Monthly Energy Review

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Energy Information Administration

Monthly Energy Review

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- Graph pages, *MER* sections, and complete *MER*: PDF files.

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August 2004

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Energy Plug

Biodiesel Performance, Costs, and Use

The idea of using vegetable oil for fuel has been around as long as the diesel engine. Rudolph Diesel, the inventor of the engine that bears his name, experimented with fuels ranging from powdered coal to peanut oil. In the early 20th century, diesel engines were adapted to burn petroleum distillate, which was cheap and plentiful. Gradually, however, the cost of petroleum distillate rose, and by the end of the 1970s there was renewed interest in biodiesel. Commercial production of biodiesel in the United States began in the 1990s. The National Biodiesel Board reported production of 500,000 gallons in 1999 and 6.7 million gallons in 2000. The most common sources of oil for biodiesel production in the United States are soybean oil and yellow grease (mostly recycled cooking oil from restaurants).

A recently released report from the Energy Information Administration (EIA), "Biodiesel Performance, Costs, and Use" examines the present and future of biodiesel.

By several measures, blends of biodiesel and petroleum diesel perform better than petroleum diesel alone, but the relatively high production costs of biodiesel and the limited availability of some of the raw materials used in its production continue to limit its commercial application.

Performance and Emissions. An important characteristic of diesel fuel is its ability to ignite on its own, as it must in a diesel engine. This ability is quantified by the fuel's cetane number, where a higher cetane number means that the fuel ignites more quickly. The cetane number for biodiesel ranges from about 46 to 57. In comparison, the cetane index for petroleum diesel ranges from 40 to 52. Thus biodiesel tends to ignite more easily. Another important characteristic is lubricity. Fuel injectors and some types of fuel pumps rely on fuel for lubrication. Biodiesel has better lubricity than low-sulfur petroleum diesel or the ultra-low-sulfur petroleum diesel to be introduced in 2006. However, the performance of biodiesel in cold conditions is markedly worse than petroleum diesel. As well, the energy content per gallon of biodiesel is approximately 11 percent lower than petroleum diesel, and vehicles running on a biodiesel blend will achieve fewer miles per gallon of fuel.

The presence of oxygen in biodiesel improves combustion and reduces hydrocarbon, carbon monoxide, and particulate emissions, but it also increases nitrogen oxide emissions. Biodiesel from virgin vegetable oil reduces carbon dioxide emissions and petroleum consumption when used in place of petroleum diesel, based on a life cycle analysis that accounts for resource consumption and emissions at all steps in the production and use of each fuel.

Biodiesel Production and Costs. The feedstock cost of the oil or grease is the largest component of biodiesel production costs. Yellow grease is much less expensive than soybean oil, but its supply is limited. A comparison of total production costs of diesel fuel by type of feedstock is shown in the table at left. The figures include energy costs and operating costs in addition to the cost of the raw materials. The petroleum diesel prices also include the cost of capital, but are still much lower than the biodiesel prices, which do not.

Projected Production Costs for Diesel Fuel by Feedstock, 2004-2013 (2002 Dollars per Gallon)

Year	Soybean Oil	Yellow Grease	Petroleum
2004-05	2.54	1.41	0.67
2005-06	2.49	1.39	0.78
2006-07	2.47	1.38	0.77
2007-08	2.44	1.37	0.78
2008-09	2.52	1.40	0.78
2009-10	2.57	1.42	0.75
2010-11	2.67	1.47	0.76
2011-12	2.73	1.51	0.76
2012-13	2.80	1.55	0.75

Source: Energy Information Administration.

For the past several years, the Department of Agriculture has offered grants for biodiesel production through the Commodity Credit Corporation. The transportation bill passed by the Senate in February includes excise tax credits for biodiesel blending.

Demand Projections. The EIA estimates that demand for biodiesel will be at least 6.5 million gallons in 2010 and 7.3 million gallons in 2020. These estimates are based on potential fleet demand for biodiesel to comply with the Energy Policy Act of 1992. Based on biodiesel's potential as a lubricity additive, demand could reach as much as 470 million gallons in 2010 and 630 million gallons in 2020.

Conclusion. Biodiesel from yellow grease is closer to being cost-competitive with petroleum diesel than biodiesel from soybean oil, but the available supply of yellow grease will probably limit its use for biodiesel production. Unless soybean oil prices decline dramatically, biodiesel will not be produced at a cost that is competitive with petroleum diesel. The largest market for biodiesel probably will be as a fuel additive. Markets may also develop in applications where reducing emissions of particulates and unburned hydrocarbons is paramount, such as school and transit buses.

"Biodiesel Performance, Costs, and Use" is available on the EIA Web site at http://eia.doe.gov. Select "Forecasts" and then this report under "New and Recent Reports." 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 Anthony Radich, Office of Integrated Analysis and Forecasting, at anthony.radich@eia.doe.gov or 202–586–0504. For general information about energy, contact the National Energy Information Center at infoctr@eia.doe.gov or 202–586–8800.

Section 1. Energy Overview

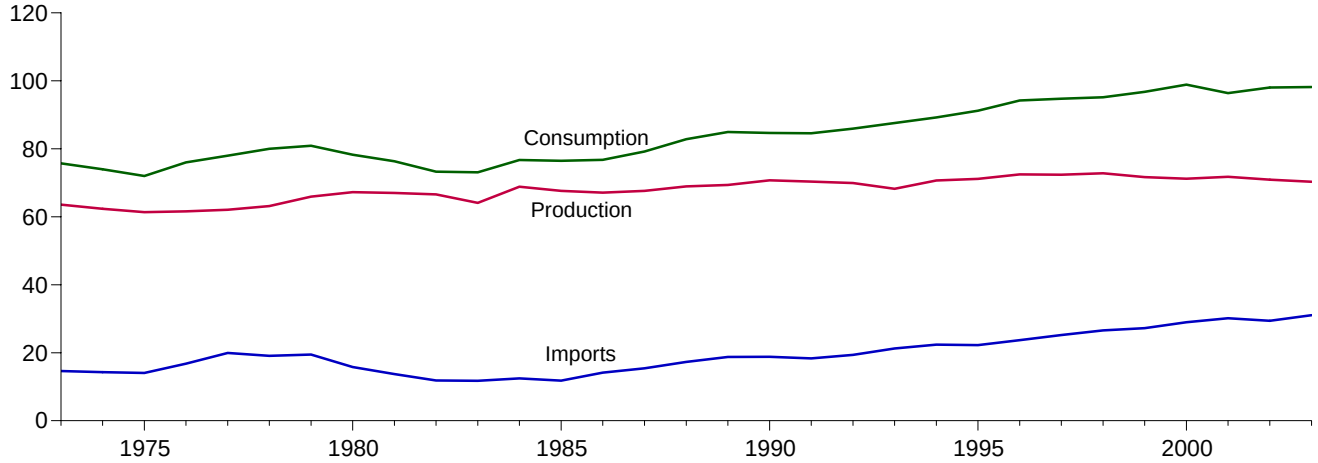
Energy production during May 2004 totaled 5.9 quadrillion Btu, a 1.7-percent decrease compared with the level of production during May 2003. Production of conventional hydroelectric power decreased 19.9 percent; coal decreased 4.4 percent; crude oil decreased 2.1 percent; and natural gas (dry) decreased 0.8 percent, compared with the level of production during May 2003

Energy consumption during May 2004 totaled 8.0 quadrillion Btu, a 3.9-percent increase compared with the level of consumption during May 2003. Consumption of coal increased 4.9 percent; petroleum and nuclear electric power both increased 4.5 percent; and natural gas increased 3.4 percent, compared with the level 1 year earlier.

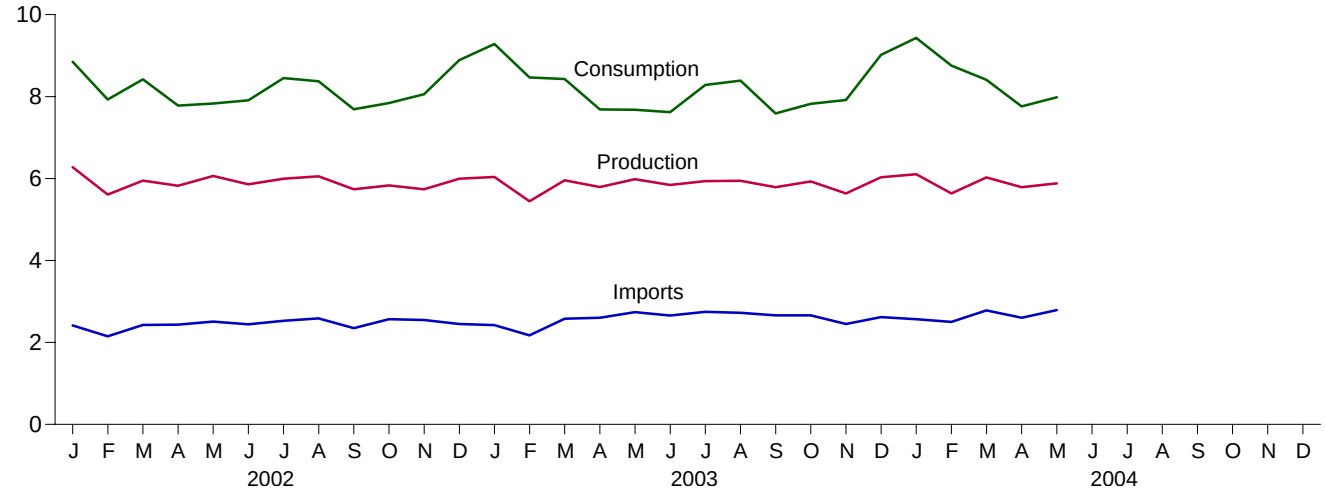
Net imports of energy during May 2004 totaled 2.4 quadrillion Btu, 1.2 percent above the level of net imports 1 year earlier. Coal net exports increased 50.0 percent; petroleum products net imports decreased 2.6 percent; natural gas net imports decreased 2.2 percent; and crude oil net imports increased 1.6 percent, compared with the level in May 2003.

Figure 1.1 Energy Overview
(Quadrillion Btu)

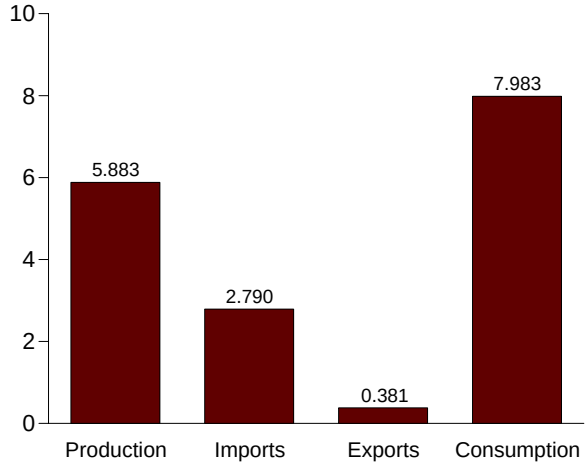
Consumption, Production, and Imports, 1973-2003



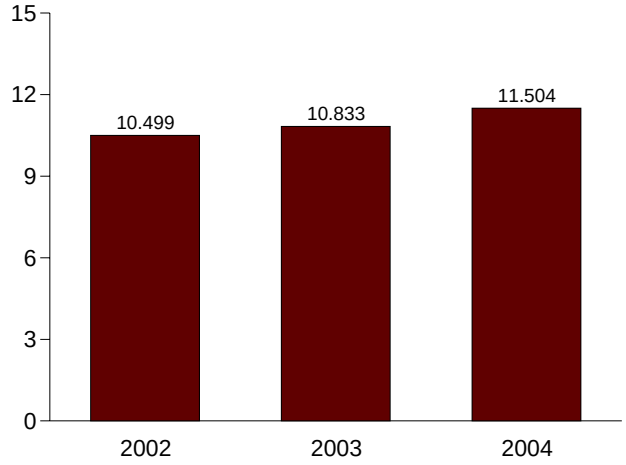
Consumption, Production, and Imports, Monthly



Overview, May 2004



Net Imports, January-May



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

Table 1.1 Energy Overview

(Quadrillion Btu)

