

## Monthly Energy Review

The Monthly Energy Review (MER) is the Energy Information Administration's (EIA) primary report of recent energy statistics. Included are total energy production, consumption, and trade; energy prices; overviews of petroleum, natural gas, coal, electricity, nuclear energy, renewable energy, and international petroleum; and data unit conversions.

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# Monthly Energy Review 

## March 2005

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## Performance Profiles of Major Energy Producers 2003

Major U.S. energy companies earned $\$ 57$ billion in 2003, nearly triple their 2002 earnings and the highest net income (in constant 2003 dollars) since 1980. Excluding unusual items, net income rose 78 percent over the previous year. The major energy companies earned an 18.1-percent return on stockholders' equity (ROE) in 2003, 4.5 percentage points higher than the ROE of the S\&P Industrial companies.
These and related financial facts are found in Performance Profiles of Major Energy Producers 2003 from the Energy Information Administration (EIA). This publication presents financial and operating information from the EIA's Financial Reporting System (FRS), which contains data provided annually by the major energy companies.
The financial results of the FRS companies were driven for the most part by higher prices in oil and natural gas markets. In 2003, U.S. crude oil prices rose 17 percent, gross margins on petroleum products increased 23 percent, and natural gas wellhead prices jumped 69 percent. Oil and gas production was the most profitable line of business for the FRS companies, providing $\$ 44$ billion in net income in 2003 and a return on net investment in place (ROI) of 15.3 percent.

For the refining and marketing line of business, 2003 was a substantial turnaround from 2002, which was the least profitable year for refining and marketing in the history of the FRS survey. Refining and marketing ROI was 8.9 percent in 2003, lower than in 2000 and 2001 but much improved from the average ROI of 5.8 percent from 1990 to 1999 . Net margins increased to $\$ 2.05$ per barrel, only the fourth time in the survey that net margins have surpassed $\$ 2$ per barrel.

Non-energy (chemicals and other industries) was the only line of business showing a decline in net income in 2003.

Two new lines of business were broken out in the FRS survey in 2003, downstream natural gas and electric power. Downstream natural gas contributed $\$ 3.6$ billion in net income and electric power $\$ 1.0$ billion.

Cash flow from operations reached $\$ 105$ billion in 2003, the highest level in the 18 years that the FRS has collected this information. The largest use of cash was for capital expenditures. However, despite increased cash flow, capital expenditures fell almost $\$ 21$ billion (constant 2003 dollars) to $\$ 80$ billion. Expenditures for mergers and acquisitions slowed significantly in 2003, falling to $\$ 11$ billion in 2003 from $\$ 35$ billion the previous year.
Higher prices encouraged companies to develop their known reserves into producing properties but exploration ex-
penditures were slower to respond. Expenditures for oil and gas exploration by FRS companies fell for the second year in a row, down 21 percent from the 2001 level but still 14 percent higher than the low of 1993. Development expenditures by FRS companies rose 5 percent in 2003, reaching the highest level since 1982.
Performance Profiles of Major Energy Producers 2003 has four chapters. Chapter 1 provides details on key financial and operational developments in 2003. Chapter 2 provides a summary of petroleum and natural gas market activity in 2003 as well as information about the FRS companies and their shares of energy production and refining capacity.

FRS Lines of Business in 2003 and Prior Years

| 2003 | Prior Years |
| :--- | :--- |
| - Petroleum | - Petroleum |
| - Downstream natural gas | - Coal |
| - Electric power | - Non-energy |
| - Non-energy | - Other energy: electric |
| - Other energy: coal, | power, nuclear, renewable <br> nuclear, renewable fuels, <br> fuels, and <br> and non-conventional <br> energy |

Chapter 3 gives more in-depth coverage of financial and operational trends in oil and gas production and refining and marketing. The oil and gas production section includes a review of revenues, production, production costs, and finding costs. The refining and marketing section covers sales, profitability, margins, and costs in domestic and foreign refining and marketing.

Chapter 4 presents several special topics:

- Are the FRS Companies Finding Enough Oil and Gas to Keep Up With Demand?
- The Gulf of Mexico-Is Deep-Shelf Gas the Solution to the Gulf's Declining Natural Gas Reserve Replacement Ratio?
- Are Investment Climates Affecting the Supply of Oil and Gas?
- Are Refining Margins Predictors of Profitability?

[^0]
## Section 1. Energy Overview

Energy production during December 2004 totaled 6.1 quadrillion Btu, a 0.5 -percent increase compared with the level of production during December 2003. Production of conventional hydroelectric power increased 8.5 percent; coal increased 3.6 percent; natural gas (dry) decreased 3.0 percent; crude oil decreased 2.3 percent; and nuclear electric power increased 0.1 percent, compared with the level of production during December 2003.

Energy consumption during December 2004 totaled 9.2 quadrillion Btu, a 1.7-percent increase compared with the level of consumption during December 2003. Consumption
of conventional hydroelectric power increased 8.5 percent; petroleum increased 2.0 percent; natural gas increased 1.2 percent; coal increased 1.0 percent; and nuclear electric power increased 0.1 percent, compared with the level 1 year earlier.

Net imports of energy during December 2004 totaled 2.4 quadrillion Btu, 6.4 percent above the level of net imports 1 year earlier. Coal net exports increased 35.0 percent; petroleum products net imports increased 21.7 percent; natural gas net imports increased 15.3 percent; and crude oil net imports increased 3.3 percent, compared with the level in December 2003.

Figure 1.1 Energy Overview
(Quadrillion Btu)
Consumption, Production, and Imports, 1973-2004


Consumption, Production, and Imports, Monthly


Overview, December 2004


Net Imports, January-December


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 ${ }^{\text {a }}$ | 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 | -. 077 | 76.342 |
| 1982 Total | 66.574 | 11.861 | 4.608 | -. 575 | 73.253 |
| 1983 Total | 64.106 | 11.752 | 3.693 | . 935 | 73.101 |
| 1984 Total .......................................... | 68.832 | 12.471 | 3.786 | -. 781 | 76.736 |
| 1985 Total .......................................... | 67.647 | 11.781 | 4.196 | 1.238 | 76.469 |
| 1986 Total | 67.087 | 14.151 | 4.021 | -. 435 | 76.782 |
| 1987 Total | 67.608 | 15.398 | 3.812 | . 032 | 79.225 |
| 1988 Total | 68.951 | 17.296 | 4.366 | . 964 | 82.844 |
| 1989 Total .......................................... | 69.364 | 18.766 | 4.661 | 1.487 | 84.957 |
| 1990 Total .......................................... | 70.729 | 18.817 | 4.752 | -. 126 | 84.668 |
| 1991 Total | 70.362 | 18.335 | 5.141 | 1.040 | 84.595 |
| 1992 Total | 69.933 | 19.372 | 4.937 | 1.581 | 85.949 |
| 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 | 28.973 | 4.006 | 2.720 | 98.905 |
| 2001 Total ......................................... | ${ }^{\text {R }} 71.793$ | 30.157 | 3.770 | -1.805 | R 96.374 |
| 2002 January ....................................... | ${ }^{\mathrm{R}} 6.273$ | 2.414 | . 292 | . 452 | R 8.847 |
| February ..................................... | ${ }^{\mathrm{R}} 5.602$ | 2.148 | . 290 | . 465 | ${ }^{\mathrm{R}} 7.925$ |
| March | R 5.943 | 2.427 | . 266 | . 315 | R 8.418 |
| April ........................................... | R 5.817 | 2.434 | . 292 | -. 180 | R 7.779 |
| May ............................................ | ${ }^{\mathrm{R}} 6.060$ | 2.510 | . 294 | -. 448 | ${ }^{\mathrm{R}} 7.828$ |
| June ........................................... | ${ }^{\text {R }} 5.858$ | 2.442 | . 308 | -. 084 | ${ }^{\mathrm{R}} 7.909$ |
| July | R 5.996 | 2.528 | . 270 | . 197 | R 8.450 |
| August ....................................... | ${ }^{\mathrm{R}} 6.048$ | 2.588 | . 344 | . 080 | R 8.372 |
| September .................................. | R 5.744 | 2.349 | . 301 | -. 102 | ${ }^{\text {R } 7.690}$ |
| October | ${ }^{\text {R }} 5.826$ | 2.566 | . 333 | -. 217 | 7.842 |
| November .......................................... | ${ }^{\mathrm{R}} 5.728$ | 2.550 | . 313 | . 090 | ${ }^{\mathrm{R}} 8.056$ |
| December ................................... | R 5.996 | 2.450 | . 359 | . 802 | R 8.890 |
| Total ............................................................ | ${ }^{\mathrm{R}} 70.891$ | 29.406 | 3.661 | 1.370 | R 98.006 |
| 2003 January ....................................... | ${ }^{\mathrm{R}} 6.047$ | 2.429 | . 377 | 1.265 | ${ }^{\mathrm{R}} 9.363$ |
| February ..................................... | ${ }^{\text {R }} 5.446$ | 2.180 | . 300 | 1.203 | ${ }^{\text {R }} 8.529$ |
| March .................................................. | ${ }^{\text {R }} 5.960$ | 2.585 | . 316 | . 229 | ${ }^{\mathrm{R}} 8.458$ |
| April | ${ }^{\mathrm{R}} 5.815$ | 2.613 | . 333 | -. 361 | ${ }^{\mathrm{R}} 7.733$ |
| May . | ${ }^{R} 5.996$ | 2.747 | . 357 | -. 669 | ${ }^{\mathrm{R}} 7.716$ |
| June ........................................... | R 5.866 | 2.661 | . 351 | -. 493 | ${ }^{\text {R } 7.683 ~}$ |
| July ............................................ | ${ }^{\text {R }} 5.936$ | 2.752 | . 339 | -. 026 | ${ }^{\text {R }} 8.323$ |
| August ........................................ | ${ }^{\text {R }} 5.979$ | 2.731 | . 335 | . 074 | ${ }^{\mathrm{R}} 8.450$ |
| September .................................. | ${ }^{\text {R }} 5.804$ | 2.666 | . 325 | -. 473 | R 7.671 |
| October ....................................... | ${ }^{\text {R }} 5.943$ | 2.668 | . 349 | -. 404 | ${ }^{\mathrm{R}} 7.859$ |
| November | ${ }^{\mathrm{R}} 5.622$ | 2.458 | . 338 | . 180 | ${ }^{\text {R } 7.922 ~}$ |
| December ................................... | ${ }^{\mathrm{R}} 6.027$ | 2.624 | . 345 | . 741 | R 9.048 |
| Total ......................................... | ${ }^{R} 70.440$ | 31.115 | 4.066 | 1.267 | R 98.756 |
| 2004 January ....................................... | ${ }^{\mathrm{R}} 6.124$ | ${ }^{\mathrm{R}} 2.572$ | . 291 | R 1.041 | ${ }^{\mathrm{R}} 9.446$ |
| February .................................... | ${ }^{R} 5.660$ | ${ }^{R} 2.506$ | . 305 | 8. 915 | R 8.776 |
| March ......................................... | ${ }^{R} 6.051$ | $\mathrm{R}_{2} 2.792$ | ${ }^{\mathrm{R}} .381$ | ${ }^{\mathrm{R}} \mathrm{-} .023$ | R 8.440 |
| April ........................................... | R 5.801 | ${ }^{R} 2.613$ | ${ }^{\mathrm{R} .} .403$ | R-. 209 | R 7.802 |
| May ........................................... | R 5.876 | ${ }^{R} 2.804$ | ${ }^{\mathrm{R} .} \mathrm{B} 38$ | R-. 296 | R 8.001 |
| June ........................................... | ${ }^{R} 5.963$ | $\mathrm{R}_{2} 2.787$ | R. 382 | $\mathrm{R}^{\mathrm{R}} .409$ | R 7.960 |
| July ............................................ | ${ }^{R} 6.046$ | ${ }^{\mathrm{R}} 2.907$ | . 364 | R -. 188 | R 8.401 |
| August ....................................... | R 6.054 | R2.908 | . 367 | R - . 240 | R 8.355 |
| September ................................... | ${ }^{R} 5.750$ | ${ }^{\text {R } 2.635}$ | . 353 | R -. 172 | ${ }^{\mathrm{R}} 7.859$ |
| October ........................................ | ${ }^{\mathrm{R}} 5.811$ | ${ }^{R} 2.838$ | . 343 | R $\mathrm{R}^{\text {. } 312}$ | R 7.994 |
| November ................................... | ${ }^{\text {R } 5.699}$ | R2.757 | R . 333 | R -. 024 | 8.099 |
| December ................................... | 6.060 | 2.850 | . 425 | . 714 | 9.199 |
| Total .......................................... | 70.896 | 32.969 | 4.331 | . 797 | 100.331 |

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 3.1a, 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, 1973-2004


By Major Sources, 1973-2004


Total, January-December

${ }^{\text {a }}$ Conventional and pumped storage hydroelectric power. Note: Because vertical scales differ, graphs should not be compared.

Total, Monthly


By Major Sources, Monthly


By Major Sources, December 2004


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 |  |  |  |  | Nuclea Electric Power | Hydro- <br> Pumped <br> Storage | Renewable Energy ${ }^{\text {a }}$ |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coal | $\begin{aligned} & \text { Natural } \\ & \text { Gas } \\ & \text { (Dry) } \\ & \hline \end{aligned}$ | $\begin{gathered} \text { Crude } \\ \text { Oil } \end{gathered}$ | Natural Gas Liquids | Total |  |  | Conventional Hydroelectric Power | Wood, Waste, Alcohol ${ }^{\text {d }}$ | Geothermal | $\begin{aligned} & \text { Solar } \\ & \text { and } \\ & \text { Wind } \end{aligned}$ | 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 | 54.773 | 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 | -. 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 | -. 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 | -. 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 | -. 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 | -. 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 | -. 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 | -. 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 | -. 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 | -. 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 | -. 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 | -. 057 | 2.811 | 2.907 | . 317 | . 123 | 6.158 | 71.218 |
| 2001 Total | 23.529 | 20.166 | 12.282 | 2.547 | 58.523 | 8.033 | R. 091 | ${ }^{\text {R } 2.242 ~}$ | 2.640 | . 311 | ${ }^{\mathrm{R} .} .135$ | R 5.328 | 71.793 |
| 2002 January | 2.117 | 1.663 | 1.051 | . 211 | 5.042 | 740 | -. 008 | R. 222 | . 234 | . 029 | . 013 | ${ }^{\mathrm{R}} .498$ | ${ }^{\mathrm{R}} 6.273$ |
| February .. | 1.873 | 1.489 | . 954 | . 198 | 4.514 | . 644 | -. 006 | ${ }^{\mathrm{R}} .205$ | . 207 | . 026 | . 012 | ${ }^{\mathrm{R}} .450$ | R 5.602 |
| March ... | 1.871 | 1.663 | 1.058 | . 220 | 4.812 | . 658 | -. 007 | ${ }^{\mathrm{R}} .214$ | . 223 | . 028 | . 014 | R ${ }^{\mathrm{R}} .479$ | R 5.943 |
| April | 1.864 | 1.607 | 1.019 | . 215 | 4.706 | . 610 | -. 006 | ${ }^{\mathrm{R}} .247$ | . 220 | . 025 | . 016 | ${ }^{\mathrm{R}} .507$ | R 5.817 |
| May ...... | 1.897 | 1.673 | 1.065 | . 224 | 4.859 | . 658 | -. 005 | R. 271 | . 233 | . 028 | R. 017 | R. 549 | ${ }^{\mathrm{R}} 6.060$ |
| June | 1.770 | 1.612 | 1.029 | 209 | 4.620 | . 693 | -. 009 | ${ }^{\mathrm{R}} \mathrm{R} .287$ | . 224 | . 026 | . 017 | R .554 | R 5.858 |
| July | 1.791 | 1.681 | 1.037 | . 213 | 4.722 | . 735 | -. 010 | ${ }^{\mathrm{R}} .259$ | . 246 | . 029 | . 015 | ${ }^{\mathrm{R}} .549$ | R 5.996 |
| August ...... | 1.912 | 1.647 | 1.045 | . 224 | 4.828 | . 739 | R-. 010 | ${ }^{\mathrm{R}} .214$ | . 233 | . 028 | . 016 | ${ }^{\mathrm{R}} .491$ | ${ }^{\mathrm{R}} 6.048$ |
| September | 1.916 | 1.557 | . 942 | . 212 | 4.627 | . 673 | -. 008 | ${ }^{\mathrm{R}} \mathrm{R} .174$ | . 238 | . 027 | . 013 | ${ }^{\mathrm{R}} \mathrm{R} .451$ | ${ }^{R} 5.744$ |
| October | 1.962 | 1.594 | . 964 | . 217 | 4.737 | . 631 | -. 007 | R. 175 | . 249 | . 028 | . 013 | ${ }^{\mathrm{R}} .465$ | R 5.826 |
| November | 1.833 | 1.598 | . 974 | 212 | 4.616 | 642 | -. 007 | R. 201 | . 238 | . 027 | . 012 | R. 477 | R 5.728 |
| December ... | 1.891 | 1.657 | 1.025 | 203 | 4.776 | . 719 | -. 007 | R. 220 | 246 | . 028 | . 013 | R. 508 | R 5.996 |
| Total .......... | 22.698 | 19.439 | 12.163 | 2.559 | 56.859 | 8.143 | R -. 089 | ${ }^{\text {R } 2.689 ~}$ | 2.791 | . 328 | R. 170 | R 5.978 | ${ }^{\text {R }} 70.891$ |
| 2003 January .... | 1.936 | 1.661 | 1.040 | . 204 | 4.841 | R. 721 | -. 008 | ${ }^{\mathrm{R}} \mathrm{R} .211$ | . 240 | . 030 | R. 012 | ${ }_{R}^{R} .492$ | R 6.047 |
| February .. | 1.716 | 1.510 | . 940 | . 190 | 4.356 | R. 635 | -. 008 | ${ }^{\mathrm{R}} \mathrm{R} .203$ | . 220 | . 027 | . 012 | ${ }^{\mathrm{R}} .462$ | R 5.446 |
| March ...... | 1.859 | 1.709 | 1.046 | . 200 | 4.815 | R. 625 | -. 008 | R. 248 | . 237 | . 029 | 016 | R. 529 | R 5.960 |
| April ... | 1.865 | 1.636 | 1.005 | . 191 | 4.696 | R. 592 | -. 006 | ${ }^{\mathrm{R}} .254$ | . 234 | . 028 | R. 017 | ${ }^{\mathrm{R}} .532$ | ${ }^{R} 5.815$ |
| May | 1.890 | 1.671 | 1.031 | . 181 | 4.773 | ${ }^{\text {R. } 648}$ | -. 006 | R. 301 | . 236 | . 028 | . 016 | R. 580 | R 5.996 |
| June. | 1.846 | 1.618 | . 992 | . 177 | 4.634 | ${ }^{\text {R. }} 669$ | -. 008 | R. 293 | . 233 | . 029 | . 016 | ${ }^{\mathrm{R}} .571$ | ${ }^{R} 5.866$ |
| July | 1.847 | 1.639 | . 994 | . 191 | 4.670 | R. 726 | -. 008 | R. 254 | . 249 | . 029 | . 015 | R .547 | R 5.936 |
| August | 1.869 | 1.671 | 1.006 | . 197 | 4.743 | R. 719 | -. 008 | R. 235 | . 247 | . 029 | . 014 | R. 525 | R 5.979 |
| September .. | 1.887 | 1.610 | . 989 | . 198 | 4.683 | R. 663 | -. 008 | R. 189 | . 234 | . 028 | R. 015 | R. 466 | R 5.804 |
| October ....... | 1.962 | 1.665 | 1.013 | . 211 | 4.851 | ${ }^{\mathrm{R} .625}$ | -. 006 | R. 189 | . 241 | . 028 | . 014 | ${ }^{\mathrm{R}} .473$ | ${ }^{\text {R } 5.943 ~}$ |
| November ... | 1.758 | 1.592 | . 968 | . 206 | 4.524 | ${ }^{\mathrm{R}} .621$ | -. 007 | R. 202 | . 241 | . 027 | . 015 | R. 485 | ${ }^{R} 5.622$ |
| December ............ | 1.923 | 1.644 | 1.003 | . 200 | 4.769 | R. 715 | - 007 | R. 246 | 257 | . 030 | . 016 | R. 550 | R 6.027 |
| Total .................. | 22.358 | 19.626 | 12.026 | 2.346 | 56.356 | ${ }^{\mathrm{R}} 7.959$ | R-. 087 | ${ }^{\mathrm{R}} 2.825$ | 2.869 | . 341 | R. 178 | ${ }^{\text {R } 6.213 ~}$ | ${ }^{\text {R }} 70.440$ |
| 2004 January . | ${ }^{\text {R } 1.954 ~}$ | E 1.681 | $\mathrm{E}_{1} .015$ | ${ }^{\mathrm{R} .208}$ | ${ }^{\mathrm{R}} 4.858$ | . 739 | -. 007 | . 235 | . 254 | . 030 | . 016 | . 535 | R 6.124 |
| February .............. | ${ }^{\text {R } 1.810}$ | E 1.562 | E. 939 | R. 194 | ${ }^{\mathrm{R}} 4.505$ | . 669 | -. 007 | . 213 | . 235 | . 028 | . 016 | . 492 | R 5.660 |
| March ......... | ${ }^{\text {R } 1.982 ~}$ | E 1.669 | $\mathrm{E}_{1} .011$ | R. 211 | ${ }^{\mathrm{R}} 4.8873$ | . 660 | -. 006 | 231 | . 246 | . 028 | . 019 | 524 | R 6.051 |
| April ...... | ${ }^{\text {R }} 1.916$ | E1.607 | E. 969 | ${ }^{\mathrm{R}} \mathrm{R} .199$ | ${ }^{\mathrm{R}} 4.691$ | . 612 | -.006 | 212 | . 247 | . 027 | . 018 | . 504 | R 5.801 |
| May ...... | ${ }^{\mathrm{R}} 1.821$ | E1.629 | $\mathrm{E}_{1} .009$ | ${ }^{\mathrm{R}} .207$ | ${ }^{\text {R }} 4.667$ | . 678 | -. 007 | . 242 | . 246 | . 028 | . 023 | . 538 | R 5.876 |
| June ....... | ${ }^{\text {R } 1.983 ~}$ | E 1.597 | E. 940 | R. 194 | ${ }^{\mathrm{R}} 4.714$ | . 708 | -. 007 | . 255 | . 246 | . 028 | . 019 | . 548 | R 5.963 |
| July | ${ }^{\mathrm{R}} 1.928$ | RE 1.655 | E. 972 | ${ }^{\mathrm{R}} .209$ | ${ }^{R} 4.763$ | . 751 | -. 007 | 235 | . 257 | . 029 | . 017 | . 538 | ${ }^{\mathrm{R}} 6.046$ |
| August | R1.989 | RE 1.651 | E. 949 | R. 215 | ${ }^{\mathrm{R}} 4.804$ | . 742 | -. 008 | . 220 | . 25 | . 029 | . 016 | . 517 | ${ }^{\mathrm{R}} 6.054$ |
| September | ${ }^{\text {R } 1.954 ~}$ | RE 1.535 | E. 886 | R. 201 | ${ }^{\mathrm{R}} 4.575$ | . 688 | -. 007 | . 208 | . 242 | . 027 | . 016 | 493 | R 5.750 |
| October | ${ }^{\text {R } 1.932 ~}$ | RE 1.615 | E. 919 | ${ }^{\text {R }} .210$ | ${ }^{R} 4.677$ | . 653 | -. 007 | . 193 | . 251 | . 029 | . 016 | 489 | R 5.811 |
| November ..... | ${ }^{\text {R } 1.925 ~}$ | E1.518 | E. 939 | R. 209 | ${ }^{\text {R }} 4.591$ | 615 | -. 006 | . 213 | 243 | . 028 | . 015 | 499 | ${ }^{\text {R } 5.699 ~}$ |
| December ......... | 1.992 23.187 | E 1.594 | E. 980 E 11527 | . 210 | 4.775 | . 716 | -. 006 | . 267 | . 262 | . 029 | . 017 | 575 | 6.060 |
| Total ................. | 23.187 | ${ }^{\text {E }} 19.312$ | $\mathrm{E}_{11.527}$ | 2.468 | 56.494 | 8.232 | -. 082 | 2.725 | 2.981 | . 340 | . 207 | 6.253 | 70.896 |

[^1]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 and Hydroelectric Pumped Storage: Tables 7.2a and A6. • Renewable Energy: Table 10.1.

Figure 1.3 Energy Consumption
(Quadrillion Btu)

Total, 1973-2004


By Major Sources, 1973-2004


Total, January-December

${ }^{\text {a }}$ Conventional and pumped storage hydroelectric power. Note: Because vertical scales differ, graphs should not be compared.

Total, Monthly


By Major Sources, Monthly


By Major Sources, December 2004


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 | Hydroelectric Pumped Storage ${ }^{\dagger}$ | Renewable Energy ${ }^{\text {a }}$ |  |  |  |  | Total ${ }^{\text {d,h }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coal | $\begin{aligned} & \text { Natural } \\ & \text { Gas }^{\text {b }} \end{aligned}$ | Petroleum ${ }^{\text {c,d }}$ | Total ${ }^{\text {e }}$ |  |  | Conventional Hydroelectric Power | Wood, Waste, Alcohol ${ }^{\text {d,g }}$ | Geothermal | Solar and Wind | Total |  |
| 1973 Total | 12.971 | 22.512 | 34.840 | 70.316 | 0.910 | (i) | 2.861 | 1.529 | 0.043 | NA | 4.433 | 75.708 |
| 1974 Total ................... | 12.663 | 21.732 | 33.455 | 67.906 | 1.272 | (i) | 3.177 | 1.540 | . 053 | NA | 4.769 | 73.991 |
| 1975 Total .................. | 12.663 | 19.948 | 32.731 | 65.355 | 1.900 | (i) | 3.155 | 1.499 | . 070 | NA | 4.723 | 71.999 |
| 1976 Total ................... | 13.584 | 20.345 | 35.175 | 69.104 | 2.111 | (i) | 2.976 | 1.713 | . 078 | NA | 4.768 | 76.012 |
| 1977 Total .................. | 13.922 | 19.931 | 37.122 | 70.989 | 2.702 | (i) | 2.333 | 1.838 | . 077 | NA | 4.249 | 78.000 |
| 1978 Total | 13.766 | 20.000 | 37.965 | 71.856 | 3.024 | (i) | 2.937 | 2.038 | . 064 | NA | 5.039 | 79.986 |
| 1979 Total .................. | 15.040 | 20.666 | 37.123 | 72.892 | 2.776 | (i) | 2.931 | 2.152 | . 084 | NA | 5.166 | 80.903 |
| 1980 Total ................... | 15.423 | 20.394 | 34.202 | 69.984 | 2.739 | (i) | 2.900 | 2.485 | . 110 | NA | 5.494 | 78.289 |
| 1981 Total | 15.908 | 19.928 | 31.931 | 67.750 | 3.008 | (i) | 2.758 | 2.590 | . 123 | NA | 5.471 | 76.342 |
| 1982 Total | 15.322 | 18.505 | 30.231 | 64.036 | 3.131 | (i) | 3.266 | 2.615 | . 105 | NA | 5.985 | 73.253 |
| 1983 Total .................. | 15.894 | 17.357 | 30.054 | 63.290 | 3.203 | $\left(\begin{array}{l}\text { ( } \\ \text { i }\end{array}\right.$ | 3.527 | 2.831 | . 129 | (s) | 6.488 | 73.101 |
| 1984 Total | 17.071 | 18.507 | 31.051 | 66.617 | 3.553 | (i) | 3.386 | 2.880 | . 165 | (s) | 6.431 | 76.736 |
| 1985 Total | 17.478 | 17.834 | 30.922 | 66.221 | 4.076 | (i) | 2.970 | 2.864 | . 198 | (s) | 6.033 | 76.469 |
| 1986 Total .................. | 17.260 | 16.708 | 32.196 | 66.148 | 4.380 | (i) | 3.071 | 2.841 | . 219 | (s) | 6.132 | 76.782 |
| 1987 Total .................. | 18.008 | 17.744 | 32.865 | 68.626 | 4.754 | (i) | 2.635 | 2.823 | . 229 | (s) | 5.687 | 79.225 |
| 1988 Total | 18.846 | 18.552 | 34.222 | 71.660 | 5.587 | (i) | 2.334 | 2.937 | . 217 | (s) | 5.489 | 82.844 |
| 1989 Total | 19.070 | 19.712 | 34.211 | 73.023 | 5.602 | (i) | 2.837 | 3.062 | . 317 | . 077 | 6.294 | 84.957 |
| 1990 Total .................. | 19.173 | 19.730 | 33.553 | 72.460 | 6.104 | -. 036 | 3.046 | 2.662 | . 336 | . 089 | 6.133 | 84.668 |
| 1991 Total .................. | 18.992 | 20.149 | 32.845 | 71.996 | 6.422 | -. 047 | 3.016 | 2.702 | . 346 | . 093 | 6.158 | 84.595 |
| 1992 Total .................. | 19.122 | 20.835 | 33.527 | 73.519 | 6.479 | -. 043 | 2.617 | 2.847 | . 349 | . 094 | 5.907 | 85.949 |
| 1993 Total ..................... | 19.835 | 21.351 | d 33.841 | 75.055 | 6.410 | -. 042 | 2.892 | d2.803 | . 364 | . 097 | 6.156 | d87.578 |
| 1994 Total | 19.909 | 21.842 | 34.670 | 76.480 | 6.694 | -. 035 | 2.683 | 2.939 | . 338 | . 104 | 6.065 | 89.248 |
| 1995 Total | 20.089 | 22.784 | 34.553 | 77.488 | 7.075 | -. 028 | 3.205 | 3.068 | . 294 | . 102 | 6.669 | 91.221 |
| 1996 Total | 21.002 | 23.197 | 35.757 | 79.979 | 7.087 | -. 032 | 3.590 | 3.127 | . 316 | . 104 | 7.137 | 94.224 |
| 1997 Total .................. | 21.445 | 23.328 | 36.266 | 81.086 | 6.597 | -. 041 | 3.640 | 3.006 | . 325 | . 104 | 7.075 | 94.727 |
| 1998 Total .................. | 21.656 | 22.936 | 36.934 | 81.592 | 7.068 | -. 046 | 3.297 | 2.835 | . 328 | . 101 | 6.561 | 95.146 |
| 1999 Total .................. | 21.623 | 23.010 | 37.960 | 82.650 | 7.610 | -. 062 | 3.268 | 2.885 | . 331 | . 115 | 6.599 | 96.774 |
| 2000 Total .................. | 22.580 | 23.916 | 38.404 | 84.965 | 7.862 | -. 057 | 2.811 | 2.907 | . 317 | R. 123 | 6.158 | 98.905 |
| 2001 Total .................. | 21.952 | 22.861 | 38.333 | 83.176 | 8.033 | R -. 091 | R 2.242 | 2.640 | . 311 | R. 135 | R 5.328 | R 96.374 |
| 2002 January . | 1.855 | 2.554 | 3.211 | 7.620 | . 740 | -. 008 | R. 222 | . 234 | . 029 | . 013 | R .498 | R 8.847 |
| February | 1.640 | 2.301 | 2.899 | 6.842 | . 644 | -. 006 | R .205 | . 207 | . 026 | . 012 | R. 450 | R 7.925 |
| March | 1.719 | 2.319 | 3.247 | 7.293 | . 658 | -. 007 | R. 214 | . 223 | . 028 | . 014 | R. 479 | R 8.418 |
| April .................... | 1.622 | 1.930 | 3.123 | 6.674 | . 610 | -. 006 | R. 247 | . 220 | . 025 | . 016 | R. 507 | R 7.779 |
| May ..................... | 1.724 | 1.653 | 3.256 | 6.638 | . 658 | -. 005 | R. 271 | . 233 | . 028 | R .017 | R. 549 | R 7.828 |
| June .................... | 1.868 | 1.632 | 3.174 | 6.676 | . 693 | -. 009 | R . 287 | . 224 | . 026 | . 017 | R . 554 | R 7.909 |
| July | 2.061 | 1.796 | 3.313 | 7.179 | . 735 | -. 010 | R. 259 | . 246 | . 029 | . 015 | R. 549 | R 8.450 |
| August .................. | 2.041 | 1.770 | 3.337 | 7.155 | . 739 | R $\mathrm{-} .010$ | R. 214 | . 233 | . 028 | . 016 | R . 491 | R 8.372 |
| September .......... | 1.882 | 1.584 | 3.108 | 6.583 | . 673 | -. 008 | R. 174 | . 238 | . 027 | . 013 | R. 451 | R 7.690 |
| October | 1.824 | 1.688 | 3.248 | 6.765 | . 631 | -. 007 | R. 175 | . 249 | . 028 | . 013 | R. 465 | 7.842 |
| November ............ | 1.794 | 1.962 | 3.193 | 6.959 | . 642 | -. 007 | R. 201 | . 238 | . 027 | . 012 | R. 477 | $R 8.056$ |
| December ............ | 1.951 | 2.440 | 3.292 | 7.686 | . 719 | -. 0.007 | R. 220 | . 246 | . 028 | . 013 | R. 508 | R 8.890 |
| Total | 21.980 | 23.628 | 38.401 | 84.070 | 8.143 | R -.089 | R 2.689 | 2.791 | . 328 | R. 170 | R 5.978 | R 98.006 |
| 2003 January .............. | 2.055 | 2.800 | 3.314 | 8.170 | R. 721 | -. 008 | R . 211 | . 240 | . 030 | R .012 | R R 492 | R 9.363 |
| February ............. | 1.806 | 2.589 | 3.046 | 7.455 | R. 635 | -. 008 | R. 203 | . 220 | . 027 | . 012 | R. 462 | R 8.529 |
| March .................. | 1.789 | 2.276 | 3.262 | 7.330 | R. 625 | -. 008 | R. 248 | . 237 | . 029 | . 016 | R. 529 | R 8.458 |
| April | 1.646 | 1.805 | 3.177 | 6.632 | R. 592 | -. 006 | R. 254 | . 234 | . 028 | R. 017 | R . 532 | R 7.733 |
| May .................... | 1.741 | 1.567 | 3.202 | 6.512 | R. 648 | -. 006 | R. 301 | . 236 | . 028 | . 016 | R. 580 | R 7.716 |
| June | 1.878 | 1.415 | 3.171 | 6.468 | R. 669 | -. 008 | R. 293 | . 233 | . 029 | . 016 | R . 571 | $\text { R } 7.683$ |
| July .................... | 2.083 | 1.653 | 3.326 | 7.068 | R. 726 | -. 008 | R. 254 | . 249 | . 029 | . 015 | R. 547 | R 8.323 |
| August ............... | 2.114 | 1.704 | 3.408 | 7.227 | R. 719 | -. 008 | R. 235 | . 247 | . 029 | . 014 | R. 525 | R 8.450 |
| September .......... | 1.899 | 1.475 | 3.193 | 6.571 | R. 663 | -. 008 | R. 189 | . 234 | . 028 | R .015 | R . 466 | R 7.671 |
| October | 1.835 | 1.615 | 3.341 | 6.794 | R. 625 | -. 006 | R. 189 | . 241 | . 028 | . 014 | R . 473 | R 7.859 |
| November | 1.846 | 1.817 | 3.184 | 6.850 | R. 621 | -. 007 | R. 202 | . 241 | . 027 | . 015 | R. 485 | R 7.922 |
| December | 2.030 | 2.355 | 3.423 | 7.814 | R. 715 | -. 0.007 | R. 246 | . 257 | . 030 | . 016 | R. 550 | R 9.048 |
| Total .................. | 22.723 | 23.069 | 39.047 | 84.889 | R 7.959 | R. .087 | R 2.825 | 2.869 | . 341 | R. 178 | ${ }^{R} 6.213$ | R 98.756 |
| 2004 January .............. | 2.067 | 2.754 | R 3.378 | R 8.204 | . 739 | -. 007 | . 235 | . 254 | . 030 | . 016 | . 535 | R 9.446 |
| February .............. | 1.870 | R 2.581 | R 3.185 | R 7.645 | . 669 | -. 007 | . 213 | . 235 | . 028 | . 016 | . 492 | R 8.776 |
| March .................. | 1.777 | 2.162 | R 3.340 | R 7.288 | . 660 | -. 006 | . 231 | . 246 | . 028 | . 019 | . 524 | R 8.440 |
| April .................... | 1.650 | R 1.804 | R 3.240 | R 6.716 | . 612 | -. 006 | . 212 | . 247 | . 027 | . 018 | . 504 | R 7.802 |
| May ..................... | 1.821 | 1.610 | R 3.348 | R 6.816 | . 678 | -. 007 | . 242 | . 246 | . 028 | . 023 | . 538 | R 8.001 |
| June | 1.931 | R 1.522 | R 3.260 | R 6.733 | . 708 | -. 007 | . 255 | . 246 | . 028 | . 019 | . 548 | R 7.960 |
| July .................... | 2.084 | R 1.626 | R 3.413 | R 7.133 | . 751 | -. 007 | . 235 | . 257 | . 029 | . 017 | . 538 | R 8.401 |
| August ................ | 2.062 | R 1.613 | R 3.435 | R 7.117 | . 742 | -. 008 | . 220 | . 252 | . 029 | . 016 | . 517 | R 8.355 |
| September .......... | R 1.919 | R1.519 | R 3.272 | R 6.708 | . 688 | -. 007 | . 208 | . 242 | . 027 | . 016 | . 493 | R 7.859 |
| October ............... | R 1.843 | R 1.595 | R 3.436 | R 6.881 | . 653 | -. 007 | . 193 | . 251 | . 029 | . 016 | . 489 | R 7.994 |
| November ............ | $R 1.843$ | R 1.830 | R 3.332 | 7.011 | . 615 | -. 006 | . 213 | . 243 | . 028 | . 015 | . 499 | 8.099 |
| December ........... | 2.051 | 2.384 | 3.492 | 7.934 | . 716 | -. 006 | . 267 | . 262 | . 029 | . 017 | . 575 | 9.199 |
| Total ........... | 22.918 | 23.000 | 40.130 | 86.186 | 8.232 | -. 082 | 2.725 | 2.981 | . 340 | . 207 | 6.253 | 100.331 |

[^2]i Included in conventional hydroelectric power.
$\mathrm{R}=$ Revised. $\mathrm{NA}=$ Not available. (s)=Less than +0.5 trillion Btu and greater than -0.5 trillion Btu.

Notes: • See Note 2, "Energy Consumption," 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.

Sources: $\mathrm{http}: / / w w w . e i a . d o e . g o v / e m e u / m e r / o v e r v i e w . h t m l . ~ G a s: ~ T a b l e s ~ 4.1 ~ a n d ~ A 4 ~$ - Petroleum: Tables 3.1b and A3. - Nuclear Electric Power and 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, 1973-2004


By Major Sources, 1973-2004


By Major Sources, December 2004


[^3]As Share of Consumption, January-December


Total, Monthly


By Major Sources, Monthly


Table 1.4 Energy Net Imports by Source
(Quadrillion Btu)

|  | Coal | Coal Coke | Natural Gas | Crude $\mathrm{Oil}^{\mathrm{a}}$ | Petroleum Products ${ }^{\text {b }}$ | 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 | . 115 | 24.967 |
| 2001 Total ....................... | -. 771 | . 029 | 3.691 | 20.305 | 3.056 | . 075 | 26.386 |
| 2002 January .................... | -. 065 | . 000 | . 316 | 1.610 | . 252 | . 009 | 2.122 |
| February .................. | -. 038 | . 003 | . 282 | 1.463 | . 142 | . 007 | 1.858 |
| March | -. 038 | . 008 | . 301 | 1.627 | . 256 | . 006 | 2.161 |
| April | -. 063 | -. 001 | . 283 | 1.665 | . 253 | . 006 | 2.142 |
| May | -. 056 | . 004 | . 287 | 1.724 | . 254 | . 003 | 2.216 |
| June | -. 072 | . 002 | . 280 | 1.669 | . 248 | . 007 | 2.134 |
| July | -. 035 | . 009 | . 307 | 1.694 | . 270 | . 012 | 2.258 |
| August ...................... | -. 053 | . 007 | . 317 | 1.765 | . 197 | . 010 | 2.244 |
| September ................ | -. 037 | . 009 | . 296 | 1.575 | . 200 | . 006 | 2.048 |
| October ...................... | -. 081 | . 006 | . 309 | 1.764 | . 230 | . 005 | 2.233 |
| November ................. | -. 042 | . 010 | . 283 | 1.728 | . 254 | . 004 | 2.237 |
| December | -. 031 | . 003 | . 324 | 1.618 | . 175 | . 003 | 2.091 |
| Total | -. 610 | . 061 | 3.583 | 19.901 | 2.732 | . 078 | 25.745 |
| 2003 January .................... | -. 067 | . 001 | . 314 | 1.596 | . 203 | . 005 | 2.052 |
| February ................ | -. 018 | . 013 | . 263 | 1.416 | . 202 | . 004 | 1.880 |
| March | -. 012 | . 004 | . 283 | 1.706 | . 290 | -. 001 | 2.269 |
| April | -. 033 | . 004 | . 273 | 1.776 | . 257 | . 003 | 2.280 |
| May | -. 048 | . 002 | . 285 | 1.876 | . 274 | . 001 | 2.390 |
| June | -. 057 | . 004 | . 263 | 1.790 | . 308 | . 001 | 2.310 |
| July | -. 044 | . 005 | . 304 | 1.856 | . 283 | . 010 | 2.413 |
| August ...................... | -. 055 | . 001 | . 293 | 1.854 | . 295 | . 008 | 2.397 |
| September ................. | -. 039 | . 004 | . 279 | 1.842 | . 256 | -. 002 | 2.340 |
| October ........................ | -. 040 | . 004 | . 283 | 1.860 | . 219 | -. 006 | 2.320 |
| November ................. | -. 038 | . 003 | . 258 | 1.671 | . 228 | -. 003 | 2.120 |
| December ................. | -. 040 | . 006 | . 300 | 1.792 | . 221 | . 001 | 2.279 |
| Total | -. 491 | . 051 | 3.398 | 21.034 | 3.035 | . 022 | 27.049 |
| 2004 January .................... | -. 046 | . 004 | . 321 |  | R . 274 | (s) |  |
| February .................. | -. 014 | . 009 | . 290 | R 1.604 | - 312 | . 000 | R 2.201 |
| March .......................... | -. 058 | . 010 | . 272 | R 1.864 | R. 328 | -. 003 | R 2.412 |
| April | -. 085 | . 024 | . 275 | R1.796 | . 201 | (s) | R2.210 |
| May ......................... | -. 072 | . 037 | . 278 | R 1.909 | . 267 | . 001 | R 2.421 |
| June ............................. | -. 068 | . 020 | . 294 | R 1.877 | . 280 | . 002 | R 2.405 |
| July .......................... | -. 039 | . 009 | . 324 | R1.907 | R. 332 | . 010 | R 2.543 |
| August ..................... | -. 043 | . 007 | . 309 | R 1.934 | R. 322 | . 012 | R 2.540 |
| September ................. | -. 039 | -. 002 | . 282 | R 1.729 | . 308 | . 003 | R 2.281 |
| October ...................... | -. 020 | . 006 | E. 277 | R 1.910 | . 318 | . 004 | R 2.495 |
| November ................. | R - .025 | . 006 | RE . 287 | R 1.806 | R. 345 | . 005 | R 2.424 |
| December ................. | -. 054 | . 008 | E. 346 | 1.852 | . 269 | . 005 | 2.425 |
| Total | -. 565 | . 138 | E 3.555 | 21.914 | 3.557 | . 039 | 28.638 |

[^4]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 3.1a, 3.1b, A2, and A3.

- Electricity: Tables 7.1 and A6.

Figure 1.5 Merchandise Trade Value (Billion Dollars)

Imports and Exports, 1974-2004


Trade Balance, 1974-2004


Imports and Exports, Monthly


Trade Balance, Monthly


[^5]Table 1.5 Merchandise Trade Value
(Million Dollars)

|  | Petroleum ${ }^{\text {a }}$ |  |  | Energy ${ }^{\text {b }}$ |  |  | NonEnergy 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 Total | 8,868 | 102,747 | -93,879 | 12,494 | 121,923 | -109,429 | -302,470 | 729,100 | 1,140,999 | -411,899 |
| 2002 January | 639 | 6,348 | -5,709 | 908 | 7,321 | -6,413 | -26,031 | 52,667 | 85,111 | -32,444 |
| February ............. | 597 | 5,427 | -4,830 | 744 | 6,200 | -5,456 | -24,955 | 53,061 | 83,473 | -30,411 |
| March .................. | 593 | 6,914 | -6,321 | 782 | 7,878 | -7,096 | -23,591 | 60,728 | 91,415 | -30,687 |
| April | 676 | 8,907 | -8,231 | 910 | 9,917 | -9,007 | -29,738 | 58,146 | 96,891 | -38,745 |
| May .................... | 664 | 9,365 | -8,701 | 903 | 10,423 | -9,520 | -28,245 | 59,884 | 97,649 | -37,765 |
| June | 603 | 8,465 | -7,862 | 883 | 9,522 | -8,639 | -27,856 | 59,920 | 96,415 | -36,495 |
| July | 664 | 9,086 | -8,422 | 883 | 10,153 | -9,270 | -36,170 | 55,032 | 100,472 | -45,440 |
| August | 822 | 9,637 | -8,815 | 1,121 | 10,667 | -9,546 | -33,241 | 59,491 | 102,277 | -42,787 |
| September .......... | 726 | 9,119 | -8,393 | 979 | 10,191 | -9,212 | -32,939 | 57,277 | 99,429 | -42,151 |
| October .... | 827 | 10,712 | -9,885 | 1,104 | 11,961 | -10,857 | -33,419 | 61,975 | 106,251 | -44,276 |
| November ........... | 779 | 9,328 | -8,549 | 1,085 | 10,682 | -9,597 | -33,297 | 59,671 | 102,564 | -42,894 |
| December ............ | 979 | 9,354 | -8,375 | 1,239 | 10,831 | -9,592 | -34,577 | 55,249 | 99,418 | -44,169 |
| Total .................. | 8,569 | 102,663 | -94,094 | 11,541 | 115,748 | -104,207 | -364,056 | 693,103 | 1,161,366 | -468,263 |
| 2003 January ............... | 1,028 | 10,435 | -9,407 | 1,302 | 12,129 | -10,827 | -31,810 | 54,854 | 97,491 | -42,637 |
| February ............. | 983 | 10,258 | -9,275 | 1,331 | 12,018 | -10,687 | -26,550 | 55,917 | 93,154 | -37,237 |
| March ..... | 991 | 12,634 | -11,643 | 1,467 | 15,086 | -13,619 | -28,699 | 63,524 | 105,842 | -42,318 |
| April. | 868 | 11,095 | -10,227 | 1,111 | 12,796 | -11,685 | -33,022 | 59,162 | 103,869 | -44,707 |
| May . | 837 | 10,399 | -9,562 | 1,072 | 12,030 | -10,958 | -31,127 | 59,983 | 102,068 | -42,085 |
| June | 834 | 10,790 | -9,956 | 1,163 | 12,460 | -11,297 | -31,090 | 61,570 | 103,958 | -42,387 |
| July .... | 787 | 11,844 | -11,057 | 1,060 | 13,732 | -12,672 | -37,889 | 57,070 | 107,631 | -50,561 |
| August ................ | 748 | 11,595 | -10,847 | 969 | 13,300 | -12,331 | -31,365 | 58,611 | 102,307 | -43,696 |
| September | 783 | 10,958 | -10,175 | 1,049 | 12,506 | -11,457 | -36,626 | 60,239 | 108,322 | -48,083 |
| October ............... | 782 | 11,134 | -10,352 | 1,048 | 12,655 | -11,607 | -39,162 | 66,389 | 117,158 | -50,769 |
| November ........... | 692 | 10,189 | -9,497 | 930 | 11,630 | -10,700 | -30,875 | 64,492 | 106,066 | -41,575 |
| December ........... | 876 | 11,102 | -10,226 | 1,266 | 12,956 | -11,690 | -34,606 | 62,959 | 109,255 | -46,296 |
| Total | 10,209 | 132,433 | -122,224 | 13,768 | 153,298 | -139,530 | -392,820 | 724,771 | 1,257,121 | -532,350 |
| 2004 January ............... | 719 | 11,875 | -11,156 | 1,088 | 14,029 | -12,941 | -31,708 | 59,151 | 103,800 | -44,649 |
| February ............. | 898 | 11,696 | -10,798 | 1,261 | 13,899 | -12,638 | -28,809 | 63,388 | 104,835 | -41,447 |
| March .................. | 1,101 | 13,991 | -12,890 | 1,597 | 15,875 | -14,278 | -34,533 | 74,475 | 123,287 | -48,811 |
| April | 987 | 13,058 | -12,071 | 1,524 | 15,129 | -13,605 | -37,551 | 67,760 | 118,917 | -51,156 |
| May .................... | 1,133 | 14,143 | -13,010 | 1,662 | 16,163 | -14,501 | -33,760 | 69,704 | 117,965 | -48,261 |
| June ................... | 1,009 | 15,705 | -14,696 | 1,521 | 18,073 | -16,552 | -42,395 | 68,273 | 127,220 | -58,947 |
| July .................... | 1,051 | 14,625 | -13,574 | 1,657 | 17,104 | -15,447 | -43,763 | 63,906 | 123,117 | -59,210 |
| August ................ | 1,167 | 16,527 | -15,360 | 1,538 | 18,789 | -17,251 | -42,801 | 67,556 | 127,608 | -60,052 |
| September .......... | 1,130 | 15,400 | -14,270 | 1,488 | 17,558 | -16,070 | -40,551 | 69,685 | 126,306 | -56,621 |
| October ............... | 1,325 | 18,185 | -16,860 | 1,777 | 20,454 | -18,677 | -42,903 | 73,679 | 135,259 | -61,580 |
| November ........... | 1,144 | 18,130 | -16,986 | 1,448 | 20,391 | -18,943 | -45,916 | 69,765 | 134,625 | -64,859 |
| December ........... | 1,434 | 15,881 | -14,447 | 1,983 | 18,405 | -16,422 | R -38,796 | R 71,709 | R 126,927 | R -55,218 |
| Total .................. | 13,101 | 179,215 | -166,114 | 18,544 | 205,870 | -187,326 | R -463,486 | ${ }^{\text {R 819,052 }}$ | ${ }^{\text {R 1,469,864 }}$ | R -650,812 |
| 2005 January ............... | 1,049 | 15,631 | -14,582 | 1,804 | 18,430 | -16,626 | -39,735 | 66,382 | 122,743 | -56,361 |

[^6]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, 1973-2004


Residential Electricity ${ }^{\text {b }}$, Monthly


Residential Heating Oila ${ }^{\text {a }}$, Monthly

${ }^{\text {a }}$ Excludes taxes.
${ }^{\text {b }}$ Includes taxes.
${ }^{\mathrm{c}}$ Residential.

Costs, December 2004


Motor Gasoline ${ }^{\text {b }}$, Monthly


Residential Natural Gas ${ }^{\text {b }}$, Monthly


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

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

|  | Consumer Price Index (Urban) ${ }^{\text {a }}$ | Motor | asoline ${ }^{\text {b }}$ | Resi Heat | $\begin{aligned} & \text { ential } \\ & \text { g Oil } \end{aligned}$ | Resid Natura | ntial Gas ${ }^{\text {b }}$ | Resid Elect | ntial city ${ }^{\text {b }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Index } \\ 1982-1984=100 \end{gathered}$ | 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 Kilowatthour | 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 Average ..................... | 177.1 | 86.4 | 6.97 | 70.6 | 5.09 | 543.8 | 5.27 | 4.87 | 14.27 |
| 2002 January | 177.1 | 68.3 | 5.51 | 61.9 | 4.47 | 416.7 | 4.05 | 4.57 | 13.39 |
| February | 177.8 | 68.1 | 5.49 | 61.0 | 4.40 | 406.6 | 3.95 | 4.61 | 13.50 |
| March .... | 178.8 | 74.0 | 5.97 | 61.5 | 4.44 | 397.1 | 3.86 | 4.57 | 13.39 |
| April | 179.8 | 83.0 | 6.70 | 62.1 | 4.48 | 426.0 | 4.14 | 4.66 | 13.66 |
| May . | 179.8 | 83.9 | 6.76 | 60.8 | 4.38 | 475.0 | 4.62 | 4.81 | 14.08 |
| June | 179.9 | 82.8 | 6.67 | 58.8 | 4.24 | 532.5 | 5.18 | 4.85 | 14.21 |
| July | 180.1 | 83.1 | 6.70 | 57.1 | 4.12 | 572.5 | 5.56 | 4.89 | 14.34 |
| August | 180.7 | 83.5 | 6.73 | 57.4 | 4.14 | 577.8 | 5.61 | 4.85 | 14.21 |
| September | 181.0 | 83.3 | 6.71 | 60.7 | 4.38 | 565.2 | 5.49 | 4.78 | 14.02 |
| October .... | 181.3 | 84.7 | 6.83 | 63.3 | 4.57 | 474.9 | 4.62 | 4.69 | 13.76 |
| November | 181.3 | 84.6 | 6.82 | 65.1 | 4.69 | 440.7 | 4.28 | 4.60 | 13.48 |
| December | 180.9 | 81.6 | 6.58 | 68.4 | 4.93 | 435.0 | 4.23 | 4.48 | 13.12 |
| Average ..................... | 179.9 | 80.1 | 6.46 | 62.8 | 4.52 | 438.6 | 4.26 | 4.70 | 13.78 |
| 2003 January ....................... | 181.7 | 85.7 | 6.91 | 73.3 | 5.29 | 444.7 | 4.30 | 4.39 | 12.87 |
| February .......................... | 183.1 | 92.1 | 7.43 | 82.4 | 5.94 | 462.0 | 4.47 | 4.36 | 12.79 |
| March .......................... | 184.2 | 97.2 | 7.84 | 83.6 | 6.02 | 523.3 | 5.07 | 4.51 | 13.21 |
| April | 183.8 | 92.7 | 7.48 | 73.2 | 5.28 | 546.8 | 5.29 | 4.79 | 14.05 |
| May | 183.5 | 86.5 | 6.98 | 69.0 | 4.98 | 581.5 | 5.63 | 4.90 | 14.36 |
| June | 183.7 | 84.8 | 6.84 | 66.2 | 4.78 | 651.1 | 6.30 | 5.01 | 14.68 |
| July | 183.9 | 85.2 | 6.87 | 63.3 | 4.56 | 686.2 | 6.64 | 4.97 | 14.57 |
| August | 184.6 | 90.5 | 7.30 | 63.7 | 4.59 | 689.1 | 6.67 | 4.97 | 14.57 |
| September | 185.2 | 95.6 | 7.71 | 64.1 | 4.63 | 658.2 | 6.37 | 4.81 | 14.08 |
| October ..... | 185.0 | 89.0 | 7.18 | 66.8 | 4.82 | 568.6 | 5.50 | 4.81 | 14.08 |
| November .................... | 184.5 | 85.5 | 6.90 | 69.5 | 5.01 | 523.6 | 5.07 | 4.74 | 13.88 |
| December .................... | 184.3 | 83.5 | 6.73 | 72.8 | 5.25 | 509.5 | 4.93 | 4.52 | 13.25 |
| Average ..................... | 184.0 | 89.0 | 7.18 | 73.6 | 5.31 | 517.4 | 5.01 | 4.73 | 13.86 |
| 2004 January | 185.2 | 88.3 | R 7.11 | 76.5 | 5.52 | 523.8 | 5.07 | 4.45 | 13.04 |
| February | 186.2 | 92.1 | R 7.42 | 76.9 | 5.55 | 528.5 | 5.12 | 4.47 | 13.10 |
| March .... | 187.4 | 96.5 | ${ }^{\mathrm{R}} 7.77$ | 75.4 | 5.44 | 533.6 | 5.17 | 4.60 | 13.48 |
| April .. | 188.0 | 99.7 | R 8.03 | 75.1 | 5.41 | 559.6 | 5.42 | 4.75 | 13.92 |
| May | 189.1 | 108.4 | R 8.73 | 75.1 | 5.41 | 614.0 | 5.94 | 4.80 | 14.07 |
| June ............................ | 189.7 | 109.8 | R 8.84 | 74.2 | 5.35 | 687.9 | 6.66 | 4.88 | 14.29 |
| July .... | 189.4 | 104.6 | R 8.43 | 75.4 | 5.44 | R 710.1 | -6.87 | 4.93 | 14.45 |
| August | 189.5 | 102.4 | R 8.25 | 79.1 | 5.70 | R 727.7 | R 7.04 | 5.00 | 14.65 |
| September | 189.9 | 101.8 | R 8.20 | 84.1 | 6.07 | R 699.8 | ${ }^{R} 6.77$ | 4.93 | 14.46 |
| October ............................ | 190.9 | 108.5 | R 8.74 | 94.6 | 6.82 | R 611.3 | R 5.92 | 4.77 | 13.97 |
| November | 191.0 | 107.5 | R 8.66 | R 95.6 | R 6.89 | 599.0 | R 5.80 | 4.69 | 13.75 |
| December | 190.3 | 101.2 | R 8.15 | R 94.2 | R 6.79 | R 5822.8 | R 5.64 | $R$ $R$ $R$ | R 13.21 $R 13.87$ |
| Average ..................... | 188.9 | 101.8 | R 8.20 | R 81.8 | R 5.90 | ${ }^{\text {R }} 568.6$ | R 5.50 | R 4.73 | R 13.87 |
| 2005 January | 190.7 | 97.9 | 7.88 | NA | NA | NA | NA | NA | NA |
| a Consumer Price Index, All Urban Consumers, All Items, 1982-1984 = 100.0. <br> b Includes taxes. <br> C Excludes taxes. <br> $R=$ Revised. NA=Not available. <br> 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. <br> Web Page: http://www.eia.doe.gov/emeu/mer/overview.html. <br> Sources: - Fuel Prices: Tables 9.4 (All Types), 9.8c, 9.11, and 9.9, adjusted by the CPI. - CPI: 1973-2002-Economic Report of the President, February 2005, Table B-60. 2003 forward-Council of Economic Advisers, Economic Indicators, March 2005, "Consumer Prices - All Urban Consumers." <br> - Conversion Factors: Tables A1, A3, A4, and A6. |  |  |  |  |  |
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Figure 1.7 Overview of U.S. Petroleum Trade
Overview, January 2005


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

1973-2004


January


January


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 ${ }^{2}$ | Imports from OPEC ${ }^{\text {b }}$ | Imports | Exports | Net Imports | Products Supplied | As Share of Products Supplied |  |  |  | As Share of Total Imports |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Imports from Persian Gulf ${ }^{\text {a }}$ | Imports from OPEC ${ }^{\text {b }}$ | Imports | Net Imports | Imports from Persian Gulfa | Imports from OPEC ${ }^{\text {b }}$ |
|  | Thousand Barrels per Day |  |  |  |  |  | Percent |  |  |  |  |  |
| 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 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 | 19,678 | 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 | 2,735 | 4,303 | 11,104 | 1,212 | 9,892 | 20,017 | 13.7 | 21.5 | 55.5 | 49.4 | 24.6 | 38.8 |
| February | 2,676 | 4,052 | 10,921 | 1,067 | 9,854 | 20,375 | 13.1 | 19.9 | 53.6 | 48.4 | 24.5 | 37.1 |
| March .... | 2,818 | 5,433 | 12,044 | 1,051 | 10,993 | 19,708 | 14.3 | 27.6 | 61.1 | 55.8 | 23.4 | 45.1 |
| April | 3,148 | 5,949 | 12,599 | 1,053 | 11,546 | 19,830 | 15.9 | 30.0 | 63.5 | 58.2 | 25.0 | 47.2 |
| May | 2,669 | 5,751 | 12,918 | 1,097 | 11,822 | 19,344 | 13.8 | 29.7 | 66.8 | 61.1 | 20.7 | 44.5 |
| June | 2,327 | 5,526 | 13,001 | 1,065 | 11,936 | 19,793 | 11.8 | 27.9 | 65.7 | 60.3 | 17.9 | 42.5 |
| July | 2,170 | 4,736 | 12,736 | 976 | 11,760 | 20,094 | 10.8 | 23.6 | 63.4 | 58.5 | 17.0 | 37.2 |
| August ..................... | 1,849 | 4,934 | 12,769 | 947 | 11,822 | 20,586 | 9.0 | 24.0 | 62.0 | 57.4 | 14.5 | 38.6 |
| September ................ | 2,397 | 5,394 | 12,868 | 960 | 11,908 | 19,933 | 12.0 | 27.1 | 64.6 | 59.7 | 18.6 | 41.9 |
| October .... | 2,353 | 5,342 | 12,373 | 970 | 11,402 | 20,182 | 11.7 | 26.5 | 61.3 | 56.5 | 19.0 | 43.2 |
| November | 2,586 | 5,237 | 11,712 | 933 | 10,780 | 19,873 | 13.0 | 26.4 | 58.9 | 54.2 | 22.1 | 44.7 |
| December | 2,312 | 5,225 | 12,033 | 990 | 11,043 | 20,679 | 11.2 | 25.3 | 58.2 | 53.4 | 19.2 | 43.4 |
| Average .................. | 2,501 | 5,162 | 12,264 | 1,027 | 11,238 | 20,034 | 12.5 | 25.8 | 61.2 | 56.1 | 20.4 | 42.1 |
| 2004 January .................... | 2,300 | 5,179 | 11,727 | 748 | 10,979 | 20,393 | 11.3 | 25.4 | 57.5 | 53.8 | 19.6 | 44.2 |
| February ................... | 2,098 | 5,215 | 12,329 | 1,046 | 11,283 | 20,549 | 10.2 | 25.4 | 60.0 | 54.9 | 17.0 | 42.3 |
| March .... | 2,373 | 5,769 | 13,073 | 1,024 | 12,048 | 20,161 | 11.8 | 28.6 | 64.8 | 59.8 | 18.2 | 44.1 |
| April | 2,322 | 5,388 | 12,450 | 1,153 | 11,297 | 20,207 | 11.5 | 26.7 | 61.6 | 55.9 | 18.7 | 43.3 |
| May | 2,478 | 5,753 | 12,989 | 1,052 | 11,937 | 20,209 | 12.3 | 28.5 | 64.3 | 59.1 | 19.1 | 44.3 |
| June | 2,370 | 5,865 | 13,301 | 1,070 | R 12,232 | 20,333 | 11.7 | 28.8 | 65.4 | 60.2 | 17.8 | 44.1 |
| July ......................... | 2,538 | 5,786 | 13,389 | 1,080 | 12,310 | 20,601 | 12.3 | 28.1 | 65.0 | 59.8 | 19.0 | 43.2 |
| August | 2,943 | 6,225 | 13,489 | 1,091 | 12,399 | 20,732 | 14.2 | 30.0 | 65.1 | 59.8 | 21.8 | 46.1 |
| September ............... | 2,764 | 5,580 | 12,532 | ${ }^{961}$ | 11,571 | 20,411 | 13.5 | 27.3 | 61.4 | 56.7 | 22.1 | 44.5 |
| October ..................... | 2,562 | 5,567 | 13,323 | 1,078 | 12,245 | 20,743 | 12.4 | 26.8 | 64.2 | 59.0 | 19.2 | 41.8 |
| November | 2,648 | 5,657 | 13,219 | 992 | 12,227 | 20,782 | 12.7 | 27.2 | 63.6 | 58.8 | 20.0 | 42.8 |
| December | 2,402 | 5,497 | 12,931 | 1,284 | 11,648 | 21,080 | 11.4 | 26.1 | 61.3 | 55.3 | 18.6 | 42.5 |
| Average | 2,485 | 5,626 | 12,899 | 1,048 | 11,851 | 20,517 | 12.1 | 27.4 | 62.9 | 57.8 | 19.3 | 43.6 |
| 2005 January .................... | 2,337 | 5,366 | 12,661 | 917 | 11,745 | 20,524 | 11.4 | 26.1 | 61.7 | 57.2 | 18.5 | 42.4 |

[^7]- 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: - Columns 1-6: Tables 3.1a, 3.1b, 3.3b, and 3.3d. • Columns 1-7: Calculated by Energy Information Administration.

Figure 1.8 Energy Consumption per Dollar of Gross Domestic Product
(Thousand Btu per Chained (2000) 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 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Petroleum } \\ & \text { and } \\ & \text { Natural Gas } \end{aligned}$ | Other Energy ${ }^{\text {a }}$, | Total ${ }^{\text {a }}$ |  | Petroleum and Natural Gas ${ }^{\text {a }}$ | Other Energy ${ }^{\text {a }, b}$ | Total ${ }^{\text {a }}$ |
|  | Quadrillion Btu |  |  | Billion Chained (2000) Dollars | Thousand Btu per Chained (2000) Dollar |  |  |
| 1973 Year .................... | 57.352 | 18.356 | 75.708 | 4,341.5 | 13.21 | 4.23 | 17.44 |
| 1974 Year ................... | 55.187 | 18.804 | 73.991 | 4,319.6 | 12.78 | 4.35 | 17.13 |
| 1975 Year ................... | 52.678 | 19.321 | 71.999 | 4,311.2 | 12.22 | 4.48 | 16.70 |
| 1976 Year ................... | 55.520 | 20.492 | 76.012 | 4,540.9 | 12.23 | 4.51 | 16.74 |
| 1977 Year ................... | 57.053 | 20.947 | 78.000 | 4,750.5 | 12.01 | 4.41 | 16.42 |
| 1978 Year ................... | 57.966 | 22.021 | 79.986 | 5,015.0 | 11.56 | 4.39 | 15.95 |
| 1979 Year .................... | 57.789 | 23.114 | 80.903 | 5,173.4 | 11.17 | 4.47 | 15.64 |
| 1980 Year ................... | 54.596 | 23.693 | 78.289 | 5,161.7 | 10.58 | 4.59 | 15.17 |
| 1981 Year ................... | 51.859 | 24.483 | 76.342 | 5,291.7 | 9.80 | 4.63 | 14.43 |
| 1982 Year ................... | 48.736 | 24.516 | 73.253 | 5,189.3 | 9.39 | 4.72 | 14.12 |
| 1983 Year ................... | 47.411 | 25.690 | 73.101 | 5,423.8 | 8.74 | 4.74 | 13.48 |
| 1984 Year ................... | 49.558 | 27.178 | 76.736 | 5,813.6 | 8.52 | 4.67 | 13.20 |
| 1985 Year ................... | 48.756 | 27.713 | 76.469 | 6,053.7 | 8.05 | 4.58 | 12.63 |
| 1986 Year ................... | 48.904 | 27.878 | 76.782 | 6,263.6 | 7.81 | 4.45 | 12.26 |
| 1987 Year ................... | 50.609 | 28.616 | 79.225 | 6,475.1 | 7.82 | 4.42 | 12.24 |
| 1988 Year ................... | 52.774 | 30.070 | 82.844 | 6,742.7 | 7.83 | 4.46 | 12.29 |
| 1989 Year ................... | 53.923 | 31.034 | 84.957 | 6,981.4 | 7.72 | 4.45 | 12.17 |
| 1990 Year .................... | 53.282 | 31.386 | 84.668 | 7,112.5 | 7.49 | 4.41 | 11.90 |
| 1991 Year ................... | 52.994 | 31.601 | 84.595 | 7,100.5 | 7.46 | 4.45 | 11.91 |
| 1992 Year ................... | 54.362 | 31.587 | 85.949 | 7,336.6 | 7.41 | 4.31 | 11.72 |
| 1993 Year ................... | a 55.193 | а 32.482 | a 87.578 | 7,532.7 | ${ }^{\text {a }} 7.33$ | ${ }^{\text {a }} 4.31$ | a 11.63 |
| 1994 Year ................... | 56.512 | 32.845 | 89.248 | 7,835.5 | 7.21 | 4.19 | 11.39 |
| 1995 Year ................... | 57.338 | 34.000 | 91.221 | 8,031.7 | 7.14 | 4.23 | 11.36 |
| 1996 Year | 58.954 | 35.353 | 94.224 | 8,328.9 | 7.08 | 4.24 | 11.31 |
| 1997 Year ................... | 59.594 | 35.239 | 94.727 | 8,703.5 | 6.85 | 4.05 | 10.88 |
| 1998 Year ................... | 59.869 | 35.394 | 95.146 | 9,066.9 | 6.60 | 3.90 | 10.49 |
| 1999 Year | 60.970 | 35.926 | 96.774 | 9,470.3 | 6.44 | 3.79 | 10.22 |
| 2000 Year ................... | 62.320 | 36.724 | 98.905 | 9,817.0 | 6.35 | 3.74 | 10.07 |
| 2001 Year ................... | 61.194 | ${ }^{\text {R }} 35.327$ | R 96.374 | 9,890.7 | 6.19 | 3.57 | 9.74 |
| 2002 Year ................... | 62.030 | ${ }^{\text {R }} 36.151$ | ${ }^{\mathrm{R}} 98.006$ | 10,074.8 | 6.16 | 3.59 | 9.73 |
| 2003 Year ................... | 62.116 | ${ }^{\text {R }} 36.879$ | ${ }^{\text {R } 98.756}$ | 10,381.3 | 5.98 | 3.55 | 9.51 |
| 2004 Year ................... | 63.130 | 37.497 | 100.331 | 10,841.6 | 5.82 | 3.46 | 9.25 |

[^8]Columbia.
Web Page: http://www.eia.doe.gov/emeu/mer/overview.html.
Sources: - Energy Consumption: Table 1.3. - Gross Domestic Product: 1973-2003-U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, August 2004, Table 2A. 2004-U.S. Department of Commerce, Bureau of Economic Analysis, BEA News Release, February 25, 2005, Table 3, which is available at website www.bea.doc.gov/bea/newsrel/gdpnewsrelease.htm.

Figure 1.9 Motor Vehicle Fuel Rates
(Miles per Gallon)

${ }^{\text {a }}$ Motorcycles 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 ${ }^{\text {a }}$ |  |  | Vans, Pickup Trucks, and Sport Utility Vehicles ${ }^{\text {b }}$ |  |  | Trucks ${ }^{\text {c }}$ |  |  | All Motor Vehicles ${ }^{\text {d }}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | a 10,157 | a533 | a19.0 | 11,676 | 724 | 16.1 | 22,926 | 3,776 | 6.1 | 10,932 | 688 | 15.9 |
| 1990 | 10,504 | 520 | 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 | 11,831 | 534 | 22.1 | 11,204 | 636 | 17.6 | 26,602 | 4,477 | 5.9 | 11,887 | 695 | 17.1 |
| 2002 | 12,202 | 555 | 22.0 | 11,364 | 650 | 17.5 | 27,071 | 4,642 | 5.8 | 12,171 | 719 | 16.9 |
| $2003{ }^{\text {P }}$ | 12,242 | 550 | 22.3 | 11,467 | 647 | 17.7 | 27,286 | 4,750 | 5.7 | 12,210 | 716 | 17.0 |

[^9]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 reports, Table VM-1.

Table 1.10 Heating Degree-Days by Census Division

| Census Divisions | February 1 through February 28 |  |  |  |  | Cumulative July 1 through February 28 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Normal ${ }^{\text {a }}$ | 2004 | 2005 | Percent Change |  | Normal ${ }^{\text {a }}$ | 2004 | 2005 | Percent Change |  |
|  |  |  |  | Normal to 2005 | $\begin{gathered} 2004 \\ \text { to } 2005 \end{gathered}$ |  |  |  | Normal to 2005 | $\begin{gathered} 2004 \\ \text { to } 2005 \end{gathered}$ |
| New England <br> Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont | 1,060 | 1,027 | 1,024 | -3 | (s) | 4,768 | 4,780 | 4,672 | -2 | -2 |
| Middle Atlantic <br> New Jersey, New York, Pennsylvania $\qquad$ | 983 | 979 | 938 | -5 | -4 | 4,332 | 4,314 | 4,128 | -5 | -4 |
| East North Central Illinois, Indiana, <br> Michigan, Ohio, <br> Wisconsin $\qquad$ | 1,061 | 1,046 | 938 | -12 | -10 | 4,835 | 4,619 | 4,403 | -9 | -5 |
| West North Central lowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota $\qquad$ | 1,078 | 1,096 | 902 | -16 | -18 | 5,163 | 4,881 | 4,517 | -13 | -7 |
| South Atlantic <br> Delaware, Florida, <br> Georgia, Maryland and the District of Columbia, North Carolina, <br> South Carolina, Virginia, West Virginia | 507 | 532 | 462 | -9 | -13 | 2,233 | 2,237 | 1,993 | -11 | -11 |
| East South Central Alabama, Kentucky, Mississippi, Tennessee $\qquad$ | 623 | 668 | 525 | -16 | -21 | 2,853 | 2,790 | 2,361 | -17 | -15 |
| West South Central <br> Arkansas, Louisiana, Oklahoma, Texas $\qquad$ | 414 | 482 | 333 | -20 | -31 | 1,912 | 1,746 | 1,558 | -19 | -11 |
| Mountain <br> Arizona, Colorado, <br> Idaho, Montana, <br> Nevada, New Mexico, <br> Utah, Wyoming $\qquad$ | 737 | 802 | 691 | -6 | -14 | 3,835 | 3,633 | 3,537 | -8 | -3 |
| Pacific ${ }^{\text {b }}$ <br> California, Oregon, <br> Washington $\qquad$ | 439 | 463 | 412 | -6 | -11 | 2,256 | 2,106 | 2,133 | -5 | 1 |
| U.S. Average ${ }^{\text {b }}$............................. | 732 | 751 | 661 | -10 | -12 | 3,388 | 3,274 | 3,088 | -9 | -6 |

a "Normal" is based on calculations of data from 1971 through 2000.
b Excludes Alaska and Hawaii.
(s)=Less than 0.5 percent and greater than -0.5 percent.

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 $65^{\circ} \mathrm{F}$. Cooling degree-days are the number of degrees that the daily average temperature rises above $65^{\circ} \mathrm{F}$. 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 $40^{\circ}$ $F$ would report 25 heating degree-days for that day (and 0 cooling degree-days). If a weather station recorded an average daily temperature of $78^{\circ} \mathrm{F}$, cooling degree-days for that station would be 13 (and 0 heating degree days).

Web Pages: • See http://www.eia.doe.gov/emeu/mer/overview.html for current data. • See http://www.eia.doe.gov/emeu/aer/overview.html for historical data.
Sources: See end of section.

Table 1.11 Cooling Degree-Days by Census Division

| Census Divisions | February 1 through February 28 |  |  |  |  | Cumulative January 1 through February 28 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Normal ${ }^{\text {a }}$ | 2004 | 2005 | Percent Change |  | Normal ${ }^{\text {a }}$ | 2004 | 2005 | Percent Change |  |
|  |  |  |  | Normal to 2005 | $\begin{gathered} 2004 \\ \text { to } 2005 \end{gathered}$ |  |  |  | Normal to 2005 | $\begin{gathered} 2004 \\ \text { to } 2005 \end{gathered}$ |
| New England <br> Connecticut, Maine, <br> Massachusetts, <br> New Hampshire, <br> Rhode Island, Vermont | 0 | 0 | 0 | ( ${ }^{\text {c }}$ | ( ${ }^{\text {c }}$ ) | 0 | 0 | 0 | ( ${ }^{\text {c }}$ | ( ${ }^{\text {c }}$ |
| Middle Atlantic <br> New Jersey, New York, Pennsylvania $\qquad$ | 0 | 0 | 0 | ( ${ }^{\text {c }}$ | ( ${ }^{\text {c }}$ ) | 0 | 0 | 0 | ( ${ }^{\text {c }}$ | ( ${ }^{\text {c }}$ |
| East North Central Illinois, Indiana, <br> Michigan, Ohio, <br> Wisconsin $\qquad$ | 0 | 0 | 0 | ( ${ }^{\text {c }}$ ) | ( ${ }^{\text {c }}$ ) | 0 | 0 | 0 | ( ${ }^{\text {c }}$ | ( ${ }^{\text {c }}$ |
| West North Central lowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota $\qquad$ | 0 | 0 | 0 | ( ${ }^{\text {c }}$ ) | ( ${ }^{\text {c }}$ ) | 0 | 0 | 0 | ( ${ }^{\text {c }}$ ) | ( ${ }^{\text {c }}$ ) |
| South Atlantic <br> Delaware, Florida, <br> Georgia, Maryland and the District of Columbia, North Carolina, <br> South Carolina, Virginia, West Virginia $\qquad$ | 30 | 25 | 25 | ( ${ }^{\text {c }}$ | ( ${ }^{\text {c }}$ | 64 | 41 | 55 | ( ${ }^{\text {c }}$ | ( ${ }^{\text {c }}$ |
| East South Central Alabama, Kentucky, Mississippi, Tennessee $\qquad$ | 4 | 0 | 3 | ( ${ }^{\text {c }}$ ) | ( ${ }^{\text {c }}$ ) | 12 | 5 | 10 | ( ${ }^{\text {c }}$ ) | ( ${ }^{\text {c }}$ ) |
| West South Central Arkansas, Louisiana, Oklahoma, Texas $\qquad$ | 15 | 3 | 22 | ( ${ }^{\text {c }}$ ) | ( ${ }^{\text {c }}$ ) | 29 | 15 | 47 | ( ${ }^{\text {c }}$ | ( ${ }^{\text {c }}$ ) |
| Mountain <br> Arizona, Colorado, <br> Idaho, Montana, <br> Nevada, New Mexico, <br> Utah, Wyoming $\qquad$ | 3 | 0 | 0 | ( ${ }^{\text {c }}$ ) | ( ${ }^{\text {c }}$ ) | 4 | 0 | 0 | ( ${ }^{\text {c }}$ ) | ( ${ }^{\text {c }}$ ) |
| Pacific ${ }^{\text {b }}$ <br> California, Oregon, <br> Washington $\qquad$ | 1 | 0 | 0 | ( ${ }^{\text {c }}$ ) | ( ${ }^{\text {c }}$ ) | 3 | 0 | 0 | ( ${ }^{\text {c }}$ ) | ( ${ }^{\text {c }}$ ) |
| U.S. Average ${ }^{\text {b }}$............................. | 8 | 5 | 7 | ( ${ }^{\text {c }}$ | ( ${ }^{\text {c }}$ | 17 | 10 | 16 | ( ${ }^{\text {c }}$ | ( ${ }^{\text {c }}$ |

[^10]For example, if a weather station recorded an average daily temperature of $78^{\circ} \mathrm{F}$, cooling degree-days for that station would be 13 (and 0 heating degree-days). A weather station recording an average daily temperature of $40^{\circ} \mathrm{F}$ would report 25 heating degree-days for that day (and 0 cooling degreedays).

Web Pages: • See http://www.eia.doe.gov/emeu/mer/overview.html for current data. - See http://www.eia.doe.gov/emeu/aer/overview.html for historical data.

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.
1993-2003: "U.S. International Trade in Goods and Services," Annual Revision.
2004 and 2005: "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.
1994-2003: "U.S. International Trade in Goods and Services," Annual Revision.
2004 and 2005: "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.
1993-2003: "U.S. International Trade in Goods and Services," Annual Revision.

2004 and 2005: "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.
1992-2003: "U.S. International Trade in Goods and Services," Annual Revision.
2004 and 2005: "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 Prediction 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 the 2000 Census 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 December 2004 was 9.2 quadrillion Btu, 2 percent higher than in December 2003.

Residential sector total consumption was 2.2 quadrillion Btu in December 2004, the same as the December 2003 level. The sector accounted for 24 percent of total energy consumption.

Commercial sector total consumption was 1.7 quadrillion Btu in December 2004, 2 percent higher than the December 2003 level. The sector accounted for 18 percent of total energy consumption.

Industrial sector total consumption was 2.9 quadrillion Btu in December 2004, 2 percent higher than the December

2003 level. The sector accounted for 31 percent of total energy consumption.

Transportation sector total consumption was 2.4 quadrillion Btu in December 2004, 3 percent higher than the December 2003 level. The sector accounted for 26 percent of total energy consumption.

Electric power sector primary consumption was 3.4 quadrillion Btu in December 2004, 3 percent higher than the December 2003 level. Fossil fuels accounted for 69 percent of all primary energy consumed by the electric power sector; nuclear electric power 21 percent; and renewable energy 10 percent.

