>Energy Education Resources</i> | December 2001 |
| <i>U.S. Natural Gas Markets: Mid-Term Prospects for Natural Gas Supply</i> | December 2001 |

2000

| | |
|---|----------------|
| <i>Inventory of Nonutility Electric Power Plants in the United States 1998</i> | January 2000 |
| <i>The Changing Structure of the Electric Power Industry 1999: Mergers and Other Corporate Combinations</i> | January 2000 |
| <i>International Energy Annual 1998</i> | February 2000 |
| <i>Performance Profiles of Major Energy Producers 1998</i> | February 2000 |
| <i>OPEC Revenues Fact Sheet</i> | March 2000 |
| <i>Country Analysis Brief: Iran</i> | March 2000 |
| <i>International Energy Outlook 2000</i> | April 2000 |
| <i>Outlook for Biomass Ethanol Production and Demand</i> | April 2000 |
| <i>Summer 2000 Motor Gasoline Outlook</i> | May 2000 |
| <i>State Energy Price and Expenditure Report 1997</i> | June 2000 |
| <i>Energy Consumption and Renewable Energy Development Potential on Indian Lands</i> | June 2000 |
| <i>Annual Energy Review 1999</i> | July 2000 |
| <i>A Primer on Gasoline Prices</i> | August 2000 |
| <i>Long-Term World Oil Supply: A Resource Base/Production Path Analysis</i> | August 2000 |
| <i>U.S. Carbon Dioxide Emissions From Energy Sources: 1999 Flash Estimate</i> | September 2000 |
| <i>The Electric Transmission Network: A Multi-Region Analysis</i> | September 2000 |
| <i>Propane Prices: What Consumers Should Know</i> | October 2000 |
| <i>Winter Fuels Outlook: 2000-2001</i> | October 2000 |
| <i>Advance Summary: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves 1999 Annual Report</i> | October 2000 |
| <i>Residential Natural Gas Prices: What Consumers Should Know</i> | November 2000 |
| <i>The Changing Structure of the Electric Power Industry 2000: An Update</i> | November 2000 |
| <i>Annual Energy Outlook 2001 Early Release</i> | December 2000 |
| <i>Residential Heating Oil Prices: What Consumers Should Know</i> | December 2000 |

1999

| | |
|--|----------------|
| <i>Performance Profiles of Major Energy Producers 1997</i> | January 1999 |
| <i>State Energy Data Report 1996</i> | February 1999 |
| <i>State Electricity Profiles</i> | March 1999 |
| <i>International Energy Annual 1997</i> | April 1999 |
| <i>International Energy Outlook 1999</i> | April 1999 |
| <i>Natural Gas 1998: Issues and Trends</i> | May 1999 |
| <i>Electric Power Annual 1998, Volume I</i> | June 1999 |
| <i>Annual Energy Review 1998</i> | July 1999 |
| <i>Energy in the Americas</i> | August 1999 |
| <i>State Energy Data Report 1997</i> | September 1999 |
| <i>The U.S. Coal Industry in the 1990s: Low Prices and Record Production</i> | September 1999 |
| <i>Issues in Midterm Analysis and Forecasting 1999</i> | October 1999 |
| <i>1999-2000 Winter Fuels Outlook</i> | November 1999 |
| <i>Emissions of Greenhouse Gases in the United States 1998</i> | November 1999 |
| <i>Annual Energy Outlook 2000</i> | December 1999 |
| <i>Energy in Africa</i> | December 1999 |

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 will be used for blending or compounding into finished aviation gasoline (e.g., straight run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

Aviation Gasoline, Finished: A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating engines. Fuel specifications are provided in ASTM Specification D 910 and Military Specification MIL-G-5572. *Note:* Data on blending components are not counted in data on finished aviation gasoline.

Barrel (Petroleum): A unit of volume equal to 42 U.S. gallons.

Base Gas: The volume of gas needed as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the withdrawal season. All native gas is included in the base gas volume.

Black Liquor (Pulping Liquor): The alkaline spent liquor removed from the digesters in the process of chemically pulping wood. After evaporation, the liquor is burned as a fuel in a recovery furnace that permits the recovery of certain basic chemicals.

British Thermal Unit (Btu): The quantity of heat required to raise the temperature of 1 pound of liquid water by 1 degree Fahrenheit at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit). 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 (C₄H₁₀). 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 (C₄H₈) recovered from refinery processes.

Capacity Factor: The ratio of the electrical energy produced by a generating unit for a given period of time to the electrical energy that could have been produced at continuous full-power operation during the same period.

Chained Dollars: A measure used to express real prices. Real prices are those that have been adjusted to remove the effect of changes in the purchasing power of the dollar; they usually reflect buying power relative to a reference year. Prior to 1996, real prices were expressed in constant dollars, a measure based on the weights of goods and services in a single year, usually a recent year. In 1996, the U.S. Department of Commerce introduced the chained-dollar measure. The new measure is based on the average weights of goods and services in successive pairs of years. It is "chained" because the second year in each pair, with its weights, becomes the first year of the next pair. The advantage of using the chained-dollar measure is that it is more closely related to any given period and is therefore subject to less distortion over time.

CIF: See **Cost, Insurance, Freight**.

City Gate: A point or measuring station at which a distribution gas utility receives gas from a natural gas pipeline company or transmission system.