	Production	Imports	Exports	Adjustments[a]	Consumption
1973 Total	**63.585**	**14.613**	**2.033**	**-0.456**	**75.708**
1974 Total	**62.372**	**14.304**	**2.203**	**-.482**	**73.991**
1975 Total	**61.357**	**14.032**	**2.323**	**-1.067**	**71.999**
1976 Total	**61.602**	**16.760**	**2.172**	**-.178**	**76.012**
1977 Total	**62.052**	**19.948**	**2.052**	**-1.948**	**78.000**
1978 Total	**63.137**	**19.106**	**1.920**	**-.337**	**79.986**
1979 Total	**65.948**	**19.460**	**2.855**	**-1.649**	**80.903**
1980 Total	**67.241**	**15.796**	**3.695**	**-1.054**	**78.289**
1981 Total	**67.007**	**13.719**	**4.307**	**-.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	**71.792**	**30.157**	**3.770**	**-1.800**	**96.378**
2002 January	6.278	2.414	.292	.449	8.849
February	5.607	2.148	.290	.463	7.928
March	5.947	2.427	.266	.313	8.421
April	5.826	2.434	.292	-.186	7.782
May	6.063	2.510	.294	-.449	7.830
June	5.858	2.442	.308	-.082	7.910
July	5.997	2.528	.270	.197	8.452
August	6.052	2.588	.344	.077	8.374
September	5.739	2.349	.301	-.096	7.691
October	5.833	2.566	.333	-.223	7.843
November	5.736	2.550	.313	.083	8.057
December	5.995	2.450	.359	.802	8.888
Total	**70.933**	**29.406**	**3.661**	**1.348**	**98.026**
2003 January	6.040	2.422	.377	1.200	9.285
February	5.444	2.174	.300	1.150	8.469
March	5.957	2.579	.316	.207	8.428
April	5.792	2.603	.333	-.376	7.686
May	5.983	2.738	.357	-.684	7.680
June	5.843	2.656	.351	R -.526	7.622
July	5.936	2.746	.339	-.059	8.285
August	5.943	2.725	.334	.057	8.391
September	5.789	2.660	.325	-.533	7.590
October	5.927	2.662	.349	-.420	7.821
November	5.635	2.452	.338	R .167	R 7.916
December	6.030	2.618	.345	.714	9.017
Total	**70.320**	**31.036**	**4.065**	R **.898**	R **98.189**
2004 January	R 6.105	R 2.567	R .286	R 1.045	R 9.431
February	R 5.637	R 2.502	R .298	R .916	R 8.756
March	R 6.026	R 2.780	R .366	R -.030	R 8.410
April	R 5.788	R 2.604	.407	R -.223	R 7.762
May	5.883	2.790	.381	-.308	7.983
5-Month Total	**29.439**	**13.243**	**1.739**	**1.400**	**42.343**
2003 5-Month Total	**29.217**	**12.517**	**1.683**	**1.497**	**41.547**
2002 5-Month Total	**29.721**	**11.933**	**1.434**	**.590**	**40.811**

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

R=Revised.

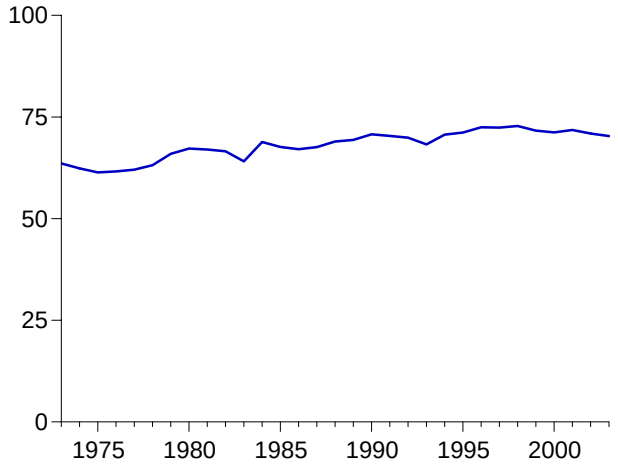
Notes: • For definitions, see Notes 1 through 4 at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

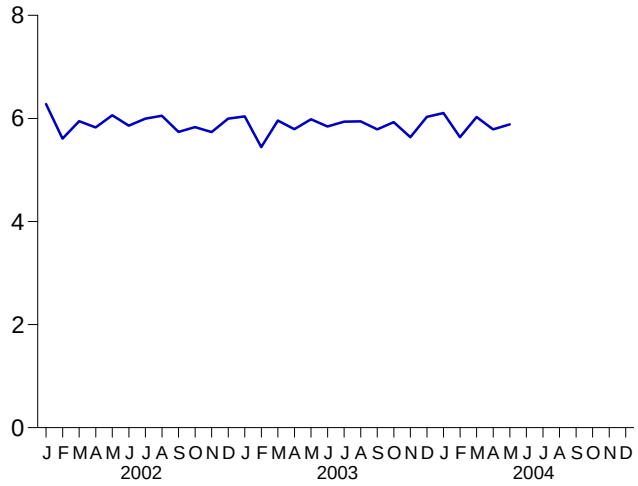
Sources: • **Production:** Table 1.2. • **Consumption:** Table 1.3. • **Imports and Exports:** Tables 3.1b, 4.3, 6.1, 7.1, A2-A6, and Section 2, "Energy Consumption Notes and Sources," Note 5.

Figure 1.2 Energy Production
(Quadrillion Btu)

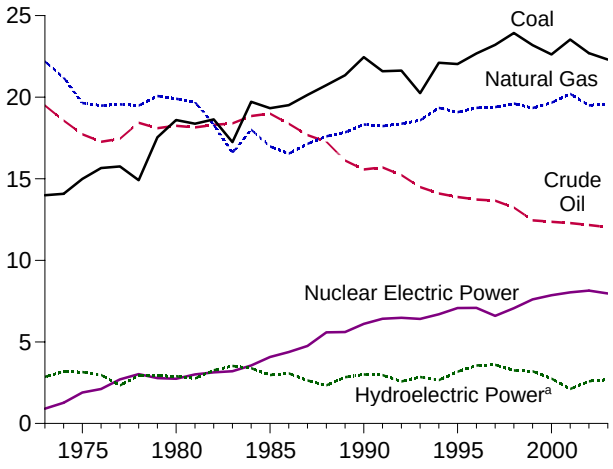
Total, 1973-2003



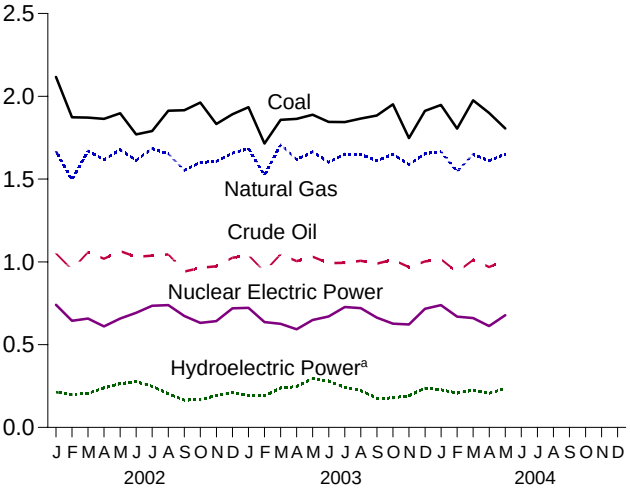
Total, Monthly



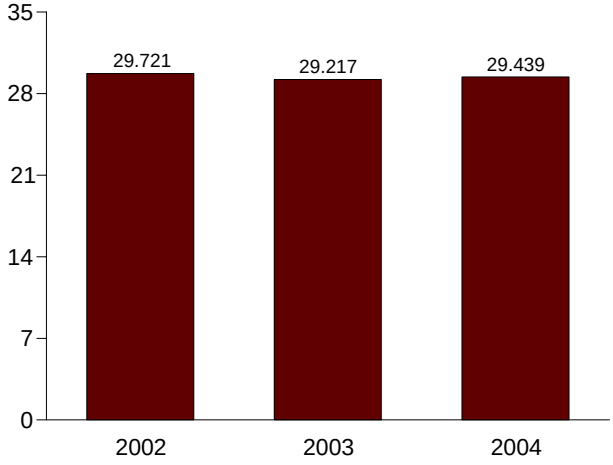
By Major Sources, 1973-2003



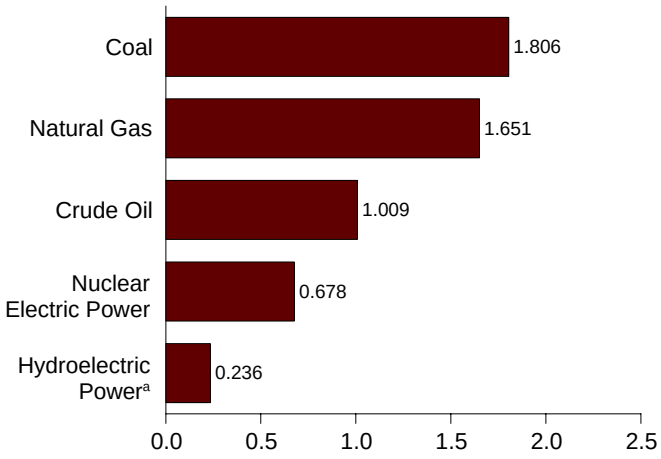
By Major Sources, Monthly



Total, January-May



By Major Sources, May 2004



[a]Conventional and pumped storage hydroelectric power.
Note: Because vertical scales differ, graphs should not be compared.

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

Table 1.2 Energy Production by Source

(Quadrillion Btu)