Figure 2.1 Energy Consumption by Sector
(Quadrillion Btu)
Total Consumption by End-Use Sector, 1973-2004


Total Consumption by End-Use Sector, Monthly


By Sector, December 2004


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)

a Commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," 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, "Classification of Power Plants Auto Energy-Use Sectors," at end of Section 7.
c The electric power sector comprises electricity-only and combined-heat-andpower (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.
$\mathrm{R}=$ Revised. (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, 1973-2004


By Major Sources, Monthly


Total, January-December


By Major Sources, December 2004


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 |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Electricity } \\ & \text { Retail }^{2} \\ & \text { Sales }^{\text {e }} \\ & \hline \end{aligned}$ | Electrical System Energy Losses ${ }^{\dagger}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fossil Fuels |  |  |  | Renewable Energy ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
|  | Coal | Natural Gas ${ }^{\text {b }}$ | Petroleum | Total | Wood | Geothermal ${ }^{C}$ | Solar ${ }^{\text {d }}$ | Total | Total Primary |  |  |  |
| 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 .................. | . 040 | 4.692 | 1.337 | 6.069 | . 923 | NA | NA | . 923 | 6.992 | 2.662 | 6.123 | 15.777 |
| 1985 Total .................. | . 039 | 4.571 | 1.483 | 6.093 | . 899 | NA | NA | . 899 | 6.992 | 2.709 | 6.227 | 15.928 |
| 1986 Total .................. | . 040 | 4.439 | 1.457 | 5.936 | . 876 | NA | NA | . 876 | 6.812 | 2.795 | 6.320 | 15.927 |
| 1987 Total .................. | . 037 | 4.449 | 1.508 | 5.994 | . 852 | NA | NA | . 852 | 6.846 | 2.902 | 6.485 | 16.233 |
| 1988 Total | . 037 | 4.765 | 1.563 | 6.364 | . 885 | NA | NA | . 885 | 7.249 | 3.046 | 6.774 | 17.069 |
| 1989 Total .................. | . 031 | 4.929 | 1.560 | 6.519 | . 918 | . 005 | . 053 | . 976 | 7.495 | 3.090 | 7.189 | 17.774 |
| 1990 Total .................... | . 031 | 4.523 | 1.263 | 5.817 | . 581 | . 006 | . 056 | . 642 | 6.460 | 3.153 | 7.287 | 16.900 |
| 1991 Total | . 025 | 4.697 | 1.293 | 6.015 | . 613 | . 006 | . 058 | . 677 | 6.692 | 3.260 | 7.463 | 17.414 |
| 1992 Total .................. | . 026 | 4.835 | 1.311 | 6.172 | . 645 | . 006 | . 060 | . 711 | 6.883 | 3.193 | 7.263 | 17.339 |
| 1993 Total .................. | . 026 | 5.095 | 1.385 | 6.506 | . 548 | . 007 | . 062 | . 616 | 7.122 | 3.394 | 7.733 | 18.249 |
| 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 | . 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 | 19.052 |
| 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 | 1.506 | 6.643 | . 433 | . 009 | . 061 | . 503 | 7.147 | 4.069 | 9.238 | 20.453 |
| 2001 Total .................. | . 012 | 4.919 | 1.539 | 6.470 | . 370 | . 009 | . 060 | . 439 | 6.909 | 4.103 | R 9.237 | R 20.249 |
| 2002 January ............. | . 001 | . 839 | . 174 | 1.014 | . 027 | . 001 | . 005 | . 032 | 1.046 | . 402 | R . 874 | R 2.322 |
| February ............ | . 001 | . 734 | . 145 | . 880 | . 024 | . 001 | . 005 | . 029 | . 909 | . 332 | . 693 | 1.934 |
| March ................. | . 001 | . 680 | . 141 | . 822 | . 027 | . 001 | . 005 | . 032 | . 854 | . 327 | R. 743 | 1.924 |
| April ...................... | . 001 | . 427 | . 117 | . 545 | . 026 | . 001 | . 005 | . 031 | . 577 | . 294 | . 661 | R 1.532 |
| May ........................ | . 001 | . 262 | . 106 | . 369 | . 027 | . 001 | . 005 | . 032 | . 402 | . 299 | R .694 | +1.394 |
| June ................... | . 001 | . 165 | . 102 | . 268 | . 026 | . 001 | . 005 | . 031 | . 299 | . 368 | R. 858 | R 1.525 |
| July .................... | . 001 | . 129 | . 109 | . 239 | . 027 | . 001 | . 005 | . 032 | . 271 | . 455 | R 1.050 | 1.776 |
| August ................ | . 001 | . 119 | . 105 | . 224 | . 027 | . 001 | . 005 | . 032 | . 257 | . 457 | 1.018 | 1.732 |
| September .......... | . 001 | . 127 | . 104 | . 232 | . 026 | . 001 | . 005 | . 031 | . 264 | . 392 | . 828 | 1.484 |
| October ................ | . 001 | . 258 | . 123 | . 381 | . 027 | . 001 | . 005 | . 032 | . 414 | . 322 | . 693 | 1.428 |
| November ........... | . 001 | . 497 | . 131 | . 629 | . 026 | . 001 | . 005 | . 031 | . 661 | . 303 | R. 694 | 1.658 |
| December ............. | . 001 | . 794 | . 159 | . 954 | . 027 | . 001 | . 005 | . 032 | . 987 | . 372 | R. 864 | R 2.223 |
| Total .................. | . 011 | 5.031 | 1.516 | 6.558 | . 313 | . 010 | . 059 | . 382 | 6.940 | 4.323 | R 9.672 | ${ }^{\text {R } 20.935}$ |
| 2003 January ............... | . 001 | . 977 | . 195 | 1.173 | . 030 | . 002 | . 005 | . 037 | 1.210 | . 425 | R . 947 | R 2.583 |
| February | . 001 | . 913 | . 160 | 1.074 | . 028 | . 001 | . 004 | . 033 | 1.108 | . 380 | R. 794 | 2.281 |
| March .................. | . 001 | . 697 | . 140 | . 838 | . 030 | . 002 | . 005 | . 037 | . 875 | . 340 | R. 760 | 1.974 |
| April ...................... | . 001 | . 428 | . 124 | . 553 | . 030 | . 001 | . 005 | . 036 | . 588 | . 286 | . 642 | +1.516 |
| May .................... | . 001 | . 256 | . 099 | . 355 | . 030 | . 002 | . 005 | . 037 | . 392 | . 300 | R. 705 | R 1.397 |
| June ................... | . 001 | . 162 | . 094 | . 257 | . 030 | . 001 | . 005 | . 036 | . 292 | . 343 | R. 802 | R 1.437 |
| July .................... | . 001 | . 131 | . 104 | . 235 | . 030 | . 002 | . 005 | . 037 | . 272 | . 442 | R1.011 | R 1.725 |
| August ................ | . 001 | . 120 | . 105 | . 226 | . 030 | . 002 | . 005 | . 037 | . 263 | . 455 | R 1.029 | R 1.746 |
| September .......... | . 001 | . 133 | . 110 | . 243 | . 030 | . 001 | . 005 | . 036 | . 279 | . 385 | R. 797 | 1.461 |
| October | . 001 | . 239 | . 122 | . 362 | . 030 | . 002 | . 005 | . 037 | . 398 | . 306 | . 672 | 1.376 |
| November ............ | . 001 | . 427 | . 127 | . 556 | . 030 | . 001 | . 005 | . 036 | . 591 | . 297 | R. 683 | 1.571 |
| December ........... | . 002 | . 763 | . 169 | . 934 | . 030 | . 002 | . 005 | . 037 | . 971 | . 387 | R. 888 | R2.245 |
| Total .................. | . 012 | 5.246 | 1.548 | 6.805 | . 359 | . 018 | . 058 | . 435 | 7.240 | 4.345 | R 9.737 | R 21.322 |
| 2004 January ............... | . 001 | . 999 | . 197 | 1.197 | . 030 | . 002 | . 005 | . 037 | 1.234 | . 433 | . 980 | 2.647 |
| February ............... | . 001 | . 890 | . 166 | 1.057 | . 028 | . 001 | . 005 | . 034 | 1.091 | . 386 | . 832 | 2.309 |
| March ................... | . 001 | . 613 | R. 145 | . 759 | . 030 | . 002 | . 005 | . 037 | . 796 | . 338 | . 736 | 1.870 |
| April | . 001 | . 397 | . 132 | . 530 | . 029 | . 001 | . 005 | . 036 | . 565 | . 292 | . 634 | 1.491 |
| May | . 001 | . 221 | . 110 | . 331 | . 030 | . 002 | . 005 | . 037 | . 368 | . 309 | . 737 | 1.414 |
| June | . 001 | . 150 | . 105 | . 255 | . 029 | . 001 | . 005 | . 036 | . 291 | . 383 | . 860 | 1.534 |
| July | . 001 | . 130 | . 114 | . 244 | . 030 | . 002 | . 005 | . 037 | R. 281 | . 443 | 1.001 | 1.725 |
| August ............... | . 001 | . 123 | . 109 | R. 233 | . 030 | . 002 | . 005 | . 037 | R . 269 | . 432 | . 961 | R 1.663 |
| September .......... | . 001 | . 129 | . 109 | R . 238 | . 029 | . 001 | . 005 | . 036 | . 274 | . 384 | . 828 | 1.486 |
| October ............... | . 001 | . 223 | . 128 | . 352 | . 030 | . 002 | . 005 | . 037 | . 389 | . 319 | . 705 | 1.413 |
| November ............. | . 001 | R. 421 | . 135 | R. 557 | . 029 | . 001 | . 005 | . 036 | R. 592 | . 306 | . 686 | R 1.584 |
| December ............ | . 002 | . 747 | . 170 | . 919 | . 030 | . 002 | . 005 | . 037 | . 955 | . 388 | . 902 | 2.245 |
| Total .................. | . 012 | 5.042 | 1.619 | 6.672 | . 359 | . 018 | . 058 | . 435 | 7.107 | 4.413 | 9.864 | 21.384 |

a All values are estimated; see Table 10.2a.
b Natural gas, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
c Geothermal heat pump and direct use energy.
d Solar thermal direct use and photovoltaic electricity generation. Includes small
amounts of commercial sector use.
e Electricity retail sales to ultimate customers reported by electric utilities and
other energy service providers.
${ }^{\dagger}$ See Note 12, "Electrical System Energy Losses," at end of section. $\mathrm{R}=$ Revised. NA=Not available.
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.
Web Page: http://www.eia.doe.gov/emeu/mer/consu

Figure 2.3 Commercial Sector Energy Consumption
(Quadrillion Btu)
By Major Sources, 1973-2004


By Major Sources, Monthly


Total, January-December
By Major Sources, December 2004



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 ${ }^{\text {e }}$ | Electrical System Energy Losses ${ }^{\dagger}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fossil Fuels |  |  |  | Renewable Energy ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
|  | Coal | Natural Gas ${ }^{\text {b }}$ | Petroleum | Total | Hydropower ${ }^{\text {C }}$ | Wood and Waste | Geothermald | Total | Total Primary |  |  | 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 .................. | . 169 | 2.600 | 1.198 | 3.967 | NA | . 022 | NA | . 022 | 3.989 | 2.264 | 5.209 | 11.463 |
| 1985 Total .................. | . 137 | 2.508 | 1.039 | 3.684 | NA | . 024 | NA | . 024 | 3.708 | 2.351 | 5.405 | 11.465 |
| 1986 Total .................. | . 135 | 2.386 | 1.099 | 3.620 | NA | . 027 | NA | . 027 | 3.647 | 2.439 | 5.515 | 11.600 |
| 1987 Total .................. | . 125 | 2.505 | 1.079 | 3.709 | NA | . 029 | NA | . 029 | 3.738 | 2.539 | 5.674 | 11.951 |
| 1988 Total .................. | . 131 | 2.748 | 1.037 | 3.916 | NA | . 032 | NA | . 032 | 3.948 | 2.675 | 5.948 | 12.571 |
| 1989 Total .................. | . 115 | 2.802 | . 973 | 3.891 | . 001 | . 058 | . 003 | . 061 | 3.952 | 2.767 | 6.437 | 13.156 |
| 1990 Total .................. | . 124 | 2.701 | . 913 | 3.739 | . 001 | . 067 | . 003 | . 071 | 3.810 | 2.860 | 6.611 | 13.281 |
| 1991 Total .................. | . 116 | 2.813 | . 859 | 3.788 | . 001 | . 068 | . 003 | . 072 | 3.860 | 2.918 | 6.681 | 13.458 |
| 1992 Total .................. | . 117 | 2.890 | . 811 | 3.817 | . 001 | . 076 | . 003 | . 081 | 3.898 | 2.900 | 6.596 | 13.394 |
| 1993 Total .................. | . 117 | 2.942 | . 750 | 3.809 | . 001 | . 079 | . 003 | . 084 | 3.892 | 3.019 | 6.877 | 13.788 |
| 1994 Total .................. | . 118 | 2.979 | . 747 | 3.844 | . 001 | . 081 | . 004 | . 086 | 3.930 | 3.116 | 7.013 | 14.059 |
| 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 | . 743 | 4.108 | . 001 | . 103 | . 005 | . 110 | 4.218 | 3.344 | 7.599 | 15.161 |
| 1997 Total .................. | . 129 | 3.302 | . 704 | 4.135 | . 001 | . 107 | . 006 | . 113 | 4.248 | 3.503 | 7.928 | 15.679 |
| 1998 Total .................. | . 093 | 3.098 | . 653 | 3.845 | . 001 | . 102 | . 007 | . 111 | 3.956 | 3.678 | 8.330 | 15.964 |
| 1999 Total .................. | . 103 | 3.130 | . 637 | 3.870 | . 001 | . 106 | . 007 | . 114 | 3.984 | 3.766 | 8.597 | 16.347 |
| 2000 Total .................. | . 092 | 3.265 | . 726 | 4.083 | . 001 | . 100 | . 008 | . 109 | 4.192 | 3.956 | 8.982 | 17.129 |
| 2001 Total .................. | . 097 | 3.116 | . 742 | 3.955 | . 001 | . 080 | . 008 | . 089 | 4.044 | 4.086 | R 9.197 | R 17.326 |
| 2002 January ............... | . 010 | . 448 | . 090 | . 548 | (s) | . 007 | . 001 | . 007 | . 555 | . 332 | R . 722 | R 1.609 |
| February ............. | . 009 | . 412 | . 071 | . 491 | (s) | . 006 | . 001 | . 007 | . 498 | . 308 | . 642 | 1.447 |
| March | . 008 | . 384 | . 071 | . 463 | (s) | . 007 | . 001 | . 007 | . 470 | . 316 | R. 718 | 1.504 |
| April | . 007 | . 275 | . 058 | . 340 | (s) | . 007 | . 001 | . 007 | . 348 | . 318 | . 715 | 1.381 |
| May .................... | . 006 | . 198 | . 050 | . 253 | (s) | . 007 | . 001 | . 008 | . 261 | . 337 | . 784 | 1.383 |
| June | . 005 | . 150 | . 049 | . 204 | (s) | . 007 | . 001 | . 008 | . 212 | . 367 | . 855 | 1.434 |
| July | . 007 | . 141 | . 050 | . 198 | (s) | . 008 | . 001 | . 008 | . 207 | . 401 | . 926 | 1.534 |
| August ............... | . 006 | . 140 | . 051 | . 197 | (s) | . 008 | . 001 | . 008 | . 205 | . 400 | . 890 | 1.495 |
| September .......... | . 005 | . 146 | . 048 | . 198 | (s) | . 007 | . 001 | . 008 | . 206 | . 375 | . 792 | 1.373 |
| October ............... | . 006 | . 205 | . 055 | . 267 | (s) | . 007 | . 001 | . 008 | . 275 | . 355 | . 766 | 1.396 |
| November | . 009 | . 307 | . 064 | . 380 | (s) | . 007 | . 001 | . 008 | . 388 | . 319 | . 729 | 1.435 |
| December ............. | . 012 | . 432 | . 081 | . 525 | (s) | . 007 | . 001 | . 007 | . 532 | . 328 | . 762 | 1.622 |
| Total | . 091 | 3.235 | . 738 | 4.064 | (s) | . 084 | . 009 | . 093 | 4.157 | 4.157 | R 9.300 | R 17.614 |
| 2003 January ............... | . 011 | . 540 | . 094 | . 645 | (s) | . 008 | . 001 | . 009 | . 654 | . 343 | R . 763 | R 1.760 |
| February ............ | . 010 | . 503 | . 080 | . 593 | (s) | . 007 | . 001 | . 008 | . 601 | . 310 | R. 648 | R 1.559 |
| March .................. | . 007 | . 404 | . 072 | . 483 | (s) | . 008 | . 001 | . 009 | . 492 | . 316 | R. 707 | R 1.515 |
| April ................... | . 008 | . 272 | . 061 | . 340 | (s) | . 007 | . 001 | . 009 | . 349 | . 305 | R. 687 | R 1.341 |
| May ................... | . 006 | . 187 | . 048 | . 241 | (s) | . 008 | . 001 | . 009 | . 250 | . 327 | R. 769 | R 1.346 |
| June ................... | . 005 | . 142 | . 046 | . 193 | (s) | . 008 | . 001 | . 009 | . 202 | . 347 | R. 812 | 1.361 |
| July .................... | . 007 | . 137 | . 050 | . 194 | (s) | . 008 | . 001 | . 009 | . 203 | . 391 | R. 894 | 1.488 |
| August ................ | . 007 | . 135 | . 055 | . 197 | (s) | . 008 | . 001 | . 009 | . 206 | . 396 | R. 896 | R 1.498 |
| September .......... | . 005 | . 141 | . 051 | . 196 | (s) | . 007 | . 001 | . 009 | . 205 | . 364 | R. 752 | R 1.320 |
| October ............... | . 006 | . 187 | . 057 | . 250 | (s) | . 008 | . 001 | . 009 | . 259 | . 342 | . 752 | R 1.353 |
| November ........... | . 009 | . 268 | . 061 | . 338 | (s) | . 007 | . 001 | . 009 | . 347 | . 317 | . 729 | R 1.393 |
| December ........... | . 014 | . 407 | . 082 | . 503 | (s) | . 008 | . 001 | . 009 | . 513 | . 335 | R. 769 | R 1.617 |
| Total .................. | . 094 | 3.323 | . 758 | 4.174 | . 001 | . 090 | . 015 | . 106 | 4.281 | 4.093 | R 9.173 | R 17.547 |
| 2004 January ............... | . 012 | . 506 | R . 095 | . 614 | (s) | . 008 | . 001 | . 009 | . 623 | . 339 | . 766 | 1.727 |
| February ............. | . 010 | . 475 | . 082 | . 567 | (s) | . 007 | . 001 | . 008 | . 576 | . 320 | . 690 | 1.586 |
| March .................. | . 006 | . 356 | . 073 | . 435 | (s) | . 008 | . 001 | . 009 | . 445 | . 325 | . 708 | 1.477 |
| April ................... | . 008 | . 252 | . 064 | . 324 | (s) | . 008 | . 001 | . 009 | . 333 | . 318 | . 691 | 1.342 |
| May .................... | . 006 | . 170 | . 051 | R. 226 | (s) | . 008 | . 001 | . 009 | R. 235 | . 343 | . 817 | 1.396 |
| June ................... | . 005 | R. 136 | . 049 | R. 191 | (s) | . 008 | . 001 | . 009 | R. 200 | . 368 | . 825 | R 1.394 |
| July .................... | . 007 | R. 126 | . 054 | R. 188 | (s) | . 008 | . 001 | . 009 | R. 197 | . 395 | . 892 | R 1.483 |
| August ................ | . 006 | R. 126 | . 053 | R. 185 | (s) | . 008 | . 001 | . 009 | R. 194 | . 391 | . 869 | R 1.454 |
| September .......... | R 005 | R. 129 | . 053 | R. 187 | (s) | . 007 | . 001 | . 009 | R. 195 | . 374 | . 804 | R 1.373 |
| October ............... | R. 005 | R. 172 | . 061 | . 238 | (s) | . 008 | . 001 | . 009 | . 247 | . 348 | . 771 | 1.366 |
| November ............ | R .009 | R . 254 | . 067 | . 329 | (s) | . 008 | . 001 | . 009 | . 338 | . 326 | . 733 | 1.397 |
| December | . 014 | . 399 | . 086 | . 499 | (s) | . 008 | . 001 | . 009 | . 508 | . 345 | . 803 | 1.657 |
| Total | . 094 | 3.101 | . 789 | 3.984 | . 001 | . 091 | . 015 | . 108 | 4.092 | 4.192 | 9.368 | 17.652 |

[^11]Figure 2.4 Industrial Sector Energy Consumption
(Quadrillion Btu)
By Major Sources, 1973-2004


By Major Sources, Monthly


Total, January-December


By Major Sources, December 2004


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 ${ }^{\text {h }}$ | Electrical System Energy Losses | Total ${ }^{\text {C }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fossil Fuels |  |  |  | Renewable Energy ${ }^{\text {a }}$ |  |  |  | Total Primary |  |  |  |
|  | Coal | Natural Gas ${ }^{\text {b }}$ | Petroleum | Total ${ }^{\text {C }}$ | Hydropower ${ }^{\text {d }}$ | Wood ${ }^{\mathrm{e}}$ and Waste ${ }^{f}$ | Geothermalg | Total |  |  |  |  |
| 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 | 8.616 | 20.133 | . 031 | 1.640 | . 002 | 1.672 | 21.806 | 3.319 | 7.548 | 32.673 |
| 1993 Total ................. | 2.496 | 9.120 | 8.398 | 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 | 20.738 | . 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 | 9.214 | 21.632 | . 058 | 1.915 | . 003 | 1.976 | 23.608 | 3.542 | 8.017 | 35.167 |
| 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 | 22.826 | 3.611 | 8.242 | 34.679 |
| 2000 Total .................. | 2.256 | 9.535 | 9.055 | 20.912 | . 042 | 1.781 | . 004 | 1.828 | 22.740 | 3.631 | 8.245 | 34.616 |
| 2001 Total .................. | 2.230 | 8.725 | 9.220 | 20.204 | R . 033 | 1.593 | . 005 | 1.630 | R 21.835 | 3.290 | R 7.406 | R 32.530 |
| 2002 January ............... | . 175 | . 804 | . 837 | 1.815 | . 003 | . 145 | (s) | . 149 | 1.964 | . 261 | . 568 | 2.794 |
| February ............. | . 173 | . 737 | . 757 | 1.670 | . 003 | . 128 | (s) | . 131 | 1.801 | . 261 | . 544 | 2.606 |
| March | . 177 | . 773 | . 826 | 1.784 | . 003 | . 135 | (s) | . 138 | 1.922 | . 267 | . 605 | R 2.794 |
| April | . 168 | . 758 | . 738 | 1.663 | . 003 | . 135 | (s) | . 139 | 1.802 | . 269 | . 606 | 2.677 |
| May | . 170 | . 726 | . 788 | 1.688 | . 003 | . 144 | (s) | . 147 | 1.835 | . 281 | R. 652 | R 2.768 |
| June | . 169 | . 705 | . 732 | 1.607 | . 003 | . 136 | (s) | . 139 | 1.746 | . 281 | R. 656 | R 2.683 |
| July .................... | . 170 | . 721 | . 764 | 1.665 | . 003 | . 151 | (s) | . 154 | 1.819 | . 292 | R. 675 | 2.786 |
| August ................ | . 173 | . 724 | . 790 | 1.694 | R 003 | . 138 | (s) | . 141 | 1.836 | . 296 | . 659 | 2.791 |
| September | . 172 | . 682 | . 743 | 1.606 | R . 003 | . 145 | (s) | . 148 | 1.754 | . 287 | . 606 | 2.647 |
| October | . 185 | . 723 | . 806 | 1.720 | . 003 | . 156 | (s) | . 159 | 1.880 | . 286 | . 616 | 2.782 |
| November ........... | . 180 | . 742 | . 785 | 1.717 | . 005 | . 143 | (s) | . 148 | 1.864 | . 270 | . 617 | 2.751 |
| December | . 180 | . 776 | . 698 | 1.658 | . 005 | . 149 | (S) | . 155 | 1.812 | . 266 | . 618 | R2.697 |
| Total | 2.094 | 8.870 | 9.262 | 20.287 | . 039 | 1.705 | . 005 | 1.748 | R 22.036 | 3.317 | R 7.422 | R 32.774 |
| 2003 January . | . 178 | . 807 | . 840 | 1.827 | . 004 | . 140 | (s) | . 144 | 1.970 | . 279 | R . 621 | R 2.870 |
| February ............. | . 178 | . 751 | . 783 | 1.725 | . 003 | . 128 | (s) | . 131 | 1.856 | . 270 | R. 564 | R 2.691 |
| March | . 182 | . 737 | . 808 | 1.730 | . 004 | . 138 | (s) | . 142 | 1.872 | . 274 | R. 612 | R 2.758 |
| April ................... | . 174 | . 690 | . 774 | 1.641 | . 002 | . 137 | (s) | . 139 | 1.781 | . 279 | R. 629 | R 2.689 |
| May | . 171 | . 672 | . 769 | 1.615 | . 004 | . 137 | (s) | R. 141 | 1.756 | . 286 | R . 673 | R 2.715 |
| June | .174 | . 620 | .719 | 1.517 | . 004 | . 134 | (s) | R. 139 | 1.656 | . 292 | . 684 | 2.632 |
| July | . 176 | . 688 | . 761 | 1.630 | . 004 | . 144 | (s) | . 148 | 1.778 | . 299 | . 682 | 2.759 |
| August ................ | . 174 | . 695 | . 778 | 1.648 | . 004 | . 141 | (s) | R. 145 | 1.793 | . 308 | . 697 | 2.798 |
| September .......... | . 175 | . 675 | . 763 | 1.616 | . 003 | . 136 | (s) | R. 140 | 1.756 | . 293 | . 606 | 2.655 |
| October ................. | . 181 | . 720 | . 832 | 1.737 | . 003 | . 140 | (s) | . 144 | 1.881 | . 296 | R. 652 | 2.829 |
| November ........... | . 183 | . 710 | . 782 | 1.677 | . 004 | . 137 | (s) | . 141 | 1.819 | . 282 | . 649 | 2.750 |
| December ........... | . 185 | . 770 | . 793 | 1.754 | . 005 | . 147 | (S) | . 153 | 1.906 | . 280 | . 642 | 2.828 |
| Total .................. | 2.132 | 8.534 | 9.401 | 20.117 | . 043 | 1.659 | . 005 | 1.707 | 21.824 | 3.439 | R 7.707 | R 32.971 |
| 2004 January ............... | . 183 | \% 807 | R . 828 | R 1.822 | . 005 | . 150 | (s) | . 155 | 1.977 | . 274 | . 620 | R 2.872 |
| February | . 179 | R. 765 | R. 812 | R 1.765 | . 005 | . 138 | (s) | . 143 | R 1.908 | . 272 | . 585 | R 2.765 |
| March | . 187 | . 752 | . 830 | R 1.778 | . 004 | . 142 | (s) | . 146 | $\text { R } 1.925$ | . 284 | . 620 | R 2.829 |
| April | . 172 | . 706 | R. 753 | R 1.655 | . 004 | . 145 | (s) | . 149 | R 1.804 | . 285 | . 620 | R 2.709 |
| May | . 171 | . 685 | R . 819 | R 1.712 | . 004 | . 140 | (s) | . 144 | R 1.856 | . 299 | . 713 | R 2.868 |
| June ................... | . 170 | . 676 | R. 753 | R 1.619 | . 003 | . 142 | (s) | . 146 | R 1.765 | . 298 | . 668 | 2.730 |
| July .................... | . 170 | R. 688 | R . 781 | R1.647 | . 003 | . 148 | (s) | . 152 | 1.799 | . 302 | . 684 | 2.785 |
| August | . 172 | R R .699 | .845 R 785 | R 1.723 | . 004 | . 145 | (s) | . 149 | R 1.872 | . 306 | . 681 | R 2.859 |
| September .......... | R. 171 | R R .681 | R . 785 | R 1.634 | . 005 | . 138 | (s) | . 143 | R 1.777 | . 294 | . 633 | R 2.704 |
| October ............... | R. 181 | R. 707 | R 875 | 1.770 | . 004 | . 147 | (s) | . 151 | R 1.921 | . 293 | . 649 | 2.864 |
| November ........... | R. 179 | R. 725 | R. 920 | R 1.829 | . 005 | . 139 | (s) | . 144 | R 1.973 | . 289 | . 649 | R 2.911 |
| December ........... | . 181 | . 780 | . 795 | 1.764 | . 006 | . 153 | (s) | . 159 | 1.923 | . 286 | . 665 | 2.874 |
| Total ................... | 2.115 | 8.669 | 9.796 | 20.717 | . 051 | 1.727 | . 005 | 1.783 | 22.500 | 3.483 | 7.785 | 33.768 |

a All values are estimated; see Table 10.2b.
b Natural gas, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
${ }^{\text {c }}$ Includes coal coke net imports, which are not separately displayed. See Table 1.4 .
d Conventional hydroelectric power.
e Wood, black liquor, and other wood waste.
f Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts and other biomass.
${ }_{\mathrm{h}}^{\mathrm{g}}$ Geothermal heat pump and direct use energy.
h Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.
i See Note 12, "Electrical System Energy Losses," at end of section. $\mathrm{R}=$ 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/consump.html.
Additional Notes and Sources: See end of section.

Figure 2.5 Transportation Sector Energy Consumption
(Quadrillion Btu)
By Major Sources, 1973-2004


By Major Sources, Monthly


Total, January-December


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 ${ }^{\dagger}$ | Electrical System Energy Losses ${ }^{9}$ | Total ${ }^{\text {d }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fossil Fuels |  |  |  | Renewable Energy ${ }^{\text {a }}$ |  |  |  |  |
|  | Coal | Natural Gas ${ }^{\text {b }}$ | Petroleum ${ }^{\text {c,d }}$ | Total | Alcohol Fuels ${ }^{\mathrm{d}, \mathrm{e}}$ | Total Primary ${ }^{\text {d }}$ |  |  |  |
| 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 | ( h ) | . 539 | 20.041 | 20.580 | NA | 20.580 | . 010 | . 024 | 20.615 |
| 1979 Total | ( $\begin{aligned} & \text { h } \\ & \text { ) }\end{aligned}$ | . 612 | 19.825 | 20.436 | NA | 20.436 | . 010 | . 024 | 20.471 |
| 1980 Total | (h) | . 650 | 19.008 | 19.658 | NA | 19.658 | . 011 | . 027 | 19.696 |
| 1981 Total | (h) | . 658 | 18.811 | 19.469 | . 007 | 19.476 | . 011 | . 026 | 19.513 |
| 1982 Total | (h) | . 612 | 18.420 | 19.032 | . 019 | 19.051 | . 011 | . 026 | 19.088 |
| 1983 Total | (h) | . 505 | 18.593 | 19.098 | . 035 | 19.133 | . 013 | . 030 | 19.176 |
| 1984 Total | (h) | . 545 | 19.216 | 19.761 | . 043 | 19.804 | . 014 | . 033 | 19.851 |
| 1985 Total | $\left(\begin{array}{l}\text { h } \\ \text { h }\end{array}\right.$ | . 519 | 19.504 | 20.023 | . 052 | 20.075 | . 014 | . 033 | 20.122 |
| 1986 Total | (h) | . 499 | 20.269 | 20.768 | . 066 | 20.828 | . 015 | . 034 | 20.877 |
| 1987 Total $\qquad$ | (h) | . 535 | 20.870 | 21.405 | . 0679 | 21.474 | . 016 | . 035 | 21.524 |
| 1988 Total | ( h ) | . 632 | 21.629 | 22.261 | . 070 | 22.331 | . 016 | . 035 | 22.382 |
| 1989 Total $\qquad$ | (h) | . 649 | 21.848 | 22.497 | . 071 | 22.568 | . 016 | . 038 | 22.622 |
| 1990 Total | ( $\begin{aligned} & \text { h } \\ & \text { h }\end{aligned}$ | . 680 | 21.792 | 22.472 | . 063 | 22.535 | . 016 | . 037 | 22.589 |
| 1991 Total $\qquad$ | (h) | . 620 | 21.448 | 22.069 | . 073 | 22.142 | . 016 | .037 .037 | 22.195 |
| 1992 Total | (h) | . 608 | d 21.798 | 22.406 | $\begin{array}{r}.083 \\ \text { d } \\ \hline\end{array}$ | 22.489 d 22 | . 016 | . 037 | d22.542 |
| 1993 Total | (h) | $\begin{array}{r}.645 \\ \hline 709\end{array}$ | d22.185 | 22.830 | d. 097 | d22.830 | . 016 | .037 038 | d22.883 |
| 1994 Total | (h) | . 709 | 22.739 | 23.448 | . 109 | 23.448 | . 017 | . 038 | 23.503 |
| 1995 Total $\qquad$ | ( h ) | . 724 | 23.181 | 23.905 | . 117 | 23.905 | . 017 | . 039 | 23.960 |
| 1996 Total | ( $\begin{aligned} & \text { h } \\ & \text { h }\end{aligned}$ | . 737 | 23.719 | 24.456 | . 084 | 24.456 | . 017 | . 038 | 24.511 |
| 1997 Total $\qquad$ | (h) | . 786 | 23.973 | 24.753 | . 106 | 24.753 | . 017 | . 038 | 24.808 |
| 1998 Total | (h) | . 666 | 24.635 | 25.301 | .117 | 25.301 | . 017 | . 038 | 25.357 |
| 1999 Total | (h) | . 675 | 25.375 | 26.050 | . 122 | 26.050 | . 017 | . 040 | 26.108 |
| 2000 Total $\qquad$ | ( h ) | . 672 | 25.973 | 26.645 | . 139 | 26.645 | . 018 | . 042 | 26.705 |
| 2001 Total | ( ${ }^{\text {( }}$ ) | . 659 | 25.556 | 26.215 | . 147 | 26.215 | . 019 | . 042 | 26.276 |
| 2002 January ............. |  | . 076 | 2.044 | 2.120 | . 013 | 2.120 | . 001 | . 003 | 2.124 |
| February ............. | (h) | . 069 | 1.869 | 1.938 | . 012 | 1.938 | . 001 | . 003 | 1.942 |
| March ................. | (h) | . 069 | 2.127 | 2.196 | . 012 | 2.196 | . 001 | . 003 | 2.200 |
| April ................... | $\left(\begin{array}{l}\text { h } \\ \text { h }\end{array}\right.$ | . 057 | 2.131 | 2.188 | . 012 | 2.188 | . 001 | . 003 | 2.193 |
| May ...................... | ( h ) | . 049 | 2.230 | 2.279 | . 014 | 2.279 | . 001 | . 003 | 2.284 |
| July . | (h) | . 048 | 2.287 | 2.258 2.340 | . 0115 | 2.258 2.340 | . 002 | . 004 | 2.263 2.346 |
| August ................ | (h) | . 052 | 2.290 | 2.342 | . 014 | 2.342 | . 002 | . 004 | 2.347 |
| September .......... | (h) | . 047 | 2.131 | 2.178 | . 015 | 2.178 | . 002 | . 004 | 2.183 |
| October | (h) | . 050 | 2.183 | 2.233 | . 017 | 2.233 | . 002 | . 003 | 2.238 |
| November | (h) | . 058 | 2.151 | 2.209 | . 020 | 2.209 | . 001 | . 003 | 2.214 |
| December | (h) | . 073 | 2.272 | 2.345 | . 019 | 2.345 | . 001 | . 003 | 2.349 |
| Total .................. | ( ${ }^{\text {) }}$ | . 702 | 25.924 | 26.626 | . 174 | 26.626 | . 018 | . 039 | 26.683 |
| 2003 January |  | . 086 | 2.058 | 2.145 | . 017 | 2.145 | . 002 | . 005 | 2.152 |
| February <br> March | ( h ) | . 0870 | 1.915 | 1.995 | . 020 | 1.995 | . 002 | . 004 | 2.002 |
| March ................. | (h) | . 070 | 2.139 | 2.209 | . 017 | 2.209 | . 002 | . 004 | 2.215 |
| April ................... | (h) | . 055 | 2.130 | 2.185 | . 020 | 2.185 | . 002 | . 004 | 2.191 |
| May .................... | (h) | . 048 | 2.205 | 2.253 | . 019 | 2.253 | . 002 | . 004 | 2.259 |
| June ................... | (h) | . 043 | 2.201 | 2.244 | . 019 | 2.244 | . 002 | . 005 | 2.251 |
| July | $\left(\begin{array}{l}\text { h } \\ \text { h }\end{array}\right.$ | . 050 | 2.288 | 2.338 | . 020 | 2.338 | . 002 | . 005 | 2.345 |
| August | $\binom{$ h }{ h } | . 052 | 2.342 | 2.394 | . 021 | 2.394 | . 002 | . 005 | 2.401 |
| September | (h) | . 045 | 2.182 | 2.227 | . 018 | 2.227 | . 002 | . 004 | 2.233 |
| October | (h) | . 049 | 2.246 | 2.295 | . 021 | 2.295 | . 002 | . 004 | 2.301 |
| November | (h) | . 056 | 2.148 | 2.204 | . 024 | 2.204 | . 002 | . 004 | 2.210 |
| December ............ | ( h ) | . 072 | 2.281 26.136 | $\begin{array}{r}2.353 \\ \hline 2.842\end{array}$ | . 025 | 2.353 | . 002 | R. 004 | R 2.359 |
| Total | ( ${ }^{\text {) }}$ | . 706 | 26.136 | 26.842 | . 239 | 26.842 | . 024 | R . 054 | R 26.920 |
| 2004 January |  | RE . 084 | R2.110 | R2.194 | . 024 | R 2.194 | . 002 | . 005 | R 2.202 |
| February | (h) | RE . 079 | R 2.033 | R 2.112 | . 022 | R 2.112 | . 002 | . 005 | R 2.119 |
| March | (h) | E. 066 | R 2.196 | R 2.262 | . 024 | R 2.262 | . 002 | . 005 | R 2.268 |
| April ................... | (h) | E. 055 | R 2.201 | R 2.257 | . 024 | R 2.257 | . 002 | . 005 | R 2.264 |
| May ..................... | $\binom{$ h }{ h } | Re .050 E. 047 | R 2.266 R 2.244 | R 2.316 R 2.291 | .025 .025 | R2.316 | . 002 | . 005 | R 2.322 |
| July ........................ | (h) | E. 050 | R 2.343 | R 2.393 | . 025 | R 2.393 | . 002 | . 005 | R 2.401 |
| August ................ | (h) | E. 050 | R2.316 | R 2.365 | . 024 | R 2.365 | . 002 | . 005 | R 2.373 |
| September | (h) | E. 047 | R2.238 | R2.285 | . 026 | R2.285 | . 002 | . 005 | R 2.292 |
| October | (h) | E. 049 | R 2.295 | R 2.344 | . 025 | R 2.344 | . 002 | . 005 | R 2.351 |
| November | (h) | RE .056 | R 2.145 | R 2.202 | . 025 | R 2.202 | . 002 | . 005 | R 2.208 |
| December ............ | (h) | E. 072 | 2.344 | 2.416 | . 026 | 2.416 | . 002 | . 005 | 2.424 |
| Total .................. | ( ${ }^{\text {) }}$ | E. 705 | 26.732 | 27.437 | . 296 | 27.437 | . 026 | . 059 | 27.522 |

a All values are estimated; see Table 10.2b
b Natural gas consumed in the operation of pipelines (primarily in compressors) and small amounts consumed as vehicle fuel. See Table 4.4.
c Beginning in 1993, includes ethanol blended into motor gasoline.
d Beginning in 1993, 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.
e "Alcohol Fuels" is ethanol blended into motor gasoline.
$f$ Electricity retail sales to ultimate customers reported by electric utilities and,
beginning in 1996, other energy service providers.
g See Note 12, "Electrical System Energy Losses," at end of section.
$h$ Since 1978, the small amounts of coal consumed for transportation are reported as industrial sector consumption.
$R=$ Revised. E=Estimate. 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/consump.html.
Additional Notes and Sources: See end of section.

Figure 2.6 Electric Power Sector Energy Consumption
(Quadrillion Btu)

Total, 1973-2004


By Major Sources, 1973-2004


Total, January-December

${ }^{a}$ Conventional and pumped storage hydroelectric power.
Note: Because vertical scales differ, graphs should not be compared.

Total, Monthly


By Major Sources, Monthly


By Major Sources, December 2004


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 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fossil Fuels |  |  |  | Nuclear Electric Power | Hydroelectric Pumped Storage ${ }^{\text {b }}$ | Renewable Energy |  |  |  |  | $\begin{array}{\|l} \hline \text { Electricity } \\ \text { Net } \\ \text { Imports } \end{array}$ | Total Primary |
|  | Coal | Natural Gas ${ }^{\text {a }}$ | Petroleum | Total |  |  | Conventional Hydroelectric Power | Wood ${ }^{\text {c }}$ and Waste ${ }^{\mathrm{d}}$ | Geothermal ${ }^{\text {e }}$ | Solar ${ }^{f}$ and Wind ${ }^{9}$ | Total |  |  |
| 1973 Total | 8.658 | 3.748 | 3.515 | 15.921 | 0.910 | ( ${ }^{\text {h }}$ ) | 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 | -. 036 | 3.014 | . 317 | . 326 | . 033 | 3.689 | . 008 | 30.647 |
| 1991 Total | 16.250 | 3.399 | 1.198 | 20.847 | 6.422 | -. 047 | 2.985 | . 354 | . 335 | . 036 | 3.710 | . 067 | 30.999 |
| 1992 Total | 16.466 | 3.534 | . 991 | 20.990 | 6.479 | -. 043 | 2.586 | . 402 | . 338 | . 034 | 3.360 | . 087 | 30.873 |
| 1993 Total | 17.196 | 3.560 | 1.124 | 21.880 | 6.410 | -. 042 | 2.861 | . 415 | . 351 | . 036 | 3.662 | . 095 | 32.006 |
| 1994 Total | 17.261 | 4.000 | 1.059 | 22.320 | 6.694 | -. 035 | 2.620 | . 434 | . 325 | . 041 | 3.420 | . 153 | 32.551 |
| 1995 Total | 17.466 | 4.325 | . 755 | 22.546 | 7.075 | -. 028 | 3.149 | . 422 | . 280 | . 038 | 3.889 | . 134 | 33.616 |
| 1996 Total | 18.429 | 3.883 | . 817 | 23.129 | 7.087 | -. 032 | 3.528 | . 438 | . 300 | . 039 | 4.305 | . 137 | 34.626 |
| 1997 Total | 18.905 | 4.146 | . 927 | 23.977 | 6.597 | -. 041 | 3.581 | . 446 | . 309 | . 039 | 4.375 | . 116 | 35.024 |
| 1998 Total | 19.216 | 4.698 | 1.306 | 25.220 | 7.068 | -. 046 | 3.241 | . 444 | . 311 | . 036 | 4.032 | . 088 | 36.363 |
| 1999 Total | 19.279 | 4.926 | 1.211 | 25.416 | 7.610 | -. 062 | 3.218 | . 453 | . 312 | . 051 | 4.034 | . 099 | 37.097 |
| 2000 Total | 20.220 | 5.316 | 1.144 | 26.680 | 7.862 | -. 057 | 2.768 | . 453 | . 296 | . 062 | 3.579 | . 115 | 38.180 |
| 2001 Total .................. | 19.614 | 5.449 | 1.277 | 26.339 | 8.033 | R -. 091 | ${ }^{\text {R } 2.209 ~}$ | . 450 | . 289 | ${ }^{\text {R }} .075$ | ${ }^{\text {R }} 3.023$ | . 075 | ${ }^{\mathrm{R}} 37.379$ |
| 2002 January | 1.668 | . 389 | . 067 | 2.125 | . 740 | -. 008 | R 212 | . 043 | . 027 | . 008 | R. 297 | . 009 | ${ }^{\text {R }} 3.163$ |
| February | 1.460 | . 351 | . 057 | 1.868 | . 644 | -. 006 | ${ }^{\mathrm{R}} .203$ | . 037 | . 024 | R. 008 | R. 271 | . 007 | R 2.784 |
| March ................. | 1.535 | . 415 | . 084 | 2.033 | . 658 | -. 007 | R. 211 | . 043 | . 026 | . 009 | R. 290 | . 006 | ${ }^{\mathrm{R}} 2.980$ |
| April ....... | 1.448 | . 413 | . 079 | 1.940 | . 610 | -. 006 | ${ }^{\mathrm{R}} .243$ | . 040 | . 023 | . 011 | R. 318 | . 006 | ${ }^{\mathrm{R}} 2.868$ |
| May ... | 1.549 | . 419 | . 082 | 2.050 | . 658 | -. 005 | R. 268 | . 041 | . 026 | ${ }^{\text {R }} .012$ | R. 347 | . 003 | R 3.052 |
| June ................... | 1.691 | . 563 | . 082 | 2.336 | . 693 | -. 009 | R. 284 | . 043 | . 024 | . 012 | R. 364 | . 007 | R 3.390 |
| July .................... | 1.877 | . 749 | . 102 | 2.729 | . 735 | -. 010 | R. 256 | . 046 | . 027 | . 010 | R. 339 | . 012 | R 3.805 |
| August ................ | 1.857 | . 733 | . 102 | 2.692 | . 739 | R-. 010 | R. 212 | . 046 | . 026 | . 011 | R. 294 | . 010 | R 3.726 |
| September .......... | 1.703 | . 581 | . 082 | 2.365 | . 673 | -. 008 | R. 171 | . 045 | . 025 | . 008 | R. 249 | . 006 | 3.285 |
| October ................ | 1.633 | . 452 | . 081 | 2.166 | . 631 | -. 007 | R. 171 | . 043 | . 026 | . 008 | R. 248 | . 005 | R 3.044 |
| November ........... | 1.605 | . 359 | . 062 | 2.026 | . 642 | -. 007 | R. 196 | . 043 | . 025 | . 007 | R. 271 | . 004 | ${ }^{\mathrm{R}} 2.936$ |
| December ........... | 1.756 | . 368 | . 081 | 2.205 | . 719 | -. 007 | R. 215 | . 046 | . 026 | . 008 | R. 295 | . 003 | R 3.215 |
| Total .................. | 19.783 | 5.791 | . 961 | 26.535 | 8.143 | R. .089 | ${ }^{\mathrm{R}} 2.650$ | . 516 | . 305 | R. 111 | ${ }^{\mathrm{R}} 3.581$ | . 078 | ${ }^{\mathrm{R}} 38.248$ |
| 2003 January ............... | 1.862 | . 392 | . 126 | 2.380 | R . 721 | -. 008 | R 207 | . 045 | . 026 | . 007 | R . 286 | . 005 | R 3.384 |
| February | 1.619 | . 343 | . 109 | 2.071 | R. 635 | -. 008 | R. 199 | . 039 | . 024 | . 008 | R. 270 | . 004 | R 2.973 |
| March ................. | 1.601 | . 370 | . 103 | 2.074 | R. 625 | -. 008 | R. 244 | . 044 | . 025 | . 011 | R. 324 | -. 001 | R 3.014 |
| April ................... | 1.467 | . 361 | . 089 | 1.917 | R. 592 | -. 006 | R. 251 | . 041 | . 025 | . 012 | R. 329 | . 003 | R 2.835 |
| May .................... | 1.565 | . 404 | . 081 | 2.049 | R. 648 | -. 006 | R. 297 | . 042 | . 025 | . 011 | R. 374 | . 001 | R 3.067 |
| June ................... | 1.698 | . 446 | . 111 | 2.255 | R. 669 | -. 008 | R. 289 | . 043 | . 026 | . 012 | R. 370 | . 001 | R 3.287 |
| July .................... | 1.895 | . 646 | . 124 | 2.665 | R. 726 | -. 008 | R. 251 | . 046 | . 026 | . 010 | R. 333 | . 010 | R 3.726 |
| August ................ | 1.927 | . 701 | . 128 | 2.756 | R. 719 | -. 008 | R. 231 | . 047 | . 026 | . 009 | R. 313 | . 008 | R 3.787 |
| September ........... | 1.718 | . 480 | . 088 | 2.286 | R. 663 | -. 008 | ${ }^{\mathrm{R}} .186$ | . 043 | . 025 | . 010 | R. 264 | -. 002 | R 3.203 |
| October ............... | 1.648 | . 419 | . 085 | 2.152 | R. 625 | -. 006 | R. 185 | . 042 | . 025 | R. 010 | R. 262 | -. 006 | R 3.027 |
| November ........... | 1.655 | . 357 | . 065 | 2.077 | R. 621 | -. 007 | R. 198 | . 043 | . 024 | . 010 | R. 275 | -. 003 | R 2.964 |
| December ........... | 1.829 | . 344 | . 098 | 2.272 | R. 715 | -. 007 | R. 241 | . 046 | . 027 | . 011 | R. 326 | . 001 | R 3.306 |
| Total .................. | 20.485 | 5.264 | 1.205 | 26.954 | ${ }^{\text {R }} 7.959$ | R .087 | R 2.781 | . 522 | . 303 | R. 120 | R 3.725 | . 022 | ${ }^{\text {R }} 38.572$ |
| 2004 January ............... | 1.869 | . 361 | . 148 | 2.378 | . 739 | -. 007 | . 230 | . 042 | . 026 | . 011 | . 309 | (s) | 3.419 |
| February ............. | 1.680 | . 375 | . 091 | 2.146 | . 669 | -. 007 | . 209 | . 040 | . 025 | . 011 | . 284 | . 000 | 3.092 |
| March .................. | 1.586 | . 377 | . 095 | 2.058 | . 660 | -. 006 | . 227 | . 042 | . 025 | . 014 | . 308 | -. 003 | 3.017 |
| April ................... | 1.473 | . 393 | . 089 | 1.954 | . 612 | -. 006 | . 209 | . 040 | . 024 | . 014 | . 286 | (s) | 2.846 |
| May .................... | 1.643 | . 485 | . 103 | 2.231 | . 678 | -. 007 | . 238 | . 042 | . 025 | . 018 | . 323 | . 001 | 3.226 |
| June ................... | 1.753 | . 512 | . 108 | 2.373 | . 708 | -. 007 | . 252 | . 042 | . 025 | . 015 | . 333 | . 002 | 3.409 |
| July .................... | 1.901 | . 631 | . 121 | 2.653 | . 751 | -. 007 | . 231 | . 046 | . 026 | . 012 | . 315 | . 010 | 3.723 |
| August ............... | 1.879 | . 614 | . 112 | 2.605 | . 742 | -. 008 | . 216 | . 045 | . 026 | . 011 | . 297 | . 012 | 3.648 |
| September .......... | 1.740 | . 532 | . 088 | 2.360 | . 688 | -. 007 | . 203 | . 041 | . 024 | . 012 | . 280 | . 003 | 3.324 |
| October ............... | 1.657 | . 443 | . 077 | 2.177 | . 653 | -. 007 | . 188 | . 041 | . 026 | . 011 | . 266 | . 004 | 3.093 |
| November ........... | 1.655 | . 375 | . 066 | 2.096 | . 615 | -. 006 | . 209 | . 042 | . 025 | . 010 | . 285 | . 005 | 2.995 |
| December ........... | 1.853 | . 387 | . 098 | 2.337 | . 716 | -. 006 | . 261 | . 045 | . 026 | . 012 | . 344 | . 005 | 3.397 |
| Total ................... | 20.689 | 5.486 | 1.195 | 27.369 | 8.232 | -. 082 | 2.673 | . 508 | . 302 | . 149 | 3.632 | . 039 | 39.190 |

[^12]i Through 1988, data are for consumption at electric utilities only. Beginning in 1989, data also include consumption at independent power producers. $\mathrm{R}=$ Revised. NA=Not available. (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 energyuse 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 abovementioned commercial establishments. For further information, see:
http://www.eia.doe.gov/neic/datadefinitions/Guideforwebcom.htm.

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); 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. For further information, see:
http://www.eia.doe.gov/neic/datadefinitions/Guideforwebind.htm.

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/datadefinitons/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."
1981-2003: EIA, Petroleum Supply Annual.
2004 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—See Tables 7.3b and 7.4b. For 19731979, electric utility 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 1980-2000, electric utility consumption of distillate fuel is assumed to be the amount of light oil (fuel oil nos. 1 and 2 , plus small amounts of kerosene and jet fuel) consumed.

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 FPC423) 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 20 percent (in 2001) 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 nonhighway 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-Portions of petroleum coke are consumed by the electric power sector (see Tables 7.3b and 7.4 b ) and the commercial sector (see sources for Table 7.4c). 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-See Tables 7.3b and 7.4b. For 1973-1979, electric utility consumption of residual fuel is assumed to be the amount of petroleum consumed in steam-electric power plants. For 1980-2000, electric utility consumption of residual fuel is assumed to be the amount of heavy oil (fuel oil nos. 4, 5, and 6) consumed.

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 19731980, 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 the "New Basis" retail sales data in Table 7.6. 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 electricity retail sales (see Tables 7.6 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.

## Section 3. Petroleum

Total petroleum imports ${ }^{1}$ were 12.7 million barrels per day in January 2005, 2 percent lower than the previous month's rate but 8 percent higher than the January 2004 rate.

In January 2005, 20.5 million barrels per day of petroleum products were supplied for domestic use, 1 percent higher than the January 2004 rate. Motor gasoline accounted for 43 percent of the total; distillate fuel oil, 21 percent; and kerosene-type jet fuel, 7 percent.

Motor gasoline product supplied during January 2005 was 8.8 million barrels per day, 5 percent lower than the previous month's rate but 1 percent higher than the January 2004 rate. Total motor gasoline stocks were 219 million barrels at the end of January 2005, 4 million barrels above the stock level in the
previous month and 11 million barrels above the level one year earlier.

Distillate fuel oil product supplied during January 2005 was 4.2 million barrels per day, 1 percent higher than the previous month's rate but 3 percent lower than the January 2004 rate. Distillate fuel oil ending stocks for January 2005 were 121 million barrels, 5 million barrels below the stock level in the previous month and 1 million barrels below the level 1 year earlier.

Kerosene-type jet fuel product supplied in January 2005 was 1.5 million barrels per day, 8 percent below the previous month's rate but 1 percent higher than the January 2004 rate. Kerosene-type jet fuel stocks were 43 million barrels at the end of January 2005, 3 million barrels higher than both the stock level in the previous month and the level 1 year earlier.

Preliminary February 2005 data are not available in this set of tables. They can be found in the Weekly Petroleum Status Report, Table H1, at http://www.eia.doe.gov/oil_gas/petroleum/data_publications/weekly_petroleum_status_report/wpsr.html.

[^13]Table 3.1a Petroleum Overview: Supply

a Crude oil production on leases, and natural gas liquids (liquefied petroleum gases, pentanes plus, and a small amount of finished petroleum products) production at natural gas processing plants. Excludes what was previously classified as "Field Production" of finished motor gasoline, motor gasoline blending components, and other hydrocarbons and oxygenates; these are now included in "Adjustments.
b Includes commercial and Strategic Petroleum Reserve imports. See Table 3.2a.
c An adjustment for crude oil (see Tables 3.2a, 3.5, and 3.6), and for motor gasoline blending components and fuel ethanol (see Tables 3.4 and 3.10). Through 1988, also includes a small amount of distillate fuel oil production at natural gas processing plants (see Table 3.5).
d See Note 6, "Data Discrepancies," at end of section. R=Revised. $\mathrm{E}=$ Estimate
$R=R e v i s e d . ~$
Notes: - Crude oil includes lease condensate. - Totals may not equa 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: - 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. - 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. - 1981-2003: Petroleum Supply Annual, annual reports. - 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

Tables 3.1a and 3.1b changes: "Refinery and Blender Net Production," "Refinery and Blender Net Inputs," "Adjustments," "Total Stock Change," "Total Stocks," "Crude Oil Stocks," and "Petroleum Products Stocks" are new; "Field Production Total" replaces "Field Production Total Domestic"; and "Net Imports" is discontinued (see Table 1.7).

Table 3.1b Petroleum Overview: Disposition and Stocks

|  | Disposition |  |  |  |  |  |  |  | Stocks ${ }^{\text {a }}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stock Change ${ }^{\text {b }}$ |  |  | Refinery and Blender Net Inputs | Exports |  |  | Petroleum Products Supplied | Crude $\mathrm{Oil}^{\mathrm{C}}$ | Petroleum Products ${ }^{\text {d }}$ | Total |
|  | $\begin{aligned} & \text { Crude } \\ & \text { Oill }^{\text {c }} \end{aligned}$ | Petroleum Products ${ }^{\text {d }}$ | Total |  | Crude Oil | Petroleum Products | Total |  |  |  |  |
|  | Thousand Barrels per Day |  |  |  |  |  |  |  | Million Barrels |  |  |
| 1973 Average | -11 | 146 | 135 | 13,401 | 2 | 229 | 231 | 17,308 | 242 | 766 | 1,008 |
| 1974 Average .................... | 62 | 117 | 179 | 13,018 | 3 | 218 | 221 | 16,653 | 265 | ${ }^{\text {e }} 809$ | ${ }^{\text {e } 1,074}$ |
| 1975 Average | 17 | ${ }^{\text {e } 15}$ | e32 | 13,225 | 6 | 204 | 209 | 16,322 | 271 | 862 | 1,133 |
| 1976 Average | 39 | -96 | -58 | 14,200 | 8 | 215 | 223 | 17,461 | 285 | 826 | 1,112 |
| 1977 Average .................... | 170 | 378 | 548 | 15,349 | 50 | 193 | 243 | 18,431 | 348 | 964 | 1,312 |
| 1978 Average .................... | 78 | -172 | -94 | 15,470 | 158 | 204 | 362 | 18,847 | 376 | e901 | e1,278 |
| 1979 Average .................... | 148 | ${ }^{2} 25$ | e173 | 15,236 | 235 | ${ }^{\text {f}} 236$ | ${ }^{\text {f }} 471$ | 18,513 | 430 | 911 | 1,341 |
| 1980 Average .................... | 98 | 42 | 140 | 14,025 | 287 | 258 | 544 | 17,056 | 466 | e926 | ${ }^{\text {e } 1,392}$ |
| 1981 Average .................... | 290 | e-130 | ${ }^{\mathrm{e}} 160$ | 13,482 | 228 | 367 | 595 | 16,058 | 594 | 890 | 1,484 |
| 1982 Average .................... | 136 | -283 | -147 | 12,861 | 236 | 579 | 815 | 15,296 | ${ }^{6} 644$ | ${ }^{\text {e }} 786$ | ${ }^{1} 1,430$ |
| 1983 Average .................... | ${ }^{\text {e } 214}$ | e-234 | - 20 | 12,650 | 164 | 575 | 739 | 15,231 | 723 | 731 | 1,454 |
| 1984 Average | 199 | 81 | 280 | 13,126 | 181 | 541 | 722 | 15,726 | 796 | 760 | 1,556 |
| 1985 Average | 50 | -153 | -103 | 13,192 | 204 | 577 | 781 | 15,726 | 814 | 705 | 1,519 |
| 1986 Average .................... | 78 | 124 | 202 | 13,906 | 154 | 631 | 785 | 16,281 | 843 | 750 | 1,593 |
| 1987 Average .................... | 128 | -87 | 41 | 13,987 | 151 | 613 | 764 | 16,665 | 890 | 718 | 1,607 |
| 1988 Average | 1 | -29 | -28 | 14,367 | 155 | 661 | 815 | 17,283 | 890 | 707 | 1,597 |
| 1989 Average | 86 | -129 | -43 | 14,513 | 142 | 717 | 859 | 17,325 | 921 | 660 | 1,581 |
| 1990 Average ................... | -35 | 142 | 107 | 14,589 | 109 | 748 | 857 | 16,988 | 908 | 712 | 1,621 |
| 1991 Average | -42 | 32 | -10 | 14,541 | 116 | 885 | 1,001 | 16,714 | 893 | 724 | 1,617 |
| 1992 Average | -1 | -68 | -68 | 14,626 | 89 | 861 | 950 | 17,033 | 893 | ${ }^{6} 699$ | e1,592 |
| 1993 Average | 81 | ${ }^{\text {e }} 70$ | ${ }^{\text {e }} 151$ | 15,021 | 98 | 904 | 1,003 | 17,237 | 922 | 725 | 1,647 |
| 1994 Average | 18 | -2 | 15 | 15,023 | 99 | 843 | 942 | 17,718 | 929 | 724 | 1,653 |
| 1995 Average | -93 | -153 | -246 | 15,220 | 95 | 855 | 949 | 17,725 | 895 | 668 | 1,563 |
| 1996 Average | -124 | -28 | -151 | 15,487 | 110 | 871 | 981 | 18,309 | 850 | 658 | 1,507 |
| 1997 Average | 51 | 93 | 143 | 15,909 | 108 | 896 | 1,003 | 18,620 | 868 | 692 | 1,560 |
| 1998 Average | 74 | 165 | 239 | 16,144 | 110 | 835 | 945 | 18,917 | 895 | 752 | 1,647 |
| 1999 Average | -118 | -304 | -422 | 16,103 | 118 | 822 | 940 | 19,519 | 852 | 641 | 1,493 |
| 2000 Average | -70 | (s) | -69 | 16,295 | 50 | 990 | 1,040 | 19,701 | 826 | 641 | 1,468 |
| 2001 Average .................... | 99 | 227 | 325 | 16,382 | 20 | 951 | 971 | 19,649 | 862 | 724 | 1,586 |
| 2002 Average ................... | 40 | -145 | -105 | 16,316 | 9 | 975 | 984 | 19,761 | 877 | 671 | 1,548 |
| 2003 January ..................... | -110 | -1,293 | -1,403 | 15,472 | 10 | 1,202 | 1,212 | 20,017 | 873 | 631 | 1,504 |
| February .................... | -106 | -1,464 | -1,570 | 15,441 | 5 | 1,062 | 1,067 | 20,375 | 870 | 590 | 1,460 |
| March .... | 339 | 114 | 452 | 15,949 | 10 | 1,042 | 1,051 | 19,708 | 881 | 594 | 1,474 |
| April | 338 | 383 | 720 | 16,664 | 12 | 1,041 | 1,053 | 19,830 | 891 | 605 | 1,496 |
| May | -75 | 1,263 | 1,188 | 17,190 | 15 | 1,082 | 1,097 | 19,344 | 889 | 644 | 1,533 |
| June | 150 | 745 | 895 | 16,755 | 45 | 1,020 | 1,065 | 19,793 | 893 | 667 | 1,560 |
| July | 135 | 209 | 344 | 16,876 | 7 | 969 | 976 | 20,094 | 897 | 673 | 1,570 |
| August | 15 | 35 | 50 | 17,044 | 4 | 943 | 947 | 20,586 | 898 | 674 | 1,572 |
| September ................. | 441 | 426 | 867 | 16,635 | 3 | 956 | 960 | 19,933 | 911 | 687 | 1,598 |
| October ...................... | 468 | -348 | 120 | 16,540 | 14 | 956 | 970 | 20,182 | 926 | 676 | 1,602 |
| November | -356 | 241 | -116 | 16,663 | 21 | 911 | 933 | 19,873 | 915 | 683 | 1,598 |
| December .................. | -244 | -721 | -965 | 16,845 | 4 | 986 | 990 | 20,679 | 907 | 661 | 1,568 |
| Average .................... | 84 | -28 | 56 | 16,513 | 12 | 1,014 | 1,027 | 20,034 | 907 | 661 | 1,568 |
| 2004 January ..................... | 199 | -692 | -493 | 15,753 | 6 | 742 | 748 | 20,393 | 913 | 639 | 1,552 |
| February .................... | 380 | -549 | -170 | 15,582 | 8 | 1,038 | 1,046 | 20,549 | 924 | 623 | 1,547 |
| March ......................... | 720 | -91 | 629 | 16,181 | 19 | 1,005 | 1,024 | 20,161 | 946 | 620 | 1,566 |
| April | 379 | -111 | 268 | 16,970 | 55 | 1,099 | 1,153 | 20,207 | 957 | 617 | 1,574 |
| May . | 186 | 646 | 831 | 17,275 | 26 | 1,026 | 1,052 | 20,209 | 963 | 637 | 1,600 |
| June .......................... | 130 | 831 | 961 | 17,320 | 45 | 1,025 | 1,070 | 20,333 | 967 | 662 | 1,629 |
| July ........................... | -186 | 782 | 596 | 17,376 | 18 | 1,062 | 1,080 | 20,601 | 961 | 686 | 1,647 |
| August | -381 | 695 | 314 | 17,405 | 13 | 1,078 | 1,091 | 20,732 | 949 | 708 | 1,657 |
| September ................. | -151 | -307 | -458 | 16,294 | 35 | R 927 | 961 | 20,411 | 945 | 699 | 1,643 |
| October ...................... | 450 | -576 | -126 | 16,577 | 25 | 1,052 | 1,078 | 20,743 | 959 | 681 | 1,639 |
| November | 187 | 407 | 594 | 16,874 | 42 | 950 | 992 | 20,782 | 964 | 693 | 1,657 |
| December .................. | -79 | -327 | -406 | 17,330 | 30 | 1,253 | 1,284 | 21,080 | 962 | 683 | 1,645 |
| Average .................... | 152 | 61 | 212 | 16,750 | 27 | 1,021 | 1,048 | 20,517 | 962 | 683 | 1,645 |
| 2005 January ..................... | R 207 | R-136 | 71 | 16,147 | R 40 | R 877 | R 917 | R 20,524 | R 968 | 679 | R 1,647 |

a Stocks are at end of period.
b A negative value indicates a decrease in stocks and a positive value indicates an increase.
${ }^{\text {c }}$ Includes commercial and Strategic Petroleum Reserve stocks. See Table 3.2b.
d Does not include distillate stocks in the Northeast Heating Oil Reserve.
e See Note 4, "New Stock Basis," at end of section.
f See Note 6, "Data Discrepancies," at end of section.
$\mathrm{R}=$ Revised.

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: - 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. - 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. - 1981-2003: Petroleum Supply Annual, annual reports. - 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

Tables 3.1a and 3.1b changes: "Refinery and Blender Net Production," "Refinery and Blender Net Inputs," "Adjustments," "Total Stock Change," "Total Stocks," "Crude Oil Stocks," and "Petroleum Products Stocks" are new; "Field Production Total" replaces "Field Production Total Domestic"; and "Net Imports" is discontinued (see Table 1.7).

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

Overview, January


Overview, 1973-2004


Crude Oil Field Production, 1973-2004

${ }^{\text {a }}$ Crude oil and natural gas plant liquids field production.
${ }^{\text {b }}$ United States excluding Alaska and Hawaii.
Note: Because vertical scales differ, graphs should not be compared.

Total Field Production, 1973-2004


Total Field Production ${ }^{\text {a }}$, Monthly


Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Sources: Tables 1.7, 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, 1973-2004


Products Supplied, Monthly


Imports from Selected Countries, January 2005


Stocks, End of Year, 1973-2004


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

Total Stocks, End of Month


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

Table 3.2a Crude Oil Overview: Supply

|  | Supply |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Field Production |  |  | Imports |  |  | Adjustments ${ }^{\text {c }}$ |
|  | 48 States ${ }^{\text {a }}$ | Alaska | Total | Commercial | SPR ${ }^{\text {b }}$ | Total |  |
|  | Thousand Barrels per Day |  |  |  |  |  |  |
| 1973 Average | 9,010 | 198 | 9,208 | 3,244 | - | 3,244 | -30 |
| 1974 Average | 8,581 | 193 | 8,774 | 3,477 | - | 3,477 | -53 |
| 1975 Average .................... | 8,183 | 191 | 8,375 | 4,105 | - | 4,105 | -14 |
| 1976 Average .................... | 7,958 | 173 | 8,132 | 5,287 | - | 5,287 | 44 |
| 1977 Average .................... | 7,781 | 464 | 8,245 | 6,594 | 21 | 6,615 | -36 |
| 1978 Average .................... | 7,478 | 1,229 | 8,707 | 6,195 | d 161 | 6,356 | -88 |
| 1979 Average .................... | 7,151 | 1,401 | 8,552 | 6,452 | 67 | 6,519 | -40 |
| 1980 Average ................... | 6,980 | 1,617 | 8,597 | 5,219 | 44 | 5,263 | 6 |
| 1981 Average .................... | 6,962 | 1,609 | 8,572 | 4,141 | 256 | 4,396 | 20 |
| 1982 Average ................... | 6,953 | 1,696 | 8,649 | 3,323 | 165 | 3,488 | 9 |
| 1983 Average .................... | 6,974 | 1,714 | 8,688 | 3,096 | 234 | 3,329 | 112 |
| 1984 Average ..................... | 7,157 | 1,722 | 8,879 | 3,229 | 197 | 3,426 | 183 |
| 1985 Average .................... | 7,146 | 1,825 | 8,971 | 3,083 | 118 | 3,201 | 145 |
| 1986 Average ................... | 6,814 | 1,867 | 8,680 | 4,130 | 48 | 4,178 | 139 |
| 1987 Average .................... | 6,387 | 1,962 | 8,349 | 4,601 | 73 | 4,674 | 145 |
| 1988 Average .................... | 6,123 | 2,017 | 8,140 | 5,055 | 51 | 5,107 | 196 |
| 1989 Average ................... | 5,739 | 1,874 | 7,613 | 5,787 | 56 | 5,843 | 200 |
| 1990 Average ................... | 5,582 | 1,773 | 7,355 | 5,867 | 27 | 5,894 | 257 |
| 1991 Average ................... | 5,618 | 1,798 | 7,417 | 5,782 | 0 | 5,782 | 195 |
| 1992 Average ............... | 5,457 | 1,714 | 7,171 | 6,073 | 10 | 6,083 | 258 |
| 1993 Average .................... | 5,264 | 1,582 | 6,847 | 6,772 | 15 | 6,787 | 168 |
| 1994 Average ................... | 5,103 | 1,559 | 6,662 | 7,051 | 12 | 7,063 | 266 |
| 1995 Average ................... | 5,076 | 1,484 | 6,560 | 7,230 | 0 | 7,230 | 193 |
| 1996 Average ................... | 5,071 | 1,393 | 6,465 | 7,508 | 0 | 7,508 | 215 |
| 1997 Average ................... | 5,156 | 1,296 | 6,452 | 8,225 | 0 | 8,225 | 145 |
| 1998 Average | 5,077 | 1,175 | 6,252 | 8,706 | 0 | 8,706 | 115 |
| 1999 Average .................... | 4,832 | 1,050 | 5,881 | 8,722 | 8 | 8,731 | 191 |
| 2000 Average .................... | 4,851 | 970 | 5,822 | 9,062 | 8 | 9,071 | 155 |
| 2001 Average .................... | 4,839 | 963 | 5,801 | 9,318 | 11 | 9,328 | 117 |
| 2002 Average .................... | 4,761 | 984 | 5,746 | 9,124 | 16 | 9,140 | 110 |
| 2003 January ...................... | 4,801 | 984 | 5,785 | 8,633 | 0 | 8,633 | -180 |
| February .................... | 4,776 | 1,015 | 5,791 | 8,474 | 0 | 8,474 | 15 |
| March ........................ | 4,795 | 1,022 | 5,817 | 9,226 | 0 | 9,226 | 239 |
| April .......................... | 4,803 | 971 | 5,774 | 9,928 | 0 | 9,928 | 223 |
| May ........................... | 4,743 | 990 | 5,733 | 10,153 | 0 | 10,153 | -36 |
| June ......................... | 4,710 | 991 | 5,701 | 10,038 | 0 | 10,038 | 76 |
| July ........................... | 4,600 | 927 | 5,526 | 10,034 | 0 | 10,034 | 128 |
| August ...................... | 4,650 | 945 | 5,595 | 10,023 | 0 | 10,023 | 94 |
| September ................. | 4,720 | 964 | 5,683 | 10,287 | 0 | 10,287 | -80 |
| October ..................... | 4,668 | 967 | 5,635 | 10,063 | 0 | 10,063 | 126 |
| November .................. | 4,597 | 963 | 5,560 | 9,351 | 0 | 9,351 | 209 |
| December ................... | 4,623 | 956 | 5,579 | 9,684 | 0 | 9,684 | -159 |
| Average .................... | 4,706 | 974 | 5,681 | 9,665 | 0 | 9,665 | 54 |
|  |  |  |  |  |  |  |  |
| February | E 4,650 | E 933 | E 5,584 | R $\mathrm{R}, 172$ | R 86 | 9,258 | 256 |
| March ........................ | E 4,643 | E 979 | E 5,622 | R 9,994 | R 79 | 10,073 | -154 |
| April .......................... | E 4,618 | E 950 | E 5,568 | R 9,937 | 125 | 10,062 | 350 |
| May .............................. | E E 4,4870 | E 942 | E 5,612 E 5,403 | R 10,294 R 10,454 | R 31 R 51 | 10,324 | 237 |
| June .................................................... | E 4,484 E 4,593 | E919 | $\mathrm{E} 5,403$ $\mathrm{E}, 404$ | R 10,454 R 10,202 | R 51 R 100 | 10,505 | 510 |
| August | E 4,579 | E 701 | E 5,280 | R 10,340 | R 108 | 10,447 | 47 |
| September ................. | E 4,222 | E 869 | E 5,091 | R 9,607 | R 62 | 9,669 | 103 |
| October ...................... | E 4,178 | E 935 | E 5,112 | R 10,214 | R115 | 10,328 | -11 |
| November .................. | E 4,450 | E 947 | E 5,397 | R 10,031 | R 78 | 10,108 | 392 |
| December ................... | E 4,506 | E 942 | E 5,448 | R 9,961 | R 57 | 10,018 | 236 |
| Average .................... | E 4,522 | E908 | E 5,430 | R 9,963 | ${ }^{\mathrm{R}} 75$ | 10,038 | 189 |
| 2005 January ...................... | E 4,476 | RE 918 | RE 5,394 | R 9,771 | ${ }^{\text {R }} 73$ | R 9,844 | R 211 |

[^14]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: 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. - 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. - 1981-2003: EIA, Petroleum Supply Annual, annual reports. - 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

Table 3.2a changes: "48 States Field Production" and "Adjustments" are new; "Other Imports" is now called "Commercial Imports"; and "Unaccounted-for Crude Oil" and "Crude Oil Used Directly" are discontinued.

Table 3.2b Crude Oil Overview: Disposition and Stocks

|  | Disposition |  |  |  |  |  | Stocks ${ }^{\text {a }}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stock Change ${ }^{\text {b }}$ |  |  | Refinery Inputs | Exports | Product Supplied | Commercial | SPR ${ }^{\text {c }}$ | Total |
|  | Commercial | SPR ${ }^{\text {c }}$ | Total |  |  |  |  |  |  |
|  | Thousand Barrels per Day |  |  |  |  |  | Million Barrels |  |  |
| 1973 Average | -11 | - | -11 | 12,431 | 2 | 0 | 242 | - | 242 |
| 1974 Average ......................... | 62 | _ | 62 | 12,133 | 3 | 0 | 265 | _ | 265 |
| 1975 Average ..................... | 17 | - | 17 | 12,442 | 6 | 0 | 271 | - | 271 |
| 1976 Average .................... | 39 | - | 39 | 13,416 | 8 | 0 | 285 | - | 285 |
| 1977 Average .................... | 150 | 20 | 170 | 14,602 | 50 | 0 | 340 | 7 | 348 |
| 1978 Average | -84 | 163 | 78 | 14,739 | 158 | 0 | 309 | 67 | 376 |
| 1979 Average | 81 | 67 | 148 | 14,648 | 235 | 0 | 339 | 91 | 430 |
| 1980 Average ................... | 52 | 45 | 98 | 13,481 | 287 | 0 | d 358 | 108 | d 466 |
| 1981 Average .................... | d-46 | 336 | d290 | 12,470 | 228 | 0 | 363 | 230 | 594 |
| 1982 Average .................... | -38 | 174 | 136 | 11,774 | 236 | 0 | ${ }^{\text {e }} 350$ | 294 | ${ }^{\text {e } 644}$ |
| 1983 Average .................... | e-20 | 234 | ${ }^{\text {e } 214}$ | 11,685 | 164 | 66 | 344 | 379 | 723 |
| 1984 Average ..................... | 4 | 195 | 199 | 12,044 | 181 | 64 | 345 | 451 | 796 |
| 1985 Average .................... | -67 | 117 | 50 | 12,002 | 204 | 60 | 321 | 493 | 814 |
| 1986 Average .................... | 28 | 50 | 78 | 12,716 | 154 | 49 | 331 | 512 | 843 |
| 1987 Average ................... | 49 | 80 | 128 | 12,854 | 151 | 34 | 349 | 541 | 890 |
| 1988 Average .................... | -51 | 52 | 1 | 13,246 | 155 | 40 | 330 | 560 | 890 |
| 1989 Average .................... | 30 | 56 | 86 | 13,401 | 142 | 28 | 341 | 580 | 921 |
| 1990 Average | -51 | 16 | -35 | 13,409 | 109 | 24 | 323 | 586 | 908 |
| 1991 Average ................... | 5 | -47 | -42 | 13,301 | 116 | 18 | 325 | 569 | 893 |
| 1992 Average ................... | -18 | 17 | -1 | 13,411 | 89 | 13 | 318 | 575 | 893 |
| 1993 Average .................. | 47 | 34 | 81 | 13,613 | 98 | 10 | 335 | 587 | 922 |
| 1994 Average ................... | 5 | 13 | 18 | 13,866 | 99 | 9 | 337 | 592 | 929 |
| 1995 Average .................... | -93 | (s) | -93 | 13,973 | 95 | 7 | 303 | 592 | 895 |
| 1996 Average ................... | -53 | -71 | -124 | 14,195 | 110 | 6 | 284 | 566 | 850 |
| 1997 Average ................... | 57 | -7 | 51 | 14,662 | 108 | 2 | 305 | 563 | 868 |
| 1998 Average .................. | 52 | 22 | 74 | 14,889 | 110 | 0 | 324 | 571 | 895 |
| 1999 Average | -107 | -11 | -118 | 14,804 | 118 | 0 | 284 | 567 | 852 |
| 2000 Average .................... | 3 | -73 | -70 | 15,067 | 50 | 0 | 286 | 541 | 826 |
| 2001 Average .................... | 73 | 26 | 99 | 15,128 | 20 | 0 | 312 | 550 | 862 |
| 2002 Average .................... | -94 | 134 | 40 | 14,947 | 9 | 0 | 278 | 599 | 877 |
| 2003 January ...................... | -115 | 5 | -110 | 14,338 | 10 | 0 | 274 | 599 | 873 |
| February .................... | -106 | 0 | -106 | 14,381 | 5 | 0 | 271 | 599 | 870 |
| March ........................ | 339 | 0 | 339 | 14,933 | 10 | 0 | 282 | 599 | 881 |
| April ......................... | 326 | 11 | 338 | 15,575 | 12 | 0 | 291 | 600 | 891 |
| May .......................... | -189 | 114 | -75 | 15,910 | 15 | 0 | 286 | 603 | 889 |
| June ......................... | -31 | 181 | 150 | 15,620 | 45 | 0 | 285 | 609 | 893 |
| July .......................... | 111 | 125 | 135 | 15,546 | 7 | 0 | 285 | 612 | 897 |
| August ...................... | -175 | 190 | 15 | 15,693 | 4 | 0 | 279 | 618 | 898 |
| September ................. | 239 | 202 | 441 | 15,446 | 3 | 0 | 287 | 624 | 911 |
| October ...................... | 258 | 210 | 468 | 15,342 | 14 | 0 | 295 | 631 | 926 |
| November .................. | -447 | 91 | -356 | 15,455 | 21 | 0 | 281 | 634 | 915 |
| December .................. | -398 | 154 | -244 | 15,345 | 4 | 0 | 269 | 638 | 907 |
| Average .................... | -24 | 108 | 84 | 15,304 | 12 | 0 | 269 | 638 | 907 |
| 2004 January ...................... | 110 | 89 | 199 | 14,816 | 6 | 0 | 271 | 641 | 913 |
| February .................... | 183 | 197 | 380 | 14,711 | 8 | 0 | 277 | 647 | 924 |
| March ........................ | 550 | 170 | 720 | 14,802 | 19 | 0 | 294 | 652 | 946 |
| April ......................... | 177 | 202 | 379 | 15,546 | 55 | 0 | 299 | 658 | 957 |
| May ........................... | 85 | 101 | 186 | 15,962 | 26 | 0 | 302 | 661 | 963 |
| June .......................... | 95 | 35 | 130 | 16,244 | 45 | 0 | 304 | 662 | 967 |
| July .......................... | -292 | 106 | -186 | 16,140 | 18 | 0 | 295 | 666 | 961 |
| August ...................... | -488 | 108 | -381 | 16,142 | 13 | 0 | 280 | 669 | 949 |
| September .................. | -194 | 42 | -151 | 14,980 | 35 | 0 | 274 | 670 | 945 |
| October ...................... | 448 | 2 | 450 | 14,954 | 25 | 0 | 288 | 670 | 959 |
| November .................. | 106 | 81 | 187 | 15,668 | 42 | 0 | 292 | 673 | 964 |
| December .................. | -170 | 91 | -79 | 15,751 | 30 | 0 | 286 | 676 | 962 |
| Average .................... | 50 | 102 | 152 | 15,479 | 27 | 0 | 286 | 676 | 962 |
| 2005 January ...................... | R 76 | R 131 | 207 | R 15,201 | R 40 | 0 | R 289 | R 680 | R 968 |

a Stocks are at end of period.
b A negative number indicates a decrease in stocks and a positive number indicates an increase
c "SPR" is the Strategic Petroleum Reserve. Crude oil stocks in the SPR include non-U.S. stocks held under foreign or commercial storage agreements.
d Beginning in 1981, includes stocks of Alaskan crude oil in transit. See Note 5, "Stocks of Alaskan Crude Oil," at end of section.
e See Note 4, "New Stock Basis," at end of section.
$R=$ Revised. $-=$ Not applicable. (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: - 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. - 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. - 1981-2003: EIA, Petroleum Supply Annual, annual reports. - 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

Table 3.2b changes: "Total Stock Change" is new; "Other Stock Change" is now called "Commercial Stock Change"; "Other Primary Stocks" is now called "Commercial Stocks," and "Crude Losses" is discontinued.