Coal: A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time.

Coal Coke: See **Coke, Coal**.

Coal Stocks: Coal quantities that are held in storage for future use and disposition. *Note:* When coal data are collected for a particular reporting period (month, quarter,

or year), coal stocks are commonly measured as of the last day of the period.

Coke, Coal: A solid carbonaceous residue derived from low-ash, low-sulfur bituminous coal from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000° F so that the fixed carbon and residual ash are fused together. Coke is used as a fuel and as a reducing agent in smelting iron ore in a blast furnace. Coke (coal) has a heating value of 24.8 million Btu per ton.

Coke, Petroleum: A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion is 5 barrels (42 U.S. gallons each) per short ton. Coke (petroleum) has a heating value of 6.024 million Btu per barrel.

Coking Coal: Bituminous coal suitable for making coke. See **Coke, Coal**.

Combined-Heat-and-Power (CHP) Plant: A plant designed to produce both heat and electricity from a single heat source. Note: This term is being used in place of the term "cogenerator" that was used by EIA in the past. CHP better describes the facilities because some of the plants included do not produce heat and power in a sequential fashion and, as a result, do not meet the legal definition of cogeneration specified in the Public Utility Regulatory Policies Act (PURPA).

Commercial Sector: An energy-consuming sector that consists of service-providing facilities and equipment of: businesses; Federal, State, and local governments; and other private and public organizations, such as religious, social, or fraternal groups. The commercial sector includes institutional living quarters. It also includes sewage treatment facilities. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a wide variety of other equipment. Note: This sector includes generators that produce electricity and/or useful thermal output primarily to support the activities of the above-mentioned commercial establishments.

Completion: The installation of permanent equipment for the production of oil or gas. If a well is equipped to produce only oil or gas from one zone or reservoir, the definition of a well (classified as an oil well or gas well) and the definition of a completion are identical. However, if a well is equipped to produce oil and/or gas separately from more than one reservoir, a well is not synonymous with a completion.

Constant Dollars: See **Chained Dollars**.

Conventional Gasoline: Finished motor gasoline not included in the oxygenated or reformulated gasoline categories. Note: This category excludes reformulated

gasoline blendstock for oxygenate blending (RBOB) as well as other blendstock.

Conventional Hydroelectric Power: Hydroelectric power generated from flowing water that is not created by **hydroelectric pumped storage**.

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. See **British Thermal Unit**.

Cost, Insurance, Freight (CIF): A sales transaction in which the seller pays for the transportation and insurance of the goods to the port of destination specified by the buyer.

Crude Oil: A mixture of hydrocarbons that exists in liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Depending upon the characteristics of the crude stream, it may also include: 1) small amounts of hydrocarbons that exist in gaseous phase in natural underground reservoirs but are liquid at atmospheric pressure after being recovered from oil well (casinghead) gas in lease separators and are subsequently commingled with the crude stream without being separately measured. Lease condensate recovered as a liquid from natural gas wells in lease or field separation facilities and later mixed into the crude stream is also included; 2) small amounts of nonhydrocarbons produced with the oil, such as sulfur and various metals; and 3) drip gases, and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

Liquids produced at natural gas processing plants are excluded. Crude oil is refined to produce a wide array of petroleum products, including heating oils; gasoline, diesel and jet fuels; lubricants; asphalt; ethane, propane, and butane; and many other products used for their energy or chemical content.

Crude Oil F.O.B. Price: The crude oil price actually charged at the oil-producing country's port of loading. Includes deductions for any rebates and discounts or additions of premiums, where applicable. It is the actual price paid with no adjustment for credit terms.

Crude Oil (Including Lease Condensate): A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Where identifiable, liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded.

Crude Oil Landed Cost: The price of crude oil at the port of discharge, including charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. The cost does not include charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage).

Crude Oil Refinery Input: The total crude oil put into processing units at refineries.

Crude Oil Stocks: Stocks of crude oil and lease condensate held at refineries, in pipelines, at pipeline terminals, and on leases.

Crude Oil Used Directly: Crude oil consumed as fuel by crude oil pipelines and on crude oil leases.

Crude Oil Well: A well completed for the production of crude oil from one or more oil zones or reservoirs. Wells producing both crude oil and natural gas are classified as oil wells.

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.

Degree-Day Normals: Simple arithmetic averages of monthly or annual degree-days over a long period of time (usually the 30-year period 1961–1990). The averages may be simple degree-day normals or population-weighted degree-day normals.

Degree-Days, Cooling (CDD): A measure of how warm a location is over a period of time relative to a base temperature, most commonly specified as 65 degrees Fahrenheit. The measure is computed for each day by subtracting the base temperature (65 degrees) from the average of the day's high and low temperatures, with negative values set equal to zero. Each day's cooling degree-days are summed to create a cooling degree-day measure for a specified reference period. Cooling degree-days are used in energy analysis as an indicator of air conditioning energy requirements or use.

Degree-Days, Heating (HDD): A measure of how cold a location is over a period of time relative to a base temperature, most commonly specified as 65 degrees Fahrenheit. The measure is computed for each day by subtracting the average of the day's high and low temperatures from the base temperature (65 degrees), with negative values set equal to zero. Each day's heating degree-days are summed to create a heating degree-day measure for a specified reference period. Heating degree-days are used in energy analysis as an indicator of space heating energy requirements or use.