	Fossil Fuels							Renewable Energy[a]					
	Coal	Natural Gas (Dry)	Crude Oil[b]	Natural Gas Plant Liquids	Total	Nuclear Electric Power	Hydro-electric Pumped Storage[c]	Conventional Hydroelectric Power	Wood, Waste, Alcohol[d]	Geo-thermal	Solar and Wind	Total	Total
1973 Total	**13.992**	**22.187**	**19.493**	**2.569**	**58.241**	**0.910**	**([e])**	**2.861**	**1.529**	**0.043**	**NA**	**4.433**	**63.585**
1974 Total	**14.074**	**21.210**	**18.575**	**2.471**	**56.331**	**1.272**	**([e])**	**3.177**	**1.540**	**.053**	**NA**	**4.769**	**62.372**
1975 Total	**14.989**	**19.640**	**17.729**	**2.374**	**54.733**	**1.900**	**([e])**	**3.155**	**1.499**	**.070**	**NA**	**4.723**	**61.357**
1976 Total	**15.654**	**19.480**	**17.262**	**2.327**	**54.723**	**2.111**	**([e])**	**2.976**	**1.713**	**.078**	**NA**	**4.768**	**61.602**
1977 Total	**15.755**	**19.565**	**17.454**	**2.327**	**55.101**	**2.702**	**([e])**	**2.333**	**1.838**	**.077**	**NA**	**4.249**	**62.052**
1978 Total	**14.910**	**19.485**	**18.434**	**2.245**	**55.074**	**3.024**	**([e])**	**2.937**	**2.038**	**.064**	**NA**	**5.039**	**63.137**
1979 Total	**17.540**	**20.076**	**18.104**	**2.286**	**58.006**	**2.776**	**([e])**	**2.931**	**2.152**	**.084**	**NA**	**5.166**	**65.948**
1980 Total	**18.598**	**19.908**	**18.249**	**2.254**	**59.008**	**2.739**	**([e])**	**2.900**	**2.485**	**.110**	**NA**	**5.494**	**67.241**
1981 Total	**18.377**	**19.699**	**18.146**	**2.307**	**58.529**	**3.008**	**([e])**	**2.758**	**2.590**	**.123**	**NA**	**5.471**	**67.007**
1982 Total	**18.639**	**18.319**	**18.309**	**2.191**	**57.458**	**3.131**	**([e])**	**3.266**	**2.615**	**.105**	**NA**	**5.985**	**66.574**
1983 Total	**17.247**	**16.593**	**18.392**	**2.184**	**54.416**	**3.203**	**([e])**	**3.527**	**2.831**	**.129**	**(s)**	**6.488**	**64.106**
1984 Total	**19.719**	**18.008**	**18.848**	**2.274**	**58.849**	**3.553**	**([e])**	**3.386**	**2.880**	**.165**	**(s)**	**6.431**	**68.832**
1985 Total	**19.325**	**16.980**	**18.992**	**2.241**	**57.539**	**4.076**	**([e])**	**2.970**	**2.864**	**.198**	**(s)**	**6.033**	**67.647**
1986 Total	**19.509**	**16.541**	**18.376**	**2.149**	**56.575**	**4.380**	**([e])**	**3.071**	**2.841**	**.219**	**(s)**	**6.132**	**67.087**
1987 Total	**20.141**	**17.136**	**17.675**	**2.215**	**57.167**	**4.754**	**([e])**	**2.635**	**2.823**	**.229**	**(s)**	**5.687**	**67.608**
1988 Total	**20.738**	**17.599**	**17.279**	**2.260**	**57.875**	**5.587**	**([e])**	**2.334**	**2.937**	**.217**	**(s)**	**5.489**	**68.951**
1989 Total	**21.346**	**17.847**	**16.117**	**2.158**	**57.468**	**5.602**	**([e])**	**2.837**	**3.062**	**.317**	**.077**	**6.294**	**69.364**
1990 Total	**22.456**	**18.326**	**15.571**	**2.175**	**58.529**	**6.104**	**-.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**	**20.205**	**12.282**	**2.547**	**58.563**	**8.033**	**-.090**	**2.201**	**2.640**	**.311**	**.134**	**5.286**	**71.792**
2002 January	2.117	1.669	1.051	.211	5.048	.740	-.008	.221	.234	.029	.013	.497	6.278
February	1.873	1.496	.954	.198	4.521	.644	-.006	.204	.207	.026	.012	.449	5.607
March	1.871	1.669	1.058	.220	4.818	.658	-.007	.213	.223	.028	.014	.478	5.947
April	1.864	1.617	1.019	.215	4.716	.610	-.006	.245	.220	.025	.016	.506	5.826
May	1.897	1.677	1.065	.224	4.863	.658	-.005	.270	.233	.028	.016	.547	6.063
June	1.770	1.613	1.029	.209	4.622	.693	-.009	.285	.224	.026	.017	.552	5.858
July	1.791	1.684	1.037	.213	4.725	.735	-.010	.258	.246	.029	.015	.547	5.997
August	1.912	1.652	1.045	.224	4.833	.739	-.009	.213	.233	.028	.016	.490	6.052
September	1.916	1.554	.942	.212	4.624	.673	-.008	.173	.238	.027	.013	.450	5.739
October	1.962	1.601	.964	.217	4.745	.631	-.007	.174	.249	.028	.013	.464	5.833
November	1.833	1.607	.974	.212	4.625	.642	-.007	.200	.238	.027	.012	.476	5.736
December	1.891	1.657	1.025	.203	4.777	.719	-.007	.219	.246	.028	.013	.506	5.995
Total	**22.698**	**19.495**	**12.163**	**2.559**	**56.915**	**8.143**	**-.088**	**2.675**	**2.791**	**.328**	**.169**	**5.963**	**70.933**
2003 January	1.935	[E] 1.684	[E] 1.040	.204	4.862	.722	-.008	.199	.225	.027	.011	.462	6.040
February	1.715	[E] 1.525	[E] .940	.190	4.370	.636	-.008	.198	.212	.025	.012	.446	5.444
March	1.858	[E] 1.706	[E] 1.046	.200	4.811	.626	-.008	.246	.241	.027	.016	.529	5.957
April	1.863	[E] 1.618	[E] 1.005	.191	4.677	.593	-.006	.253	.234	.025	.016	.528	5.792
May	1.889	[E] 1.665	[E] 1.031	.181	4.766	.649	-.006	.302	.232	.025	.015	.574	5.983
June	1.845	[E] 1.602	[E] .992	.177	4.616	.670	-.008	.288	.235	.026	.015	.564	5.843
July	1.844	[E] 1.651	[E] .994	.191	4.679	.727	-.008	.249	.247	.026	.015	.537	5.936
August	1.866	[E] 1.648	[E] 1.006	.197	4.718	.721	-.008	.231	.243	.026	.013	.513	5.943
September	1.884	[E] 1.612	[E] .989	.198	4.682	.664	-.008	.184	.227	.026	.014	.451	5.789
October	1.951	[E] 1.650	[E] 1.013	.211	4.826	.627	-.006	.185	.256	.026	.014	.482	5.927
November	1.748	[E] 1.588	[E] .968	.206	4.510	.622	-.007	.199	.270	.026	.015	.511	5.635
December	1.912	[E] 1.654	[E] 1.003	.200	4.769	.716	-.007	.244	.263	.029	.016	.552	6.030
Total	**22.311**	**[E] 19.602**	**[E] 12.026**	**2.346**	**56.285**	**7.973**	**-.088**	**2.779**	**2.885**	**.314**	**.172**	**6.150**	**70.320**
2004 January	1.948	[RE] 1.666	[E] 1.015	.209	[R] 4.838	.739	-.008	.235	.257	.030	.014	.536	[R] 6.105
February	1.804	[RE] 1.544	[E] .939	.195	[R] 4.483	.669	-.006	.214	.235	.028	.015	.491	[R] 5.637
March	1.975	[RE] 1.650	[E] 1.011	.212	[R] 4.848	.661	-.007	.233	.245	.028	.017	.524	[R] 6.026
April	1.899	[E] 1.611	[E] .969	.200	4.679	[R] .612	[R] -.007	[R] .213	[R] .246	.027	[R] .018	[R] .504	[R] 5.788
May	1.806	[E] 1.651	[E] 1.009	.208	4.674	.678	-.007	.242	.245	.028	.022	.538	5.883
5-Month Total	**9.433**	**[E] 8.122**	**[E] 4.943**	**1.024**	**23.522**	**3.359**	**-.034**	**1.137**	**1.229**	**.140**	**.086**	**2.593**	**29.439**
2003 5-Month Total	**9.260**	**[E] 8.198**	**[E] 5.062**	**.966**	**23.486**	**3.226**	**-.035**	**1.199**	**1.144**	**.129**	**.069**	**2.540**	**29.217**
2002 5-Month Total	**9.622**	**8.127**	**5.147**	**1.069**	**23.965**	**3.310**	**-.032**	**1.153**	**1.117**	**.136**	**.071**	**2.477**	**29.721**

[a] End-use consumption and electricity net generation.
[b] Includes lease condensate.
[c] Pumped storage facility production minus energy used for pumping.
[d] "Alcohol" is ethanol blended into motor gasoline.
[e] Included in "Conventional Hydroelectric Power."

R=Revised. E=Estimate. NA=Not available. (s)=Less than +0.5 trillion Btu and greater than -0.5 trillion Btu.

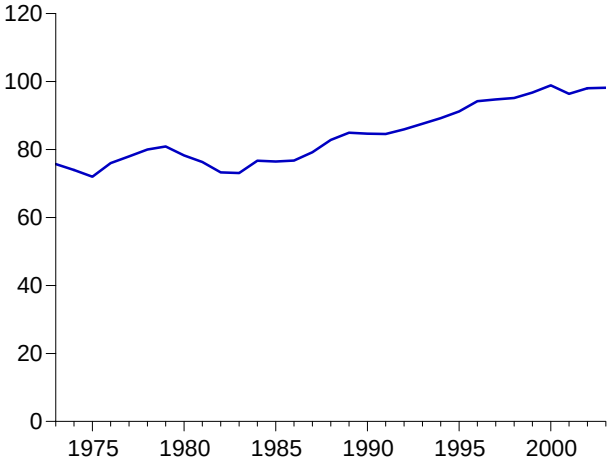
Notes: • See Note 1 at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

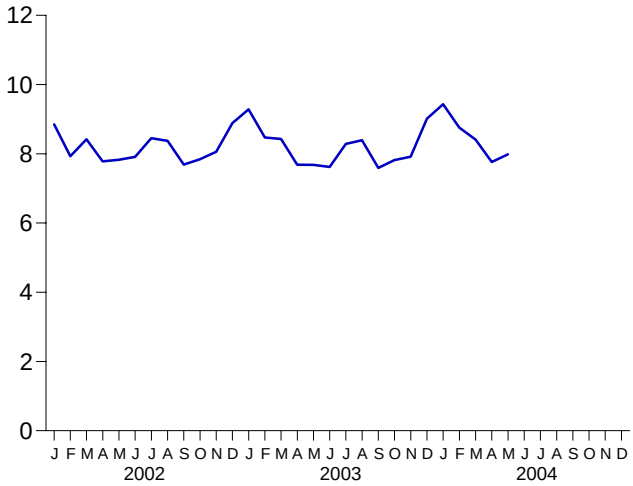
Sources: • **Coal:** Tables 6.1 and A5. • **Natural Gas (Dry):** Tables 4.1 and A4. • **Crude Oil and Natural Gas Plant Liquids:** Tables 3.1a and A2. • **Nuclear Electric Power and Hydroelectric Pumped Storage:** Tables 7.2a and A6. • **Renewable Energy:** Table 10.1.

Figure 1.3 Energy Consumption
(Quadrillion Btu)

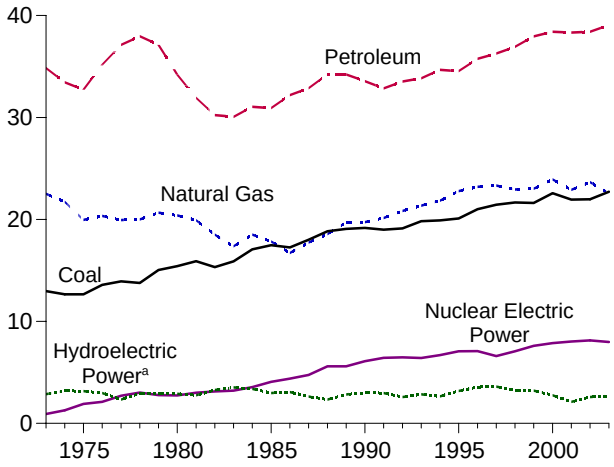
Total, 1973-2003



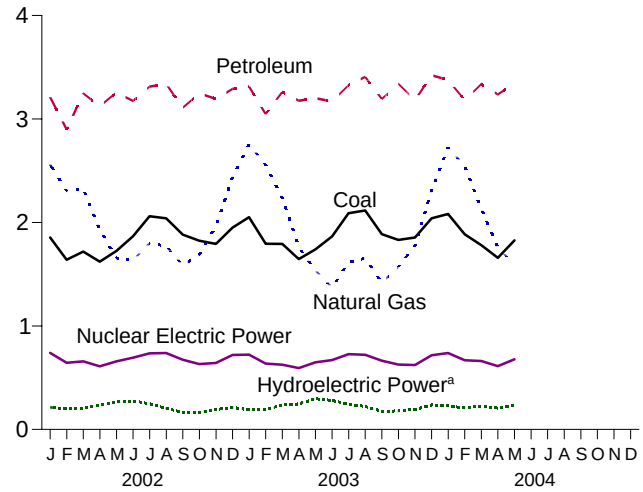
Total, Monthly



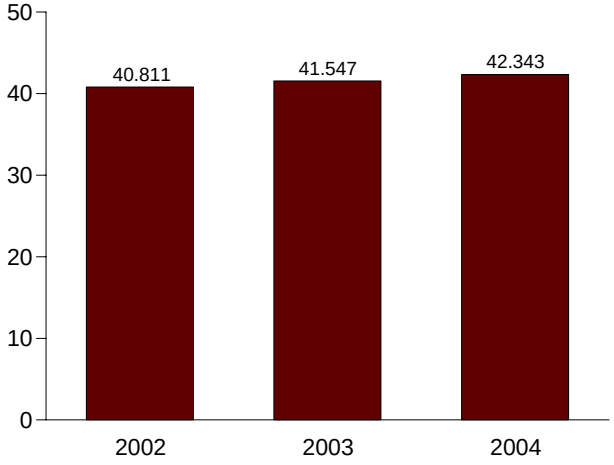
By Major Sources, 1973-2003



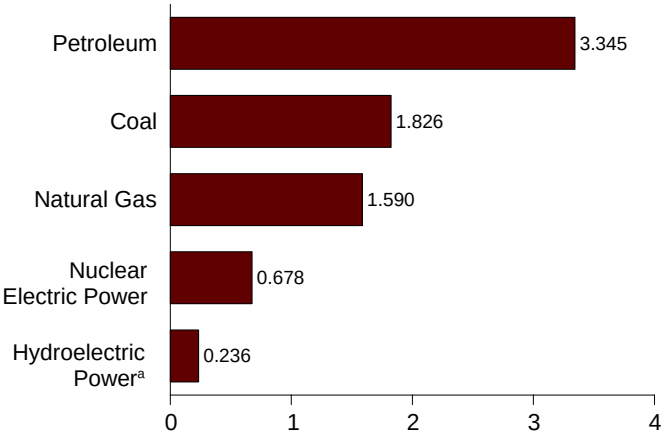
By Major Sources, Monthly



Total, January-May



By Major Sources, May 2004



[a]Conventional and pumped storage hydroelectric power.
Note: Because vertical scales differ, graphs should not be compared.