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

|  | Persian Gulf ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bahrain |  | Iran |  | Iraq |  | Kuwait ${ }^{\text {b }}$ |  |
|  | 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 Average ......................... | (s) | 0 | 0 | 0 | 795 | 795 | 250 | 237 |
| 2002 Average ...................... | 0 | 0 | 0 | 0 | 459 | 459 | 228 | 216 |
| 2003 January ........................ | 4 | 0 | 0 | 0 | 634 | 634 | 166 | 134 |
| February ...................... | 11 | 0 | 0 | 0 | 963 | 963 | 241 | 223 |
| March .......................... | 0 | 0 | 0 | 0 | 681 | 681 | 251 | 220 |
| April ............................ | 0 | 0 | 0 | 0 | 739 | 739 | 301 | 294 |
| May ............................ | 0 | 0 | 0 | 0 | 128 | 128 | 217 | 200 |
| June ............................ | 0 | 0 | 0 | 0 | 0 | 0 | 292 | 274 |
| July ............................ | 0 | 0 | 0 | 0 | 67 | 67 | 169 | 169 |
| August ........................................ | 0 | 0 | 0 | 0 | 125 362 | 125 362 | 189 | 183 |
| October ........................... | 0 | 0 | 0 | 0 | 735 | 735 | 168 | 168 |
| November ......................... | 0 | 0 | 0 | 0 | 706 | 706 | 182 | 176 |
| December .................... | 0 | 0 | 0 | 0 | 678 | 678 | 217 | 211 |
| Average ...................... | 1 | 0 | 0 | 0 | 481 | 481 | 220 | 208 |
| 2004 January ........................ | 0 | 0 | 0 | 0 | 578 | 578 | 244 | 238 |
| February | 0 | 0 | 0 | 0 | 646 | 646 | 92 | 80 |
| March .......................... | 0 | 0 | 0 | 0 | 621 | 621 | 220 | 214 |
| April ................................ | 0 | 0 | 0 | 0 | 769 | 755 | 328 | 322 |
| May ............................. | 7 | 0 | 0 | 0 | 674 | 674 | 278 | 273 |
| June ............................ | 0 | 0 | 0 | 0 | 636 | 636 | 224 | 224 |
| July ............................ | 0 | 0 | 0 | 0 | 593 | 593 | 277 | 268 |
| August ........................ | 13 | 0 | 0 | 0 | 816 | 816 | 197 | 191 |
| September ................... | 0 | 0 | 0 | 0 | 623 | 623 | 365 | 327 |
| October ....................... | 13 | 0 | 0 | 0 | 647 | 647 | 229 | 229 |
| November .................... | 10 | 0 | 0 | 0 | 596 | 596 | 324 | 324 |
| December .................... | 0 | 0 | 0 | 0 | 626 | 626 | 219 | 205 |
| Average ...................... | 4 | 0 | 0 | 0 | 652 | 651 | 250 | 241 |
| 2005 January ........................ | 0 | 0 | 0 | 0 | 477 | 477 | 203 | 197 |

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.

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

|  | Persian Gulf ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Qatar |  | Saudi Arabia ${ }^{\text {b }}$ |  | United Arab Emirates |  | Total ${ }^{\text {a }}$ |  |
|  | 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 ...................... 2001 Average ............... | 9 13 | (s) ${ }^{0}$ | 1,572 1,662 | 1,523 | 15 | 3 21 | 2,488 | 2,409 |
| 2002 Average ........................... | 15 | 9 | 1,552 | 1,519 | 15 | 10 | 2,269 | 2,213 |
| 2003 January ....................... | 0 | 0 | 1,841 | 1,803 | 90 | 34 | 2,735 | 2,605 |
| February ...................... | 0 | 0 | 1,447 | 1,407 | 13 | 0 | 2,676 | 2,593 |
| March .......................... | 0 | 0 | 1,886 | 1,838 | 0 | 0 | 2,818 | 2,739 |
| April ........................... | 0 | 0 | 2,070 | 2,024 | 39 | 19 | 3,148 | 3,075 |
| May ............................ | 9 | 0 | 2,305 | 2,244 | 9 | 0 | 2,669 | 2,572 |
| June ............................ | 0 | 0 | 2,002 | 1,921 | 33 | 17 | 2,327 | 2,212 |
| July ............................. | 14 | 0 | 1,900 | 1,835 | 19 | 0 | 2,170 | 2,072 |
| August ........................ | 0 | 0 | 1,535 | 1,475 | 0 | 0 | 1,849 | 1,783 |
| September ................... | 3 | 0 | 1,749 | 1,692 | 33 | 33 | 2,397 | 2,335 |
| October ....................... | 0 | 0 | 1,451 | 1,388 | 0 | 0 | 2,353 | 2,291 |
| November .................... | 0 | 0 | 1,681 | 1,664 | 17 | 17 | 2,586 | 2,564 |
| December .................... | 8 | 0 | 1,410 | 1,399 | 0 | 0 | 2,312 | 2,288 |
| Average ...................... | 3 | 0 | 1,774 | 1,726 | 21 | 10 | 2,501 | 2,425 |
| 2004 January ........................ | 0 | 0 | 1,477 | 1,432 | 0 | 0 | 2,300 | 2,248 |
| February | 0 | 0 | 1,360 | 1,295 | 0 | 0 | 2,098 | 2,021 |
| March .......................... | 0 | 0 | 1,531 | 1,478 | 1 | 0 | 2,373 | 2,312 |
| April ............................ | 5 | 5 | 1,175 | 1,161 | 45 | 29 | 2,322 | 2,271 |
| May ............................. | 0 | 0 | 1,519 | 1,493 | 0 | 0 | 2,478 | 2,439 |
| June ............................ | 0 | 0 | 1,493 | 1,450 | 18 | 0 | 2,370 | 2,310 |
| July ............................ | 0 | 0 | 1,655 | 1,622 | 13 | 0 | 2,538 | 2,483 |
| August ........................ | 0 | 0 | 1,865 | 1,755 | 53 | 33 | 2,943 | 2,793 |
| September ................... | 17 | 0 | 1,732 | 1,567 | 27 | 0 | 2,764 | 2,517 |
| October ........................ | 0 | 0 | 1,646 | 1,581 | 27 | 0 | 2,562 | 2,458 |
| November .................... | 4 | 0 | 1,700 | 1,625 | 13 | 0 | 2,648 | 2,546 |
| December .................... | 40 | 40 | 1,502 | 1,449 | 15 | 0 | 2,402 | 2,320 |
| Average ...................... | 5 | 4 | 1,556 | 1,494 | 18 | 5 | 2,485 | 2,395 |
| 2005 January ....................... | 0 | 0 | 1,645 | 1,602 | 11 | 0 | 2,337 | 2,276 |

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: 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. - 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. - 1981-2003: EIA, Petroleum Supply Annual, annual reports. 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

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

|  | Other OPEC ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Algeria |  | Ecuador ${ }^{\text {b }}$ |  | Gabon ${ }^{\text {c }}$ |  | 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 | ( ${ }^{\text {b }}$ ) | (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) | $\left(\begin{array}{l}\text { b } \\ \text { b }\end{array}\right.$ | (c) | (c) | 58 | 51 | 0 | 0 |
| 1998 Average ........................... | 290 | 10 | (b) | $\left(\begin{array}{l}\text { (b) } \\ \text { b }\end{array}\right.$ | (c) | (c) | 66 | 50 | 0 | 0 |
| 1999 Average ........................................................... | 259 | 25 | $\left(\begin{array}{l}\text { (b) } \\ \text { b }\end{array}\right.$ | $\left(\begin{array}{l}\text { (b) }\end{array}\right.$ | (c) | (c) | 81 | 70 | 0 | 0 |
| 2001 Average .................................... | 278 | 11 | (b) | (b) | (c) | (c) | 51 | 40 | 0 | 0 |
| 2002 Average ............................ | 264 | 30 | (b) | (b) | ( ${ }^{\text {c }}$ ) | ( ${ }^{\text {c }}$ ) | 53 | 50 | 0 | 0 |
| 2003 January .............................. | 291 | 39 |  |  |  |  | 25 | 25 | 0 | 0 |
| February ............................. | 213 | 0 | (b) | (b) | (c) | (c) | 15 | 15 | 0 | 0 |
| March ................................. | 304 | 40 | (b) | (b) | (c) | (c) | 10 | 10 | 0 | 0 |
| April .................................. | 395 | 77 | (b) | (b) | (c) | (c) | 46 | 43 | 0 | 0 |
| May .................................. | 377 | 81 | (b) | (b) | (c) | (c) | 10 | 10 | 0 | 0 |
| June .................................... | 700 | 282 86 | $\left(\begin{array}{l}\text { ( } \\ \text { b }\end{array}\right.$ | (b) | (c) | $\left(\begin{array}{l}\text { c } \\ \text { c }\end{array}\right.$ | 11 | 11 | 0 | 0 |
| August | 459 | 192 | (b) | (b) | (c) | (c) | 66 | 39 | 0 | 0 |
| September ................................ | 479 | 243 | (b) | (b) | (c) | (c) | 35 | 8 | 0 | 0 |
| October .. | 244 | 86 | (b) | (b) | (c) | (c) | 133 | 92 | 0 | 0 |
| November | 371 | 151 | (b) | (b) | (c) | (c) | 71 | 44 | 0 | 0 |
| December | 301 | 69 | (b) | (b) | (c) | (c) | 23 | 15 | 0 | 0 |
| Average ............................ | 382 | 112 | (b) | (b) | ( ${ }^{\text {c }}$ ) | ( ${ }^{\text {c }}$ | 37 | 26 | 0 | 0 |
| 2004 January ............................... | 345 | 123 |  |  |  | (c) | 17 | 14 | 0 | 0 |
| February | 378 | 92 | (b) | (b) | (c) | (c) | 47 | 44 | 0 | 0 |
| March ..... | 496 | 253 | (b) | (b) | (c) | (c) | 36 | 32 | 0 | 0 |
| April ... | 380 | 261 | (b) | (b) | (c) | (c) | 74 | 74 | 0 | 0 |
| May .................................. | 477 | 234 | (b) | (b) | (c) | (c) | 39 | 39 | 0 | 0 |
| June .................................. | 464 | 216 | (b) | (b) | (c) | (c) | r2 | 51 | 34 | 34 |
| July .................................. | 576 | 297 | (b) | (b) | (c) | (c) | 104 | 72 | 32 34 | 32 |
| August ....................................................... | 536 385 | 352 187 | $\left(\begin{array}{l}\text { b } \\ \text { b }\end{array}\right.$ | $\left(\begin{array}{l}\text { b } \\ \text { b }\end{array}\right.$ | (c) | ( $\begin{aligned} & \text { c } \\ & \text { c) }\end{aligned}$ | 45 | 419 | 34 33 | 34 33 |
| October ..... | 299 | 114 | (b) | (b) | (c) | (c) | 27 | 10 | 66 | 66 |
| November | 465 | 240 | (b) | (b) | (c) | (c) | 29 | 11 | 31 | 20 |
| December | 464 | 199 | (b) | (b) | (c) | (c) | 11 | 11 | 12 | 0 |
| Average ............................ | 439 | 214 | (b) | (b) | (c) | ( ${ }^{\text {c }}$ | 45 | 34 | 20 | 18 |
| 2005 January ............................... | 368 | 146 | (b) | ( ${ }^{\text {b }}$ ) | ( ${ }^{\text {c }}$ ) | ( ${ }^{\text {c }}$ ) | 22 | 22 | 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 3.3 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: - 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. - 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. - 1981-2003: EIA, Petroleum Supply Annual, annual reports. 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

Table 3.3d Petroleum Imports From Nigeria, Venezuela, Total Other OPEC, and Total OPEC
(Thousand Barrels per Day)

|  | Other OPEC ${ }^{\text {a }}$ |  |  |  |  |  | Total OPEC ${ }^{\text {b }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 ..................... | 681 740 | 765 | 1,170 1,300 | r 826 | 2,313 2,493 | 1,770 1,972 | 4,092 4,273 | 3,406 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 1,493 | 1,377 1,150 | 2,771 $\mathbf{2} 489$ | 2,125 1,869 | 4,905 | 4,169 4,228 |
| 2000 Average ..................... | 896 | 875 | 1,546 | 1,223 | 2,716 | 2,135 | 5,203 | 4,544 |
| 2001 Average ....................... | 885 | 842 | 1,553 | 1,291 | 2,768 | 2,184 | 5,528 | 4,848 |
| 2002 Average ...................... | 621 | 589 | 1,398 | 1,201 | 2,336 | 1,870 | 4,605 | 4,083 |
| 2003 January ....................... | 831 | 804 | 426 | 399 | 1,573 | 1,267 | 4,303 | 3,873 |
| February ....................... | 547 | 505 | 613 | 559 | 1,388 | 1,079 | 4,052 | 3,672 |
| March ........................... | 1,002 | 945 | 1,297 | 1,149 | 2,614 | 2,144 | 5,433 | 4,883 |
| April .......................... | 733 958 | ${ }_{907}^{697}$ | 1,626 1,737 | 1,387 1,491 | 2,801 3,082 | 2,204 2,488 | 5,949 5 5,751 | 5,279 5,060 |
| June ............................ | 866 | 836 | 1,622 | 1,381 | 3,199 | 2,510 | 5,526 | 4,722 |
| July ........................... | 843 | 804 | 1,279 | 1,150 | 2,566 | 2,040 | 4,736 | 4,112 |
| August ......................... | 995 | 988 | 1,564 | 1,345 | 3,085 | 2,564 | 4,934 | 4,347 |
| September .................... | 936 | 905 | 1,547 | 1,307 | 2,997 | 2,463 | 5,394 | 4,798 |
| October ....................... | 1,049 | 990 | 1,564 | 1,295 | 2,989 | 2,463 | 5,342 | 4,754 |
| November ..................... | 646 | 622 | 1,562 | 1,352 | 2,651 | 2,170 | 5,237 | 4,733 |
| December .................... | 959 | 938 832 | 1,631 1,376 | 1,340 | 2,913 | 2,362 2,153 | $\begin{array}{r}5,225 \\ 5 \\ \hline 162\end{array}$ | 4,650 4,578 |
| Average ...................... | 867 | 832 | 1,376 | 1,183 | 2,662 | 2,153 | 5,162 | 4,578 |
| 2004 January ....................... | 982 | 923 | 1,535 | 1,298 | 2,879 | 2,359 | 5,179 | 4,607 |
| February ..................... | 1,163 | 1,044 | 1,529 | 1,294 | 3,117 | 2,473 | 5,215 | 4,494 |
| March ......................... | 1,300 | 1,236 | 1,563 | 1,343 | 3,396 | 2,864 | 5,769 | 5,177 |
| April .......................... | 1,073 | 1,044 | 1,539 | 1,372 | 3,066 | 2,751 | 5,388 | 5,022 |
| May ............................ | 1,197 | 1,127 | 1,569 | 1,371 | 3,281 | 2,770 | 5,753 | 5,210 |
| June ........................... | 1,238 | 1,191 | 1,687 | 1,439 | 3,495 | 2,931 | 5,865 | 5,241 |
| July ........................... | 1,102 | 1,020 | 1,435 | 1,228 | 3,249 | 2,650 | 5,786 | 5,132 |
| August ........................ | 1,236 | 1,168 | 1,443 | 1,194 | 3,295 | 2,757 | 6,225 | 5,550 |
| September ................... | 1,076 | 1,012 | 1,281 | 1,070 | 2,816 | 2,344 | 5,580 | 4,860 |
| October ....................... | 1,066 | 1,029 | 1,560 | 1,330 | 3,017 | 2,548 | 5,567 | 5,006 |
| November .................. December ............... | 963 1,027 | 1,945 1,006 | 1,532 1,581 1 | 1,237 1,344 | 3,019 3 3 | 2,452 2,560 | 5,657 5,497 | 4,998 4,879 |
| Average ...................... | 1,119 | 1,062 | 1,521 | 1,294 | 3,144 | 2,622 | 5,626 | 5,017 |
| 2005 January ...................... | 1,067 | 1,007 | 1,573 | 1,349 | 3,029 | 2,524 | 5,366 | 4,800 |

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 3.3 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: 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. - 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. - 1981-2003: EIA, Petroleum Supply Annual, annual reports. 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

Table 3.3e Petroleum Imports From Angola, Australia, Bahamas, Brazil, Canada, and China
(Thousand Barrels per Day)

|  | Non-OPECa ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 Average .................. | 328 | 321 | 43 | 34 | 10 | 0 | 82 | 13 | 1,828 | 1,356 | 24 | 13 |
| 2002 Average .................. | 332 | 321 | 57 | 51 | 34 | 0 | 116 | 58 | 1,971 | 1,445 | 26 | 20 |
| 2003 January .................... | 263 | 245 | 20 | 20 | 38 | 0 | 114 | 48 | 2,272 | 1,654 | 19 | 16 |
| February .................. | 265 | 251 | 23 | 23 | 27 | 0 | 119 | 36 | 1,997 | 1,447 | 15 | 14 |
| March ....................... | 396 | 396 | 20 | 20 | 41 | 0 | 76 | 15 | 1,895 | 1,428 | 45 | 7 |
| April ........................ | 494 | 482 | 24 | 24 | 35 | 0 | 75 | 17 | 1,779 | 1,287 | 21 | 6 |
| May ......................... | 356 | 356 | 20 | 20 | 37 | 0 | 67 | 33 | 2,015 | 1,502 | 22 | 7 |
| June ........................ | 403 | 390 | 44 | 22 | 67 | 0 | 84 | 60 | 1,956 | 1,517 | 32 | 6 |
| July .......................... | 529 | 517 | 47 | 23 | 18 | 0 | 144 | 63 | 2,131 | 1,616 | 74 | 25 |
| August ..................... | 483 | 471 | 62 | 41 | 37 | 0 | 198 | 82 | 2,132 | 1,586 | 21 | 13 |
| September ................ | 401 | 401 | 84 | 63 | 6 | 0 | 132 | 68 | 2,082 | 1,538 | 39 | 24 |
| October .................... | 385 | 373 | 45 | 45 | 25 | 0 | 95 | 32 | 2,179 | 1,700 | 6 | 5 |
| November ................. | 203 | 191 | 22 | 22 | 4 | 0 | 93 | 68 | 2,186 | 1,639 | 30 | 28 |
| December ................. | 269 | 269 | 0 | 0 | 22 | 0 | 99 | 77 | 2,227 | 1,663 | 0 | 0 |
| Average .................. | 371 | 363 | 34 | 27 | 30 | 0 | 108 | 50 | 2,072 | 1,549 | 27 | 13 |
| 2004 January .................... | 277 | 277 | 20 | 20 | 5 | 0 | 136 | 103 | 2,185 | 1,626 | 12 | 7 |
| February | 273 | 271 | 23 | 23 | 21 | 0 | 104 | 67 | 2,087 | 1,490 | 46 | 38 |
| March ....................... | 347 | 336 | 22 | 22 | 15 | 0 | 93 | 42 | 2,077 | 1,583 | 14 | 6 |
| April ........................... | 338 | 325 | 0 | 0 | 21 | 0 | 83 | 22 | 2,044 | 1,596 | 7 | 7 |
| May ......................... | 405 | 384 | 39 | 39 | 19 | 0 | 60 | 16 | 2,063 | 1,630 | 15 | 7 |
| June ......................... | 139 | 127 | 21 | 0 | 14 | 0 | 130 | 91 | 2,217 | 1,708 | 14 | 7 |
| July ......................... | 370 | 355 | 38 | 8 | 25 | 0 | 140 | 95 | 2,166 | 1,664 | 38 | 21 |
| August ..................... | 354 | 341 | 21 | 21 | 60 | 0 | 69 | 50 | 1,982 | 1,512 | 7 | 7 |
| September ................ | 382 | 361 | 22 | 22 | 43 | 0 | 138 | 102 | 2,148 | 1,716 | 8 | 6 |
| October .................... | 197 | 185 | 19 | 19 | 34 | 0 | 90 | 26 | 2,208 | 1,687 | 38 | 24 |
| November ................. | 402 | 402 | 21 | 21 | 48 | 0 | 36 | 0 | 2,094 | 1,557 | 32 | 23 |
| December ................. | 306 | 306 | 82 | 62 | 24 | 0 | 45 | 0 | 2,143 | 1,563 | 29 | 22 |
| Average .................. | 316 | 306 | 27 | 21 | 27 | 0 | 94 | 51 | 2,118 | 1,611 | 22 | 14 |
| 2005 January .................... | 436 | 424 | 21 | 21 | 32 | 0 | 123 | 32 | 2,175 | 1,564 | 24 | 22 |

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.

Table 3.3f Petroleum Imports From Colombia, Ecuador, Gabon, Italy, Malaysia, and Mexico
(Thousand Barrels per Day)

| Non-OPEC ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Colombia |  | Ecuador ${ }^{\text {b }}$ |  | Gabon ${ }^{\text {c }}$ |  | 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 Average | 296 | 260 | 120 | 113 | 140 | 140 | 40 | 0 | 37 | 15 | 1,440 | 1,394 |
| 2002 Average .................. | 260 | 235 | 110 | 100 | 143 | 143 | 34 | 0 | 16 | 9 | 1,547 | 1,500 |
| 2003 January | 160 | 138 | 85 | 85 | 113 | 113 | 25 | 0 | 12 | 11 | 1,604 | 1,530 |
| February | 269 | 240 | 93 | 93 | 168 | 168 | 21 | 0 | 15 | 0 | 1,646 | 1,542 |
| March .... | 220 | 163 | 82 | 82 | 98 | 98 | 49 | 0 | 8 | 0 | 1,355 | 1,313 |
| April . | 212 | 170 | 101 | 95 | 135 | 135 | 68 | 0 | 27 | 21 | 1,663 | 1,633 |
| May | 162 | 133 | 149 | 137 | 129 | 129 | 39 | 0 | 31 | 22 | 1,556 | 1,513 |
| June | 170 | 146 | 136 | 120 | 140 | 140 | 20 | 0 | 0 | 0 | 1,530 | 1,472 |
| July . | 188 | 161 | 144 | 139 | 98 | 98 | 24 | 0 | 118 | 95 | 1,694 | 1,645 |
| August | 226 | 206 | 173 | 170 | 144 | 144 | 32 | 0 | 62 | 62 | 1,618 | 1,575 |
| September | 200 | 182 | 173 | 167 | 102 | 102 | 28 | 0 | 46 | 22 | 1,665 | 1,631 |
| October .... | 231 | 186 | 245 | 234 | 141 | 141 | 25 | 0 | 15 | 9 | 1,692 | 1,620 |
| November | 129 | 102 | 103 | 103 | 142 | 142 | 49 | 0 | 9 | 0 | 1,657 | 1,585 |
| December | 175 | 168 | 244 | 237 | 161 | 161 | 25 | 0 | 21 | 11 | 1,801 | 1,765 |
| Average ................... | 195 | 166 | 145 | 139 | 131 | 131 | 34 | 0 | 31 | 21 | 1,623 | 1,569 |
| 2004 January ...................... | 287 | 276 | 197 | 187 | 97 | 97 | 20 | 0 | 24 | 14 | 1,615 | 1,594 |
| February .................... | 99 | 61 | 223 | 209 | 163 | 163 | 24 | 0 | 0 | 0 | 1,541 | 1,486 |
| March ... | 124 | 105 | 113 | 95 | 108 | 108 | 63 | 0 | 22 | 8 | 1,639 | 1,576 |
| April | 153 | 136 | 253 | 225 | 169 | 169 | 41 | 0 | 0 | 0 | 1,577 | 1,566 |
| May | 202 | 173 | 259 | 259 | 116 | 116 | 26 | 0 | 31 | 22 | 1,714 | 1,666 |
| June | 202 | 192 | 205 | 186 | 195 | 195 | 37 | 0 | 23 | 5 | 1,702 | 1,668 |
| July | 136 | 83 | 277 | 249 | 117 | 117 | 65 | 0 | 34 | 34 | 1,648 | 1,603 |
| August | 184 | 143 | 282 | 256 | 65 | 65 | 51 | 0 | 64 | 33 | 1,647 | 1,588 |
| September | 166 | 131 | 285 | 285 | 94 | 94 | 51 | 0 | 21 | 12 | 1,591 | 1,527 |
| October | 139 | 110 | 299 | 293 | 236 | 236 | 23 | 0 | 59 | 30 | 1,760 | 1,722 |
| November | 159 | 123 | 237 | 237 | 116 | 116 | 14 | 0 | 28 | 12 | 1,654 | 1,604 |
| December | 165 | 119 | 255 | 249 | 233 | 233 | 33 | 0 | 42 | 42 | 1,605 | 1,552 |
| Average ................... | 168 | 138 | 240 | 228 | 142 | 142 | 37 | 0 | 29 | 18 | 1,642 | 1,597 |
| 2005 January ...................... | 150 | 122 | 315 | 309 | 145 | 145 | 24 | 0 | 64 | 40 | 1,501 | 1,420 |

[^15]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: - 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. - 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. - 1981-2003: EIA, Petroleum Supply Annual, annual reports. 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

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

|  | Non-OPECa |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Netherlands |  | Netherlands Antilles |  | Norway |  | Puerto Rico |  | Russia ${ }^{\text {b }}$ |  | 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 Average .................. | 43 | 0 | 81 | 0 | 341 | 281 | 4 | 0 | 90 | 0 | 31 | 0 |
| 2002 Average .................. | 66 | 0 | 81 | 0 | 393 | 348 | (s) | 0 | 210 | 85 | 17 | 0 |
| 2003 January .................... | 123 | 0 | 49 | 0 | 210 | 139 | 0 | 0 | 181 | 99 | 30 | 0 |
| February .................. | 62 | 0 | 129 | 0 | 280 | 236 | 0 | 0 | 271 | 121 | 26 | 0 |
| March | 108 | 0 | 64 | 0 | 242 | 181 | 0 | 0 | 257 | 16 | 16 | 0 |
| April | 89 | 0 | 83 | 0 | 282 | 182 | 0 | 0 | 132 | 19 | 17 | 0 |
| May ......................... | 76 | 0 | 143 | 0 | 303 | 190 | 0 | 0 | 208 | 142 | 49 | 0 |
| June | 97 | 0 | 49 | 0 | 375 | 244 | 0 | 0 | 527 | 441 | 44 | 0 |
| July | 100 | 0 | 59 | 0 | 265 | 162 | 0 | 0 | 550 | 479 | 16 | 0 |
| August ...................... | 91 | 0 | 27 | 0 | 352 | 192 | 0 | 0 | 411 | 288 | 7 | 0 |
| September ................ | 102 | 0 | 46 | 0 | 288 | 214 | 0 | 0 | 275 | 142 | 11 | 0 |
| October ..................... | 79 | 0 | 42 | 0 | 296 | 190 | 0 | 0 | 93 | 34 | 10 | 0 |
| November ................. | 93 | 0 | 78 | 0 | 188 | 129 | 0 | 0 | 71 | 0 | 41 | 0 |
| December ................ | 19 | 0 | 71 | 0 | 162 | 116 | 0 | 0 | 72 | 21 | 19 | 0 |
| Average .................. | 87 | 0 | 70 | 0 | 270 | 181 | 0 | 0 | 254 | 151 | 24 | 0 |
| 2004 January .................... | 30 | 0 | 90 | 0 | 241 | 149 | 0 | 0 | 128 | 8 | 0 | 0 |
| February ................... | 121 | 0 | 153 | 0 | 252 | 168 | 0 | 0 | 184 | 11 | R 11 | 4 |
| March ....................... | 159 | 0 | 0 | 0 | 287 | 217 | 0 | 0 | 193 | 42 | 34 | 0 |
| April ........................ | 111 | 0 | 28 | 0 | 169 | 131 | 0 | 0 | 316 | 193 | 53 | 0 |
| May ......................... | 95 | 0 | 5 | 0 | 278 | 186 | 0 | 0 | 211 | 142 | 35 | 0 |
| June ........................ | 118 | 0 | 1 | 0 | 209 | 164 | 0 | 0 | 416 | 321 | 8 | 0 |
| July .......................... | 110 | 0 | 2 | 0 | 318 | 215 | 0 | 0 | 384 | 206 | 8 | 0 |
| August ...................... | 97 | 0 | 121 | 0 | 319 | 163 | 0 | 0 | 215 | 105 | 17 | 0 |
| September ................ | 50 | 0 | 127 | 0 | 148 | 59 | 0 | 0 | 199 | 43 | 0 | 0 |
| October ..................... | 132 | 0 | 93 | 0 | 223 | 133 | 0 | 0 | 268 | 129 | 20 | 0 |
| November ................. | 49 | 0 | 30 | 0 | 245 | 105 | 0 | 0 | 490 | 402 | 45 | 0 |
| December | 74 | 0 | 4 | 0 | 157 | 63 | 0 | 0 | 365 | 196 | 53 | 0 |
| Average .................. | 96 | 0 | 54 | 0 | 238 | 146 | 0 | 0 | 281 | 150 | 24 | (s) |
| 2005 January .................... | 70 | 18 | 9 | 0 | 259 | 162 | 1 | 0 | 318 | 176 | 7 | 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 republics 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: - 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. - 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2003: EIA, Petroleum Supply Annual, annual reports. 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

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 ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  | Total Imports |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Trinidad and Tobago |  | United Kingdom |  | U.S. Virgin Islands |  | Other Non-OPEC ${ }^{\text {b }}$ |  | 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 | C4,347 | c3,178 | 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 Average ................... | 72 | 51 | 324 | 244 | 268 | 0 | 702 | 244 | 6,343 | 4,480 | 11,871 | 9,328 |
| 2002 Average ................... | 80 | 68 | 478 | 405 | 236 | 0 | 720 | 270 | 6,925 | 5,058 | 11,530 | 9,140 |
| 2003 January ..................... | 111 | 73 | 493 | 411 | 179 | 0 | 700 | 181 | 6,801 | 4,760 | 11,104 | 8,633 |
| February .................... | 78 | 44 | 463 | 407 | 253 | 0 | 649 | 179 | 6,869 | 4,802 | 10,921 | 8,474 |
| March | 105 | 78 | 389 | 299 | 328 | 0 | 818 | 245 | 6,612 | 4,342 | 12,044 | 9,226 |
| April | 110 | 82 | 407 | 308 | 245 | 0 | 651 | 189 | 6,650 | 4,649 | 12,599 | 9,928 |
| May . | 97 | 82 | 557 | 470 | 258 | 0 | 894 | 358 | 7,167 | 5,093 | 12,918 | 10,153 |
| June ........................... | 50 | 44 | 512 | 373 | 278 | 0 | 959 | 340 | 7,475 | 5,316 | 13,001 | 10,038 |
| July ............................ | 128 | 98 | 512 | 454 | 351 | 0 | 809 | 348 | 8,000 | 5,922 | 12,736 | 10,034 |
| August ....................... | 58 | 36 | 381 | 319 | 345 | 0 | 974 | 490 | 7,836 | 5,676 | 12,769 | 10,023 |
| September ................... | 124 | 87 | 558 | 487 | 326 | 0 | 786 | 359 | 7,474 | 5,489 | 12,868 | 10,287 |
| October | 91 | 60 | 319 | 285 | 307 | 0 | 711 | 396 | 7,031 | 5,309 | 12,373 | 10,063 |
| November | 112 | 68 | 300 | 234 | 291 | 0 | 676 | 307 | 6,475 | 4,618 | 11,712 | 9,351 |
| December .................. | 112 | 56 | 390 | 261 | 287 | 0 | 634 | 228 | 6,808 | 5,034 | 12,033 | 9,684 |
| Average ................... | 98 | 67 | 440 | 359 | 288 | 0 | 773 | 303 | 7,103 | 5,087 | 12,264 | 9,665 |
| 2004 January ..................... | 85 | 55 | 200 | 126 | 295 | 0 | 606 | 175 | 6,549 | 4,715 | 11,727 | 9,322 |
| February | 123 | 75 | 384 | 297 | 279 | 0 | 999 | 402 | 7,114 | 4,764 | 12,329 | 9,258 |
| March | 107 | 56 | 448 | 293 | 284 | 0 | 1,152 | 408 | 7,304 | 4,897 | 13,073 | 10,073 |
| April ........................... | 110 | 77 | 461 | 306 | 290 | 0 | 837 | 287 | 7,062 | 5,040 | 12,450 | 10,062 |
| May | 100 | 41 | 433 | 249 | 294 | 0 | 824 | 184 | 7,236 | 5,115 | 12,989 | 10,324 |
| June | 59 | 34 | 394 | 304 | 376 | 0 | 956 | 261 | 7,436 | 5,264 | 13,301 | 10,505 |
| July | 108 | 54 | 402 | 249 | 379 | 0 | 838 | 217 | 7,603 | 5,170 | 13,389 | 10,302 |
| August ...................... | 101 | 56 | 274 | 174 | 355 | 0 | 981 | 383 | 7,264 | 4,897 | 13,489 | 10,447 |
| September ................. | 67 | 38 | 192 | 94 | 342 | 0 | 876 | 319 | 6,952 | 4,808 | 12,532 | 9,669 |
| October ...................... | 57 | 48 | 486 | 292 | 352 | 0 | 1,023 | 388 | 7,757 | 5,323 | 13,323 | 10,328 |
| November | 63 | 32 | 290 | 156 | 296 | 0 | 1,213 | 320 | 7,562 | 5,111 | 13,219 | 10,108 |
| December | 64 | 22 | 464 | 287 | 344 | 0 | 948 | 422 | 7,434 | 5,139 | 12,931 | 10,018 |
| Average .................... | 87 | 49 | 369 | 235 | 324 | 0 | 937 | 314 | 7,274 | 5,021 | 12,899 | 10,038 |
| 2005 January ...................... | 84 | 50 | 283 | 162 | 302 | 0 | 951 | 376 | 7,295 | 5,044 | 12,661 | 9,844 |

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: 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. - 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. - 1981-2003: EIA, Petroleum Supply Annual, annual reports. 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

Figure 3.2 Finished Motor Gasoline
(Million Barrels per Day, Except as Noted)
Overview, 1973-2004


Overview, Monthly


Product Supplied, January

${ }^{\text {a }}$ Refinery and blender net production.
Note: Because vertical scales differ, graphs should not be compared.

Total Stocks, End of Month


Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Source: Table 3.4.

Table 3.4 Finished Motor Gasoline Supply, Disposition, and Stocks

|  | Supply |  |  | Disposition |  |  | Stocks ${ }^{\text {a }}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Refinery and Blender Net Production | Imports ${ }^{\text {b }}$ | Adjustments ${ }^{\text {C }}$ | Stock <br> Change ${ }^{\mathrm{b}, \mathrm{d}}$ | Exports | Product Supplied | Motor Gasoline |  | Oxygenates |
|  |  |  |  |  |  |  | Finished | Total ${ }^{\text {e }}$ |  |
|  | Thousand Barrels per Day |  |  |  |  |  | Million Barrels |  |  |
| 1973 Average .................... | 6,527 | 134 | 8 | -9 | 4 | 6,674 | NA | 209 | NA |
| 1974 Average .................... | 6,358 | 204 | 3 | 24 | 2 | 6,537 | NA | ${ }^{\text {f } 218}$ | NA |
| 1975 Average .................... | 6,518 | 184 | 3 | ${ }^{1} 28$ | 2 | 6,675 | NA | 235 | NA |
| 1976 Average .................... | 6,838 | 131 | 3 | -10 | 3 | 6,978 | NA | 231 | NA |
| 1977 Average | 7,031 | 217 | 2 | 72 | 2 | 7,177 | NA | 258 | NA |
| 1978 Average ................... | 7,167 | 190 | 2 | -54 | 1 | 7,412 | NA | 238 | NA |
| 1979 Average .................... | 6,837 | 181 | 15 | -2 | (s) | 7,034 | NA | 237 | NA |
| 1980 Average .................... | 6,492 | 140 | 14 | 66 | 1 | 6,579 | NA | $\mathrm{f}_{261}$ | NA |
| 1981 Average ${ }^{\text {g ................... }}$ | 6,400 | 157 | 5 | f-28 | 2 | 6,588 | 203 | 253 | NA |
| 1982 Average .................... | 6,336 | 197 | 2 | -25 | 20 | 6,539 | ${ }^{\text {f194 }}$ | f235 | NA |
| 1983 Average | 6,338 | 247 | 2 | f-45 | 10 | 6,622 | 186 | 222 | NA |
| 1984 Average | 6,453 | 299 | (s) | 54 | 6 | 6,693 | 205 | 243 | NA |
| 1985 Average | 6,419 | 381 | (s) | -41 | 10 | 6,831 | 190 | 223 | NA |
| 1986 Average .................... | 6,752 | 326 | (s) | 11 | 33 | 7,034 | 194 | 233 | NA |
| 1987 Average ................... | 6,841 | 384 | (s) | -15 | 35 | 7,206 | 189 | 226 | NA |
| 1988 Average ................... | 6,956 | 405 | (s) | 3 | 22 | 7,336 | 190 | 228 | NA |
| 1989 Average ................... | 6,963 | 369 | (s) | -35 | 39 | 7,328 | 177 | 213 | NA |
| 1990 Average | 6,959 | 342 | (s) | 10 | 55 | 7,235 | 181 | 220 | NA |
| 1991 Average | 6,975 | 297 | (s) | 3 | 82 | 7,188 | 182 | 219 | NA |
| 1992 Average | 7,058 | 294 | (s) | -11 | 96 | 7,268 | 178 | 216 | NA |
| 1993 Average ${ }^{\text {g ................... }}$ | 7,304 | 247 | 56 | 26 | 105 | 7,476 | 187 | 226 | h13 |
| 1994 Average .................... | 7,181 | 356 | 131 | -31 | 97 | 7,601 | 176 | 215 | 17 |
| 1995 Average | 7,459 | 265 | 130 | -40 | 104 | 7,789 | 161 | 202 | 12 |
| 1996 Average | 7,565 | 336 | 82 | -12 | 104 | 7,891 | 157 | 195 | 13 |
| 1997 Average .................... | 7,743 | 309 | 127 | 26 | 137 | 8,017 | 166 | 210 | 12 |
| 1998 Average .................... | 7,892 | 311 | 190 | 15 | 125 | 8,253 | 172 | 216 | 14 |
| 1999 Average .................... | 7,934 | 382 | 177 | -49 | 111 | 8,431 | 154 | 193 | 14 |
| 2000 Average ................... | 7,951 | 427 | 235 | -3 | 144 | 8,472 | 153 | 196 | 12 |
| 2001 Average .................... | 8,022 | 454 | 290 | 23 | 133 | 8,610 | 161 | 210 | 13 |
| 2002 Average ................... | 8,183 | 498 | 292 | 1 | 124 | 8,848 | 162 | 209 | 12 |
| 2003 January ..................... | 7,870 | 446 | 121 | -151 | 175 | 8,414 | 157 | 211 | 13 |
| February .................... | 7,800 | 427 | 223 | -219 | 143 | 8,525 | 151 | 203 | 13 |
| March | 7,724 | 555 | 217 | -207 | 102 | 8,602 | 145 | 200 | 14 |
| April . | 8,161 | 704 | 309 | 225 | 111 | 8,838 | 151 | 207 | 13 |
| May ....................... | 8,311 | 575 | 391 | 122 | 113 | 9,042 | 155 | 208 | 15 |
| June .......................... | 8,293 | 482 | 430 | -74 | 109 | 9,170 | 153 | 206 | 14 |
| July ........................... | 8,320 | 524 | 343 | -95 | 90 | 9,192 | 150 | 202 | 13 |
| August ....................... | 8,355 | 565 | 419 | -156 | 84 | 9,411 | 145 | 193 | 11 |
| September | 8,228 | 529 | 329 | 30 | 129 | 8,926 | 146 | 199 | 14 |
| October ...................... | 8,253 | 469 | 359 | -185 | 159 | 9,108 | 140 | 192 | 13 |
| November ................. | 8,450 | 489 | 321 | 196 | 118 | 8,946 | 146 | 204 | 12 |
| December ................... | 8,540 | 446 | 216 | 19 | 172 | 9,011 | 147 | 207 | 11 |
| Average .................... | 8,194 | 518 | 307 | -41 | 125 | 8,935 | 147 | 207 | 11 |
| 2004 January | 7,927 | 309 | 412 | -126 | 93 | 8,680 | 143 | 208 | 11 |
| February ...................... | 7,866 | 410 | 417 | -209 | 159 | 8,743 | 137 | 203 | 11 |
| March .... | 8,093 | 512 | 336 | -125 | 144 | 8,922 | 133 | 201 | 11 |
| April | 8,239 | 411 | 581 | 37 | 127 | 9,067 | 134 | 202 | 10 |
| May ........................... | 8,400 | 485 | 532 | 116 | 122 | 9,178 | 138 | 204 | 9 |
| June .......................... | 8,321 | 515 | 582 | 105 | 76 | 9,237 | 141 | 209 | 9 |
| July ................................... | 8,344 | 585 | 457 | 33 | 109 | 9,243 | 142 | 214 | 9 |
| August ........................ | 8,294 | 475 | 534 | -67 | 126 | 9,244 | 140 | 211 | 10 |
| September ................. | 7,965 | 497 | 517 | -129 | 79 | 9,030 | 136 | 206 | 10 |
| October ..................... | 8,349 | 515 | 434 | 69 | 126 | 9,103 | 138 | 204 | 11 |
| November .................. | 8,320 | 582 | 425 | 109 | 148 | 9,070 | 141 | 211 | 11 |
| December ................... | 8,656 | 479 | 327 | 59 | 183 | 9,219 | 143 | 215 | 10 |
| Average .................... | 8,233 | 481 | 462 | -10 | 124 | 9,063 | 143 | 215 | 10 |
| 2005 January ..................... | 8,094 | R 489 | 393 | R 55 | R 146 | R 8,775 | R 145 | R 219 | R 11 |

[^16]
$R=$ Revised. NA=Not available. (s)=Less than 500 barrels per day
Note: - The category "Total Production" has been replaced by "Refinery and Note: • The category "Total Production" has been replaced by "Refinery and
Blender Net Production." $\bullet$ Geographic coverage is the 50 States and the Blender Net Product
District of Columbia.

District of Columbia.
Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: - 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Petroleum Statement, Annual, annual reports. - 1981-2003: EIA, Petroleum Supply Annual, annual reports. • 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

Table 3.4 changes: "Refinery and Blender Net Production" replaces "Total Production"; "Adjustments" is new; and the order of the stocks columns is changed.

Figure 3.3 Distillate Fuel Oil
(Million Barrels per Day, Except as Noted)
Overview, 1973-2004


Overview, Monthly


Product Supplied, January

${ }^{\text {a }}$ Refinery net production.
Note: Because vertical scales differ, graphs should not be compared.

Total Stocks, End of Month


Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Source: Table 3.5.

Table 3.5 Distillate Fuel Oil Supply, Disposition, and Stocks

|  | Supply |  |  | Disposition |  |  | Stocks ${ }^{\text {a }}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Refinery } \\ & \text { Net } \\ & \text { Production } \end{aligned}$ | Imports | Adjustments ${ }^{\text {C }}$ | Stock Change ${ }^{\text {d }}$ | Exports | Product Supplied | Sulfur Content ${ }^{\text {b }}$ |  |  | Total |
|  |  |  |  |  |  |  | <= 15 ppm | $\begin{array}{\|l\|l} >15 \mathrm{ppm} \text { and } \\ <=500 \mathrm{ppm} \end{array}$ | > 500 ppm |  |
|  | Thousand Barrels per Day |  |  |  |  |  | Million Barrels |  |  |  |
| 1973 Average .................. | 2,820 | 392 | 4 | 115 | 9 | 3,092 | NA | NA | NA | 196 |
| 1974 Average .................. | 2,668 | 289 | 3 | ${ }^{\text {f }} 10$ | 2 | 2,948 | NA | NA | NA | 9200 |
| 1975 Average .................. | 2,653 | 155 | 2 | f,g-41 | 1 | 2,851 | NA | NA | NA | 209 |
| 1976 Average .................. | 2,924 | 146 | 2 | -62 | 1 | 3,133 | NA | NA | NA | 186 |
| 1977 Average .................. | 3,277 | 250 | 2 | 176 | 1 | 3,352 | NA | NA | NA | 250 |
| 1978 Average .................. | 3,167 | 173 | 2 | -93 | 3 | 3,432 | NA | NA | NA | 216 |
| 1979 Average .................. | 3,152 | 193 | 2 | 34 | 3 | 3,311 | NA | NA | NA | 229 |
| 1980 Average .................. | 2,661 | 142 | 2 | -64 | 3 | 2,866 | NA | NA | NA | 9205 |
| 1981 Average ${ }^{\text {h ................. }}$ | 2,613 | 173 | 10 | 9-38 | 5 | 2,829 | NA | NA | NA | 192 |
| 1982 Average .................. | 2,606 | 93 | 10 | -35 | 74 | 2,671 | NA | NA | NA | 9179 |
| 1983 Average | 2,456 | 174 | (s) | g-124 | 64 | 2,690 | NA | NA | NA | 140 |
| 1984 Average . | 2,680 | 272 | 1 | 57 | 51 | 2,845 | NA | NA | NA | 161 |
| 1985 Average | 2,686 | 200 | 2 | -48 | 67 | 2,868 | NA | NA | NA | 144 |
| 1986 Average | 2,796 | 247 | 1 | 31 | 100 | 2,914 | NA | NA | NA | 155 |
| 1987 Average | 2,729 | 255 | 1 | -56 | 66 | 2,976 | NA | NA | NA | 134 |
| 1988 Average | 2,857 | 302 | 1 | -30 | 69 | 3,122 | NA | NA | NA | 124 |
| 1989 Average | 2,899 | 306 | 0 | -49 | 97 | 3,157 | NA | NA | NA | 106 |
| 1990 Average | 2,925 | 278 | 0 | 73 | 109 | 3,021 | NA | NA | NA | 132 |
| 1991 Average | 2,962 | 205 | 0 | 31 | 215 | 2,921 | NA | NA | NA | 144 |
| 1992 Average .................. | 2,974 | 216 | 0 | -8 | 219 | 2,979 | NA | NA | NA | 141 |
| 1993 Average .................. | 3,132 | 184 | 0 | 1 | 274 | 3,041 | $\left({ }^{\text {e }}\right.$ ) | h64 | ${ }^{\text {h77 }}$ | 141 |
| 1994 Average .................. | 3,205 | 203 | 0 | 12 | 234 | 3,162 | $(\mathrm{e})$ | 73 | 73 | 145 |
| 1995 Average ................. | 3,155 | 193 | 0 | -41 | 183 | 3,207 | $\left(\begin{array}{l}e \\ e\end{array}\right.$ | 67 | 63 | 130 |
| 1996 Average ................. | 3,316 | 230 | 0 | -10 | 190 | 3,365 | (e) | 68 | 58 | 127 |
| 1997 Average .................. | 3,392 3,424 | 228 | 0 | 32 | 152 | 3,435 | (e) | 77 | 70 | 138 |
| 1998 Average | 3,424 3,399 | 210 | 0 | -84 | 124 | 3,461 | (e) | 77 69 | 79 56 | 156 |
| 2000 Average | 3,580 | 295 | 0 | -20 | 173 | 3,722 | (e) | 72 | 46 | 118 |
| 2001 Average .................. | 3,695 | 344 | 0 | 73 | 119 | 3,847 | (e) | 82 | 62 | 145 |
| 2002 Average .................. | 3,592 | 267 | 0 | -29 | 112 | 3,776 | ( ${ }^{\text {) }}$ | 81 | 53 | 134 |
| 2003 January .................... | 3,403 | 325 | 0 | -693 | 119 | 4,301 | (e) | 69 | 44 | 113 |
| February .................. | 3,459 | 503 | 0 | -532 | 132 | 4,362 | $(\mathrm{e})$ | 61 | 37 | 98 |
| March ....................... | 3,732 | 460 | 0 | 30 | 161 | 4,001 | (e) | 63 | 35 | 99 |
| April ........................ | 3,796 | 246 | 0 | -47 | 139 | 3,951 | $(\mathrm{e})$ | 66 | 31 | 97 |
| May ........................ | 3,833 | 287 | 0 | 307 | 162 | 3,651 | (e) | 72 | 35 | 107 |
| June ........................ | 3,728 | 337 | 0 | 184 | 101 | 3,781 | $(\mathrm{e})$ | 74 | 38 | 112 |
| July ........................ | 3,673 | 299 | 0 | 188 | 103 | 3,680 | $\left(\begin{array}{l}e \\ \text { e }\end{array}\right.$ | 75 | 43 | 118 |
| August .................... | 3,730 | 375 | 0 | 274 | 80 | 3,752 | $(\mathrm{e})$ | 76 | 51 | 127 |
| September ................ | 3,721 | 352 | 0 | 159 | 43 | 3,871 | $\left(\begin{array}{l}\text { e } \\ \text { e }\end{array}\right.$ | 77 | 55 | 131 |
| October ...................... | 3,750 3,800 | 281 241 | 0 | 25 | 82 | 3,945 3,824 | (e) | 74 | 59 | 132 |
| December .................... | 3,845 | 305 | 0 | 13 | 100 | 4,037 | (e) | 82 | 55 | 137 |
| Average ..................... | 3,707 | 333 | 0 | 7 | 107 | 3,927 | (e) | 82 | 55 | 137 |
| 2004 January .................... | 3,599 | 362 | 0 | -461 | 72 | 4,350 | (e) | 77 | 46 | 122 |
| February .................. | 3,467 | 501 | 0 | -385 | 86 | 4,268 | (e) | 68 | 43 | 111 |
| March ....................... | 3,558 | 432 | 0 | -235 | 99 | 4,126 | (e) | 66 | 38 | 104 |
| April ........................ | 3,881 | 244 | 0 | -87 | 92 | 4,121 | (e) | 66 | 35 | 101 |
| May .......................... | 3,858 | 273 | 0 | 177 | 100 | 3,854 | (e) | 71 | 36 | 107 |
| June ........................ | 3,957 | 305 | 0 | 238 | R 164 | 3,860 | (e) | 71 | 43 | 114 |
| July ......................... | 3,902 | 300 | 0 | 239 | 113 | 3,850 | (e) | 74 | 47 | 121 |
| August ..................... | 3,981 | 311 | 0 | 294 | 120 | 3,878 | (e) | 78 | 52 | 131 |
| September ................ | 3,625 | 270 | 0 | -252 | 88 | 4,059 | (e) | 72 | 51 | 123 |
| October .................... | 3,807 | 242 | 0 | -164 | 101 | 4,113 | (e) | 68 | 50 | 118 |
| November ................. | 4,004 | 318 | 0 | 167 | 102 | 4,053 | (e) | 72 | 51 | 123 |
| December ................. | 4,167 | 291 | 0 | 103 | 176 | 4,180 | (e) | 77 | 49 | 126 |
| Average .................. | 3,819 | 320 | 0 | -29 | 110 | 4,059 | ( ${ }^{\text {) }}$ | 77 | 49 | 126 |
| 2005 January .................... | 3,772 | R 352 | 0 | ${ }^{\mathrm{R}}$-151 | R 49 | ${ }^{\text {R 4,226 }}$ | 1 | 74 | 46 | R 121 |

[^17]Notes: - The category "Total Production" has been replaced by "Refinery Net Production." - 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: - 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. - 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. - 1981-2003: EIA, Petroleum Supply Annual, annual reports. - 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

Table 3.5 changes: "Refinery Net Production" replaces "Total Production"; "Adjustments" is new; "Crude Oil Used Directly" is discontinued; and the "Sulfur Content" columns under "Stocks" are revised.

Figure 3.4 Residual Fuel Oil
(Million Barrels per Day, Except as Noted)
Overview, 1973-2004


Overview, Monthly


Product Supplied, January

${ }^{\text {a }}$ Refinery net production.
Note: Because vertical scales differ, graphs should not be compared.

Total Stocks, End of Month


Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Source: Table 3.6.

Table 3.6 Residual Fuel Oil Supply, Disposition, and Stocks

|  | Supply |  |  | Disposition |  |  | Stocks ${ }^{\text {a }}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{\|c} \text { Refinery } \\ \text { Net } \\ \text { Production } \end{array}$ | Imports | Adjustments ${ }^{\text {C }}$ | Stock Change ${ }^{d}$ | Exports | Product Supplied | Sulfur Content ${ }^{\text {b }}$ |  |  | Total |
|  |  |  |  |  |  |  | < 0.31\% | $\begin{gathered} >=0.31 \% \text { and } \\ <=1.00 \% \end{gathered}$ | > 1.00\% |  |
|  | Thousand Barrels per Day |  |  |  |  |  | Million Barrels |  |  |  |
| 1973 Average | 971 | 1,853 | 17 | -5 | 23 | 2,822 | NA | NA | NA | 53 |
| 1974 Average .................. | 1,070 | 1,587 | 13 | 17 | 14 | 2,639 | NA | NA | NA | ${ }^{\text {e }} 60$ |
| 1975 Average .................. | 1,235 | 1,223 | 15 | e-2 | 15 | 2,462 | NA | NA | NA | 74 |
| 1976 Average | 1,377 | 1,413 | 17 | -5 | 12 | 2,801 | NA | NA | NA | 72 |
| 1977 Average .................. | 1,754 | 1,359 | 13 | 48 | 6 | 3,071 | NA | NA | NA | 90 |
| 1978 Average .................. | 1,667 | 1,355 | 13 | 1 | 13 | 3,023 | NA | NA | NA | 90 |
| 1979 Average | 1,687 | 1,151 | 12 | 15 | 9 | 2,826 | NA | NA | NA | 96 |
| 1980 Average | 1,580 | 939 | 12 | -10 | 33 | 2,508 | NA | NA | NA | ${ }^{-92}$ |
| 1981 Average ${ }^{\text {f }}$................. | 1,321 | 800 | 49 | e-37 | 118 | 2,088 | NA | NA | NA | 78 |
| 1982 Average .................. | 1,070 | 776 | 48 | -32 | 209 | 1,716 | NA | NA | NA | ${ }^{\text {e }} 66$ |
| 1983 Average .................. | 852 | 699 | 0 | e-55 | 185 | 1,421 | NA | NA | NA | 49 |
| 1984 Average | 891 | 681 | 0 | 12 | 190 | 1,369 | NA | NA | NA | 53 |
| 1985 Average | 882 | 510 | 0 | -7 | 197 | 1,202 | NA | NA | NA | 50 |
| 1986 Average | 889 | 669 | 0 | -8 | 147 | 1,418 | NA | NA | NA | 47 |
| 1987 Average ................. | 885 | 565 | 0 | (s) | 186 | 1,264 | NA | NA | NA | 47 |
| 1988 Average ................. | 926 | 644 | 0 | -8 | 200 | 1,378 | NA | NA | NA | 45 |
| 1989 Average | 954 | 629 | 0 | -2 | 215 | 1,370 | NA | NA | NA | 44 |
| 1990 Average | 950 | 504 | 0 | 13 | 211 | 1,229 | NA | NA | NA | 49 |
| 1991 Average | 934 | 453 | 0 | 4 | 226 | 1,158 | NA | NA | NA | 50 |
| 1992 Average .................. | 892 | 375 | 0 | -20 | 193 | 1,094 | NA | NA | NA | 43 |
| 1993 Average .................. | 835 | 373 | 0 | 4 | 123 | 1,080 | NA | NA | NA | 44 |
| 1994 Average | 826 | 314 | 0 | -6 | 125 | 1,021 | NA | NA | NA | 42 |
| 1995 Average | 788 | 187 | 0 | -13 | 136 | 852 | NA | NA | NA | 37 |
| 1996 Average | 726 | 248 | 0 | 24 | 102 | 848 | NA | NA | NA | 46 |
| 1997 Average .................. | 708 | 194 | 0 | -15 | 120 | 797 | NA | NA | NA | 40 |
| 1998 Average .................. | 762 | 275 | 0 | 12 | 138 | 887 | NA | NA | NA | 45 |
| 1999 Average | 698 | 237 | 0 | -25 | 129 | 830 | NA | NA | NA | 36 |
| 2000 Average | 696 | 352 | 0 | 1 | 139 | 909 | NA | NA | NA | 36 |
| 2001 Average .................. | 721 | 295 | 0 | 13 | 191 | 811 | NA | NA | NA | 41 |
| 2002 Average .................. | 601 | 249 | 0 | -27 | 177 | 700 | NA | NA | NA | 31 |
| 2003 January .................... | 658 | 343 | 0 | (s) | 231 | 770 | NA | NA | NA | 31 |
| February | 683 | 363 | 0 | -15 | 173 | 888 | NA | NA | NA | 31 |
| March ....................... | 652 | 467 | 0 | 35 | 161 | 923 | NA | NA | NA | 32 |
| April ........................ | 632 | 349 | 0 | -43 | 247 | 778 | NA | NA | NA | 31 |
| May ......................... | 729 | 307 | 0 | 168 | 195 | 673 | NA | NA | NA | 36 |
| June ........................ | 666 | 284 | 0 | -22 | 280 | 693 | NA | NA | NA | 35 |
| July .......................... | 632 | 276 | 0 | -121 | 252 | 777 | NA | NA | NA | 32 |
| August ..................... | 663 | 347 | 0 | -45 | 158 | 897 | NA | NA | NA | 30 |
| September ............... | 662 | 240 | 0 | 51 | 191 | 660 | NA | NA | NA | 32 |
| October .................... | 640 | 311 | 0 | 72 | 164 | 716 | NA | NA | NA | 34 |
| November ................. | 616 | 319 | 0 | 68 | 163 | 703 | NA | NA | NA | 36 |
| December ................. | 686 | 322 | 0 | 61 | 155 | 792 | NA | NA | NA | 38 |
| Average .................. | 660 | 327 | 0 | 18 | 197 | 772 | NA | NA | NA | 38 |
| 2004 January .................... | 658 | 335 | 0 | 5 | 97 | 891 | NA | NA | NA | 38 |
| February | 658 | 433 | 0 | 57 | 163 | 872 | NA | NA | NA | 40 |
| March ....................... | 633 | 291 | 0 | -21 | 158 | 786 | NA | NA | NA | 39 |
| April | 691 | 277 | 0 | -111 | 282 | 797 | NA | NA | NA | 36 |
| May ............... | 661 | 346 | 0 | 17 | 280 | 711 | NA | NA | NA | 36 |
| June | 641 | 310 | 0 | 45 | 204 | 702 | NA | NA | NA | 38 |
| July ......................... | 610 | 352 | 0 | -90 | 184 | 867 | NA | NA | NA | 35 |
| August .................... | 624 | 351 | 0 | 78 | 225 | 672 | NA | NA | NA | 37 |
| September ............... | 611 | 303 | 0 | -106 | 254 | 766 | NA | NA | NA | 34 |
| October .................... | 606 | 546 | 0 | 68 | 231 | 852 | NA | NA | NA | 36 |
| November | 698 | 522 | 0 | 209 | 154 | 856 | NA | NA | NA | 42 |
| December ................ | 714 | 387 | 0 | (s) | 223 | 878 | NA | NA | NA | 42 |
| Average .................. | 650 | 371 | 0 | 12 | 205 | 804 | NA | NA | NA | 42 |
| 2005 January .................... | 697 | R 445 | 0 | R - 39 | R 200 | R 981 | 5 | 15 | 21 | R 41 |

[^18]greater than -500 barrels per day.
Note: • The category "Total Production" has been replaced by "Refinery Net Production." - Geographic coverage is the 50 States and the District of Columbia.

Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: - 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. © 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2003: EIA, Petroleum Supply Annual, annual reports. - 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

Table 3.6 changes: "Refinery Net Production" replaces "Total Production";
"Adjustments" is new; and "Sulfur Content" categories are added under "Stocks."

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

Overview, 1973-2004


Overview, Monthly


Product Supplied by Type, 1973-2004


Product Supplied, January


## ${ }^{\text {a Refinery net production. }}$

Notes: • Through 2004, includes naphtha-type jet fuel. Beginning in 2005, naphtha-type jet fuel is included in "Other Petroleum Products" on Table

Total Stocks, End of Month

3.10. • 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, Disposition, and Stocks

|  | Supply |  |  | Disposition |  |  |  | Stocks ${ }^{\text {a }}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Refinery Net Production |  | Imports ${ }^{\text {b }}$ | Stock Change ${ }^{b, c}$ | Exports ${ }^{\text {b }}$ | Product Supplied |  | Kerosene Type | Total ${ }^{\text {b }}$ |
|  | Kerosene Type | Total ${ }^{\text {b }}$ |  |  |  | Kerosene Type | Total ${ }^{\text {b }}$ |  |  |
|  | Thousand Barrels per Day |  |  |  |  |  |  | Million Barrels |  |
| 1973 Average | 679 | 859 | 212 | 8 | 4 | 842 | 1,059 | 23 | 29 |
| 1974 Average .................... | 641 | 836 | 163 | 2 | 3 | 771 | 993 | $\mathrm{d}_{24}$ | $\mathrm{d}_{29}$ |
| 1975 Average .................... | 691 | 871 | 133 | $\mathrm{d}_{2}$ | 2 | 791 | 1,001 | 25 | 30 |
| 1976 Average .................... | 731 | 918 | 76 | 5 | 2 | 789 | 987 | 26 | 32 |
| 1977 Average .................... | 787 | 973 | 75 | 7 | 2 | 831 | 1,039 | 28 | 35 |
| 1978 Average ........................ | 791 | 970 | 86 | -2 | 1 | 858 | 1,057 | 28 | 34 |
| 1979 Average | 835 | 1,012 | 78 | 13 | 1 | 876 | 1,076 | 33 | 39 |
| 1980 Average .................... | 811 | 999 | 80 | 10 | 1 | 851 | 1,068 | ${ }^{\text {d }} 36$ | ${ }^{\text {d }} 42$ |
| 1981 Average .................... | 775 | 968 | 38 | d-4 | 2 | 809 | 1,007 | 34 | 41 |
| 1982 Average .................... | 778 | 978 | 29 | -12 | 6 | 804 | 1,013 | $\mathrm{d}_{31}$ | ${ }^{\text {d }} 37$ |
| 1983 Average .................... | 817 | 1,022 | 29 | ${ }^{\text {d }}$ (s) | 6 | 839 | 1,046 | 32 | 39 |
| 1984 Average .................... | 919 | 1,132 | 62 | 9 | 9 | 953 | 1,175 | 35 | 42 |
| 1985 Average .................... | 983 | 1,189 | 39 | -4 | 13 | 1,005 | 1,218 | 34 | 40 |
| 1986 Average .................... | 1,097 | 1,293 | 57 | 25 | 18 | 1,105 | 1,307 | 43 | 50 |
| 1987 Average ................... | 1,138 | 1,343 | 67 | (s) | 24 | 1,181 | 1,385 | 42 | 50 |
| 1988 Average ................... | 1,164 | 1,370 | 90 | -17 | 28 | 1,236 | 1,449 | 38 | 44 |
| 1989 Average | 1,197 | 1,403 | 106 | -8 | 27 | 1,284 | 1,489 | 34 | 41 |
| 1990 Average .................... | 1,311 | 1,488 | 108 | 31 | 43 | 1,340 | 1,522 | 46 | 52 |
| 1991 Average .................... | 1,274 | 1,438 | 67 | -9 | 43 | 1,296 | 1,471 | 44 | 49 |
| 1992 Average | 1,254 | 1,399 | 82 | -16 | 43 | 1,310 | 1,454 | 39 | 43 |
| 1993 Average | 1,309 | 1,422 | 100 | -7 | 59 | 1,357 | 1,469 | 38 | 40 |
| 1994 Average | 1,410 | 1,448 | 117 | 18 | 20 | 1,480 | 1,527 | 46 | 47 |
| 1995 Average .................... | 1,407 | 1,416 | 106 | -19 | 26 | 1,497 | 1,514 | 39 | 40 |
| 1996 Average | 1,513 | 1,515 | 111 | (s) | 48 | 1,575 | 1,578 | 40 | 40 |
| 1997 Average | 1,554 | 1,554 | 91 | 11 | 35 | 1,598 | 1,599 | 44 | 44 |
| 1998 Average | 1,525 | 1,526 | 124 | 2 | 26 | 1,623 | 1,622 | 45 | 45 |
| 1999 Average | 1,565 | 1,565 | 128 | -11 | 32 | 1,675 | 1,673 | 40 | 41 |
| 2000 Average | 1,606 | 1,606 | 162 | 11 | 32 | 1,725 | 1,725 | 44 | 45 |
| 2001 Average .................. | 1,529 | 1,530 | 148 | -7 | 29 | 1,656 | 1,655 | 42 | 42 |
| 2002 Average .......................... | 1,514 | 1,514 | 107 | -8 | 15 | 1,621 | 1,614 | 39 | 39 |
| 2003 January ...................... | 1,495 | 1,495 | 94 | 46 | 36 | 1,505 | 1,507 | 41 | 41 |
| February | 1,416 | 1,416 | 109 | -74 | 19 | 1,581 | 1,581 | 39 | 39 |
| March ........................ | 1,430 | 1,422 | 117 | -62 | 34 | 1,575 | 1,567 | 37 | 37 |
| April .......................... | 1,445 | 1,445 | 106 | -4 | 34 | 1,520 | 1,521 | 36 | 36 |
| May .......................... | 1,484 | 1,484 | 122 | 117 | 19 | 1,470 | 1,470 | 40 | 40 |
| June .......................... | 1,393 | 1,393 | 119 | -60 | 7 | 1,565 | 1,565 | 38 | 38 |
| July ........................... | 1,491 | 1,491 | 126 | -2 | 12 | 1,606 | 1,607 | 38 | 38 |
| August ...................... | 1,551 | 1,551 | 129 | 12 | 7 | 1,661 | 1,661 | 39 | 39 |
| September ................. | 1,513 | 1,514 | 136 | 49 | 20 | 1,581 | 1,581 | 40 | 40 |
| October ...................... | 1,510 | 1,510 | 103 | 4 | 28 | 1,580 | 1,580 | 40 | 40 |
| November ................... | 1,522 | 1,522 | 46 | -73 | 10 | 1,631 | 1,631 | 38 | 38 |
| December .................. | 1,605 | 1,605 | 101 | 24 | 18 | 1,663 | 1,664 | 39 | 39 |
| Average .................... | 1,489 | 1,488 | 109 | -1 | 20 | 1,578 | 1,578 | 39 | 39 |
| 2004 January ...................... | 1,484 | 1,484 | 77 | 33 | 22 | 1,506 | 1,507 | 40 | 40 |
| February .................... | 1,462 | 1,462 | 93 | -116 | 19 | 1,651 | 1,651 | 36 | 36 |
| March ......................... | 1,505 | 1,505 | 70 | -24 | 39 | 1,560 | 1,560 | 36 | 36 |
| April .......................... | 1,497 | 1,497 | 77 | -19 | 19 | 1,574 | 1,574 | 35 | 35 |
| May ........................... | 1,543 | 1,543 | 158 | 97 | 30 | 1,574 | 1,574 | 38 | 38 |
| June .......................... | 1,532 | 1,532 | 165 | 23 | 28 | 1,647 | 1,647 | 39 | 39 |
| July ........................... | 1,628 | 1,628 | 96 | 63 | 10 | 1,651 | 1,651 | 41 | 41 |
| August ...................... | 1,650 | 1,650 | 142 | 36 | 52 | 1,704 | 1,704 | 42 | 42 |
| September ................. | 1,553 | 1,553 | 84 | -18 | 77 | 1,577 | 1,577 | 41 | 41 |
| October ...................... | 1,498 | 1,498 | 151 | -32 | 51 | 1,630 | 1,630 | 40 | 40 |
| November .................. | 1,614 | 1,614 | 150 | 24 | 55 | 1,684 | 1,684 | 41 | 41 |
| December .................. | 1,597 | 1,597 | 105 | -28 | 83 | 1,647 | 1,647 | 40 | 40 |
| Average .................... | 1,547 | 1,547 | 114 | 4 | 40 | 1,617 | 1,617 | 40 | 40 |
| 2005 January ..................... | 1,551 | 1,551 | ${ }^{\mathrm{R}} 79$ | ${ }^{\mathrm{R}} 86$ | $\mathrm{R}_{28}$ | R 1,516 | $\mathrm{R}^{1,516}$ | ${ }^{R} 43$ | ${ }^{\text {R }} 43$ |

[^19]Net Production." - Geographic coverage is the 50 States and the District of Columbia.

Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: - 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. - 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. - 1981-2003: EIA, Petroleum Supply Annual, annual reports. - 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

Table 3.7 changes: "Refinery Net Production" replaces "Production"; and the order of the "Kerosene Type" and "Total" columns is switched.

Figure 3.6 Liquefied Petroleum Gases
(Million Barrels per Day, Except as Noted)
Overview, 1973-2004


Overview, Monthly


Product Supplied, January

${ }^{\text {a }}$ Field production and refinery net production.
Note: Because vertical scales differ, graphs should not be compared.

Stocks, End of Month


Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Source: Table 3.8.

Table 3.8 Liquefied Petroleum Gases Supply, Disposition, and Stocks

|  | Supply |  |  | Disposition |  |  |  | Stocks ${ }^{\text {c }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Field Production ${ }^{\text {a }}$ | $\begin{aligned} & \text { Refinery } \\ & \text { Net } \\ & \text { Production } \end{aligned}$ | Imports | Stock Change ${ }^{\text {b }}$ | Refinery Inputs | Exports | Product Supplied |  |
|  | Thousand Barrels per Day |  |  |  |  |  |  | Million Barrels |
| 1973 Average | 1,225 | 375 | 132 | 35 | 220 | 27 | 1,449 | 99 |
| 1974 Average ........................ | 1,227 | 338 | 123 | 38 | 220 | 25 | 1,406 | $\mathrm{d}_{113}$ |
| 1975 Average .................... | 1,217 | 311 | 112 | d35 | 246 | 26 | 1,333 | 125 |
| 1976 Average ................... | 1,195 | 340 | 130 | -24 | 260 | 25 | 1,404 | 116 |
| 1977 Average | 1,214 | 352 | 161 | 55 | 233 | 18 | 1,422 | 136 |
| 1978 Average .................... | 1,182 | 355 | 123 | -12 | 239 | 20 | 1,413 | ${ }^{\text {d }} 132$ |
| 1979 Average .................... | 1,216 | 340 | 217 | d-70 | 236 | 15 | 1,592 | 111 |
| 1980 Average .................... | 1,205 | 330 | 216 | 27 | 233 | 21 | 1,469 | ${ }^{\text {d }} 120$ |
| 1981 Average .................... | 1,256 | 315 | 244 | ${ }^{\text {d }} 18$ | 289 | 42 | 1,466 | 135 |
| 1982 Average .................... | 1,258 | 270 | 226 | -111 | 300 | 65 | 1,499 | d94 |
| 1983 Average .................. | 1,314 | 328 | 190 | d-4 | 253 | 73 | 1,509 | $\mathrm{d}_{101}$ |
| 1984 Average ................... | 1,334 | 363 | 195 | d-19 | 291 | 48 | 1,572 | 101 |
| 1985 Average ................... | 1,313 | 391 | 187 | -75 | 304 | 62 | 1,599 | 74 |
| 1986 Average ................... | 1,277 | 417 | 242 | 80 | 302 | 42 | 1,512 | 103 |
| 1987 Average ................... | 1,300 | 449 | 190 | -15 | 304 | 38 | 1,612 | 97 |
| 1988 Average .................. | 1,319 | 499 | 209 | 1 | 321 | 49 | 1,656 | 97 |
| 1989 Average .................. | 1,237 | 554 | 181 | -47 | 315 | 35 | 1,668 | 80 |
| 1990 Average ................... | 1,250 | 499 | 188 | 48 | 293 | 40 | 1,556 | 98 |
| 1991 Average .................... | 1,336 | 536 | 147 | -15 | 304 | 41 | 1,689 | 92 |
| 1992 Average | 1,365 | 607 | 131 | -10 | 309 | 49 | 1,755 | 89 |
| 1993 Average | 1,402 | 592 | 160 | 49 | 327 | 43 | 1,734 | 106 |
| 1994 Average | 1,400 | 611 | 183 | -19 | 296 | 38 | 1,880 | 99 |
| 1995 Average .................. | 1,428 | 654 | 146 | -17 | 289 | 58 | 1,899 | 93 |
| 1996 Average ................... | 1,494 | 662 | 166 | -19 | 278 | 51 | 2,012 | 86 |
| 1997 Average ................. | 1,499 | 691 | 169 | 9 | 263 | 50 | 2,038 | 89 |
| 1998 Average ................... | 1,450 | 674 | 194 | 70 | 253 | 42 | 1,952 | 115 |
| 1999 Average .................... | 1,547 | 684 | 182 | -71 | 238 | 50 | 2,195 | 89 |
| 2000 Average ................... | 1,605 | 705 | 215 | -19 | 238 | 74 | 2,231 | 83 |
| 2001 Average ................... | 1,562 | 667 | 206 | 105 | 241 | 44 | 2,044 | 121 |
| 2002 Average .................... | 1,581 | 671 | 183 | -42 | 247 | 67 | 2,163 | 106 |
|  | 1,493 | 412 | 197 | -960 | 304 | 113 | 2,645 |  |
| February | 1,542 | 483 | 216 | -632 | 265 | 130 | 2,478 | 58 |
| March ........................ | 1,457 | 679 | 171 | -20 | 197 | 43 | 2,087 | 58 |
| April .......................... | 1,431 | 843 | 156 | 235 | 175 | 51 | 1,970 | 65 |
| May .......................... | 1,294 | 892 | 191 | 514 | 176 | 67 | 1,619 | 81 |
| June .......................... | 1,309 | 853 | 279 | 628 | 179 | 45 | 1,589 | 99 |
| July ........................... | 1,369 | 841 | 294 | 530 | 186 | 47 | 1,742 | 116 |
| August ....................... | 1,418 | 832 | 239 | 266 | 194 | 36 | 1,993 | 124 |
| September ................. | 1,477 | 626 | 242 | 6 | 212 | 29 | 2,098 | 124 |
| October ..................... | 1,529 | 509 | 240 | -41 | 249 | 25 | 2,045 | 123 |
| November .................. | 1,562 | 434 | 231 | -271 | 295 | 31 | 2,171 | 115 |
| December .................. | 1,459 | 475 | 246 | -660 | 307 | 56 | 2,477 | 94 |
| Average .................... | 1,444 | 658 | 225 | -31 | 228 | 56 | 2,074 | 94 |
| 2004 January ...................... | 1,540 | 472 | 266 | -693 | 291 | 58 | 2,622 | 73 |
| February .................... | 1,538 | 485 | 388 | -438 | 270 | 57 | 2,522 | 60 |
| March ......................... | 1,552 | 649 | 278 | 205 | 215 | 26 | 2,033 | 67 |
| April .......................... | 1,506 | 839 | 134 | 173 | 192 | 49 | 2,065 | 72 |
| May ........................... | 1,515 | 856 | 173 | 287 | 191 | 29 | 2,039 | 81 |
| June .......................... | 1,456 | 837 | 186 | 480 | 174 | 54 | 1,771 | 95 |
| July ........................... | 1,522 | 833 | 304 | 515 | 179 | 48 | 1,916 | 111 |
| August ...................... | 1,562 | 828 | 297 | 502 | 178 | 39 | 1,970 | 127 |
| September ................. | 1,519 | 607 | 382 | 323 | 203 | 44 | 1,937 | 136 |
| October ...................... | 1,544 | 457 | 221 | -261 | 263 | 30 | 2,190 | 128 |
| November .................. | 1,594 | 427 | 243 | -297 | 297 | 30 | 2,234 | 119 |
| December .................. | 1,553 | 438 | 257 | -502 | 301 | 57 | 2,393 | 104 |
| Average .................... | 1,534 | 644 | 260 | 25 | 229 | 43 | 2,140 | 104 |
| 2005 January ...................... | 1,550 | 430 | 306 | -589 | 262 | 33 | 2,581 | 85 |

a Liquefied petroleum gases production at natural gas processing plants.
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, "New Stock Basis," at end of section.
Notes: - The category "Total Production" has been replaced by "Field Production" and "Refinery Net Production." - Geographic coverage is the 50 States and the District of Columbia.

Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: - 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. - 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. - 1981-2003: EIA, Petroleum Supply Annual, annual reports. - 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

Table 3.8 change: "Field Production" and "Refinery Net Production" replace "Total Production."

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

Overview, 1973-2004


Product Supplied, Monthly


Stocks, End of Month


Product Supplied, January


Share of Liquefied Petroleum Gases, January

${ }^{a}$ Field production and refinery net production.
Note: Because vertical scales differ, graphs should not be compared.

Web Page: http://www.eia.doe.gov/emeu/mer/petro.html. Source: Tables 3.8 and 3.9. Calculation of shares is based on data prior to rounding.

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

|  | Supply |  |  | Disposition |  |  |  | Stocks ${ }^{\text {C }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Field Production ${ }^{\text {a }}$ | Refinery Net Production | Imports | Stock Change ${ }^{\text {b }}$ | Refinery Inputs | Exports | Product Supplied |  |
|  | Thousand Barrels per Day |  |  |  |  |  |  | Million Barrels |
| 1973 Average | 583 | 271 | 71 | 30 | 8 | 15 | 872 | 65 |
| 1974 Average ...................... | 566 | 240 | 59 | 11 | 9 | 14 | 830 | 69 |
| 1975 Average ...................... | 550 | 234 | 60 | 36 | 11 | 13 | 783 | 82 |
| 1976 Average ..................... | 518 | 248 | 68 | -22 | 12 | 13 | 830 | 74 |
| 1977 Average | 510 | 265 | 86 | 21 | 10 | 10 | 821 | 81 |
| 1978 Average | 489 | 269 | 57 | 15 | 13 | 9 | 778 | d87 |
| 1979 Average ..................... | 450 | 271 | 88 | d-61 | 14 | 8 | 849 | 64 |
| 1980 Average | 442 | 269 | 69 | 4 | 12 | 10 | 754 | ${ }^{1} 65$ |
| 1981 Average ...................... | 478 | 267 | 70 | ${ }^{\text {d }} 18$ | 5 | 18 | 773 | 76 |
| 1982 Average ...................... | 457 | 254 | 63 | -59 | 4 | 31 | 798 | ${ }^{1} 54$ |
| 1983 Average ...................... | 463 | 266 | 44 | d-24 | 4 | 43 | 751 | ${ }^{\text {d }} 48$ |
| 1984 Average ...................... | 527 | 280 | 67 | d 7 | 4 | 30 | 833 | 58 |
| 1985 Average | 521 | 295 | 67 | -50 | 3 | 48 | 883 | 39 |
| 1986 Average .................... | 508 | 309 | 110 | 64 | 4 | 28 | 831 | 63 |
| 1987 Average ...................... | 503 | 325 | 88 | -41 | 8 | 24 | 924 | 48 |
| 1988 Average ..................... | 506 | 357 | 106 | 7 | 8 | 31 | 923 | 50 |
| 1989 Average ...................... | 471 | 392 | 111 | -52 | 11 | 24 | 990 | 32 |
| 1990 Average ...................... | 474 | 404 | 115 | 48 | (s) | 28 | 917 | 49 |
| 1991 Average ..................... | 487 | 427 | 91 | -3 | (s) | 28 | 982 | 48 |
| 1992 Average ..................... | 499 | 458 | 85 | -24 | (s) | 33 | 1,032 | 39 |
| 1993 Average ...................... | 513 | 450 | 103 | 34 | (s) | 26 | 1,006 | 51 |
| 1994 Average ..................... | 510 | 459 | 124 | -13 | 0 | 24 | 1,082 | 46 |
| 1995 Average .................... | 519 | 503 | 102 | -10 | 0 | 38 | 1,096 | 43 |
| 1996 Average ...................... | 525 | 520 | 119 | (s) | 0 | 28 | 1,136 | 43 |
| 1997 Average ...................... | 528 | 565 | 113 | 3 | 0 | 32 | 1,170 | 44 |
| 1998 Average .................... | 513 | 550 | 137 | 56 | 0 | 25 | 1,120 | 65 |
| 1999 Average ..................... | 529 | 569 | 122 | -59 | 0 | 33 | 1,246 | 43 |
| 2000 Average ..................... | 539 | 583 | 161 | -5 | 0 | 53 | 1,235 | 41 |
| 2001 Average ..................... | 538 | 556 | 145 | 67 | 0 | 31 | 1,142 | 66 |
| 2002 Average ...................... | 549 | 572 | 145 | -36 | 0 | 55 | 1,248 | 53 |
| 2003 January | 528 | 517 | 165 | -606 | 0 | 95 | 1,720 |  |
| February | 528 | 540 | 181 | -417 | 0 | 116 | 1,551 | 22 |
| March .......................... | 506 | 554 | 133 | -4 | 0 | 31 | 1,167 | 22 |
| April ........................... | 498 | 583 | 95 | 83 | 0 | 20 | 1,072 | 24 |
| May ............................ | 469 | 604 | 139 | 327 | 0 | 22 | 863 | 35 |
| June ........................... | 465 | 583 | 179 | 380 | 0 | 27 | 820 | 46 |
| July ............................ | 486 | 570 | 200 | 307 | 0 | 18 | 931 | 56 |
| August ........................ | 501 | 569 | 163 | 157 | 0 | 19 | 1,058 | 60 |
| September ................... | 521 | 572 | 182 | 70 | 0 | 19 | 1,186 | 62 |
| October ....................... | 534 | 553 | 187 | 69 | 0 | 20 | 1,185 | 65 |
| November .................... | 528 | 582 | 181 | -92 | 0 | 24 | 1,360 | 62 |
| December .................... | 505 | 610 | 213 | -399 | 0 | 46 | 1,681 | 50 |
| Average ...................... | 506 | 570 | 168 | -8 | 0 | 37 | 1,215 | 50 |
| 2004 January ........................ | 526 | 575 | 227 | -509 | 0 | 49 | 1,789 | 34 |
| February ...................... | 536 | 563 | 309 | -270 | 0 | 51 | 1,627 | 26 |
| March ........................... | 534 | 571 | 221 | 68 | 0 | 21 | 1,236 | 28 |
| April ............................ | 526 | 590 | 95 | 61 | 0 | 22 | 1,127 | 30 |
| May ............................ | 521 | 586 | 128 | 147 | 0 | 19 | 1,069 | 34 |
| June ............................ | 513 | 581 | 152 | 312 | 0 | 25 | 909 | 44 |
| July ............................. | 527 | 581 | 214 | 224 | 0 | 22 | 1,076 | 51 |
| August ........................ | 536 | 599 | 215 | 226 | 0 | 26 | 1,099 | 58 |
| September ................... | 515 | 564 | 303 | 319 | 0 | 26 | 1,038 | 67 |
| October ....................... | 521 | 576 | 196 | 40 | 0 | 25 | 1,229 | 68 |
| November .................... | 536 | 616 | 205 | -92 | 0 | 26 | 1,422 | 66 |
| December .................... | 523 | 613 | 222 | -344 | 0 | 29 | 1,672 | 55 |
| Average ...................... | 526 | 585 | 207 | 15 | 0 | 28 | 1,274 | 55 |
| 2005 January ........................ | 524 | 562 | 258 | -430 | 0 | 28 | 1,746 | 42 |

a Propane and propylene production at natural gas processing plants.
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, "New Stock Basis," at end of section.
(s)=Less than 500 barrels per day

Note: - The category "Total Production" has been replaced by "Field Production" and "Refinery Net Production." - Geographic coverage is the 50 States and the District of Columbia.

Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: - 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. - 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. - 1981-2003: EIA, Petroleum Supply Annual, annual reports. - 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

Table 3.9 change: "Field Production" and "Refinery Net Production" replace "Total Production."

Table 3.10 Other Petroleum Products Supply, Disposition, and Stocks

|  | Supply |  |  |  | Disposition |  |  |  | Stocks ${ }^{\text {d }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Field Production ${ }^{\text {a }}$ | Refinery and Blender Net Production | Imports | Adjustments | Stock Change ${ }^{\text {C }}$ | Refinery and Blender Net Inputs | Exports | Products Supplied |  |
|  | Thousand Barrels per Day |  |  |  |  |  |  |  | Million Barrels |
| 1973 Average | 513 | 2,301 | 290 | 19 | 1 | 750 | 162 | 2,211 | 179 |
| 1974 Average .................... | 461 | 2,229 | 269 | 32 | 25 | 665 | 172 | 2,129 | ${ }^{\text {e }} 188$ |
| 1975 Average | 416 | 2,097 | 144 | 35 | e-6 | 537 | 158 | 2,001 | 188 |
| 1976 Average .................... | 409 | 2,281 | 129 | 35 | (s) | 524 | 172 | 2,158 | 188 |
| 1977 Average .................... | 404 | 2,487 | 130 | 48 | 20 | 514 | 164 | 2,371 | 195 |
| 1978 Average .................... | 385 | 2,640 | 80 | 51 | -12 | 492 | 165 | 2,511 | 191 |
| 1979 Average ................... | 367 | 2,736 | 116 | 38 | 24 | 352 | 208 | 2,673 | 200 |
| 1980 Average ................... | 369 | 2,559 | 130 | 30 | 15 | 310 | 197 | 2,566 | ${ }^{\text {e } 205}$ |
| 1981 Average | 352 | 2,374 | 188 | 45 | e-42 | 723 | 197 | 2,081 | 241 |
| 1982 Average .................... | 293 | 2,132 | 305 | 51 | -68 | 787 | 205 | ${ }^{\text {f }} 1,857$ | ${ }^{\text {e } 216}$ |
| 1983 Average .................... | 245 | 2,142 | 382 | 51 | e-6 | 712 | 236 | 1,877 | e217 |
| 1984 Average .................... | 296 | 2,160 | 503 | 44 | e-32 | 791 | 236 | 2,007 | 198 |
| 1985 Average | 296 | 2,183 | 550 | 53 | 22 | 886 | 227 | 1,947 | 206 |
| 1986 Average | 273 | 2,375 | 504 | 56 | -15 | 888 | 291 | 2,045 | 201 |
| 1987 Average ............... | 295 | 2,380 | 543 | 62 | -1 | 829 | 264 | 2,187 | 200 |
| 1988 Average ................... | 306 | 2,415 | 645 | 52 | 22 | 799 | 294 | 2,303 | 208 |
| 1989 Average .................... | 309 | 2,402 | 627 | 60 | 12 | 797 | 305 | 2,285 | 213 |
| 1990 Average .................... | 309 | 2,452 | 705 | 80 | -32 | 887 | 289 | 2,402 | 201 |
| 1991 Average ................... | 324 | 2,411 | 675 | 92 | 18 | 936 | 277 | 2,269 | 208 |
| 1992 Average .................... | 332 | 2,469 | 707 | 128 | -3 | 906 | 263 | 2,470 | ${ }^{\text {e } 207}$ |
| 1993 Average | 334 | 2,503 | 770 | 198 | -2 | 1,081 | 300 | 2,426 | 206 |
| 1994 Average ................... | 326 | 2,520 | 761 | 126 | 24 | 861 | 329 | 2,518 | 215 |
| 1995 Average ................... | 335 | 2,522 | 708 | 174 | -23 | 958 | 348 | 2,457 | 206 |
| 1996 Average .................... | 336 | 2,541 | 879 | 230 | -11 | 1,014 | 376 | 2,608 | 202 |
| 1997 Average .................... | 318 | 2,671 | 945 | 215 | 30 | 985 | 402 | 2,733 | 213 |
| 1998 Average .................... | 309 | 2,753 | 888 | 190 | 18 | 1,002 | 380 | 2,741 | 219 |
| 1999 Average ................... | 303 | 2,709 | 943 | 199 | -64 | 1,061 | 338 | 2,819 | 196 |
| 2000 Average .................... | 306 | 2,705 | 938 | 143 | 30 | 991 | 429 | 2,642 | 207 |
| 2001 Average ..................... | 307 | 2,651 | 1,095 | 95 | 20 | 1,013 | 434 | 2,681 | 214 |
| 2002 Average .................... | 300 | 2,712 | 1,085 | 126 | -42 | 1,123 | 479 | 2,662 | 199 |
| 2003 January ........ | 265 | 2,568 | 1,066 | 304 | 466 | 831 | 526 | 2,381 | 213 |
| February .................... | 270 | 2,522 | 829 | 188 | 8 | 796 | 464 | 2,541 | 214 |
| March ......................... | 272 | 2,705 | 1,048 | 200 | 338 | 820 | 541 | 2,527 | 224 |
| April .......................... | 270 | 2,724 | 1,110 | 60 | 17 | 915 | 459 | 2,773 | 225 |
| May ........................... | 270 | 2,897 | 1,284 | 103 | 35 | 1,104 | 527 | 2,888 | 226 |
| June ......................... | 274 | 2,805 | 1,461 | -21 | 89 | 955 | 479 | 2,996 | 228 |
| July ........................... | 280 | 2,853 | 1,183 | 97 | -291 | 1,144 | 464 | 3,097 | 219 |
| August ....................... | 285 | 2,922 | 1,091 | -8 | -316 | 1,156 | 578 | 2,871 | 210 |
| September .................. | 284 | 2,900 | 1,082 | 183 | 130 | 977 | 545 | 2,797 | 214 |
| October ...................... | 289 | 2,798 | 905 | 40 | -223 | 949 | 518 | 2,789 | 207 |
| November .................. | 278 | 2,838 | 1,037 | 50 | 184 | 913 | 508 | 2,598 | 212 |
| December ................... | 264 | 2,806 | 929 | 200 | -179 | 1,193 | 487 | 2,698 | 207 |
| Average ..................... | 275 | 2,780 | 1,087 | 116 | 21 | 981 | 509 | 2,747 | 207 |
| 2004 January ...................... | 263 | 2,626 | 1,056 | -6 | 550 | 646 | 400 | 2,343 | 223 |
| February .................... | 259 | 2,685 | 1,246 | 0 | 543 | 601 | 554 | 2,492 | 239 |
| March ......................... | 277 | 2,747 | 1,417 | 105 | 109 | 1,165 | 538 | 2,734 | 242 |
| April .......................... | 278 | 2,887 | 1,246 | -166 | -104 | 1,232 | 531 | 2,584 | 239 |
| May .......................... | 280 | 2,981 | 1,229 | -98 | -48 | 1,122 | 465 | 2,853 | 238 |
| June .......................... | 281 | 3,006 | 1,316 | -145 | -60 | 902 | 499 | 3,116 | 236 |
| July .......................... | 288 | 3,051 | 1,451 | -42 | 21 | 1,056 | 597 | 3,074 | 237 |
| August ...................... | 297 | 3,036 | 1,465 | -82 | -149 | 1,085 | 516 | 3,265 | 232 |
| September .................. | 278 | 2,888 | 1,327 | -81 | -125 | 1,111 | 385 | 3,041 | 228 |
| October ...................... | 278 | 2,871 | 1,320 | 5 | -256 | 1,360 | 514 | 2,855 | 220 |
| November .................. | 279 | 2,879 | 1,296 | -4 | 195 | 909 | 462 | 2,884 | 226 |
| December ................... | 265 | 2,896 | 1,393 | 60 | 41 | 1,277 | 531 | 2,764 | 227 |
| Average ................... | 277 | 2,880 | 1,314 | -38 | 58 | 1,041 | 499 | 2,835 | 227 |
| 2005 January ...................... | 259 | 2,593 | 1,146 | 53 | 502 | 684 | 420 | 2,445 | 243 |

a Production at natural gas processing plants. Through 1988, includes pentanes plus and a small amount of finished petroleum products. Beginning in 1989, includes pentanes plus only.
b An adjustment for motor gasoline blending components and fuel ethanol. Through 2004, includes what was previously classified as "Field Production" of motor gasoline blending components and other hydrocarbons and oxygenates.
c A negative number indicates a decrease in stocks and a positive number indicates an increase.
d Stocks are at end of period.
e See Note 4, "New Stock Basis," at end of section.
f See Note 6, "Data Discrepancies," at end of section
(s)=Less than +500 barrels per day and greater than -500 barrels per day.

Notes: - The category "Total Production" has been replaced by "Field

Production" and "Refinery and Blender Net Production." • "Other Petroleum Products" include pentanes plus, other hydrocarbons and oxygenates, Products" include pentanes plus, other hydrocarbons and oxygenates,
unfinished oils, gasoline blending components, and all finished petroleum unfinished oils, gasoline blending components, and all finished petroleum
products except finished motor gasoline, distillate fuel oil, residual fuel oil, jet products except finished motor gasoline, distillate fuel oil, residual fuel oil, jet
fuel, liquefied petroleum gases, and crude oil that is used as fuel; beginning in 2005 also includes naphtha-type jet fuel. - Geographic coverage is the 50 States and the District of Columbia

Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: - 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. - 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement Annual, annual reports. - 1981-2003: EIA, Petroleum Supply Annual, annua reports. - 2004 forward: EIA, Petroleum Supply Monthly, monthly reports.

Table 3.10 changes: "Field Production" and "Refinery Net Production" replace "Total Production"; "Adjustments" is new; and "Refinery Inputs" is now called "Refinery and Blender Net Inputs."

## 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 <br> Average | MER <br> Data | PSA and PSM <br> 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 |
| 3.2 a | Imports, SPR | 1978 | 161 | 162 |
| 3.5 | Stock Change | 1974 | 10 | 9 |
| 3.5 | Stock Change | 1975 | -41 | -40 |
| 3.10 | Products Supplied | 1982 | 1,857 | 1,856 |

## Section 4. Natural Gas

Total dry natural gas production in the United States during December 2004 was estimated as 1.5 trillion cubic feet, 3 percent lower than production during December 2003.

Consumption of natural and supplemental gas in December 2004 was 2.3 trillion cubic feet, 1 percent higher than the level in December 2003.

Deliveries to residential consumers in December 2004 were 723 billion cubic feet, 2 percent lower than the previous December's deliveries. Total deliveries to industrial consumers during December 2004 were 755 billion cubic feet, 1 percent higher than the previous December's level. The electric power sector's use of natural gas in December

2004 was 377 billion cubic feet, 12 percent higher than the rate in December 2003.

Net imports of natural gas in December 2004 were estimated as 336 billion cubic feet, 15 percent higher than net imports in the previous December.

Stocks of working gas ${ }^{1}$ in underground natural gas storage reservoirs at the end of December 2004 were 2,696 billion cubic feet, 5 percent higher than the level of stocks available 1 year earlier.

Net withdrawals from underground storage during December 2004 were 567 billion cubic feet, 20 percent more than the amount of net withdrawals during December 2003.

Figure 4.1 Natural Gas
(Trillion Cubic Feet)

Overview, 1973-2004


Consumption by Sector, 1973-2004


Underground Storage, End of Year, 1973-2004


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.

Overview, Monthly


Consumption by Sector, Monthly


Underground Storage, End of Month


Table 4.1 Natural Gas Overview
(Billion Cubic Feet)

|  | Dry Gas Production ${ }^{\text {a }}$ | Supplemental Gaseous Fuels ${ }^{\text {b }}$ | Trade |  |  | Net Storage Withdrawals ${ }^{\text {C }}$ | Balancing Item ${ }^{\text {d }}$ | Consumption ${ }^{\text {e }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Imports | Exports | Net Imports |  |  |  |
| 1973 Total .................. | ${ }_{\text {f } 21,731}$ | NA | 1,033 | 77 | 956 | -442 | -196 | 22,049 |
| 1974 Total ..................... | f20,713 | NA | , 959 | 77 | 882 | -84 | -289 | 21,223 |
| 1975 Total ..................... | f19,236 | NA | 953 | 73 | 880 | -344 | -235 | 19,538 |
| 1976 Total ................... | f19,098 | NA | 964 | 65 | 899 | 165 | -216 | 19,946 |
| 1977 Total .................. | ${ }_{\text {f }} 19,163$ | NA | 1,011 | 56 | 955 | -557 | -41 | 19,521 |
| 1978 Total | ${ }^{\text {f } 19,122}$ | NA | , 966 | 53 | 913 | -120 | -287 | 19,627 |
| 1979 Total | ${ }^{\text {f } 19,663}$ | NA | 1,253 | 56 | 1,198 | -248 | -372 | 20,241 |
| 1980 Total .................. | 19,403 | 155 | 985 | 49 | 936 | 23 | -640 | 19,877 |
| 1981 Total .................. | 19,181 | 176 | 904 | 59 | 845 | -297 | -500 | 19,404 |
| 1982 Total | 17,820 | 145 | 933 | 52 | 882 | -308 | d-537 | 18,001 |
| 1983 Total .................. | 16,094 | 132 | 918 | 55 | 864 | 447 | d-703 | 16,835 |
| 1984 Total | 17,466 | 110 | 843 | 55 | 788 | -197 | -217 | 17,951 |
| 1985 Total | 16,454 | 126 | 950 | 55 | 894 | 235 | -428 | 17,281 |
| 1986 Total | 16,059 | 113 | 750 | 61 | 689 | -147 | -493 | 16,221 |
| 1987 Total | 16,621 | 101 | 993 | 54 | 939 | -6 | -444 | 17,211 |
| 1988 Total .................. | 17,103 | 101 | 1,294 | 74 | 1,220 | 59 | -453 | 18,030 |
| 1989 Total | 17,311 | 107 | 1,382 | 107 | 1,275 | 326 | 101 | g 19,119 |
| 1990 Total .................. | 17,810 | 123 | 1,532 | 86 | 1,447 | -513 | 307 | g 19,174 |
| 1991 Total | 17,698 | 113 | 1,773 | 129 | 1,644 | 80 | 27 | g 19,562 |
| 1992 Total .................. | 17,840 | 118 | 2,138 | 216 | 1,921 | 173 | 176 | g 20,228 |
| 1993 Total | 18,095 | 119 | 2,350 | 140 | 2,210 | -36 | 401 | 20,790 |
| 1994 Total .............. | 18,821 | 111 | 2,624 | 162 | 2,462 | -286 | 139 | 21,247 |
| 1995 Total | 18,599 | 110 | 2,841 | 154 | 2,687 | 415 | 396 | 22,207 |
| 1996 Total .................. | 18,854 | 109 | 2,937 | 153 | 2,784 | 2 | 860 | 22,610 |
| 1997 Total | 18,902 | 103 | 2,994 | 157 | 2,837 | 24 | 871 | 22,737 |
| 1998 Total | 19,024 | 102 | 3,152 | 159 | 2,993 | -530 | 657 | 22,246 |
| 1999 Total | 18,832 | 98 | 3,586 | 163 | 3,422 | 172 | -119 | 22,405 |
| 2000 Total .................. | 19,182 | 90 | 3,782 | 244 | 3,538 | 829 | -305 | 23,333 |
| 2001 Total .................. | 19,616 | 86 | 3,977 | 373 | 3,604 | -1,166 | 99 | 22,239 |
| 2002 January ............... | 1,619 | 6 | 343 | 34 | 309 | 558 | -4 | 2,487 |
| February | 1,450 | 6 | 306 | 30 | 276 | 474 | 36 | 2,240 |
| March | 1,620 | 6 | 333 | 38 | 294 | 327 | 11 | 2,258 |
| April | 1,565 | 5 | 315 | 39 | 276 | -129 | 163 | 1,879 |
| May | 1,629 | 5 | 319 | 39 | 280 | -330 | 26 | 1,610 |
| June | 1,569 | 5 | 318 | 45 | 273 | -350 | 92 | 1,589 |
| July .................... | 1,636 | 6 | 345 | 45 | 300 | -248 | 54 | 1,748 |
| August ............... | 1,603 | 6 | 356 | 47 | 310 | -242 | 47 | 1,723 |
| September | 1,516 | 5 | 336 | 47 | 289 | -276 | 8 | 1,542 |
| October | 1,552 | 6 | 343 | 42 | 301 | -89 | -127 | 1,643 |
| November ........... | 1,556 | 6 | 331 | 55 | 276 | 202 | -130 | 1,910 |
| December ........... | 1,613 | 7 | 371 | 55 | 316 | 572 | -132 | 2,376 |
| Total .................. | 18,928 | 68 | 4,015 | 516 | 3,499 | 468 | 44 | 23,007 |
| 2003 January ............... | 1,611 | 6 | 365 | 60 | 305 | 865 | -72 | 2,716 |
| February | 1,465 | 6 | 314 | 59 | 255 | 698 | 87 | 2,511 |
| March | 1,658 | 5 | 329 | 55 | 275 | 139 | 130 | 2,207 |
| April | 1,587 | 5 | 317 | 52 | 266 | -162 | 55 | 1,750 |
| May | 1,621 | 6 | 328 | 50 | 277 | -424 | 40 | 1,520 |
| June | 1,569 | 5 | 310 | 54 | 256 | -483 | 25 | 1,372 |
| July | 1,589 | 6 | 345 | 50 | 296 | -372 | 84 | 1,603 |
| August ................ | 1,621 | 6 | 337 | 51 | 286 | -319 | 60 | 1,653 |
| September | 1,562 | 5 | 326 | 55 | 271 | -423 | 15 | 1,430 |
| October | 1,615 | 5 | 336 | 61 | 275 | -292 | -37 | 1,566 |
| November ........... | 1,544 | 6 | 322 | 71 | 251 | 89 | -128 | 1,763 |
| December ........... | 1,594 | 7 | 367 | 76 | 291 | 489 | -97 | 2,284 |
| Total .................. | 19,036 | 68 | 3,996 | 692 | 3,305 | -194 | 161 | 22,375 |
| 2004 January .............. | E 1,631 | 6 | 372 | 60 | 312 | 811 | -88 | R 2,672 |
| February | E 1,515 | 6 | 346 | 63 | 282 | 600 | R 101 | R 2,503 |
| March | E 1,618 | 5 | 348 | 84 | 264 | 103 | R 106 | R 2,097 |
| April | E 1,558 | 5 | 323 | 55 | 268 | -198 | 116 | R 1,749 |
| May | E 1,580 | 6 | 325 | 54 | 271 | -379 | 84 | R 1,562 |
| June | E 1,549 RE 1,605 | 1 | 343 375 | 57 | 286 | -397 | R 37 | R 1,476 |
| July | RE 1,605 | 2 | 375 | 60 | 316 | -366 | R21 | R 1,577 |
| August | RE 1,601 | -5 | 360 | 60 | 300 | -345 | $\mathrm{R}^{\mathrm{R}} 4$ | R 1,565 |
| September .......... | RE 1,489 | E 5 | 341 | 66 | 274 | -325 | R 30 | R 1,473 |
| October ................ | RE 1,566 | E 5 | E 324 | E 55 | E 269 | -248 | R -46 | R 1,547 |
| November | E 1,472 | E 5 | RE 350 | E 71 | RE 279 | 65 | R-47 | R 1,775 |
| December ........... | E 1,546 | E 5 | E 410 | E 74 | E E 3 | 567 | -142 | 2,312 |
| Total .................. | E 18,731 | E 55 | E 4,216 | E 759 | E 3,457 | -110 | 176 | 22,309 |

a Marketed production (wet) minus extraction loss. See Table 4.2.
b See Note 1, "Supplemental Gaseous Fuels," at end of section
c Net withdrawals from underground storage. For 1980-2003, also includes net withdrawals of liquefied natural gas in above-ground tanks. See Note 2, "Storage," at end of section.
d See Note 3, "Balancing Item," 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)

See Note 4, "Consumption," at end of section.
May include unknown quantities of nonhydrocarbon gases
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, "Consumption, 1989-1992," at end of section.

R=Revised. E=Estimate. NA=Not available.
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: Table 4.2. - Supplemental Gaseous Fuels: 1980-1998: Energy Information Administration (EIA), Natural Gas Annual (NGA), annual reports. 1999 forward: EIA, Natural Gas Monthly (NGM), February 2005, Table 2. • Trade: Table 4.3. • Net Storage Withdrawals: 1973-1998: EIA, NGA 2000, Table 94. 1999 forward: EIA, NGM, February 2005, Table 2. - Consumption: Table 4.4. - Balancing Item: Calculated as consumption minus dry gas production, supplemental gaseous fuels, net imports, and net storage withdrawals.

Table 4.2 Natural Gas Production
(Billion Cubic Feet)

|  | Gross Withdrawals ${ }^{\text {a }}$ | Repressuring ${ }^{\text {b }}$ | Nonhydrocarbon Gases Removed ${ }^{\text {c }}$ | $\begin{aligned} & \text { Vented }{ }^{d} \\ & \text { and } \\ & \text { Flared } \end{aligned}$ | Marketed Production ${ }^{\dagger}$ | Extraction Loss ${ }^{9}$ | Dry Gas Production ${ }^{h}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1973 Total | 24,067 | 1,171 | NA | 248 | ¢ 22,648 | 917 | ¢ 21,731 |
| 1974 Total | 22,850 | 1,080 | NA | 169 | i 21,601 | 887 | - 20,713 |
| 1975 Total | 21,104 | 861 | NA | 134 | - 20,109 | 872 | 19,236 |
| 1976 Total | 20,944 | 859 | NA | 132 | - 19,952 | 854 | i 19,098 |
| 1977 Total ......................... | 21,097 | 935 | NA | 137 | - 20,025 | 863 | 1 19,163 |
| 1978 Total ......................... | 21,309 | 1,181 | NA | 153 | 1 19,974 | 852 | - 19,122 |
| 1979 Total ......................... | 21,883 | 1,245 | NA | 167 | i 20,471 | 808 | i 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 Total ......................... | 24,501 | 3,371 | 463 | 97 | 20,570 | 954 | 19,616 |
| 2002 January | 2,058 | 305 | 43 | 9 | 1,701 | 82 | 1,619 |
| February | 1,859 | 289 | 39 | 7 | 1,523 | 73 | 1,450 |
| March | 2,062 | 308 | 44 | 8 | 1,701 | 82 | 1,620 |
| April | 1,978 | 284 | 43 | 8 | 1,644 | 79 | 1,565 |
| May | 2,028 | 264 | 44 | 8 | 1,711 | 82 | 1,629 |
| June | 1,969 | 270 | 43 | 8 | 1,649 | 79 | 1,569 |
| July | 2,037 | 266 | 44 | 8 | 1,719 | 83 | 1,636 |
| August ....................... | 2,019 | 281 | 44 | 9 | 1,684 | 81 | 1,603 |
| September ................. | 1,923 | 279 | 43 | 8 | 1,593 | 77 | 1,516 |
| October .... | 1,976 | 302 | 37 | 8 | 1,630 | 78 | 1,552 |
| November .................. | 1,979 | 298 | 39 | 8 | 1,634 | 79 | 1,556 |
| December .................. | 2,053 | 309 | 40 | 10 | 1,695 | 82 | 1,613 |
| Total ......................... | 23,941 | 3,455 | 502 | 99 | 19,885 | 957 | 18,928 |
| 2003 January ..................... | 2,051 | 313 | 45 | 9 | 1,685 | 74 | 1,611 |
| February | 1,876 | 295 | 41 | 8 | 1,532 | 67 | 1,465 |
| March ........................ | 2,099 | 312 | 44 | 9 | 1,734 | 76 | 1,658 |
| April | 2,002 | 290 | 43 | 9 | 1,660 | 73 | 1,587 |
| May | 2,012 | 274 | 33 | 9 | 1,695 | 75 | 1,621 |
| June | 1,965 | 279 | 36 | 8 | 1,642 | 72 | 1,569 |
| July ........................... | 1,987 | 275 | 42 | 7 | 1,662 | 73 | 1,589 |
| August ......................... | 2,028 | 282 | 42 | 8 | 1,695 | 75 | 1,621 |
| September ................. | 1,971 | 288 | 42 | 8 | 1,634 | 72 | 1,562 |
| October ...................... | 2,052 | 312 | 42 | 8 | 1,689 | 74 | 1,615 |
| November ................... | 1,973 | 308 | 42 | 7 | 1,615 | 71 | 1,544 |
| December .................. | 2,040 | 320 | 45 | 8 | 1,668 | 73 | 1,594 |
| Total ........................... | 24,056 | 3,548 | 499 | 98 | 19,912 | 876 | 19,036 |
| 2004 January ..................... | E 2,092 | E 345 | E 34 | E 8 | E 1,706 | E 75 | E 1,631 |
| February | E 1,947 | E 323 | E 32 | E 7 | E 1,585 | E 70 | E 1,515 |
| March ......................... | E 2,085 | E 350 | E 34 | E 8 | E 1,693 | E 74 | E 1,618 |
| April | E 1,996 | E 325 | E 33 | E 8 | E 1,630 | E 72 | E 1,558 |
| May .............................. | E 2,025 | E 330 | E 34 | E 8 | E 1,653 | E 73 | E 1,580 |
| June | E 1,954 | E 293 | E 33 | E 8 | E 1,620 | E 71 | E 1,549 |
| July | E 2,005 | E 284 | RE 34 | E 9 | RE 1,679 | E 74 | RE 1,605 |
| August | RE 1,987 | E 270 | RE 34 | E9 | RE 1,675 | RE 74 | RE 1,601 |
| September ................. | RE 1,889 | E 292 | RE 32 | E 8 | RE 1,558 | RE 69 | RE 1,489 |
| October ...................... | RE 2,005 | RE 326 | RE 33 | E 8 | RE 1,638 | RE 72 | RE 1,566 |
| November .................. | RE 1,860 | RE 281 | E 31 | E 8 | E 1,540 | E 68 | E 1,472 |
| December .................... | E 1,965 | E 307 | E 33 | E 8 | E 1,617 | E 71 | E 1,546 |
| Total ......................... | E 23,811 | E 3,725 | E 397 | E 97 | E 19,593 | E 862 | E 18,731 |

a Gas withdrawn from natural gas and crude oil wells; excludes lease condensate.
b Natural gas injected into natural gas and crude oil formations to effect greater ultimate recovery.
c See Note 6, "Nonhydrocarbon Gases Removed," at end of section.
d Natural gas released into the air on the base site or at processing plants.
e Natural gas burned in flares on the base site or at processing plants. See Note 7, "Production," at end of section.
ite 7, "Production," at end of section. and vented and flared. See Note 7, "Production," at end of section.
g See Note 8, "Extraction Loss," at end of section.
Marketed production (wet) minus extraction loss
i May include unknown quantities of nonhydrocarbon gases.
$R=$ Revised. NA=Not available. 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/natgas.html.
Sources: - 1973-1998: Energy Information Administration (EIA), Natural Sources: - 1973-1998: Energy Information Administration (EIA), Natural
Gas Annual 2000, Table 93. - 1999 forward: EIA, Natural Gas Monthly, February 2005, Table 1.

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

|  | Imports |  |  |  |  |  |  |  | Exports |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Algeria ${ }^{\text {a }}$ | Australia ${ }^{\text {a }}$ | Canada ${ }^{\text {b }}$ | Mexico ${ }^{\text {b }}$ | Qatar ${ }^{\text {a }}$ | Trinidad and Tobago ${ }^{\text {a }}$ | Other ${ }^{\text {c }}$ | Total | Canadab | Japan ${ }^{\text {a }}$ | Mexico ${ }^{\text {b }}$ | 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 | (s) | 904 | (s) | 56 | 3 | 59 |
| 1982 Total .................. | 55 | 0 | 783 | 95 | 0 | 0 | (s) | 933 | (s) | 50 | 2 | 52 |
| 1983 Total .................. | 131 | 0 | 712 | 75 | 0 | 0 | (s) | 918 | (s) | 53 | 2 | 55 |
| 1984 Total | 36 | 0 | 755 | 52 | 0 | 0 | (s) | 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 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 | 298 | 1 | 0 | 8 | 0 | 306 | 16 | 4 | 11 | 30 |
| March ................. | 0 | 0 | 322 | 0 | 0 | 10 | 0 | 333 | 14 | 6 | 18 | 38 |
| April | 2 | 0 | 298 | 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 | 318 | 14 | 6 | 25 | 45 |
| July | 5 | 0 | 323 | 0 | 5 | 11 | 0 | 345 | 12 | 6 | 28 | 45 |
| August ................ | 0 | 0 | 332 | 0 | 3 | 16 | 6 | 356 | 12 | 6 | 29 | 47 |
| September | 0 | 0 | 319 | 0 | 3 | 14 | 0 | 336 | 13 | 6 | 28 | 47 |
| October ............... | 0 | 0 | 316 | 0 | 0 | 22 | 5 | 343 | 10 | 6 | 26 | 42 |
| November ........... | 3 | 0 | 309 | 0 | 0 | 19 | 0 | 331 | 28 | 6 | 21 | 55 |
| December ............ | 3 | 0 | 351 | 0 | 0 | 18 | 0 | 371 | 26 | 6 | 23 | 55 |
| Total .................. | 27 | 0 | 3,785 | 2 | 35 | 151 | 16 | 4,015 | 189 | 63 | 263 | 516 |
| 2003 January ............... | 0 | 0 | 342 | 0 | 0 | 23 | 0 | 365 | 27 | 4 | 28 | 60 |
| February | 0 | 0 | 293 | 0 | 0 | 21 | 0 | 314 | 28 | 6 | 25 | 59 |
| March .................. | 3 | 0 | 298 | 0 | 2 | 26 | 0 | 329 | 32 | 6 | 17 | 55 |
| April | 11 | 0 | 285 | 0 | 0 | 19 | 3 | 317 | 26 | 6 | 20 | 52 |
| May .................... | 4 | 0 | 282 | 0 | 0 | 30 | 11 | 328 | 18 | 4 | 29 | 50 |
| June ................... | 3 | 0 | 262 | 0 | 0 | 34 | 11 | 310 | 20 | 3 | 30 | 54 |
| July | 5 | 0 | 288 | 0 | 3 | 44 | 5 | 345 | 16 | 7 | 27 | 50 |
| August ................ | 3 | 0 | 288 | 0 | 0 | 35 | 11 | 337 | 16 | 5 | 30 | 51 |
| September .......... | 8 | 0 | 272 | 0 | 6 | 29 | 11 | 326 | 21 | 5 | 28 | 55 |
| October | 11 | 0 | 279 | 0 | 3 | 38 | 6 | 336 | 20 | 8 | 33 | 61 |
| November ........... | 3 | 0 | 275 | 0 | 0 | 40 | 4 | 322 | 32 | 6 | 33 | 71 |
| December ............ | 3 | 0 | 327 | 0 | 0 | 37 | 0 | 367 | 38 | 6 | 32 | 76 |
| Total .................. | 53 | 0 | 3,490 | 0 | 14 | 378 | 61 | 3,996 | 294 | 64 | 333 | 692 |
| 2004 January ............... | 7 | 0 | 319 | 0 | 0 | 43 | 3 | 372 | 24 | 5 | 31 | 60 |
| February | 8 | 0 | 297 | 0 | 0 | 41 | 0 | 346 | 31 | 5 | 27 | 63 |
| March .................. | 11 | 0 | 299 | 0 | 0 | 38 | 0 | 348 | 49 | 6 | 30 | 84 |
| April ................... | 8 | 0 | 277 | 0 | 3 | 35 | 0 | 323 | 26 | 6 | 24 | 55 |
| May | 5 | 3 | 271 | 0 | 3 | 36 | 6 | 325 | 20 | 2 | 32 | 54 |
| June ................... | 16 | 3 | 286 | 0 | 0 | 34 | 4 | 343 | 17 | 4 | 36 | 57 |
| July | 11 | 6 | 300 | 0 | 3 | 38 | 17 | 375 | 16 | 6 | 38 | 60 |
| August ............... | 22 | 0 | 301 | 0 | 0 | 38 | 0 | 360 | 15 | 6 | 39 | 60 |
| September .......... | 7 | 0 | 283 | 0 | 0 | +41 | 9 | 341 | +22 | 7 | +37 | -66 |
| October ............... | E 6 | 0 | R 279 | 0 | E 3 | E 36 | 0 | E 324 | E 17 | 5 | E 32 | E 55 |
| November ............ | 0 | 0 | R 309 | 0 | 0 | E 41 | 0 | RE 350 | E 33 | 6 | E 32 | E 71 |
| December ............ | 0 | 0 | E 347 | 0 | 0 | E 64 | 0 | E 410 | E 36 | 6 | E 32 | E 74 |
| Total ................... | E 101 | 12 | E 3,567 | 0 | E 12 | E 485 | 40 | E 4,216 | E 307 | 62 | E 390 | E 759 |

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, "Imports and Exports," at end of section.
c Brunei in 2002; Indonesia in 1986 and 2000; Malaysia in 1999 and 2002 forward; Nigeria in 2000 forward; Oman in 2000 forward; and United Arab forward; Nigeria in 2000
Emirates in 1996-2000
$R=$ Revised. E=Estimate. (s)=Less than 500 million cubic feet.
Notes: • See Note 9, "Imports and Exports," 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: - 1973-1987: Energy Information Administration (EIA), Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." - 1988-1998: EIA, Natural Gas Annual, annual reports. - 1999 forward: EIA, - 1988-1998: EIA, Natural Gas Annual, annual reports. • 1999 forward: ElA, Natural Gas Monthly, February 2005, Tables 5 and 6; and Depal
Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."

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

|  | End-Use Sectors |  |  |  |  |  |  |  |  |  | Electric Power Sector ${ }^{\text {t,g }}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Residential | Commerciala | Lease and Plant Fuel | Industrial |  |  |  | Transportation |  |  |  |  |
|  |  |  |  | Other Industrial |  |  | Total | Pipelines ${ }^{d}$ and Distribution ${ }^{-}$ | Vehicle Fuel | Total |  |  |
|  |  |  |  | CHPb | Non-CHP ${ }^{\text {c }}$ | Total |  |  |  |  |  |  |
| 1973 Total .................. | 4,879 | 2,597 | 1,496 | $\left(\begin{array}{l}\text { h } \\ \text { ) }\end{array}\right.$ | 8,689 | 8,689 | 10,185 | 728 | NA | 728 | 3,660 | 22,049 |
| 1974 Total | 4,786 | 2,556 | 1,477 | (h) | 8,292 | 8,292 | 9,769 | 669 | NA | 669 | 3,443 | 21,223 |
| 1975 Total .................. | 4,924 | 2,508 | 1,396 | (h) | 6,968 | 6,968 | 8,365 | 583 | NA | 583 | 3,158 | 19,538 |
| 1976 Total .................. | 5,051 | 2,668 | 1,634 | (h) | 6,964 | 6,964 | 8,598 | 548 | NA | 548 | 3,081 | 19,946 |
| 1977 Total | 4,821 | 2,501 | 1,659 | (h) | 6,815 | 6,815 | 8,474 | 533 | NA | 533 | 3,191 | 19,521 |
| 1978 Total .................. | 4,903 | 2,601 | 1,648 | (h) | 6,757 | 6,757 | 8,405 | 530 | NA | 530 | 3,188 | 19,627 |
| 1979 Total ...................... | 4,965 | 2,786 | 1,499 | (h) | 6,899 | 6,899 | 8,398 | 601 | NA | 601 | 3,491 | 20,241 |
| 1980 Total .................. | 4,752 | 2,611 | 1,026 | (h) | 7,172 | 7,172 | 8,198 | 635 | NA | 635 | 3,682 | 19,877 |
| 1981 Total .................. | 4,546 | 2,520 | , 928 | (h) | 7,128 | 7,128 | 8,055 | 642 | NA | 642 | 3,640 | 19,404 |
| 1982 Total .................. | 4,633 | 2,606 | 1,109 | ( h ) | 5,831 | 5,831 | 6,941 | 596 | NA | 596 | 3,226 | 18,001 |
| 1983 Total ................... | 4,381 | 2,433 | , 978 | (h) | 5,643 | 5,643 | 6,621 | 490 | NA | 490 | 2,911 | 16,835 |
| 1984 Total .................. | 4,555 | 2,524 | 1,077 | (h) | 6,154 | 6,154 | 7,231 | 529 | NA | 529 | 3,111 | 17,951 |
| 1985 Total .................. | 4,433 | 2,432 | 966 | (h) | 5,901 | 5,901 | 6,867 | 504 | NA | 504 | 3,044 | 17,281 |
| 1986 Total .................. | 4,314 | 2,318 | 923 | (h) | 5,579 | 5,579 | 6,502 | 485 | NA | 485 | 2,602 | 16,221 |
| 1987 Total ................... | 4,315 | 2,430 | 1,149 | (h) | 5,953 | 5,953 | 7,103 | 519 | NA | 519 | 2,844 | 17,211 |
| 1988 Total ................... | 4,630 | 2,670 | 1,096 | (h) | 6,383 | 6,383 | 7,479 | 614 | NA | 614 | 2,636 | 18,030 |
| 1989 Total .................. | 4,781 | 2,718 | 1,070 | +914 | 5,903 | i 6,816 | 7,886 | 629 | NA | 629 | g,i ${ }^{\text {, }} 105$ | - 19,119 |
| 1990 Total .................. | 4,391 | 2,623 | 1,236 | 1,055 | 5,963 | 17,018 | 8,255 | 660 | (s) | 660 | i 3,245 | -19,174 |
| 1991 Total | 4,556 | 2,729 | 1,129 | 1,061 | 6,170 | i 7,231 | 8,360 | 601 | (s) | 602 | i 3,316 | i 19,562 |
| 1992 Total .................. | 4,690 | 2,803 | 1,171 | 1,107 | 6,420 | 17,527 | 8,698 | 588 | 2 | 590 | i 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 | 3,807 | 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 | 9,158 | 645 | 12 | 657 | 4,820 | 22,405 |
| 2000 Total .................. | 4,996 | 3,182 | 1,151 | 1,386 | 6,757 | 8,142 | 9,293 | 642 | 13 | 655 | 5,206 | 23,333 |
| 2001 Total .................. | 4,771 | 3,023 | 1,119 | 1,310 | 6,035 | 7,344 | 8,463 | 625 | 15 | 640 | 5,342 | 22,239 |
| 2002 January | 815 | 435 | 96 | 114 | 572 | 686 | 781 | 73 | E1 | 74 | 381 | 2,487 |
| February | 713 | 400 | 86 | 100 | 531 | 631 | 717 | 66 | E 1 | 67 | 344 | 2,240 |
| March .................. | 660 | 373 | 96 | 107 | 549 | 655 | 751 | 66 | E1 | 67 | 407 | 2,258 |
| April | 415 | 267 | 92 | 97 | 547 | 645 | 737 | 54 | E1 | 56 | 404 | 1,879 |
| May ...................... | 255 | 192 | 95 | 107 | 503 | 610 | 705 | 46 | E1 | 47 | 410 | 1,610 |
| June | 160 | 146 | 92 | 102 | 491 | 593 | 685 | 46 | E1 | 47 | 551 | 1,589 |
| July .................... | 125 | 137 | 95 | 111 | 495 | 606 | 701 | 50 | E1 | 52 | 734 | 1,748 |
| August ............... | 116 | 136 | 94 | 108 | 502 | 610 | 704 | 50 | E1 | 51 | 718 | 1,723 |
| September .......... | 124 | 141 | 89 | 101 | 472 | 573 | 663 | 44 | E1 | 45 | 569 | 1,542 |
| October ............... | 251 | 199 | 92 | 97 | 513 | 611 | 703 | 47 | E1 | 49 | 442 | 1,643 |
| November ........... | 483 | 298 | 92 | 97 | 532 | 629 | 721 | 55 | E1 | 57 | 352 | 1,910 |
| December ............ | 772 | 419 | 95 | 98 | 560 | 659 | 754 | 69 | E1 | 71 | 360 | 2,376 |
| Total .................. | 4,889 | 3,144 | 1,113 | 1,240 | 6,267 | 7,507 | 8,620 | 667 | 15 | 682 | 5,672 | 23,007 |
| 2003 January ............... | 946 | 522 | 96 | 106 | 580 | 686 | 782 | 82 | $\mathrm{E}_{2}$ | 84 | 382 | 2,716 |
| February .............. | 884 | 487 | 87 | 91 | 549 | 640 | 727 | 76 | E1 | 77 | 335 | 2,511 |
| March .................. | 675 | 391 | 98 | 94 | 522 | 615 | 713 | 66 | E 2 | 68 | 361 | 2,207 |
| April | 414 | 263 | 93 | 91 | 484 | 574 | 668 | 52 | E2 | 53 | 352 | 1,750 |
| May | 248 | 181 | 94 | 94 | 462 | 556 | 651 | 45 | E2 | 46 | 394 | 1,520 |
| June ................... | 157 | 138 | 92 | 94 | 414 | 508 | 600 | 40 | E2 | 42 | 436 | 1,372 |
| July .................... | 126 | 132 | 93 | 99 | 474 | 573 | 666 | 47 | E2 | 49 | 630 | 1,603 |
| August ............... | 116 | 131 | 95 | 102 | 475 | 577 | 672 | 49 | E2 | 50 | 684 | 1,653 |
| September .......... | 129 | 137 | 92 | 95 | 466 | 561 | 653 | 42 | E 2 | 43 | 469 | 1,430 |
| October ............... | 232 | 181 | 96 | 95 | 506 | 601 | 697 | 46 | E2 | 48 | 409 | 1,566 |
| November ............ | 414 | 260 | 92 | 90 | 506 | 596 | 687 | 52 | E2 | 54 | 348 | 1,763 |
| December ............ | 739 | 394 | 95 | 93 | 557 | 650 7 | 745 | 68 | E2 | 70 | 336 5 | 2,284 |
| Total .................. | 5,078 | 3,217 | 1,123 | 1,144 | 5,995 | 7,139 | 8,262 | 665 | 18 | 683 | 5,135 | 22,375 |
| 2004 January ............... | 967 | 490 | E 96 | 97 | 587 | 685 | 781 | 79 | E2 | E 81 | 352 | R2,672 |
| February .............. | 861 | 460 | E 89 | 97 | R 553 | R 651 | R 740 | 74 | E2 | E 76 | 366 | R 2,503 |
| March | 593 | 344 | E 95 | 95 | 538 | 632 | R 728 | 62 | E2 | E64 | 367 | 2,097 R 1,749 |
| April | 384 | 244 | E 92 | 91 | 501 | 592 | R 684 | 52 | E2 | RE 54 | 384 | R 1,749 |
| May | 214 | R 164 | E 93 | 99 | 471 | 570 | 663 | R 46 | E2 | E 48 | 473 | R 1,562 |
| June | 145 | R 132 | E 91 | 95 | 468 | 563 | 654 | R 44 | E2 | RE 46 | 500 | R 1,476 |
| July ................... | 126 | R 122 | E 95 | 107 | 465 | 571 | 666 | R 47 | E2 | RE 49 | 616 | R 1,577 |
| August ................. | 119 | R 122 | RE 94 | 104 | 478 | 582 | R 676 | R 47 | E2 | E 48 | 599 | R 1,565 |
| September | 125 | R125 | RE 88 | 98 | 473 | 571 | R 659 | 44 | E2 | E 45 | 519 | R 1,473 |
| October | R 216 | R166 | RE 92 | 92 | 500 | - 592 | R 684 | -46 | E2 | E 48 | 432 | R 1,547 |
| November .............. | R 407 | R 246 | E 87 | 90 | 525 | R 615 | R 702 | R 53 | E2 | E 54 | 366 | R 1,775 |
| December ............ | 723 | 387 | E 91 | 97 | 567 | 664 | 755 | 68 | E2 | E 70 | 377 | 2,312 |
| Total .................. | 4,881 | 3,002 | E 1,105 | 1,162 | 6,125 | 7,287 | 8,392 | 662 | E 20 | E 683 | 5,352 | 22,309 |

a All commercial sector fuel use, including that at commercial combined-heat-and-power (CHHP) and commercial electicitity-only plants. See Table 7 .4c tor CHP fuel use.
plants
${ }^{\text {c }}$ All industrial sector fuel use other than that in "Lease and Plant Fuel" and "CHP."
Natural gas consumed in the operation of pipelines, primarily in compressors
e Natural gas used as fuel in the delivery of natural gas to consumers.
plants within the NAICS 22 category whose primary business is to sell electricity, or electricity
and heat, to the public.
$g$ Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.
h Included in "Non-CHP."
I 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, "Consumption, 1989-1992," at end of section.

NA=Not available. (s)=Less than 500 million cubic feet.

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 ${ }^{\text {a }}$ | Volume | Percent | Withdrawals | Injections | Net ${ }^{\text {b,c }}$ |
| 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 | -305 |
| 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 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 | 606 | 59 | 546 |
| February ............. | 4,356 | 1,838 | 6,194 | 925 | 101.4 | 520 | 55 | 464 |
| March .................. | 4,355 | 1,518 | 5,873 | 776 | 104.7 | 428 | 108 | 320 |
| April ................... | 4,355 | 1,659 | 6,014 | 666 | 67.1 | 112 | 238 | -126 |
| May | 4,361 | 1,968 | 6,329 | 528 | 36.7 | 60 | 381 | -322 |
| June ................... | 4,355 | 2,308 | 6,663 | 426 | 22.6 | 56 | 397 | -341 |
| July .................... | 4,358 | 2,539 | 6,896 | 278 | 12.3 | 101 | 343 | -242 |
| August ................ | 4,357 | 2,773 | 7,130 | 198 | 7.7 | 90 | 325 | -236 |
| September .......... | 4,342 | 3,042 | 7,384 | 97 | 3.3 | 71 | 340 | -269 |
| October | 4,342 | 3,116 | 7,458 | -28 | -. 9 | 145 | 232 | -87 |
| November ........... | 4,344 | 2,929 | 7,273 | -325 | -10.0 | 322 | 124 | 198 |
| December ........... | 4,340 | 2,375 | 6,715 | -528 | -18.2 | 627 | 66 | 560 |
| Total .................. | 4,340 | 2,375 | 6,715 | -528 | -18.2 | 3,138 | 2,670 | 468 |
| 2003 January .............. | 4,344 | 1,522 | 5,866 | -822 | -35.1 | 884 | 44 | 840 |
| February | 4,337 | 851 | 5,187 | -987 | -53.7 | 724 | 47 | 677 |
| March | 4,326 | 730 | 5,056 | -788 | -51.9 | 306 | 171 | 135 |
| April | 4,317 | 893 | 5,210 | -765 | -46.1 | 119 | 277 | -158 |
| May .................... | 4,324 | 1,298 | 5,622 | -671 | -34.1 | 41 | 453 | -412 |
| June ................... | 4,325 | 1,765 | 6,090 | -543 | -23.5 | 36 | 505 | -469 |
| July .................... | 4,325 | 2,126 | 6,451 | -413 | -16.3 | 64 | 426 | -361 |
| August ................ | 4,327 | 2,436 | 6,763 | -338 | -12.2 | 62 | 372 | -310 |
| September .......... | 4,328 | 2,845 | 7,173 | -196 | -6.5 | 31 | 442 | -411 |
| October ............... | 4,327 | 3,130 | 7,457 | 14 | . 5 | 59 | 343 | -284 |
| November ........... | 4,303 | 3,038 | 7,341 | 109 | 3.7 | 228 | 142 | 87 |
| December ........... | 4,303 | 2,563 | 6,866 | 187 | 7.9 | 544 | 70 | 474 |
| Total .................. | 4,303 | 2,563 | 6,866 | 187 | 7.9 | 3,099 | 3,292 | -193 |
| 2004 January ............... | 4,301 | 1,751 | 6,052 | 217 | 14.1 | 869 | 59 | 811 |
| February ............ | 4,297 | 1,156 | 5,452 | 292 | 33.8 | 646 | 47 | 600 |
| March .................. | 4,283 | 1,058 | 5,342 | 328 | 45.0 | 269 | 165 | 103 |
| April ................... | 4,283 | 1,252 | 5,535 | 357 | 39.8 | 95 | 293 | -198 |
| May .................... | 4,287 | 1,624 | 5,911 | 323 | 24.9 | 43 | 421 | -379 |
| June ................... | 4,284 | 2,023 | 6,307 | 255 | 14.4 | 31 | 428 | -397 |
| July .................... | 4,287 | 2,395 | 6,681 | 266 | 12.5 | 56 | 422 | -366 |
| August ................ | 4,262 | 2,743 | 7,005 | 307 | 12.6 | 57 | 402 | -345 |
| September .......... | 4,254 | 3,057 | 7,310 | 214 | 7.5 | 65 | 390 | -325 |
| October ............... | 4,246 | 3,302 | 7,548 | 172 | 5.5 | 60 | 307 | -248 |
| November ........... | 4,235 | 3,245 | 7,479 | 207 | 6.8 | 189 | 124 | 65 |
| December ........... | 4,201 | 2,696 | 6,897 | 133 | 5.2 | 622 | 55 | 567 |
| Total .................. | 4,201 | 2,696 | 6,897 | 133 | 5.2 | 3,003 | 3,113 | -110 |

a For total underground storage capacity at the end of each calendar year, see Note 2, "Storage," at end of section.
b For 1980-2003, data differ from those shown on Table 4.1, which include 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, "Storage," at end of section. 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: Natural 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:

| $\mathbf{1 9 7 5}$ | $\ldots$ | 6,280 | $\mathbf{1 9 8 5}$ | $\ldots$ | 8,087 | $\mathbf{1 9 9 5}$ | $\ldots$ | 7,953 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $\mathbf{1 9 7 6}$ | $\ldots$ | 6,544 | $\mathbf{1 9 8 6}$ | $\ldots$ | 8,145 | $\mathbf{1 9 9 6}$ | $\ldots$ | 7,980 |
| $\mathbf{1 9 7 7}$ | $\ldots$ | 6,678 | $\mathbf{1 9 8 7}$ | $\ldots$ | 8,124 | $\mathbf{1 9 9 7}$ | $\ldots$ | 8,332 |
| $\mathbf{1 9 7 8}$ | $\ldots$ | 6,890 | $\mathbf{1 9 8 8}$ | $\ldots$ | 8,124 | $\mathbf{1 9 9 8}$ | $\ldots$ | 8,179 |
| $\mathbf{1 9 7 9}$ | $\ldots$ | 6,929 | $\mathbf{1 9 8 9}$ | $\ldots$ | 8,124 | $\mathbf{1 9 9 9}$ | $\ldots$ | 8,229 |
| $\mathbf{1 9 8 0}$ | $\ldots$ | 7,434 | $\mathbf{1 9 9 0}$ | $\ldots$ | 8,125 | $\mathbf{2 0 0 0}$ | $\ldots$ | 8,241 |
| $\mathbf{1 9 8 1}$ | $\ldots$ | 7,805 | $\mathbf{1 9 9 1}$ | $\ldots$ | 7,993 | $\mathbf{2 0 0 1}$ | $\ldots$ | 8,415 |
| 1982 | $\ldots$ | 7,915 | $\mathbf{1 9 9 2}$ | $\ldots$ | 7,932 | $\mathbf{2 0 0 2}$ | $\ldots$ | 8,207 |
| 1983 | $\ldots$ | 7,985 | $\mathbf{1 9 9 3}$ | $\ldots$ | 7,989 | $\mathbf{2 0 0 3}$ | $\ldots$ | 8,206 |
| 1984 | $\ldots$ | 8,043 | $\mathbf{1 9 9 4}$ | $\ldots$ | 8,043 |  |  |  |

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 1980-2003 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 use for lease and plant fuel, pipelines and distribution, vehicle fuel, and electric power plants, as well as deliveries to residential, commercial, and other industrial customers.

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 produc-tion-carbon dioxide, helium, hydrogen sulfide, and nitro-gen-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 $N G A$, 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, Brunei, Indonesia, Malaysia, 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.

## Table 4.4 Notes:

- Data are for natural gas, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
- See Note, "Classification of Power Plants Into EnergyUse Sectors," at end of Section 7. - Totals may not equal sum of components due to independent rounding. Geographic coverage is the 50 States and the District of Columbia.


## Table 4.4 Web Page:

http://www.eia.doe.gov/emeu/mer/natgas.html.

## Table 4.4 Sources:

Residential, Commercial, Lease and Plant Fuel, Other Industrial Total, and Pipelines and Distribution
1973-1998: Energy Information Administration (EIA), Natural Gas Annual 2000, (NGA) (November 2001), Table 95, and Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."
1999 forward: EIA, Natural Gas Monthly (NGM), February 2005, Table 3.

## Industrial CHP

Table 7.4c.

## Vehicle Fuel:

1990 and 1991: EIA, NGA 2000 (November 2001), Table 95.

1992-1998: EIA, "Alternatives to Traditional Transportation Fuels 1999" (October 1999), Table 10, and "Alternatives to Traditional Transportation Fuels 2003" (February 2004), Table 10. Data for compressed natural gas and liquefied natural gas in gasoline-equivalent gallons were converted to cubic feet by multiplying by the motor gasoline conversion factor (see Table A3) and dividing by the natural gas enduse sectors conversion factor (see Table A4).
1999 forward: EIA, NGM, February 2005, Table 3, and unpublished revisions.

## Electric Power Sector

1973-1988: Table 7.3b.
1989 forward: Table 7.4b.
All Other Data: Calculated.

## 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.
1996-1998: EIA, Natural Gas Monthly, February 2003, Table 9. 1999 forward: EIA, Natural Gas Monthly, February 2005, Table 9.

## 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."
1996-2000: EIA, Natural Gas Monthly, February 2002, Table 9.
2001: EIA, Natural Gas Monthly, February 2004, Table 9.
2002 forward: EIA, Natural Gas Monthly, February 2005, Table 9.

## Section 5. Crude Oil and Natural Gas Resource Development

The February 2005 rotary rig count was 1,276 , 2 percent higher than the count in January 2005 and 14 percent higher than the count in February 2004. Of the total number of rigs in operation, 1,170 were onshore and 106 were offshore. For February 2005, the number of onshore rigs was up 15 percent and the number of offshore rigs was up 7 percent from the February 2004 count. Rotary rigs drilling for natural gas as a share of total rigs stood at 85 percent in February 2005.

Total footage drilled in February 2005 was 18.2 million feet, 2 percent higher than the footage drilled in January 2005 and up 35 percent from that drilled in February 2004.

The number of exploratory and development crude oil and natural gas wells drilled during February 2005 was 2,763, 2 percent higher than the number drilled in January 2005 and up 16 percent from the number drilled in February
2004. The number of crude oil wells drilled was 671 , and the number of natural gas wells was 2,092, 25 percent higher and 13 percent higher, respectively, than their February 2004 levels.

The number of dry holes drilled in February 2005 was 395, up 3 percent from the number drilled in January 2005 and up 15 percent from the number drilled in February 2004.

There were 2.1 thousand well service rigs active in February 2005, 3 percent higher than the previous month and 5 percent higher than the count a year ago.

The number of seismic crews active in the 48 States onshore in December 2004 was 41, 9 more than a year earlier. The number of crews active in the 48 States offshore was 7, 3 fewer than a year earlier. Two crews were active in Alaska in December 2004, 2 more than a year earlier.

Figure 5.1 Crude Oil and Natural Gas Resource Development Indicators

Active Well Service Rig Count


Wells Drilled


Wells Drilled by Type

${ }^{a}$ Federal and State Jurisdiction waters of Gulf of Mexico.
${ }^{\text {b }}$ All onshore.

Rotary Rigs in Operation


Footage Drilled


Maximum U.S. Active Seismic Crew Counts


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 ${ }^{\text {a }}$ |  |  |  |  | Total <br> Footage Drilled ${ }^{\text {c }}$ | Active Well Service Rig Count ${ }^{\text {d }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | By Site |  | By Type |  | Total ${ }^{\text {b }}$ |  |  |
|  | Onshore | Offshore | Crude Oil | Natural Gas |  |  |  |
|  | Average |  |  |  |  | Thousand Feet | Number |
| 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 Average .................. | 1,003 | 153 | 217 | 939 | 1,156 | 187,616 | NA |
| 2002 Average .................. | 717 | 113 | 137 | 691 | 830 | 138,310 | 1,830 |
| 2003 January .................... | 743 | 111 | 132 | 718 | 854 | 12,962 | 1,898 |
| February .................. | 797 | 110 | 153 | 750 | 907 | 10,866 | 1,928 |
| March ..................... | 836 | 105 | 171 | 767 | 941 | 13,269 | 1,950 |
| April ........................ | 877 | 106 | 185 | 795 | 983 | 14,409 | 1,954 |
| May | 921 | 113 | 167 | 864 | 1,034 | 14,515 | 1,927 |
| June ......................... | 958 | 109 | 152 | 910 | 1,067 | 15,080 | 1,957 |
| July ......................... | 974 | 107 | 153 | 924 | 1,081 | 15,637 | 2,016 |
| August ..................... | 979 | 111 | 153 | 932 | 1,090 | 15,776 | 2,026 |
| September ................ | 984 | 109 | 154 | 936 | 1,093 | 15,796 | 1,966 |
| October .................... | 997 | 105 | 158 | 941 | 1,102 | 16,156 | 2,064 |
| November ................. | 1,005 | 106 | 158 | 952 | 1,111 | 16,307 | 1,973 |
| December ................. | 1,010 | 104 | 153 | 959 | 1,114 | 16,301 | 1,946 |
| Average .................. | 924 | 108 | 157 | 872 | 1,032 | 177,074 | 1,967 |
| 2004 January .................... | 1,001 | 100 | 143 | 955 | 1,101 | 15,957 | 2,019 |
| February .................. | 1,020 | 99 | 153 | 961 | 1,119 | R 13,531 | 2,043 |
| March ....................... | 1,041 | 94 | 164 | 968 | 1,135 | 16,508 | 2,047 |
| April ........................ | 1,058 | 93 | 154 | 996 | 1,151 | 16,642 | 2,050 |
| May ......................... | 1,068 | 96 | 156 | 1,007 | 1,164 | 16,687 | 2,095 |
| June ........................ | 1,080 | 96 | 164 | 1,011 | 1,176 | 16,905 | 2,067 |
| July ........................ | 1,116 | 97 | 170 | 1,041 | 1,213 | R 17, 174 | 2,068 |
| August ..................... | 1,139 | 95 | 170 | 1,063 | 1,234 | R 17,462 | 2,106 |
| September ................ | 1,148 | 92 | 166 | 1,073 | 1,240 | R 17,485 | 2,078 |
| October .................... | 1,145 | 95 | 171 | 1,068 | 1,240 | R 17,543 | 2,111 |
| November ................. | 1,160 | 102 | 183 | 1,077 | 1,262 | R 17,935 | 2,024 |
| December ................. | 1,140 | 106 | 180 | 1,064 | 1,246 | R 17,693 | 2,063 |
| Average .................. | 1,095 | 97 | 165 | 1,025 | 1,192 | ${ }^{\text {R 201,522 }}$ | 2,064 |
| 2005 January .................... | 1,153 | 102 | 178 | 1,075 | 1,255 | R 17,791 | 2,091 |
| February .................. | 1,170 | 106 | 192 | 1,083 | 1,276 | 18,218 | 2,144 |
| 2-Month Average ..... | 1,162 | 103 | 185 | 1,079 | 1,265 | 36,009 | 2,118 |
| 2004 2-Month Average ..... | 1,011 | 99 | 148 | 958 | 1,110 | 29,488 | 2,031 |
| 2003 2-Month Average ..... | 770 | 110 | 143 | 734 | 881 | 23,828 | 1,913 |

[^20]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.

Total footage drilled values published last month for July 2004 through January 2005 were incorrect.

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 | 10,640 | 3,193 | 20,606 | 7,064 | 11,144 | 4,840 | 23,048 |
| 1999 Total | 157 | 539 | 1,195 | 1,891 | 4,019 | 10,338 | 2,217 | 16,574 | 4,176 | 10,877 | 3,412 | 18,465 |
| 2000 Total | 264 | 602 | 1,288 | 2,154 | 7,094 | 15,853 | 2,737 | 25,684 | 7,358 | 16,455 | 4,025 | 27,838 |
| 2001 Total | 322 | 988 | 1,669 | 2,979 | 7,738 | 21,095 | 2,415 | 31,248 | 8,060 | 22,083 | 4,084 | 34,227 |
| 2002 Total | 231 | 668 | 1,253 | 2,152 | 5,827 | 15,487 | 2,328 | 23,642 | 6,058 | 16,155 | 3,581 | 25,794 |
| 2003 January ................. | 23 | 49 | 106 | 178 | 528 | 1,326 | 202 | 2,056 | 551 | 1,375 | 308 | 2,234 |
| February ............... | 27 | 35 | 68 | 130 | 434 | 1,113 | 157 | 1,704 | 461 | 1,148 | 225 | 1,834 |
| March ................... | 22 | 46 | 86 | 154 | 493 | 1,423 | 142 | 2,058 | 515 | 1,469 | 228 | 2,212 |
| April ..................... | 21 | 65 | 92 | 178 | 621 | 1,458 | 211 | 2,290 | 642 | 1,523 | 303 | 2,468 |
| May ..................... | 22 | 53 | 91 | 166 | 627 | 1,601 | 197 | 2,425 | 649 | 1,654 | 288 | 2,591 |
| June . | 35 | 53 | 98 | 186 | 632 | 1,690 | 184 | 2,506 | 667 | 1,743 | 282 | 2,692 |
| July ...................... | 32 | 76 | 133 | 241 | 637 | 1,694 | 195 | 2,526 | 669 | 1,770 | 328 | 2,767 |
| August ................. | 32 | 77 | 112 | 221 | 635 | 1,708 | 279 | 2,622 | 667 | 1,785 | 391 | 2,843 |
| September ............ | 26 | 95 | 97 | 218 | 658 | 1,698 | 227 | 2,583 | 684 | 1,793 | 324 | 2,801 |
| October ................. | 28 | 78 | 132 | 238 | 622 | 1,724 | 258 | 2,604 | 650 | 1,802 | 390 | 2,842 |
| November ............. | 28 | 78 | 134 | 240 | 448 | 1,745 | 174 | 2,367 | 476 | 1,823 | 308 | 2,607 |
| December ............. | 17 | 79 | 134 | 230 | 636 | 1,758 | 178 | 2,572 | 653 | 1,837 | 312 | 2,802 |
| Total .................... | 313 | 784 | 1,283 | 2,380 | 6,971 | 18,938 | 2,404 | 28,313 | 7,284 | 19,722 | 3,687 | 30,693 |
| 2004 January | R21 | ${ }^{\mathrm{R}} 71$ | R 115 | R 207 | R 488 | R 1,779 | R 222 | R2,489 | R 509 | R 1,850 | R 337 | R2,696 |
| February ............... | 22 | R 71 | R117 | R210 | ${ }^{\text {R } 512}$ | R 1,786 | ${ }^{\text {R } 225}$ | R2,523 | R 534 | R 1,857 | R 342 | R 2,733 |
| March .................... | ${ }^{\text {R } 24}$ | ${ }^{\mathrm{R}} 72$ | R 119 | R215 | R 550 | ${ }^{\mathrm{R}} 1,798$ | R 230 | R2,578 | R 574 | R 1,870 | R 349 | R2,793 |
| April ..................... | $\mathrm{R}_{22}$ | ${ }^{\mathrm{R}} 74$ | R 120 | R216 | ${ }^{\text {R }} 514$ | R 1,850 | R231 | R 2,595 | R 536 | R 1,924 | R 351 | R 2,811 |
| May ..................... | $\mathrm{R}^{2} 2$ | ${ }^{\mathrm{R}} 75$ | R 121 | R219 | ${ }^{\text {R } 522}$ | R 1,871 | R 234 | R 2,627 | R 545 | R 1,946 | R 355 | R 2,846 |
| June ......................... | R24 | ${ }^{\mathrm{R}} 75$ | R 123 | R222 | R 547 | R 1,787 | R 237 | R 2,571 | R 571 | R 1,862 | R 360 | R 2,793 |
| July ...................... | R25 | R 77 | R 127 | R229 | ${ }^{\text {R } 570}$ | R 1,934 | $\mathrm{R}_{2} 245$ | R2,749 | R 595 | R 2,011 | R 372 | R 2,978 |
| August ................. | R25 | ${ }^{\text {R } 79}$ | R 129 | R 233 | R 570 | R 1,975 | R 249 | R2,794 | R 595 | R 2,054 | R 378 | ${ }^{\mathrm{R}} 3,027$ |
| September .............. | $\mathrm{R}_{24}$ | R 79 | R 129 | R232 | R 556 | R 1,994 | R 249 | R2,799 | R 580 | R 2,073 | R 378 | ${ }^{\mathrm{R}} 3,031$ |
| October ................. | R25 | ${ }^{\text {R } 79}$ | R 130 | R 234 | R 572 | R 1,985 | ${ }^{R} 250$ | R2,807 | R 597 | R2,064 | R 380 | ${ }^{\text {R 3,041 }}$ |
| November ............. | ${ }^{\mathrm{R}} 26$ | ${ }^{\mathrm{R}} 80$ | R 133 | R239 | ${ }^{\text {R } 613}$ | $\mathrm{R}^{2}$,001 | ${ }^{\text {R } 256}$ | R2,870 | R 639 | R2,081 | R 389 | R 3,109 |
| December .............. | R 26 | R 79 | R131 | R236 | R 603 | R 1,976 | R 252 | R 2,831 | R 629 | R2,055 | R 383 | R 3,067 |
| Total ..................... | ${ }^{\text {R } 287}$ | R 911 | ${ }^{\mathrm{R}} \mathbf{1 , 4 9 4}$ | ${ }^{\text {R 2,692 }}$ | ${ }^{\mathrm{R}} \mathbf{6 , 6 1 7}$ | R22,736 | ${ }^{\text {R 2,880 }}$ | ${ }^{\text {R 32,233 }}$ | ${ }^{R} 6,904$ | ${ }^{\text {R 23,647 }}$ | ${ }^{R} 4,374$ | ${ }^{\text {R 34,09 }}$, |
| 2005 January ................. | ${ }^{\text {R } 26 ~}$ | R 80 | R 132 | R 238 | R 595 | $\mathrm{R}^{1,998}$ | R 253 | R2,846 | R 621 | R 2,078 | R 385 | R 3,084 |
| February ............... | 28 | 80 | 135 | 243 | 643 | 2,012 | 260 | 2,915 | 671 | 2,092 | 395 | 3,158 |
| 2-Month Total ....... | 54 | 160 | 267 | 481 | 1,238 | 4,010 | 513 | 5,761 | 1,292 | 4,170 | 780 | 6,242 |
| 2004 2-Month Total ....... | 43 | 142 | 232 | 417 | 1,000 | 3,565 | 447 | 5,012 | 1,043 | 3,707 | 679 | 5,429 |
| 2003 2-Month Total ....... | 50 | 84 | 174 | 308 | 962 | 2,439 | 359 | 3,760 | 1,012 | 2,523 | 533 | 4,068 |

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: - 1973-1994: Energy Information Administration (EIA), computations based on well reports submitted to the American Petroleum Institute. - 1995 forward: EIA computations based on well reports submitted to the Information Handling Services Energy Group, Inc.

Data published last month for January 2004 through January 2005 were incorrect.

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

|  | 48 States, Onshore |  |  |  | 48 States, Offshore ${ }^{\text {a }}$ |  |  |  | Alaska ${ }^{\text {b }}$ |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dimensions ${ }^{\text {c }}$ |  |  | Total ${ }^{\text {d }}$ | Dimensions ${ }^{\text {c }}$ |  |  | Total ${ }^{\text {d }}$ | Dimensions ${ }^{\text {c }}$ |  |  | Total ${ }^{\text {d }}$ |  |
|  | 2 | 3 | 4 |  | 2 | 3 | 4 |  | 2 | 3 | 4 |  |  |
| 2000 March .................. | 4 | 36 | 1 | 41 | 7 | 11 | 0 | 19 | 1 | 1 | 0 | 2 | 62 |
| April ........................ | 4 | 36 | 1 | 41 | 7 | 11 | 0 | 19 | , | 2 | 0 | 3 | 63 |
| May .................... | 3 | 34 | 1 | 38 | 6 | 11 | 0 | 18 | 1 | 2 | 0 | 3 | 59 |
| June ................... | 5 | 37 | 1 | 43 | 7 | 9 | 0 | 17 | 1 | 2 | 0 | 3 | 63 |
| July .................... | 4 | 39 | 1 | 44 | 6 | 6 | 0 | 13 | 0 | 1 | 0 | 1 | 58 |
| August ................ | 4 | 40 | 1 | 45 | 7 | 7 | 0 | 15 | 0 | 1 | 0 | 1 | 61 |
| September .......... | 3 | 39 | 1 | 43 | 7 | 8 | 0 | 16 | 0 | 0 | 0 | 0 | 59 |
| October ............... | 4 | 41 | 1 | 46 | 7 | 9 | 0 | 17 | 0 | 0 | 0 | 0 | 63 |
| November ........... | 4 | 40 | 1 | 46 | 7 | 8 | 0 | 16 | 0 | 0 | 0 | 0 | 62 |
| December ........... | 5 | 41 | 1 | 48 | 8 | 8 | 0 | 17 | 0 | 0 | 0 | 0 | 65 |
| 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 |
| July ................... | 7 | 21 | 0 | 28 | 7 | 4 | 0 | 11 | 1 | 1 | 0 | 2 | 41 |
| August ............... | 8 | 22 | 0 | 30 | 7 | 4 | 0 | 11 | 1 | 1 | 0 | 2 | 43 |
| September .......... | 8 | 22 | 0 | 30 | 7 | 2 | 0 | 9 | 0 | 0 | 0 | 0 | 39 |
| October ............... | 7 | 24 | 0 | 31 | 5 | 3 | 0 | 8 | 0 | 0 | 0 | 0 | 39 |
| November ........... | 7 | 24 | 0 | 31 | 4 | 3 | 0 | 7 | 0 | 0 | 0 | 0 | 38 |
| December ........... | 7 | 25 | 0 | 32 | 5 | 5 | 0 | 10 | 0 | 0 | 0 | 0 | 42 |
| 2004 January ............... | 8 | 25 | 0 | 33 | 5 | 5 | 0 | 10 | 0 | 0 | 0 | 0 | 43 |
| February ............. | 8 | 27 | 0 | 35 | 5 | 5 | 0 | 10 | 0 | 0 | 0 | 0 | 45 |
| March .................. | 8 | 27 | 0 | 35 | 5 | 5 | 0 | 10 | 0 | 0 | 0 | 0 | 45 |
| April ................... | 9 | 27 | 0 | 36 | 5 | 4 | 0 | 9 | 0 | 0 | 0 | 0 | 45 |
| May .................... | 9 | 26 | 0 | 35 | 5 | 4 | 0 | 9 | 0 | 0 | 0 | 0 | 44 |
| June ................... | 9 | 30 | 0 | 39 | 4 | 4 | 0 | 8 | 0 | 2 | 0 | 2 | 49 |
| July .................... | 8 | 30 | 0 | 38 | 4 | 4 | 0 | 8 | 0 | 2 | 0 | 2 | 48 |
| August ................ | 8 | 31 | 0 | 39 | 4 | 4 | 0 | 8 | 0 | 2 | 0 | 2 | 49 |
| September .......... | 8 | 32 | 0 | 40 | 4 | 2 | 0 | 6 | 0 | 2 | 0 | 2 | 48 |
| October ............... | 8 | 34 | 0 | 42 | 2 | 2 | 0 | 4 | 0 | 2 | 0 | 2 | 48 |
| November ........... | 9 | 33 | 0 | 42 | 1 | 4 | 0 | 5 | 0 | 2 | 0 | 2 | 49 |
| December ........... | 9 | 32 | 0 | 41 | 3 | 4 | 0 | 7 | 0 | 2 | 0 | 2 | 50 |

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 4 D is mapping the movement of fluid interfaces in producing oil and gas reservoirs.
d Includes crews with unknown survey dimension.
R=Revised
Notes: - A "seismic crew" is a group of people, of varying number, engaged in a seismic surveying job. - "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.

Table 5.3 has not been updated this month.

## 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 February 2005 totaled 87 million short tons, slightly higher than in February 2004.

Coal consumed by the electric power sector in December 2004 was 91 million short tons, 1 percent higher than the level in December 2003.

Electric power sector coal stocks were 107 million short
tons at the end of December 2004, 12 percent lower than the level a year earlier.

Coal exports in December 2004 totaled 4 million short tons, 35 percent higher than exports in December 2003. Coal imports in December 2004 totaled 2 million short tons, 36 percent higher than imports in December 2003.