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, each comprising 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.

Design Electrical Rating, Net: The nominal net electrical output of a nuclear unit as specified by the electric utility for the purpose of plant design.

Development Well: A well drilled within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive.

Distillate Fuel Oil: A general classification for one of the petroleum fractions produced in conventional distillation operations. It includes diesel fuels and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery. Products known as No. 1, No. 2, and No. 4 fuel oils are used primarily for space heating and electric power generation.

Dry Hole: An exploratory or development well found to be incapable of producing either oil or gas in sufficient quantities to justify completion as an oil or gas well.

Dry Natural Gas Production: See **Natural Gas (Dry) Production**.

Electrical System Energy Losses: The amount of energy lost during generation, transmission, and distribution of electricity, including plant and unaccounted-for uses.

Electricity: A form of energy characterized by the presence and motion of elementary charged particles generated by friction, induction, or chemical change.

Electricity Generation: The process of producing electric energy, or the amount of electric energy produced by transforming other forms of energy, commonly expressed in **kilowatthours** (kWh) or **megawatthours** (Mwh).

Electricity Generation, Gross: The total amount of electric energy produced by generating units and

measured at the generating terminal in **kilowatthours** (kWh) or megawatthours (MWh).

Electricity Generation, Net: The amount of **gross electricity generation** less the electrical energy consumed at the generating station(s) for station service or auxiliaries. Note: Electricity required for pumping at **hydro-electric pumped-storage** plants is regarded as electricity for station service and is deducted from gross generation.

Electricity-Only Plant: A plant designed to produce electricity only. See also **Combined-Heat-and-Power (CHP) Plant**.

Electricity Retail Sales: The amount of electricity sold to customers purchasing electricity for their own use and not for resale.

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 Power Sector: An energy-consuming sector that consists of electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public—i.e., North American Industry Classification System 22 plants. See also **Combined-Heat-and-Power (CHP) Plant, Electricity-Only Plant, Electric Utility, and Independent Power Producer**.

Electric Utility: A corporation, person, agency, authority, or other legal entity or instrumentality aligned with distribution facilities for delivery of electric energy for use primarily by the public. Included are investor-owned electric utilities, municipal and State utilities, Federal electric utilities, and rural electric cooperatives. A few entities that are tariff based and corporately aligned with companies that own distribution facilities are also included. Note: Due to the issuance of FERC Order 888 that required traditional electric utilities to functionally unbundle their generation, transmission, and distribution operations, "electric utility" currently has inconsistent interpretations from State to State.

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.

Energy Consumption: The use of energy as a source of heat or power or as an input in the manufacturing process.

Energy service provider: An energy entity that provides service to a retail or end-use customer.

Energy-Use Sectors: A group of major energy-consuming components of U.S. society developed to measure and analyze energy use. The sectors most commonly referred to in EIA are: **residential, commercial, industrial, transportation, and electric power**.

Ethane: A normally gaseous straight-chain hydrocarbon (C₂H₆). 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.

Ethanol: An anhydrous denatured aliphatic alcohol intended for gasoline blending. See Oxygenates.

Ethylene: An olefinic hydrocarbon (C₂H₄) recovered from refinery processes or petrochemical processes.

Exploratory Well: A well drilled to find and produce oil or gas in an area previously considered an unproductive area, to find a new reservoir in a known field (i.e., one previously found to be producing oil or gas in another reservoir), or to extend the limit of a known oil or gas reservoir.

Exports: Shipments of goods from within the 50 States and the District of Columbia to U.S. possessions and territories or to foreign countries.

Extraction Loss: The reduction in volume of natural gas due to the removal of natural gas liquid constituents, such as ethane, propane, and butane, at natural gas processing plants.

Federal Energy Administration (FEA): A predecessor of the Energy Information Administration.

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.

First Purchase Price: The marketed first sales price of domestic crude oil, consistent with the removal price defined by the provisions of the Windfall Profits Tax on Domestic Crude Oil (Public Law 96-223, Sec. 4998 (c)).

Flared Natural Gas: Natural gas burned in flares on the base site or at gas processing plants.

F.O.B. (Free on Board): A sales transaction in which the seller makes the product available for pick up at a specified port or terminal at a specified price and the buyer pays for the subsequent transportation and insurance.

Footage Drilled: Total footage for wells in various categories, as reported for any specified period, includes (1) the deepest total depth (length of well bores) of all wells drilled from the surface, (2) the total of all bypassed footage drilled in connection with reported wells, and (3) all new footage drilled for directional sidetrack wells. Footage reported for directional sidetrack wells does not include footage in the common bore, which is reported as footage for the original well. In the case of old wells drilled deeper, the reported footage is that which was drilled below the total depth of the old well.

Former U.S.S.R.: See **U.S.S.R.**

Fossil Fuel: An energy source formed in the Earth's crust from decayed organic material, such as **petroleum**, **coal**, and **natural gas**.

Fossil-Fueled Steam-Electric Power Plant: An electricity generation plant in which the prime mover is a turbine rotated by high-pressure steam produced in a boiler by heat from burning fossil fuels.

Fuel Ethanol: An anhydrous, denatured aliphatic alcohol (C₂H₅OH) intended for motor gasoline blending. See **Oxygenates**.