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

Table 1.3 Energy Consumption by Source

(Quadrillion Btu)

	Fossil Fuels				Nuclear Electric Power	Hydroelectric Pumped Storage[f]	Renewable Energy[a]					Total[d,h]
	Coal	Natural Gas[b]	Petroleum[c,d]	Total[e]			Conventional Hydroelectric Power	Wood, Waste, Alcohol[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**	**(i)**	**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**	**[d]2.803**	**.364**	**.097**	**6.156**	**[d]87.578**
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**	**.123**	**6.158**	**98.905**
2001 Total	**21.952**	**22.906**	**38.333**	**83.221**	**8.033**	**-.090**	**2.201**	**2.640**	**.311**	**.134**	**5.286**	**96.378**
2002 January	1.855	2.558	3.211	7.623	.740	-.008	.221	.234	.029	.013	.497	8.849
February	1.640	2.306	2.899	6.847	.644	-.006	.204	.207	.026	.012	.449	7.928
March	1.719	2.323	3.247	7.298	.658	-.007	.213	.223	.028	.014	.478	8.421
April	1.622	1.934	3.123	6.677	.610	-.006	.245	.220	.025	.016	.506	7.782
May	1.724	1.657	3.256	6.641	.658	-.005	.270	.233	.028	.016	.547	7.830
June	1.868	1.635	3.174	6.680	.693	-.009	.285	.224	.026	.017	.552	7.910
July	2.061	1.798	3.313	7.182	.735	-.010	.258	.246	.029	.015	.547	8.452
August	2.041	1.773	3.337	7.158	.739	-.009	.213	.233	.028	.016	.490	8.374
September	1.882	1.586	3.108	6.585	.673	-.008	.173	.238	.027	.013	.450	7.691
October	1.824	1.689	3.248	6.767	.631	-.007	.174	.249	.028	.013	.464	7.843
November	1.794	1.964	3.193	6.961	.642	-.007	.200	.238	.027	.012	.476	8.057
December	1.951	2.440	3.292	7.685	.719	-.007	.219	.246	.028	.013	.506	8.888
Total	**21.980**	**23.662**	**38.401**	**84.104**	**8.143**	**-.088**	**2.675**	**2.791**	**.328**	**.169**	**5.963**	**98.026**
2003 January	2.050	2.754	3.314	8.119	.722	-.008	.199	.225	.027	.011	.462	9.285
February	1.794	2.555	3.046	7.409	.636	-.008	.198	.212	.025	.012	.446	8.469
March	1.793	2.239	3.262	7.298	.626	-.008	.246	.241	.027	.016	.529	8.428
April	1.646	1.761	3.177	6.587	.593	-.006	.253	.234	.025	.016	.528	7.686
May	1.740	1.537	3.202	6.481	.649	-.006	.302	.232	.025	.015	.574	7.680
June	1.865	1.373	3.171	6.412	.670	-.008	.288	.235	.026	.015	.564	7.622
July	2.090	1.616	3.326	7.038	.727	-.008	.249	.247	.026	.015	.537	8.285
August	2.116	1.654	3.408	7.179	.721	-.008	.231	.243	.026	.013	.513	8.391
September	1.887	1.420	3.193	6.503	.664	-.008	.184	.227	.026	.014	.451	7.590
October	1.832	1.570	3.341	6.747	.627	-.006	.185	.256	.026	.014	.482	7.821
November	1.855	[R]1.775	3.184	[R]6.817	.622	-.007	.199	.270	.026	.015	.511	[R]7.916
December	2.040	2.311	3.423	7.780	.716	-.007	.244	.263	.029	.016	.552	9.017
Total	**22.707**	**[R]22.566**	**39.047**	**[R]84.371**	**7.973**	**-.088**	**2.779**	**2.885**	**.314**	**.172**	**6.150**	**[R]98.189**
2004 January	2.082	[R]2.726	3.376	[R]8.188	.739	-.008	.235	.257	.030	.014	.536	[R]9.431
February	1.886	[R]2.548	3.182	[R]7.625	.669	-.006	.214	.235	.028	.015	.491	[R]8.756
March	1.780	[R]2.132	3.337	[R]7.259	.661	-.007	.233	.245	.028	.017	.524	[R]8.410
April	[R]1.658	[R]1.759	3.237	[R]6.677	[R].612	[R]-.007	[R].213	[R].246	.027	[R].018	[R].504	[R]7.762
May	1.826	[F]1.590	3.345	[E]6.799	.678	-.007	.242	.245	.028	.022	.538	7.983
5-Month Total	**9.232**	**[E]10.754**	**16.478**	**[E]36.548**	**3.359**	**-.034**	**1.137**	**1.229**	**.140**	**.086**	**2.593**	**42.343**
2003 5-Month Total	**9.023**	**10.846**	**16.001**	**35.895**	**3.226**	**-.035**	**1.199**	**1.144**	**.129**	**.069**	**2.540**	**41.547**
2002 5-Month Total	**8.560**	**10.777**	**15.736**	**35.086**	**3.310**	**-.032**	**1.153**	**1.117**	**.136**	**.071**	**2.477**	**40.811**

[a] End-use consumption and electricity net generation.

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

[c] Petroleum products supplied, including natural gas plant liquids and crude oil burned as fuel. Beginning in 1993, also includes ethanol blended into motor gasoline.

[d] Beginning in 1993, ethanol blended into motor gasoline is included in both "Petroleum" and "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.

[h] Includes coal coke net imports and electricity net imports, which are not separately displayed. See Table 1.4.

[i] Included in conventional hydroelectric power.

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

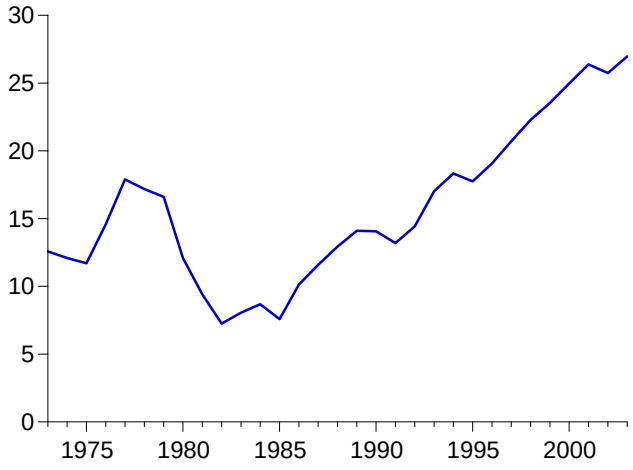
Notes: • See Note 2 at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

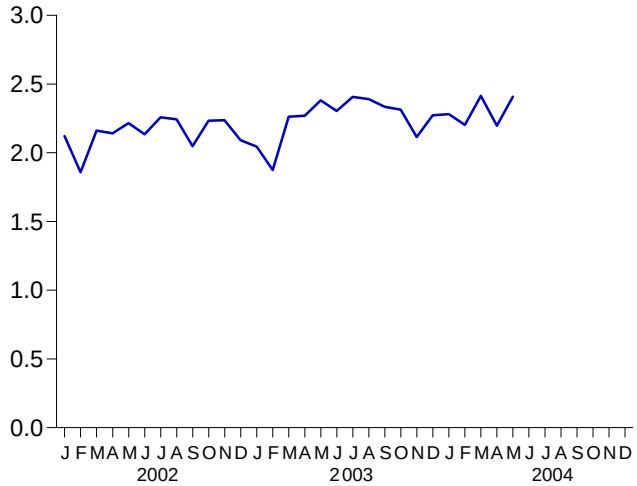
Sources: • **Coal:** Tables 6.1 and A5. • **Natural Gas:** Tables 4.1 and A4. • **Petroleum:** Tables 3.1a and A3. • **Nuclear Electric Power and Hydroelectric Pumped Storage:** Tables 7.2a and A6. • **Renewable Energy:** Table 10.1. • **Net Imports of Coal Coke and Electricity:** Table 1.4.

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

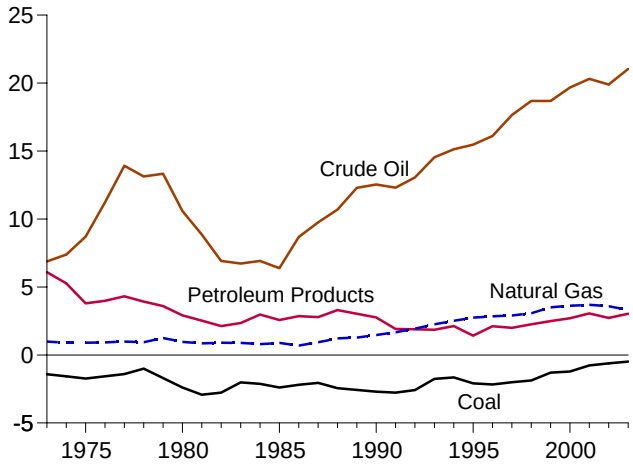
Total, 1973-2003



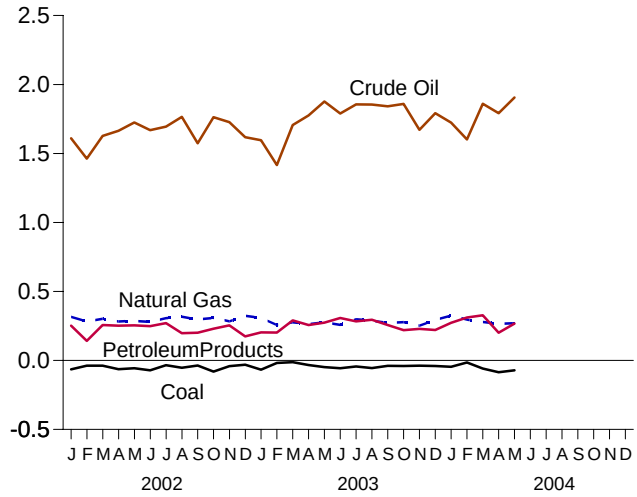
Total, Monthly



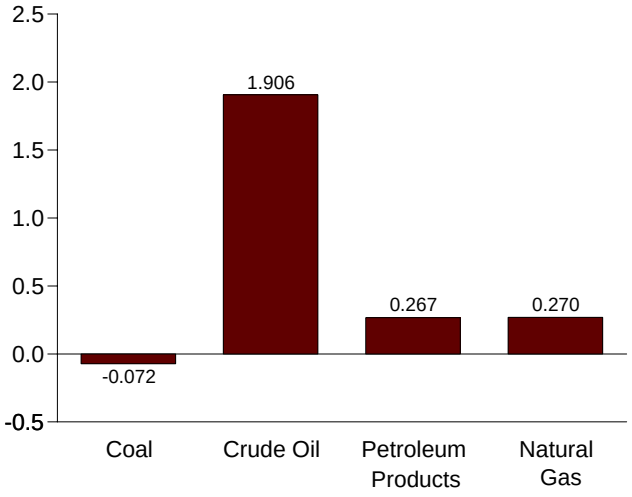
By Major Sources, 1973-2003



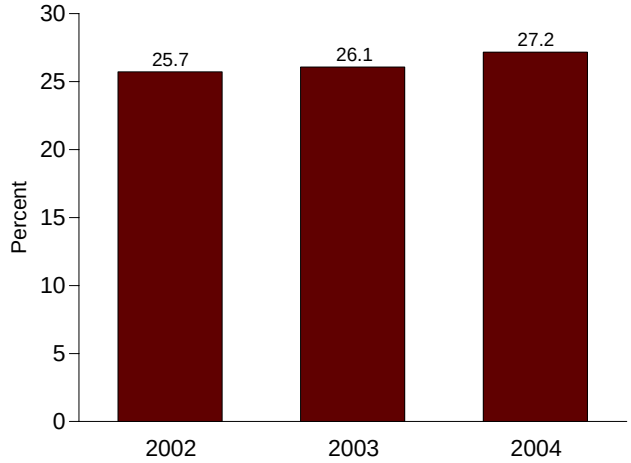
By Major Sources, Monthly



By Major Sources, May 2004



As Share of Consumption, January-May



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

Table 1.4 Energy Net Imports by Source

(Quadrillion Btu)