Figure 6.1 Coal
(Million Short Tons)
Overview, 1973-2004


Consumption by Sector, 1973-2004


Stocks, End of Year, 1973-2004


[^21]Table 6.1 Coal Overview
(Thousand Short Tons)

|  | Production ${ }^{\text {a }}$ | Waste Coal ${ }^{\text {b,c }}$ | Imports | Exports | Stock Change ${ }^{\text {d }}$ | Losses and Unaccounted fore | Consumption |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1973 Total .................. | 598,568 | NA | 127 | 53,587 | ( ${ }^{\text {f }}$ ) | 9-17,476 | 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 Total .................. | 1,127,689 | $\left({ }^{\text {c }}\right.$ ) | 19,787 | 48,666 | 41,630 | -2,966 | 1,060,146 |
| 2002 Total .................. | 1,094,283 | (c) | 16,875 | 39,601 | 10,215 | -5,012 | 1,066,355 |
| 2003 January ............... | 92,804 | (c) | 1,134 | 3,680 | -6,051 | -2,718 | 99,026 |
| February ............... | 82,264 | (c) | 1,804 | 2,428 | -3,488 | -1,904 | 87,032 |
| March ................. | 89,134 | (c) | 2,017 | 2,410 | 4,064 | -1,505 | 86,182 |
| April ................... | 89,378 | (c) | 2,390 | 3,571 | 6,634 | 2,251 | 79,312 |
| May .................... | 90,610 | (c) | 2,109 | 3,875 | 4,490 | 464 | 83,889 |
| June .................... | 88,511 | (c) | 1,894 | 4,003 | -2,803 | -1,302 | 90,508 |
| July .................... | 88,534 | (c) | 2,619 | 4,223 | -11,519 | -1,932 | 100,381 |
| August ................ | 89,586 | (c) | 2,133 | 4,164 | -10,204 | -4,113 | 101,872 |
| September ........... | 90,444 | (c) | 2,300 | 3,707 | -4,539 | 2,067 | 91,510 |
| October ............... | 94,058 | (c) | 2,545 | 3,997 | 2,134 | 2,078 | 88,395 |
| November ........... | 84,266 | (c) | 2,358 | 3,737 | -433 | -5,627 | 88,947 |
| December ............ | 92,163 | (c) | 1,742 | 3,219 | -4,945 | -2,176 | 97,808 |
| Total .................... | 1,071,753 | (c) | 25,044 | 43,014 | -26,659 | -14,419 | 1,094,861 |
| 2004 January ............... | R 93,681 | (c) | 1,748 | 3,447 | -13,475 | R 5,855 | R 99,602 |
| February ............. | R 86,767 | (c) | 1,789 | 2,276 | -3,288 | R-537 | R 90,105 |
| March .................. | R 95,023 | (c) | 1,788 | 3,965 | 6,336 | R 891 | R 85,620 |
| April ................... | R 91,850 | (c) | 2,157 | 5,359 | 9,357 | R -191 | 79,482 |
| May .................... | R 87,311 | (c) | 2,232 | 4,910 | -263 | R-2,837 | 87,732 |
| June ................... | R 95,048 | (c) | 2,464 | 4,987 | R -2,508 | R 1,976 | 93,058 |
| July .................... | R 92,401 | (c) | 2,531 | 3,957 | -5,627 | R-3,816 | 100,418 |
| August ................ | R 95,354 | (c) | 2,494 | 4,067 | -6,015 | R 430 | 99,367 |
| September .......... | R 93,647 | (c) | 2,779 | 4,178 | -5,072 | ${ }^{R} 4,867$ | 92,453 |
| October ............... | R 92,635 | (c) | 2,678 | 3,358 | R7,162 | R -4,017 | R 88,810 |
| November ........... | R 92,288 | (c) | 2,258 | ${ }^{\text {R }} 3,144$ | ${ }^{\mathrm{R}} 3,121$ | ${ }^{\mathrm{R}}$-527 | R 88,809 |
| December ........... | R 95,472 | (c) | 2,361 | 4,350 | -7,948 | 2,620 | 98,811 |
| Total .................. | ${ }^{\text {R 1,111,479 }}$ | (c) | 27,280 | 47,998 | -18,221 | 4,715 | 1,104,267 |
| 2005 January ............... | 90,825 |  | NA | NA | NA | NA | NA |
| February ............. | 87,089 | (c) | NA | NA | NA | NA | NA |
| 2-Month Total ..... | 177,914 | (c) | NA | NA | NA | NA | NA |
| 2004 2-Month Total ..... | 180,448 | (c) | 3,537 | 5,723 | -16,763 | 5,318 | 189,707 |
| 2003 2-Month Total ..... | 175,068 | (c) | 2,937 | 6,108 | -9,539 | -4,622 | 186,058 |

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.
$\mathrm{R}=$ Revised. $\mathrm{NA}=$ Not available.
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 stocks, 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 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Commerc |  |  |  | Industrial |  |  |  |  |  |
|  |  |  |  |  |  |  | her Industri |  |  |  | Electric |  |
|  | dential | CHPa | Other ${ }^{\text {b }}$ | Total | Plants | CHP ${ }^{\text {c }}$ | Non-CHPd | Total | Total | portation | Sectore,f | Total |
| 1973 Total .................. | 4,113 | ( g ) | 7,004 | 7,004 | 94,101 |  | 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 | ( $\left.\begin{array}{l}\text { h } \\ \mathrm{h}\end{array}\right)$ | 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 | $\binom{g}{g}$ | 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 | 1,735 | (g) | 7,395 | 7,395 | 44,022 | (h) | 73,745 | 73,745 | 117,767 | (h) | 664,399 | 791,296 |
| 1985 Total | 1,711 | (g) | 6,068 | 6,068 | 41,056 | (h) | 75,372 | 75,372 | 116,429 | (h) | 693,841 | 818,049 |
| 1986 Total | 1,763 | (g) | 5,904 | 5,904 | 35,924 | (h) | 75,583 | 75,583 | 111,508 | (h) | 685,056 | 804,231 |
| 1987 Total | 1,590 | (g) | 5,324 | 5,324 | 36,957 | (h) | 75,175 | 75,175 | 112,132 | (h) | 717,894 | 836,941 |
| 1988 Total | 1,569 | (g) | 5,561 | 5,561 | 41,888 | (h) | 76,252 | 76,252 | 118,140 | (h) | 758,372 | 883,642 |
| 1989 Total | 1,295 | 1,125 | 3,747 | 4,872 | 40,508 | 24,867 | 51,268 | 76,134 | 116,643 | (h) | ${ }^{\text {f }} 772,190$ | 895,000 |
| 1990 Total | 1,345 | 1,191 | 4,189 | 5,379 | 38,877 | 27,781 | 48,549 | 76,330 | 115,207 | (h) | 782,567 | 904,498 |
| 1991 Total | 1,097 | 1,228 | 3,769 | 4,997 | 33,854 | 27,021 | 48,384 | 75,405 | 109,259 | (h) | 783,874 | 899,227 |
| 1992 Total .................. | 1,107 | 1,175 | 3,871 | 5,045 | 32,366 | 28,244 | 45,799 | 74,042 | 106,408 | (h) | 795,094 | 907,655 |
| 1993 Total | 1,120 | 1,373 | 3,729 | 5,101 | 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 Total .................. | 481 | 1,448 | 2,441 | 3,888 | 26,075 | 25,755 | 39,514 | 65,268 | 91,344 | ( ${ }^{\text {) }}$ | 964,433 | 1,060,146 |
| 2002 January | 54 | 127 | 313 | 440 | 1,861 | 2,278 | 2,946 | 5,224 | 7,085 |  | 82,424 | 90,004 |
| February ............. | 47 | 102 | 282 | 384 | 1,763 | 1,990 | 3,240 | 5,230 | 6,993 | (h) | 72,144 | $79,569$ |
| March | 45 | 124 | 239 | 363 | 1,917 | 2,150 | 3,097 | 5,247 | 7,164 | (h) | 75,823 | 83,395 |
| April ................... | 40 | 100 | 222 | 322 | 1,932 | 2,115 | 2,721 | 4,835 | 6,767 | (h) | 71,560 | 78,688 |
| May | 30 | 105 | 139 | 245 | 1,995 | 2,110 | 2,750 | 4,860 | 6,856 | (h) | 76,528 | 83,658 |
| June ................... | 28 | 112 | 113 | 225 | 1,910 | 2,101 | 2,785 | 4,886 | 6,796 | (h) | 83,565 | 90,613 |
| July ... | 39 | 126 | 187 | 313 | 1,973 | 2,439 | 2,448 | 4,887 | 6,860 | (h) | 92,766 | 99,977 |
| August ................ | 34 | 127 | 151 | 279 | 2,054 | 2,153 | 2,739 | 4,893 | 6,947 | (h) | 91,752 | 99,012 |
| September .......... | 25 | 116 | 84 | 200 | 2,041 | 2,150 | 2,745 | 4,895 | 6,936 | (h) | 84,144 | 91,305 |
| October | 33 | 114 | 150 | 264 | 2,186 | 2,231 | 3,041 | 5,272 | 7,458 | (h) | 80,714 | 88,469 |
| November ........... | 49 | 116 | 281 | 397 | 2,015 | 2,237 | 3,016 | 5,253 | 7,268 | (h) | 79,301 | 87,016 |
| December ............. | 65 | 134 | 391 | 525 | 2,009 | 2,279 | 2,986 | 5,265 | 7,274 | (h) | 86,784 | 94,648 |
| Total ....... | 489 | 1,405 | 2,551 | 3,956 | 23,656 | 26,232 | 34,515 | 60,747 | 84,403 | (h) | 977,507 | 1,066,355 |
| 2003 January ............... | 57 | 171 | 290 | 461 | 1,941 | 2,286 | 2,919 | 5,206 | 7,147 |  | 91,361 | 99,026 |
| February | 48 | 152 | 234 | 386 | 1,958 | 2,010 | 3,182 | 5,192 | 7,150 | (h) | 79,447 | 87,032 |
| March | 35 | 155 | 129 | 284 | 2,105 | 2,072 | 3,130 | 5,202 | 7,307 | (h) | 78,557 | 86,182 |
| April | 40 | 137 | 186 | 323 | 2,047 | 1,895 | 3,007 | 4,903 | 6,950 | (h) | 72,000 | 79,312 |
| May | 28 | 137 | 93 | 230 | 1,964 | 2,029 | 2,866 | 4,895 | 6,859 | (h) | 76,772 | 83,889 |
| June | 25 | 144 | 58 | 202 | 2,059 | 1,998 | 2,911 | 4,909 | 6,968 | $\binom{h}{h}$ | 83,313 | 90,508 |
| July | 35 | 159 | 127 | 287 | 2,079 | 2,183 | 2,802 | 4,985 | 7,064 | (h) | 92,994 | 100,381 |
| August | 35 | 164 | 121 | 285 | 2,007 | 2,200 | 2,780 | 4,980 | 6,987 | (h) | 94,565 | 101,872 |
| September .......... | 23 | 146 | 36 | 183 | 2,024 | 1,957 | 3,029 | 4,986 | 7,010 | (h) | 84,294 | 91,510 |
| October ............... | 28 | 141 | 83 | 224 | 2,001 | 2,008 | 3,277 | 5,285 | 7,286 | (h) | 80,857 | 88,395 |
| November | 44 | 143 | 212 | 355 | 1,976 | 1,981 | 3,389 | 5,370 | 7,345 | $\left(\begin{array}{l}\text { h } \\ \text { h }\end{array}\right.$ | 81,202 | 88,947 |
| December | 68 | 165 | 386 | 551 | 2,087 | 2,227 | 3,122 | 5,349 | $7,436$ | (h) | 89,753 | $97,808$ |
| Total .................. | 466 | 1,816 | 1,954 | 3,770 | 24,248 | 24,846 | 36,415 | 61,261 | 85,509 | ( ${ }^{\text {) }}$ ) | 1,005,116 | 1,094,861 |
| 2004 January ............... | 60 | 165 | 319 | 484 | 1,996 | 2,779 | R 2,587 | R 5,365 | R 7,361 |  | 91,698 | R 99,602 |
| February | 48 | 152 | 237 | 389 | 1,829 | 2,320 | R 3,079 | R 5,399 | R 7,228 | (h) | $82,439$ | $\text { R } 90,105$ |
| March | 32 | 140 | 117 | 258 | 2,080 | 2,329 | 3,080 | R 5,409 | R 7,489 | (h) | 77,841 | R 85,620 |
| April | 39 | 113 | 201 | 314 | 2,023 | 2,192 | 2,663 | 4,855 | 6,878 | (h) | 72,251 | 79,482 |
| May | 28 | 127 | 97 | 224 | 1,974 | 2,206 | 2,679 | 4,885 | 6,859 | (h) | 80,621 | 87,732 |
| June | 27 | 126 | 90 | 216 | 1,934 | 2,291 | 2,590 | 4,881 | $6,815$ | (h) | 86,001 | 93,058 |
| July | 36 | 128 | 167 | 295 | 1,918 | 2,439 | 2,447 | 4,886 | 6,804 | (h) | 93,283 | 100,418 |
| August ................ | 31 | 128 | 125 | 253 | 1,996 | 2,386 | 2,505 | 4,891 | 6,888 | $\left(\begin{array}{l}\text { h } \\ \text { h }\end{array}\right.$ | 92,195 | 99,367 |
| September | R 25 | 116 | 90 | 206 | 1,979 | 2,207 | 2,654 | 4,861 | 6,840 | (h) | 85,382 | 92,453 |
| October ............... | R 27 | 107 | R 111 | R 218 | R 2,002 | 2,248 | R 3,020 | R 5,269 | R 7,270 | (h) | 81,294 | R 88,810 |
| November ........... | R 44 | 130 | R 223 | R 353 | R 1,937 | 2,154 | R 3,103 | R 5,257 | R 7,194 | (h) | 81,218 | R 88,809 |
| December ........... | 69 | 139 | 420 | 559 | 2,003 | 2,444 | 2,833 | 5,276 | 7,279 | (h) | 90,903 | 98,811 |
| Total .................. | 466 | 1,574 | 2,196 | 3,770 | 23,670 | 27,996 | 33,239 | 61,235 | 84,906 | (h) | 1,015,126 | 1,104,267 |

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 .

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.
${ }^{\text {d }}$ 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.
Notes: - CHP monthly data are from Table 7.4c; electric power sector monthly data are from Table 7.4b; all other monthly values are estimated. 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.

Table 6.3 Coal Stocks by Sector
(Thousand Short Tons)

|  | $\begin{aligned} & \text { Producers } \\ & \text { and } \\ & \text { Distributors } \end{aligned}$ | End-Use Sectors |  |  |  |  | Electric Power Sectorb,c | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Residential and <br> Commercial | Industrial |  |  | Total |  |  |
|  |  |  | Coke Plants | Other ${ }^{\text {a }}$ | 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 Year ................... | 35,900 | NA | 1,510 | 6,006 | 7,516 | 7,516 | 138,496 | 181,912 |
| 2002 January ............... | 39,548 | NA | 1,427 | 5,618 | 7,045 | 7,045 | 139,400 | 185,992 |
| February | 41,589 | NA | 1,387 | 5,230 | 6,616 | 6,616 | 143,151 | 191,356 |
| March .................. | 40,284 | NA | 1,360 | 4,842 | 6,202 | 6,202 | 146,443 | 192,929 |
| April ................... | 44,961 | NA | 1,399 | 4,916 | 6,314 | 6,314 | 153,375 | 204,651 |
| May .................... | 43,946 | NA | 1,437 | 4,990 | 6,427 | 6,427 | 155,313 | 205,686 |
| June ................... | 41,288 | NA | 1,522 | 5,064 | 6,586 | 6,586 | 152,134 | 200,008 |
| July .................... | 40,496 | NA | 1,535 | 5,321 | 6,856 | 6,856 | 142,634 | 189,985 |
| August ..... | 36,489 | NA | 1,548 | 5,578 | 7,125 | 7,125 | 137,130 | 180,745 |
| September .......... | 35,662 | NA | 1,561 | 5,834 | 7,395 | 7,395 | 135,962 | 179,019 |
| October ............... | 35,191 | NA | 1,495 | 5,820 | 7,315 | 7,315 | 140,800 | 183,307 |
| November ........... | 36,954 | NA | 1,430 | 5,806 | 7,236 | 7,236 | 144,608 | 188,797 |
| December ........... | 43,257 | NA | 1,364 | 5,792 | 7,156 | 7,156 | 141,714 | 192,127 |
| 2003 January ............... | 44,648 | NA | 1,353 | 5,314 | 6,667 | 6,667 | 134,761 | 186,075 |
| February ............. | 46,039 | NA | 1,341 | 4,837 | 6,177 | 6,177 | 130,372 | 182,588 |
| March .................. | 47,429 | NA | 1,329 | 4,359 | 5,688 | 5,688 | 133,536 | 186,652 |
| April | 46,903 | NA | 1,377 | 4,297 | 5,674 | 5,674 | 140,709 | 193,286 |
| May | 46,012 | NA | 1,426 | 4,234 | 5,660 | 5,660 | 146,104 | 197,776 |
| June | 45,070 | NA | 1,474 | 4,172 | 5,646 | 5,646 | 144,257 | 194,973 |
| July | 42,735 | NA | 1,345 | 4,407 | 5,751 | 5,751 | 134,968 | 183,454 |
| August ................ | 40,647 | NA | 1,215 | 4,642 | 5,857 | 5,857 | 126,747 | 173,251 |
| September .......... | 38,231 | NA | 1,085 | 4,878 | 5,963 | 5,963 | 124,518 | 168,712 |
| October ............... | 37,352 | NA | 1,025 | 4,824 | 5,849 | 5,849 | 127,645 | 170,846 |
| November ........... | 37,984 | NA | 965 | 4,771 | 5,736 | 5,736 | 126,692 | 170,413 |
| December ........... | 38,277 | NA | 905 | 4,718 | 5,623 | 5,623 | 121,567 | 165,468 |
| 2004 January ............... | F 33,486 | NA | 1,020 | 4,458 | 5,478 | 5,478 | 113,029 | 151,993 |
| February ............. | F 34,947 | NA | 1,134 | R 4,197 | 5,332 | 5,332 | 108,426 | 148,705 |
| March ................. | F 36,618 | NA | 1,249 | R 3,937 | R 5,186 | R 5,186 | 113,237 | 155,041 |
| April ................... | F 37,489 | NA | 1,278 | 4,056 | 5,334 | 5,334 | 121,575 | 164,398 |
| May .................... | F 34,587 | NA | 1,307 | 4,175 | 5,482 | 5,482 | 124,066 | 164,136 |
| June ................... | F 35,299 | NA | 1,336 | 4,294 | 5,630 | 5,630 | 120,698 | 161,627 |
| July .................... | F 38,147 | NA | 1,289 | 4,482 | 5,771 | 5,771 | 112,081 | 156,000 |
| August ............... | F 35,357 | NA | 1,242 | 4,671 | 5,913 | 5,913 | 108,714 | 149,984 |
| September .......... | F 31,939 | NA | 1,196 | 4,859 | 6,055 | -6,055 | 106,919 | 144,913 |
| October ............... | F 34,251 | NA | R 1,245 | R 4,853 | R 6,098 | R 6,098 | 111,725 | R 152,075 |
| November ........... | F 35,752 | NA | R 1,294 | R 4,848 | R 6,142 | R 6,142 | 113,301 | R 155,195 |
| December ........... | F 34,352 | NA | 1,344 | 4,842 | 6,186 | 6,186 | 106,709 | 147,247 |

a Through 1977, data are for stocks held by the manufacturing and transportation sectors. Beginning in 1978, data are for stocks held at manufacturing plants only.
power electric power sector comprises electricity-only and combined-heat-andpower (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. $E=$ Estimate. $N A=$ Not available. $F=F o r e c a s t$.
Notes: - Stocks are at end of period. - Producer and distributor monthly values
are estimates derived from collected annual data; end-use sector monthly values are estimates derived from collected quarterly data; and electric power sector monthly values are data from Table 7.5. See Note 3 at end of section. monthly values are data from Table 7.5 . See Note 3 at end of section. - Geogaraphic coverage is the 50 States and the District of Columbia.

Geographic coverage is the 50 States and the District of
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 (19731981 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 2003 share is applied to 2004 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/EIA0202) table titled "U.S. Coal Supply and Demand: Mid World Oil Price Case." The monthly estimates are based on the quarterly values (released in March, June, September, and December) or annual values. The estimates are revised as collected data become available from the data sources. Sector-specific information follows.

Producers and Distributors—Prior to 1998, quarterly stocks at producers and distributors were taken directly from reported data. Monthly data were estimated by using onethird of the current quarterly change to indicate the monthly change in stocks. Beginning in 1998, end-of-year stocks are taken from reported data. Monthly stocks are estimated by a model.

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 onethird 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.

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 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 ReportNonutility" and predecessor form.

## Imports and Exports

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

## Stock Change

Calculated from data in Table 6.3.

## Losses and Unaccounted for

Calculated as the sum of production, imports, and waste coal, minus exports, stock change, and consumption.

## 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 DealersUpper 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 ReportQuarterly/Annual Supplement."
1985 forward: EIA, Form EIA-5, "Coke Plant ReportQuarterly."

## 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."
1980-1997: EIA, Form EIA-3, "Quarterly Coal Consumption Report-Manufacturing Plants," and Form EIA-6, "Coal Distribution Report," quarterly.
1998 forward: EIA, Form EIA-3, "Quarterly Coal Consumption Report-Manufacturing Plants," and Form EIA-6A, "Coal Distribution Report," annual.

## 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

1973-1988: Table 7.3b.
1989 forward: Table 7.4b.

## Table 6.3 Sources

## Producers and Distributors

1973-1979: DOI, BOM, Form 6-1419Q, "Distribution of Bituminous Coal and Lignite Shipments."
1980-1997: Energy Information Administration (EIA), Form EIA-6, "Coal Distribution Report," quarterly."
1998 forward: EIA, Form EIA-6A, "Coal Distribution Report," annual.

## 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 ReportQuarterly/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."

## Electric Power

Table 7.5.

## Section 7. Electricity

Overview. In 2004, net generation of electricity totaled 4.0 trillion kilowatthours, up 2 percent compared with the total in 2003. 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 34 billion kilowatthours and exported 23 billion kilowatthours of electricity in 2004.

Net Generation. In December 2004, total net generation of electricity was 340 billion kilowatthours, 2 percent higher than December 2003.

Consumption of Combustible Fuels. The consumption of coal for electricity generation and useful thermal output by all sectors was 93 million short tons in December 2004, 1 percent higher than in December 2003. Total petroleum consumption was 18 million barrels, 1 percent lower than a
year earlier, and natural gas consumption was 481 billion cubic feet, 11 percent higher than a year ago.

Stocks of Coal and Petroleum. Stocks of coal held by the electric power sector in December 2004 were 107 million short tons, 12 percent below the level held a year earlier. Total petroleum was 50 million barrels in December 2004, 7 percent lower than a year earlier.

Retail Sales of Electricity. Total retail sales of electricity in December 2004 were 300 billion kilowatthours, 2 percent higher than sales in December 2003. Sales to residential users in December 2004 were 114 billion kilowatthours, slightly higher than a year ago; commercial sector sales were 101 billion kilowatthours, 3 percent higher than a year ago; and industrial sector sales were 84 billion kilowatthours, 2 percent higher than a year ago.

Figure 7.1 Electricity Overview
(Billion Kilowatthours)


Net Generation by Sector, 1989-2004


End Use, 2004

${ }^{\text {a }}$ Includes commercial sector.
${ }^{\text {b }}$ Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.
"See "Direct Use" in Glossary.

Net Generation, 2004


Net Generation by Sector, Monthly


Trade, 1973-2004


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 ${ }^{\text {d }}$ | Exports ${ }^{\text {d }}$ | ```T&D Losses }\mp@subsup{}{}{\textrm{e} and Unaccounted for \({ }^{f}\)``` | End Use |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Electric Power Sector ${ }^{\text {a }}$ | Commercial Sector ${ }^{\text {b }}$ | Industrial Sector ${ }^{\text {C }}$ | Total |  |  |  | Retail Sales ${ }^{9}$ | Direct Use ${ }^{\text {h }}$ | 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 | 109 | 2,756 |
| 1990 Total .................... | 2,901 | 6 | 131 | 3,038 | 18 | 16 | 203 | 2,713 | 125 | 2,837 |
| 1991 Total .................. | 2,936 | 6 | 133 | 3,074 | 22 | 2 | 207 | 2,762 | 124 | 2,886 |
| 1992 Total .................. | 2,934 | 6 | 143 | 3,084 | 28 | 3 | 212 | 2,763 | 134 | 2,897 |
| 1993 Total .................. | 3,044 | 7 | 146 | 3,197 | 31 | 4 | 224 | 2,861 | 139 | 3,001 |
| 1994 Total .................. | 3,089 | 8 | 151 | 3,248 | 47 | 2 | 211 | 2,935 | 146 | 3,081 |
| 1995 Total .................. | 3,194 | 8 | 151 | 3,353 | 43 | 4 | 229 | 3,013 | 151 | 3,164 |
| 1996 Total .................. | 3,284 | 9 | 151 | 3,444 | 43 | 3 | 231 | 3,101 | 153 | 3,254 |
| 1997 Total .................. | 3,329 | 9 | 154 | 3,492 | 43 | 9 | 224 | 3,146 | 156 | 3,302 |
| 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 | 240 | 3,312 | 172 | 3,484 |
| 2000 Total .................. | 3,638 | 8 | 157 | 3,802 | 49 | 15 | 244 | 3,421 | 171 | 3,592 |
| 2001 Total .................. | 3,580 | 7 | 149 | 3,737 | 39 | 16 | 226 | 3,370 | 163 | 3,532 |
| 2002 January ............... | 306 | 1 | 13 | 320 | 3 | 1 | 16 | 292 | E 14 | 306 |
| February ............. | 269 | (s) | 12 | 282 | 3 | 1 | 7 | 264 | E13 | 277 |
| March ................. | 289 | 1 | 13 | 303 | 3 | 2 | 23 | 267 | E 14 | 281 |
| April ................... | 277 | 1 | 12 | 290 | 3 | 1 | 20 | 259 | E13 | 272 |
| May .................... | 295 | 1 | 13 | 308 | 2 | 2 | 26 | 269 | E 14 | 283 |
| June ................... | 328 | 1 | 13 | 341 | 3 | 1 | 31 | 298 | E 14 | 312 |
| July .................... | 367 | 1 | 14 | 382 | 4 | 1 | 33 | 337 | E 15 | 352 |
| August ............... | 360 | 1 | 13 | 375 | 4 | 1 | 25 | 338 | E15 | 353 |
| September ........... | 318 | 1 | 13 | 331 | 3 | 1 | 10 | 309 | E 14 | 323 |
| October ............... | 294 | 1 | 12 | 307 | 2 | 1 | 12 | 283 | E 13 | 296 |
| November ........... | 283 | 1 | 12 | 296 | 3 | 1 | 22 | 262 | E13 | 275 |
| December ............ | 312 3,698 | 1 7 | 13 153 | 325 3,858 | 3 26 | 1 14 | 283 | 284 3,463 | E 14 166 | 298 3,629 |
| 2003 January ............... | 327 | 1 | 14 | 342 | 3 | 1 | 21 | 307 | E15 | 323 |
| February ............. | 287 | 1 | 12 | 299 | 3 | 2 | 5 | 282 | E13 | 295 |
| March .................. | 291 | 1 | 13 | 304 | 3 | 3 | 17 | 273 | E 14 | 287 |
| April ................... | 273 | 1 | 12 | 286 | 3 | 2 | 18 | 256 | E13 | 269 |
| May .................... | 294 | 1 | 13 | 308 | 3 | 2 | 26 | 268 | E14 | 282 |
| June ................... | 315 | 1 | 13 | 329 | 3 | 2 | 27 | 288 | E14 | 302 |
| July .................... | 360 | 1 | 14 | 374 | 4 | 1 | 30 | 332 | E15 | 347 |
| August ............... | 367 | 1 | 14 | 382 | 4 | 1 | 29 | 340 | E15 | 355 |
| September .......... | 310 | 1 | 13 | 323 | 2 | 2 | 3 | 306 | E 14 | 320 |
| October ............... | 293 | 1 | 13 | 307 | 1 | 3 | 14 | 277 | E 14 | 291 |
| November ........... | 285 | 1 | 12 | 298 | 1 | 2 | 20 | 263 | E13 | 277 |
| December ........... | 318 | 1 | 13 | 332 | 2 | 2 | 24 | 294 | E 14 | 308 |
| Total .................. | 3,721 | 7 | 155 | 3,883 | 30 | 24 | 233 | 3,488 | 168 | 3,656 |
| 2004 January ............... | 331 | 1 | 13 | 345 | 2 | 2 | 24 | 307 | E14 | 322 |
| February ............. | 300 | 1 | 12 | 313 | 2 | 2 | 12 | 287 | E13 | 301 |
| March ................. | 293 | 1 | 13 | 307 | 2 | 3 | 14 | 278 | E 14 | 292 |
| April ................... | 277 | 1 | 12 | 290 | 2 | 2 | 14 | 263 | E 13 | 276 |
| May .................... | 313 | 1 | 13 | 326 | 2 | 2 | 33 | 280 | E 14 | 293 |
| June ................... | 331 | 1 | 13 | 344 | 3 | 2 | 23 | 308 | E 14 | 322 |
| July .................... | 361 | 1 | 14 | 376 | 4 | 1 | 29 | 335 | E15 | 350 |
| August ................ | 353 | 1 | 13 | 367 | 5 | 1 | 25 | 332 | E15 | 346 |
| September .......... | 321 | 1 | 13 | 335 | 3 | 2 | 13 | 309 | E14 | 323 |
| October ............... | 299 | 1 | 12 | 311 300 | 3 3 | 2 | 17 | 282 | E13 | 295 |
| December .............. | 326 | 1 | 13 | 340 | 3 | 2 | 28 | 300 | E 14 | 313 |
| Total ................... | 3,794 | 7 | 152 | 3,953 | 34 | 23 | 248 | 3,551 | E166 | 3,717 |

a 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 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers
b Commercial combined-heat-and-power (CHP) and commercial electricity-only plants
C Industrial combined-heat-and-power (CHP) and industrial electricity-only plants. Through 1988, data are for industrial hydroelectric power only

Electricity transmitted across U.S. borders with Canada and Mexico
e Transmission and distribution losses (electricity losses that occur between the point of generation and delivery to the customer). See Note 12, "Electrical System Energy Losses," at end of Section 2.

Data collection frame differences and nonsampling error.
g Electricity retail sales to ultimate customers by electric utilities and, beginning in 1996, other
energy service providers.
Use of electricity that is 1) self-generated, 2) produced by either the same entity that consumes the power or an affiliate, and 3) used in direct support of a service or industrial process located within the same facility or group of facilities that house the generating equipment. Direct use is exclusive of station use.
$E=$ Estimate. NA=Not available. ( s )=Less than 0.5 billion kilowatthours.
Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," 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. St.//www.eia.doe gov/emeu/mer/elect.html.
Sources: See end of section.

Figure 7.2 Electricity Net Generation

Total (All Sectors), Major Sources, 1989-2004


Total (All Sectors), Major Sources, 2004


Commercial Sector, Major Sources, 2004


[^22]Total (All Sectors), Major Sources, Monthly


Electric Power Sector, Major Sources, 2004


Industrial Sector, Major Sources, 2004


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)
(Sum of Tables 7.2b and 7.2c; Million Kilowatthours)

|  | Fossil Fuels |  |  |  | Nuclear Electric Power | Hydroelectric Pumped Storage ${ }^{\mathrm{e}}$ | Renewable Energy |  |  |  |  |  | Total ${ }^{\text {i }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coal ${ }^{\text {a }}$ | Petroleum ${ }^{\text {b }}$ | Natural Gas ${ }^{\text {c }}$ | Other Gases ${ }^{\text {d }}$ |  |  | Conventional Hydroelectric Power | Wood ${ }^{\text {f }}$ | Waste ${ }^{\text {g }}$ | Geothermal | Solar ${ }^{\text {h }}$ | Wind |  |
| 1973 Total | 847,651 | 314,343 | 340,858 | NA | 83,479 | ( ${ }^{\text {j }}$ ) | 275,431 | 130 | 198 | 1,966 | NA | NA | 1,864,057 |
| 1974 Total | 828,433 | 300,931 | 320,065 | NA | 113,976 | ( ${ }^{\text {j }}$ ) | 304,212 | 69 | 182 | 2,453 | NA | NA | 1,870,319 |
| 1975 Total | 852,786 | 289,095 | 299,778 | NA | 172,505 | ( ${ }^{\text {j }}$ ) | 303,153 | 18 | 174 | 3,246 | NA | NA | 1,920,755 |
| 1976 Total .................. | 944,391 | 319,988 | 294,624 | NA | 191,104 | ( ${ }^{\text {j }}$ ) | 286,924 | 84 | 182 | 3,616 | NA | NA | 2,040,914 |
| 1977 Total .................. | 985,219 | 358,179 | 305,505 | NA | 250,883 | ( ${ }^{\text {j }}$ ) | 223,599 | 308 | 173 | 3,582 | NA | NA | 2,127,447 |
| 1978 Total | 975,742 | 365,060 | 305,391 | NA | 276,403 | ( ${ }^{\text {j }}$ ) | 283,465 | 197 | 140 | 2,978 | NA | NA | 2,209,377 |
| 1979 Total | 1,075,037 | 303,525 | 329,485 | NA | 255,155 | ( ${ }^{\text {j }}$ ) | 283,076 | 300 | 198 | 3,889 | NA | NA | 2,250,665 |
| 1980 Total .................. | 1,161,562 | 245,994 | 346,240 | NA | 251,116 | ( ${ }^{\text {j }}$ ) | 279,182 | 275 | 158 | 5,073 | NA | NA | 2,289,600 |
| 1981 Total .................. | 1,203,203 | 206,421 | 345,777 | NA | 272,674 | ( ${ }^{\text {j }}$ ) | 263,845 | 245 | 123 | 5,686 | NA | NA | 2,297,973 |
| 1982 Total .................. | 1,192,004 | 146,797 | 305,260 | NA | 282,773 | ( ${ }^{\text {j }}$ ) | 312,374 | 196 | 125 | 4,843 | NA | NA | 2,244,372 |
| 1983 Total .................. | 1,259,424 | 144,499 | 274,098 | NA | 293,677 | ( ${ }^{\text {j }}$ ) | 335,291 | 216 | 163 | 6,075 | NA | 3 | 2,313,446 |
| 1984 Total | 1,341,681 | 119,808 | 297,394 | NA | 327,634 | ( ${ }^{\text {j }}$ ) | 324,311 | 461 | 425 | 7,741 | 5 | 6 | 2,419,465 |
| 1985 Total | 1,402,128 | 100,202 | 291,946 | NA | 383,691 | ( ${ }^{\text {j }}$ ) | 284,311 | 743 | 640 | 9,325 | 11 | 6 | 2,473,002 |
| 1986 Total | 1,385,831 | 136,585 | 248,508 | NA | 414,038 | ( ${ }^{\text {j }}$ ) | 294,005 | 492 | 685 | 10,308 | 14 | 4 | 2,490,471 |
| 1987 Total | 1,463,781 | 118,493 | 272,621 | NA | 455,270 | ( ${ }^{\text {j }}$ ) | 252,856 | 783 | 694 | 10,775 | 10 | 4 | 2,575,288 |
| 1988 Total | 1,540,653 | 148,900 | 252,801 | NA | 526,973 | ( ${ }^{\text {j }}$ ) | 226,101 | 936 | 738 | 10,300 | 9 | 1 | 2,707,411 |
| 1989 Total ${ }^{\text {k }}$ | 1,583,779 | 164,518 | 352,629 | 7,862 | 529,355 | ( ${ }^{\text {d }}$ ) | 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 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 ............. | 164,358 | 6,690 | 48,413 | 923 | 70,926 | -750 | 21,795 | 3,255 | 1,879 | 1,287 | 11 | 811 | 319,941 |
| February ........... | 143,049 | 5,664 | 44,308 | 760 | 61,658 | -586 | 20,192 | 2,844 | 1,666 | 1,132 | 24 | 714 | 281,826 |
| March .... | 151,486 | 8,217 | 51,214 | 904 | 63,041 | -684 | 21,009 | 2,961 | 1,901 | 1,245 | 44 | 852 | 302,549 |
| April | 142,305 | 7,834 | 49,146 | 890 | 58,437 | -585 | 24,247 | 3,196 | 1,771 | 1,115 | 46 | 1,024 | 289,848 |
| May .................... | 151,406 | 8,127 | 50,275 | 910 | 63,032 | -539 | 26,663 | 3,161 | 1,925 | 1,216 | 58 | 1,078 | 307,675 |
| June .................... | 164,668 | 7,796 | 65,631 | 1,009 | 66,372 | -863 | 28,213 | 3,395 | 1,969 | 1,151 | 96 | 1,126 | 341,023 |
| July ..................... | 183,195 | 9,913 | 83,917 | 1,071 | 70,421 | -998 | 25,471 | 3,440 | 2,088 | 1,262 | 86 | 890 | 381,542 |
| August ................ | 179,955 | 9,737 | 84,477 | 1,117 | 70,778 | -935 | 21,084 | 3,369 | 2,096 | 1,227 | 75 | 977 | 374,586 |
| September .......... | 165,366 | 8,075 | 68,161 | 1,053 | 64,481 | -777 | 17,087 | 3,313 | 1,941 | 1,195 | 53 | 736 | 331,279 |
| October ................ | 159,099 | 8,116 | 54,201 | 908 | 60,493 | -681 | 17,171 | 3,346 | 1,837 | 1,235 | 31 | 734 | 307,059 |
| November ............ | 156,054 | 6,287 | 45,161 | 894 | 61,520 | -666 | 19,730 | 3,161 | 1,849 | 1,189 | 28 | 656 | 296,290 |
| December ........... | 172,190 | 8,112 | 46,100 | 1,025 | 688,905 | -680 | 21,669 | 3,222 | 1,934 | 1,236 | 4 | 755 | 324,834 |
| Total .................. | 1,933,130 | 94,567 | 691,006 | 11,463 | 780,064 | -8,743 | 264,329 | 38,665 | 22,857 | 14,491 | 555 | 10,354 | 3,858,452 |
| 2003 January | 181,313 | 12,642 | 50,176 | 1,283 | 69,211 | -802 | 20,600 | 3,269 | 1,981 | 1,258 | 13 | 632 | 341,989 |
| February | 156,982 | 10,770 | 43,547 | 1,132 | 60,942 | -759 | 19,780 | 2,905 | 1,713 | 1,130 | 18 | 745 | 299,249 |
| March .... | 155,002 | 10,222 | 46,699 | 1,267 | 59,933 | -778 | 24,202 | 3,080 | 1,993 | 1,213 | 50 | 1,036 | 304,317 |
| April .................... | 141,960 | 8,581 | 45,195 | 1,305 | 56,776 | -546 | 24,759 | 3,036 | 1,988 | 1,166 | 60 | 1,093 | 285,756 |
| May ....................... | 150,263 | 8,053 | 49,373 | 1,310 | 62,202 | -597 | 29,395 | 2,928 | 1,992 | 1,169 | 68 | 1,006 | 307,545 |
| June ................... | 162,285 | 11,000 | 54,453 | 1,235 | 64,181 | -762 | 28,586 | 3,028 | 1,960 | 1,223 | 91 | 1,047 | 328,694 |
| July ... | 181,852 | 12,201 | 76,938 | 1,292 | 69,653 | -745 | 24,843 | 3,361 | 2,105 | 1,228 | 62 | 953 | 374,396 |
| August ............... | 185,332 | 12,478 | 83,250 | 1,284 | 69,024 | -806 | 22,972 | 3,310 | 2,075 | 1,219 | 62 | 815 | 381,816 |
| September .......... | 164,910 | 8,664 | 59,090 | 1,309 | 63,584 | -769 | 18,480 | 3,079 | 1,956 | 1,203 | 56 | 895 | 323,136 |
| October ............... | 159,323 | 8,610 | 51,824 | 1,291 | 60,016 | -615 | 18,428 | 3,139 | 1,920 | 1,195 | 35 | 897 | 306,741 |
| November | 158,223 | 6,480 | 45,328 | 1,451 | 59,600 | -695 | 19,715 | 3,119 | 1,937 | 1,151 | 14 | 961 | 297,867 |
| December | 176,291 | 9,705 | 44,035 | 1,441 | 68,612 | -661 -835 | 24,044 | 3,275 | 2,115 | 1,268 | 4 | 1,105 | 331,680 |
| Total .................. | 1,973,737 | 119,406 | 649,908 | 15,600 | 763,733 | -8,535 | 275,806 | 37,529 | 23,736 | 14,424 | 534 | 11,187 | 3,883,185 |
| 2004 January .............. | 180,624 | 14,840 | 47,485 | 1,170 | 70,806 | -740 | 23,248 | 3,221 | 1,878 | 1,254 | 12 | 1,045 | 345,094 |
| February ............. | 161,497 | 9,008 | 49,456 | 1,198 | 64,102 | -657 | 21,117 | 3,001 | 1,703 | 1,177 | 18 | 1,063 | 313,087 |
| March .................. | 153,572 | 9,419 | 48,947 | 1,276 | 63,263 | -616 | 22,905 | 3,064 | 1,870 | 1,199 | 53 | 1,305 | 306,712 |
| April .................... | 141,503 | 8,754 | 51,367 | 1,234 | 58,620 | -636 | 21,012 | 3,032 | 1,891 | 1,119 | 57 | 1,300 | 289,775 |
| May ....................... | 157,397 | 9,986 | 61,075 | 1,253 | 64,917 | -657 | 23,949 | 2,950 | 2,014 | 1,172 | 81 | 1,701 | 326,403 |
| June | 167,918 | 10,578 | 63,973 | 1,332 | 67,787 | -690 | 25,248 | 3,040 | 1,961 | 1,190 | 88 | 1,360 | 344,290 |
| July .... | 181,196 | 11,811 | 78,379 | 1,321 | 71,975 | -668 | 23,225 | 3,338 | 2,030 | 1,241 | 82 | 1,096 | 375,574 |
| August ................ | 178,424 | 10,795 | 76,750 | 1,286 | 71,064 | -792 | 21,730 | 3,205 | 2,010 | 1,219 | 73 | ,992 | 367,307 |
| September .......... | 164,251 | 8,579 | 67,021 | 1,332 | 65,932 | -739 | 20,591 | 3,032 | 1,789 | 1,151 | 60 | 1,085 | 334,524 |
| October .... | 157,544 | 7,527 | 56,431 | 1,258 | 62,530 | -667 | 19,077 | 3,196 | 1,842 | 1,240 | 33 | 1,028 | 311,486 |
| November | 156,427 | 6,554 | 48,559 | 1,178 | 58,941 | -623 | 21,106 | 3,001 | 1,821 | 1,177 | 15 | 963 | 299,606 |
| December | 175,978 | 9,739 | 50,168 | 1,153 | 68,617 | -607 | 26,429 | 3,215 | 1,937 | 1,216 | 8 | 1,215 | 339,548 |
| Total .................. | 1,976,333 | 117,591 | 699,610 | 14,990 | 788,556 | -8,092 | 269,637 | 37,295 | 22,747 | 14,356 | 579 | 14,153 | 3,953,407 |

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, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
fossil fuels.
f Wumped storage facility production minus e
g Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other
biomass
h Solar thermal and photovoltaic energy.
Includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies, which are not separately displayed.
$k$ Included in "Conventional Hydroelectric Power."
Through 1988, all data except hydroelectric are for electric utilities only; hydroelectric data through 1988 include industrial plants as well as electric utilities. Beginning in 1989, data are for electric utilities, independent power producers, commercial plants, and industrial plants.

NA=Not available.
Notes, Web Page, and Sources: See end of section.

Table 7.2b Electricity Net Generation: Electric Power Sector
(Subset of Table 7.2a; Million Kilowatthours)

|  | Fossil Fuels |  |  |  | Nuclear Electric Power | Hydroelectric Pumped Storage ${ }^{\mathrm{e}}$ | Renewable Energy |  |  |  |  |  | Total ${ }^{\text {i }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coal ${ }^{\text {a }}$ | Petroleum ${ }^{\text {b }}$ | Natural Gas ${ }^{\text {c }}$ | Other Gases ${ }^{\text {d }}$ |  |  | Conventional Hydroelectric Power | Wood ${ }^{\text {f }}$ | Waste ${ }^{\text {g }}$ | Geothermal | Solar ${ }^{\text {h }}$ | Wind |  |
| 1973 Total | 847,651 | 314,343 | 340,858 | NA | 83,479 | ( ${ }^{\text {j }}$ ) | 272,083 | 130 | 198 | 1,966 | NA | NA | 1,860,710 |
| 1974 Total | 828,433 | 300,931 | 320,065 | NA | 113,976 | ( ${ }^{\text {j }}$ ) | 301,032 | 69 | 182 | 2,453 | NA | NA | 1,867,139 |
| 1975 Total | 852,786 | 289,095 | 299,778 | NA | 172,505 | (j) | 300,047 | 18 | 174 | 3,246 | NA | NA | 1,917,649 |
| 1976 Total | 944,391 | 319,988 | 294,624 | NA | 191,104 | ( ${ }^{\text {j }}$ ) | 283,707 | 84 | 182 | 3,616 | NA | NA | 2,037,696 |
| 1977 Total | 985,219 | 358,179 | 305,505 | NA | 250,883 | ( ${ }^{\text {j }}$ ) | 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 | ( ${ }^{\text {j }}$ ) | 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 | ( ${ }^{\text {j }}$ ) | 309,213 | 196 | 125 | 4,843 | NA | NA | 2,241,211 |
| 1983 Total | 1,259,424 | 144,499 | 274,098 | NA | 293,677 | ( ${ }^{\text {j }}$ ) | 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 | ( ${ }^{\text {j }}$ ) | 290,844 | 492 | 685 | 10,308 | 14 | 4 | 2,487,310 |
| 1987 Total | 1,463,781 | 118,493 | 272,621 | NA | 455,270 | (i) | 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 ${ }^{\text {k }}$ | 1,562,366 | 159,005 | 297,295 | 454 | 529,355 | ( ${ }^{\text {( }}$ | 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 | -2,725 | 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 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 ............... | 162,521 | 6,265 | 40,827 | 201 | 70,926 | -750 | 21,498 | 805 | 1,665 | 1,287 | 11 | 811 | 306,171 |
| February .............. | 141,430 | 5,300 | 37,533 | 107 | 61,658 | -586 | 19,912 | 652 | 1,481 | 1,132 | 24 | 714 | 269,476 |
| March .................. | 149,724 | 7,826 | 43,875 | 160 | 63,041 | -684 | 20,732 | 776 | 1,688 | 1,245 | 44 | 852 | 289,322 |
| April ................... | 140,498 | 7,463 | 42,701 | 131 | 58,437 | -585 | 23,929 | 661 | 1,562 | 1,115 | 46 | 1,024 | 277,126 |
| May . | 149,646 | 7,767 | 43,200 | 128 | 63,032 | -539 | 26,375 | 702 | 1,694 | 1,216 | 58 | 1,078 | 294,517 |
| June ................... | 162,736 | 7,428 | 58,686 | 140 | 66,372 | -863 | 27,957 | 749 | 1,742 | 1,151 | 96 | 1,126 | 327,553 |
| July ....................... | 181,001 | 9,504 | 76,391 | 198 | 70,421 | -998 | 25,196 | 801 | 1,840 | 1,262 | 86 | 890 | 366,980 |
| August | 177,962 | 9,350 | 76,936 | 202 | 70,778 | -935 | 20,806 | 779 | 1,836 | 1,227 | 75 | 977 | 360,351 |
| September .......... | 163,497 | 7,703 | 61,381 | 181 | 64,481 | -777 | 16,839 | 808 | 1,699 | 1,195 | 53 | 736 | 317,976 |
| October | 157,195 | 7,690 | 47,932 | 171 | 60,493 | -681 | 16,828 | 739 | 1,624 | 1,235 | 31 | 734 | 294,096 |
| November ............. | 154,172 | 5,817 | 38,737 | 165 | 61,520 | -666 | 19,282 | 756 | 1,619 | 1,189 | 28 | 656 | 283,374 |
| December ........... | 170,231 | 7,620 | 39,484 | 186 | 68,905 | -680 | 21,138 | 782 | 1,732 | 1,236 | 4 | 755 | 311,516 |
| Total .................. | 1,910,613 | 89,733 | 607,683 | 1,970 | 780,064 | -8,743 | 260,491 | 9,009 | 20,180 | 14,491 | 555 | 10,354 | 3,698,458 |
| 2003 January ............... | 179,356 | 12,090 | 42,546 | 266 | 69,211 | -802 | 20,239 | 863 | 1,745 | 1,258 | 13 | 632 | 327,446 |
| February ............... | 155,283 | 10,313 | 37,041 | 237 | 60,942 | -759 | 19,474 | 763 | 1,504 | 1,130 | 18 | 745 | 286,699 |
| March .................. | 153,323 | 9,747 | 39,959 | 229 | 59,933 | -778 | 23,830 | 784 | 1,742 | 1,213 | 50 | 1,036 | 291,086 |
| April | 140,369 | 8,152 | 38,725 | 243 | 56,776 | -546 | 24,512 | 730 | 1,728 | 1,166 | 60 | 1,093 | 273,016 |
| May .......................... | 148,574 | 7,603 | 42,536 | 251 | 62,202 | -597 | 29,003 | 669 | 1,756 | 1,169 | 68 | 1,006 | 294,241 |
| June | 160,559 | 10,513 | 47,554 | 205 | 64,181 | -762 | 28,217 | 743 | 1,727 | 1,223 | 91 | 1,047 | 315,306 |
| July .................... | 180,006 | 11,682 | 69,623 | 212 | 69,653 | -745 | 24,472 | 883 | 1,846 | 1,228 | 62 | 953 | 360,116 |
| August ................ | 183,469 | 11,985 | 75,773 | 203 | 69,024 | -806 | 22,597 | 888 | 1,821 | 1,219 | 62 | 815 | 367,420 |
| September .......... | 163,243 | 8,222 | 52,178 | 205 | 63,584 | -769 | 18,144 | 800 | 1,717 | 1,203 | 56 | 895 | 309,751 |
| October ............... | 157,578 | 8,119 | 45,022 | 181 | 60,016 | -615 | 18,093 | 788 | 1,678 | 1,195 | 35 | 897 | 293,289 |
| November ............. | 156,536 | 6,080 | 38,942 | 210 | 59,600 | -695 | 19,363 | 794 | 1,715 | 1,151 | 14 | 961 | 284,902 |
| December ........... | 174,418 | 9,193 | 37,403 | 205 | 68,612 | -661 | 23,568 | 822 | 1,864 | 1,268 | 4 | 1,105 | 317,887 |
| Total .................. | 1,952,714 | 113,697 | 567,303 | 2,647 | 763,733 | -8,535 | 271,512 | 9,528 | 20,842 | 14,424 | 534 | 11,187 | 3,721,159 |
| 2004 January ............... | 178,601 | 14,218 | 40,679 | 138 | 70,806 | -740 | 22,720 | 814 | 1,651 | 1,254 | 12 | 1,045 | 331,253 |
| February ............. | 159,669 | 8,568 | 42,909 | 171 | 64,102 | -657 | 20,662 | 788 | 1,495 | 1,177 | 18 | 1,063 | 300,155 |
| March ................... | 151,700 | 8,982 | 42,242 | 183 | 63,263 | -616 | 22,483 | 788 | 1,636 | 1,199 | 53 | 1,305 | 293,443 |
| April ................... | 139,746 | 8,345 | 44,979 | 190 | 58,620 | -636 | 20,640 | 710 | 1,634 | 1,119 | 57 | 1,300 | 276,991 |
| May | 155,583 | 9,592 | 54,182 | 187 | 64,917 | -657 | 23,568 | 717 | 1,747 | 1,172 | 81 | 1,701 | 313,106 |
| June ..................... | 166,043 | 10,159 | 57,202 | 192 | 67,787 | -690 | 24,903 | 725 | 1,704 | 1,190 | 88 | 1,360 | 330,929 |
| July ...................... | 179,187 | 11,334 | 70,930 | 233 | 71,975 | -668 | 22,885 | 881 | 1,763 | 1,241 | 82 | 1,096 | 361,222 |
| August ............... | 176,480 | 10,373 | 69,445 | 214 | 71,064 | -792 | 21,368 | 853 | 1,740 | 1,219 | 73 | 992 | 353,336 |
| September .......... | 162,478 | 8,204 | 60,073 | 250 | 65,932 | -739 | 20,119 | 784 | 1,566 | 1,151 | 60 | 1,085 | 321,192 |
| October ............... | 155,736 | 7,183 | 50,109 | 192 | 62,530 | -667 | 18,650 | 804 | 1,612 | 1,240 | 33 | 1,028 | 298,677 |
| November ............ | 154,688 | 6,200 | 42,302 | 193 | 58,941 | -623 | 20,632 | 771 | 1,600 | 1,177 | 15 | 963 | 287,098 |
| December ........... | 174,056 | 9,324 | 43,544 | 176 | 68,617 | -607 | 25,866 | 852 | 1,712 | 1,216 | 8 | 1,215 | 326,196 |
| Total .................. | 1,953,968 | 112,482 | 618,597 | 2,320 | 788,556 | -8,092 | 264,497 | 9,489 | 19,859 | 14,356 | 579 | 14,153 | 3,793,599 |

[^23]g Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.
h Solar thermal and photovoltaic energy.
i 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 electric utilities only. Beginning in 1989, data are for electric utilites and independent power producers.
$N A=$ Not available.

Table 7.2c Electricity Net Generation: Commercial and Industrial Sectors
(Subset of Table 7.2a; Million Kilowatthours)

|  | Commercial Sector ${ }^{\text {a }}$ |  |  |  |  | Industrial Sector ${ }^{\text {b }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coal ${ }^{\text {c }}$ | Petroleum ${ }^{\text {d }}$ | Natural Gas ${ }^{\text {e }}$ | Waste ${ }^{\text {f }}$ | Total ${ }^{\text {9 }}$ | Coal ${ }^{\text {c }}$ | Petroleum ${ }^{\text {d }}$ | Natural Gas ${ }^{\text {e }}$ | Other Gases ${ }^{h}$ | Hydropower ${ }^{1}$ | Wood ${ }^{\text {j }}$ | Waste ${ }^{\text {f }}$ | Total ${ }^{\text {k }}$ |
| 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 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 | 85 | 35 | 355 | 111 | 597 | 1,752 | 390 | 7,231 | 721 | 296 | 2,448 | 103 | 13,173 |
| February ............. | 70 | 36 | 291 | 92 | 500 | 1,548 | 327 | 6,484 | 653 | 279 | 2,190 | 92 | 11,850 |
| March ................. | 84 | 32 | 338 | 110 | 573 | 1,677 | 359 | 7,001 | 743 | 276 | 2,184 | 103 | 12,654 |
| April ................... | 66 | 27 | 328 | 117 | 546 | 1,741 | 343 | 6,118 | 759 | 317 | 2,535 | 92 | 12,176 |
| May .................... | 69 | 27 | 314 | 145 | 566 | 1,691 | 333 | 6,761 | 781 | 287 | 2,459 | 86 | 12,592 |
| June ................... | 83 | 30 | 378 | 141 | 642 | 1,848 | 338 | 6,567 | 868 | 255 | 2,646 | 87 | 12,829 |
| July | 101 | 38 | 448 | 145 | 743 | 2,092 | 371 | 7,079 | 873 | 273 | 2,638 | 103 | 13,820 |
| August ................ | 102 | 37 | 490 | 157 | 797 | 1,891 | 350 | 7,051 | 915 | 277 | 2,589 | 102 | 13,438 |
| September .......... | 88 | 34 | 392 | 153 | 676 | 1,782 | 339 | 6,388 | 872 | 247 | 2,505 | 89 | 12,628 |
| October ............... | 78 | 31 | 344 | 138 | 600 | 1,827 | 395 | 5,925 | 737 | 343 | 2,607 | 75 | 12,363 |
| November ........... | 78 | 38 | 294 | 142 | 554 | 1,804 | 432 | 6,131 | 730 | 447 | 2,405 | 89 | 12,361 |
| December ........... | 88 | 65 | 339 | 120 | 622 | 1,872 | 426 | 6,277 | 840 | 529 | 2,439 | 83 | 12,697 |
| Total .................. | 992 | 431 | 4,310 | 1,572 | 7,415 | 21,525 | 4,403 | 79,013 | 9,493 | 3,825 | 29,643 | 1,104 | 152,580 |
| 2003 January ............... | 103 | 39 | 325 | 143 | 617 | 1,854 | 513 | 7,305 | 1,017 | 356 | 2,405 | 92 | 13,926 |
| February ............. | 99 | 33 | 289 | 123 | 550 | 1,601 | 425 | 6,217 | 894 | 301 | 2,141 | 86 | 11,999 |
| March .................. | 102 | 31 | 291 | 162 | 594 | 1,577 | 444 | 6,449 | 1,038 | 366 | 2,295 | 88 | 12,637 |
| April ................... | 96 | 20 | 293 | 165 | 581 | 1,495 | 409 | 6,178 | 1,061 | 240 | 2,305 | 95 | 12,159 |
| May .................... | 91 | 30 | 307 | 162 | 598 | 1,598 | 420 | 6,529 | 1,059 | 386 | 2,258 | 75 | 12,706 |
| June ................... | 97 | 37 | 319 | 164 | 624 | 1,628 | 450 | 6,580 | 1,031 | 363 | 2,284 | 70 | 12,763 |
| July .................... | 112 | 43 | 373 | 174 | 709 | 1,734 | 477 | 6,942 | 1,080 | 364 | 2,477 | 85 | 13,571 |
| August ................ | 115 | 44 | 387 | 165 | 718 | 1,748 | 449 | 7,090 | 1,081 | 369 | 2,421 | 90 | 13,678 |
| September ........... | 100 | 36 | 343 | 155 | 640 | 1,567 | 406 | 6,570 | 1,105 | 332 | 2,278 | 85 | 12,744 |
| October ............... | 93 | 33 | 340 | 164 | 636 | 1,652 | 459 | 6,462 | 1,110 | 330 | 2,350 | 78 | 12,816 |
| November ........... | 94 | 34 | 313 | 140 | 588 | 1,593 | 366 | 6,072 | 1,242 | 346 | 2,324 | 82 | 12,377 |
| December ............ | 103 | 44 | 320 | 164 | 640 | 1,770 | 469 | 6,312 | 1,236 | 470 | 2,451 | 87 | 13,154 |
| Total .................. | 1,206 | 423 | 3,899 | 1,881 | 7,496 | 19,817 | 5,285 | 78,705 | 12,953 | 4,222 | 27,988 | 1,012 | 154,530 |
| 2004 January ............... | 99 | 63 | 320 | 137 | 626 | 1,924 | 559 | 6,486 | 1,032 | 522 | 2,405 | 89 | 13,215 |
| February ............. | 100 | 42 | 316 | 123 | 590 | 1,728 | 398 | 6,231 | 1,027 | 446 | 2,211 | 85 | 12,342 |
| March .................. | 91 | 39 | 304 | 140 | 587 | 1,781 | 397 | 6,400 | 1,093 | 409 | 2,275 | 95 | 12,681 |
| April ................... | 72 | 36 | 286 | 149 | 556 | 1,685 | 373 | 6,102 | 1,044 | 360 | 2,321 | 109 | 12,229 |
| May .................... | 91 | 29 | 337 | 162 | 633 | 1,723 | 365 | 6,556 | 1,065 | 368 | 2,232 | 105 | 12,664 |
| June ................... | 98 | 30 | 343 | 159 | 641 | 1,777 | 390 | 6,428 | 1,139 | 334 | 2,314 | 98 | 12,720 |
| July .................... | 105 | 35 | 379 | 161 | 686 | 1,904 | 442 | 7,069 | 1,088 | 335 | 2,456 | 106 | 13,666 |
| August ................ | 109 | 32 | 378 | 157 | 681 | 1,835 | 390 | 6,927 | 1,072 | 358 | 2,352 | 113 | 13,291 |
| September .......... | 93 | 25 | 369 | 143 | 636 | 1,679 | 350 | 6,579 | 1,082 | 467 | 2,247 | 80 | 12,696 |
| October ............... | 81 | 19 | 338 | 145 | 593 | 1,728 | 324 | 5,983 | 1,066 | 420 | 2,391 | 85 | 12,216 |
| November ........... | 89 | 22 | 305 | 143 | 568 | 1,650 | 332 | 5,952 | 985 | 467 | 2,229 | 79 | 11,939 |
| December ........... | 98 | 37 | 330 | 147 | 626 | 1,824 | 378 | 6,294 | 976 | 551 | 2,361 | 78 | 12,727 |
| Total .................. | 1,126 | 410 | 4,005 | 1,766 | 7,423 | 21,239 | 4,699 | 77,008 | 12,669 | 5,036 | 27,793 | 1,122 | 152,385 |

a Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.
b Industrial combined-heat-and-power (CHP) and industrial electricity-only plants.
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, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
${ }^{\dagger}$ 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.
hlast furnace gas, propane gas, and other manufactured and waste gases
derived from fossil fuels.
i Conventional hydroelectric power.
${ }^{\mathrm{j}}$ Wood, black liquor, and other wood waste.
k Includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies, which are not separately displayed.

Notes: - See Note, "Classification of Power Plants Into Energy-Use Sectors," 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/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." - 2001-2003: EIA, Form EIA-906, "Power Plant Report." - 2004: EIA, Form EIA-906, "Power Plant Report" and Form EIA-920, "Combined Heat and Power Plant Report."

Figure 7.3 Consumption of Selected Combustible Fuels for Electricity Generation

Coal by Sector, 1989-2004


Natural Gas by Sector, 1989-2004


Wood by Sector, 1989-2004

${ }^{\text {a }}$ Includes commercial sector.
${ }^{\text {b }}$ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

Petroleum by Sector, 1989-2004


Other Gases ${ }^{\text {b }}$ by Sector, 1989-2004


Waste by Sector, 1989-2004


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: Total (All Sectors)
(Sum of Tables 7.3b and 7.3c)

|  | Coal ${ }^{\text {a }}$ | Petroleum |  |  |  |  | Natural Gas ${ }^{\dagger}$ | Other Gases ${ }^{9}$ | Wood ${ }^{\text {h }}$ | Waste ${ }^{\text {i }}$ | Other ${ }^{\text {j }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Distillate Fuel Oil ${ }^{\text {b }}$ | Residual Fuel Oil ${ }^{\text {c }}$ | Other Liquids ${ }^{\text {d }}$ | Petroleum Coke ${ }^{\text {e }}$ | Total ${ }^{\text {e }}$ |  |  |  |  |  |
|  | Thousand Short Tons | Thousand Barrels |  |  | Thousand Short Tons | Thousand Barrels | Billion Cubic Feet | Trillion Btu |  |  |  |
| 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 ${ }^{\text {k }}$ | 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 Total .................. | 972,691 | 31,150 | 165,312 | 855 | 3,871 | 216,672 | 5,832 | 97 | 486 | 347 | 41 |
| 2002 January . | 83,186 | 1,963 | 7,271 | 148 | 524 | 12,003 | 424 | 11 | 51 | 32 | 4 |
| February ............. | 72,845 | 1,239 | 6,108 | 88 | 527 | 10,069 | 381 | 9 | 46 | 29 | 4 |
| March .................. | 76,541 | 1,943 | 9,696 | 112 | 569 | 14,594 | 448 | 10 | 48 | 32 | 4 |
| April ...................... | 72,379 | 1,819 | 9,044 | 143 | 530 | 13,657 | 439 | 10 | 50 | 31 | 3 |
| May ....................... | 77,322 | 2,130 | 9,003 | 175 | 590 | 14,258 | 453 | 10 | 47 | 33 | 3 |
| June ................... | 84,412 | 1,788 | 9,076 | 119 | 645 | 14,209 | 589 | 12 | 50 | 34 | 3 |
| July ....................... | 93,763 | 2,730 | 11,793 | 208 | 600 | 17,730 | 777 | 13 | 53 | 37 | 5 |
| August .................. | 92,604 | 2,549 | 11,635 | 202 | 660 | 17,688 | 759 | 12 | 52 | 37 | 4 |
| September ........... | 84,932 | 1,759 | 9,359 | 135 | 616 | 14,333 | 605 | 11 | 52 | 34 | 5 |
| October ................ | 81,613 | 2,049 | 9,453 | 183 | 529 | 14,333 | 475 | 11 | 54 | 33 | 5 |
| November ............. | 80,234 | 1,492 | 7,123 | 177 | 498 | 11,282 | 385 | 12 | 50 | 33 | 4 |
| December ............ | 87,752 | 1,825 | 9,674 | 204 | 548 | 14,442 | 390 | 11 | 50 | 34 | 3 |
| Total | 987,583 | 23,286 | 109,235 | 1,894 | 6,836 | 168,597 | 6,126 | 131 | 605 | 399 | 49 |
| 2003 January .............. | 92,161 | 4,699 | 14,553 | 485 | 423 | 21,850 | 427 | 14 | 46 | 32 | 4 |
| February ............. | 80,128 | 4,006 | 12,425 | 371 | 391 | 18,756 | 373 | 12 | 39 | 28 | 3 |
| March .................. | 79,207 | 2,949 | 12,701 | 331 | 342 | 17,692 | 400 | 12 | 43 | 32 | 4 |
| April ....................... | 72,672 | 1,646 | 10,940 | 161 | 479 | 15,144 | 389 | 13 | 41 | 32 | 3 |
| May ....................... | 77,559 | 2,688 | 8,808 | 134 | 455 | 13,906 | 437 | 12 | 39 | 33 | 4 |
| June ................... | 84,060 | 3,071 | 12,875 | 203 | 541 | 18,852 | 479 | 13 | 43 | 32 | 4 |
| July ........................ | 93,797 | 2,545 | 15,033 | 261 | 623 | 20,956 | 672 | 14 | 46 | 34 | 6 |
| August ................ | 95,352 | 2,196 | 15,995 | 358 | 613 | 21,612 | 728 | 14 | 46 | 34 | 8 |
| September .......... | 85,003 | 1,362 | 10,443 | 188 | 596 | 14,976 | 509 | 13 | 43 | 32 | 7 |
| October ................ | 81,618 | 1,428 | 10,090 | 166 | 612 | 14,745 | 448 | 13 | 43 | 31 | 7 |
| November ........... | 81,941 | 1,271 | 6,917 | 132 | 602 | 11,329 | 384 | 13 | 42 | 30 | 5 |
| December ............. | 90,560 | 1,811 | 11,737 | 155 | 627 | 16,836 | 370 | 12 | 48 | 33 | 4 |
| Total .................. | 1,014,058 | 29,672 | 142,518 | 2,947 | 6,303 | 206,653 | 5,616 | 156 | 519 | 383 | 59 |
| 2004 January ............... | 92,995 | 4,169 | 17,830 | 854 | 700 | 26,353 | 412 | 18 | 64 | 31 | 1 |
| February | 83,637 | 1,371 | 11,396 | 153 | 587 | 15,858 | 426 | 17 | 59 | 29 | 1 |
| March .................. | 79,093 | 1,339 | 12,007 | 178 | 596 | 16,502 | 424 | 19 | 62 | 32 | 2 |
| April | 73,420 | 1,230 | 11,059 | 158 | 614 | 15,518 | 433 | 18 | 60 | 32 | 2 |
| May | 81,761 | 1,721 | 12,691 | 179 | 627 | 17,726 | 528 | 19 | 55 | 33 | 2 |
| June | 87,190 | 1,583 | 13,969 | 132 | 568 | 18,525 | 552 | 18 | 57 | 33 | 1 |
| July | 94,566 | 1,394 | 16,016 | 188 | 611 | 20,655 | 676 | 18 | 62 | 34 | 2 |
| August ................ | 93,452 | 1,326 | 14,305 | 114 | 685 | 19,168 | 659 | 19 | 59 | 34 | 1 |
| September .......... | 86,515 | 1,594 | 10,355 | 144 | 626 | 15,225 | 575 | 18 | 56 | 31 | 1 |
| October | 82,477 | 1,089 | 8,829 | 108 | 661 | 13,329 | 485 | 18 | 59 | 31 | 1 |
| November ........... | 82,326 | 1,007 | 7,764 | 212 | 545 | 11,711 | 418 | 16 | 56 | 31 | 1 |
| December ............ | 92,131 | 1,867 | 11,663 | 251 | 675 | 17,158 | 433 | 15 | 60 | 33 | 2 |
| Total .................. | 1,029,564 | 19,690 | 147,885 | 2,671 | 7,497 | 207,729 | 6,020 | 211 | 710 | 383 | 18 |

[^24]fossil fuels.
i Wood, black liquor, and other wood waste.
i Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and othe biomass.
j Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.
through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities, independent power producers, commercial plants, and industrial plants.
$\mathrm{NA}=$ Not available. (s)=Less than 0.5 trillion Btu.
Notes, Web Page, and Sources: See end of section.

Table 7.3b Consumption of Combustible Fuels for Electricity Generation: Electric Power Sector (Subset of Table 7.3a)

|  | Coal ${ }^{\text {a }}$ | Petroleum |  |  |  |  | Natural Gas ${ }^{\dagger}$ | Other Gases ${ }^{9}$ | Wood ${ }^{\text {h }}$ | Waste ${ }^{\text {i }}$ | Other |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Distillate Fuel Oil ${ }^{\text {b }}$ | Residual Fuel Oil ${ }^{\text {c }}$ | Other Liquids ${ }^{d}$ | Petroleum Coke ${ }^{\text {e }}$ | Total ${ }^{\text {e }}$ |  |  |  |  |  |
|  | Thousand Short Tons | Thousand Barrels |  |  | Thousand Short Tons | Thousand Barrels | Billion Cubic Feet | Trillion Btu |  |  |  |
| 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 |  | 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 |  | 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 |  |
| 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 23 | 117 | 292 | 1 |
| 1998 Total ................. | 934,126 937,888 | 23,166 23,875 | 165,875 151,921 | 411 514 | 3,999 3,607 | 209,447 194,345 | 4,416 | 23 14 | 125 125 | 287 290 | ${ }_{1}^{2}$ |
| 2000 Total. | 982,713 | 29,722 | 138,047 | 403 | 3,155 | 183,946 | 5,014 | 19 | 126 | 294 | 1 |
| 2001 Total ................. | 961,523 | 29,056 | 159,150 | 374 | 3,308 | 205,119 | 5,142 | 9 | 116 | 314 | 0 |
| 2002 January .............. | 82,197 | 1,832 | 6,853 | 89 | 431 | 10,928 | 360 | 3 | 12 | 29 | (s) |
| February .............. | 71,972 | 1,134 | 5,772 | 43 | 450 | 9,198 | 324 | 2 |  | 26 |  |
| March .................. | 75,613 | 1,823 | 9,258 | 57 | 476 | 13,515 | 385 | ${ }_{1}$ | 12 | 29 | (s) |
| April ................... | 71,377 | 1,738 | 8,680 | 103 | 456 | 12,800 | 384 | 1 | 11 | 28 | (s) |
| May | 76,367 | 2,012 | 8,658 | 135 | 514 | 13,373 | 390 | 2 | 10 | 29 | 1 |
| June ................... | 83,393 | 1,696 | 8,729 | 85 | 552 | 13,268 | 529 | 2 | 11 | 30 |  |
| July ................... | 92,575 | 2,611 | 11,419 | 170 | 487 | 16,637 | 710 | 2 | 12 | 32 | 1 |
| August ................ | 91,543 | 2,428 | 11,289 | 163 | 553 | 16,646 | 693 | 3 | 13 | 32 | 1 |
| September ........... | 83,958 | 1,638 | 9,016 | 101 | 507 | 13,292 | 546 | 2 | 13 | 30 | 1 |
| October ............... | 80,533 | 1,918 | 9,070 | 91 | 423 | 13,194 | 421 | 2 | 12 | 29 | (s) |
| November ............ | 79,132 | 1,338 | 6,668 | 77 | 405 | 10,105 | 330 | 3 | 12 | 29 | (s) |
| December <br> Total | 86,591 975,251 | 1,642 $\mathbf{2 1 , 8 1 0}$ | 9,164 104,577 | 128 $\mathbf{1 , 2 4 3}$ | 453 5,705 | 13,199 156,154 | 336 5,408 | $\stackrel{2}{2}$ | 13 141 | 31 353 | ${ }^{(\mathrm{s})} 7$ |
| 2003 January . | 91,151 | 4,421 | 13,978 | 434 | 375 | 20,709 | 361 | 3 | 15 |  |  |
| February ............. | 79,250 | 3,787 | 11,975 | 322 | 347 | 17,819 | 317 | 3 | 12 | 24 | (s) |
| March ................. | 78,361 | 2,840 | 12,258 | 230 | 285 | 16,754 | 343 | 2 | 13 | 28 | (s) |
| April ................... | 71,836 | 1,536 | 10,517 | 83 | 434 | 14,307 | 334 | 3 | 11 | 28 | (s) |
| May .................... | 76,608 | 2,470 | 8,432 | 78 | 408 | 13,021 | 379 | 2 | 11 | 29 | (s) |
| June ................... | 83,153 | 2,824 | 12,499 | 96 | 492 | 17,876 | 419 | 2 | 12 | 29 | (s) |
| July .................... | 92,825 | 2,356 | 14,610 | 128 | 569 | 19,936 | 612 | 2 | 14 | 30 | 2 |
| August ............... | 94,394 | 2,034 | 15,578 | 189 | 564 | 20,621 | 664 | 2 | 15 | 30 | 4 |
| September ........... | 84,141 | 1,197 | 10,094 | 90 | 547 | 14,114 | 450 | 2 | 13 | 28 | 3 |
| October ................ | 80,707 | 1,219 | 9,654 | 85 | 558 | 13,749 | 389 | 2 | 13 | 27 | 3 |
| November ........... | 81,040 | 1,098 | 6,534 | 87 | 568 | 10,556 | 329 | 2 | 13 | 27 | 2 |
| December ............ | 89,570 | 1,660 | 11,234 | 116 | 573 | 15,873 | 313 | 2 | 14 | 29 | 1 |
| Total ................. | 1,003,036 | 27,441 | 137,361 | 1,937 | 5,719 | 195,336 | 4,909 | 30 | 156 | 337 | 16 |
| 2004 January .............. | 91,530 | 3,839 | 16,934 | 795 | 635 | 24,741 | 341 | 2 | 14 | 27 | (s) |
| February ............. | 82,278 | 1,254 | 10,729 | 105 | 532 | 14,745 | 355 | 3 | 13 | 25 | (s) |
| March .......... | 77,692 | 1,205 | 11,357 | 119 | 543 | 15,394 | 357 | 3 | 13 | 28 | (s) |
| April ................... | 72,121 | 1,082 | 10,492 | 87 | 542 | 14,370 | 372 | 3 | 12 | 28 | (s) |
| May .................... | 80,453 | 1,620 | 12,149 | 122 | 566 | 16,718 | 460 | 3 | 12 | 29 | (s) |
| June ............ | 85,838 | 1,487 | 13,390 | 81 | 513 | 17,525 | 487 | 3 | 12 | 29 | (s) |
| Jugy ................... | 92,050 | 1,294 1,238 | 15,417 13,720 | 51 | 646 | 19,531 18,087 | 603 587 | 2 | 1 | 29 | (s) |
| September ........... | 85,243 | 1,500 | 9,812 | 90 | 565 | 14,228 | 508 | 3 | 13 | 27 | (s) |
| October .............. | 81,149 | 1,006 | 8,308 | 50 | 603 | 12,381 | 422 | 3 | 13 | 27 | (s) |
| November ............ | 81,077 | 935 | 7,262 | 156 | 482 | 10,762 | 356 | 2 | 13 | 27 | (s) |
| December ............ | 99,728 $1,013,284$ | $\begin{array}{r}1,765 \\ \hline 18,226\end{array}$ | 10,989 | 216 | 610 | 16,020 | 367 | 32 | 14 | 239 | (s) |
| Total .......... | 1,013,284 | 18,226 | 140,557 | 1,967 | 6,750 | 194,502 | 5,217 | 30 | 158 | 334 | 1 |

[^25]fossil fuels
Wood, black liquor, and other wood waste
i Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.
k Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.
$N A=$ Not available. ( $s$ ) $=$ Less than 0.5 trillion Btu.
Notes, Web Page, and Sources: See end of section.

Table 7.3c Consumption of Selected Combustible Fuels for Electricity Generation: Commercial and Industrial Sectors (Subset of Table 7.3a)

|  | Commercial Sector ${ }^{\text {a }}$ |  |  |  | Industrial Sector ${ }^{\text {b }}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coal ${ }^{\text {c }}$ | Petroleum ${ }^{\text {d }}$ | Natural Gas ${ }^{\text {e }}$ | Waste ${ }^{\text {f }}$ | Coal ${ }^{\text {c }}$ | Petroleum ${ }^{\text {d }}$ | Natural Gas ${ }^{\text {e }}$ | Other Gases ${ }^{9}$ | Wood ${ }^{\text {h }}$ | Waste ${ }^{\text {f }}$ | Other ${ }^{\text {i }}$ |
|  | Thousand Short Tons | Thousand Barrels | Billion Cubic Feet | Trillion Btu | Thousand Short Tons | Thousand Barrels | Billion Cubic Feet |  | Trillio | 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 Total .................. | 532 | 1,023 | 36 | 22 | 10,636 | 10,530 | 654 | 88 | 370 | 10 | 41 |
| 2002 January ............... | 46 | 67 | 3 | 2 | 943 | 1,008 | 61 | 8 | 39 | 1 | 3 |
| February ............. | 30 | 64 | 2 | 2 | 843 | 808 | 55 | 8 | 36 | 1 | 3 |
| March .................. | 42 | 56 | 3 | 2 | 887 | 1,022 | 60 | 8 | 36 | 1 | 4 |
| April ................... | 36 | 49 | 3 | 2 | 966 | 807 | 53 | 8 | 39 | 2 | 3 |
| May .................... | 36 | 51 | 2 | 3 | 919 | 835 | 61 | 8 | 37 | 1 | 2 |
| June ................... | 39 | 56 | 3 | 3 | 980 | 885 | 57 | 10 | 39 | 2 | 2 |
| July .................... | 41 | 71 | 3 | 3 | 1,147 | 1,022 | 63 | 10 | 41 | 2 | 4 |
| August ................ | 46 | 73 | 4 | 3 | 1,015 | 969 | 62 | 10 | 40 | 2 | 3 |
| September ........... | 44 | 62 | 3 | 3 | 930 | 979 | 56 | 9 | 39 | 1 | 5 |
| October ............... | 39 | 59 | 3 | 3 | 1,041 | 1,080 | 52 | 9 | 42 | 1 | 5 |
| November ........... | 37 | 92 | 2 | 3 | 1,064 | 1,084 | 53 | 9 | 38 | 1 | 4 |
| December ............ | 41 | 135 | 2 | 2 | 1,120 | 1,108 | 52 | 9 | 37 | 1 | 3 |
| Total .................. | 477 | 834 | 33 | 28 | 11,855 | 11,608 | 685 | 106 | 464 | 18 | 41 |
| 2003 January ............... | 54 | 99 | 3 | 2 | 956 | 1,042 | 63 | 11 | 31 | 1 | 3 |
| February ............. | 43 | 87 | 3 | 2 | 835 | 850 | 53 | 9 | 27 | 1 | 3 |
| March .................. | 47 | 62 | 3 | 2 | 799 | 876 | 55 | 10 | 30 | 1 | 4 |
| April ................... | 43 | 42 | 3 | 3 | 794 | 795 | 52 | 10 | 30 | 2 | 3 |
| May .................... | 46 | 53 | 3 | 3 | 904 | 831 | 55 | 10 | 28 | 1 | 4 |
| June ................... | 49 | 70 | 3 | 2 | 858 | 906 | 57 | 11 | 30 | 1 | 4 |
| July .................... | 54 | 95 | 4 | 3 | 918 | 925 | 57 | 12 | 32 | 1 | 4 |
| August ................ | 55 | 89 | 4 | 3 | 903 | 902 | 60 | 11 | 31 | 1 | 4 |
| September ........... | 50 | 65 | 3 | 2 | 812 | 797 | 56 | 11 | 30 | 1 | 4 |
| October ............... | 44 | 63 | 3 | 3 | 866 | 932 | 55 | 11 | 30 | 1 | 4 |
| November ........... | 43 | 66 | 3 | 2 | 858 | 707 | 52 | 11 | 29 | 1 | 3 |
| December ........... | 53 | 103 | 3 | 3 | 937 | 860 | 54 | 10 | 33 | 1 | 3 |
| Total .................. | 582 | 894 | 38 | 30 | 10,440 | 10,424 | 668 | 127 | 362 | 16 | 43 |
| 2004 January ............... | 57 | 188 | 4 | 2 | 1,409 | 1,424 | 67 | 15 | 51 | 2 | 1 |
| February ............. | 54 | 114 | 3 | 2 | 1,305 | 999 | 68 | 15 | 46 | 1 | 1 |
| March .................. | 51 | 105 | 3 | 3 | 1,351 | 1,003 | 64 | 16 | 48 | 1 | 2 |
| April ................... | 39 | 88 | 3 | 3 | 1,260 | 1,061 | 58 | 15 | 48 | 1 | 2 |
| May .................... | 46 | 73 | 4 | 3 | 1,262 | 935 | 64 | 16 | 43 | 1 | 2 |
| June ................... | 52 | 76 | 3 | 3 | 1,300 | 925 | 61 | 16 | 46 | 1 | 1 |
| July | 54 | 89 | 4 | 3 | 1,387 | 1,036 | 68 | 15 | 47 | 2 | 2 |
| August ................ | 57 | 79 | 4 | 3 | 1,345 | 1,002 | 68 | 16 | 45 | 2 | 1 |
| September ........... | 47 | 57 | 4 | 2 | 1,225 | 939 | 64 | 15 | 43 | 1 | 1 |
| October ............... | 45 | 42 | 4 | 3 | 1,283 | 906 | 58 | 15 | 46 | 1 | 1 |
| November ........... | 52 | 50 | 3 | 3 | 1,197 | 900 | 59 | 13 | 43 | 1 | 1 |
| December ........... | 50 | 98 | 3 | 3 | 1,353 | 1,040 | 63 | 13 | 45 | 1 | 2 |
| Total .................. | 605 | 1,059 | 41 | 32 | 15,676 | 12,168 | 762 | 181 | 551 | 16 | 17 |

[^26][^27]Figure 7.4 Consumption of Selected Combustible Fuels for Electricity Generation and Useful Thermal Output

Coal by Sector, 1989-2004


Natural Gas by Sector, 1989-2004


Wood by Sector, 1989-2004


[^28]Petroleum by Sector, 1989-2004


Other Gases ${ }^{\text {b }}$ by Sector, 1989-2004


Waste by Sector, 1989-2004


[^29]Table 7.4a Consumption of Combustible Fuels for Electricity Generation and Useful Thermal Output: Total (All Sectors) (Sum of Tables 7.4b and 7.4c)

|  | Coal ${ }^{\text {a }}$ | Petroleum |  |  |  |  | Natural Gas ${ }^{\dagger}$ | Other Gases 9 | Wood ${ }^{\text {h }}$ | Waste ${ }^{\text {i }}$ | Other ${ }^{\text {j }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Distillate <br> Fuel Oil ${ }^{\text {b }}$ | Residual Fuel Oilc | Other Liquids ${ }^{d}$ | Petroleum Coke ${ }^{\text {e }}$ | Total ${ }^{\text {e }}$ |  |  |  |  |  |
|  | Thousand Short Tons | Thousand Barrels |  |  | Thousand Short Tons | Thousand Barrels | Billion Cubic Feet | Trillion Btu |  |  |  |
| 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 Total .................. | 991,635 | 33,724 | 177,137 | 1,418 | 4,532 | 234,940 | 6,731 | 263 | 1,182 | 398 | 94 |
| 2002 January ............... | 84,830 | 2,073 | 8,147 | 295 | 570 | 13,365 | 501 | 23 | 109 | 37 | 7 |
| February ............. | 74,236 | 1,343 | 6,768 | 185 | 566 | 11,125 | 449 | 20 | 94 | 33 | 8 |
| March .................. | 78,096 | 2,078 | 10,451 | 267 | 603 | 15,812 | 520 | 22 | 99 | 37 | 8 |
| April ................... | 73,775 | 1,904 | 9,743 | 259 | 575 | 14,779 | 508 | 21 | 100 | 35 | 7 |
| May .................... | 78,744 | 2,261 | 9,748 | 297 | 634 | 15,475 | 523 | 22 | 108 | 37 | 6 |
| June ................... | 85,778 | 1,853 | 9,761 | 216 | 693 | 15,296 | 660 | 24 | 101 | 38 | 6 |
| July .................... | 95,331 | 2,849 | 12,533 | 309 | 654 | 18,963 | 852 | 25 | 116 | 40 | 9 |
| August ................ | 94,033 | 2,637 | 12,336 | 283 | 709 | 18,798 | 833 | 24 | 103 | 40 | 7 |
| September ........... | 86,410 | 1,862 | 10,086 | 211 | 651 | 15,414 | 676 | 25 | 113 | 37 | 9 |
| October ............... | 83,060 | 2,172 | 10,271 | 261 | 572 | 15,563 | 546 | 23 | 120 | 37 | 9 |
| November ........... | 81,654 | 1,689 | 8,045 | 285 | 533 | 12,686 | 454 | 24 | 108 | 37 | 8 |
| December ........... | 89,198 | 2,028 | 10,747 | 388 | 594 | 16,132 | 464 | 25 | 114 | 39 | 7 |
| Total .................. | 1,005,144 | 24,749 | 118,637 | 3,257 | 7,353 | 183,409 | 6,986 | 278 | 1,287 | 448 | 93 |
| 2003 January ............... | 93,819 | 4,930 | 15,531 | 649 | 486 | 23,538 | 494 | 25 | 107 | 38 | 8 |
| February ............. | 81,610 | 4,167 | 13,369 | 512 | 444 | 20,267 | 430 | 23 | 97 | 33 | 7 |
| March .................. | 80,783 | 3,091 | 13,578 | 537 | 392 | 19,168 | 459 | 25 | 104 | 38 | 9 |
| April ................... | 74,032 | 1,790 | 11,773 | 270 | 543 | 16,547 | 447 | 24 | 102 | 37 | 8 |
| May .................... | 78,939 | 2,890 | 9,627 | 230 | 526 | 15,376 | 493 | 25 | 101 | 37 | 8 |
| June ................... | 85,455 | 3,307 | 13,662 | 345 | 611 | 20,368 | 534 | 25 | 102 | 37 | 8 |
| July .................... | 95,337 | 2,699 | 15,906 | 439 | 696 | 22,523 | 734 | 26 | 112 | 39 | 10 |
| August ................ | 96,929 | 2,336 | 16,889 | 528 | 678 | 23,143 | 792 | 26 | 109 | 39 | 13 |
| September .......... | 86,398 | 1,543 | 11,215 | 288 | 663 | 16,361 | 569 | 24 | 104 | 36 | 11 |
| October ............... | 83,006 | 1,670 | 10,842 | 263 | 682 | 16,184 | 509 | 24 | 107 | 36 | 11 |
| November ........... | 83,326 | 1,452 | 7,710 | 245 | 648 | 12,648 | 443 | 24 | 106 | 36 | 10 |
| December ........... | 92,144 | 1,949 | 12,756 | 270 | 699 | 18,469 | 434 | 25 | 115 | 39 | 8 |
| Total .................. | 1,031,778 | 31,825 | 152,859 | 4,576 | 7,067 | 224,593 | 6,337 | 294 | 1,266 | 444 | 110 |
| 2004 January ............... | 94,641 | 4,441 | 18,978 | 945 | 725 | 27,990 | 456 | 31 | 117 | 35 | 3 |
| February ............. | 84,911 | 1,496 | 12,240 | 217 | 609 | 16,997 | 469 | 29 | 107 | 33 | 4 |
| March .................. | 80,311 | 1,418 | 12,768 | 212 | 618 | 17,489 | 468 | 34 | 109 | 35 | 4 |
| April ................... | 74,556 | 1,280 | 11,768 | 174 | 625 | 16,346 | 480 | 33 | 112 | 35 | 3 |
| May .................... | 82,954 | 1,788 | 13,317 | 202 | 647 | 18,540 | 578 | 33 | 104 | 39 | 3 |
| June ................... | 88,418 | 1,656 | 14,685 | 153 | 588 | 19,433 | 601 | 32 | 107 | 38 | 3 |
| July .................... | 95,850 | 1,470 | 16,738 | 201 | 645 | 21,637 | 729 | 31 | 117 | 38 | 3 |
| August ................ | 94,710 | 1,371 | 14,946 | 121 | 704 | 19,956 | 711 | 33 | 113 | 38 | 3 |
| September ........... | 87,706 | 1,669 | 10,946 | 153 | 644 | 15,986 | 624 | 32 | 106 | 34 | 2 |
| October ............... | 83,649 | 1,154 | 9,432 | 143 | 694 | 14,196 | 531 | 31 | 114 | 35 | 2 |
| November ............ | 83,502 | 1,067 | 9,034 | 240 | 565 | 13,165 | 461 | 28 | 108 | 35 | 3 |
| December ............ | 93,486 | 1,956 | 12,558 | 300 | 698 | 18,302 | 481 | 26 | 121 | 37 | 4 |
| Total .................. | 1,044,696 | 20,767 | 157,410 | 3,059 | 7,760 | 220,037 | 6,588 | 371 | 1,335 | 431 | 38 |

[^30]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.