Full-Power Operation: Operation of a nuclear generating unit at 100 percent of its design capacity. Full-power operation precedes commercial operation.

Gasohol: A blend of finished motor gasoline containing alcohol (generally ethanol but sometimes methanol) at a concentration between 5.7 percent and 10 percent by volume. See **Motor Gasoline**, **Oxygenated**.

Gas Well: A well completed for the production of natural gas from one or more gas zones or reservoirs. (Wells

producing both crude oil and natural gas are classified as oil wells.)

Geothermal Energy: Hot water or steam extracted from geothermal reservoirs in the earth's crust and used for geothermal heat pumps, water heating, or electricity generation.

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.

GT/IC: Gas turbine and internal combustion plants.

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. It is 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 usable 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.

Hydrocarbon: An organic chemical compound of hydrogen and carbon in the gaseous, liquid, or solid phase. The molecular structure of hydrocarbon compounds varies from the simplest (methane, the primary constituent of natural gas) to the very heavy and very complex.

Hydroelectric Power: The production of electricity from the kinetic energy of falling water.

Hydroelectric Power Plant: A plant in which the turbine generators are driven by falling water.

Hydroelectric Pumped Storage: Hydroelectricity that is generated during peak load periods by using water

previously pumped into an elevated storage reservoir during off-peak periods when excess generating capacity is available to do so. When additional generating capacity is needed, the water can be released from the reservoir through a conduit to turbine generators located in a power plant at a lower level.

Imports: Receipts of goods into the 50 States and the District of Columbia from U.S. possessions and territories or from foreign countries.

Independent Power Producer: A corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities for the generation of electricity for use primarily by the public, and that is not an **electric utility**.

Industrial Sector: An energy-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity: manufacturing (NAICS (North American Industry Classification System) codes 31-33); agriculture, forestry, fishing and hunting (NAICS code 11); mining, including oil and gas extraction (NAICS code 21); natural gas distribution (NAICS code 2212); and construction (NAICS code 23). Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. *Note:* This sector includes generators that produce electricity and/or useful thermal output primarily to support the above-mentioned industrial activities.

Injections (Natural Gas): Natural gas injected into storage reservoirs.

Isobutane: A normally gaseous branch-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. See **Butane**.

Isobutylene: An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

Isopentane: A saturated branched-chain hydrocarbon obtained by fractionation of natural gasoline or isomerization of normal pentane.

Jet Fuel: A refined petroleum product used in jet aircraft engines. It includes kerosene-type jet fuel and naphtha-type jet fuel.

Jet Fuel, Kerosene-Type: A kerosene-based product with a maximum distillation temperature of 400° F at the 10-percent recovery point and a final maximum boiling point of 572° F. Fuel specifications are provided in ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It is

used primarily for commercial turbojet and turboprop aircraft engines.

Jet Fuel, Naphtha-Type: A fuel in the heavy naphtha boiling range, with an average gravity of 52.8 degrees API, 20 to 90 percent distillation temperatures of 290° to 470° F and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used by the military for turbojet and turboprop engines.

Kerosene: A petroleum distillate having 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.

Kilowatt: A unit of electrical power equal to 1,000 **watts**.

Kilowatthour (kWh): A measure of electricity defined as a unit of work or energy, measured as 1 **kilowatt** (1,000 **watts**) of power expended for 1 hour. One kilowatthour is equivalent to 3,412 Btu. See **Watthour**.

Landed Costs: The dollar-per-barrel price of crude oil at the port of discharge. Included are the charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. Not included are charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage charges).

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 used as fuel in natural gas processing plants.

Lease Condensate: A mixture consisting primarily of pentanes and heavier hydrocarbons, which is recovered as a liquid from natural gas in lease or field separation facilities. *Note:* This category excludes natural gas liquids, such as butane and propane, which are recovered at natural gas processing plants or facilities.

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.

Lignite: The lowest rank of coal. Often referred to as brown coal, it is used almost exclusively as fuel for steam-electric power generation. It is brownish-black and has a high inherent moisture content, sometimes as high as 45 percent. The heat content of lignite ranges from 9 to 17 million Btu per ton on a moist, mineral-matter-free basis. The heat content of lignite consumed in the United States

averages 14 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Liquefied Natural Gas (LNG): Natural gas (primarily methane) that has been liquefied by reducing its temperature to -260° F at atmospheric pressure.

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.

Low-Power Testing: The period of time between a nuclear generating unit's initial fuel loading date and the issuance of its operating (full-power) license. The maximum level of operation during that period is 5 percent of the unit's design thermal rating.

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.

Marketed Production (Natural Gas): Gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations.

Methane: A colorless, flammable, odorless, hydrocarbon gas (CH₄) that is the principal constituent of natural gas. It is also an important source of hydrogen in various industrial processes.

Methyl Tertiary Butyl Ether (MTBE): An ether, (CH₃)₃COCH₃, intended for motor gasoline blending. See **Oxygenates**.

Methanol: A light, volatile alcohol (CH₃OH) eligible for motor gasoline blending. See **Oxygenates**.

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 Blending: Mechanical mixing of motor gasoline blending components and oxygenates as required, to produce finished motor gasoline. Finished motor gasoline may be further mixed with other motor gasoline blending components or oxygenates, resulting in increased volumes of finished motor gasoline and/or changes in the formulation of finished motor gasoline (e.g., conventional motor gasoline mixed with MTBE to produce oxygenated motor gasoline).