	Coal	Coal Coke	Natural Gas	Crude Oil[a]	Petroleum Products[b]	Electricity	Total
1973 Total	**-1.422**	**-0.007**	**0.981**	**6.883**	**6.097**	**0.049**	**12.580**
1974 Total	**-1.568**	**.056**	**.907**	**7.389**	**5.273**	**.043**	**12.101**
1975 Total	**-1.738**	**.014**	**.904**	**8.708**	**3.800**	**.021**	**11.709**
1976 Total	**-1.567**	**(s)**	**.922**	**11.221**	**3.982**	**.029**	**14.588**
1977 Total	**-1.401**	**.015**	**.981**	**13.921**	**4.321**	**.059**	**17.896**
1978 Total	**-1.004**	**.125**	**.941**	**13.125**	**3.932**	**.067**	**17.186**
1979 Total	**-1.702**	**.063**	**1.243**	**13.328**	**3.603**	**.069**	**16.605**
1980 Total	**-2.391**	**-.035**	**.957**	**10.586**	**2.912**	**.071**	**12.101**
1981 Total	**-2.918**	**-.016**	**.857**	**8.854**	**2.522**	**.113**	**9.412**
1982 Total	**-2.768**	**-.022**	**.898**	**6.917**	**2.128**	**.100**	**7.253**
1983 Total	**-2.013**	**-.016**	**.885**	**6.731**	**2.351**	**.121**	**8.059**
1984 Total	**-2.119**	**-.011**	**.792**	**6.918**	**2.970**	**.135**	**8.685**
1985 Total	**-2.389**	**-.013**	**.896**	**6.381**	**2.570**	**.140**	**7.584**
1986 Total	**-2.193**	**-.017**	**.686**	**8.676**	**2.855**	**.122**	**10.130**
1987 Total	**-2.049**	**.009**	**.937**	**9.748**	**2.784**	**.158**	**11.586**
1988 Total	**-2.446**	**.040**	**1.221**	**10.698**	**3.308**	**.108**	**12.929**
1989 Total	**-2.566**	**.030**	**1.278**	**12.296**	**3.029**	**.037**	**14.105**
1990 Total	**-2.705**	**.005**	**1.464**	**12.536**	**2.757**	**.008**	**14.065**
1991 Total	**-2.769**	**.010**	**1.666**	**12.308**	**1.912**	**.067**	**13.194**
1992 Total	**-2.587**	**.035**	**1.941**	**13.065**	**1.895**	**.087**	**14.435**
1993 Total	**-1.758**	**.027**	**2.255**	**14.542**	**1.854**	**.095**	**17.014**
1994 Total	**-1.657**	**.058**	**2.518**	**15.131**	**2.126**	**.153**	**18.329**
1995 Total	**-2.081**	**.061**	**2.745**	**15.469**	**1.422**	**.134**	**17.750**
1996 Total	**-2.165**	**.023**	**2.847**	**16.108**	**2.119**	**.137**	**19.069**
1997 Total	**-2.006**	**.046**	**2.904**	**17.648**	**1.993**	**.116**	**20.701**
1998 Total	**-1.874**	**.067**	**3.064**	**18.684**	**2.252**	**.088**	**22.281**
1999 Total	**-1.298**	**.058**	**3.500**	**18.686**	**2.493**	**.099**	**23.537**
2000 Total	**-1.215**	**.065**	**3.623**	**19.676**	**2.701**	**.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	.307	1.596	.203	.005	2.045
February	-.018	.013	.257	1.416	.202	.004	1.874
March	-.012	.004	.277	1.706	.290	-.001	2.263
April	-.033	.004	.264	1.776	.257	.003	2.270
May	-.048	.002	.276	1.876	.274	.001	2.381
June	-.057	.004	.258	1.790	.308	.001	2.304
July	-.044	.005	.298	1.856	.283	.010	2.407
August	-.055	.001	.288	1.854	.295	.008	2.391
September	-.039	.004	.273	1.842	.256	-.002	2.335
October	-.040	.004	.277	1.860	.219	-.006	2.314
November	-.038	.003	.252	1.671	.228	-.003	2.114
December	-.040	.006	.294	1.792	.221	.001	2.273
Total	**-.491**	**.051**	**3.321**	**21.034**	**3.035**	**.022**	**26.971**
2004 January	-.046	.004	RE .325	1.724	.273	(s)	R 2.281
February	-.014	.009	RE .296	1.602	.312	.000	R 2.204
March	-.058	.010	RE .279	1.861	.327	-.003	R 2.414
April	-.085	.024	RE .265	1.793	.201	(s)	R 2.197
May	-.072	.037	E .270	1.906	.267	.001	2.409
5-Month Total	**-.275**	**.084**	E **1.434**	**8.885**	**1.379**	**-.002**	**11.504**
2003 5-Month Total	**-.178**	**.024**	**1.380**	**8.370**	**1.225**	**.013**	**10.833**
2002 5-Month Total	**-.260**	**.013**	**1.469**	**8.089**	**1.157**	**.031**	**10.499**

[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.

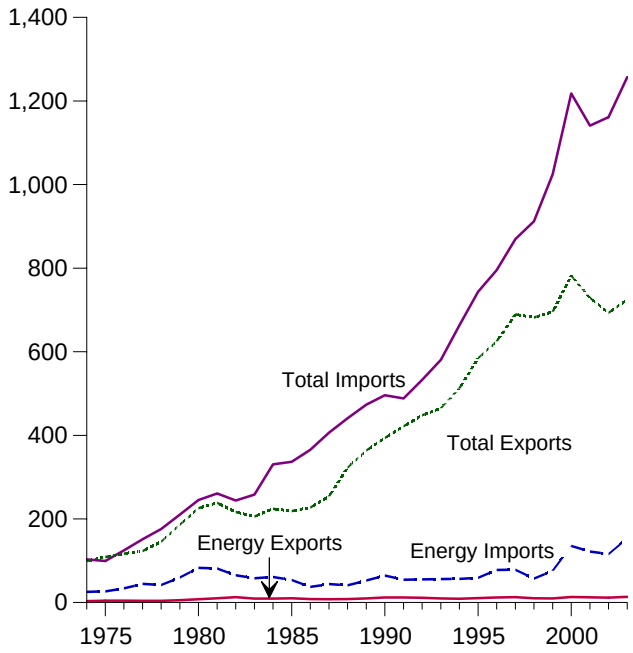
Notes: • See Notes 3 and 4 at end of section. • Net imports equal imports minus exports. Minus sign indicates exports are greater than imports. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

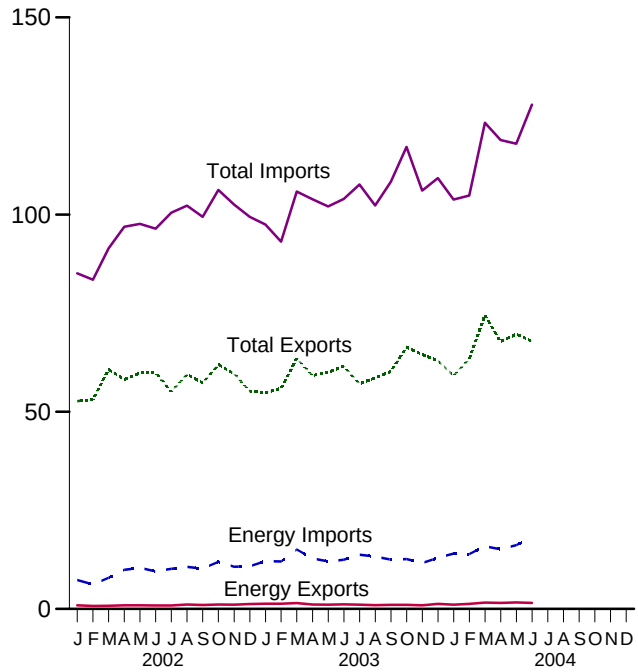
Sources: • **Coal:** Tables 6.1 and A5. • **Coal Coke:** Section 2, "Energy Consumption Notes and Sources," Note 5, and Table A5. • **Natural Gas:** Tables 4.1 and A4. • **Crude Oil and Petroleum Products:** Tables 3.1b, A2, and A3. • **Electricity:** Tables 7.1 and A6.

Figure 1.5 Merchandise Trade Value
(Billion Dollars)

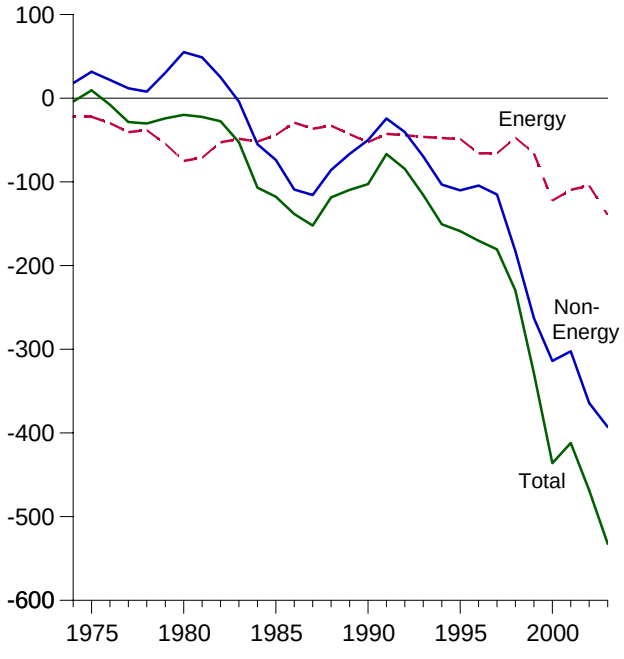
Imports and Exports, 1974-2003



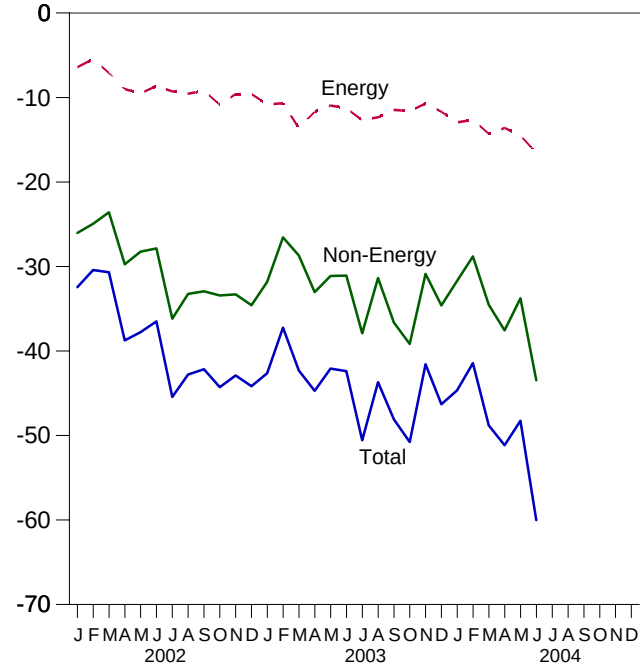
Imports and Exports, Monthly



Trade Balance, 1974-2003



Trade Balance, Monthly



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

Table 1.5 Merchandise Trade Value

(Million Dollars)