Notes: - Data are for fuels consumed to produce electricity and 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: See sources for Tables 7.4b and 7.4c.

Table 7.4b Consumption of Combustible Fuels for Electricity Generation and Useful Thermal Output: Electric Power Sector (Subset of Table 7.4a)

|  | Coal ${ }^{\text {a }}$ | Petroleum |  |  |  |  | Natural Gas ${ }^{\dagger}$ | Other Gases ${ }^{9}$ | Wood ${ }^{\text {h }}$ | Waste ${ }^{\text {i }}$ | Other ${ }^{\text {j }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Distillate Fuel Oil ${ }^{\text {b }}$ | Residual Fuel Oil ${ }^{\text {c }}$ | Other Liquids ${ }^{d}$ | Petroleum Coke ${ }^{\text {e }}$ | Total ${ }^{\text {e }}$ |  |  |  |  |  |
|  | 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 Total .................. | 964,433 | 29,274 | 159,504 | 377 | 3,427 | 206,291 | 5,342 | 15 | 126 | 324 | 0 |
| 2002 January ............... | 82,424 | 1,838 | 6,872 | 92 | 441 | 11,007 | 381 | 3 | 13 | 30 | (s) |
| February ............. | 72,144 | 1,137 | 5,789 | 45 | 459 | 9,265 | 344 | 2 | 10 | 27 | 1 |
| March ................. | 75,823 | 1,827 | 9,271 | 58 | 486 | 13,588 | 407 | 3 | 13 | 30 | (s) |
| April ................... | 71,560 | 1,740 | 8,687 | 105 | 464 | 12,851 | 404 | 2 | 11 | 28 | (s) |
| May .................... | 76,528 | 2,017 | 8,671 | 136 | 523 | 13,441 | 410 | 2 | 11 | 30 | 1 |
| June ................... | 83,565 | 1,698 | 8,746 | 86 | 564 | 13,348 | 551 | 2 | 12 | 31 | 1 |
| July .................... | 92,766 | 2,613 | 11,437 | 173 | 500 | 16,721 | 734 | 3 | 13 | 33 | 1 |
| August ................ | 91,752 | 2,430 | 11,306 | 166 | 562 | 16,710 | 718 | 3 | 13 | 33 | 1 |
| September .......... | 84,144 | 1,640 | 9,031 | 104 | 511 | 13,331 | 569 | 3 | 14 | 31 | 1 |
| October ............... | 80,714 | 1,921 | 9,091 | 93 | 430 | 13,255 | 442 | 3 | 13 | 30 | (s) |
| November ........... | 79,301 | 1,343 | 6,687 | 79 | 412 | 10,171 | 352 | 3 | 13 | 30 | (s) |
| December ........... | 86,784 | 1,672 | 9,186 | 132 | 464 | 13,308 | 360 | 3 | 14 | 32 | (s) |
| Total .................. | 977,507 | 21,876 | 104,773 | 1,267 | 5,816 | 156,996 | 5,672 | 33 | 150 | 365 | 7 |
| 2003 January ............... | 91,361 | 4,490 | 14,063 | 477 | 383 | 20,947 | 382 | 4 | 16 | 30 | (s) |
| February ............. | 79,447 | 3,833 | 12,056 | 348 | 353 | 18,004 | 335 | 4 | 13 | 26 | (s) |
| March ................. | 78,557 | 2,862 | 12,310 | 238 | 296 | 16,887 | 361 | 4 | 14 | 30 | (s) |
| April ................... | 72,000 | 1,539 | 10,574 | 85 | 439 | 14,396 | 352 | 4 | 12 | 29 | (s) |
| May .................... | 76,772 | 2,473 | 8,524 | 80 | 416 | 13,157 | 394 | 4 | 12 | 30 | (s) |
| June ................... | 83,313 | 2,829 | 12,589 | 98 | 499 | 18,011 | 436 | 3 | 13 | 30 | (s) |
| July .................... | 92,994 | 2,360 | 14,704 | 130 | 575 | 20,068 | 630 | 3 | 15 | 31 | 2 |
| August ................ | 94,565 | 2,038 | 15,673 | 190 | 570 | 20,753 | 684 | 3 | 16 | 31 | 4 |
| September .......... | 84,294 | 1,200 | 10,184 | 90 | 554 | 14,246 | 469 | 3 | 14 | 29 | 3 |
| October ............... | 80,857 | 1,222 | 9,656 | 85 | 566 | 13,794 | 409 | 3 | 14 | 28 | 3 |
| November ........... | 81,202 | 1,112 | 6,622 | 87 | 570 | 10,672 | 348 | 3 | 14 | 29 | 2 |
| December ........... | 89,753 | 1,673 | 11,325 | 118 | 576 | 15,998 | 336 | 3 | 15 | 31 | 1 |
| Total .................. | 1,005,116 | 27,632 | 138,279 | 2,026 | 5,799 | 196,932 | 5,135 | 41 | 167 | 354 | 16 |
| 2004 January ............... | 91,698 | 3,891 | 16,938 | 796 | 635 | 24,801 | 352 | 3 | 15 | 28 | (s) |
| February | 82,439 | 1,272 | 10,733 | 105 | 532 | 14,769 | 366 | 3 | 14 | 26 | (s) |
| March .................. | 77,841 | 1,212 | 11,361 | 119 | 543 | 15,408 | 367 | 3 | 14 | 28 | (s) |
| April ................... | 72,251 | 1,086 | 10,497 | 88 | 542 | 14,381 | 384 | 3 | 12 | 28 | (s) |
| May .................... | 80,621 | 1,623 | 12,153 | 122 | 566 | 16,728 | 473 | 3 | 13 | 30 | (s) |
| June ................... | 86,001 | 1,491 | 13,395 | 82 | 514 | 17,537 | 500 | 3 | 13 | 29 | (s) |
| July .................... | 93,283 | 1,297 | 15,422 | 92 | 546 | 19,541 | 616 | 4 | 16 | 30 | (s) |
| August ................ | 92,195 | 1,241 | 13,725 | 56 | 615 | 18,097 | 599 | 3 | 15 | 30 | (s) |
| September .......... | 85,382 | 1,503 | 9,817 | 91 | 566 | 14,240 | 519 | 3 | 14 | 27 | (s) |
| October ............... | 81,294 | 1,008 | 8,313 | 51 | 615 | 12,446 | 432 | 3 | 14 | 27 | (s) |
| November ........... | 81,218 | 937 | 7,265 | 157 | 482 | 10,768 | 366 | 3 | 14 | 28 | (s) |
| December ........... | -90,903 | 1,770 | 10,993 | 216 | 610 | 16,031 | 377 | 3 | 15 | 30 | (s) |
| Total .................. | 1,015,126 | 18,331 | 140,611 | 1,976 | 6,765 | 194,745 | 5,352 | 39 | 168 | 340 | 1 |

a Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.
b Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.
c Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small amount 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, plus a small amount of supplemental gaseous fuels that cannot be identified separately.

9 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.
(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/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."

- 2001-2003: Form EIA-906, "Power Plant Report." - 2004: EIA, Form EIA-906,
"Power Plant Report" and Form EIA-920, "Combined Heat and Power Plant Report."

Table 7.4c Consumption of Selected Combustible Fuels for Electricity Generation and Useful Thermal Output: Commercial and Industrial Sectors (Subset of Table 7.4a)

|  | Commercial Sector ${ }^{\text {a }}$ |  |  |  | Industrial Sector ${ }^{\text {b }}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Coal ${ }^{\text {c }}$ | Petroleum ${ }^{\text {d }}$ | Natural Gas ${ }^{\text {e }}$ | Waste ${ }^{\text {f }}$ | Coal ${ }^{\text {c }}$ | Petroleum ${ }^{\text {d }}$ | Natural Gas ${ }^{\text {e }}$ | Other Gases ${ }^{9}$ | Wood ${ }^{\text {h }}$ | Waste ${ }^{\text {f }}$ | Other ${ }^{\text {i }}$ |
|  | Thousand Short Tons | Thousand Barrels | Billion Cubic Feet | Trillion Btu | Thousand Short Tons | Thousand Barrels | Billion Cubic Feet |  | Trillion |  |  |
| 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 Total .................. | 1,448 | 1,832 | 79 | 39 | 25,755 | 26,817 | 1,310 | 248 | 1,054 | 35 | 94 |
| 2002 January ............... | 127 | 99 | 6 | 3 | 2,278 | 2,259 | 114 | 20 | 97 | 4 | 7 |
| February ............. | 102 | 92 | 5 | 3 | 1,990 | 1,768 | 100 | 18 | 84 | 3 | 7 |
| March .................. | 124 | 88 | 6 | 3 | 2,150 | 2,136 | 107 | 20 | 86 | 4 | 7 |
| April ................... | 100 | 84 | 6 | 3 | 2,115 | 1,844 | 97 | 19 | 89 | 3 | 7 |
| May .................... | 105 | 81 | 5 | 4 | 2,110 | 1,953 | 107 | 20 | 96 | 3 | 6 |
| June ................... | 112 | 87 | 6 | 4 | 2,101 | 1,861 | 102 | 22 | 89 | 3 | 5 |
| July .................... | 126 | 115 | 7 | 4 | 2,439 | 2,127 | 111 | 22 | 103 | 3 | 8 |
| August ................ | 127 | 114 | 8 | 4 | 2,153 | 1,974 | 108 | 21 | 90 | 3 | 6 |
| September .......... | 116 | 90 | 7 | 4 | 2,150 | 1,993 | 101 | 22 | 99 | 3 | 9 |
| October ............... | 114 | 89 | 6 | 4 | 2,231 | 2,219 | 97 | 20 | 107 | 3 | 9 |
| November ........... | 116 | 130 | 5 | 4 | 2,237 | 2,385 | 97 | 21 | 95 | 4 | 8 |
| December ............ | 134 | 181 | 6 | 3 | 2,279 | 2,643 | 98 | 22 | 100 | 4 | 7 |
| Total .................. | 1,405 | 1,250 | 74 | 42 | 26,232 | 25,163 | 1,240 | 245 | 1,136 | 41 | 85 |
| 2003 January ............... | 171 | 154 | 5 | 4 | 2,286 | 2,437 | 106 | 21 | 91 | 4 | 7 |
| February ............. | 152 | 140 | 4 | 3 | 2,010 | 2,122 | 91 | 19 | 84 | 4 | 7 |
| March .................. | 155 | 114 | 4 | 4 | 2,072 | 2,167 | 94 | 21 | 90 | 4 | 8 |
| April ................... | 137 | 80 | 4 | 4 | 1,895 | 2,071 | 91 | 20 | 90 | 4 | 7 |
| May .................... | 137 | 89 | 5 | 4 | 2,029 | 2,130 | 94 | 21 | 90 | 3 | 8 |
| June ................... | 144 | 113 | 5 | 4 | 1,998 | 2,244 | 94 | 21 | 89 | 3 | 8 |
| July .................... | 159 | 147 | 5 | 4 | 2,183 | 2,309 | 99 | 23 | 97 | 3 | 8 |
| August ................ | 164 | 143 | 6 | 4 | 2,200 | 2,247 | 102 | 23 | 94 | 4 | 9 |
| September ........... | 146 | 108 | 5 | 4 | 1,957 | 2,008 | 95 | 21 | 90 | 3 | 8 |
| October ............... | 141 | 101 | 5 | 4 | 2,008 | 2,289 | 95 | 21 | 93 | 4 | 8 |
| November ........... | 143 | 105 | 5 | 4 | 1,981 | 1,871 | 90 | 20 | 91 | 3 | 7 |
| December ............ | 165 | 155 | 5 | 4 | 2,227 | 2,317 | 93 | 22 | 100 | 4 | 7 |
| Total .................. | 1,816 | 1,449 | 58 | 47 | 24,846 | 26,212 | 1,144 | 253 | 1,097 | 43 | 94 |
| 2004 January ............... | 165 | 346 | 6 | 4 | 2,779 | 2,843 | 97 | 29 | 102 | 3 | 3 |
| February ............. | 152 | 206 | 6 | 3 | 2,320 | 2,022 | 97 | 26 | 93 | 3 | 4 |
| March .................. | 140 | 172 | 6 | 4 | 2,329 | 1,909 | 95 | 31 | 94 | 3 | 4 |
| April ................... | 113 | 115 | 6 | 4 | 2,192 | 1,850 | 91 | 29 | 99 | 3 | 3 |
| May .................... | 127 | 100 | 6 | 4 | 2,206 | 1,713 | 99 | 29 | 91 | 5 | 3 |
| June ................... | 126 | 101 | 6 | 4 | 2,291 | 1,796 | 95 | 28 | 95 | 5 | 3 |
| July .................... | 128 | 127 | 7 | 4 | 2,439 | 1,968 | 107 | 27 | 101 | 3 | 3 |
| August ................ | 128 | 105 | 7 | 4 | 2,386 | 1,754 | 104 | 29 | 98 | 3 | 3 |
| September ........... | 116 | 75 | 7 | 4 | 2,207 | 1,672 | 98 | 29 | 93 | 3 | 2 |
| October ............... | 107 | 74 | 6 | 4 | 2,248 | 1,676 | 92 | 27 | 100 | 3 | 2 |
| November ........... | 130 | 82 | 6 | 4 | 2,154 | 2,315 | 90 | 24 | 93 | 3 | 3 |
| December ............ | 139 | 153 | 6 | 4 | 2,444 | 2,118 | 97 | 23 | 106 | 3 | 4 |
| Total .................. | 1,574 | 1,656 | 75 | 48 | 27,996 | 23,636 | 1,162 | 332 | 1,166 | 42 | 37 |

[^31][^32]Figure 7.5 Stocks of Coal and Petroleum: Electric Power Sector

Coal, 1973-2004


Total Petroleum, 1973-2004


Coal and Petroleum Stocks, 1973-2004

${ }^{\text {a }}$ Converted from short tons to barrels by multiplying by 5 .
Note: Because vertical scales differ, graphs should not be compared.


Total Petroleum, Monthly


Petroleum by Type, End of Month


Web Page: http://www.eia.doe.gov/emeu/mer/elect.html. Source: Tables 7.5, A1, and A5.

Table 7.5 Stocks of Coal and Petroleum: Electric Power Sector

|  | Coal ${ }^{\text {a }}$ | Petroleum |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Distillate Fuel Oil ${ }^{\text {b }}$ | Residual Fuel Oilc | Other Liquids ${ }^{\text {d }}$ | Petroleum Coke ${ }^{\mathrm{e}}$ | Total ${ }^{\text {e }}$ |
|  | Thousand Short Tons | Thousand Barrels |  |  | Thousand Short Tons | Thousand Barrels |
| 1973 Total ................... | 86,967 | 10,095 | 79,121 | NA | 312 | 90,776 |
| 1974 Total ...................... | 83,509 | 15,199 | 97,718 | NA | 35 | 113,091 |
| 1975 Total ................... | 110,724 | 16,432 | 108,825 | NA | 31 | 125,413 |
| 1976 Total | 117,436 | 14,703 | 106,993 | NA | 32 | 121,857 |
| 1977 Total | 133,219 | 19,281 | 124,750 | NA | 44 | 144,252 |
| 1978 Total ................... | 128,225 | 16,386 | 102,402 | NA | 198 | 119,778 |
| 1979 Total ................... | 159,714 | 20,301 | 111,121 | NA | 183 | 132,338 |
| 1980 Total .................. | 183,010 | 30,023 | 105,351 | NA | 52 | 135,635 |
| 1981 Total .................. | 168,893 | 26,094 | 102,042 | NA | 42 | 128,345 |
| 1982 Total .................. | 181,132 | 23,369 | 95,515 | NA | 41 | 119,090 |
| 1983 Total .................. | 155,598 | 18,801 | 70,573 | NA | 55 | 89,652 |
| 1984 Total .................. | 179,727 | 19,116 | 68,503 | NA | 50 | 87,870 |
| 1985 Total .................. | 156,376 | 16,386 | 57,304 | NA | 49 | 73,933 |
| 1986 Total .............. | 161,806 | 16,269 | 56,841 | NA | 40 | 73,313 |
| 1987 Total ................ | 170,797 | 15,759 | 55,069 | NA | 51 | 71,084 |
| 1988 Total | 146,507 | 15,099 | 54,187 | NA | 86 | 69,714 |
| 1989 Total .................. | 135,860 | 13,824 | 47,446 | NA | 105 | 61,795 |
| 1990 Total | 156,166 | 16,471 | 67,030 | NA | 94 | 83,970 |
| 1991 Total | 157,876 | 16,357 | 58,636 | NA | 70 | 75,343 |
| 1992 Total .................. | 154,130 | 15,714 | 56,135 | NA | 67 | 72,183 |
| 1993 Total .................. | 111,341 | 15,674 | 46,770 | NA | 89 | 62,890 |
| 1994 Total .................. | 126,897 | 16,644 | 46,344 | NA | 69 | 63,333 |
| 1995 Total .................. | 126,304 | 15,392 | 35,102 | NA | 65 | 50,821 |
| 1996 Total .................. | 114,623 | 15,216 | 32,473 | NA | 91 | 48,146 |
| 1997 Total | 98,826 | 15,456 | 33,336 | NA | 469 | 51,138 |
| 1998 Total | 120,501 | 16,343 | 37,451 | NA | 559 | 56,591 |
| 1999 Total ${ }^{\text {f }}$................ | 141,604 | 17,995 | 34,256 | NA | 372 | 54,109 |
| 2000 Total | 102,296 | 15,127 | 24,748 | NA | 211 | 40,932 |
| 2001 Total .................. | 138,496 | 20,486 | 34,594 | NA | 390 | 57,031 |
| 2002 January ............... | 139,400 | 18,558 | 34,833 | 903 | 798 | 58,283 |
| February ............. | 143,151 | 18,314 | 32,792 | 688 | 912 | 56,353 |
| March ................. | 146,443 | 18,866 | 28,447 | 774 | 1,082 | 53,500 |
| April ................... | 153,375 | 17,693 | 28,485 | 787 | 1,144 | 52,683 |
| May ................... | 155,313 | 18,305 | 28,241 | 758 | 1,149 | 53,047 |
| June ................... | 152,134 | 18,113 | 30,412 | 638 | 1,206 | 55,190 |
| July ... | 142,634 | 17,206 | 26,986 | 692 | 1,208 | 50,921 |
| August ............... | 137,130 | 17,439 | 25,697 | 718 | 1,393 | 50,820 |
| September .......... | 135,962 | 16,967 | 22,841 | 768 | 1,508 | 48,117 |
| October ............... | 140,800 | 16,838 | 23,926 | 731 | 1,667 | 49,829 |
| November ........... | 144,608 | 16,959 | 25,127 | 1,111 | 1,714 | 51,767 |
| December .......... | 141,714 | 17,413 | 25,723 | 800 | 1,711 | 52,490 |
| 2003 January ............... | 134,761 | 16,898 | 21,318 | 727 | 1,612 | 47,002 |
| February ............. | 130,372 | 15,956 | 21,327 | 570 | 1,562 | 45,666 |
| March .................. | 133,536 | 21,302 | 22,024 | 476 | 1,499 | 51,296 |
| April ................... | 140,709 | 16,883 | 24,251 | 445 | 1,773 | 50,442 |
| May ................... | 146,104 | 16,685 | 27,506 | 570 | 1,722 | 53,371 |
| June ................... | 144,257 | 17,362 | 26,122 | 589 | 1,693 | 52,540 |
| July .................... | 134,968 | 17,840 | 25,897 | 698 | 1,673 | 52,800 |
| August ............... | 126,747 | 17,935 | 25,729 | 701 | 1,665 | 52,688 |
| September .......... | 124,518 | 18,521 | 26,249 | 732 | 1,636 | 53,684 |
| October ............... | 127,645 | 19,000 | 26,721 | 721 | 1,544 | 54,162 |
| November ........... | 126,692 | 18,716 19,153 | 28,552 $\mathbf{2 5 , 8 2 0}$ | 755 | 1,613 1,484 | 56,086 |
| December .......... | 121,567 | 19,153 | 25,820 | 779 | 1,484 | 53,170 |
| 2004 January ............... | 113,029 | 18,690 | 23,667 | 351 | 1,306 | 49,239 |
| February ............. | 108,426 | 19,047 | 25,246 | 287 | 1,255 | 50,857 |
| March ................. | 113,237 | 18,725 | 24,332 | 409 | 1,275 | 49,841 |
| April ................... | 121,575 | 18,382 | 23,995 | 411 | 1,046 | 48,018 |
| May .................... | 124,066 | 18,879 | 24,608 | 411 | 1,000 | 48,897 |
| June ................... | 120,698 | 18,217 | 25,670 | 475 | 1,116 | 49,942 |
| July ................... | 112,081 | 18,349 | 25,618 | 493 | 1,087 1 | 49,896 |
| August ............... | 108,714 106,919 | 18,328 18,134 | 26,329 25,284 | 488 | 1,129 1,097 | 50,792 |
| October ................. | 111,725 | 18,224 | 27,193 | 483 | 1,029 | 51,046 |
| November ........... | 113,301 | 18,312 | 28,908 | 487 | , 958 | 52,499 |
| December ........... | 106,709 | 18,322 | 26,250 | 554 | 914 | 49,695 |

a Anthracite, bituminous coal, subbituminous coal, and lignite.
b Fuel oil nos. 1, 2 and 4. For 1973-1979, data are for gas turbine and internal combustion plant stocks of petroleum. For 1980-2000, electric utility data also include small amounts of kerosene and jet fuel.
c Fuel oil nos. 5 and 6 . For 1973-1979, data are for steam plant stocks of petroleum. For 1980-2000, electric utility data also include a small amount of fuel oil no. 4.
d Jet fuel and kerosene. Through 2003, data also include a small amount of waste oil.
e Petroleum coke is converted from short tons to barrels by multiplying by 5 .
f Through 1998, data are for electric utilities only. Beginning in 1999, data are for electric utilities and independent power producers.
$N A=$ Not available.
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." Report" and Form EIA-867, "Annua Nonutility Power Producer Report." - 1998-2000: EIA, Form EIA-759, "Monthly Power Plant Report" and Form
EIA-860B, "Annual Electric Generator Report-Nonutility." - 2001-2003: Form EIA-906, "Power Plant Report." - 2004: EIA, Form EIA-906, "Power Plant Report" and Form EIA-920, "Combined Heat and Power Plant Report."

Figure 7.6 Electricity End Use
(Billion Kilowatthours)

Electricity End Use Overview, 1989-2004


Retail Sales ${ }^{\text {a }}$ by Sector, 1973-2004


Retail Sales ${ }^{\text {a }}$ Total, January-December

${ }^{\text {a }}$ Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.
${ }^{\text {b }}$ See "Direct Use" in Glossary.
${ }^{\text {c Commercial sector, including public street and highway lighting, interde- }}$ partmental sales, and other sales to public authorities.

Retail Sales ${ }^{\text {a }}$ by Sector, December 2004


Retail Sales ${ }^{\text {a }}$ by Sector, Monthly


Retail Sales ${ }^{\text {a }}$ Total, Monthly

${ }^{\mathrm{d}}$ Transportation sector, including sales to railroads and railways.
Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/elect.html.
Source: Table 7.6.

Table 7.6 Electricity End Use
(Million Kilowatthours)

|  | Retail Sales ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Old Bas |  |  |  | New Ba | sis |  |  |  |  |
|  | Residential | Commercial ${ }^{\text {b }}$ | Industrial ${ }^{\text {C }}$ | Other ${ }^{\text {d }}$ | Residential | Commercial ${ }^{\text {e }}$ | Industrial ${ }^{\text {f }}$ | Transportationg | Total ${ }^{\text {h }}$ | Direct Use ${ }^{1}$ | Total |
| 1973 Total | 579,231 | 388,266 | 686,085 | 59,326 | 579,231 | E 444,505 | 686,085 | E 3,087 | 1,712,909 | NA | 1,712,909 |
| 1974 Total ................ | 578,184 | 384,826 | 684,875 | 58,039 | 578,184 | E 440,016 | 684,875 | E 2,849 | 1,705,924 | NA | 1,705,924 |
| 1975 Total | 588,140 | 403,049 | 687,680 | 68,222 | 588,140 | E 468,296 | 687,680 | E 2,974 | 1,747,091 | NA | 1,747,091 |
| 1976 Total | 606,452 | 425,094 | 754,069 | 69,631 | 606,452 | E 491,777 | 754,069 | E 2,948 | 1,855,246 | NA | 1,855,246 |
| 1977 Total ................ | 645,239 | 446,514 | 786,037 | 70,571 | 645,239 | E 514,029 | 786,037 | E 3,056 | 1,948,361 | NA | 1,948,361 |
| 1978 Total ................ | 674,466 | 461,163 | 809,078 | 73,215 | 674,466 | E 531,439 | 809,078 | E 2,939 | 2,017,922 | NA | 2,017,922 |
| 1979 Total ................ | 682,819 | 473,307 | 841,903 | 73,070 | 682,819 | E 543,412 | 841,903 | E 2,965 | 2,071,099 | NA | 2,071,099 |
| 1980 Total ................ | 717,495 | 488,155 | 815,067 | 73,732 | 717,495 | E 558,643 | 815,067 | E 3,244 | 2,094,449 | NA | 2,094,449 |
| 1981 Total | 722,265 | 514,338 | 825,743 | 84,756 | 722,265 | E 595,908 | 825,743 | E 3,186 | 2,147,103 | NA | 2,147,103 |
| 1982 Total | 729,520 | 526,397 | 744,949 | 85,575 | 729,520 | E 608,748 | 744,949 | E 3,224 | 2,086,441 | NA | 2,086,441 |
| 1983 Total | 750,948 | 543,788 | 775,999 | 80,219 | 750,948 | E 620,292 | 775,999 | E 3,715 | 2,150,955 | NA | 2,150,955 |
| 1984 Total ................ | 780,092 | 582,621 | 837,836 | 85,248 | 780,092 | E 663,680 | 837,836 | E 4,189 | 2,285,796 | NA | 2,285,796 |
| 1985 Total ................ | 793,934 | 605,989 | 836,772 | 87,279 | 793,934 | E 689,121 | 836,772 | E 4,147 | 2,323,974 | NA | 2,323,974 |
| 1986 Total ................ | 819,088 | 630,520 | 830,531 | 88,615 | 819,088 | E 714,721 | 830,531 | E 4,413 | 2,368,753 | NA | 2,368,753 |
| 1987 Total ................ | 850,410 | 660,433 | 858,233 | 88,196 | 850,410 | E 744,067 | 858,233 | E 4,562 | 2,457,272 | NA | 2,457,272 |
| 1988 Total | 892,866 | 699,100 | 896,498 | 89,598 | 892,866 | E 784,029 | 896,498 | E 4,669 | 2,578,062 | NA | 2,578,062 |
| 1989 Total ................. | 905,525 | 725,861 | 925,659 | 89,765 | 905,525 | E 810,856 | 925,659 | E 4,770 | 2,646,809 | 108,826 | 2,755,635 |
| 1990 Total ................ | 924,019 | 751,027 | 945,522 | 91,988 | 924,019 | E 838,263 | 945,522 | E 4,751 | 2,712,555 | 124,529 | 2,837,084 |
| 1991 Total ................. | 955,417 | 765,664 | 946,583 | 94,339 | 955,417 | E 855,244 | 946,583 | E 4,758 | 2,762,003 | 124,057 | 2,886,060 |
| 1992 Total ................ | 935,939 | 761,271 | 972,714 | 93,442 | 935,939 | E 850,007 | 972,714 | E 4,706 | 2,763,365 | 133,841 | 2,897,207 |
| 1993 Total | 994,781 | 794,573 | 977,164 | 94,944 | 994,781 | E 884,746 | 977,164 | E 4,771 | 2,861,462 | 139,238 | 3,000,700 |
| 1994 Total | 1,008,482 | 820,269 | 1,007,981 | 97,830 | 1,008,482 | E 913,106 | 1,007,981 | E 4,994 | 2,934,563 | 146,325 | 3,080,888 |
| 1995 Total | 1,042,501 | 862,685 | 1,012,693 | 95,407 | 1,042,501 | E 953,117 | 1,012,693 | E 4,975 | 3,013,287 | 150,677 | 3,163,963 |
| 1996 Total ................ | 1,082,512 | 887,445 | 1,033,631 | 97,539 | 1,082,512 | E 980,061 | 1,033,631 | E 4,923 | 3,101,127 | 152,638 | 3,253,765 |
| 1997 Total ................ | 1,075,880 | 928,633 | 1,038,197 | 102,901 | 1,075,880 | E 1,026,626 | 1,038,197 | E 4,907 | 3,145,610 | 156,239 | 3,301,849 |
| 1998 Total ................ | 1,130,109 | 979,401 | 1,051,203 | 103,518 | 1,130,109 | E 1,077,957 | 1,051,203 | E 4,962 | 3,264,231 | 160,866 | 3,425,097 |
| 1999 Total ................ | 1,144,923 | 1,001,996 | 1,058,217 | 106,952 | 1,144,923 | E 1,103,821 | 1,058,217 | E 5,126 | 3,312,087 | 171,629 | 3,483,716 |
| 2000 Total ................ | 1,192,446 | 1,055,232 | 1,064,239 | 109,496 | 1,192,446 | E 1,159,347 | 1,064,239 | E 5,382 | 3,421,414 | 170,943 | 3,592,357 |
| 2001 Total ................. | 1,202,647 | 1,089,154 | 964,224 | 113,756 | 1,202,647 | E 1,197,426 | 964,224 | E 5,484 | 3,369,781 | 162,649 | 3,532,429 |
| 2002 January ............. | 117,742 | 89,366 | 76,600 | 8,315 | 117,742 | E 97,280 | 76,600 | E 401 | 292,023 | E 14,303 | 306,326 |
| February ........... | 97,309 | 82,526 | 76,413 | 8,028 | 97,309 | E 90,166 | 76,413 | E 387 | 264,275 | E 12,827 | 277,102 |
| March ................. | 95,919 | 85,055 | 78,122 | 8,010 | 95,919 | E 92,678 | 78,122 | E 386 | 267,105 | E 13,738 | 280,844 |
| April | 86,103 | 85,549 | 78,918 | 8,009 | 86,103 | E 93,171 | 78,918 | E 386 | 258,578 | E 13,214 | 271,792 |
| May ... | 87,494 | 90,819 | 82,242 | 8,501 | 87,494 | E 98,910 | 82,242 | E 410 | 269,055 | E 13,666 | 282,721 |
| June .................. | 107,853 | 98,638 | 82,432 | 9,306 | 107,853 | E 107,496 | 82,432 | E449 | 298,230 | E 13,992 | 312,221 |
| July ................... | 133,389 | 108,091 | 85,724 | 10,064 | 133,389 | E 117,670 | 85,724 | E 485 | 337,268 | E 15,126 | 352,394 |
| August ............... | 133,951 | 107,439 | 86,739 | 10,183 | 133,951 | E 117,131 | 86,739 | E 491 | 338,312 | E 14,786 | 353,098 |
| September ......... | 114,951 | 100,138 | 84,107 | 10,266 | 114,951 | E 109,909 | 84,107 | E 495 | 309,462 | E 13,818 | 323,280 |
| October .............. | 94,237 | 95,188 | 83,783 | 9,456 | 94,237 | E 104,189 | 83,783 | E 456 | 282,665 | E 13,465 | 296,130 |
| November ........... | 88,926 | 85,363 | 79,057 | 8,464 | 88,926 | E 93,419 | 79,057 | E 408 | 261,810 | E 13,415 | 275,226 |
| December .......... | 109,085 | 88,076 | 78,032 | 8,546 | 109,085 | E 96,209 | 78,032 | E 412 | 283,738 | E 13,833 | 297,572 |
| Total ................. | 1,266,959 | 1,116,248 | 972,168 | 107,146 | 1,266,959 | E 1,218,228 | 972,168 | E 5,166 | 3,462,521 | 166,184 | 3,628,705 |
| 2003 January ............. | - | - | - | - | 124,678 | 100,449 | 81,699 | 624 | 307,451 | E 15,106 | 322,557 |
| February ............ | - | - | - | - | 111,459 | 90,988 | 79,208 | 615 | 282,271 | E 13,035 | 295,306 |
| March .............. | - | - | - | - | 99,652 | 92,700 | 80,238 | 560 | 273,150 | E 13,743 | 286,893 |
| April | - | - | - | - | 83,680 | 89,471 | 81,913 | 564 | 255,628 | E 13,232 | 268,860 |
| May | - | - | - | - | 87,897 | 95,818 | 83,879 | 557 | 268,151 | E 13,819 | 281,969 |
| June .................... | - | - | - | - | 100,405 | 101,735 | 85,710 | 574 | 288,425 | E 13,905 | 302,330 |
| July | - | - | - | - | 129,601 | 114,651 | 87,507 | 616 | 332,375 | E 14,833 | 347,208 |
| August ..... | - | - | - | - | 133,217 | 115,998 | 90,315 | 611 | 340,141 | E 14,953 | 355,094 |
| September ......... | - | - | - | - | 112,937 | 106,554 | 85,944 | 598 | 306,034 | E 13,902 | 319,936 |
| October .... | - | - | - | - | 89,593 | 100,219 | 86,871 | 583 | 277,266 | E 13,973 | 291,239 |
| November | - | - | - | - | 87,035 | 92,957 | 82,739 | 548 | 263,279 | E 13,466 | 276,745 |
| December | - | - | - | - | 113,331 | 98,177 | 81,964 | 548 | 294,021 | E 14,328 | 308,349 |
| Total ............... | - | - | - | - | 1,273,486 | 1,199,718 | 1,007,988 | 6,999 | 3,488,192 | 168,295 | 3,656,487 |
| 2004 January ............. | - | - | - | - | 126,964 | 99,211 | 80,407 | 676 | 307,257 | E 14,376 | 321,634 |
| February | - | - | - | - | $113,075$ | 93,848 | 79,598 | 666 | $287,187$ | E 13,432 | 300,619 |
| March ................ | - | - | - | - | 99,047 | 95,223 | 83,353 | 606 | 278,229 | E 13,782 | 292,011 |
| April .................. | - | - | - | - | 85,440 | 93,076 | 83,529 | 610 | 262,655 | E 13,279 | 275,934 |
| May .................... | - | - | - | - | 90,660 | 100,600 | 87,704 | 603 | 279,567 | E 13,811 | 293,378 |
| June | - | - | - | - | 112,373 | 107,855 | 87,272 | 621 | 308,121 | E 13,878 | 321,999 |
| July | - | - | - | - | 129,753 | 115,638 | 88,628 | 667 | 334,685 | E 14,907 | 349,592 |
| August .............. | - | - | - | - | 126,724 | 114,569 | 89,703 | 662 | 331,658 | E 14,512 | 346,170 |
| September ......... | - | - | - | - | 112,688 | 109,512 | 86,172 | 648 | 309,019 | E 13,848 | 322,867 |
| October ............. | - | _ | - | - | 93,451 | 102,102 | 85,992 | 631 | 282,176 | E 13,304 | 295,481 |
| November | - | - | - | - | 89,537 | 95,617 | 84,637 | 601 | 270,392 | E 12,992 | 283,383 |
| December | - | - | - | - | 113,737 | 101,255 | 83,890 | 684 | 299,565 | E 13,869 | 313,434 |
| Total ................. | - | - | - | - | 1,293,449 | 1,228,505 | 1,020,883 | 7,674 | 3,550,512 | E 165,991 | 3,716,503 |

a Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers. Beginning in 2003 , the category "Other" has been replaced ay "Transportation," and the categories "Commercial" and "Industrial" have been redefined. For this table. and other sales to public authorities
${ }_{\mathrm{c}}$ Industrial sector, excluding agriculture and irrigation.
d Public street and highway lighting, interdepartmental sales, other sales to public authorities, agriculture and irrigation, and transportation including railroads and railways.
e Commercial sector, including public street and highway lighting, interdepartmental sales, and the estimated non-transportation portion of "Other"; beginning in 2003, data are actual survey
data.
Industrial sector. Through 2002, excludes agriculture and irrigation; beginning in 2003 includes agriculture and irrigation.
Transportation sector, including sales to railroads and railways. Through 2002, data are the estmated transportation portion of "Other"; beginning in 2003, data are actual survey data. categories. i Use of electricity that is 1) self-generated, 2) produced by either the same entity that consumes the power or an affiliate, and 3) used in direct support of a service or industrial process located within the same facility or group of facilities that house the generating equipment. Direct use is exclusive of station use.
$\mathrm{E}=$ Estimate. NA=Not available. $-=$ Not applicable.
Notes, Web Page, and Sources: See end of section.

## Electricity

## Note. Classification of Power Plants Into EnergyUse Sectors

The Energy Information Administration (EIA) classifies power plants (both electricity-only and combined-heat-andpower 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:
http://www.eia.doe.gov/cneaf/electricity/forms/eia860/naics_eia.xls.

## Table 7.1 Sources:

Net Generation, Electric Power Sector: Table 7.2b.

Net Generation, Commercial Sector: Table 7.2c.

## Net Generation, Industrial Sector:

1973-September 1977: 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.
October 1977-1978: Federal Energy Regulatory Commission (FERC), Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and FERC, Form FPC-12C, "Industrial Electric Generating Capacity," for all other plants.
1979: FERC, Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and EIA estimates for all other plants.
1980-1988: Estimated by EIA as the average generation over the 6-year period of 1974-1979.
1989 forward: Table 7.2c.

Imports and Exports, 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."

Imports and Exports, 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.

Imports and Exports, Electricity Trade with Mexico, 1990 Forward:
DOE, Fossil Energy, Office of Fuels Programs, Form FE-781R, "Annual Report of International Electrical Export/Import Data." For 2001 forward, data from the California Independent System Operator were used in combination with the Form FE-781R values to estimate electricity trade with Mexico.

T\&D Losses and Unaccounted for: Calculated as the sum of total net generation and imports minus end use and exports.

End Use: Table 7.6.
Table 7.2a Notes:

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


## Table 7.2a Web Page:

http://www.eia.doe.gov/emeu/mer/elect.html.

## Table 7.2a Sources:

1973-1988: Table 7.2b for electric power sector, and Table 7.1 for industrial sector.

1989 forward: See sources for Tables 7.2b and 7.2c

## Table 7.2b 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.


## Table 7.2b Web Page:

http://www.eia.doe.gov/emeu/mer/elect.html.

## 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."
2001-2003: EIA, Form EIA-906, "Power Plant Report."
2004: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

## Table 7.3a Notes:

- Data are for fuels consumed to produce electricity. Data also include fuels consumed to produce useful thermal output at a small number of electric utility 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.

Table 7.3a Web Page:
http://www.eia.doe.gov/emeu/mer/elect.html.

## Table 7.3a Sources:

See sources for Tables 7.3b and 7.3c.

## Table 7.3b Notes:

- Data are for fuels consumed to produce electricity. Data also include fuels consumed to produce useful thermal output at a small number of electric utility 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.


## Table 7.3b Web Page:

http://www.eia.doe.gov/emeu/mer/elect.html.

## Table 7.3b Sources:

1973-September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."
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."
2001-2003: EIA, Form EIA-906, "Power Plant Report."
2004: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

Table 7.6 Notes:

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


## Table 7.6 Web Page:

http://www.eia.doe.gov/emeu/mer/elect.html.

Table 7.6 Sources:

## Retail Sales, Old Basis:

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, "Electric Utility Company Monthly Statement."
1984-1989: EIA, Form EIA-861, "Annual Electric Utility Report."
1990-2002: EIA, Electric Power Monthly, March 2005, Table 5.1.

## Retail Sales, New Basis:

1973-2002: For "Residential" and "Industrial," see sources listed above. For "Commercial" and "Transportation," see http://www.eia.doe.gov/emeu/states/sep_use/notes/use_elec.pdf.
2003 forward: EIA, Electric Power Monthly, March 2005, Table 5.1.

## Direct Use, Annual:

1989-1991: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."
1992-2004: EIA, Electric Power Annual 2004, January 2005, Table 7.2.

Direct Use, Monthly: Annual shares are calculated as annual direct use divided by annual commercial and industrial net generation (on Table 7.1). Then monthly direct use estimates are calculated as the annual share multiplied by the monthly commercial and industrial net generation values. For 2004, the 2003 annual share is used.

## Section 8. Nuclear Energy

U.S. nuclear electricity net generation during December 2004 was 69 net terawatthours (billion kilowatthours) of electricity, the same as the level in December 2003.

Nuclear units generated at an average capacity factor of 93.0 percent in December 2004, the same as the capacity factor in December 2003.

The nuclear share of total electricity net generation in December 2004 was 20.2 percent, compared with 20.7 percent 1 year earlier.

On December 31, 2004, there were 104 operable nuclear generating units in the United States, with a collective net summer capacity of 99.2 million kilowatts of electricity.

Figure 8.1 Nuclear Energy Overview
Operable Units, End of Year, 1973-2004


Electricity Net Generation, 1973-2004


Nuclear Electricity Net Generation


Nuclear Share of Electricity Net Generation, 1973-2004


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 ${ }^{\text {a,b }}$ | Net Summer Capacity of Operable Units ${ }^{\text {b,c }}$ | Nuclear Electricity Net Generation | Nuclear Share of Electricity Net Generation | Capacity Factor ${ }^{\text {d }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Million Kilowatts | Million Kilowatthours |  |  |
| 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 Year ......................... | 104 | 98.159 | 768,826 | 20.6 | 89.4 |
|  | 104 | 98.657 | 70,926 | 22.2 | 96.6 |
| February | 104 | 98.657 | 61,658 | 21.9 | 93.0 |
| March | 104 | 98.657 | 63,041 | 20.8 | 85.9 |
| April ......................... | 104 | 98.657 | 58,437 | 20.2 | 82.3 |
| May ......................... | 104 | 98.657 | 63,032 | 20.5 | 85.9 |
| June ......................... | 104 | 98.657 | 66,372 | 19.5 | 93.4 |
| July ......................... | 104 | 98.657 | 70,421 | 18.5 | 95.9 |
| August ..................... | 104 | 98.657 | 70,778 | 18.9 | 96.4 |
| September ................. | 104 | 98.657 | 64,481 | 19.5 | 90.8 |
| October .................... | 104 | 98.657 | 60,493 | 19.7 | 82.4 |
| November ................. | 104 | 98.657 | 61,520 | 20.8 | 86.6 |
| December .................... | 104 104 | 98.657 98.657 | 68,905 780,064 | 21.2 20.2 | 93.9 |
| Year ........................ | 104 | 98.657 | 780,064 | 20.2 | 90.3 |
| 2003 January .................... | 104 | 99.209 | 69,211 | 20.2 | 93.8 |
| February ................... | 104 | 99.209 | 60,942 | 20.4 | 91.4 |
| March ....................... | 104 | 99.209 | 59,933 | 19.7 | 81.2 |
| April ......................... | 104 | 99.209 | 56,776 | 19.9 | 79.5 |
| May ......................... | 104 | 99.209 | 62,202 | 20.2 | 84.3 |
| June ......................... | 104 | 99.209 | 64,181 | 19.5 | 89.9 |
| July ........................................... | 104 | 99.209 99.209 | 69,653 69,024 | 18.6 | 94.4 |
| August ..................... | 104 | 99.209 | 69,584 | 19.7 | 93.5 89.0 |
| October ..................... | 104 | 99.209 | 60,016 | 19.6 | 81.3 |
| November ................. | 104 | 99.209 | 59,600 | 20.0 | 83.4 |
| December .................. | 104 | 99.209 | 68,612 | 20.7 | 93.0 |
| Year ....................... | 104 | 99.209 | 763,733 | 19.7 | 87.9 |
| 2004 January .................... | 104 | 99.209 | 70,806 | 20.5 | 95.9 |
| February .................. | 104 | 99.209 | 64,102 | 20.5 | 92.8 |
| March ........................ | 104 | 99.209 | 63,263 | 20.6 | 85.7 |
| April ........................ | 104 | 99.209 | 58,620 | 20.2 | 82.1 |
| May ......................... | 104 | 99.209 | 64,917 | 19.9 | 88.0 |
| June .......................... | 104 | 99.209 | 67,787 | 19.7 | 94.9 |
| July ......................... | 104 | 99.209 | 71,975 | 19.2 | 97.5 |
| August .................... | 104 | 99.209 | 71,064 | 19.3 | 96.3 |
| September .................. | 104 | 99.209 99.209 | 65,932 | 19.7 | 92.3 |
| October .................... | 104 | 99.209 99.209 | 62,530 58,941 | 20.1 19.7 | 84.7 82.5 |
| December ..................... | 104 | 99.209 | 68,617 | 20.2 | 93.0 |
| Year ......................... | 104 | 99.209 | 788,556 | 19.9 | 90.5 |

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 intenton 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 2003, September 2004, Table 9.1.
September 2004, Tabl
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.
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.xls.

Nuclear Electricity Net Generation and Nuclear Share of Electricity Net Generation: See Table 7.2a for actual data.

Capacity Factor: EIA, Office of Coal, Nuclear, Electric and Alternate Fuels for actual data.

## Section 9. Energy Prices

Crude Oil. The average price of domestic crude oil at the wellhead was $\$ 38.10$ per barrel in December 2004, 34 percent above the level of December 2003. The refiner acquisition cost of imported crude oil in December 2004 was $\$ 34.32$ per barrel, 20 percent higher than the December 2003 level. The average cost of domestic crude oil in December 2004 was \$40.31, 33 percent more than the December 2003 average.

Motor Gasoline. The national city average retail price of unleaded regular gasoline at all types of stations was $\$ 1.82$ per gallon in January 2005, 15 percent higher than the price in January 2004. The price of unleaded premium gasoline averaged $\$ 2.02$ in January 2005, 13 percent higher than the price in January 2004.

Residual Fuel Oil. The average price, excluding taxes, of residual fuel oil sold to end users in December 2004 was 75 cents per gallon, 8 percent lower than the previous month's price but 13 percent higher than the December 2003 average. The average resale price, excluding taxes, of residual fuel oil in December 2004 was 62 cents, 12 percent lower than the November 2004 price but the same as the price 1 year earlier.

Jet Fuel. The average price, excluding taxes, of kerosenetype jet fuel sold to end users in December 2004 was \$1.33 per gallon, 9 percent lower than the previous month's average price but 44 percent more than the December 2003 average price.

No. 2 Distillate Fuel Oil. The December 2004 national average price, excluding taxes, of heating oil sold to residential customers was $\$ 1.79$ per gallon, 2 percent lower than the November 2004 price but 34 percent higher than the December 2003 price. The average price of No. 2 fuel oil sold to all end users was $\$ 1.32$ per gallon in December

2004, 7 percent lower than the November 2004 price but 40 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 December 2004 (latest month for which data are available) was 7.32 cents per kilowatthour, 2 percent higher than the average price in December 2003. The price of electricity sold to residential consumers in December 2004 averaged 8.58 cents per kilowatthour, 3 percent higher than the December 2003 price. The price of electricity sold to commercial consumers averaged 7.81 cents per kilowatthour in December 2004, 2 percent higher than the December 2003 price. The price of electricity sold to transportation users in December 2004 averaged 6.51 cents per kilowatthour, 5 percent lower than the December 2003 price. The price of electricity sold to industrial users in December 2004 averaged 5.01 cents per kilowatthour, 1 percent higher than the price 1 year earlier.

Natural Gas. The average wellhead price of natural gas for December 2004 (latest month for which data are available) was estimated as $\$ 6.25$ per thousand cubic feet, 31 percent higher than the December 2003 price.

The average price of natural gas delivered to the electric power sector was $\$ 6.67$ per thousand cubic feet in November 2004, 39 percent higher than the November 2003 price. The average price of natural gas used by residential consumers in December 2004 was $\$ 11.09$ per thousand cubic feet, 18 percent higher than the December 2003 price. The average price of natural gas used by commercial consumers in December 2004 was $\$ 10.26$ per thousand cubic feet, 21 percent higher than the December 2003 price. The average price of natural gas used by industrial consumers in December 2004 was $\$ 7.43$ per thousand cubic feet, 30 percent above the December 2003 price.

Crude Oil Prices, 1973-2004


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 ${ }^{\text {b }}$ | F.O.B. Cost of Imports ${ }^{\text {C }}$ | Landed Cost of Imports ${ }^{\text {d }}$ | Refiner Acquisition Cost ${ }^{\text {a }}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Domestic | Imported | Composite |
| 1973 Average ............. | 3.89 | ${ }^{\text {e }} 5.21$ | ${ }^{\mathrm{e}} 6.41$ | E 4.17 | ${ }^{\text {E }} 4.08$ | 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 Average ............. | 21.84 | 20.46 | 21.82 | 24.33 | 22.00 | 22.95 |
| 2002 January ............... | 15.89 | 16.01 | 17.29 | 17.84 | 17.04 | 17.38 |
| February ............. | 16.93 | 17.67 | 19.17 | 18.70 | 18.24 | 18.43 |
| March ................. | 20.28 | 21.60 | 22.24 | 21.61 | 22.29 | 22.00 |
| April ................... | 22.52 | 23.04 | 24.15 | 24.26 | 23.98 | 24.10 |
| May .................... | 23.51 | 23.16 | 24.49 | 25.78 | 24.44 | 25.03 |
| June ................... | 22.59 | 22.63 | 23.95 | 24.81 | 23.45 | 24.05 |
| July .................... | 23.51 | 23.72 | 25.01 | 25.37 | 24.99 | 25.16 |
| August ................ | 24.76 | 24.57 | 25.93 | 26.87 | 25.68 | 26.19 |
| September .......... | 26.08 | 25.80 | 26.78 | 28.40 | 27.14 | 27.66 |
| October ............... | 25.29 | 24.32 | 25.58 | 27.82 | 25.99 | 26.70 |
| November ........... | 23.38 | 22.42 | 24.22 | 26.02 | 23.68 | 24.60 |
| December | 25.29 | 25.86 | 27.08 | 27.25 | 26.68 | 26.93 |
| Average ............. | 22.51 | 22.63 | 23.91 | 24.65 | 23.71 | 24.10 |
| 2003 January | 28.42 | 29.15 | 30.34 | 30.82 | 30.30 | 30.52 |
| February ............. | 31.85 | 29.78 | 31.34 | 34.05 | 32.23 | 33.00 |
| March ................. | 30.10 | 26.32 | 28.86 | 32.70 | 29.23 | 30.65 |
| April ................... | 25.45 | 22.74 | 25.20 | 28.55 | 24.48 | 26.02 |
| May .................... | 24.95 | 23.48 | 25.40 | 26.75 | 25.15 | 25.74 |
| June ................... | 26.84 | 25.34 | 27.36 | 29.07 | 27.22 | 27.92 |
| July .................... | 27.52 | 26.10 | 27.72 | 29.54 | 27.95 | 28.55 |
| August ................ | 27.94 | 26.87 | 28.01 | 30.28 | 28.50 | 29.15 |
| September .......... | 25.23 | 24.07 | 25.91 | 27.75 | 25.66 | 26.39 |
| October ............... | 26.53 | 26.06 | 27.37 | 28.43 | 27.32 | 27.75 |
| November ............ | 27.21 | 26.03 | 27.68 | 29.55 | 27.47 | 28.28 |
| December ........... | 28.53 | 26.77 | 28.80 | 30.27 | 28.63 | 29.28 |
| Average ............. | 27.56 | 25.86 | 27.69 | 29.82 | 27.71 | 28.53 |
| 2004 January ............... | 30.35 | 28.16 | 30.76 | 32.01 | 30.24 | 30.92 |
| February ................ | 31.21 | 28.50 | 31.14 | 33.19 | 30.77 | 31.72 |
| March .................. | 32.86 | 30.02 | 32.30 | 34.53 | 32.25 | 33.09 |
| April ................... | 33.23 | 30.98 | 32.88 | 35.25 | 32.42 | 33.46 |
| May .................... | 36.07 | 33.81 | 35.09 | 37.23 | 35.82 | 36.31 |
| June ................... | 34.53 | 32.20 | 34.37 | 36.57 | 33.58 | 34.65 |
| July .................... | 36.54 | 34.92 | 36.82 | 37.90 | 35.98 | 36.67 |
| August ................ | 40.10 | 37.33 | 39.56 | 41.54 | 39.57 | 40.29 |
| September ........... | 40.62 | \% 38.82 | 41.09 | 42.77 | 40.51 | 41.34 |
| October ............... | 46.28 | R 42.23 | R 44.12 | 47.22 | 45.53 | 46.12 |
| November ........... | ${ }^{\text {R }} 42.81$ | ${ }^{\text {R }} 35.93$ | ${ }^{\text {R }} 38.96$ | ${ }^{\text {R }} 44.79$ | ${ }^{\text {R }} 39.89$ | 41.76 |
| December ........... | 38.10 | 30.49 | 34.06 | 40.31 | 34.32 | 36.57 |
| Average ............. | 36.75 | 33.68 | 35.98 | 38.62 | 36.01 | 36.97 |

[^33]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 ${ }^{\text {a }}$ | Total OPEC ${ }^{\text {b }}$ | Total <br> Non-OPEC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Angola | Colombia | Mexico | Nigeria | Saudi <br> Arabia | United Kingdom | Venezuela |  |  |  |
| 1973 Average ${ }^{\text {c }}$............ | 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 | ( ${ }^{\text {d }}$ ) | 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 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 | W | 13.49 | 17.46 | 15.79 | 16.17 |
| February ............. | 18.76 | 19.28 | 15.91 | 20.73 | 21.11 | W | 14.84 | 19.77 | 17.61 | 17.71 |
| March .................. | 22.65 | 23.88 | 20.21 | 24.39 | 23.42 | W | 19.31 | 23.08 | 21.49 | 21.67 |
| April ...................... | 24.36 | 25.57 | 22.42 | 25.66 | 23.17 | W | 20.02 | 23.38 | 22.48 | 23.38 |
| May .................... | 24.49 | 26.11 | 22.83 | W | 23.19 | 24.52 | 19.90 | 22.78 | 22.26 | 23.72 |
| June .................... | 22.93 | 24.30 | 22.05 | 24.39 | 23.55 | 23.24 | 20.50 | 23.56 | 22.26 | 22.84 |
| July ..................... | 24.63 | W | 22.50 | 26.01 | 25.12 | 25.39 | 21.71 | 24.99 | 23.46 | 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 | 25.31 | 28.56 | 24.67 | 28.41 | 23.98 | 24.71 | 25.09 | 26.30 |
| October ................ | 26.57 | 27.03 | 23.68 | 27.28 | 23.46 | 28.20 | 21.59 | 23.06 | 22.88 | 25.29 |
| November ............ | 23.58 | 24.14 | 20.63 | 24.93 | 25.12 | 25.10 | 20.18 | 24.58 | 22.36 | 22.46 |
| December ............ | 28.75 | 27.75 | 24.25 | 29.98 | 26.75 | W | 23.41 | 26.64 | 26.53 | 25.51 |
| Average ............. | 24.09 | 24.64 | 21.60 | 25.38 | 23.92 | 24.50 | 20.13 | 23.38 | 22.18 | 22.93 |
| 2003 January ............... | 31.59 | 32.94 | 28.32 | 31.76 | 27.79 | 31.66 | W | 27.83 | 29.05 | 29.21 |
| February ............. | 33.49 | 35.25 | 28.43 | 33.64 | 26.67 | 32.97 | 28.50 | 27.17 | 28.65 | 30.52 |
| March .................. | 29.34 | 31.28 | 24.97 | 30.82 | 24.87 | 28.78 | 22.83 | 25.09 | 25.39 | 26.99 |
| April ................... | 24.81 | 24.85 | 21.53 | 25.27 | 20.97 | W | 21.00 | 21.08 | 21.83 | 23.40 |
| May .................... | 25.63 | 25.13 | 22.56 | 27.03 | 22.52 | 25.28 | 21.61 | 22.57 | 22.78 | 23.99 |
| June .................... | 26.66 | 27.63 | 24.39 | 27.79 | 26.45 | W | 22.98 | 26.37 | 24.88 | 25.67 |
| July .................... | 27.83 | W | 25.60 | 29.14 | 25.54 | W | 24.51 | 25.58 | 25.63 | 26.41 |
| August ................ | 28.76 | 28.97 | 25.88 | 30.08 | 26.22 | 29.42 | 24.87 | 25.99 | 26.33 | 27.20 |
| September .......... | 26.13 | 27.44 | 23.33 | 27.28 | 23.82 | W | 22.76 | 23.80 | 23.78 | 24.32 |
| October ............... | 29.47 | 28.91 | 23.77 | 30.02 | W | W | 23.77 | 26.29 | 25.84 | 26.21 |
| November ........... | 28.94 | W | 24.92 | 29.78 | 27.70 | 29.32 | 23.75 | 26.88 | 26.09 | 25.99 |
| December ............ | 29.58 | 30.02 | 25.56 | 30.60 | 27.70 | W | 25.71 | 27.32 | 27.05 | 26.56 |
| Average ............. | 28.22 | 28.89 | 24.83 | 29.40 | 25.03 | 28.76 | 23.81 | 25.17 | 25.36 | 26.21 |
| 2004 January ............... | W | 33.14 | 26.65 | 31.25 | W | W | 25.94 | 27.98 | 27.88 | 28.40 |
| February .............. | 30.06 | W | 26.24 | 32.03 | W | W | 26.70 | 28.05 | 28.70 | 28.33 |
| March .................. | W | 33.17 | 28.26 | 33.80 | W | 33.72 | 28.15 | 29.76 | 30.08 | 29.97 |
| April | 32.43 | 34.47 | 29.46 | 34.21 | W | W | 31.23 | 29.89 | 31.54 | 30.47 |
| May .................... | W | 36.46 | 32.40 | 38.16 | W | W | 33.18 | 32.49 | 34.50 | 33.25 |
| June ................... | 36.57 | 35.10 | 30.33 | 35.63 | 32.91 | W | 30.92 | 32.31 | 32.46 | 32.01 |
| July ..................... | 36.95 | 39.28 | 32.56 | 39.80 | 35.17 | (d) | 32.46 | 34.90 | 35.28 | 34.58 |
| August ................ | 42.75 | W | 34.24 | 43.18 | W | 41.89 | 33.93 | 37.71 | 37.57 | 37.14 |
| September ........... | 41.03 | 41.80 | 35.27 | 44.82 | 38.41 | W | 38.72 | 39.12 | 40.58 | 37.45 |
| October ............... | 47.64 | 45.74 | r 40.46 | r 49.15 | W | W | 39.55 | R 37.35 | R 41.33 | 42.92 |
| November ............ | R 39.78 | W | R 33.09 | R 43.36 | W | W | R 32.23 | R 33.04 | R 35.41 | R 36.37 |
| December ............ | 33.01 | W | 29.48 | 40.12 | W | W | 29.55 | 26.84 | 29.91 | 30.84 |
| Average ............. | 36.98 | 37.73 | 31.55 | 38.65 | 33.61 | 37.30 | 31.75 | 32.78 | 33.82 | 33.57 |

[^34]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 ${ }^{\text {a }}$ | Total OPEC ${ }^{\text {b }}$ | Total Non-OPEC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Angola | Canada | Colombia | Mexico | Nigeria | Saudi Arabia | United Kingdom | Venezuela |  |  |  |
| 1973 Average ${ }^{\text {c }}$ | 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 | ( ${ }_{\text {d }}$ ) | 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 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 | 15.64 | 19.86 | 14.87 | 20.41 | 19.02 | W | 15.07 | 18.02 | 17.57 | 16.95 |
| February ............... | 19.70 | 18.00 | 20.33 | 16.29 | 21.57 | 21.99 | 20.83 | 16.49 | 20.67 | 19.68 | 18.58 |
| March .................... | 22.99 | 20.05 | 24.54 | 20.38 | 24.33 | 24.01 | 23.72 | 20.82 | 23.31 | 22.79 | 21.72 |
| April ...................... | 25.24 | 23.37 | 26.22 | 22.90 | 26.47 | 24.18 | 25.35 | 22.02 | 24.06 | 24.03 | 24.26 |
| May ...................... | 25.52 | 23.97 | 25.85 | 23.45 | 26.56 | 24.48 | 25.93 | 21.92 | 24.33 | 24.11 | 24.78 |
| June | 24.48 | 23.15 | 24.99 | 22.61 | 25.55 | 24.61 | 25.12 | 22.30 | 24.48 | 23.98 | 23.93 |
| July | 26.06 | 24.38 | 25.99 | 23.09 | 26.89 | 25.97 | 26.36 | 23.34 | 25.77 | 25.06 | 24.98 |
| August | 26.99 | 25.63 | 27.00 | 24.21 | 27.75 | 26.67 | 27.00 | 24.43 | 26.51 | 25.94 | 25.92 |
| September ............ | 28.93 | 26.00 | 29.77 | 25.76 | 29.44 | 25.93 | 28.20 | 25.45 | 25.97 | 26.37 | 27.16 |
| October ................. | 27.75 | 25.16 | 28.07 | 24.14 | 28.59 | 25.02 | 28.90 | 23.06 | 24.92 | 24.73 | 26.30 |
| November ............. | 25.06 | 23.24 | 25.28 | 21.24 | 26.53 | 26.37 | 26.96 | 22.02 | 25.86 | 24.53 | 23.92 |
| December ............. | 30.65 | 24.53 | 28.42 | 24.63 | 30.58 | 28.20 | 29.38 | 25.09 | 27.91 | 28.07 | 26.32 |
| Average ............... | 25.43 | 22.98 | 25.28 | 22.09 | 26.45 | 24.77 | 26.35 | 21.93 | 24.13 | 23.83 | 23.97 |
| 2003 January ................ | 33.28 | 27.91 | 34.11 | 28.71 | 33.40 | 30.55 | 32.89 | 29.38 | 30.22 | 30.79 | 29.99 |
| February ............... | 36.01 | 30.10 | 36.79 | 29.28 | 35.65 | 29.25 | 34.74 | 30.80 | 29.85 | 30.73 | 31.94 |
| March .................... | 32.00 | 29.93 | 32.73 | 26.18 | 34.29 | 26.23 | 31.32 | 26.51 | 27.01 | 28.24 | 29.52 |
| April ..................... | 27.77 | 26.06 | 26.15 | 22.24 | 29.54 | 24.46 | 28.23 | 23.33 | 24.26 | 24.86 | 25.62 |
| May ...................... | 27.39 | 24.98 | 26.85 | 23.12 | 28.33 | 25.40 | 26.75 | 23.42 | 25.15 | 25.30 | 25.50 |
| June ...................... | 28.52 | 26.91 | 29.35 | 25.09 | 29.49 | 28.22 | 29.58 | 25.06 | 28.11 | 27.38 | 27.33 |
| July ...................... | 29.60 | 26.88 | 30.17 | 26.05 | 30.40 | 27.54 | 29.83 | 26.11 | 27.50 | 27.58 | 27.84 |
| August | 30.04 | 27.48 | 30.24 | 26.37 | 31.10 | 27.08 | 30.52 | 26.23 | 26.93 | 27.70 | 28.27 |
| September ............ | 27.91 | 25.17 | 28.13 | 23.76 | 29.12 | 25.81 | 28.95 | 24.09 | 25.88 | 25.99 | 25.84 |
| October ................. | 31.07 | 25.57 | 29.88 | 24.37 | 30.38 | 28.23 | 31.14 | 25.48 | 28.01 | 27.76 | 26.97 |
| November | 30.57 | 25.06 | 30.38 | 25.54 | 31.45 | 29.13 | 31.60 | 25.85 | 28.61 | 28.36 | 26.95 |
| December ............. | 31.60 | 26.16 | 32.63 | 26.27 | 32.51 | 30.56 | 31.46 | 27.70 | 30.17 | 29.84 | 27.79 |
| Average ............... | 30.14 | 26.76 | 30.55 | 25.48 | 31.07 | 27.50 | 30.62 | 25.70 | 27.54 | 27.70 | 27.68 |
| 2004 January ................ | 34.03 | 29.37 | 34.85 | 27.81 | 33.63 | 31.73 | 32.89 | 28.79 | 31.43 | 31.20 | 30.32 |
| February ................. | 34.44 | 30.21 | 35.99 | 27.10 | 35.09 | 31.98 | 33.30 | 28.98 | 31.70 | 31.86 | 30.35 |
| March ................... | 35.00 | 30.95 | 35.34 | 28.92 | 36.06 | 33.11 | 36.41 | 30.00 | 32.89 | 32.92 | 31.60 |
| April ..................... | 35.29 | 31.20 | 35.30 | 29.82 | 36.65 | 33.37 | 35.11 | 32.39 | 33.21 | 33.69 | 31.97 |
| May ...................... | 37.90 | 32.70 | 37.78 | 32.84 | 39.33 | 34.89 | 38.14 | 34.16 | 34.68 | 35.70 | 34.45 |
| June ..................... | 38.44 | 33.05 | 36.19 | 30.89 | 38.05 | 36.14 | 36.50 | 32.29 | 35.43 | 35.21 | 33.55 |
| July ...................... | 39.19 | 35.00 | 38.49 | 32.84 | 41.00 | 38.68 | 40.93 | 33.78 | 38.32 | 37.85 | 35.65 |
| August ................. | 44.92 | 38.28 | 42.30 | 34.66 | 44.74 | 42.21 | 42.51 | 36.03 | 41.14 | 40.65 | 38.38 |
| September ............. | 43.84 | 39.07 | 43.03 | 35.64 | 46.53 | 42.52 | 43.49 | 40.28 | 42.32 | 42.84 | 39.37 |
| October .................. | R 48.47 | 42.93 | 47.35 | 41.14 | 51.85 | R 42.87 | 49.78 | 41.92 | R 42.15 | R 44.21 | R 44.04 |
| November .............. | R 43.63 | R 39.46 | 42.52 | R 33.78 | R 47.64 | R 38.58 | R 47.41 | R 34.76 | R 37.58 | R 39.02 | R 38.90 |
| December | 38.79 | 31.87 | 39.39 | 30.32 | 43.78 | 35.01 | 39.80 | 32.57 | 34.25 | 35.38 | 33.11 |
| Average ............... | 39.33 | 34.51 | 39.03 | 32.25 | 40.81 | 36.90 | 39.25 | 33.76 | 36.36 | 36.70 | 35.24 |

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 is included in the data through 1992 and Gabon through 1995.
${ }^{c}$ Based on October, November, and December data only.
${ }^{d}$ No data reported.
$\mathrm{R}=$ Revised. $N A=$ Not available. $\mathrm{W}=$ 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, March 2005, 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 ${ }^{\text {a }}$ |
| :---: | :---: | :---: | :---: | :---: |
| 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 ${ }^{\text {b }}$............................ | 131.1 | 137.8 | ${ }^{\text {c }} 147.0$ | 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 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 | 155.6 | 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 |
| June .................................. | NA | 151.4 | 170.0 | 155.8 |
| July ................................... | NA | 152.4 | 171.0 | 156.7 |
| August .............................. | NA | 162.8 | 180.8 | 167.1 |
| September .......................... | NA | 172.8 | 191.1 | 177.1 |
| October ............................. | NA | 160.3 | 178.9 | 164.6 |
| November .......................... | NA | 153.5 | 172.4 | 157.8 |
| December ........................... | NA | 149.4 | 168.6 | 153.8 |
| Average ............................ | NA | 159.1 | 177.7 | 163.8 |
| 2004 January .............................. | NA | 159.2 | 177.9 | 163.5 |
| February ............................ | NA | 167.2 | 185.8 | 171.5 |
| March ................................ | NA | 176.6 | 194.9 | 180.9 |
| April ................................... | NA | 183.3 | 201.2 | 187.5 |
| May ................................... | NA | 200.9 | 218.6 | 205.0 |
| June ................................. | NA | 204.1 | 222.5 | 208.3 |
| July | NA | 193.9 | 213.0 | 198.2 |
| August | NA | 189.8 | 209.1 | 194.1 |
| September .......................... | NA | 189.1 | 208.2 | 193.4 |
| October .............................. | NA | 202.9 | 221.5 | 207.2 |
| November ........................... | NA | 201.0 | 220.3 | 205.3 |
| December ........................... | NA | 188.2 | 208.0 | 192.6 |
| Average ........................... | NA | 188.0 | 206.8 | 192.3 |
| 2005 January ................................ | NA | 182.3 | 201.7 | 186.6 |

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 OilSulfur ContentGreater 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 Average .............. | 52.3 | 64.2 | 42.8 | 49.2 | 47.6 | 53.1 |
| 2002 January ................ | 40.4 | 51.8 | 33.7 | 41.6 | 38.2 | 44.2 |
| February | 37.1 | 52.2 | 33.7 | 40.9 | 35.9 | 43.3 |
| March .................... | 46.0 | 53.5 | 40.5 | 48.3 | 43.7 | 49.7 |
| April ..................... | 53.8 | 59.4 | 48.0 | 55.0 | 51.2 | 56.0 |
| May ..................... | 56.3 | 63.5 | 52.1 | 56.6 | 54.5 | 58.1 |
| June ...................... | 53.5 | 61.4 | 53.3 | 57.2 | 53.4 | 58.2 |
| July ...................... | 55.7 | 63.2 | 50.9 | 56.8 | 53.7 | 58.6 |
| August ................. | 60.6 | 67.4 | 55.8 | 59.2 | 58.4 | 61.4 |
| September ............ | 60.1 | 67.8 | 56.8 | 62.6 | 58.7 | 63.8 |
| October ................. | 65.1 | 72.7 | 54.5 | 63.7 | 60.7 | 65.8 |
| November ............. | 59.1 | 73.6 | 58.2 | 54.8 | 58.7 | 60.1 |
| December ............. | 67.6 | 73.9 | 59.7 | 56.6 | 64.1 | 62.0 |
| Average ................. | 54.6 | 64.0 | 50.8 | 54.4 | 53.0 | 56.9 |
| 2003 January ................ | 79.7 | 86.6 | NA | 71.2 | 73.1 | 75.4 |
| February | 94.4 | 97.2 | 76.0 | 77.1 | 87.3 | 83.9 |
| March | 88.1 | 98.1 | 62.4 | 72.1 | 77.4 | 81.1 |
| April ..................... | 60.3 | 77.3 | 51.9 | 59.5 | 56.9 | 64.3 |
| May ..................... | 62.8 | 74.9 | 53.2 | 58.8 | 57.2 | 61.9 |
| June ..................... | 62.6 | 71.9 | 54.1 | 60.0 | 58.0 | 63.9 |
| July ...................... | 64.9 | 74.5 | 58.9 | 67.8 | 61.7 | 70.1 |
| August ................. | 67.2 | 75.4 | 60.7 | 67.2 | 63.4 | 69.8 |
| September ............ | 62.6 | 72.0 | 56.1 | 61.2 | 58.6 | 64.6 |
| October ................. | 65.2 | 70.7 | 56.6 | 62.8 | 60.1 | 65.2 |
| November ............. | 67.3 | 76.7 | 58.7 | 62.2 | 62.7 | 66.7 |
| December ............. | 66.7 | 79.3 | 54.5 | 60.7 | 62.3 | 66.8 |
| Average ............... | 72.8 | 80.4 | 58.8 | 65.1 | 66.1 | 69.8 |
| 2004 January ................ | 75.3 | 84.4 | 57.6 | 64.9 | 69.0 | 71.6 |
| February ............... | 76.3 | 80.7 | 59.3 | 64.0 | 69.7 | 70.3 |
| March .................... | 67.3 | 76.3 | 57.1 | 62.5 | 62.8 | 67.5 |
| April ..................... | 69.9 | 75.8 | 58.4 | 64.8 | 64.4 | 68.8 |
| May ...................... | 76.4 | 79.1 | 62.9 | 69.8 | 68.9 | 72.8 |
| June ..................... | 75.7 | 78.7 | 62.7 | 71.6 | 69.6 | 73.9 |
| July ...................... | 72.2 | 76.3 | 60.4 | 69.3 | 66.4 | 71.4 |
| August ................. | 75.2 | 79.8 | 60.8 | 70.1 | 67.8 | 73.2 |
| September ............ | 74.6 | 88.3 | 61.3 | 70.7 | 67.2 | 77.2 |
| October ................. | 85.7 | 88.3 | 68.9 | 81.0 | 77.1 | 82.8 |
| November ............. | 86.7 | 93.8 | ${ }^{\text {R }} 59.1$ | 75.2 | 71.1 | 82.2 |
| December ............. | 75.9 | 85.0 | 54.2 | 66.6 | 62.3 | 75.4 |
| Average ............... | 75.6 | 82.4 | 60.0 | 69.2 | 67.9 | 73.8 |

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, March 2005, Table 19.

Table 9.6 Refiner Prices of Petroleum Products for Resale
(Cents per Gallon, Excluding Taxes)

|  | Finished Motor Gasoline ${ }^{\text {a }}$ | Finished Aviation Gasoline | KeroseneType Jet Fuel | Kerosene | No. 2 <br> Fuel Oil | No. 2 <br> 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 Average ..................... | 88.6 | 125.6 | 76.3 | 82.1 | 75.6 | 78.4 | 54.0 |
| 2002 January ..................... | 61.2 | 97.5 | 57.2 | 61.9 | 57.6 | 54.6 | 37.4 |
| February .................... | 62.8 | 99.8 | 57.1 | 61.1 | 57.8 | 56.7 | 36.4 |
| March ........................ | 78.4 | 105.1 | 63.9 | 69.8 | 64.5 | 66.6 | 39.7 |
| April .......................... | 87.1 | 118.9 | 69.1 | 70.5 | 68.3 | 70.9 | 41.6 |
| May | 85.9 | 114.4 | 69.6 | 71.1 | 68.4 | 70.6 | 40.8 |
| June .......................... | 85.6 | 116.7 | 67.8 | 69.4 | 66.0 | 68.2 | 37.9 |
| July ........................... | 87.8 | 118.9 | 71.4 | 73.2 | 68.9 | 71.0 | 37.5 |
| August ...................... | 87.4 | 115.5 | 73.8 | 76.4 | 71.3 | 75.7 | 41.5 |
| September .................. | 88.9 | 119.2 | 81.5 | 85.5 | 78.3 | 83.4 | 47.1 |
| October ...................... | 93.0 | 123.7 | 84.5 | 88.5 | 79.6 | 85.7 | 48.9 |
| November .................. | 85.0 | 116.1 | 75.1 | 81.3 | 74.8 | 78.7 | 49.4 |
| December ................... | 85.9 | 113.2 | 79.9 | 87.9 | 80.8 | 82.0 | 53.3 |
| Average .................... | 82.8 | 114.6 | 71.6 | 75.2 | 69.4 | 72.4 | 43.1 |
| 2003 January ...................... | 94.7 | 122.4 | 89.8 | 98.8 | 90.0 | 89.2 | 60.5 |
| February .................... | 110.0 | 130.1 | 103.1 | 118.4 | 108.6 | 107.8 | 72.7 |
| March . | 112.9 | 135.0 | 102.4 | 116.6 | 105.3 | 102.5 | 69.2 |
| April .......................... | 99.7 | 125.8 | 82.3 | 86.1 | 83.0 | 86.4 | 53.8 |
| May ........................... | 93.6 | 122.6 | 75.1 | 75.4 | 75.8 | 79.2 | 54.3 |
| June .......................... | 95.6 | NA | 76.9 | 77.4 | 76.9 | 81.0 | 57.1 |
| July ........................... | 98.2 | 129.5 | 81.3 | 82.8 | 78.9 | 83.7 | 55.9 |
| August ....................... | 110.2 | 139.7 | 86.2 | 88.2 | 83.6 | 88.8 | 58.6 |
| September ................. | 102.5 | 134.9 | 80.8 | 82.7 | 77.3 | 80.7 | 56.7 |
| October ...................... | 98.2 | 131.3 | 83.7 | 91.6 | 84.2 | 87.0 | 59.7 |
| November .................. | 94.3 | 124.4 | 86.5 | 89.5 | 84.2 | 86.5 | 58.7 |
| December .................. | 93.9 | 124.4 | 90.7 | 97.0 | 88.6 | 89.2 | 64.8 |
| Average .................... | 100.2 | 128.8 | 87.1 | 95.5 | 88.1 | 88.3 | 60.7 |
| 2004 January ...................... | 105.0 | 135.3 | 99.7 | 110.9 | 97.0 | 96.2 | 71.7 |
| February .................... | 112.7 | 143.6 | 100.0 | 114.6 | 93.0 | 96.8 | 70.1 |
| March ........................ | 119.9 | 148.9 | 101.4 | 104.3 | 93.6 | 101.0 | 61.9 |
| April .......................... | 125.4 | 155.7 | 103.3 | 104.3 | 95.5 | 107.6 | 60.4 |
| May ........................... | 143.5 | 172.8 | 115.1 | 119.4 | 102.9 | 112.4 | 65.6 |
| June .......................... | 133.5 | 174.0 | 108.5 | 108.0 | 101.9 | 107.2 | 66.1 |
| July ........................... | 134.1 | 170.6 | 115.6 | 118.8 | 109.4 | 115.6 | 72.1 |
| August ....................... | 131.0 | 168.1 | 126.9 | 127.9 | 118.8 | 124.4 | 83.0 |
| September ................. | 132.8 | 165.8 | 132.5 | 140.1 | 126.8 | 133.1 | 80.4 |
| October ...................... | 145.9 | 174.5 | 154.9 | 163.2 | 147.7 | 153.1 | 88.6 |
| November .................. | 138.2 | 168.6 | ${ }^{\text {R } 145.3}$ | 147.9 | 139.3 | 142.4 | 88.3 |
| December .................. | 119.7 | 157.3 | 132.5 | 138.1 | 129.8 | 127.5 | 83.4 |
| Average .................... | 128.9 | 162.5 | 121.0 | 126.2 | 112.6 | 118.9 | 75.1 |

a See Note 5 at end of section.
NA=Not available. 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, March 2005, Table 4.