Motor Gasoline Blending Components: Naphtha (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. These components include reformulated gasoline blendstock (RBOB) but exclude oxygenates (alcohols, ethers), butane, and pentanes plus. Note: oxygenates are reported as individual components and are included in the total for other hydrocarbons, hydrogens, and oxygenates.

Motor Gasoline, Finished: A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition. Motor gasoline, as defined in ASTM Specification D-4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122°F to 158°F at the 10-percent recovery point to 365°F to 374°F at the 90-percent recovery point. "Motor gasoline" includes conventional gasoline, all types of oxygenated gasoline including gasohol, and reformulated gasoline, but excludes aviation gasoline. Note: Volumetric data on blending components, as well as oxygenates, are not counted in data on finished motor gasoline until the blending components are blended into the gasoline.

Motor Gasoline Grades: The classification of gasoline by octane ratings. Each type of gasoline (conventional, oxygenated, and reformulated) is classified by three grades: regular, midgrade, and premium. Note: Gasoline sales are reported by grade in accordance with their classification at the time of sale. In general, automotive octane requirements are lower at high altitudes. Therefore, in some areas of the United States, such as the Rocky Mountain States, the octane ratings for the gasoline grades may be 2 or more octane points lower.

Regular Gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 85 and less than 88. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

Midgrade Gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 88 and less than or equal to 90. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

Premium Gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than 90. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

Motor Gasoline, Oxygenated: Finished motor gasoline, other than reformulated gasoline, having an oxygen content of 2.7 percent or higher by weight and required by the U.S. Environmental Protection Agency (EPA) to be sold in areas designated by EPA as carbon monoxide (CO) nonattainment areas. Note: Oxygenated gasoline excludes oxygenated fuels program reformulated gasoline (OPRG) and reformulated gasoline blendstock for oxygenate blending (RBOB). Data on gasohol that has at least 2.7 percent oxygen, by weight, and is intended for sale inside CO nonattainment areas are included in data on oxygenated gasoline. Other data on gasohol are included in data on conventional gasoline.

Motor Gasoline, Reformulated: Finished motor gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environmental Protection Agency under Section 211(k) of the Clean Air Act. Note: This category includes oxygenated fuels program reformulated gasoline (OPRG) but excludes reformulated gasoline blendstock for oxygenate blending (RBOB).

Motor Gasoline Retail Prices: Motor gasoline prices calculated each month by the Bureau of Labor Statistics (BLS) in conjunction with the construction of the Consumer Price Index (CPI). Those prices are collected in 85 urban areas selected to represent all urban consumers—about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-service).

Motor Gasoline (Total): For stock level data, a sum including finished motor gasoline stocks plus stocks of motor gasoline blending components but excluding stocks of oxygenates.

MTBE: See **Methyl Tertiary Butyl Ether**.

NAICS (North American Industry Classification System) A coding system developed jointly by the United States, Canada, and Mexico to classify businesses and industries according to the type of economic activity in which they are engaged. NAICS replaces the Standard Industrial Classification (SIC) codes. For additional information on NAICS, go to <http://www.census.gov/epcd/www/naics.html>.

Naphtha: A generic term applied to a petroleum fraction with an approximate boiling range between 122 and 400° F.

Natural Gas: A gaseous mixture of hydrocarbon compounds, primarily methane, used as a fuel for electricity generation and in a variety of ways in buildings, and as raw material input and fuel for industrial processes.

Natural Gas, Dry: Natural gas which remains after: 1) the liquefiable hydrocarbon portion has been removed from the gas stream (i.e., gas after lease, field, and/or plant separation); and 2) any volumes of nonhydrocarbon gases have been removed where they occur in sufficient quantity to render the gas unmarketable. Note: Dry natural gas is also known as consumer-grade natural gas. The parameters for measurement are cubic feet at 60 degrees Fahrenheit and 14.73 pounds per square inch absolute.

Natural Gas (Dry) Production: The process of producing consumer-grade natural gas. Natural gas withdrawn from reservoirs is reduced by volumes used at the production (lease) site and by processing losses. Volumes used at the production site include 1) the volume returned to reservoirs in cycling, repressuring of oil reservoirs, and conservation operations; and 2) gas vented and flared. Processing losses include 1) nonhydrocarbon gases (e.g., water vapor, carbon dioxide, helium, hydrogen sulfide, and nitrogen) removed from the gas stream; and 2) gas converted to liquid form, such as lease condensate and plant liquids. Volumes of dry gas withdrawn from gas storage reservoirs are not considered part of production. Dry natural gas production equals marketed production less extraction loss.

Natural Gas Marketed Production: Gross withdrawals of natural gas from production reservoirs, less gas used for reservoir repressuring; nonhydrocarbon gases removed in treating and processing operations; and quantities vented and flared.

Natural Gas Plant Liquids (NGPL): Natural gas liquids recovered from natural gas in processing plants and, in some situations, from natural gas field facilities, as well as those extracted by fractionators. Natural gas plant liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Material as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gas Wellhead Price: The wellhead price of natural gas is calculated by dividing the total reported value at the wellhead by the total quantity produced as reported by the appropriate agencies of individual producing States and the U.S. Minerals Management Service. The price includes all costs prior to shipment from the lease, including gathering and compression costs, in addition to State production, severance, and similar charges.