	Petroleum[a]			Energy[b]			Non-Energy Balance	Total Merchandise		
	Exports	Imports	Balance	Exports	Imports	Balance		Exports	Imports	Balance
1974 Total	**792**	**24,668**	**-23,876**	**3,444**	**25,454**	**-22,010**	**18,126**	**99,437**	**103,321**	**-3,884**
1975 Total	**907**	**25,197**	**-24,289**	**4,470**	**26,476**	**-22,006**	**31,557**	**108,856**	**99,305**	**9,551**
1976 Total	**998**	**32,226**	**-31,228**	**4,226**	**33,996**	**-29,770**	**21,950**	**116,794**	**124,614**	**-7,820**
1977 Total	**1,276**	**42,368**	**-41,093**	**4,184**	**44,537**	**-40,354**	**12,001**	**123,182**	**151,534**	**-28,353**
1978 Total	**1,561**	**39,526**	**-37,965**	**3,881**	**42,096**	**-38,215**	**8,010**	**145,847**	**176,052**	**-30,205**
1979 Total	**1,914**	**56,715**	**-54,801**	**5,621**	**59,998**	**-54,377**	**30,455**	**186,363**	**210,285**	**-23,922**
1980 Total	**2,833**	**78,637**	**-75,803**	**7,982**	**82,924**	**-74,942**	**55,246**	**225,566**	**245,262**	**-19,696**
1981 Total	**3,696**	**76,659**	**-72,963**	**10,279**	**81,360**	**-71,081**	**48,814**	**238,715**	**260,982**	**-22,267**
1982 Total	**5,947**	**60,458**	**-54,511**	**12,729**	**65,409**	**-52,680**	**25,170**	**216,442**	**243,952**	**-27,510**
1983 Total	**4,557**	**53,217**	**-48,659**	**9,500**	**57,952**	**-48,452**	**-3,957**	**205,639**	**258,048**	**-52,409**
1984 Total	**4,470**	**56,924**	**-52,454**	**9,311**	**60,980**	**-51,669**	**-55,033**	**223,976**	**330,678**	**-106,703**
1985 Total	**4,707**	**50,475**	**-45,768**	**9,971**	**53,917**	**-43,946**	**-73,765**	**218,815**	**336,526**	**-117,712**
1986 Total	**3,640**	**35,142**	**-31,503**	**8,115**	**37,310**	**-29,195**	**-109,084**	**227,159**	**365,438**	**-138,279**
1987 Total	**3,922**	**42,285**	**-38,363**	**7,713**	**44,220**	**-36,506**	**-115,613**	**254,122**	**406,241**	**-152,119**
1988 Total	**3,693**	**38,787**	**-35,094**	**8,235**	**41,042**	**-32,806**	**-85,720**	**322,426**	**440,952**	**-118,526**
1989 Total	**5,021**	**49,704**	**-44,683**	**9,869**	**52,779**	**-42,910**	**-66,490**	**363,812**	**473,211**	**-109,399**
1990 Total	**6,901**	**61,583**	**-54,682**	**12,233**	**64,661**	**-52,428**	**-50,068**	**393,592**	**496,088**	**-102,496**
1991 Total	**6,954**	**51,350**	**-44,396**	**12,081**	**54,629**	**-42,548**	**-24,175**	**421,730**	**488,453**	**-66,723**
1992 Total	**6,412**	**51,217**	**-44,805**	**11,254**	**55,256**	**-44,002**	**-40,500**	**448,164**	**532,665**	**-84,501**
1993 Total	**6,215**	**51,046**	**-44,831**	**9,756**	**55,900**	**-46,144**	**-69,425**	**465,091**	**580,659**	**-115,568**
1994 Total	**5,659**	**50,835**	**-45,176**	**8,911**	**56,391**	**-47,480**	**-103,149**	**512,626**	**663,256**	**-150,629**
1995 Total	**6,321**	**54,368**	**-48,047**	**10,358**	**59,109**	**-48,751**	**-110,050**	**584,742**	**743,543**	**-158,801**
1996 Total	**7,984**	**72,022**	**-64,038**	**12,181**	**78,086**	**-65,905**	**-104,309**	**625,075**	**795,289**	**-170,214**
1997 Total	**8,592**	**71,152**	**-62,560**	**12,682**	**78,277**	**-65,595**	**-114,927**	**689,182**	**869,704**	**-180,522**
1998 Total	**6,574**	**50,264**	**-43,690**	**10,251**	**57,323**	**-47,072**	**-182,686**	**682,138**	**911,896**	**-229,758**
1999 Total	**7,118**	**67,173**	**-60,055**	**9,880**	**75,803**	**-65,923**	**-262,898**	**695,797**	**1,024,618**	**-328,821**
2000 Total	**10,192**	**119,251**	**-109,059**	**13,179**	**135,367**	**-122,188**	**-313,916**	**781,918**	**1,218,022**	**-436,104**
2001 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	R -33,760	R 69,704	R 117,965	R -48,261
June	1,009	15,705	-14,696	1,521	18,073	-16,552	-43,462	67,849	127,863	-60,014
6-Month Total	**5,847**	**80,468**	**-74,621**	**8,653**	**93,168**	**-84,515**	**-209,823**	**402,327**	**696,666**	**-294,339**
2003 6-Month Total	**5,541**	**65,611**	**-60,070**	**7,446**	**76,519**	**-69,073**	**-182,298**	**355,012**	**606,383**	**-251,371**
2002 6-Month Total	**3,772**	**45,426**	**-41,654**	**5,130**	**51,261**	**-46,131**	**-160,416**	**344,408**	**550,954**	**-206,546**

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

[b] Petroleum, coal, natural gas, and electricity.

R=Revised.

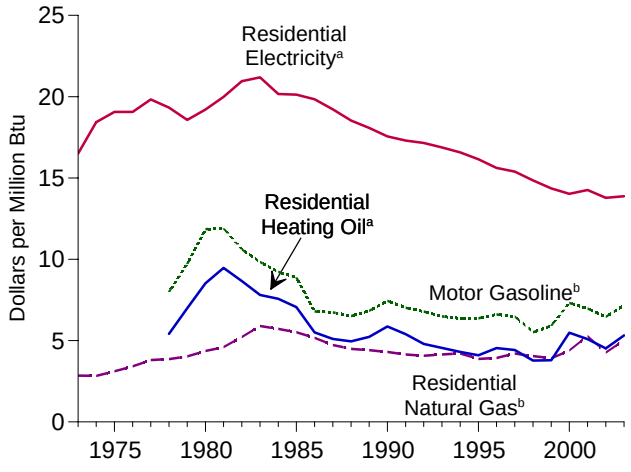
Notes: • Monthly data are not adjusted for seasonal variations. • See Note 5 at end of section. • Totals may not equal sum of components due to independent rounding. • The U.S. import statistics reflect both government and nongovernment imports of merchandise from foreign countries into the U.S. customs territory, which comprises the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands.

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

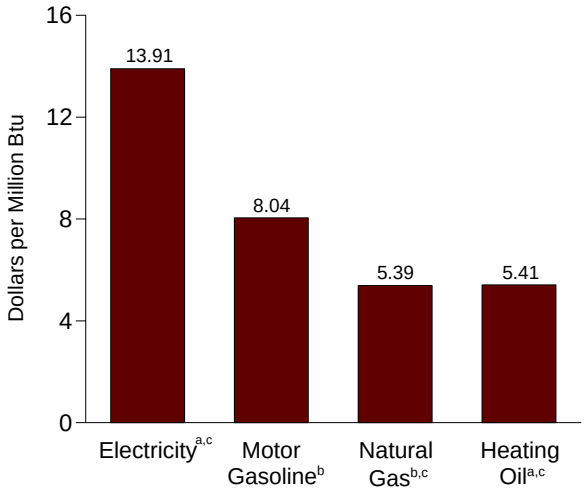
Source: U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division. For details, see "Sources for Table 1.5" at the end of this section.

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

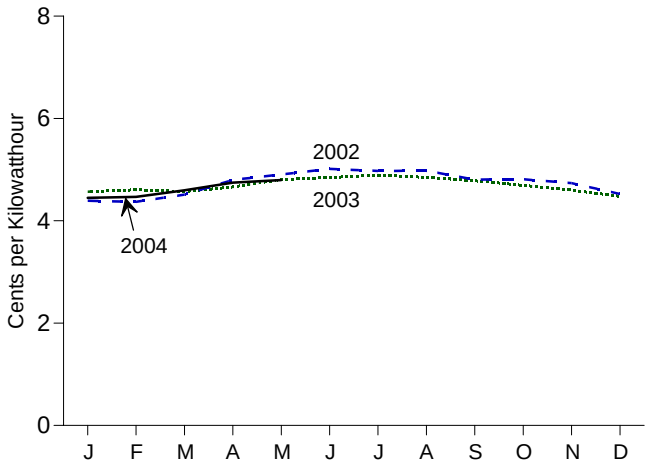
Costs, 1973-2003



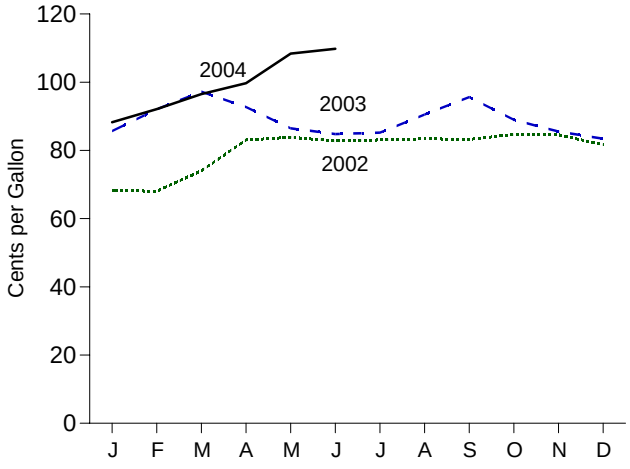
Costs, April 2004



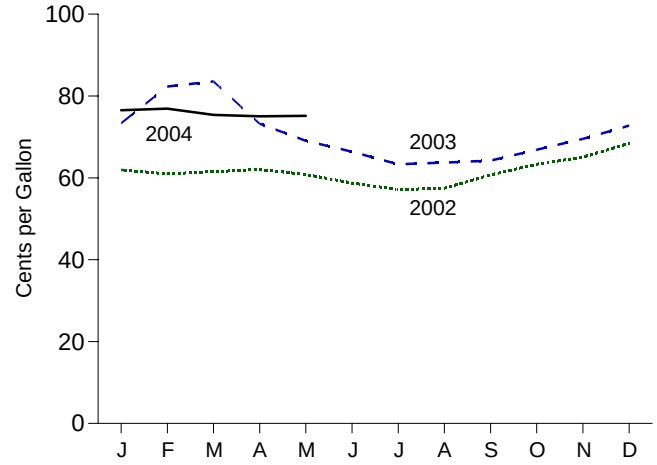
Residential Electricity[a], Monthly



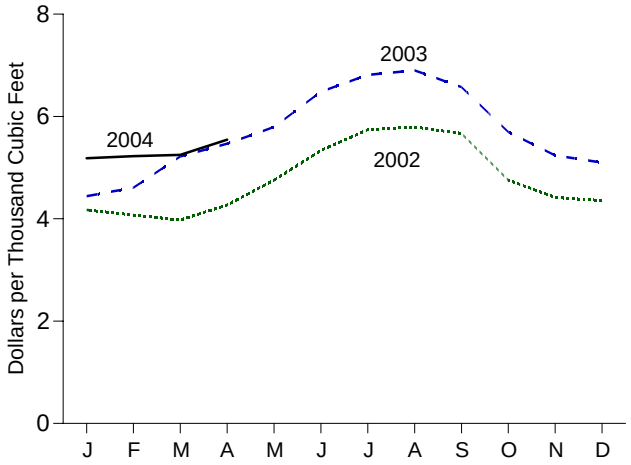
Motor Gasoline[b], Monthly



Residential Heating Oil[a], Monthly



Residential Natural Gas[b], Monthly



[a]Excludes taxes.
[b]Includes taxes.
[C]Residential.