Table 9.7 Refiner Prices of Petroleum Products to End Users
(Cents per Gallon, Excluding Taxes)

|  | Finished Motor Gasoline ${ }^{\text {a }}$ | Finished Aviation Gasoline | KeroseneType Jet Fuel | Kerosene | No. 2 <br> Fuel Oil | No. 2 <br> Diesel <br> 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 Average .................... | 103.2 | 132.3 | 77.5 | 104.5 | 82.9 | 84.2 | 50.6 |
| 2002 January ..................... | 70.6 | 111.8 | 58.2 | 98.0 | 63.6 | 60.5 | 38.1 |
| February .................... | 71.8 | 110.6 | 58.5 | 99.6 | 62.3 | 61.6 | 35.0 |
| March ......................... | 87.2 | 122.6 | 64.4 | 101.3 | 70.1 | 70.2 | 39.5 |
| April | 100.4 | 129.8 | 70.1 | 87.3 | 72.0 | 75.3 | 41.7 |
| May ........................... | 99.9 | 128.9 | 70.9 | 91.5 | 70.9 | 75.5 | 40.5 |
| June .......................... | 99.1 | 127.3 | 68.8 | 83.6 | 67.8 | 73.7 | 37.9 |
| July ........................... | 100.3 | 139.2 | 72.2 | 80.7 | 70.9 | 75.6 | 38.4 |
| August ...................... | 100.1 | 136.9 | 75.3 | 79.8 | 73.4 | 79.5 | 41.5 |
| September .................. | 100.1 | 139.1 | 82.8 | 99.1 | 81.8 | 86.7 | 46.9 |
| October ...................... | 104.0 | 143.0 | 84.7 | 111.1 | 81.8 | 89.1 | 47.1 |
| November .................. | 101.2 | 141.8 | 76.7 | 104.4 | 80.0 | 84.0 | 46.9 |
| December ................... | 98.1 | 139.8 | 81.1 | 115.2 | 87.5 | 85.9 | 49.9 |
| Average .................... | 94.7 | 128.8 | 72.1 | 99.0 | 73.7 | 76.2 | 41.9 |
| 2003 January | 106.0 | 139.7 | 91.4 | 121.0 | 98.3 | 93.2 | 57.3 |
| February .................... | 122.1 | W | 101.8 | 137.2 | 114.5 | 110.3 | 69.5 |
| March ......................... | 130.1 | W | 104.3 | 138.6 | 112.9 | 111.3 | 68.0 |
| April | 120.0 | W | 82.1 | 127.7 | 91.2 | 94.2 | 52.7 |
| May ........................... | 110.0 | 139.8 | 75.9 | NA | 81.1 | 85.5 | 53.9 |
| June .......................... | 109.4 | 145.7 | 76.6 | 90.8 | 81.6 | 86.4 | 56.0 |
| July ........................... | 110.6 | 151.9 | 81.7 | 89.8 | 82.8 | 88.4 | 54.3 |
| August ....................... | 123.1 | 162.2 | 87.2 | 100.7 | 86.9 | 94.2 | 55.3 |
| September .................. | 126.5 | 158.9 | 81.7 | NA | 81.4 | 88.9 | 53.8 |
| October ...................... | 115.0 | 150.8 | 84.5 | 117.2 | 88.2 | 91.9 | 55.8 |
| November .................. | 109.5 | W | 87.8 | 120.9 | 89.1 | 91.7 | 55.9 |
| December .................. | 106.5 | 146.6 | 92.9 | NA | 94.5 | 93.8 | 61.3 |
| Average .................... | 115.6 | 149.3 | 87.2 | 122.4 | 93.3 | 94.4 | 57.7 |
|  | 117.3 | W | 99.8 | 132.5 | 102.5 | 99.9 | NA |
| February .................... | 125.6 | W | 101.3 | 93.9 | 99.4 | 103.3 | 87.7 |
| March ......................... | 133.8 | W | 102.7 | NA | 101.1 | 107.3 | NA |
| April .......................... | 139.6 | 177.4 | 106.6 | 139.8 | 101.9 | 114.6 | 67.4 |
| May ........................... | 157.1 | 194.9 | 117.0 | 111.7 | 107.2 | 120.0 | 74.8 |
| June .......................... | 154.7 | 193.2 | 110.3 | 105.2 | 104.9 | 113.9 | 71.5 |
| July ........................... | 148.6 | 187.0 | 116.9 | W | 113.2 | 120.1 | 77.6 |
| August ....................... | 145.4 | 185.8 | 127.2 | 125.8 | 122.6 | 128.3 | 88.1 |
| September ................. | 145.2 | 189.2 | 133.3 | W | 129.9 | 135.3 | 85.9 |
| October ...................... | 158.6 | W | 155.0 | 169.5 | 153.2 | 155.5 | 98.3 |
| November .................. | 155.3 | W | 146.5 | 154.3 | R 142.4 | ${ }^{\text {R } 149.7}$ | 103.5 |
| December ................... | 141.5 | W | 133.4 | 145.2 | 132.1 | 134.5 | 94.5 |
| Average .................... | 143.7 | 182.3 | 120.7 | 116.7 | 116.9 | 124.2 | 83.3 |

a See Note 5 at end of section.
$R=$ Revised. $N A=$ 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, March 2005, 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 Average .......... | 121.7 | 125.6 | 126.1 | 122.1 | 123.6 | 123.9 | 136.3 | 131.4 | 115.9 |
| 2002 January ........... | 109.5 | 113.2 | 117.9 | 107.4 | 112.1 | 108.3 | 121.5 | 113.8 | 102.9 |
| February .......... | 108.6 | 114.1 | 117.6 | 106.9 | 110.9 | 106.6 | 119.9 | 113.4 | 100.2 |
| March .............. | 112.2 | 110.1 | 116.2 | 111.2 | 107.7 | 109.1 | 119.0 | 117.0 | 104.6 |
| April ................ | 111.4 | 109.7 | 117.7 | 114.0 | 112.0 | 109.6 | 120.0 | 121.0 | 106.6 |
| May ................ | 111.5 | 108.4 | 118.1 | 113.6 | 109.8 | 108.9 | 117.6 | 119.6 | 104.3 |
| June ................ | 110.1 | 104.6 | 114.0 | 110.9 | 106.1 | 110.6 | 115.9 | 116.7 | 102.8 |
| July ................ | 109.5 | 101.4 | 111.5 | 111.3 | 105.6 | 106.4 | 114.2 | 113.4 | 95.2 |
| August ............ | 107.7 | 102.2 | 112.1 | 112.5 | 107.7 | 107.3 | NA | 114.7 | 96.1 |
| September ....... | 111.2 | 106.0 | 114.3 | 113.7 | 110.6 | 110.7 | 116.6 | 120.7 | 101.4 |
| October ........... | 116.7 | 111.4 | 117.6 | 116.2 | 110.5 | 112.0 | 120.1 | 123.6 | 106.6 |
| November ........ | 115.4 | 113.4 | 117.9 | 118.5 | 114.4 | 115.5 | 125.1 | 127.5 | 111.3 |
| December ........ | 119.4 | 118.1 | 120.5 | 125.0 | 120.8 | 121.5 | 130.1 | 135.4 | 117.5 |
| Average ......... | 112.9 | 111.9 | 117.2 | 114.1 | 112.4 | 111.8 | 121.8 | 122.0 | 106.4 |
| 2003 January ........... | 128.0 | 127.2 | 126.4 | 135.0 | 132.3 | 130.9 | 139.2 | 145.8 | 127.4 |
| February .......... | 142.5 | 145.0 | 138.9 | 152.4 | 151.8 | 149.6 | 156.1 | 166.6 | 147.7 |
| March .............. | 147.0 | 148.4 | 144.0 | 153.9 | 151.4 | 152.2 | 160.0 | 170.5 | 153.7 |
| April ................ | 130.1 | 132.6 | 131.9 | 136.0 | 131.5 | 133.5 | 141.6 | 146.1 | 132.8 |
| May ................ | 125.2 | 126.4 | 125.8 | 132.7 | 123.9 | 127.8 | 137.8 | 135.9 | 124.0 |
| June ................ | 124.5 | 121.4 | 122.3 | 129.5 | 119.9 | 124.6 | 130.0 | 133.9 | NA |
| July ................ | 121.3 | 118.7 | 120.3 | 127.1 | 117.3 | 120.6 | 128.4 | 128.5 | 105.6 |
| August ............ | 120.6 | 119.1 | 121.0 | 127.4 | NA | 120.8 | 124.9 | NA | 108.8 |
| September ....... | 121.5 | 119.4 | 121.3 | 125.9 | 120.6 | 122.6 | 128.9 | 126.1 | 110.7 |
| October ............ | 122.8 | 120.4 | 126.0 | 126.0 | 121.1 | 124.4 | 131.8 | 133.3 | 116.3 |
| November ........ | 124.3 | 121.8 | 126.9 | 129.8 | 127.3 | 129.8 | 137.5 | 136.5 | 121.4 |
| December ........ | 129.4 | 126.1 | 129.0 | 134.9 | 133.1 | 133.6 | 142.4 | 144.7 | 128.4 |
| Average ......... | 131.4 | 131.2 | 130.9 | 138.6 | 134.4 | 135.5 | 143.6 | 148.9 | 130.4 |
| 2004 January ........... | 135.4 | 136.4 | 135.6 | 143.1 | 143.4 | 140.8 | 148.9 | 152.1 | 138.0 |
| February .......... | 138.3 | 139.8 | 137.3 | 144.3 | 141.7 | 139.8 | 150.9 | 155.5 | 138.6 |
| March .............. | 137.0 | 135.2 | 137.9 | 142.9 | 137.0 | 138.7 | 147.2 | 153.9 | 136.9 |
| April ................ | 136.9 | 133.6 | 138.9 | 142.0 | 137.4 | 137.7 | 146.8 | 151.1 | 135.6 |
| May ................ | 138.6 | 133.7 | 138.8 | 145.1 | 141.1 | 139.7 | 148.4 | 152.3 | 136.1 |
| June ................ | 141.6 | 135.8 | 144.0 | 144.6 | 137.8 | 143.3 | 148.5 | 151.9 | 134.8 |
| July ................ | 145.1 | 138.8 | 150.6 | 149.4 | 140.1 | 146.9 | 151.8 | 151.8 | 133.2 |
| August ............ | 153.2 | 146.5 | 155.1 | 156.4 | 148.3 | 152.1 | 155.5 | 158.6 | 142.1 |
| September ....... | 161.4 | 153.5 | 160.0 | 165.5 | 155.7 | 162.4 | 162.9 | 164.2 | 153.1 |
| October ........... | 178.7 | 173.3 | 176.7 | 182.7 | 177.8 | 178.0 | 184.2 | 192.3 | 171.0 |
| November ........ | 178.1 | R 174.7 | 174.1 | ${ }^{\text {R }} 183.1$ | ${ }^{\text {R } 176.4}$ | R 180.8 | R 188.9 | R 195.9 | R 174.0 |
| December ........ | 176.5 | 175.4 | 172.2 | 180.6 | 175.8 | 178.4 | 185.8 | 193.2 | 170.8 |
| Average .......... | 151.0 | 150.4 | 150.5 | 155.8 | 151.1 | 150.9 | 162.1 | 165.1 | 148.5 |

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, March 2005, 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 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 | 96.7 | 94.2 | 102.2 | 91.7 | 87.0 | 97.0 | 91.2 |
| February .......... | 111.0 | W | 115.1 | 99.9 | 95.7 | 94.3 | 101.8 | 95.7 | 84.4 | 95.9 | 91.6 |
| March ............... | 113.0 | W | 117.6 | 102.2 | 99.5 | 101.4 | 103.6 | 93.9 | 85.0 | 100.3 | 94.0 |
| April ................ | 116.2 | 129.2 | 118.9 | 100.7 | 101.5 | 103.1 | 108.3 | 94.9 | 84.7 | 105.3 | 102.0 |
| May ................ | 106.1 | NA | 114.2 | 97.2 | 102.3 | 100.6 | 106.4 | W | 83.7 | 106.4 | 102.6 |
| June ................ | 100.5 | 111.5 | 111.5 | 97.1 | 101.6 | 96.9 | 107.0 | W | NA | 101.7 | 101.7 |
| July ................. | 98.2 | W | 109.4 | 98.0 | 101.5 | 95.3 | 106.8 | W | 96.6 | 102.0 | 101.9 |
| August ............. | 99.5 | W | 110.9 | 100.2 | 102.4 | 100.5 | 107.4 | W | NA | 103.3 | 105.2 |
| September ....... | 111.2 | W | 116.4 | 103.1 | 107.1 | 107.1 | 113.1 | W | 101.2 | 112.3 | 111.1 |
| October ........... | 114.8 | 129.2 | 120.1 | 108.7 | 111.1 | 114.5 | 120.9 | W | 105.6 | 118.0 | 116.6 |
| November ........ | 119.8 | W | 124.7 | 111.1 | 113.7 | 115.8 | 122.2 | 114.0 | 111.9 | 120.2 | 114.9 |
| December ........ | 129.1 | W | 131.3 | 120.2 | 121.1 | 119.5 | 124.7 | 121.0 | 111.0 | 121.5 | 117.0 |
| Average .......... | 116.4 | W | 120.1 | 105.7 | 105.4 | 105.8 | 110.9 | 102.5 | 97.5 | 107.3 | 105.1 |
| 2003 January ........... | 138.4 | W | 141.4 | 130.9 | 131.7 | 129.4 | 130.5 | 130.3 | 116.6 | 127.1 | 120.5 |
| February .......... | 161.4 | W | 158.2 | 147.2 | 155.5 | 144.8 | 148.5 | 146.7 | 130.5 | 138.5 | 135.3 |
| March .............. | 168.5 | W | 165.5 | 143.4 | 155.9 | 141.3 | 148.8 | 142.4 | 131.8 | 140.2 | 133.7 |
| April ................ | 142.2 | NA | 145.2 | 127.7 | 130.9 | 126.0 | 130.5 | W | 112.5 | 125.4 | 119.6 |
| May ................. | 130.0 | NA | 135.7 | 119.3 | 116.5 | 115.4 | 120.9 | W | 108.1 | 117.9 | 113.4 |
| June ................ | 125.5 | 127.6 | 128.4 | 120.3 | 113.2 | 113.4 | 114.0 | W | 106.1 | 113.6 | 114.6 |
| July ................. | 119.7 | W | 124.4 | 118.5 | 109.5 | 111.5 | 113.5 | W | NA | 112.1 | 113.8 |
| August ............ | 117.2 | W | 125.6 | 120.4 | 113.8 | 113.9 | 119.6 | 106.0 | 114.9 | 114.1 | 115.4 |
| September ....... | 121.7 | 128.6 | 126.9 | 121.1 | 112.3 | 114.1 | 119.8 | W | 114.0 | 117.5 | 113.3 |
| October ............ | 125.6 | W | 133.8 | 122.7 | 117.2 | 120.5 | 122.1 | W | 116.5 | 121.9 | 119.6 |
| November ........ | 130.0 | W | 136.5 | 123.8 | 119.3 | 122.3 | 125.9 | 112.8 | 117.7 | 122.7 | 118.3 |
| December ........ | 139.8 | W | 143.0 | 129.0 | 128.9 | 125.3 | 126.5 | 123.0 | 119.9 | 123.8 | 119.1 |
| Average .......... | 143.3 | W | 145.5 | 131.1 | 130.4 | 128.4 | 132.1 | 120.2 | 119.8 | 126.9 | 121.8 |
| 2004 January ........... | 147.3 | NA | 152.2 | 135.6 | 137.6 | 132.4 | 133.2 | 130.1 | 125.4 | 132.6 | 125.4 |
| February .......... | 150.6 | W | 155.9 | 134.7 | 140.4 | 134.9 | 137.8 | 133.3 | 126.6 | 132.0 | 126.5 |
| March .............. | 148.6 | W | 153.6 | 134.2 | 137.2 | 137.6 | 140.4 | 134.0 | 132.6 | 132.3 | 127.9 |
| April ................ | 148.6 | W | 153.1 | 130.0 | 136.3 | 140.3 | 139.8 | W | 134.2 | 134.1 | 133.0 |
| May ................. | 146.7 | 160.4 | 150.1 | NA | 140.3 | 137.7 | 141.0 | W | 136.2 | NA | 134.9 |
| June ................ | 140.2 | 154.7 | 145.9 | 125.8 | NA | 134.9 | 138.1 | W | 134.5 | 136.2 | 135.1 |
| July ................. | 140.8 | W | 150.3 | 134.3 | 137.2 | 141.4 | 143.2 | W | 139.8 | 141.8 | 139.4 |
| August ............ | 147.5 | W | 156.6 | 141.7 | 147.3 | 147.4 | 150.0 | W | 144.9 | 148.6 | 150.2 |
| September ....... | 156.9 | W | 166.6 | 152.8 | 154.0 | 153.8 | 162.5 | W | NA | 157.3 | 160.0 |
| October ........... | 179.3 | W | 185.1 | 177.7 | 176.9 | 178.0 | 180.5 | 181.0 | 177.1 | 174.1 | 176.0 |
| November ........ | 187.2 | ${ }^{R} W$ | ${ }^{\text {R } 190.7}$ | ${ }^{\text {R } 181.0}$ | ${ }^{\text {R } 183.4}$ | R 170.8 | ${ }^{\text {R } 179.7}$ | ${ }^{\text {R } 181.1}$ | ${ }^{\text {R } 175.1}$ | ${ }^{\text {R } 176.2}$ | ${ }^{\text {R } 176.0}$ |
| December ........ | 185.6 | W | 188.2 | 180.2 | 176.1 | 166.9 | 174.3 | 171.0 | 169.1 | 169.1 | 163.9 |
| Average .......... | 156.3 | W | 163.2 | 145.8 | 149.8 | 147.1 | 153.2 | 152.9 | 140.5 | 146.6 | 143.1 |

R=Revised. $\quad N A=$ 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, March 2005, 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. <br> 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 Average .................... | 103.8 | 133.6 | 121.1 | 137.7 | 125.0 |
| 2002 January ...................... | 74.7 | 108.9 | 93.7 | 114.0 | 109.7 |
| February .................... | 74.5 | 108.2 | 94.4 | 114.5 | 108.4 |
| March ......................... | 82.2 | 117.0 | 104.3 | 110.4 | 110.0 |
| April .......................... | 92.6 | 124.1 | 108.0 | 111.8 | 111.6 |
| May ........................... | 90.0 | 124.9 | 107.5 | 104.6 | 109.3 |
| June .......................... | 89.0 | 122.4 | 103.9 | 106.0 | 105.7 |
| July | 88.0 | 117.7 | NA | 102.7 | 102.9 |
| August ...................... | 89.9 | 117.0 | 107.6 | 105.8 | 103.8 |
| September ................. | 96.6 | 124.2 | 115.5 | 110.0 | 109.9 |
| October ...................... | 103.4 | 128.5 | 118.5 | 110.5 | 114.8 |
| November .................. | 103.5 | 131.2 | 119.3 | 113.0 | 118.0 |
| December ................... | 103.0 | 131.2 | 118.0 | 113.9 | 123.8 |
| Average .................... | 91.9 | 120.4 | 106.0 | 108.7 | 112.9 |
| 2003 January ...................... | 107.6 | 137.9 | 124.4 | 115.7 | 133.2 |
| February .................... | 120.5 | 155.4 | 144.6 | 121.1 | 150.8 |
| March ......................... | 133.9 | 179.5 | 158.6 | 137.4 | 153.9 |
| April .......................... | 121.1 | 154.8 | 130.6 | 129.9 | 134.6 |
| May ... | 111.4 | 143.0 | 120.6 | 122.2 | 126.7 |
| June .......................... | NA | 143.3 | 125.3 | 122.6 | 121.7 |
| July ........................... | 107.4 | 141.0 | 131.1 | NA | 116.4 |
| August ...................... | 114.3 | 145.4 | 130.3 | 127.2 | 117.6 |
| September .................. | 114.0 | 137.0 | 119.1 | NA | 118.8 |
| October ...................... | NA | 135.1 | 116.8 | NA | 123.6 |
| November .................. | 122.4 | 141.8 | 123.5 | 126.6 | 128.3 |
| December ................... | 120.7 | 146.2 | 125.6 | 127.3 | 134.1 |
| Average .................... | 118.8 | 148.7 | 130.3 | 124.3 | 135.5 |
| 2004 January ...................... | 122.6 | 147.7 | 129.0 | 129.1 | 141.7 |
| February .................... | 124.1 | 157.7 | 140.3 | 130.8 | 143.2 |
| March ........................ | 134.2 | 166.4 | 144.6 | 136.8 | 141.3 |
| April .......................... | 144.3 | 178.7 | 159.3 | 143.5 | 141.1 |
| May ........................... | 162.5 | 191.5 | 177.0 | 155.3 | 142.0 |
| June .......................... | 148.9 | 185.5 | 163.5 | 159.2 | 140.8 |
| July ........................... | 142.7 | 182.2 | 171.8 | 165.4 | 142.9 |
| August ....................... | 155.2 | 180.9 | 164.2 | 163.3 | 149.8 |
| September ................. | 161.8 | 187.2 | 175.7 | 162.4 | 159.8 |
| October ...................... | 193.2 | 208.8 | 192.2 | 177.1 | 180.5 |
| November .................. | ${ }^{\text {R }} 188.4$ | ${ }^{\text {R }} 204.4$ | ${ }^{\text {R } 180.3}$ | ${ }^{\text {R } 174.7}$ | ${ }^{\text {R }} 182.6$ |
| December .................. | 166.8 | 189.8 | 164.0 | 169.0 | 179.3 |
| Average .................... | 150.2 | 175.0 | 159.3 | 152.8 | 154.5 |

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, March 2005, Table 18.

Figure 9.2 Average Retail Prices of Electricity
(Cents per Kilowatthour)

By Sector, 1973-2004


By Sector, Monthly


Note: Includes 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, 1973-2003


Costs, Monthly


[^35]Table 9.9 Average Retail Prices of Electricity
(Cents per Kilowatthour, Including Taxes)

|  | Residential | Commercial ${ }^{\text {a }}$ | Industrial ${ }^{\text {b }}$ | Transportation ${ }^{\text {c }}$ | Other ${ }^{\text {d }}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1973 Average .................. | 2.5 | 2.4 | 1.3 | NA | 2.1 | 2.0 |
| 1974 Average ..................... | 3.1 | 3.0 | 1.7 | NA | 2.8 | 2.5 |
| 1975 Average .................. | 3.5 | 3.5 | 2.1 | NA | 3.1 | 2.9 |
| 1976 Average .................. | 3.7 | 3.7 | 2.2 | NA | 3.3 | 3.1 |
| 1977 Average ...................... | 4.1 | 4.1 | 2.5 | NA | 3.5 | 3.4 |
| 1978 Average .................. | 4.3 | 4.4 | 2.8 | NA | 3.6 | 3.7 |
| 1979 Average ................... | 4.6 | 4.7 | 3.1 | NA | 4.0 | 4.0 |
| 1980 Average .................. | 5.4 | 5.5 | 3.7 | NA | 4.8 | 4.7 |
| 1981 Average .................. | 6.2 | 6.3 | 4.3 | NA | 5.3 | 5.5 |
| 1982 Average ................... | 6.9 | 6.9 | 5.0 | NA | 5.9 | 6.1 |
| 1983 Average .................. | 7.2 | 7.0 | 5.0 | NA | 6.4 | 6.3 |
| 1984 Average .................. | 7.15 | 7.13 | 4.83 | NA | 5.90 | 6.25 |
| 1985 Average .................. | 7.39 | 7.27 | 4.97 | NA | 6.09 | 6.44 |
| 1986 Average ................... | 7.42 | 7.20 | 4.93 | NA | 6.11 | 6.44 |
| 1987 Average .................. | 7.45 | 7.08 | 4.77 | NA | 6.21 | 6.37 |
| 1988 Average ................... | 7.48 | 7.04 | 4.70 | NA | 6.20 | 6.35 |
| 1989 Average .................. | 7.65 | 7.20 | 4.72 | NA | 6.25 | 6.45 |
| 1990 Average .................. | 7.83 | 7.34 | 4.74 | NA | 6.40 | 6.57 |
| 1991 Average ................... | 8.04 | 7.53 | 4.83 | NA | 6.51 | 6.75 |
| 1992 Average .................. | 8.21 | 7.66 | 4.83 | NA | 6.74 | 6.82 |
| 1993 Average .................. | 8.32 | 7.74 | 4.85 | NA | 6.88 | 6.93 |
| 1994 Average .................. | 8.38 | 7.73 | 4.77 | NA | 6.84 | 6.91 |
| 1995 Average .................. | 8.40 | 7.69 | 4.66 | NA | 6.88 | 6.89 |
| 1996 Average .................. | 8.36 | 7.64 | 4.60 | NA | 6.91 | 6.86 |
| 1997 Average ................... | 8.43 | 7.59 | 4.53 | NA | 6.91 | 6.85 |
| 1998 Average ................... | 8.26 | 7.41 | 4.48 | NA | 6.63 | 6.74 |
| 1999 Average .................. | 8.16 | 7.26 | 4.43 | NA | 6.35 | 6.64 |
| 2000 Average .................. | 8.24 8.62 | 7.43 7.93 | 4.64 5.04 | NA | 6.56 7.03 | 6.81 7.32 |
|  |  |  |  |  |  |  |
| 2002 January .................... | 8.09 | 7.44 | 4.78 | NA | 6.58 | 6.98 |
| February ..................... | 8.19 | 7.66 | 4.82 | NA | 6.76 | 7.01 |
| March ....................... | 8.17 | 7.69 | 4.83 | NA | 6.79 | 7.00 |
| April ........................ | 8.38 | 7.61 | 4.76 | NA | 6.86 | 6.97 |
| May ......................... | 8.64 | 7.77 | 4.78 | NA | 6.79 | 7.11 |
| June ........................ | 8.72 | 8.05 | 4.99 | NA | 6.83 | 7.41 |
| July ......................... | 8.81 | 8.26 | 5.18 | NA | 6.66 | 7.65 |
| August ..................... | 8.76 | 8.20 | 5.11 | NA | 6.57 | 7.58 |
| September ............... | 8.66 | 8.05 | 4.95 | NA | 6.56 | 7.38 |
| October ................... | 8.51 | 8.04 | 4.89 | NA | 6.75 | 7.22 |
| November ................. | 8.34 8.10 | 7.65 | 4.73 4.73 | NA | 6.71 6.94 | 6.97 6.99 |
| Average .................. | 8.46 | 7.86 | 4.88 | NA | 6.73 | 7.21 |
|  |  |  |  | 7.31 | - |  |
| February | 7.99 | 7.62 | 5.00 | 7.50 | _ | 7.03 |
| March ....................... | 8.30 | 7.70 | 5.07 | 7.51 | - | 7.15 |
| April ........................ | 8.81 | 7.89 | 5.04 | 7.50 | - | 7.28 |
| May ......................... | 8.99 | 8.00 | 5.10 | 7.42 | - | 7.42 |
| June ........................ | 9.20 | 8.37 | 5.25 | 7.81 | - | 7.73 |
| July ......................... | 9.14 | 8.45 | 5.48 | 8.12 | - | 7.94 |
| August .................... | 9.18 | 8.37 | 5.47 | 8.13 | - | 7.92 |
| September .................................. | 8.90 | 8.06 | 5.21 5.14 | 7.94 | - | 7.57 |
| November ..................... | 8.74 | 7.79 | 4.94 | 6.82 | - | 7.21 |
| December ................. | 8.33 | 7.66 | 4.95 | 6.82 | - | 7.16 |
| Average ................... | 8.70 | 7.98 | 5.13 | 7.58 | - | 7.42 |
| 2004 January .................... | 8.24 | 7.71 | 4.88 | 6.13 | - | 7.18 |
| February .................. | 8.32 | 7.83 | 4.91 | 6.29 | _ | 7.21 |
| March ....................... | 8.62 | 7.93 | 4.91 | 6.29 | - | 7.27 |
| April ........................ | 8.93 | 7.90 | 4.96 | 6.29 | - | 7.29 |
| May ........................ | 9.08 | 8.00 | 5.03 | 6.22 | - | 7.41 |
| June ......................... | 9.25 | 8.46 | 5.28 | 6.55 | - | 7.85 |
| July .......................................... | 9.34 9.47 | 8.60 8.67 | 5.46 5.49 | 6.81 6.81 | - | 8.05 8.11 |
| September ................... | 9.37 | 8.53 | 5.27 | 6.66 | - | 7.92 |
| October .................... | 9.10 | 8.25 | 5.11 | 6.69 | - | 7.57 |
| November ................ | 8.96 | 8.03 | 4.96 | 6.51 | - | 7.37 |
| December ................. | 8.58 | 7.81 | 5.01 | 6.51 | - | 7.32 |
| Average .................. | 8.94 | 8.17 | 5.11 | 6.48 | - | 7.57 |

a Commercial sector. For 1973-2002, prices exclude public street and highway lighting, interdepartmental sales, and other sales to public authorities.
b Industrial sector. For 1973-2002, prices exclude agriculture and irrigation.
c Transportation sector, including railroads and railways.
d Public street and highway lighting, interdepartmental sales, other sales to public authorities, agriculture and irrigation, and transportation including railroads and railways.
NA=Not available. - =Not applicable.
Notes: • Beginning in 2003, the category "Other" has been replaced by "Transportation," and the categories "Commercial" and "Industrial" have been redefined. - 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.

- Prices include State and local taxes, energy or demand charges, customer service charges, environmental surcharges, franchise fees, fuel adjustments,
and other miscellaneous charges applied to end-use customers during normal billing operations. Prices do not include deferred charges, credits, or other adjustments, such as fuel or revenue from purchased power, from previous reporting periods. - See Note 7 at end of section for plant coverage, and for information on preliminary and final values. - 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, March 2005, Table 5.3.

Table 9.10 Cost of Fossil-Fuel Receipts at Electric Generating Plants
(Dollars per Million Btu)

|  | Coal | Petroleum |  |  |  | Natural Gas ${ }^{\text {d }}$ | All Fossil Fuels ${ }^{\text {e }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Residual Fuel Oila | Distillate Fuel Oil ${ }^{\text {b }}$ | Petroleum Coke | Total ${ }^{\text {C }}$ |  |  |
| 1973 Average .................. | 0.41 | 0.79 | NA | NA | 0.80 | 0.34 | 0.48 |
| 1974 Average .................. | . 71 | 1.89 | NA | NA | 1.91 | . 48 | . 91 |
| 1975 Average .................. | . 81 | 2.01 | NA | NA | 2.02 | . 75 | 1.04 |
| 1976 Average .................. | . 85 | 1.95 | NA | NA | 1.99 | 1.03 | 1.12 |
| 1977 Average .................. | . 95 | 2.20 | NA | NA | 2.25 | 1.29 | 1.30 |
| 1978 Average .................. | 1.12 | 2.13 | NA | NA | 2.19 | 1.42 | 1.41 |
| 1979 Average .................. | 1.22 | 2.99 | NA | NA | 3.07 | 1.75 | 1.64 |
| 1980 Average .................. | 1.35 | 4.27 | NA | NA | 4.35 | 2.20 | 1.93 |
| 1981 Average .................. | 1.53 | 5.33 | NA | NA | 5.43 | 2.81 | 2.26 |
| 1982 Average .................. | 1.65 | 4.83 | NA | NA | 4.92 | 3.38 | 2.25 |
| 1983 Average .................. | 1.66 | 4.58 | NA | NA | 4.63 | 3.47 | 2.21 |
| 1984 Average ................. | 1.66 | 4.81 | NA | NA | 4.86 | 3.60 | 2.19 |
| 1985 Average | 1.65 | 4.24 | NA | NA | 4.32 | 3.44 | 2.09 |
| 1986 Average ................. | 1.58 | 2.40 | NA | NA | 2.44 | 2.35 | 1.75 |
| 1987 Average .................. | 1.51 | 2.98 | NA | NA | 3.01 | 2.24 | 1.71 |
| 1988 Average ................. | 1.47 | 2.41 | NA | NA | 2.44 | 2.26 | 1.64 |
| 1989 Average .................. | 1.45 | 2.85 | NA | NA | 2.89 | 2.36 | 1.68 |
| 1990 Average .................. | 1.45 | 3.32 | 5.38 | . 80 | 3.35 | 2.32 | 1.69 |
| 1991 Average .................. | 1.45 | 2.47 | 4.83 | . 81 | 2.53 | 2.15 | 1.60 |
| 1992 Average .................. | 1.41 | 2.48 | 4.51 | . 75 | 2.51 | 2.33 | 1.59 |
| 1993 Average .................. | 1.39 | 2.36 | 4.22 | . 70 | 2.37 | 2.56 | 1.59 |
| 1994 Average .................. | 1.36 | 2.41 | 3.99 | . 69 | 2.42 | 2.23 | 1.52 |
| 1995 Average ................. | 1.32 | 2.59 | 3.99 | . 65 | 2.57 | 1.98 | 1.45 |
| 1996 Average .................. | 1.29 | 3.03 | 4.87 | . 78 | 3.03 | 2.64 | 1.52 |
| 1997 Average .................. | 1.27 | 2.79 | 4.49 | . 91 | 2.73 | 2.76 | 1.52 |
| 1998 Average .................. | 1.25 | 2.08 | 3.30 | . 71 | 2.02 | 2.38 | 1.44 |
| 1999 Average .................. | 1.22 | 2.44 | 4.03 | . 65 | 2.36 | 2.57 | 1.44 |
| 2000 Average ................. | 1.20 | 4.29 | 6.65 | . 58 | 4.18 | 4.30 | 1.74 |
| 2001 Average .................. | 1.23 | 3.73 | 6.30 | . 78 | 3.69 | 4.49 | 1.73 |
| 2002 January f .................. | 1.26 | 2.79 | 4.51 | 0.90 | 2.55 | 3.00 | 1.51 |
| February | 1.28 | 2.73 | 4.15 | . 94 | 2.42 | 2.74 | 1.49 |
| March ....................... | 1.25 | 3.07 | 4.46 | . 82 | 2.68 | 3.20 | 1.51 |
| April ... | 1.25 | 3.50 | 5.15 | . 75 | 3.16 | 3.64 | 1.48 |
| May | 1.26 | 3.65 | 5.24 | . 75 | 3.30 | 3.65 | 1.52 |
| June | 1.26 | 3.68 | 4.87 | . 76 | 3.34 | 3.49 | 1.51 |
| July | 1.25 | 3.63 | 5.19 | . 71 | 3.29 | 3.41 | 1.51 |
| August | 1.26 | 3.93 | 5.30 | . 72 | 3.46 | 3.33 | 1.53 |
| September ............... | 1.26 | 3.89 | 6.05 | . 91 | 3.38 | 3.61 | 1.47 |
| October | 1.25 | 4.24 | 6.19 | . 70 | 3.74 | 4.04 | 1.53 |
| November ................. | 1.25 | 4.22 | 5.78 | 1.02 | 3.96 | 4.23 | 1.57 |
| December ................. | 1.22 | 4.24 | 6.39 | . 56 | 3.88 | 4.53 | 1.55 |
| Average .................. | 1.25 | 3.73 | 5.34 | . 78 | 3.34 | 3.56 | 1.52 |
| 2003 January .................... | 1.25 | 5.01 | 6.68 | . 72 | 4.63 | 5.17 | 2.14 |
| February .................... | 1.28 | 5.63 | 7.78 | . 68 | 5.55 | 6.16 | 2.39 |
| March | 1.29 | 5.44 | 9.14 | . 79 | 5.72 | 7.00 | 2.55 |
| April ........................ | 1.29 | 4.68 | 6.64 | . 66 | 4.43 | 5.21 | 2.14 |
| May .......................... | 1.29 | 4.40 | 6.09 | . 69 | 4.17 | 5.46 | 2.23 |
| June ......................... | 1.27 | 4.44 | 5.83 | . 67 | 4.17 | 5.84 | 2.34 |
| July ............................... | 1.28 | 4.72 | 6.02 | . 80 | 4.39 | 5.27 | 2.47 |
| August .................... | 1.28 | 4.75 | 6.65 | . 71 | 4.29 | 5.04 | 2.42 |
| September ................. | 1.27 | 4.42 | 6.46 | . 75 | 3.93 | 4.95 | 2.18 |
| October .................... | 1.28 | 4.28 | 6.51 | . 71 | 3.92 | 4.79 | 2.06 |
| November ................. | 1.26 | 4.55 | 6.79 | . 70 | 3.86 | 4.66 | 1.96 |
| December | 1.26 | 4.49 | 6.58 | . 74 | 4.12 | 5.41 | 2.10 |
| Average ................. | 1.28 | 4.74 | 6.90 | . 72 | 4.45 | 5.37 | 2.25 |
| 2004 January .................... | 1.29 | 4.58 | 7.45 | . 72 | 4.43 | 6.13 | 2.37 |
| February | 1.31 | 4.55 | 7.43 | . 74 | 4.25 | 5.62 | 2.32 |
| March ....................... | 1.32 | 4.35 | 7.72 | . 80 | 3.97 | 5.35 | 2.19 |
| April ........................ | 1.33 | 4.56 | 7.61 | . 72 | 4.17 | 5.59 | 2.33 |
| May ............................. | 1.32 | 5.03 | 7.65 | . 73 | 4.44 | 6.09 | 2.53 |
| June ......................... | 1.34 | 5.05 | 8.78 | . 78 | 4.57 | 6.34 | 2.67 |
| July ......................... | 1.36 | 4.83 | 8.11 | . 80 | 4.45 | 6.06 | 2.78 |
| August ..................... | 1.39 | 4.86 | 8.47 | . 72 | 4.38 | 5.81 | 2.64 |
| September ............... | 1.37 | 5.09 | 9.01 | . 76 | 4.45 | 5.25 | 2.42 |
| October .................... | 1.41 | 5.31 | 9.89 | . 82 | 4.76 | 5.82 | 2.47 |
| November ................ | 1.41 | 5.55 | 9.18 | 1.00 | 5.11 | 6.61 | 2.49 |
| 11-Month Average ... | 1.35 | 4.87 | 8.24 | . 78 | 4.45 | 5.88 | 2.48 |
| 2003 11-Month Average ... | 1.28 | 4.76 | 6.93 | . 72 | 4.48 | 5.37 | 2.27 |
| 2002 11-Month Average ... | 1.26 | 3.67 | 5.21 | . 80 | 3.28 | 3.48 | 1.51 |

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 For 1973-2001, electric utility data are for light oil (fuel oil nos. 1 and 2).
c 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 gases. For 1973-1989, data do not include petroleum coke
d Natural gas, plus a small amount of supplemental gaseous fuels that cannot be identified separately. For 1973-2000, data also include a small amount of blast furnace gas and other gases derived from fossil fuels.
e Weighted average of costs shown under "Coal," "Petroleum," and "Natural

Gaș."
Through 2001, data are for electric utilities only. Beginning in 2002, data
also include independent power producers, and electric generating plants in the 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.
$N A=$ Not available.
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, 1973-2004


Consuming Sectors, 1973-2004


Consuming Sectors, Monthly


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

Web Page: http://www.eia.doe.gov/emeu/mer/prices.html. Source: Table 9.11.

Table 9.11 Natural Gas Prices
(Dollars per Thousand Cubic Feet)

|  | Wellhead Price | City Gate Price | Consuming Sectors ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Residential |  | Commercial ${ }^{\text {b }}$ |  | Industrial ${ }^{\text {c }}$ |  | Electric Power ${ }^{\text {d }}$ |  |
|  |  |  | Price ${ }^{\text {e }}$ | Percentage of Sector ${ }^{\dagger}$ | Price ${ }^{\text {e }}$ | Percentage of Sector ${ }^{\text {f }}$ | Price ${ }^{\text {e }}$ | Percentage of Sector ${ }^{\text {f }}$ | Price | Percentage of Sector |
| 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 | NA |
| 1990 Average ................... | 1.71 | 3.03 | 5.80 | 99.3 | 4.83 | 86.6 | 2.93 | 35.2 | 2.38 | NA |
| 1991 Average | 1.64 | 2.90 | 5.82 | 99.2 | 4.81 | 85.1 | 2.69 | 32.7 | 2.18 | NA |
| 1992 Average ................... | 1.74 | 3.01 | 5.89 | 99.1 | 4.88 | 83.2 | 2.84 | 30.3 | 2.36 | NA |
| 1993 Average ................... | 2.04 | 3.21 | 6.16 | 99.1 | 5.22 | 83.9 | 3.07 | 29.7 | 2.61 | NA |
| 1994 Average | 1.85 | 3.07 | 6.41 | 99.1 | 5.44 | 79.3 | 3.05 | 25.5 | 2.28 | NA |
| 1995 Average ................... | 1.55 | 2.78 | 6.06 | 99.1 | 5.05 | 76.7 | 2.71 | 24.5 | 2.02 | NA |
| 1996 Average ................... | 2.17 | 3.34 | 6.34 | 99.1 | 5.40 | 77.6 | 3.42 | 19.4 | 2.69 | NA |
| 1997 Average | 2.32 | 3.66 | 6.94 | 98.8 | 5.80 | 70.8 | 3.59 | 18.1 | 2.78 | NA |
| 1998 Average | 1.96 | 3.07 | 6.82 | 97.7 | 5.48 | 67.0 | 3.14 | 16.1 | 2.40 | NA |
| 1999 Average ................... | 2.19 | 3.10 | 6.69 | 95.2 | 5.33 | 66.1 | 3.12 | 18.8 | 2.62 | NA |
| 2000 Average ................... | 3.68 | 4.62 | 7.76 | 92.6 | 6.59 | 63.9 | 4.45 | 19.8 | 4.38 | NA |
| 2001 Average .................... | 4.00 | 5.72 | 9.63 | 92.4 | 8.43 | 66.0 | 5.24 | 20.8 | 4.61 | NA |
| 2002 January ...................... | 2.50 | 3.79 | 7.38 | NA | 6.51 | 79.8 | 4.05 | 20.3 | d3.10 | NA |
| February .................... | 2.19 | 3.76 | 7.23 | NA | 6.40 | 80.7 | 3.70 | 20.6 | 2.86 | NA |
| March | 2.40 | 3.84 | 7.10 | NA | 6.28 | 81.5 | 3.78 | 20.2 | 3.37 | NA |
| April .......................... | 2.94 | 4.21 | 7.66 | NA | 6.56 | 76.8 | 3.64 | 26.3 | 3.80 | NA |
| May ........................... | 2.94 | 4.07 | 8.54 | NA | 6.68 | 73.0 | 4.07 | 24.0 | 3.78 | NA |
| June | 2.96 | 4.15 | 9.58 | NA | 6.80 | 73.2 | 3.86 | 25.6 | 3.61 | NA |
| July ........................... | 2.92 | 3.95 | 10.31 | NA | 6.62 | 71.2 | 3.80 | 24.0 | 3.49 | NA |
| August ...................... | 2.76 | 3.67 | 10.44 | NA | 6.45 | 71.6 | 3.62 | 22.6 | 3.42 | NA |
| September | 2.97 | 3.99 | 10.23 | NA | 6.54 | 69.5 | 3.89 | 22.5 | 3.71 | NA |
| October ......................... | 3.24 | 4.32 | 8.61 | NA | 6.64 | 73.2 | 4.18 | 21.7 | 4.19 | NA |
| November .................. | 3.59 | 4.65 | 7.99 | NA | 6.89 | 78.7 | 4.72 | 21.9 | 4.35 | NA |
| December | 3.96 | 4.74 | 7.87 | NA | 7.16 | 79.6 | 4.92 | 23.2 | 4.72 | NA |
| Average .................... | 2.95 | 4.12 | 7.89 | 91.4 | 6.63 | 77.4 | 4.02 | 22.7 | 3.68 | NA |
| 2003 January ...................... | 4.43 | 5.28 | 8.08 | NA | 7.40 | 79.1 | 5.52 | 22.2 | 5.36 | NA |
| February | 5.05 | 5.83 | 8.46 | NA | 7.86 | 79.8 | 6.24 | 23.0 | 6.47 | NA |
| March ........................ | 6.96 | 7.63 | 9.64 | NA | 9.00 | 80.1 | 8.01 | 22.0 | 7.08 | NA |
| April .......................... | 4.47 | 5.60 | 10.05 | NA | 8.76 | 76.7 | 5.81 | 21.7 | 5.37 | NA |
| May .......................... | 4.77 | 5.69 | 10.67 | NA | 8.64 | 73.5 | 5.65 | 21.0 | 5.67 | NA |
| June .......................... | 5.41 | 6.40 | 11.96 | NA | 8.90 | 72.4 | 6.42 | 19.8 | 6.03 | NA |
| July ........................... | 5.08 | 5.83 | 12.62 | NA | 8.77 | 71.0 | 5.64 | 25.2 | 5.42 | NA |
| August ...................... | 4.46 | 5.48 | 12.72 | NA | 8.40 | 73.3 | 5.21 | 23.4 | 5.21 | NA |
| September ................. | 4.59 | 5.58 | 12.19 | NA | 8.35 | 72.2 | 5.27 | 23.4 | 5.10 | NA |
| October | 4.32 | 5.33 | 10.52 | NA | 8.26 | 72.7 | 5.26 | 24.6 | 4.96 | NA |
| November ................... | 4.26 | 5.54 | 9.66 | NA | 8.24 | 77.6 | 5.15 | 23.0 | 4.79 | NA |
| December .................. | 4.76 | 5.89 | 9.39 | NA | 8.49 | 80.2 | 5.70 | 24.5 | 5.65 | NA |
| Average .................... | 4.88 | 5.85 | 9.52 | 92.1 | 8.29 | 77.3 | 5.81 | 22.9 | 5.54 | NA |
| 2004 January ..................... | E 5.53 | 6.39 | 9.70 | NA | 8.92 | 80.7 | 6.63 | R 22.7 | 6.32 | NA |
| February | E 5.15 | 6.37 | 9.84 | NA | 8.95 | 80.9 | 6.39 | R 23.4 | 5.74 | NA |
| March ......................... | E 4.97 | 6.24 | 10.00 | NA | 8.93 | 78.3 | 5.86 | 22.6 | 5.48 | NA |
| April .............................. | E 5.20 | 6.32 | 10.52 | NA | 8.91 | 76.4 | 5.96 | R 23.2 | 5.76 | NA |
| May .......................... | E 5.63 | 6.47 | 11.61 | NA | 9.06 | 73.1 | 6.27 | 23.1 | 6.28 | NA |
| June .......................... | E 5.85 | 6.92 | 13.05 $\times 13.45$ | NA | R 9.59 | R 71.6 | 6.71 | 24.8 | 6.49 | NA |
| July ........................... | E 5.60 | 6.68 | R 13.45 | NA | R 9.52 | R 71.1 | 6.25 | 24.9 | 6.21 | NA |
| August ...................... | E 5.36 | 6.50 | R 13.79 | NA | R 9.54 | R 70.6 | 6.20 | 24.2 | 5.95 | NA |
| September ................. | E 4.86 | 6.07 | R 13.29 | NA | R 9.18 | R 70.9 | 5.54 | 22.9 | 5.40 | NA |
| October | E 5.45 | 6.31 | R 11.67 | NA | 9.07 | R 72.9 | \%.84 | 23.1 | 6.04 | NA |
| November | E 6.07 | ${ }^{\mathrm{R}} 7.49$ | 11.44 | NA | R 10.07 | R 77.8 | R 7.48 | 23.3 | R 6.67 | NA |
| December .................. | E 6.25 | 7.51 | 11.09 | NA | 10.26 | 80.1 | 7.43 | 24.2 | NA | NA |
| Average ................... | E 5.49 | 6.65 | 10.74 | NA | 9.29 | 77.3 | 6.40 | 23.5 | 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 industrial electricity-only plants. See note at end of Section 7.
d The electric power sector comprises electricity-only and combined-heat-andpower (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, plus a small amount of supplemental gaseous fuels that cannot be identified separately. - 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. companyowned 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. Average annual retail prices of electricity have the following plant coverage: Through 1979, annual data are for Classes A and B privately owned electric utilities only. For 1980-1982, annual data are for selected Class A utilities whose electric operating revenues were $\$ 100$ million or more during the previous year. For 1983, annual data are for a selected sample of electric utilities. Beginning in 1984, data are for a census of electric utilities. Beginning in 1996, annual data also include energy service providers selling to retail customers.

Average monthly retail prices of electricity have the following plant coverage: Through 1985, monthly data are derived from selected privately owned electric utilities and, therefore, are not national averages. Beginning in 1986, monthly data are based on a sample of publicly and privately owned electric utilities. Beginning in 1996, monthly data also include energy service providers selling to retail customers.

Preliminary monthly data are from Form EIA-826, "Monthly Electric Sales and Revenue Report With State Distributions Report," which is a monthly collection of data from approximately 450 of the largest publicly and privately owned electric utilities as well as a census of energy service providers with retail sales in deregulated States; a model is then applied to the collected data to estimate for the entire universe of U.S. electric utilities. Preliminary annual data are the sum of the monthly revenues divided by the sum of the monthly sales. When final annual data become available each year from Form EIA-861, "Annual Electric Power Industry Report," their ratios to the preliminary Form EIA826 values are used to derive adjusted final monthly values.

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, March 2005, 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, March 2005, 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, March 2005, 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, March 2005, Table 24.

## Table 9.10 Sources

1973-September 1977: Federal Power Commission, Form FPC-423, "Monthly Report on Cost and Quality of Fuels for Electric Utility Plants."
October 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, May issues.
1990-2000: EIA, Electric Power Monthly, March 2003, Table 26.
2001 forward: EIA, Electric Power Monthly, March 2005, Table 4.1; 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:

1973-1998: Energy Information Administration (EIA), Natural Gas Annual 2000, Table 96.
1999 forward: EIA, Natural Gas Monthly, February 2005, 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;
1993-1998: EIA, Natural Gas Monthly, December 1999, Table 4.
1999 forward: EIA, Natural Gas Monthly, February 2005, Table 4.

## Residential, Commercial, and Industrial Sector Prices:

1973-1998: EIA, Natural Gas Annual 2001, Table 96. 1999 forward: EIA, Natural Gas Monthly, February 2005, 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:

1973-1998: EIA, Natural Gas Annual 2000, Table 96. 1999-2002: EIA, Natural Gas Monthly, October 2004, Table 4.
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."
2004: EIA, Natural Gas Monthly, February 2005, Table 4.

## 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 7.4b. 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 1996, Table 26; 1996-2000: EIA, Electric Power Monthly, March 2002, Table 26; and 2001: EIA, Electric Power Monthly, June 2004, Table 4.1.
2002 forward: 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, February 2005, Table 4.1), 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 7.4b.

## Section 10. Renewable Energy

Sources. The Nation consumed 6.3 quadrillion Btu of renewable energy in 2004, accounting for 6 percent ${ }^{1}$ 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 44 percent of the total. Wood was the next largest component at 2.1 quadrillion Btu and 34 percent of the total. Waste, the third largest component of the renewable energy total, contributed 0.6 quadrillion Btu in 2004, a 9-percent share of the total.

Electric Power Sector. In 2004, the electric power sector consumed 3.6 quadrillion Btu of renewable energy resources, 58 percent of all renewable energy consumed. Conventional hydroelectric power recorded 2.7 quadrillion Btu in 2004, 74 percent of the electric power sector total. Waste, at 0.3 quadrillion Btu, was the second largest
renewable source consumed for electricity generation, followed by geothermal, wood, wind, and solar.

End-Use Sectors. The industrial sector was the largest end-use consumer of renewable energy in 2004. Industrial facilities used 1.8 quadrillion Btu of renewable energy in 2004, 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---83 percent in the form of wood, 13 percent solar, and 4 percent geothermal. The transportation sector consumed renewable energy in the form of alcohol fuels used in the blending of motor gasoline; in 2004, alcohol fuel use was 0.3 quadrillion Btu. The commercial sector used 0.1 quadrillion Btu in 2004, 44 percent of it as waste and 40 percent as wood.

[^36]Figure 10.1 Renewable Energy Consumption

## (Quadrillion Btu)

Total and Major Sources, 1973-2004


By Source, 2004


Compared With Other Resources, 1973-2004

${ }^{a}$ Conventional hydroelectric power.
${ }^{\text {b }}$ A small amount of alcohol (ethanol blended into motor gasoline) is both fossil fuel (as petroleum) and renewable energy and is counted in both

By Sector, 2004


Compared With Other Resources, 2004

those subtotals but counted only once in total energy consumption. Web Page: http://www.eia.doe.gov/emeu/mer/renew.html.
Sources: Tables 1.3 and 10.1-10.2c.

Table 10.1 Renewable Energy Consumption by Source
(Trillion Btu)

|  | Conventional Hydroelectric Power ${ }^{\text {a }}$ | Wood ${ }^{\text {b }}$ | Waste ${ }^{\text {c }}$ | Alcohol Fuels ${ }^{\text {d }}$ | Geothermal ${ }^{\text {e }}$ | Solar ${ }^{\text {f }}$ | Wind ${ }^{\text {g }}$ | 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 Total ......................... | R 2,242 | 1,980 | 514 | 147 | 311 | 65 | ${ }^{\text {R }} 70$ | ${ }^{\text {R 5,328 }}$ |
| 2002 January ...................... | R 222 | 173 | 49 | 13 | 29 | 5 | 8 | R 498 |
| February .................... | R 205 | 152 | 43 | 12 | 26 | 5 | 7 | R 450 |
| March ......................... | R 214 | 163 | 49 | 12 | 28 | 5 | 9 | R 479 |
| April .......................... | R 247 | 162 | 46 | 12 | 25 | 5 | 10 | R 507 |
| May ........................... | R 271 | 171 | 48 | 14 | 28 | 6 | 11 | R 549 |
| June .......................... | R 287 | 163 | 49 | 12 | 26 | 6 | 11 | R 554 |
| July ........................... | R 259 | 180 | 52 | 15 | 29 | 6 | 9 | R 549 |
| August ...................... | R 214 | 167 | 51 | 14 | 28 | 6 | 10 | R 491 |
| September ................. | R 174 | 175 | 48 | 15 | 27 | 5 | 7 | ${ }^{\text {R }} 451$ |
| October ...................... | R 175 | 184 | 48 | 17 | 28 | 5 | 7 | ${ }^{\text {R }} 465$ |
| November .................. | R 201 | 170 | 48 | 20 | 27 | 5 | 7 | ${ }^{\mathrm{R}} 477$ |
| December .................. | R 220 | 178 | 50 | 19 | 28 | 5 | 8 | R 508 |
| Total ........................ | ${ }^{\mathrm{R}} \mathbf{2 , 6 8 9}$ | 2,036 | 581 | 174 | 328 | 64 | 105 | ${ }^{\text {R 5,978 }}$ |
| 2003 January ...................... | R 211 | 174 | 49 | 17 | 30 | 5 | 6 | R 492 |
| February ........................ | ${ }^{R} 203$ | 158 | 43 | 20 | 27 | 5 | 8 | ${ }^{\mathrm{R}} 462$ |
| March ......................... | ${ }^{R} 248$ | 171 | 48 | 17 | 29 | 5 | ${ }^{\mathrm{R}} 11$ | R 529 |
| April .......................... | R 254 | 168 | 47 | 20 | 28 | 5 | 11 | R 532 |
| May ........................... | R 301 | 169 | 48 | 19 | 28 | 6 | 10 | R 580 |
| June .......................... | R 293 | 167 | 47 | 19 | 29 | 6 | 11 | ${ }^{\text {R }} 571$ |
| July ........................... | R 254 | 179 | 50 | 20 | 29 | 6 | 10 | R 547 |
| August ...................... | R 235 | 177 | 49 | 21 | 29 | 6 | 8 | R 525 |
| September .................. | R 189 | 169 | 47 | 18 | 28 | 5 | 9 | R 466 |
| October ...................... | R 189 | 174 | 47 | 21 | 28 | 5 | 9 | R 473 |
| November .................. | R 202 | 171 | 46 | 24 | 27 | 5 | 10 | R 485 |
| December .................. | R 246 R 2825 | 182 | 50 | 25 | 30 | 5 | 11 | ${ }^{\text {R } 550}$ |
| Total ......................... | ${ }^{\mathrm{R}} \mathbf{2 , 8 2 5}$ | 2,060 | 570 | 239 | 341 | 63 | ${ }^{\mathrm{R}} 115$ | ${ }^{R} \mathbf{6 , 2 1 3}$ |
| 2004 January ....................... | 235 | 184 | 46 | 24 | 30 | 5 | 11 | 535 |
| February .................... | 213 | 170 | 43 | 22 | 28 | 5 | 11 | 492 |
| March ........................ | 231 | 176 | 46 | 24 | 28 | 5 | 13 | 524 |
| April ......................... | 212 | 177 | 46 | 24 | 27 | 5 | 13 | 504 |
| May .......................... | 242 | 171 | 50 | 25 | 28 | 6 | 17 | 538 |
| June ..................................................... | 255 | 173 | 49 | 25 | 28 | 6 | 14 | 548 |
| July ........................................ | 235 | 185 | 48 | 25 | 29 | 6 | 11 | 538 |
| August ...................... | 220 | 180 | 48 | 24 | 29 29 | 6 5 | 10 | 517 493 |
| October ...................... | 193 | 181 | 45 | 25 | 29 | 5 | 10 | 489 |
| November .................. | 213 | 173 | 45 | 25 | 28 | 5 | 10 | 499 |
| December .................. | 267 | 188 | 48 | 26 | 29 | 5 | 12 | 575 |
| Total .......................... | 2,725 | 2,129 | 557 | 296 | 340 | 64 | 143 | 6,253 |

[^37]direct use energy.
g Wind electricity net generation
$\mathrm{R}=$ 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 ${ }^{\text {a }}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Wood ${ }^{\text {b }}$ | Geothermal ${ }^{\text {c }}$ | Solar ${ }^{\text {d }}$ | Total | Hydropowere | Wood ${ }^{\text {b }}$ | Waste ${ }^{\text {f }}$ | Geothermal ${ }^{\text {c }}$ | 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 Total .................. | 370 | 9 | 60 | 439 | 1 | 40 | 39 | 8 | 89 |
| 2002 January ............... | 27 | 1 | 5 | 32 | (s) | 4 | 3 | 1 | 7 |
| February ............. | 24 | 1 | 5 | 29 | (s) | 3 | 3 | 1 | 7 |
| March ................. | 27 | 1 | 5 | 32 | (s) | 4 | 3 | 1 | 7 |
| April ................... | 26 | 1 | 5 | 31 | (s) | 3 | 3 | 1 | 7 |
| May ................... | 27 | 1 | 5 | 32 | (s) | 4 | 4 | 1 | 8 |
| June ................... | 26 | 1 | 5 | 31 | (s) | 3 | 4 | 1 | 8 |
| July ................... | 27 | 1 | 5 | 32 | (s) | 4 | 4 | 1 | 8 |
| August ................ | 27 | 1 | 5 | 32 | (s) | 4 | 4 | 1 | 8 |
| September .......... | 26 | 1 | 5 | 31 | (s) | 3 | 4 | 1 | 8 |
| October ............... | 27 | 1 | 5 | 32 | (s) | 4 | 4 | 1 | 8 |
| November ............ | 26 | 1 | 5 | 31 | (s) | 3 | 4 | 1 | 8 |
| December ............ | 27 313 | 1 10 | 59 | 322 | (s) | 4 42 | 3 42 | 1 | 7 93 |
| 2003 January ................ | 30 | 2 | 5 | 37 | (s) | 4 | 4 | 1 | 9 |
| February ............. | 28 | 1 | 4 | 33 | (s) | 3 | 3 | 1 | 8 |
| March .................. | 30 | 2 | 5 | 37 | (s) | 4 | 4 | 1 | 9 |
| April ................... | 30 | 1 | 5 | 36 | (s) | 4 | 4 | 1 | 9 |
| May .................... | 30 | 2 | 5 | 37 | (s) | 4 | 4 | 1 | 9 |
| June ................... | 30 | 1 | 5 | 36 | (s) | 4 | 4 | 1 | 9 |
| July .................... | 30 | 2 | 5 | 37 | (s) | 4 | 4 | 1 | 9 |
| August ............... | 30 | 2 | 5 | 37 | (s) | 4 | 4 | 1 | 9 |
| September .......... | 30 | 1 | 5 | 36 | (s) | 4 | 4 | 1 | 9 |
| October ............... | 30 | 2 | 5 | 37 | (s) | 4 | 4 |  | 9 |
| November ........... | 30 | 1 | 5 | 36 | (s) | 4 | 4 | 1 | 9 |
| December ............. | 30 | 2 | 5 | 37 | (s) | 4 | 4 | 1 | 9 |
| Total .................. | 359 | 18 | 58 | 435 | 1 | 43 | 47 | 15 | 106 |
| 2004 January ............... | 30 | 2 | 5 | 37 | (s) | 4 | 4 | 1 | 9 |
| February ............. | 28 | 1 | 5 | 34 | (s) | 3 | 3 | 1 | 8 |
| March .................. | 30 | 2 | 5 | 37 | (s) | 4 | 4 | 1 | 9 |
| April ................... | 29 | 1 | 5 | 36 | (s) | 4 | 4 | 1 | 9 |
| May .................... | 30 | 2 | 5 | 37 | (s) | 4 | 4 | 1 | 9 |
| June ................... | 29 | 1 | 5 | 36 | (s) | 3 | 4 | 1 | 9 |
| July ................... | 30 | 2 | 5 | 37 | (s) | 4 | 4 | 1 | 9 |
| August ................ | 30 | 2 | 5 | 37 | (s) | 4 | 4 | 1 | 9 |
| September ........... | 29 | 1 | 5 | 36 | (s) | 4 | 4 | 1 | 9 |
| October ............... | 30 | 2 | 5 | 37 | (s) | 4 | 4 | 1 | 9 |
| November ........... | 29 | 1 | 5 | 36 | (s) | 4 | 4 | 1 | 9 |
| December ........... | 30 | 2 | 5 | 37 | (s) | 4 | 4 | 1 | 9 |
| Total .................. | 359 | 18 | 58 | 435 | 1 | 43 | 48 | 15 | 108 |

[^38]Table 10.2b Estimated Renewable Energy Consumption: Industrial and Transportation Sectors
(Trillion Btu)

|  | Industrial Sector ${ }^{\text {a }}$ |  |  |  |  | Transportation Sector |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hydropower ${ }^{\text {b }}$ | Wood ${ }^{\text {c }}$ | Waste ${ }^{\text {d }}$ | Geothermal ${ }^{\text {e }}$ | Total | Alcohol Fuels ${ }^{\dagger}$ |
| 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 Total ........................... | ${ }^{\text {R }} 33$ | 1,443 | 150 | 5 | 1,630 | 147 |
| 2002 January | 3 | 130 | 15 | (s) | 149 | 13 |
| February | 3 | 114 | 13 | (s) | 131 | 12 |
| March | 3 | 120 | 15 | (s) | 138 | 12 |
| April | 3 | 121 | 14 | (s) | 139 | 12 |
| May ............................ | 3 | 130 | 14 | (s) | 147 | 14 |
| June ............................ | 3 | 122 | 14 | (s) | 139 | 12 |
| July | 3 | 137 | 14 | (s) | 154 | 15 |
| August | 3 | 124 | 14 | (s) | 141 | 14 |
| September | R 3 | 132 | 14 | (s) | 148 | 15 |
| October | 3 | 141 | 15 | (s) | 159 | 17 |
| November | 5 | 128 | 15 | (s) | 148 | 20 |
| December ...................... | 5 | 133 | 16 | (s) | 155 | 19 |
| Total .......................... | 39 | 1,531 | 174 | 5 | 1,748 | 174 |
| 2003 January ....................... | 4 | 125 | 15 | (s) | 144 | 17 |
| February ...................... | 3 | 114 | 14 | (s) | 131 | 20 |
| March .......................... | 4 | 123 | 15 | (s) | 142 | 17 |
| April ............................ | 2 | 122 | 14 | (s) | 139 | 20 |
| May ............................ | 4 | 123 | 14 | (s) | 141 | 19 |
| June ............................ | 4 | 121 | 13 | (s) | R 139 | 19 |
| July ............................ | 4 | 130 | 14 | (s) | 148 | 20 |
| August ........................ | 4 | 127 | 14 | (s) | 145 | 21 |
| September ................... | 3 | 122 | 14 | (s) | ${ }^{\text {R } 140}$ | 18 |
| October ....................... | 3 | 126 | 14 | (s) | 144 | 21 |
| November .................... | 4 | 124 | 14 | (s) | 141 | 24 |
| December .................... | 5 | 133 | 14 | (s) | 153 | 25 |
| Total ........................... | 43 | 1,491 | 168 | 5 | 1,707 | 239 |
| 2004 January ....................... | 5 | 136 | 14 | (s) | 155 | 24 |
| February ...................... | 5 | 124 | 13 | (s) | 143 | 22 |
| March .......................... | 4 | 128 | 14 | (s) | 146 | 24 |
| April ........................... | 4 | 132 | 14 | (s) | 149 | 24 |
| May ............................ | 4 | 124 | 15 | (s) | 144 | 25 |
| June ........................... | 3 | 127 | 15 | (s) | 146 | 25 |
| July ............................ | 3 | 134 | 14 | (s) | 152 | 25 |
| August ........................ | 4 | 131 | 14 | (s) | 149 | 24 |
| September ................... | 5 | 125 | 13 | (s) | 143 | 26 |
| October ....................... | 4 | 133 | 14 | (s) | 151 | 25 |
| November .................... | 5 | 126 | 13 | (s) | 144 | 25 |
| December .................... | ${ }^{6}$ | 139 | 14 | (s) | 159 | 26 |
| Total .......................... | 51 | 1,559 | 168 | 5 | 1,783 | 296 |

[^39]e Geothermal heat pump and direct use energy.
f Ethanol blended into motor gasoline.
$\mathrm{R}=$ 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
(Trillion Btu)

|  | Hydropower ${ }^{\text {a }}$ | Wood ${ }^{\text {b }}$ | Waste ${ }^{\text {c }}$ | Geothermal ${ }^{\text {d }}$ | Solar ${ }^{\text {e }}$ | Wind ${ }^{\text {f }}$ | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1973 Total ................. | 2,827 | 1 | 2 | 43 | NA | NA | 2,873 |
| 1974 Total ..................... | 3,143 | 1 | 2 | 53 | NA | NA | 3,199 |
| 1975 Total .................. | 3,122 | (s) | 2 | 70 | NA | NA | 3,194 |
| 1976 Total ................. | 2,943 | 1 | 2 | 78 | NA | NA | 3,024 |
| 1977 Total .................. | 2,301 | 3 | 2 | 77 | NA | NA | 2,383 |
| 1978 Total .................. | 2,905 | 2 | 1 | 64 | NA | NA | 2,973 |
| 1979 Total .................. | 2,897 | 3 | 2 | 84 | NA | NA | 2,986 |
| 1980 Total .................. | 2,867 | 3 | 2 | 110 | NA | NA | 2,982 |
| 1981 Total .................. | 2,725 | 3 | 1 | 123 | NA | NA | 2,852 |
| 1982 Total .................. | 3,233 | 2 | 1 | 105 | NA | NA | 3,341 |
| 1983 Total .................. | 3,494 | 2 | 2 | 129 | NA | (s) | 3,627 |
| 1984 Total | 3,353 | 5 | 4 | 165 | (s) | (s) | 3,527 |
| 1985 Total | 2,937 | 8 | 7 | 198 | (s) | (s) | 3,150 |
| 1986 Total | 3,038 | 5 | 7 | 219 | (s) | (s) | 3,270 |
| 1987 Total | 2,602 | 8 | 7 | 229 | (s) | (s) | 2,846 |
| 1988 Total | 2,302 | 10 | 8 | 217 | (s) | (s) | 2,536 |
| 1989 Total9 ................. | 2,808 | 100 | 132 | 308 | 3 | 22 | 3,372 |
| 1990 Total .................. | 3,014 | 129 | 188 | 326 | 4 | 29 | 3,689 |
| 1991 Total .................. | 2,985 | 126 | 229 | 335 | 5 | 31 | 3,710 |
| 1992 Total .................. | 2,586 | 140 | 262 | 338 | 4 | 30 | 3,360 |
| 1993 Total .................. | 2,861 | 150 | 265 | 351 | 5 | 31 | 3,662 |
| 1994 Total .................. | 2,620 | 152 | 282 | 325 | 5 | 36 | 3,420 |
| 1995 Total .................. | 3,149 | 125 | 296 | 280 | 5 | 33 | 3,889 |
| 1996 Total .................. | 3,528 | 138 | 300 | 300 | 5 | 33 | 4,305 |
| 1997 Total .................. | 3,581 | 137 | 309 | 309 | 5 | 34 | 4,375 |
| 1998 Total .................. | 3,241 | 137 | 308 | 311 | 5 | 31 | 4,032 |
| 1999 Total .................. | 3,218 | 138 | 315 | 312 | 5 | 46 | 4,034 |
| 2000 Total ...................... | 2,768 | 134 | 318 | 296 | 5 | 57 | 3,579 |
| 2001 Total ..................... | R 2,209 | 126 | 324 | 289 | 6 | ${ }^{\mathrm{R}} 70$ | ${ }^{\text {R 3,023 }}$ |
| 2002 January ............... | R219 | 13 | 30 | 27 | (s) | 8 | ${ }^{\mathrm{R}} 297$ |
| February | R 203 | 10 | 27 | 24 | (s) | 7 | R 271 |
| March | R211 | 13 | 30 | 26 | (s) | 9 | ${ }^{\text {R } 290}$ |
| April | R 243 | 11 | 28 | 23 | (s) | 10 | R 318 |
| May | R 268 | 11 | 30 | 26 | 1 | 11 | R 347 |
| June ................... | R 284 | 12 | 31 | 24 | 1 | 11 | ${ }^{\text {R }} 364$ |
| July ................... | R 256 | 13 | 33 | 27 | 1 | 9 | R 339 |
| August ................ | R 212 | 13 | 33 | 26 | 1 | 10 | R 294 |
| September .......... | R 171 | 14 | 31 | 25 | 1 | 7 | R 249 |
| October ................. | R 171 | 13 | 30 | 26 | (s) | 7 | R 248 |
| November ........... | R 196 | 13 | 30 | 25 | (s) | 7 | R 271 |
| December ............ | R 215 | 14 | 32 | 26 | (s) | 8 | R 295 |
| Total .................. | R2,650 | 150 | 365 | 305 | 6 | 105 | ${ }^{\text {R 3,581 }}$ |
|  | R 207 | 16 | 30 | 26 | (s) | 6 | R 286 |
| February | R 199 | 13 | 26 | 24 | (s) | ${ }_{8}^{8}$ | R 270 |
| March | R 244 | 14 | 30 | 25 | 1 | R 11 | R 324 |
| April | R251 | 12 | 29 | 25 | 1 | 11 | R 329 |
| May | R 297 | 12 | 30 | 25 | 1 | 10 | R 374 |
| June | R 289 | 13 | 30 | 26 | 1 | 11 | R 370 |
| July | R 251 | 15 | 31 | 26 | 1 | 10 | R 333 |
| August ................ | R 231 | 16 | 31 | 26 | 1 | 8 | R 313 |
| September .......... | R186 | 14 | 29 | 25 | 1 | 9 | R 264 |
| October ............... | R185 | 14 | 28 | 25 | (s) | 9 | R 262 |
| November ........... | R 198 | 14 | 29 | 24 | (s) | 10 | R 275 |
| December ........... | R 241 | 15 | 31 | 27 | (s) | 11 | R 326 |
| Total .................. | R 2,781 | 167 | 354 | 303 | 5 | ${ }^{\mathrm{R}} 115$ | ${ }^{\text {R 3,725 }}$ |
| 2004 January ............... | 230 | 15 | 28 | 26 | (s) | 11 | 309 |
| February ............. | 209 | 14 | 26 | 25 | (s) | 11 | 284 |
| March .................. | 227 | 14 | 28 | 25 | 1 | 13 | 308 |
| April ................... | 209 | 12 | 28 | 24 | 1 | 13 | 286 |
| May .................... | 238 | 13 | 30 | 25 | 1 | 17 | 323 |
| June ................... | 252 | 13 | 29 | 25 | 1 | 14 | 333 |
| July .................... | 231 | 16 | 30 | 26 | 1 | 11 | 315 |
| August ................ | 216 | 15 | 30 | 26 | 1 | 10 | 297 |
| September ........... | 203 | 14 | 27 | 24 | 1 | 11 | 280 |
| October ............... | 188 | 14 | 27 | 26 | (s) | 10 | 266 |
| November ........... | 209 | 14 | 28 | 25 | (s) | 10 | 285 |
| December ............ | 261 | 15 | 30 | 26 | (s) | 12 | 344 |
| Total .................. | 2,673 | 168 | 340 | 302 | 6 | 143 | 3,632 |

[^40]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/renew.html.
Sources: • Wood and Waste: 1973-1988-Table 7.3b. 1989 forward-Table 7.4b. • Hydropower, Geothermal, Solar, and Wind: Tables 7.2 b and A6.

## 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 l.
1985 and 1986: Values interpolated.
1987: EIA, Estimates of Biofuels Consumption in the United States During 1987, Table 2.
1988: Value interpolated.
1989-2001: EIA, Renewable Energy Trends 2003 (August 2004), Table B1.

2002 forward: Annual estimates are from EIA, Office of Coal, Nuclear, Electric and Alternate Fuels (CNEAF). Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

## 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.
1985-1988: Values interpolated.
1989-2001: EIA, Renewable Energy Trends 2003 (August 2004), Table B1.

2002 forward: Annual estimates are created by adding annual values for wood consumption at commercial combined heat-and-power (CHP) plants (see sources for Table 7.4c) and annual CNEAF estimates for wood consumption at other commercial plants. Monthly estimates are created by adding monthly values for wood consumption at commercial CHP plants (see sources for Table 7.4c) and monthly estimates for wood consumption at other commercial plants. (For other commercial plants, monthly estimates are created by dividing the annual CNEAF estimate by the number of days in the year and then multiplying by the number of days in the month.)

## 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.
1989-2001: EIA, Renewable Energy Trends 2003 (August 2004), Table B1.

2002 forward: Annual estimates are created by adding annual values for wood consumption at industrial CHP plants (see Table 7.4c) and annual CNEAF estimates for wood consumption at other industrial plants. Monthly estimates are created by adding monthly values for wood consumption at industrial CHP plants (see Table 7.4c) and monthly estimates for wood consumption at other industrial plants. (For wood consumption at other industrial plants, monthly estimates are created by dividing the annual CNEAF estimate by the number of days in the year and then multiplying by the number of days in the month.)

## Waste, Commercial

Table 7.4c

## 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.
1989-2001: EIA, Renewable Energy Trends 2003 (August 2004), Table B1.

2002 forward: Annual estimates are created by adding annual values for waste consumption at industrial CHP plants (see Table 7.4c) and annual CNEAF estimates for waste consumption at other industrial plants. Monthly estimates are created by adding monthly values for waste consumption at industrial CHP plants (see Table 7.4c) and monthly estimates for waste consumption at other industrial plants. (For waste consumption at other industrial plants, monthly estimates are created by dividing the annual CNEAF estimate by the number of days in the year and then multiplying by the number of days in the month.)

## Hydroelectric, Commercial

Conventional hydroelectric power total (see Table 7.2a), minus conventional hydroelectric power in the electric power sector (see Table 7.2b) and industrial sector (see Table 7.2c), times the fossil-fueled-plants heat rate (see Table A6).

## Hydroelectric, Industrial

1973-1988: Tables 7.1 and 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.
1993-2004: 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 for fuel ethanol as shown in the MER Table A1.

2005: EIA, PSM, Table 1, "Motor Gasoline Blending Components Adjustments" plus "Finished Motor Gasoline Adjustments," plus PSM, Table 27, refinery and blender net inputs of "Fuel Ethanol." The sum is multiplied by the conversion factor of 3.539 million Btu per barrel for fuel ethanol from MER Table A1.

## Geothermal and Solar

1989-2001: EIA Renewable Energy Trends 2003 (August 2004), Table B1.

2002 forward: Annual estimates are from CNEAF. Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

## Section 11. International Petroleum

Crude Oil Production. World crude oil production during December 2004 was 73 million barrels per day, down 0.3 million barrels per day from the level in the previous month. World crude oil production during 2004 averaged 73 million barrels per day, up 3.3 million barrels per day, compared with production in 2003.

Organization of Petroleum Exporting Countries (OPEC) production during December 2004 averaged 31 million barrels per day, up 0.2 million barrels per day from the level in the previous month. OPEC production during 2004 averaged 30 million barrels per day, an 8-percent increase, compared with production in 2003. During December 2004, production increased in Iraq by 200 thousand barrels per day; Venezuela by 100 thousand barrels per day; Indonesia by 19 thousand barrels per day; and Iran by 10 thousand barrels per day. Production decreased in Nigeria by 100 thousand barrels per day but remained unchanged in Saudi Arabia, the United Arab Emirates, Kuwait, Algeria, Libya, and Qatar.

Among the non-OPEC nations, production during December 2004 increased in the United Kingdom by 55 thousand barrels per day; the United States by 51 thousand barrels per day; and China by 33 thousand per day. Production decreased in Norway by 225 thousand barrels per day;

Mexico by 142 thousand barrels per day; Canada by 140 thousand barrels per day; Russia by 79 thousand barrels per day; and Egypt by 28 thousand barrels per day.

Petroleum Consumption. In November 2004, consumption in all Organization for Economic Cooperation and Development (OECD) countries was 50.5 million barrels per day, 4 percent ${ }^{1}$ higher than the November 2003 rate. Comparing November rates in 2004 and 2003, consumption was higher in 2004 in the United Kingdom ( +11 percent); Germany (+7 percent); Canada, France, and the United States (each +5 percent); and Italy (+3 percent). The November 2004 consumption rate was lower in South Korea and Japan (both -4 percent), compared with the rate 1 year earlier.

Petroleum Stocks. For all OECD countries, petroleum stocks at the end of November 2004 totaled 4.1 billion barrels, 3 percent ${ }^{1}$ higher than the ending stock level in November 2003. Stock levels were higher in November 2004 in South Korea ( +10 percent); Canada ( +9 percent); France ( +5 percent); the United States ( +4 percent); and Japan (+3 percent). Stock levels were lower in the United Kingdom (-5 percent) and Italy and Germany (each -2 percent), compared with levels 1 year earlier.