Natural Gasoline: A mixture of hydrocarbons (mostly pentanes and heavier) extracted from natural gas that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane, which is a saturated branch-chain hydrocarbon

obtained by fractionation of natural gasoline or isomerization of normal pentane.

Net Summer Capacity: The maximum output, commonly expressed in **kilowatts** (kW) or megawatts (MW), that generating equipment can supply to system load, as demonstrated by a multi-hour test, at the time of summer peak demand. This output reflects a reduction in capacity due to electricity use for station service or auxiliaries.

Neutral Zone: A 6,200 square-mile area shared equally between Kuwait and Saudi Arabia under a 1992 agreement. The Neutral Zone contains an estimated 5 billion barrels of oil and 8 trillion cubic feet of natural gas.

Nonhydrocarbon Gases: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

Nuclear Electric Power (Nuclear Power): Electricity generated by the use of the thermal energy released from the fission of nuclear fuel in a reactor.

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 Reactor: An apparatus in which a nuclear fission chain reaction can be initiated, controlled, and sustained at a specific rate. A reactor includes fuel (fissionable material), moderating material to control the rate of fission, a heavy-walled pressure vessel to house reactor components, shielding to protect personnel, a system to conduct heat away from the reactor, and instrumentation for monitoring and controlling the reactor's systems.

Offshore: That geographic area that lies seaward of the coastline. In general, the coastline is the line of ordinary low water along with that portion of the coast that is in direct contact with the open sea or the line marking the seaward limit of inland water.

Oil: See **Crude Oil**.

Operable Unit (Nuclear): In the United States, a nuclear generating unit that has completed low-power testing and been issued a full-power operating license by the Nuclear Regulatory Commission, or equivalent permission to operate.

Organization for Economic Cooperation and Development (OECD): Members are Australia, Austria, Belgium, Canada, Denmark, Faeroe Islands, Finland, France, Germany, Greece, Greenland, Hawaiian Trade Zone, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States

and its territories (Guam, Puerto Rico, and the Virgin Islands). In addition, Czech Republic, Hungary, Poland, and South Korea joined the OECD in 1996.

Organization of Petroleum Exporting Countries (OPEC): Countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

Oxygenates: Substances which, when added to gasoline, increase the amount of oxygen in that gasoline blend. Ethanol, Methyl Tertiary Butyl Ether (MTBE), Ethyl Tertiary Butyl Ether (ETBE), and methanol are common oxygenates.

PAD Districts: Petroleum Administration for Defense Districts. Geographic aggregations of the 50 States and the District of Columbia into five districts for the Petroleum Administration for Defense in 1950. The districts were originally instituted for economic and geographic reasons as Petroleum Administration for War (PAW) Districts, which were established in 1942.

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.

Petroleum: A broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids. Note: Volumes of finished petroleum products include nonhydrocarbon compounds, such as additives and detergents, after they have been blended into the products.

Petroleum Coke: See **Coke, Petroleum**.

Petroleum Consumption: The sum of all refined petroleum products supplied. For each refined petroleum product, the amount supplied is calculated by adding production and imports, then subtracting changes in primary stocks (net withdrawals are a plus quantity and net additions are a minus quantity) and exports.

Petroleum Imports: Imports of petroleum into the 50 States and the District of Columbia from foreign countries and from Puerto Rico, the Virgin Islands, and other U.S. territories and possessions. Included are imports for the Strategic Petroleum Reserve and withdrawals from bonded warehouses for onshore consumption, offshore bunker use, and military use. Excluded are receipts of

foreign petroleum into bonded warehouses and into U.S. territories and U.S. Foreign Trade Zones.

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.

Petroleum Products Supplied: Same as **Petroleum Consumption**.

Petroleum Stocks, Primary: For individual products, quantities that are held at refineries, in pipelines, and at bulk terminals that have a capacity of 50,000 barrels or more, or that are in transit thereto. Stocks held by product retailers and resellers, as well as tertiary stocks held at the point of consumption, are excluded. Stocks of individual products held at gas processing plants are excluded from individual product estimates but are included in other oils estimates and total.

Photovoltaic Energy: Direct-current electricity generated from sunlight through solid-state semiconductor devices that have no moving parts.

Pipeline Fuel: Gas consumed in the operation of pipelines, primarily in compressors.

Plant Condensate: One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquid at gas inlet separators or scrubbers in processing plants.

Prime Mover: The engine, turbine, water wheel, or similar machine that drives an electric generator; or, for reporting purposes, a device that converts energy to electricity directly.

Primary Consumption: Includes consumption of coal, natural gas, petroleum, nuclear electric power, hydroelectric power, wood, waste, alcohol fuels, geothermal, solar, wind, net imports of coal coke, and net imports of electricity.

Propane: A normally gaseous straight-chain hydrocarbon (C₃H₈). 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 (C₃H₆) recovered from refinery or petrochemical processes.

Refiner Acquisition Cost of Crude Oil: The cost of crude oil to the refiner, including transportation and fees. The composite cost is the weighted average of domestic and imported crude oil costs.