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

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

	Consumer Price Index (Urban)[a]	Motor Gasoline[b]		Residential Heating Oil[c]		Residential Natural Gas[b]		Residential Electricity[c]	
	Index 1982-1984=100	Cents per Gallon	Dollars per Million Btu	Cents per Gallon	Dollars per Million Btu	Cents per Thousand Cubic Feet	Dollars per Million Btu	Cents per 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	417.3	4.05	4.57	13.39
February	177.8	68.1	5.49	61.0	4.40	407.2	3.95	4.61	13.50
March	178.8	74.0	5.97	61.5	4.44	397.7	3.86	4.57	13.39
April	179.8	83.0	6.70	62.1	4.48	427.1	4.15	4.66	13.66
May	179.8	83.9	6.76	60.8	4.38	475.5	4.62	4.81	14.08
June	179.9	82.8	6.67	58.8	4.24	533.6	5.18	4.85	14.21
July	180.1	83.1	6.70	57.1	4.12	574.1	5.57	4.89	14.34
August	180.7	83.5	6.73	57.4	4.14	579.4	5.63	4.85	14.21
September	181.0	83.3	6.71	60.7	4.38	566.9	5.50	4.78	14.02
October	181.3	84.7	6.83	63.3	4.57	475.5	4.62	4.69	13.76
November	181.3	84.6	6.82	65.1	4.69	441.8	4.29	4.60	13.48
December	180.9	81.6	6.58	68.4	4.93	435.6	4.23	4.48	13.12
Average	**179.9**	**80.1**	**6.46**	**62.8**	**4.52**	**439.7**	**4.27**	**4.70**	**13.78**
2003 January	181.7	85.7	6.91	73.4	5.29	444.1	4.32	4.39	12.87
February	183.1	92.1	7.43	82.3	5.93	461.0	4.48	4.37	12.81
March	184.2	97.2	7.84	83.6	6.02	521.7	5.07	4.51	13.22
April	183.8	92.7	7.48	73.2	5.28	546.8	5.31	4.80	14.06
May	183.5	86.5	6.98	69.0	4.98	579.3	5.63	4.90	14.37
June	183.7	84.8	6.84	66.4	4.79	648.3	6.30	5.01	14.69
July	183.9	85.2	6.87	63.3	4.56	681.3	6.62	4.98	14.58
August	184.6	90.5	7.30	63.8	4.60	690.1	6.71	4.98	14.59
September	185.2	95.6	7.71	64.2	4.63	657.7	6.39	4.81	14.08
October	185.0	89.0	7.18	66.9	4.82	569.7	5.54	4.81	14.10
November	184.5	85.5	6.90	69.5	5.01	524.1	5.09	4.74	13.88
December	184.3	83.5	6.73	72.8	5.25	510.0	4.96	4.53	13.26
Average	**184.0**	**89.0**	**7.18**	**73.7**	**5.31**	**516.8**	**5.02**	**4.73**	**13.87**
2004 January	185.2	88.3	7.12	76.5	5.52	518.4	5.04	4.45	13.04
February	186.2	92.1	7.43	76.9	5.55	522.6	5.08	4.47	13.10
March	187.4	96.5	7.79	75.4	5.44	525.1	5.10	4.59	13.47
April	188.0	99.7	8.04	75.1	[R] 5.41	554.8	5.39	4.74	13.91
May	189.1	108.4	8.74	75.1	5.42	NA	NA	4.80	14.06
June	189.7	109.8	8.86	NA	NA	NA	NA	NA	NA

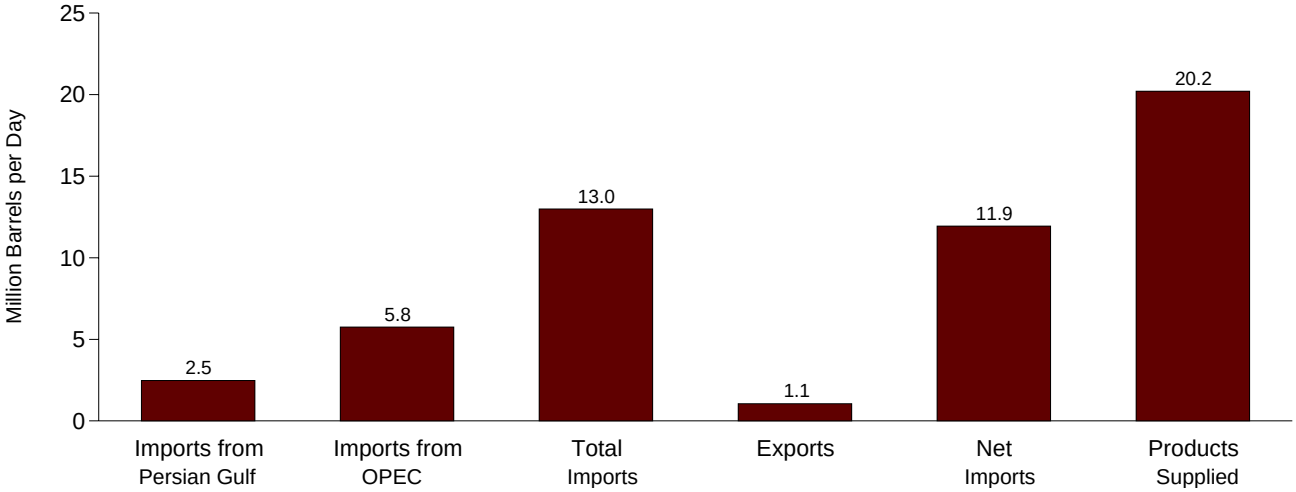
[a] Consumer Price Index, All Urban Consumers, All Items, 1982-1984 = 100.0.
[b] Includes taxes.
[c] Excludes taxes.
R=Revised. NA=Not available.

Notes: • Fuel costs are calculated by using the Urban Consumer Price Index (CPI) developed by the Bureau of Labor Statistics. • Annual averages may not equal average of months due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: http://www.eia.doe.gov/emeu/mer/overview.html.

Sources: • **Fuel Prices:** Tables 9.4 (All Types), 9.8c, 9.11, and 9.9, adjusted by the CPI. • **CPI: 1973-2001**—*Economic Report of the President,* February 2004, Table B-60. **2002 forward**—Council of Economic Advisers, *Economic Indicators,* August 2004, "Consumer Prices - All Urban Consumers." • **Conversion Factors:** Tables A1, A3, A4, and A6.

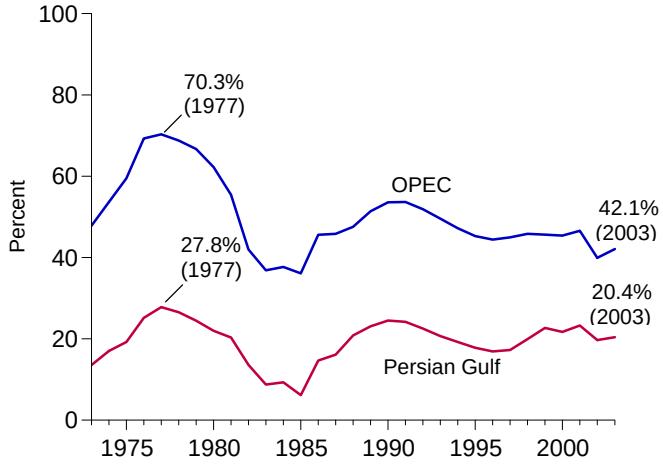
Figure 1.7 Overview of U.S. Petroleum Trade

Overview, May 2004

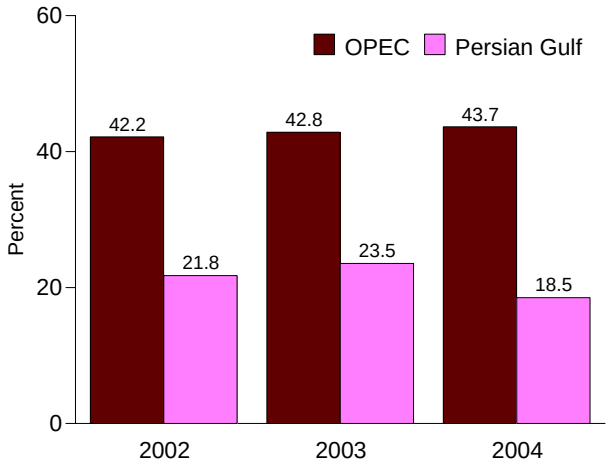


Imports from OPEC and the Persian Gulf as a Share of Total Imports

1973-2003

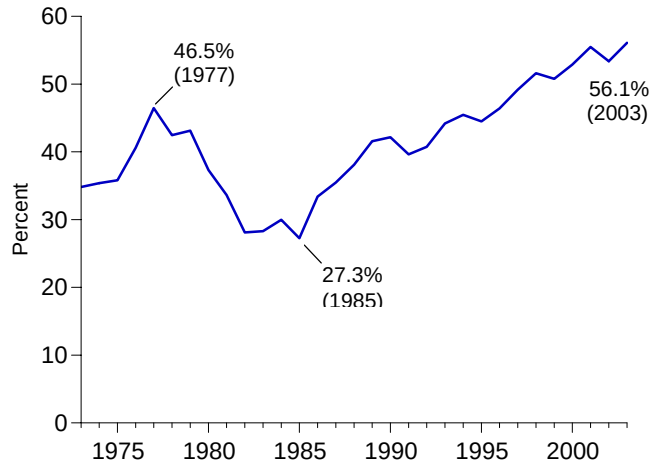


January-May

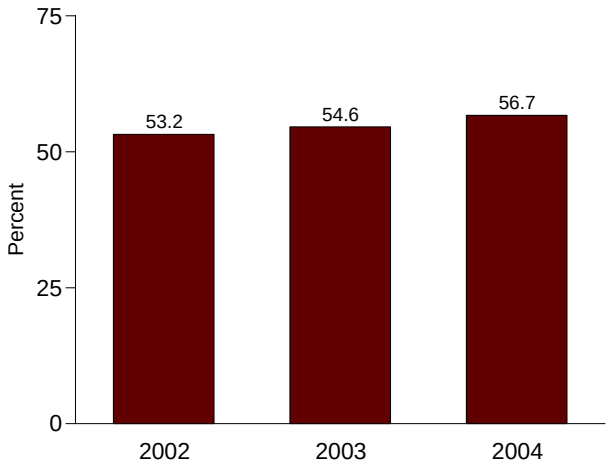


Net Imports as Share of Products Supplied

1973-2003



January-May



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

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

Table 1.7 Overview of U.S. Petroleum Trade

	Thousand Barrels per Day						Percent					
							As Share of Products Supplied				As Share of Total Imports	
	Imports from Persian Gulf[a]	Imports from OPEC[b]	Imports	Exports	Net Imports	Products Supplied	Imports from Persian Gulf[a]	Imports from OPEC[b]	Imports	Net Imports	Imports from Persian Gulf[a]	Imports from OPEC[b]
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
5-Month Average	**2,317**	**5,464**	**12,516**	**1,003**	**11,513**	**20,301**	**11.4**	**26.9**	**61.7**	**56.7**	**18.5**	**43.7**
2003 5-Month Average	**2,810**	**5,113**	**11,933**	**1,097**	**10,836**	**19,844**	**14.2**	**25.8**	**60.1**	**54.6**	**23.5**	**42.8**
2002 5-Month Average	**2,470**	**4,786**	**11,351**	**933**	**10,418**	**19,573**	**12.6**	**24.5**	**58.0**	**53.2**	**21.8**	**42.2**

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

[b] Organization of Petroleum Exporting Countries. See Glossary.

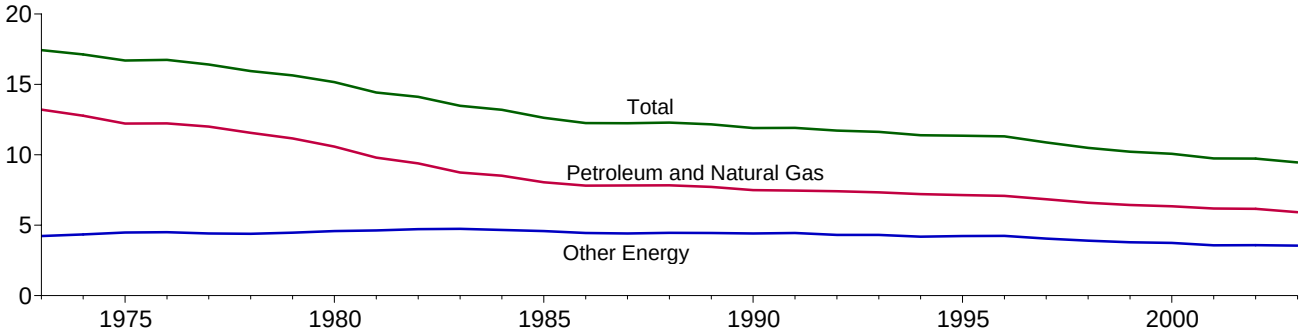
Notes: • Readers of Table 1.7 may be interested in a feature article, "Measuring Dependence on Imported Oil," that was published in the August 1995 *Monthly Energy Review.* • Petroleum is crude oil, lease condensate, unfinished oils, petroleum products, natural gas plant liquids, and nonhydrocarbon compounds blended into finished petroleum products. • Beginning in October 1977, petroleum imported for the Strategic Petroleum Reserves is included. • Annual averages may not equal average of months due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia. U.S. exports include shipments to U.S. territories, and imports include receipts from U.S. territories.

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

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

Table 1.7 has not been updated this month.