[^41]Table 11.1a World Crude Oil Production: OPEC Members
(Thousand Barrels per Day)

|  | Algeria | Indonesia | Iran | Iraq | Kuwait ${ }^{\text {a }}$ | Libya | Nigeria | Qatar | Saudi Arabia ${ }^{\text {a }}$ | United Arab Emirates | Venezuela | OPEC ${ }^{\text {b }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 Average ........ | 1,310 | 1,340 | 3,724 | 2,390 | 1,998 | 1,367 | 2,256 | 714 | 8,031 | 2,205 | 3,010 | 28,344 |
| 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 | 2,310 | 760 | 8,570 | 2,200 | 630 | 26,769 |
| February ........ | 1,495 | 1,225 | 3,735 | 2,490 | 2,050 | 1,400 | 2,360 | 785 | 8,870 | 2,250 | 1,450 | 28,110 |
| March ............. | 1,555 | 1,200 | 3,760 | 1,373 | 2,300 | 1,405 | 2,030 | 785 | 9,460 | 2,450 | 2,390 | 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 |
| May ............... | 1,645 | 1,170 | 3,755 | 293 | 2,285 | 1,435 | 2,050 | 785 | 9,400 | 2,400 | 2,665 | 27,883 |
| June .............. | 1,625 | 1,165 | 3,755 | 453 | 2,100 | 1,430 | 2,150 | 735 | 8,700 | 2,350 | 2,640 | 27,103 |
| July ............... | 1,645 | 1,165 | 3,785 | 573 | 2,100 | 1,430 | 2,185 | 735 | 8,610 | 2,350 | 2,640 | 27,218 |
| August .......... | 1,645 | 1,150 | 3,785 | 1,053 | 2,100 | 1,425 | 2,260 | 735 | 8,610 | 2,340 | 2,640 | 27,743 |
| September ..... | 1,645 | 1,150 | 3,785 | 1,403 | 2,100 | 1,425 | 2,360 | 735 | 8,550 | 2,300 | 2,640 | 28,093 |
| October .......... | 1,645 | 1,145 | 3,785 | 1,753 | 2,200 | 1,420 | 2,360 | 735 | 8,650 | 2,330 | 2,640 | 28,663 |
| November ...... | 1,645 | 1,140 | 3,835 | 1,853 | 2,200 | 1,420 | 2,410 | 785 | 8,500 | 2,350 | 2,540 | 28,678 |
| December ...... | 1,645 | 1,140 | 3,950 | 1,953 | 2,300 | 1,450 | 2,460 | 785 | 8,660 | 2,400 | 2,540 | 29,283 |
| Average ........ | 1,611 | 1,171 | 3,779 | 1,312 | 2,178 | 1,421 | 2,241 | 762 | 8,848 | 2,348 | 2,335 | 28,006 |
| 2004 January | 1,645 | 1,130 | 3,950 | 2,103 | 2,300 | 1,450 | 2,530 | 785 | 8,700 | 2,400 | 2,540 | 29,533 |
| February ........ | 1,645 | 1,130 | 3,950 | 2,003 | 2,300 | 1,450 | 2,530 | 795 | 8,700 | 2,420 | 2,540 | 29,463 |
| March ............. | 1,645 | 1,120 | 3,960 | 2,203 | 2,355 | 1,450 | 2,530 | 795 | 8,400 | 2,370 | 2,540 | 29,368 |
| April .............. | 1,645 | 1,120 | 3,970 | 2,303 | 2,350 | 1,450 | 2,530 | 795 | 8,400 | 2,220 | 2,540 | 29,323 |
| May .............. | 1,645 | 1,115 | 3,980 | 1,903 | 2,400 | 1,450 | 2,530 | 795 | 8,500 | 2,280 | 2,540 | 29,138 |
| June .............. | 1,665 | 1,110 | 3,990 | 1,703 | 2,400 | 1,500 | 2,580 | 835 | 9,500 | 2,510 | 2,540 | 30,333 |
| July ............... | 1,695 | 1,110 | 4,010 | 2,003 | 2,400 | 1,550 | 2,580 | 835 | 9,500 | 2,530 | 2,540 | 30,753 |
| August .......... | 1,695 | 1,110 | 4,030 | 1,803 | 2,400 | 1,560 | 2,480 | 835 | 9,500 | 2,600 | 2,540 | 30,553 |
| September ..... | 1,695 | 1,110 | 4,030 | 2,303 | 2,400 | 1,560 | 2,480 | 835 | 9,500 | 2,600 | 2,540 | 31,053 |
| October .......... | 1,695 | 1,110 | 4,035 | 2,203 | 2,400 | 1,560 | 2,480 | 835 | 9,500 | 2,602 | 2,640 | 31,060 |
| November ...... | 1,725 | 1,089 | 4,050 | 1,703 | 2,400 | 1,600 | 2,480 | 835 | 9,500 | 2,602 | 2,540 | 30,524 |
| December ...... | 1,725 | 1,108 | 4,060 | 1,903 | 2,400 | 1,600 | 2,380 | 835 | 9,500 | 2,602 | 2,640 | 30,753 |
| Average ........ | 1,677 | 1,113 | 4,001 | 2,011 | 2,376 | 1,515 | 2,509 | 818 | 9,101 | 2,478 | 2,557 | 30,157 |

a Except for the period from August 1990 through May 1991, includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. In December 2004, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 600 thousand barrels per day.
Current members of OPEC are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela. Ecuador
respectively, are excluded from all OPEC totals.
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 ${ }^{\text {a }}$ | Selected Non-OPEC Producers |  |  |  |  |  |  |  |  | Total NonOPEC | 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 | - | 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 Average | 19,098 | 2,029 | 3,300 | 698 | 3,157 | 3,117 | - | 6,917 | 2,282 | 5,801 | 39,598 | 67,942 |
| 2002 January | 17,570 | 2,091 | 3,365 | 627 | 3,253 | 3,079 | - | 7,017 | 2,396 | 5,848 | 40,350 | 66,456 |
| February ........... | 17,633 | 2,167 | 3,330 | 629 | 3,142 | 3,150 | - | 7,094 | 2,392 | 5,871 | 40,469 | 66,542 |
| March | 17,785 | 2,159 | 3,350 | 624 | 3,125 | 2,787 | - | 7,157 | 2,334 | 5,883 | 40,088 | 66,383 |
| April | 16,665 | 2,204 | 3,333 | 630 | 3,178 | 3,157 | - | 7,179 | 2,388 | 5,859 | 40,679 | 65,784 |
| May | 17,360 | 2,130 | 3,365 | 667 | 3,136 | 3,028 | - | 7,184 | 2,338 | 5,924 | 40,398 | 66,378 |
| June | 17,090 | 2,155 | 3,415 | 635 | 3,158 | 2,918 | - | 7,337 | 2,323 | 5,915 | 40,499 | 66,224 |
| July ... | 17,660 | 2,201 | 3,395 | 628 | 3,145 | 3,114 | - | 7,441 | 2,114 | 5,770 | 40,413 | 66,723 |
| August | 17,395 | 2,165 | 3,490 | 624 | 3,214 | 2,896 | - | 7,574 | 1,953 | 5,811 | 40,412 | 66,542 |
| September | 17,953 | 2,135 | 3,430 | 628 | 3,162 | 2,752 | - | 7,686 | 2,186 | 5,411 | 40,155 | 67,126 |
| October ............. | 18,663 | 2,179 | 3,447 | 625 | 3,257 | 2,993 | - | 7,735 | 2,364 | 5,363 | 40,704 | 68,457 |
| November | 18,835 | 2,224 | 3,379 | 629 | 3,080 | 3,059 | - | 7,753 | 2,350 | 5,597 | 40,691 | 68,596 |
| December | 18,859 | 2,238 | 3,371 | 630 | 3,269 | 2,962 | - | 7,721 | 2,375 | 5,699 | 40,808 | 66,877 |
| Average ........... | 17,792 | 2,171 | 3,390 | 631 | 3,177 | 2,990 | - | 7,408 | 2,292 | 5,746 | 40,472 | 66,842 |
| 2003 January | 19,769 | 2,220 | 3,354 | 630 | 3,330 | 2,935 | - | 7,678 | 2,256 | 5,785 | ${ }^{R} 40,693$ | R 67,462 |
| February ........... | 20,215 | 2,215 | 3,375 | 630 | 3,325 | 3,015 | - | 7,789 | 2,275 | 5,791 | R 40,930 | R 69,040 |
| March ..... | 20,163 | 2,235 | 3,385 | 625 | 3,317 | 2,965 | - | 7,836 | 2,250 | 5,817 | R 40,872 | R 69,580 |
| April | 19,078 | 2,185 | 3,445 | 625 | 3,282 | 2,860 | - | 7,873 | 2,145 | 5,774 | R 40,693 | R 68,511 |
| May | 18,953 | 2,190 | 3,430 | 625 | 3,320 | 2,845 | - | 7,991 | 2,005 | 5,733 | R 40,638 | R 68,521 |
| June .................. | 18,128 | 2,250 | 3,450 | 620 | 3,396 | 2,576 | - | 8,106 | 1,950 | 5,701 | R 40,611 | R 67,714 |
| July .................. | 18,188 | 2,405 | 3,405 | 610 | 3,400 | 2,840 | - | 8,238 | 1,988 | 5,526 | ${ }^{\mathrm{R}} 41,107$ | R 68,325 |
| August .............. | 18,658 | 2,365 | 3,425 | 605 | 3,426 | 2,699 | - | 8,291 | 1,892 | 5,595 | R 41,043 | R 68,786 |
| September ......... | 18,908 | 2,350 | 3,371 | 614 | 3,417 | 2,689 | - | 8,426 | 2,047 | 5,683 | R 41,398 | R 69,491 |
| October ............. | 19,488 | 2,325 | 3,401 | 615 | 3,398 | 2,816 | - | 8,448 | 2,171 | 5,635 | R 41,703 | R 70,366 |
| November | 19,558 | 2,440 | 3,426 | 610 | 3,380 | 2,941 | - | 8,445 | 1,956 | 5,560 | R 41,901 | R 70,579 |
| December .......... | 20,083 | 2,480 | 3,438 | 610 | 3,455 | 2,978 | - | 8,444 | 2,192 | 5,579 | R 42,571 | R 71,854 |
| Average ........... | 19,262 | 2,306 | 3,409 | 618 | 3,371 | 2,846 | - | 8,132 | 2,093 | 5,681 | R 41, 182 | ${ }^{\mathrm{R}} \mathbf{6 9 , 1 8 8}$ |
| 2004 January ............. | 20,273 | 2,414 | 3,440 | 610 | 3,417 | 3,143 | - | 8,457 | 2,021 | E 5,644 | ${ }^{\mathrm{R}}$ 42,326 | R 71,859 |
| February ........... | 20,203 | 2,470 | 3,474 | 607 | 3,360 | 3,179 | - | 8,503 | 1,897 | E 5,584 | ${ }^{\mathrm{R}} 42,308$ | R 71,771 |
| March ................ | 20,118 | 2,440 | 3,393 | 590 | 3,368 | 3,089 | - | 8,562 | 2,026 | E 5,622 | R 42,344 | R 71,712 |
| April | 20,073 | 2,363 | 3,435 | 580 | 3,439 | 3,064 | - | 8,639 | 1,966 | E 5,568 | ${ }^{\mathrm{R}} 42,337$ | R 71,660 |
| May .................. | 19,893 | 2,384 | 3,420 | 591 | 3,394 | 3,028 | - | 8,708 | 1,800 | E 5,612 | ${ }^{\mathrm{R}} 42,257$ | R 71,395 |
| June .................. | 20,973 | 2,430 | 3,460 | 585 | 3,436 | 3,068 | - | 8,883 | 1,926 | E 5,403 | R 42,638 | R 72,971 |
| July | 21,313 | 2,410 | 3,486 | 595 | 3,363 | 3,079 | - | 8,924 | 1,876 | E 5,404 | R 42,533 | R 73,286 |
| August | 21,203 | 2,370 | 3,500 | 596 | 3,354 | 2,625 | - | 9,013 | 1,648 | E 5,280 | R 41,811 | R 72,364 |
| September ....... | 21,703 | 2,407 | 3,574 | 605 | 3,431 | 2,735 | - | 9,042 | R 1,578 | E 5,091 | R 42,042 | R 73,095 |
| October ............. | 21,610 | 2,369 | 3,544 | 604 | 3,451 | 2,983 | - | 9,006 | R 1,701 | E 5,112 | R 42,471 | R 73,531 |
| November | 21,125 | 2,435 | 3,533 | 599 | 3,364 | 2,962 | - | 8,995 | R 1,825 | E 5,397 | R 42,796 | R 73,320 |
| December ........... | 21,335 | 2,295 | 3,566 | 571 | 3,222 | 2,737 | - | 8,916 | 1,880 | E 5,448 | 42,284 | 73,037 |
| Average ............ | 20,820 | 2,398 | 3,485 | 594 | 3,383 | 2,973 | - | 8,805 | 1,845 | E 5,430 | 42,345 | 72,501 |

[^42]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, 1973-2004


Selected Producers, 1973-2004


Notes: • OECD is the Organization for Economic Cooperation and Development. • Because vertical scales differ, graphs should not be compared.

World Production, Monthly


Selected Producers, Monthly


Web Page: http://www.eia.doe.gov/emeu/mer/inter.html. Source: Tables 11.1a and 11.b.

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.
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, 1973-2003


OECD Total, November


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 ${ }^{\text {a }}$ | Italy | Japan | South Korea | United Kingdom | United States | $\begin{gathered} \text { OECD } \\ \text { Europe }^{\text {b }} \end{gathered}$ | Other OECD ${ }^{\text {c }}$ | OECD ${ }^{\text {d }}$ | World |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1973 Average ... | 1,729 | 2,601 | 3,324 | 2,068 | 4,949 | 281 | 2,341 | 17,308 | 15,879 | 1,658 | 41,804 | 57,237 |
| 1974 Average ......... | 1,779 | 2,447 | 3,030 | 2,004 | 4,864 | 287 | 2,210 | 16,653 | 14,985 | 1,806 | 40,375 | 56,677 |
| 1975 Average ......... | 1,779 | 2,252 | 2,957 | 1,855 | 4,621 | 311 | 1,911 | 16,322 | 14,314 | 1,794 | 39,141 | 56,198 |
| 1976 Average | 1,818 | 2,420 | 3,206 | 1,971 | 4,837 | 357 | 1,892 | 17,461 | 15,298 | 1,946 | 41,716 | 59,673 |
| 1977 Average | 1,850 | 2,294 | 3,212 | 1,897 | 4,880 | 422 | 1,905 | 18,431 | 15,160 | 2,035 | 42,779 | 61,826 |
| 1978 Average ......... | 1,902 | 2,408 | 3,290 | 1,952 | 4,945 | 482 | 1,938 | 18,847 | 15,611 | 2,194 | 43,980 | 64,158 |
| 1979 Average ......... | 1,971 | 2,463 | 3,373 | 2,039 | 5,050 | 525 | 1,971 | 18,513 | 16,048 | 2,278 | 44,385 | 65,220 |
| 1980 Average ......... | 1,873 | 2,256 | 3,082 | 1,934 | 4,960 | 537 | 1,725 | 17,056 | 14,995 | 2,342 | 41,763 | 63,108 |
| 1981 Average ......... | 1,768 | 2,023 | 2,804 | 1,874 | 4,848 | 536 | 1,590 | 16,058 | 13,802 | 2,479 | 39,491 | 60,944 |
| 1982 Average | 1,578 | 1,880 | 2,743 | 1,781 | 4,582 | 534 | 1,590 | 15,296 | 13,292 | 2,484 | 37,766 | 59,543 |
| 1983 Average | 1,448 | 1,835 | 2,661 | 1,750 | 4,395 | 561 | 1,531 | 15,231 | 12,968 | 2,303 | 36,906 | 58,779 |
| 1984 Average | 1,520 | 1,771 | 2,557 | 1,720 | 4,666 | 554 | 1,825 | 15,726 | 12,819 | 2,408 | 37,693 | 59,822 |
| 1985 Average ......... | 1,526 | 1,753 | 2,651 | 1,705 | 4,436 | 552 | 1,617 | 15,726 | 12,774 | 2,469 | 37,483 | 60,087 |
| 1986 Average ......... | 1,531 | 1,764 | 2,792 | 1,734 | 4,503 | 592 | 1,637 | 16,281 | 13,202 | 2,491 | 38,600 | 61,825 |
| 1987 Average ......... | 1,607 | 1,785 | 2,723 | 1,815 | 4,567 | 627 | 1,611 | 16,665 | 13,327 | 2,549 | 39,342 | 63,104 |
| 1988 Average ......... | 1,681 | 1,801 | 2,723 | 1,829 | 4,849 | 746 | 1,692 | 17,283 | 13,514 | 2,578 | 40,652 | 64,963 |
| 1989 Average | 1,754 | 1,844 | 2,581 | 1,897 | 5,058 | 860 | 1,731 | 17,325 | 13,588 | 2,745 | 41,330 | 66,092 |
| 1990 Average ......... | 1,746 | 1,826 | 2,682 | 1,874 | 5,218 | 1,048 | 1,776 | 16,988 | 13,711 | 2,804 | 41,515 | 66,443 |
| 1991 Average ......... | 1,675 | 1,940 | 2,829 | 1,862 | 5,325 | 1,263 | 1,802 | 16,714 | 14,060 | 2,897 | 41,934 | 67,061 |
| 1992 Average ......... | 1,722 | 1,932 | 2,841 | 1,894 | 5,493 | 1,527 | 1,815 | 17,033 | 14,252 | 2,919 | 42,946 | 67,273 |
| 1993 Average ......... | 1,754 | 1,877 | 2,908 | 1,891 | 5,380 | 1,684 | 1,829 | 17,237 | 14,262 | 2,942 | 43,259 | 67,372 |
| 1994 Average ......... | 1,766 | 1,865 | 2,883 | 1,869 | 5,673 | 1,840 | 1,833 | 17,718 | 14,343 | 3,089 | 44,429 | 68,679 |
| 1995 Average ......... | 1,819 | 1,919 | 2,882 | 1,942 | 5,676 | 2,008 | 1,815 | 17,725 | 14,636 | 3,005 | 44,868 | 69,955 |
| 1996 Average | 1,870 | 1,949 | 2,922 | 1,920 | 5,785 | 2,101 | 1,851 | 18,309 | 14,939 | 2,996 | 46,000 | 71,522 |
| 1997 Average ......... | 1,956 | 1,969 | 2,917 | 1,934 | 5,797 | 2,255 | 1,803 | 18,620 | 15,075 | 3,091 | 46,795 | 73,292 |
| 1998 Average ......... | 1,942 | 2,040 | 2,923 | 1,941 | 5,577 | 1,917 | 1,791 | 18,917 | 15,384 | 3,191 | 46,928 | 73,932 |
| 1999 Average ......... | 2,027 | 2,029 | 2,838 | 1,891 | 5,698 | 2,084 | 1,794 | 19,519 | 15,288 | 3,236 | 47,853 | 75,826 |
| 2000 Average ......... | 2,027 | 2,001 | 2,772 | 1,854 | 5,607 | 2,135 | 1,758 | 19,701 | 15,175 | 3,325 | 47,970 | 76,954 |
| 2001 Average ......... | 2,043 | 2,051 | 2,815 | 1,837 | 5,530 | 2,132 | 1,724 | 19,649 | 15,331 | 3,326 | 48,010 | 78,105 |
| 2002 January ........... | 2,038 | 2,213 | 2,583 | 1,947 | 5,811 | 2,404 | 1,737 | 19,454 | 15,582 | 3,210 | 48,498 | NA |
| February ......... | 2,117 | 2,068 | 2,684 | 2,032 | 6,147 | 2,266 | 1,797 | 19,444 | 15,594 | 3,418 | 48,985 | NA |
| March .............. | 2,072 | 1,954 | 2,648 | 1,866 | 5,555 | 2,286 | 1,806 | 19,676 | 15,076 | 3,211 | 47,876 | NA |
| April ................ | 1,986 | 1,932 | 2,675 | 1,828 | 5,034 | 2,144 | 1,786 | 19,552 | 15,048 | 3,319 | 47,082 | NA |
| May ................. | 2,001 | 1,785 | 2,491 | 1,811 | 4,638 | 1,865 | 1,778 | 19,728 | 14,558 | 3,231 | 46,020 | NA |
| June ................ | 2,056 | 1,936 | 2,775 | 1,831 | 4,721 | 1,886 | 1,679 | 19,875 | 15,124 | 3,189 | 46,850 | NA |
| July ................. | 2,089 | 2,093 | 2,921 | 1,941 | 5,199 | 1,866 | 1,801 | 20,076 | 15,723 | 3,293 | 48,247 | NA |
| August ............ | 2,144 | 1,865 | 2,789 | 1,757 | 5,170 | 1,965 | 1,725 | 20,221 | 14,955 | 3,299 | 47,753 | NA |
| September ....... | 2,025 | 1,998 | 2,933 | 1,842 | 5,216 | 2,107 | 1,738 | 19,461 | 15,554 | 3,281 | 47,645 | NA |
| October ............ | 2,142 | 2,069 | 2,771 | 1,934 | 5,273 | 2,118 | 1,808 | 19,678 | 15,850 | 3,339 | 48,401 | NA |
| November ........ | 2,170 | 1,978 | 2,746 | 1,794 | 6,099 | 2,334 | 1,801 | 19,991 | 15,443 | 3,207 | 49,244 | NA |
| December ........ | 2,115 | 1,908 | 2,642 | 1,869 | 6,753 | 2,555 | 1,757 | 19,943 | 15,329 | 3,376 | 50,072 | NA |
| Average ......... | 2,079 | 1,983 | 2,721 | 1,870 | 5,465 | 2,149 | 1,768 | 19,761 | 15,318 | 3,280 | 48,052 | 78,439 |
| 2003 January ........... | 2,125 | 2,173 | 2,432 | 1,796 | 6,224 | 2,520 | 1,759 | 20,017 | R 15,365 | 3,299 | R 49,550 | NA |
| February ......... | 2,267 | 2,244 | 2,751 | 2,047 | 6,665 | 2,408 | 1,746 | 20,375 | R 16,168 | 3,395 | R 51,279 | NA |
| March .............. | 2,113 | 1,927 | 2,586 | 1,821 | 6,241 | 2,206 | 1,742 | 19,708 | R 15,022 | 3,343 | R 48,633 | NA |
| April ................ | 2,166 | 1,972 | 2,784 | 1,834 | 5,302 | 1,970 | 1,740 | 19,830 | R 15,389 | 3,414 | R 48,072 | NA |
| May ................ | 2,189 | 1,885 | 2,809 | 1,808 | 5,073 | 1,991 | 1,684 | 19,344 | R 15,120 | 3,448 | R 47,163 | NA |
| June | 2,111 | 2,026 | 2,715 | 1,870 | 5,127 | 2,051 | 1,684 | 19,793 | R 15,213 | 3,383 | R 47,678 | NA |
| July ................ | 2,190 | 2,141 | 2,676 | 1,918 | 4,994 | 1,920 | 1,714 | 20,094 | R 15,629 | 3,470 | R 48,297 | NA |
| August ............ | 2,246 | 1,887 | 2,484 | 1,762 | 5,012 | 1,951 | 1,608 | 20,586 | R 14,744 | 3,336 | R 47,875 | NA |
| September ....... | 2,168 | 2,188 | 2,893 | 1,945 | 5,108 | 1,991 | 1,755 | 19,933 | R 16,147 | 3,466 | R 48,812 | NA |
| October ............ | R 2,290 | 2,193 | 2,781 | 1,924 | 5,377 | 2,203 | 1,720 | 20,182 | R 16,126 | 3,402 | R 49,579 | NA |
| November ........ | 2,209 | 1,928 | 2,645 | 1,808 | 5,510 | 2,331 | 1,737 | 19,873 | R 15,257 | 3,355 | R 48,535 | NA |
| December ........ | 2,239 | 2,168 | 2,590 | 1,976 | 6,372 | 2,489 | 1,784 | 20,679 | R 15,906 | 3,575 | R 51,260 | NA |
| Average ......... | R 2,192 | 2,060 | 2,677 | 1,874 | 5,578 | 2,168 | 1,722 | 20,034 | R 15,502 | 3,407 | R 48,882 | R 79,812 |
| 2004 January ........... | 2,219 | 2,122 | 2,502 | 1,796 | 6,002 | 2,376 | 1,797 | 20,393 | R 15,246 | 3,391 | R 49,626 | NA |
| February .......... | 2,301 | 2,159 | 2,677 | 1,903 | 6,203 | 2,247 | 1,866 | 20,549 | R 15,905 | 3,523 | R 50,728 | NA |
| March .............. | 2,307 | 2,117 | 2,764 | 1,949 | 5,980 | 2,248 | 1,887 | 20,161 | R 16,177 | 3,498 | R 50,370 | NA |
| April | 2,246 | 2,094 | 2,643 | 1,831 | 5,184 | 2,041 | 1,993 | 20,207 | R 15,880 | 3,369 | R 48,926 | NA |
| May ................. | 2,188 | 1,778 | 2,340 | 1,787 | 4,803 | 1,972 | 1,794 | 20,209 | R 14,559 | 3,435 | R 47,167 | NA |
| June ................ | 2,324 | 2,009 | 2,641 | 1,929 | 4,868 | 2,033 | 1,858 | 20,333 | R 15,640 | 3,479 | R 48,677 | NA |
| July ................ | 2,266 | 2,020 | 2,687 | 1,965 | 5,201 | 1,897 | 1,844 | 20,601 | R 15,731 | 3,491 | R 49,187 | NA |
| August ............ | R 2,299 | 1,859 | 2,669 | 1,745 | 5,360 | 2,030 | 1,800 | 20,732 | R 15,106 | 3,369 | R 48,896 | NA |
| September ....... | R 2,276 | 2,136 | 2,846 | 1,948 | 5,045 | 2,059 | 1,850 | 20,411 | R 16,274 | 3,446 | R 49,512 | NA |
| October ........... | R 2,256 | 2,050 | 2,667 | 1,927 | 5,219 | 2,136 | R 1,843 | 20,743 | R 15,876 | 3,339 | R 49,569 | NA |
| November ........ | 2,330 | 2,024 | 2,832 | 1,863 | 5,310 | 2,231 | 1,932 | 20,782 | 16,239 | 3,613 | 50,504 | NA |
| 11-Mo. Avg. .... | 2,273 | 2,032 | 2,659 | 1,876 | 5,378 | 2,115 | 1,860 | 20,465 | 15,689 | 3,449 | 49,370 | NA |
| 2003 11-Mo. Avg. .... | 2,188 | 2,050 | 2,686 | 1,865 | 5,505 | 2,138 | 1,717 | 19,974 | 15,464 | 3,392 | 48,661 | NA |
| 2002 11-Mo. Avg. .... | 2,076 | 1,990 | 2,728 | 1,870 | 5,345 | 2,111 | 1,769 | 19,744 | 15,317 | 3,271 | 47,865 | 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 1984), Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovakia (beginning in 1984) 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, South Korea, the United States, "OECD Europe" and "Other OECD."
$\mathrm{R}=$ Revised. $N A=$ Not available.
R=Revised. NA=Not available.
Notes: - 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 3.1b. - U.S. Territories: 1983-2004-Energy Information Administration, (EIA), International Energy Database. - East Germany, Former Czechoslavakia, Hungary, Mexico, Poland, South Korea, Non-OECD Countries, and World: 1973-1979-EIA, International Energy Database. 1980-1983-EIA, International Energy Annual 2002, May 2004, Table 1.2. - Non-OECD Countries: 1984-2002-EIA, International Energy Annual 2002, May 2004, Table 1.2. 2003-EIA, Short Term Energy Outlook, December 2004, Table 3 (adjusted to remove Slovakia). - World: 1984-2004-Sum of OECD and Non-OECD Countries. - All Other Data: 1973-1981—International Energy Agency (IEA), Quarterly Oil Statistics and Energy Balances in OECD Countries, various issues. 1982-1983-IEA, Monthly Oil and Gas Statistics Database. 1984-2004-IEA, Monthly Oil Data Service, February 10, 2005.

Figure 11.3 Petroleum Stocks in OECD Countries (Billion Barrels)

Overview, End of Year, 1973-2003


OECD Stocks, End of Month, November


By Selected OECD Country


[^43]Table 11.3 Petroleum Stocks in OECD Countries

|  | Canada | France | Germany ${ }^{\text {a }}$ | Italy | Japan | South Korea | United Kingdom | United States | OECD Europe ${ }^{\text {b }}$ | Other OECD ${ }^{\text {c }}$ | OECD ${ }^{\text {d }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 ...................... | 129 | 153 | 280 | 158 | 483 | 15 | 129 | 1,556 | 1,199 | 112 | 3,494 |
| 1985 Year | 112 | 139 | 277 | 156 | 500 | 13 | 131 | 1,519 | 1,154 | 110 | 3,408 |
| 1986 Year ....................... | 111 | 127 | 295 | 154 | 514 | 21 | 133 | 1,593 | 1,192 | 113 | 3,543 |
| 1987 Year ....................... | 128 | 127 | 304 | 168 | 545 | 20 | 133 | 1,607 | 1,226 | 115 | 3,643 |
| 1988 Year ....................... | 119 | 140 | 303 | 154 | 543 | 16 | 126 | 1,597 | 1,200 | 114 | 3,588 |
| 1989 Year ...................... | 118 | 138 | 310 | 162 | 582 | 22 | 131 | 1,581 | 1,217 | 114 | 3,635 |
| 1990 Year | 143 | 143 | 280 | 143 | 572 | 64 | 103 | 1,621 | 1,188 | 117 | 3,705 |
| 1991 Year ...................... | 140 | 161 | 288 | 134 | 586 | 66 | 109 | 1,617 | 1,191 | 113 | 3,713 |
| 1992 Year ....................... | 127 | 157 | 311 | 149 | 582 | 77 | 104 | 1,592 | 1,224 | 115 | 3,718 |
| 1993 Year ...................... | 128 | 153 | 310 | 139 | 597 | 83 | 109 | 1,647 | 1,220 | 115 | 3,791 |
| 1994 Year ....................... | 142 | 153 | 314 | 143 | 625 | 96 | 109 | 1,653 | 1,245 | 114 | 3,875 |
| 1995 Year ....................... | 132 | 155 | 302 | 141 | 631 | 92 | 101 | 1,563 | 1,228 | 113 | 3,758 |
| 1996 Year ...................... | 127 | 154 | 303 | 135 | 651 | 123 | 103 | 1,507 | 1,235 | 118 | 3,761 |
| 1997 Year | 144 | 161 | 299 | 129 | 685 | 124 | 100 | 1,560 | 1,246 | 115 | 3,874 |
| 1998 Year ...................... | 139 | 169 | 323 | 135 | 649 | 129 | 104 | 1,647 | 1,331 | 111 | 4,006 |
| 1999 Year ....................... | 142 | 160 | 290 | 130 | 629 | 132 | 101 | 1,493 | 1,233 | 105 | 3,733 |
| 2000 Year ...................... | 144 | 170 | 272 | 140 | 634 | 140 | 100 | 1,468 | 1,291 | 117 | 3,793 |
| 2001 Year ...................... | 156 | 165 | 273 | 134 | 634 | 143 | 116 | 1,586 | 1,280 | 112 | 3,912 |
| 2002 January | 156 | 164 | 277 | 140 | 631 | 142 | 116 | 1,591 | 1,310 | 114 | 3,943 |
| February | 160 | 167 | 276 | 138 | 620 | 137 | 114 | 1,576 | 1,316 | 116 | 3,925 |
| March | 160 | 163 | 276 | 132 | 630 | 144 | 109 | 1,573 | 1,290 | 110 | 3,907 |
| April | 159 | 164 | 276 | 133 | 624 | 140 | 111 | 1,588 | 1,283 | 114 | 3,907 |
| May .......................... | 155 | 173 | 274 | 136 | 626 | 144 | 108 | 1,611 | 1,297 | 110 | 3,942 |
| June | 155 | 170 | 269 | 132 | 634 | 154 | 116 | 1,616 | 1,294 | 112 | 3,965 |
| July ........................ | 159 | 169 | 264 | 137 | 633 | 153 | 116 | 1,611 | 1,288 | 111 | 3,954 |
| August ...... | 162 | 171 | 264 | 142 | 633 | 152 | 108 | 1,596 | 1,285 | 123 | 3,952 |
| September .............. | 163 | 174 | 259 | 136 | 627 | 149 | 107 | 1,574 | 1,266 | 115 | 3,894 |
| October ..... | 162 | 176 | 254 | 140 | 628 | 150 | 113 | 1,573 | 1,287 | 111 | 3,911 |
| November ............... | 159 | 170 | 253 | 143 | 616 | 149 | 113 | 1,578 | 1,265 | 114 | 3,881 |
| December ............... | 155 | 175 | 253 | 138 | 615 | 140 | 105 | 1,548 | 1,250 | 105 | 3,815 |
| 2003 January . | 155 | 170 | 265 | 140 | 618 | 140 | 105 | 1,504 | 1,256 | 107 | R 3,779 |
| February ................ | 150 | 162 | 260 | 128 | 614 | 140 | 103 | 1,460 | 1,227 | 110 | 3,701 |
| March | 154 | 175 | 266 | 136 | 619 | 137 | 105 | 1,474 | R 1,278 | 115 | 3,779 |
| April | 161 | 174 | 266 | 139 | 619 | 141 | 106 | 1,496 | R 1,282 | 104 | R 3,803 |
| May . | 163 | 180 | 267 | 137 | 632 | 142 | 108 | 1,533 | R 1,274 | 110 | R 3,854 |
| June ....................... | 168 | 173 | 268 | 135 | 647 | 152 | 101 | 1,560 | 1,271 | 107 | 3,905 |
| July ............................ | 176 | 174 | 270 | 136 | 650 | 158 | 103 | 1,570 | R 1,278 | 103 | R 3,937 |
| August ................... | 176 | 184 | 276 | 140 | 651 | 150 | 100 | 1,572 | 1,304 | 101 | R 3,953 |
| September .............. | R179 | 179 | 266 | 141 | 654 | 155 | 98 | 1,598 | R 1,286 | 103 | R 3,974 |
| October .... | R 179 | 176 | 271 | 139 | 642 | 148 | 98 | 1,602 | R 1,282 | 99 | 3,952 |
| November ............... | 175 | 183 | 272 | 139 | 636 | 149 | 106 | 1,598 | R 1,301 | 107 | R 3,966 |
| December ................ | 175 | 185 | 273 | 135 | 636 | 155 | 102 | 1,568 | R 1,295 | 96 | R 3,925 |
| 2004 January .................. | 171 | 183 | 277 | 132 | 631 | 143 | 105 | 1,552 | R 1,315 | 99 | R 3,910 |
| February | 170 | 178 | 275 | 132 | 625 | 151 | 102 | 1,547 | R 1,289 | 100 | R 3,881 |
| March ..................... | 170 | 176 | 270 | 136 | 614 | 143 | 101 | 1,566 | R 1,291 | 97 | R 3,882 |
| April | 171 | 181 | 267 | 134 | 612 | 148 | 98 | 1,574 | R 1,275 | 108 | R 3,888 |
| May | 170 | 186 | 270 | 131 | 625 | 146 | 98 | 1,600 | R 1,289 | 104 | R 3,935 |
| June | 169 $\times 173$ | 184 | 267 | 135 | 622 | 153 | 98 | 1,629 | R 1,293 | 99 | R 3,964 |
| July | R 173 | 184 | 269 | 133 | 630 | 154 | 102 | 1,647 | R 1,297 | 99 | R 4,000 |
| August ...... | R 173 | 185 | 271 | 137 | 627 | 150 | R93 | 1,657 | R 1,317 | 99 | R 4,024 |
| September | R 184 | 189 | 264 | 139 | 632 | 152 | R 98 | 1,643 | 1,308 | 99 | R 4,018 |
| October .................... | R 189 | 188 | 270 | 131 | 642 | 148 | R 94 | 1,639 | 1,310 | 105 | R 4,032 |
| November ............... | 191 | 192 | 268 | 137 | 656 | 163 | 100 | 1,657 | 1,315 | 106 | 4,089 |

a Through December 1983, the data for Germany are for the former West Germany only. Beginning with January 1984, 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 1984 forward, Czech Republic, Hungary, Poland, and Slovakia.
c "Other OECD" consists of Australia, New Zealand, and the U.S. Territories, and, for 1984 forward, Mexico.
d' The Organization for Economic Cooperation and Development (OECD) consists of Canada, Japan, South Korea, the United States, "OECD Europe" and "Other OECD."
$R=$ Revised. $N A=N o t$ 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. - 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. - 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 3.1b. $\quad$ U.S. Territories:
1983-2004-Energy Information Administration, International Energy Database.

- All Other Data: 1973-1982-International Energy Agency (IEA), Quarterly Oil Statistics and Energy Balances, various issues. 1983-IEA, Monthly Oil and Gas Statistics Database. 1984-2004-IEA, Monthly Oil Data Service, February 10, 2005.


## International Petroleum

## Tables 11.1a and 11.1b Sources

United States: See Table 3.1a.

## All Other Countries: Monthly Data

2002 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.
1980-2003: Office of Energy Markets and End Use, International Energy Database, February 2005.
2004: Average of monthly data.
World: Monthly Data
2002 forward: EIA, International Petroleum Monthly, sum of all countries' monthly data.

## World: Annual Data

1973-1979: EIA, International Energy Annual 1981, Table 8.

1980-2003: Office of Energy Markets and End Use, International Energy Database, February 2005.
2004: 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 ${ }^{\text {a }}$ | 4.130 | Naptha Less Than $401^{\circ} \mathrm{F}$ | 5.248 |
| Distillate Fuel Oil | 5.825 | Other Oils Equal to or Greater Than $401^{\circ} \mathrm{F}$ | 5.825 |
| Ethane | 3.082 | Still Gas | 6.000 |
| Ethane-Propane Mixture ${ }^{\text {b }}$ | 3.308 | Petroleum Coke | 6.024 |
| Isobutane | 3.974 | Plant Condensate | 5.418 |
| Jet Fuel, Kerosene Type | 5.670 | Propane | 3.836 |
| Jet Fuel, Naphtha 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 ${ }^{\text {c }}$ | 5.253 | Unfinished Oils | 5.825 |
| Reformulated ${ }^{\text {c }}$ | 5.150 | Unfractionated Stream | 5.418 |
| Oxygenated ${ }^{\text {c }}$ | 5.150 | Waxes | 5.537 |
| Fuel Ethanold ${ }^{\text {d }}$ | 3.539 | Miscellaneous | 5.796 |

[^44]Table A2. Approximate Heat Content of Petroleum Production, Imports, and Exports (Million Btu per Barrel)

|  | Production |  | Imports |  |  | Exports |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Crude Oil | Natural Gas Plant Liquids | Crude Oil | Petroleum Products | Total | Crude Oil | Petroleum Products | Total |
| 1973 ............................. | 5.800 | 4.049 | 5.817 | 5.983 | 5.897 | 5.800 | 5.752 | 5.752 |
| 1974 ............................ | 5.800 | 4.011 | 5.827 | 5.959 | 5.884 | 5.800 | 5.773 | 5.774 |
| 1975 ............................ | 5.800 | 3.984 | 5.821 | 5.935 | 5.858 | 5.800 | 5.747 | 5.748 |
| 1976 | 5.800 | 3.964 | 5.808 | 5.980 | 5.856 | 5.800 | 5.743 | 5.745 |
| 1977 ............................. | 5.800 | 3.941 | 5.810 | 5.908 | 5.834 | 5.800 | 5.796 | 5.797 |
| 1978 ............................. | 5.800 | 3.925 | 5.802 | 5.955 | 5.839 | 5.800 | 5.814 | 5.808 |
| 1979 ............................ | 5.800 | 3.955 | 5.810 | 5.811 | 5.810 | 5.800 | 5.864 | 5.832 |
| 1980 ............................. | 5.800 | 3.914 | 5.812 | 5.748 | 5.796 | 5.800 | 5.841 | 5.820 |
| 1981 ............................. | 5.800 | 3.930 | 5.818 | 5.659 | 5.775 | 5.800 | 5.837 | 5.821 |
| 1982 | 5.800 | 3.872 | 5.826 | 5.664 | 5.775 | 5.800 | 5.829 | 5.820 |
| 1983 ............................. | 5.800 | 3.839 | 5.825 | 5.677 | 5.774 | 5.800 | 5.800 | 5.800 |
| 1984 | 5.800 | 3.812 | 5.823 | 5.613 | 5.745 | 5.800 | 5.867 | 5.850 |
| 1985 ............................ | 5.800 | 3.815 | 5.832 | 5.572 | 5.736 | 5.800 | 5.819 | 5.814 |
| 1986 | 5.800 | 3.797 | 5.903 | 5.624 | 5.808 | 5.800 | 5.839 | 5.832 |
| 1987 | 5.800 | 3.804 | 5.901 | 5.599 | 5.820 | 5.800 | 5.860 | 5.858 |
| 1988 | 5.800 | 3.800 | 5.900 | 5.618 | 5.820 | 5.800 | 5.842 | 5.840 |
| 1989 | 5.800 | 3.826 | 5.906 | 5.641 | 5.833 | 5.800 | 5.869 | 5.857 |
| 1990 ........................... | 5.800 | 3.822 | 5.934 | 5.614 | 5.849 | 5.800 | 5.838 | 5.833 |
| 1991 | 5.800 | 3.807 | 5.948 | 5.636 | 5.873 | 5.800 | 5.827 | 5.823 |
| 1992 ............................. | 5.800 | 3.804 | 5.953 | 5.623 | 5.877 | 5.800 | 5.774 | 5.777 |
| 1993 | 5.800 | 3.801 | 5.954 | 5.620 | 5.883 | 5.800 | 5.777 | 5.779 |
| 1994 ............................. | 5.800 | 3.794 | 5.950 | 5.534 | 5.861 | 5.800 | 5.777 | 5.779 |
| 1995 | 5.800 | 3.796 | 5.938 | 5.483 | 5.855 | 5.800 | 5.740 | 5.746 |
| 1996 | 5.800 | 3.777 | 5.947 | 5.468 | 5.847 | 5.800 | 5.728 | 5.736 |
| 1997 | 5.800 | 3.762 | 5.954 | 5.469 | 5.862 | 5.800 | 5.726 | 5.734 |
| 1998 | 5.800 | 3.769 | 5.953 | 5.462 | 5.861 | 5.800 | 5.710 | 5.720 |
| 1999 | 5.800 | 3.744 | 5.942 | 5.421 | 5.840 | 5.800 | 5.684 | 5.699 |
| 2000 | 5.800 | 3.733 | 5.959 | 5.432 | 5.849 | 5.800 | 5.651 | 5.658 |
| 2001 ............................. | 5.800 | 3.735 | 5.976 | 5.443 | 5.862 | 5.800 | 5.751 | 5.752 |
| 2002 | 5.800 | 3.729 | 5.971 | 5.451 | 5.863 | 5.800 | 5.687 | 5.688 |
| 2003 | 5.800 | 3.739 | 5.970 | 5.438 | 5.857 | 5.800 | 5.739 | 5.740 |
| $2004^{\text {P }}$........................... | 5.800 | ${ }^{\mathrm{R}} 3.724$ | ${ }^{\mathrm{R}} 5.980$ | ${ }^{\mathrm{R}} 5.451$ | ${ }^{\text {R }} 5.863$ | 5.800 | ${ }^{\mathrm{R}} 5.753$ | ${ }^{\text {R }} 5.754$ |

$\mathrm{P}=$ Preliminary. R=Revised.
Note: Crude oil includes lease condensate.
Web Page: http://www.eia.doe.gov/emeu/mer/append.html.
Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

Table A3. Approximate Heat Content of Petroleum Consumption
(Million Btu per Barrel)

|  | Total Petroleum ${ }^{\text {a }}$ |  |  |  |  |  | Liquefied Petroleum Gases | Motor Gasoline |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | End-Use Sectors |  |  |  | Electric Power Sector ${ }^{\text {b }}$ | Total |  |  |
|  | Residential | Commercial | Industrial | Transportation |  |  |  |  |
| 1973 .................... | 5.205 | 5.749 | 5.568 | 5.395 | 6.245 | 5.515 | 3.746 | 5.253 |
| 1974 .................... | 5.196 | 5.740 | 5.538 | 5.394 | 6.238 | 5.504 | 3.730 | 5.253 |
| 1975 .................... | 5.192 | 5.704 | 5.528 | 5.392 | 6.250 | 5.494 | 3.715 | 5.253 |
| 1976 .................... | 5.215 | 5.726 | 5.538 | 5.395 | 6.251 | 5.504 | 3.711 | 5.253 |
| 1977 .................... | 5.213 | 5.733 | 5.555 | 5.400 | 6.249 | 5.518 | 3.677 | 5.253 |
| 1978 .................... | 5.213 | 5.716 | 5.553 | 5.404 | 6.251 | 5.519 | 3.669 | 5.253 |
| 1979 .................... | 5.298 | 5.769 | 5.418 | 5.428 | 6.258 | 5.494 | 3.680 | 5.253 |
| 1980 .................... | 5.245 | 5.803 | 5.376 | 5.440 | 6.254 | 5.479 | 3.674 | 5.253 |
| 1981 .................... | 5.191 | 5.751 | 5.313 | 5.432 | 6.258 | 5.448 | 3.643 | 5.253 |
| 1982 .................... | 5.167 | 5.751 | 5.263 | 5.422 | 6.258 | 5.415 | 3.615 | 5.253 |
| 1983 .................... | 5.022 | 5.642 | 5.273 | 5.415 | 6.255 | 5.406 | 3.614 | 5.253 |
| 1984 | 5.129 | 5.700 | 5.223 | 5.422 | 6.251 | 5.395 | 3.599 | 5.253 |
| 1985 .................... | 5.115 | 5.660 | 5.221 | 5.423 | 6.247 | 5.387 | 3.603 | 5.253 |
| 1986 .................... | 5.130 | 5.691 | 5.286 | 5.427 | 6.257 | 5.418 | 3.640 | 5.253 |
| 1987 .................... | 5.095 | 5.659 | 5.253 | 5.430 | 6.249 | 5.403 | 3.659 | 5.253 |
| 1988 .................... | 5.118 | 5.657 | 5.248 | 5.434 | 6.250 | 5.410 | 3.652 | 5.253 |
| 1989 .................... | 5.057 | 5.619 | 5.234 | 5.440 | $\mathrm{b}_{6.240}$ | 5.410 | 3.683 | 5.253 |
| 1990 .................... | 4.950 | 5.617 | 5.272 | 5.444 | 6.244 | 5.411 | 3.625 | 5.253 |
| 1991 .................... | 4.912 | 5.590 | 5.190 | 5.442 | 6.246 | 5.384 | 3.614 | 5.253 |
| 1992 .................... | 4.942 | 5.577 | 5.188 | 5.445 | 6.238 | 5.378 | 3.624 | 5.253 |
| 1993 .................... | 4.942 | 5.571 | 5.195 | 5.438 | 6.230 | 5.379 | 3.606 | 5.253 |
| 1994 .................... | 4.936 | 5.580 | 5.165 | 5.426 | 6.213 | 5.361 | 3.635 | ${ }^{\text {c }} 5.230$ |
| 1995 ........................ | 4.925 | 5.546 | 5.133 | 5.419 | 6.188 | 5.341 | 3.623 | 5.215 |
| 1996 .................... | 4.869 | 5.494 | 5.129 | 5.421 | 6.195 | 5.336 | 3.613 | 5.216 |
| 1997 .................... | 4.870 | 5.459 | 5.133 | 5.417 | 6.199 | 5.336 | 3.616 | 5.213 |
| 1998 .................... | 4.842 | 5.440 | 5.149 | 5.414 | 6.210 | 5.349 | 3.614 | 5.212 |
| 1999 .................... | 4.749 | 5.349 | 5.105 | 5.415 | 6.205 | 5.328 | 3.616 | 5.211 |
| 2000 .................... | 4.754 | 5.388 | 5.072 | 5.423 | 6.189 | 5.326 | 3.607 | 5.210 |
| 2001 .................... | 4.824 | 5.422 | 5.120 | 5.421 | 6.199 | 5.345 | 3.614 | 5.210 |
| 2002 .................... | E4.824 | $\mathrm{E}_{5.422}$ | E5.120 $^{\text {l }}$ | $\mathrm{E}_{5.421}$ | $\mathrm{E}_{6.173}$ | 5.324 | 3.613 | 5.208 |
| 2003 .................... | E4.824 | E5.422 | E5.120 | $\mathrm{E}_{5.421}$ | ${ }^{\text {P } 6.181 ~}$ | 5.340 | 3.629 | 5.207 |
| 2004 .................... | E4.824 | E5.422 | E5.120 | ${ }_{5} .421$ | $\mathrm{E}_{6.181}$ | R P 5.344 | R P 3.620 | R P 5.215 |

[^45]Table A4. Approximate Heat Content of Natural Gas
(Btu per Cubic Foot)

|  | Production |  | Consumption ${ }^{\text {a }}$ |  |  | Imports | Exports |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Marketed | Dry | End-Use Sectors | Electric Power Sector ${ }^{\text {b }}$ | 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 | b1,028 | 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 | 1,031 | 1,020 | 1,028 | 1,023 | 1,010 |
| 2002 ..................... | 1,106 | 1,027 | 1,029 | 1,021 | 1,027 | 1,022 | 1,008 |
| $2003{ }^{\text {P }}$.................... | 1,106 | 1,031 | 1,033 | 1,025 | 1,031 | 1,025 | 1,009 |
| $2004{ }^{\text {E }}$.................... | 1,106 | 1,031 | 1,033 | 1,025 | 1,031 | 1,025 | 1,009 |

[^46]Table A5. Approximate Heat Content of Coal and Coal Coke
(Million Btu per Short Ton)

|  | Coal |  |  |  |  |  |  |  | Coal Coke <br> Imports and Exports |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Production | Consumption |  |  |  |  | Imports | Exports |  |
|  |  |  | d-Use Sectors |  | Electric Power Sector ${ }^{b}$ | Total |  |  |  |
|  |  | ResidentialandCommercial | Industrial |  |  |  |  |  |  |
|  |  |  | Coke Plants | Other ${ }^{\text {a }}$ |  |  |  |  |  |
| 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 | $\mathrm{b}_{2} 0.898$ | 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 ..................... | 20.865 | 24.909 | 27.426 | 23.209 | 20.337 | 20.707 | 25.000 | 25.998 | 24.800 |
| 2002 ...................... | 20.742 | 22.962 | 27.426 | 23.793 | 20.238 | 20.612 | 25.000 | 26.062 | 24.800 |
| $2003{ }^{\text {P }}$.................... | 20.861 | 24.916 | 27.425 | 23.941 | 20.381 | 20.754 | 25.000 | 25.972 | 24.800 |
| $2004{ }^{\text {E }}$................... | 20.861 | 24.916 | 27.425 | 23.941 | 20.381 | 20.754 | 25.000 | 25.972 | 24.800 |

[^47]Table A6. Approximate Heat Rates for Electricity
(Btu per Kilowatthour)

|  | Electricity Net Generation |  |  | Electricity Consumption ${ }^{\text {e }}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Fossil-Fueled Plants ${ }^{\text {a,b }}$ | Nuclear Plants ${ }^{\text {c }}$ | Geothermal Energy Plants ${ }^{\text {d }}$ |  |
| 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 .......................................... | ${ }^{\text {R 10,333 }}$ | 10,448 | 21,017 | 3,412 |
| 2002 .......................................... | ${ }^{\mathrm{R}} 10,173$ | 10,439 | 21,017 | 3,412 |
| 2003 .......................................... | ${ }^{\text {R 1 10,241 }}$ | ${ }^{\mathrm{R}} 10,421$ | 21,017 | 3,412 |
| 2004 ......................................... | E 10,107 | E 10,439 | E 21,017 | 3,412 |

a Through 2000, used as the thermal conversion factor for wood and waste electricity net generation at electric utilities. For all years, used as the thermal conversion factor for hydro, solar, and wind electricity net generation.
b Through 2000, heat rates are for fossil-fueled steam-electric plants at electric utilities. Beginning in 2001, heat rates are for all fossil-fueled plants at electric utilities and independent power producers.
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.
R=Revised. E=Estimate.
Web Page: http://www.eia.doe.gov/emeu/mer/append.html.
Sources: 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 thermal conversion factor of 5.048 million Btu per barrel as adopted by the Bureau of Mines from the Texas Eastern Transmission Corporation publication 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 as published 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 Production.

Crude Oil Imports. Calculated annually by EIA as the average of the thermal conversion factors for each type of crude oil imported weighted by the quantities imported. Thermal conversion factors for each type were calculated on a foreign country basis, by determining the average American Petroleum Institute (API) gravity of crude oil imported from each foreign country from Form ERA-60 in 1977 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 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."

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 Values of Various Fuels, Adopted January 3, 1950."

Ethane. EIA adopted the Bureau of Mines thermal conversion factor of 3.082 million Btu per barrel as published in the California Oil World and Petroleum Industry, First Issue, April 1942.
Ethane-Propane Mixture. EIA calculation of 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 as published 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 the report 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 the report 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 Consumption. Calculated annually by EIA as the average of the thermal conversion factors for all liquefied petroleum gases consumed (see Table A1) weighted by the quantities consumed. The component products of liquefied petroleum gases are ethane (including ethylene), propane (including propylene), normal butane (including butylene), butane-propane mixtures, ethane-propane mixtures, and isobutane. For 1973-1980, quantities consumed are from EIA, Energy Data Reports, "Petroleum Statement, Annual," Table 1. For 1981 forward, quantities consumed are from 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 Consumption. 1973-1993: 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 (see Table A3). 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 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." See Fuel Ethanol (Blended Into Motor Gasoline).
Natural Gas Plant Liquids Production. Calculated annually by EIA as the average of the thermal conversion factors for each natural gas plant liquid produced weighted by the quantities 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 or equal to that for natural gasoline. See Natural Gasoline.

Petrochemical Feedstocks, Naphtha less than $401^{\circ}$ F. 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, Other Oils equal to or greater than $\mathbf{4 0 1}{ }^{\circ} \mathbf{F}$. 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 Values 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 $6-1300-\mathrm{M}$ and successor EIA forms.

Petroleum Consumption, Commercial Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the commercial sector weighted by the estimated quantities consumed by the commercial sector. The quantities of petroleum products consumed by the commercial sector are estimated in the State Energy Data System-see documentation at http://www.eia.doe.gov/emeu/states/sep_use/notes/use_petrol.pdf.
Petroleum Consumption, 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 quantities consumed by the electric power sector. Data are from Form EIA-860, "Annual Electric Generator Report"; Form EIA-906, "Power Plant Report"; and predecessor forms.
Petroleum Consumption, Industrial Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the industrial sector weighted by the estimated quantities consumed by the industrial sector. The quantities of petroleum products consumed by the industrial sector are estimated in the State Energy Data System-see documentation at http://www.eia.doe.gov/emeu/states/sep_use/notes/use_petrol.pdf.
Petroleum Consumption, Residential Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the residential sector weighted by the estimated quantities consumed by the residential sector. The quantities of petroleum products consumed by the residential sector are estimated in the State Energy Data System-see documentation at http://www.eia.doe.gov/emeu/states/sep_use/notes/use_petrol.pdf.

Petroleum Consumption, Total. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed weighted by the quantities consumed.
Petroleum Consumption, Transportation Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the transportation sector weighted by the estimated quantities consumed by the transportation sector. The quantities of petroleum products consumed by the transportation sector are estimated in the State Energy Data System-see documentation
at
http://www.eia.doe.gov/emeu/states/sep_use/notes/use_petrol.pdf.
Petroleum Products Exports. Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product exported weighted by the quantities exported.

Petroleum Products Imports. Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product imported weighted by the quantities 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 as published 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 the 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, first published in the Petroleum Statement, Annual, 1970.

Total Petroleum Exports. Calculated annually by EIA as the average of the thermal conversion factors for crude oil and each petroleum product exported weighted by the quantities exported. See Crude Oil Exports and Petroleum Products Exports.
Total Petroleum Imports. Calculated annually by EIA as the average of the thermal conversion factors for each type of crude oil and petroleum product imported weighted by the quantities imported. See Crude Oil Imports and Petroleum Products Imports.
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 it in EIA's 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 it in EIA's 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.

Natural Gas Consumption, Electric Power Sector. Calculated annually by EIA by dividing the heat content of natural gas consumed by the electric power sector by the quantity consumed. Data are from Form EIA-860, "Annual Electric Generator Report"; Form EIA-906, "Power Plant Report"; and predecessor forms.

Natural Gas Consumption, End-Use Sectors. Calculated annually by EIA by dividing the heat content of natural gas consumed by the end-use sectors (residential, commercial, industrial, and transportation) by the quantity consumed. Data are from Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition."

Natural Gas Consumption, Total. 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 consumed.

Natural Gas Exports. Calculated annually by EIA by dividing the heat content of natural gas exported by the quantity exported. For 1973-1995, data are from Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." Beginning in 1996, data are from U.S. Department of Energy, Office of Fossil Energy, Natural Gas Imports and Exports.

Natural Gas Imports. Calculated annually by EIA by dividing the heat content of natural gas imported by the quantity imported. For 1973-1995, data are from Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." Beginning in 1996, data are from U.S. Department of Energy, Office of Fossil Energy, Natural Gas Imports and Exports.

Natural Gas Production, Dry. Assumed by EIA to be equal to the thermal conversion factor for dry natural gas consumed. See Natural Gas Consumption, Total.

Natural Gas Production, Marketed. Calculated annually by EIA by dividing the heat content of dry natural gas produced (see Natural Gas Production, Dry) and natural gas plant liquids produced (see Natural Gas Plant Liquids Production) by the total quantity of marketed natural gas produced.

## Approximate Heat Content of Natural Gas

Approximate Heat Content of Coal and Coal Coke

Coal Coke Imports and Exports. EIA adopted the Bureau of Mines estimate of 24.800 million Btu per short ton.

Coal Consumption, Electric Power Sector. Calculated annually by EIA by dividing the heat content of coal consumed by the electric power sector by the quantity consumed. Data are from Form EIA-860, "Annual Electric Generator Report"; Form EIA-906, "Power Plant Report"; and predecessor forms.
Coal Consumption, End-Use Sectors. Calculated annually by EIA by dividing the heat content of coal consumed by the end-use sectors (residential, commercial, industrial, and transportation) by the quantity consumed.

Coal Consumption, Industrial Sector, Coke Plants. Calculated annually by EIA by dividing the heat content of coal consumed by coke plants by the quantity consumed. Data are from Form EIA-5, "Quarterly Coal Consumption and Quality Report-Coke Plants."

Coal Consumption, Industrial Sector, Other. Calculated annually by EIA by dividing the heat content of coal consumed by manufacturing plants by the quantity consumed. Data are from Form EIA-3, "Quarterly Coal Consumption and Quality Report-Manufacturing Plants."

Coal Consumption, Residential and Commercial Sectors. Calculated annually by EIA by dividing the heat content of coal consumed by the residential and commercial sectors by the quantity consumed. Through 1999, data are from Form EIA-6, "Coal Distribution Report." Beginning in 2000, data are for commercial combined-heat-and-power (CHP) plants from Form EIA-860, "Annual Electric Generator Report"; and Form EIA-906, "Power Plant Report."

Coal Consumption, Total. Calculated annually by EIA by dividing the total heat content of coal consumed by all sectors by the total quantity consumed.

Coal Exports. Calculated annually by EIA by dividing the heat content of steam coal and metallurgical coal exported by the quantity exported. Data are from U.S. Department of Commerce, Bureau of the Census, "Monthly Report EM 545."

Coal Imports. Assumed by EIA to be 25.000 million Btu per short ton.
Coal Production. Calculated annually by EIA to balance the heat content of coal supply (production and imports) and
the heat content of coal disposition (exports, stock change, and consumption).

## Approximate Heat Rates for Electricity

Electricity Net Generation, Fossil-Fueled Plants. There is no generally accepted practice for measuring the thermal conversion rates for power plants that generate electricity from hydro, wind, photovoltaic, or solar thermal energy sources. Therefore, EIA calculates a rate factor that is equal to the prevailing annual average heat rate factor for fossilfueled 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); and the generation on Form EIA-906, "Power Plant Report."

Electricity Net Generation, Geothermal Energy Plants. 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, "Power System Statement." 1982 forward: Estimated annually by EIA on the basis of an informal survey of relevant plants.
Electricity Net Generation, Nuclear Plants. 1973-1984: Calculated annually 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 were reported on Form FERC-1, "Annual Report of Major Electric Utilities, Licensees, and Others"; Form EIA-412, "Annual Report of Public Electric Utilities"; and predecessor forms. For 1982, the factors were published in EIA, Historical Plant Cost and Annual Production Expenses for Selected Electric Plants 1982, page 215. For 1983 and 1984, the factors were published in EIA, 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 predecessor forms); and the generation reported on Form EIA-906, "Power Plant Report."

## 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 |  | Equivalent in | Metric Units |
| :---: | :---: | :---: | :---: | :---: |
| Mass | 1 short ton (2,000 lb) | = | 0.9071847 | metric tons (t) |
|  | 1 long ton | = | 1.016047 | metric tons (t) |
|  | 1 pound (lb) | = | $0.45359237^{\text {a }}$ | kilograms (kg) |
|  | 1 pound uranium oxide ( $\mathrm{lb} \mathrm{U}_{3} \mathrm{O}_{8}$ ) | = | $0.384647^{\text {b }}$ | kilograms uranium (kgU) |
|  | 1 ounce, avoirdupois (avdp oz) | = | 28.34952 | grams (g) |
| Volume | 1 barrel of oil (bbl) | = | 0.1589873 | cubic meters ( $\mathrm{m}^{3}$ ) |
|  | 1 cubic yard (yd ${ }^{3}$ ) | = | 0.764555 | cubic meters ( $\mathrm{m}^{3}$ ) |
|  | 1 cubic foot ( $\mathrm{ft}^{3}$ ) | = | 0.02831685 | cubic meters ( $\mathrm{m}^{3}$ ) |
|  | 1 U.S. gallon (gal) | = | 3.785412 | liters (L) |
|  | 1 ounce, fluid (fl oz) | = | 29.57353 | milliliters (mL) |
|  | 1 cubic inch ( $\mathrm{in}^{3}$ ) | $=$ | 16.38706 | milliliters (mL) |
| Length | 1 mile (mi) | = | $1.609344^{\text {a }}$ | kilometers (km) |
|  | 1 yard (yd) | = | $0.9144^{\text {a }}$ | meters (m) |
|  | 1 foot (ft) | = | $0.3048^{\text {a }}$ | meters (m) |
|  | 1 inch (in) | $=$ | $2.54{ }^{\text {a }}$ | centimeters (cm) |
| Area | 1 acre | = | 0.40469 | hectares (ha) |
|  | 1 square mile ( $\mathrm{mi}^{2}$ ) | = | 2.589988 | square kilometers ( $\mathrm{km}^{2}$ ) |
|  | 1 square yard ( $\mathrm{yd}^{2}$ ) | = | 0.8361274 | square meters ( $\mathrm{m}^{2}$ ) |
|  |  | = | $0.09290304^{\text {a }}$ | square meters ( $\mathrm{m}^{2}$ ) |
|  | 1 square inch ( $\mathrm{in}^{2}$ ) | = | $6.4516^{\text {a }}$ | square centimeters ( $\mathrm{cm}^{2}$ ) |
| Energy | 1 British thermal unit (Btu) ${ }^{\text {c }}$ | = | 1,055.055 $85262^{\text {a }}$ | joules (J) |
|  | 1 calorie (cal) | $=$ | $4.1868^{\text {a }}$ | joules (J) |
|  | 1 kilowatthour (kWh) | = | $3.6{ }^{\text {a }}$ | megajoules (MJ) |
| Temperature ${ }^{\text {d }}$ | 32 degrees Fahrenheit ( ${ }^{\circ} \mathrm{F}$ ) | = | $0^{\text {a }}$ | degrees Celsius ( ${ }^{\circ} \mathrm{C}$ ) |
|  | 212 degrees Fahrenheit ( ${ }^{\circ} \mathrm{F}$ ) | $=$ | $100^{\text {a }}$ | degrees Celsius ( ${ }^{\circ} \mathrm{C}$ ) |

${ }^{\text {a }}$ Exact conversion.
${ }^{\text {b }}$ Calculated by the Energy Information Administration.
${ }^{\text {c }}$ The Btu used in this table is the International Table Btu adopted by the Fifth International Conference on Properties of Steam, London, 1956.
${ }^{\mathrm{d}}$ To convert degrees Fahrenheit ( ${ }^{\circ} \mathrm{F}$ ) to degrees Celsius $\left({ }^{\circ} \mathrm{C}\right.$ ) exactly, subtract 32, then multiply by $5 / 9$.
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, see http://physics.nist.gov/cuu/Units/index.html.

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 1993), pp. 9-11, 13, and 16. - U.S. Department of Commerce, 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 | $\mathrm{\mu}$ |
| $10^{9}$ | giga | G | $10^{-9}$ | nano | n |
| $10^{12}$ | tera | T | $10^{-12}$ | pico | p |
| $10^{15}$ | peta | P | $10^{-15}$ | femto | f |
| $10^{18}$ | exa | E | $10^{-18}$ | atto | a |
| $10^{21}$ | zetta | Z | $10^{-21}$ | zepto | z |
| $10^{24}$ | yotta | Y | $10^{-24}$ | yocto | y |

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 | Equivalent in Final Units |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Petroleum | 1 barrel (bbl) | $=$ | $42^{\text {a }}$ | U.S. gallons (gal) |
| Coal | 1 short ton <br> 1 long ton <br> 1 metric ton (t) | $=$ $=$ $=$ | $\begin{aligned} & 2,000^{\mathrm{a}} \\ & 2,240^{\mathrm{a}} \\ & 1,000^{\mathrm{a}} \end{aligned}$ | pounds (Ib) pounds (lb) kilograms (kg) |
| Wood | $\begin{aligned} & 1 \text { cord (cd) } \\ & 1 \text { cord (cd) } \end{aligned}$ | = | $\begin{gathered} 1.25^{b} \\ 128^{\mathrm{a}} \end{gathered}$ | shorts tons cubic feet ( $\mathrm{ft}^{3}$ ) |

${ }^{a}$ Exact conversion.
${ }^{\mathrm{b}}$ Calculated 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 few 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 the Energy Plug web site at: http://www.eia.doe.gov/emeu/plugs/plugsrgt.html.
Title Cover Date
2005
Financial News for Independent Energy Companies ..... January 2005
Annual Energy Outlook 2005. ..... February 2005
The Natural Gas Industry and Markets in 2003 ..... February 2005
2004
Annual Energy Outlook 2004 January 2004
Natural Gas Annual 2002 ..... February 2004
Analysis of Restricted Natural Gas Supply Cases March 2004
Performance Profiles of Major Energy Producers 2002. ..... March 2004
International Energy Outlook 2004. ..... April 2004
Biodiesel Performance, Costs, and Use. ..... August 2004
State Renewable Energy Requirements and Goals ..... September 2004
Annual Energy Review 2003. ..... October 2004
U.S. Natural Gas Pipeline and Underground Storage Expansions in 2003 ..... October 2004
Oil Market Basics. ..... November 2004
Unique Reactors. ..... December 2004
2003
Annual Energy Outlook 2003. ..... January 2003
Performance Profiles of Major Energy Producers 2001 ..... February 2003
Voluntary Reporting of Greenhouse Gases 2001 ..... March 2003
Electric Power Annual 2001. ..... April 2003
International Energy Outlook 2003. ..... May 2003
Uranium Industry Annual 2002. ..... June 2003
Residential Energy Consumption Special Topics ..... July 2003
New Reactor Designs. ..... August 2003
Foreign Direct Investment in U.S. Energy in 2001 ..... September 2003
Annual Energy Review 2002 ..... October 2003
Annual Coal Report 2002. ..... November 2003
Renewable Energy Annual 2002. ..... December 2003
2002
Performance Profiles of Major Energy Producers 2000. ..... January 2002
Voluntary Reporting of Greenhouse Gases 2000 ..... February 2002
Analysis of Corporate Average Fuel Economy Standards for Light Trucks and Increased Alternative Fuel Use ..... March 2002
Summer 2002 Motor Gasoline Outlook ..... April 2002
International Energy Outlook 2002. ..... April 2002
Weekly Natural Gas Storage Report. ..... May 2002
International Energy Annual 2000. ..... May 2002
2002 (Continued)
Delivered Energy Consumption Projections by Industry. ..... June 2002
Uranium Industry Annual 2001 ..... June 2002
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## 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: A byproduct of the paper production process, alkaline spent liquor, that can be used as a source of energy. Alkaline spent liquor is removed from the digesters in the process of chemically pulping wood. After evaporation, the residual "black" 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 $\left(\mathrm{C}_{4} \mathrm{H}_{10}\right)$. 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 $10.9^{\circ} \mathrm{F}$. 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 $31.1^{\circ} \mathrm{F}$. It is extracted from natural gas or refinery gas streams.

Butylene: An olefinic hydrocarbon $\left(\mathrm{C}_{4} \mathrm{H}_{8}\right)$ 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 $2,000^{\circ} \mathrm{F}$ 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. Various EIA programs differ in sectoral coverage-for more information see
http://www.eia.doe.gov/neic/datadefinitions/Guideforwebcom.htm.
See End-Use Sectors and Energy-Use Sectors.
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 $60^{\circ} \mathrm{F}$.

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 populationweighted 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 populationweighted 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.

Direct Use: Use of electricity that 1) is self-generated, 2) is produced by either the same entity that consumes the power or an affiliate, and 3) is used in direct support of a service or industrial process located within the same facility or group of facilities that house the generating equipment. Direct use is exclusive of station use.

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 unaccountedfor 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 station use (the electric energy consumed at the generating station(s) for station service or auxiliaries). Note: Electricity required for pumping at hydroelectric 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, ElectricityOnly 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 distribu-
tion 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 energyconsuming 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 $\left(\mathrm{C}_{2} \mathrm{H}_{6}\right)$. It is a colorless, paraffinic gas that boils at a temperature of $-127.48^{\circ} \mathrm{F}$. 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 $\left(\mathrm{C}_{2} \mathrm{H}_{4}\right)$ 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 $\left(\mathrm{C}_{2} \mathrm{H}_{5} \mathrm{OH}\right)$ 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 offpeak 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 codes 31-33); agriculture, forestry, fishing and hunting (NAICS code 11); mining, including oil and gas extraction (NAICS code 21); 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. Various EIA programs differ in sectoral coverage—for more information see http://www.eia.doe.gov/neic/datadefinitions/Guideforwebind.htm. See End-Use Sectors and Energy-Use Sectors.

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 $10.9^{\circ} \mathrm{F}$. 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 $400^{\circ} \mathrm{F}$ at the 10-percent recovery point and a final maximum boiling point of $572^{\circ}$ F. Fuel specifications are provided in ASTM Specification D 1655 and Military Specifications MIL-T5624 P 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 $290^{\circ}$ to $470^{\circ} \mathrm{F}$ 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 $401^{\circ} \mathrm{F}$ at the 10-percent recovery point, a final boiling point of $572^{\circ} \mathrm{F}$, and a minimum flash point of $100^{\circ} \mathrm{F}$. 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 $3,412 \mathrm{Btu}$. 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 steamelectric 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 $-260^{\circ} \mathrm{F}$ 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 $\left(\mathrm{CH}_{4}\right)$ 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, $\left(\mathrm{CH}_{3}\right)_{3} \mathrm{COCH}_{3}$, intended for motor gasoline blending. See Oxygenates.

Methanol: A light, volatile alcohol $\left(\mathrm{CH}_{3} \mathrm{OH}\right)$ 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 sparkignition. Motor gasoline, as defined in ASTM Specification D-4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of $122^{\circ} \mathrm{F}$ to $158^{\circ} \mathrm{F}$ at the 10 -percent recovery point to $365^{\circ} \mathrm{F}$ to $374^{\circ} \mathrm{F}$ 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 $400^{\circ} \mathrm{F}$.

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 heavywalled 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 $\left(\mathrm{C}_{3} \mathrm{H}_{8}\right)$. It is a colorless paraffinic gas that boils at a temperature of $-43.67^{\circ} \mathrm{F}$. 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 $\left(\mathrm{C}_{3} \mathrm{H}_{6}\right)$ 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 hydrolectric 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. Note: Various EIA programs differ in sectoral coverage-for more information
http://www.eia.doe.gov/neic/datadefinitions/Guideforwebres.htm.
See End-Use Sectors and Energy-Use Sectors.

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 steampowered 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.

Station Use: Energy that is used to operate an electric power plant. It includes energy consumed for plant lighting, power, and auxiliary facilities, regardless of whether the energy is produced at the plant or comes from another source.

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 pipelinequality 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 more information see
http://www.eia.doe.gov/neic/datadefinitions/Guideforwebtrans.htm.
See End-Use Sectors and Energy-Use Sectors

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 plus 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.

Watthour (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.

# Energy Financial Analysis Information 

from the Energy Information Administration


The resources described below, and many others, are available on the Energy Information Administration's Web site at http://www.eia.doe.gov/. For further information about these and other EIA products, visit our Web site or contact the National Energy Information Center at infoctr@eia.doe.gov or 202-586-8800.

## Performance Profiles of Major Energy Producers

Examination of financial and operating developments in energy markets, with particular reference to the major U.S.-based energy companies required to report annually on Form EIA-28, "Financial Reporting System." The latest edition reports along revised lines of business, including separate results for downstream natural gas and electricity.

## Foreign Direct Investment in U.S. Energy

Annual analysis of foreign direct investment in U.S. energy resources, assets, and companies. Describes the role of foreign ownership in U.S. energy enterprises with respect to acquisitions and divestitures, cumulative net investment (including net loans), capital investment, energy operations, and financial performance. Examines patterns of direct investment in foreign energy enterprises by U.S.-based companies.

## Foreign Direct Investment Acquisitions and Divestitures

Annual analysis of acquisitions and divestitures of U.S. energy assets by foreign investors.

## The Impact of Environmental Compliance Costs on U.S. Refining Profitability, 1995-2001

Analyzes the sources of changing profitability in U.S. refining/marketing, including the role of the costs of compliance with environmental laws and their implementation. The primary focus is on the 1996-to-2001 period, but the report also presents data for 1988 to 1995.

## Derivatives and Risk Management in the Petroleum, Natural Gas, and Electricity Industries

Examination of the role of derivatives in managing some of the risks in the production and consumption of petroleum, natural gas, and electricity. Also analyzes how policy decisions that affect energy markets can limit or enhance the usefulness of derivatives as tools for risk management.

## Financial News for Major Energy Companies

Quarterly review of the financial performance of major U.S. energy companies.

## Financial News for Independent Energy Companies

Quarterly review of the financial performance of independent U.S. energy companies.

## Financial Reporting System (FRS) Public Data

Data on the major U.S. energy-producing companies' financial and operating information, in total and by specific functions and geographic areas of operation. Includes data on revenues, costs, profits; property, plant, and equipment; investments; and more.


[^0]:    Performance Profiles of Major Energy Producers 2003 DOE/EIA-0206(04). The publication is available on the EIA Web site at http://www.eia.doe.gov. Under "Analyses" select "Finance" and then "Performance of Major Energy Companies." Contact the webmaster at wmaster@eia.doe.gov or call 202-586-8959 if you have problems. Questions about the contents of the report should be directed to Gregory Filas, Office of Energy Markets and End Use, at greg.filas@eia.doe.gov or 202-586-1347. For general information about energy, contact the National Energy Information Center at infoctr@eia.doe.gov or 202-586-8800.

[^1]:    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. $N A=$ Not available. (s)=Less than +0.5 trillion Btu and greater than -0.5 trillion Btu.

    Notes: • See Note 1, "Energy Production," at end of section. • Totals may not

[^2]:    a End-use consumption and electricity net generation
    b Natural gas, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
    fuel Beginning products supplied, including natural gas plant liquids and crude oil burned as fuel $\begin{gathered}\text { Beginning in 1993, also includes ethanol blended into motor gasoline. } \\ \text { Beginning in 1993, ethanol blended into motor gasoline is included in }\end{gathered}$
    "Wood, Waste, Alcohol," but is counted only once in total consumption.
    e Includes coal coke net imports. See Table 1.4.
    f Pumped storage facility production minus energy used for pumping.
    g "Alcohol" is ethanol blended into motor gasoline.
    Includes coal coke net imports and electricity net imports, which are not separately

[^3]:    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.

[^4]:    ${ }^{\text {a }}$ 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. (s)=Less than +0.5 trillion Btu and greater than -0.5 trillion Btu.

    Notes: • See Note 3, "Energy Imports," and 4, "Energy Exports," 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

[^5]:    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.

[^6]:    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

[^7]:    a Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.
    b Organization of Petroleum Exporting Countries. See Glossary.
    $\mathrm{R}=$ Revised
    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.

[^8]:    a Beginning in 1993, ethanol blended into motor gasoline is included in both "Petroleum and Natural Gas" and "Other Energy," but is counted only once in total consumption.
    b "Other Energy" is 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

[^9]:    a Through 1989, includes motorcycles.
    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.
    $\mathrm{P}=$ Preliminary.
    Notes: Geographic coverage is the 50 States and the District of Columbia.

[^10]:    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 $65^{\circ} \mathrm{F}$. Heating degree-days are the number of degrees that the daily average temperature falls below $65^{\circ} \mathrm{F}$. The daily average temperature is the mean of the maximum and minimum temperatures in a 24 -hour period.

[^11]:    a All values are estimated; see Table 10.2a.
    b Natural gas, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
    c Conventional hydroelectric power.
    d Geothermal heat pump and direct use energy.
    e Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.

[^12]:    a Natural gas, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
    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.

[^13]:    ${ }^{1}$ Total import data include imports into the Strategic Petroleum Reserve.

[^14]:    a United States excluding Alaska and Hawaii.
    b "SPR" is the Strategic Petroleum Reserve. Through 2003, includes imports by SPR only; beginning in 2004, includes imports by SPR, and imports into SPR by others.
    c An adjustment for crude oil. Through 1982, includes what was previously classified as "Crude Oil Used Directly" (as distillate and residual fuel oil). Through 2004, also includes what were previously classified as "Unaccounted-for Crude Oil" and "Crude Losses."
    d See Note 6, "Data Discrepancies," at end of section.
    R=Revised. E=Estimate. $-=$ Not applicable.

[^15]:    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

[^16]:    a Stocks are at end of period.
    b Beginning in 1981, excludes motor gasoline blending components.
    c An adjustment for motor gasoline blending components and fuel ethanol. Through 2004, includes what was previously classified as "Field Production" of finished motor gasoline.
    d A negative number indicates a decrease in stocks and a positive number indicates an increase.
    e Includes motor gasoline blending components and gasohol, but excludes
    oxygenates, which are reported separately.
    See Note 4, "New Stock Basis," at end of section.
    g See Note 2, "Motor Gasoline," at end of section.

[^17]:    a Stocks are at end of period.
    b By weight; "ppm" is parts per million
    c Through 1982, includes what was previously classified as "Crude Oil Used Directly" (as distillate fuel oil). Through 1988, also includes a small amount of distillate fuel oil production at natural gas processing plants.
    d A negative number indicates a decrease in stocks and a positive number indicates an increase.
    e Included in "> 15 ppm and <= 500 ppm."
    f See Note 6, "Data Discrepancies," at end of section
    g See Note 4, "New Stock Basis," at end of section.
    h See Note 3, "Distillate and Residual Fuel Oils," at end of section.
    $R=$ Revised. NA=Not available. (s)=Less than 500 barrels per day.

[^18]:    a Stocks are at end of period.
    b By weight. Residual fuel oil stocks by sulfur content exclude pipeline stocks; therefore, the sum of stocks by sulfur content may not equal total stocks. c Through 1982, includes what was previously classified as "Crude Oil Used Directly" (as residual fuel oil)
    d A negative number indicates a decrease in stocks and a positive number indicates an increase.
    e See Note 4, "New Stock Basis," at end of section.
    f See Note 3, "Distillate and Residual Fuel Oils," at end of section
    R=Revised. $N A=$ Not available. (s)=Less than +500 barrels per day and

[^19]:    a Stocks are at end of period.
    b Through 2004, includes naphtha-type jet fuel. Beginning in 2005, naphtha-type jet fuel is included in "Other Petroleum Products" on Table 3.10.
    c A negative number indicates a decrease in stocks and a positive number indicates an increase.
    d See Note 4, "New Stock Basis," at end of section.
    R=Revised. (s)=Less than +500 barrels per day and greater than -500 barrels per day.
    Note: • The category "Total Production" has been replaced by "Refinery

[^20]:    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.

[^21]:    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.

[^22]:    ${ }^{\text {a }}$ Conventional and pumped storage hydroelectric power.
    ${ }^{\text {b }}$ Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

[^23]:    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, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
    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.

[^24]:    a Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.
    b Fuel oil nos. 1, 2, and 4. For 1973-1979, data are for gas turbine and internal combustion plant use of petroleum. For 1980-2000, electric utility data also include small amounts of kerosene and jet fuel.
    C Fuel oil nos. 5 and 6. For 1973-1979, data are for steam plant use of petroleum. For 1980-2000, electric utility data also include a small amount 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, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
    g Blast furnace gas, propane gas, and other manufactured and waste gases derived from

[^25]:    a Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal. Fuel oil nos. 1, 2, and 4. For 1973-1979, data are for gas turbine and internal combustion plar c Ful
    1980-2000, electric utility date 1973-1979, data are for steam plant use of petroleum. For ded Jot 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, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
    g Blast furnace gas, propane gas, and other manufactured and waste gases derived from

[^26]:    a Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.
    b Industrial combined-heat-and-power (CHP) and industrial electricity-only plants.
    ${ }_{c}$ 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, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
    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.

[^27]:    h Wood, black liquor, and other wood waste.
    i Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

    Notes: - Data are for fuels consumed to produce electricity. - See Note, "Classification of Power Plants Into Energy-Use Sectors," 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/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." • 2001-2003: EIA, Form EIA-906, "Power Plant Report." • 2004: EIA, Form EIA-906, "Power Plant Report" and Form EIA-920, "Combined Heat and Power Plant Report."

[^28]:    ${ }^{\text {a }}$ Includes commercial sector.
    blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

[^29]:    Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/elect.html. Sources: Tables 7.4a, 7.4b, and 7.4c.

[^30]:    a Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal
    b Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.
    c Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small amount 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 .
    ${ }^{\dagger}$ Natural gas, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
    g Blast furnace gas, propane gas, and other manufactured and waste gases

[^31]:    a Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.
    b Industrial combined-heat-and-power (CHP) and industrial electricity-only plants.
    ${ }^{c}$ 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, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
    ${ }^{\dagger}$ 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.

[^32]:    h Wood, black liquor, and other wood waste.
    i Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.
    Notes: - Data are for fuels consumed to produce electricity and useful thermal output. - See Note, "Classification of Power Plants Into Energy-Use Sectors," 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/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." • 2001-2003: EIA, Form EIA-906, "Power Plant Report." • 2004: EIA, Form EIA-906, "Power Plant Report" and Form EIA-920, "Combined Heat and Power Plant Report."

[^33]:    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.
    $\mathrm{R}=$ Revised. $\mathrm{E}=$ 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

[^34]:    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 is included in the data through 1992 and Gabon through 1995.
    c Based on October, November, and December data only.
    d No data reported.
    $\mathrm{R}=$ Revised. $\mathrm{NA}=$ Not available. $\mathrm{W}=$ 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

[^35]:    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.

[^36]:    ${ }^{1} \mathrm{~A}$ 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.

[^37]:    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

[^38]:    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.

[^39]:    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.

[^40]:    a Conventional hydroelectric power
    b Wood, black liquor, and other wood waste.
    c Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.
    d Geothermal electricity net generation.
    e Solar thermal and photovoltaic electricity net generation
    ${ }^{f}$ Wind electricity net generation.
    9 Through 1988, data are for consumption at electric utilities only. Beginning in 1989, data also include consumption at independent power producers.
    $\mathrm{R}=$ Revised. NA $=$ Not available. ( s ) $=$ Less than 0.5 trillion Btu.

[^41]:    ${ }^{1}$ Percentage changes are based on unrounded data.

[^42]:    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

[^43]:    Note: OECD is the Organization for Economic Cooperation and Development.
    Web Page: http://www.eia.doe.gov/emeu/mer/inter.html.
    Source: Table 11.3.

[^44]:    ${ }^{\text {a }} 60$ percent butane and 40 percent propane
    ${ }^{\mathrm{b}} 70$ percent ethane and 30 percent propane
    ${ }^{\text {c }}$ 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.
    Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

[^45]:    a Petroleum products supplied, including natural gas plant liquids and crude oil burned directly as fuel.
    b Electricity-only and combined-heat-and-power (CHP) plants within the NAICS (North American Industry Classification System) 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.
    c 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.
    $R=$ Revised. P=Preliminary. 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.
    Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

[^46]:    a Consumption factors are for natural gas, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
    b Electricity-only and combined-heat-and-power (CHP) plants within the NAICS (North American Industry Classification System) 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.

    R=Revised. P=Preliminary. E=Estimate.
    Web Page: http://www.eia.doe.gov/emeu/mer/append.html.
    Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

[^47]:    a Includes transportation.
    b Electricity-only and combined-heat-and-power (CHP) plants within the NAICS (North American Industry Classification System) 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data are for electric utilities and independent power producers.
    $\mathrm{P}=$ Preliminary. E=Estimate.
    Web Page: http://www.eia.doe.gov/emeu/mer/append.html.
    Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