Refinery (Petroleum): An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Renewable Energy: Energy obtained from sources that are essentially inexhaustible (unlike, for example, the **fossil fuels**, of which there is a finite supply). Renewable sources of energy include **conventional hydroelectric power, wood, waste, alcohol fuels, geothermal, solar, and wind**.

Repressuring: The injection of a pressurized fluid (such as air, gas, or water) into oil and gas reservoir formations to effect greater ultimate recovery.

Residential Sector: An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters. For further explanation see

<http://www.eia.doe.gov/neic/datadefinitions/Guideforwebres.htm>.

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, for 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.

Rotary Rig: A machine used for drilling wells that employs a rotating tube attached to a bit for boring holes through rock.

Short Ton (Coal): A unit of weight equal to 2,000 pounds.

SIC (Standard Industrial Classification): A set of codes developed by the U.S. Office of Management and Budget which categorizes industries into groups with similar

economic activities. Replaced by NAICS (North American Industry Classification System).

Solar Energy: See **Solar Thermal Energy** and **Photovoltaic Energy**.

Solar Thermal Energy: The radiant energy of the sun that can be converted into other forms of energy, such as heat or **electricity**.

Special Naphthas: All finished products within the naphtha boiling ranges that are used as paint thinner, 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.

Steam Coal: All nonmetallurgical coal.

Steam-Electric Power Plant: A plant in which the prime mover is a steam turbine. The steam used to drive the turbine is produced in a boiler where fossil fuels are burned.

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.

Stocks: See **Coal Stocks**, **Crude Oil Stocks**, or **Petroleum Stocks, Primary**.

Strategic Petroleum Reserve (SPR): Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

Supplemental Gaseous Fuels: Synthetic natural gas, propane-air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

Synthetic Natural Gas (SNG): (Also referred to as substitute natural gas) A manufactured product, chemically similar in most respects to natural gas, resulting from the conversion or reforming of petroleum hydrocarbons that may easily be substituted for or interchanged with pipeline-quality natural gas.

Thermal Conversion Factor: See **Conversion Factor**.

Transportation Sector: An energy-consuming sector that consists of all vehicles whose primary purpose is transporting people and/or goods from one physical location to another. Included are automobiles; trucks; buses; motorcycles; trains, subways, and other rail vehicles; aircraft; and ships, barges, and other waterborne vehicles. Vehicles whose primary purpose is not transportation (e.g., construction cranes and bulldozers, farming vehicles, and warehouse tractors and forklifts) are classified in the sector of their primary use. *Note:* Various EIA programs differ in sectoral coverage. For further information see <http://www.eia.doe.gov/neic/datadefinitions/Guideforwebtrans.htm>.

Unaccounted-for Crude Oil: Represents the arithmetic difference between the calculated supply and the calculated disposition of crude oil. The calculated supply is the sum of crude oil production and imports minus changes in crude oil stocks. The calculated disposition of crude oil is the sum of crude oil input to refineries, crude oil exports, crude oil burned as fuel, and crude oil losses.

Unfinished Oils: All oils requiring further refinery processing except those requiring only mechanical blending. Includes naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

Unfractionated Stream: Mixtures of unsegregated natural gas liquid components, excluding those in plant condensate. This product is extracted from natural gas.

Underground Storage: The storage of natural gas in underground reservoirs at a different location from which it was produced.

United States: The 50 States and the District of Columbia. *Note:* The United States has varying degrees of jurisdiction over a number of territories and other political entities outside the 50 States and the District of Columbia, including Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Johnston Atoll, Midway Islands, Wake Island, and the Northern Mariana Islands. EIA data programs may include data from some or all of these areas in U.S. totals. For these programs, data products will contain notes explaining the extent of geographic coverage included under the term "United States."

Useful Thermal Output: The thermal energy made available in a combined-heat-and-power system for use in any industrial or commercial process, heating or cooling application, or delivered to other end users, i.e., total thermal energy made available for processes and applications other than electrical generation.

U.S.S.R.: The Union of Soviet Socialist Republics consisted of 15 constituent republics: Armenia, Azerbaijan,

Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. As a political entity, the U.S.S.R. ceased to exist as of December 31, 1991.

Vented Natural Gas: Gas released into the air on the production site or at processing plants.

Vessel Bunkering: Includes sales for the fueling of commercial or private boats, such as pleasure craft, fishing boats, tugboats, and ocean-going vessels, including vessels operated by oil companies. Excluded are volumes sold to the U.S. Armed Forces.

Waste Energy: Municipal solid waste, landfill gas, methane, digester gas, liquid acetonitrile waste, tall oil, waste alcohol,

medical waste, paper pellets, sludge waste, solid byproducts, tires, agricultural byproducts, closed loop biomass, fish oil, and straw used as fuel.

Watt (W): The unit of electrical power equal to one ampere under a pressure of one volt. A watt is equal to 1/746 horsepower.

Watt-hour (Wh): The electrical energy unit of measure equal to one watt of power supplied to, or taken from, an electric circuit steadily for one hour.

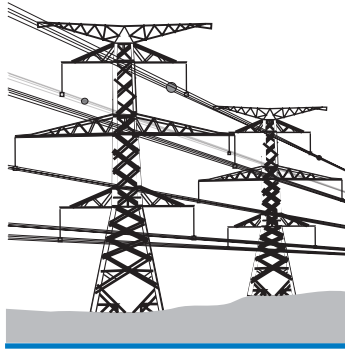
Waxes: Solid or semisolid material derived from petroleum distillates or residues. Waxes are light-colored, more or less translucent crystalline masses, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Included are all marketable waxes, whether crude scale or fully refined. Waxes are used primarily as industrial coating for surface protection.

Wellhead Price: The value of crude oil or natural gas at the mouth of the well.

Wind Energy: Kinetic energy present in wind motion that can be converted to mechanical energy for driving pumps, mills, and electric power generators.

Wood Energy: Wood and wood products used as fuel, including round wood (cord wood), limb wood, wood chips, bark, sawdust, forest residues, charcoal, pulp waste, and spent pulping liquor.

Working Gas: The volume of gas in a reservoir that is in addition to the base gas. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capacity could be used more than once during any season.



Electricity Publications and Resources

...from the Energy Information Administration

The items listed below are available on EIA's Web site; under "By Fuel" select "Electricity" and then "Electricity Publications." Some items are also available in hard copy. For more information on these and other EIA products, contact the National Energy Information Center at 202-586-8800 or infoctr@eia.doe.gov.

Electric Power Monthly

Monthly statistics at the State, Census division, and U.S. levels for net generation, fossil fuel consumption and stocks, quantity and quality of fossil fuels, cost of fossil fuels, electricity retail sales, associated revenue, and average revenue per kilowatthour of electricity sold. Some data are also displayed for North American Electric Reliability Council (NERC) regions.

Electric Power Annual 2001

Overview of the electric power industry in the United States, including generation; capacity; demand, capacity resources, and capacity margins; emissions; trade; retail customers, sales, and revenues; revenue and expense statistics; and demand-side management.

Inventory of Electric Utility Power Plants in the United States 2000

Inventory of Nonutility Electric Power Plants in the United States 2000

Annual statistics on electric utility and nonutility generating units; includes outlook for generating unit additions and retirements through 2005.

Status of State Electric Industry Restructuring Activity

Map and chart, updated monthly, showing the status of deregulation and restructuring activity by State. Includes links to detailed tables and public utility commission Web sites.

Electric Sales and Revenue 2001

Information on electricity sales, associated revenue, average revenue per kilowatthour sold, and number of consumers at the national, Census division, State, and electric utility levels.

Cost and Quality of Fuels for Electric Utility Plants 2000 Tables

Comprehensive information concerning the quality, quantity, and cost of fossil fuels used to produce electricity in the United States.

Financial Statistics of Major U.S. Publicly Owned Electric Utilities 2000

Aggregate income statement and balance sheet data, including operating and maintenance expenses, electric utility plant, number of consumers, sales of electricity, operating revenue. Also includes financial indicators and electric energy account data..

Derivatives and Risk Management in the Petroleum, Natural Gas, and Electricity Industries

Special report prepared at the request of the Secretary of Energy on the nature and use of derivative contracts in the petroleum, natural gas, and electricity industries.

Electric Industry Federal Restructuring Legislation

Purpose and summary of all Federal bills before the current Congress that deal both directly and indirectly with the issue of restructuring the U.S. electric power industry.

Integrated Historical Energy Data Sources ...from the Energy Information Administration



Monthly Energy Review

Current monthly data on production, consumption, stocks, trade, and prices of the principal energy commodities in the United States.

<http://eia.doe.gov/mer>

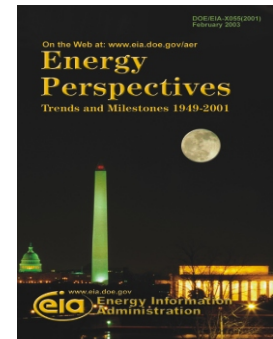
Also available in print.

Energy Perspectives: Trends and Milestones 1949-2001

A graphical, historical overview of U.S. energy trends and milestones. Many of the graphs extend over 50 years.

<http://eia.doe.gov/aer/ep/overview.html>

Also available as a pamphlet.

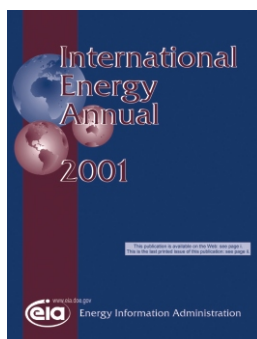
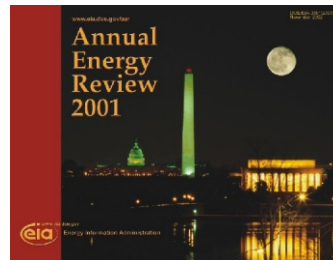


Annual Energy Review

Long-term historical annual data on U.S. energy production, consumption, stocks, trade, and prices. Most series begin in 1949.

<http://eia.doe.gov/aer>

Also available in print.



International Energy Annual

Annual data for production, consumption, and trade of primary energy commodities in more than 220 countries, dependencies, and areas of special sovereignty. Also included are prices of crude oil and petroleum products in selected countries.

<http://eia.doe.gov/iea>

State Energy Data

Annual energy consumption, price, and expenditure estimates at the State and national levels by energy source and by major sector (residential, commercial, industrial, transportation, and electric utilities). Consumption data begin with 1960; price and expenditure data begin with 1970.

<http://eia.doe.gov/states>

On the Web



eia.doe.gov/states