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		
	Petroleum and Natural Gas[a]	Other Energy[a,b]	Total[a]		Petroleum and Natural Gas	Other Energy[b]	Total
	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**	[a] **32.482**	[a] **87.578**	**7,532.7**	[a] **7.33**	[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	**61.239**	**35.286**	**96.378**	[R] **9,890.7**	[R] **6.19**	[R] **3.57**	[R] **9.74**
2002 Year	**62.064**	**36.136**	**98.026**	[R] **10,074.8**	**6.16**	[R] **3.59**	[R] **9.73**
2003 Year	[R] **61.613**	[R] **36.815**	[R] **98.189**	[R] **10,381.3**	**5.93**	[R] **3.55**	[R] **9.46**

[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.

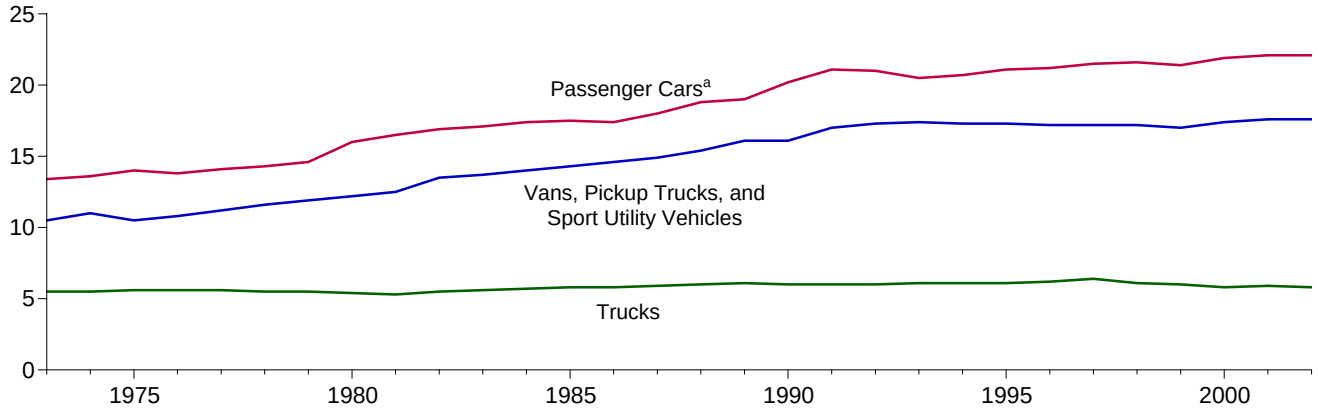
R=Revised.

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

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

Sources: • **Energy Consumption:** Table 1.3. • **Gross Domestic Product: 1973-2001**—U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business,* December 2003, Table 7B. **2002**—U.S. Department of Commerce, Bureau of Economic Analysis, *BEA News Release,* July 30, 2004, Table 3, which is available at website www.bea.doc.gov/bea/newsrel/gdp400p.htm.

Figure 1.9 Motor Vehicle Fuel Rates
(Miles per Gallon)



[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[a]			Vans, Pickup Trucks, and Sport Utility Vehicles[b]			Trucks[c]			All Motor Vehicles[d]		
	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Rate (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Rate (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Rate (miles per gallon)	Mileage (miles per vehicle)	Fuel Consumption (gallons per vehicle)	Fuel Rate (miles per gallon)
1973	9,884	737	13.4	9,779	931	10.5	15,370	2,775	5.5	10,099	850	11.9
1974	9,221	677	13.6	9,452	862	11.0	14,995	2,708	5.5	9,493	788	12.0
1975	9,309	665	14.0	9,829	934	10.5	15,167	2,722	5.6	9,627	790	12.2
1976	9,418	681	13.8	10,127	934	10.8	15,438	2,764	5.6	9,774	806	12.1
1977	9,517	676	14.1	10,607	947	11.2	16,700	3,002	5.6	9,978	814	12.3
1978	9,500	665	14.3	10,968	948	11.6	18,045	3,263	5.5	10,077	816	12.4
1979	9,062	620	14.6	10,802	905	11.9	18,502	3,380	5.5	9,722	776	12.5
1980	8,813	551	16.0	10,437	854	12.2	18,736	3,447	5.4	9,458	712	13.3
1981	8,873	538	16.5	10,244	819	12.5	19,016	3,565	5.3	9,477	697	13.6
1982	9,050	535	16.9	10,276	762	13.5	19,931	3,647	5.5	9,644	686	14.1
1983	9,118	534	17.1	10,497	767	13.7	21,083	3,769	5.6	9,760	686	14.2
1984	9,248	530	17.4	11,151	797	14.0	22,550	3,967	5.7	10,017	691	14.5
1985	9,419	538	17.5	10,506	735	14.3	20,597	3,570	5.8	10,020	685	14.6
1986	9,464	543	17.4	10,764	738	14.6	22,143	3,821	5.8	10,143	692	14.7
1987	9,720	539	18.0	11,114	744	14.9	23,349	3,937	5.9	10,453	694	15.1
1988	9,972	531	18.8	11,465	745	15.4	22,485	3,736	6.0	10,721	688	15.6
1989	[a]10,157	[a]533	[a]19.0	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[P]	12,203	551	22.1	11,365	645	17.6	27,062	4,637	5.8	12,172	715	17.0

[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.
P=Preliminary.
Notes: Geographic coverage is the 50 States and the District of Columbia.

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

Table 1.10 Heating Degree-Days by Census Division

Census Divisions	July 1 through July 31				
				Percent Change	
	Normal[a]	2003	2004	Normal to 2004	2003 to 2004
New England					
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	11	5	8	([c])	([c])
Middle Atlantic					
New Jersey, New York, Pennsylvania	6	0	0	([c])	([c])
East North Central					
Illinois, Indiana, Michigan, Ohio, Wisconsin	9	6	13	([c])	([c])
West North Central					
Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	15	5	22	([c])	([c])
South Atlantic					
Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	0	0	0	([c])	([c])
East South Central					
Alabama, Kentucky, Mississippi, Tennessee	0	0	0	([c])	([c])
West South Central					
Arkansas, Louisiana, Oklahoma, Texas	0	0	0	([c])	([c])
Mountain					
Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	19	1	12	([c])	([c])
Pacific[b]					
California, Oregon, Washington	24	3	4	([c])	([c])
U.S. Average[b]	**9**	**2**	**5**	**([c])**	**([c])**

[a] "Normal" is based on calculations of data from 1971 through 2000.
[b] Excludes Alaska and Hawaii.
[c] Percent change is not meaningful: normal is less than 100 or ratio is incalculable.

Notes: Degree-days are relative measurements of outdoor air temperature used as an index for heating and cooling energy requirements. Heating degree-days are the number of degrees that the daily average temperature falls below 65° F. Cooling degree-days are the number of degrees that the daily average temperature rises above 65° F. The daily average temperature is the mean of the maximum and minimum temperatures in a 24-hour period. For example, a weather station recording an average daily temperature of 40° F would report 25 heating degree-days for that day (and 0 cooling degree-days). If a weather station recorded an average daily temperature of 78° F, cooling degree-days for that station would be 13 (and 0 heating degree days).

Web 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	July 1 through July 31					Cumulative January 1 through July 31				
				Percent Change					Percent Change	
	Normal[a]	2003	2004	Normal to 2004	2003 to 2004	Normal[a]	2003	2004	Normal to 2004	2003 to 2004
New England										
Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	180	210	163	-9	-22	249	276	229	-8	-17
Middle Atlantic										
New Jersey, New York, Pennsylvania	247	257	229	-7	-11	387	364	383	-1	5
East North Central										
Illinois, Indiana, Michigan, Ohio, Wisconsin	245	224	208	-15	-7	443	338	388	-12	15
West North Central										
Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	308	345	257	-17	-26	574	534	487	-15	-9
South Atlantic										
Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	425	402	424	(s)	5	1,105	1,123	1,225	11	9
East South Central										
Alabama, Kentucky, Mississippi, Tennessee	412	376	379	-8	1	902	859	980	9	14
West South Central										
Arkansas, Louisiana, Oklahoma, Texas	545	548	509	-7	-7	1,403	1,497	1,413	1	-6
Mountain										
Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	341	451	376	10	-17	715	911	840	17	-8
Pacific[b]										
California, Oregon, Washington	188	252	225	20	-11	345	439	478	39	9
U.S. Average[b]	**321**	**334**	**310**	**-3**	**-7**	**696**	**713**	**736**	**6**	**3**

[a] "Normal" is based on calculations of data from 1971 through 2000.
[b] Excludes Alaska and Hawaii.

Notes: Degree-days are relative measurements of outdoor air temperature used as an index for heating and cooling energy requirements. Cooling degree-days are the number of degrees that the daily average temperature rises above 65° F. Heating degree-days are the number of degrees that the daily average temperature falls below 65° F. The daily average temperature is the mean of the maximum and minimum temperatures in a 24-hour period. For example, if a weather station recorded an average daily temperature of 78° F, cooling degree-days for that station would be 13 (and 0 heating degree-days). A weather station recording an average daily temperature of 40° F would report 25 heating degree-days for that day (and 0 cooling degree-days).

Web 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.
1993-2002: "U.S. International Trade in Goods and Services," Annual Revision.
2003 and 2004: "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.
1994-2002: "U.S. International Trade in Goods and Services," Annual Revision.
2003 and 2004: "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.
1993-2002: "U.S. International Trade in Goods and Services," Annual Revision.
2003 and 2004: "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.
1992-2002: "U.S. International Trade in Goods and Services," Annual Revision.
2003 and 2004: "U.S. International Trade in Goods and Services," FT-900, monthly.

Tables 1.10 and 1.11 Sources

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

The State figures are then aggregated into Census Divisions and into the national average. The population weights currently used represent resident State population data estimated for 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 May 2004 was 8.0 quadrillion Btu, 4 percent higher than in May 2003.

Residential sector total consumption was 1.4 quadrillion Btu in May 2004, 3 percent above the May 2003 level. The sector accounted for 18 percent of total energy consumption.

Commercial sector total consumption was 1.4 quadrillion Btu in May 2004, 3 percent higher than the May 2003 level. The sector accounted for 17 percent of total energy consumption.

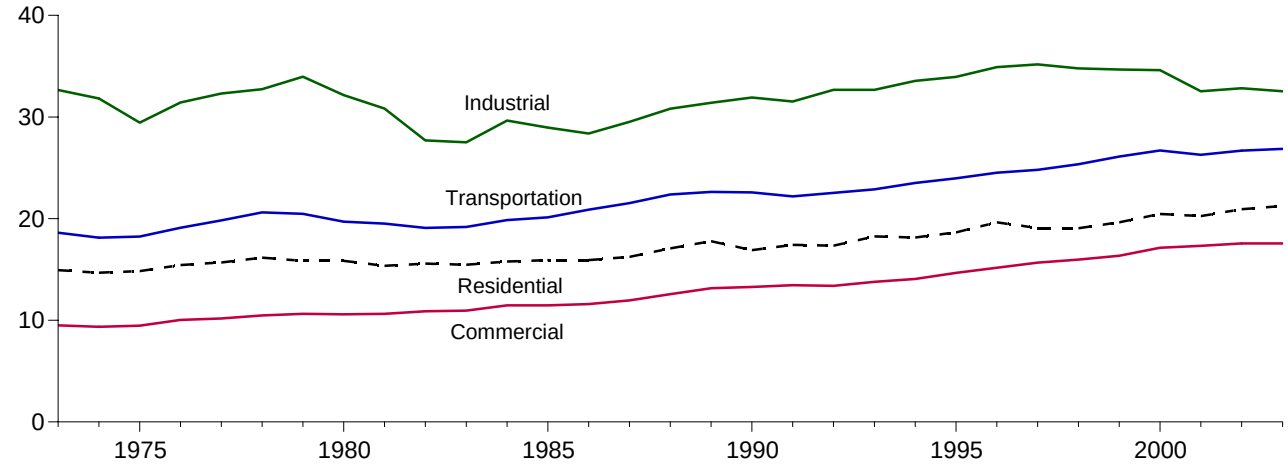
Industrial sector total consumption was 2.8 quadrillion Btu in May 2004, 6 percent higher than the May 2003 level. The sector accounted for 36 percent of total energy consumption.

Transportation sector total consumption was 2.3 quadrillion Btu in May 2004, 3 percent higher than the May 2003 level. The sector accounted for 29 percent of total energy consumption.

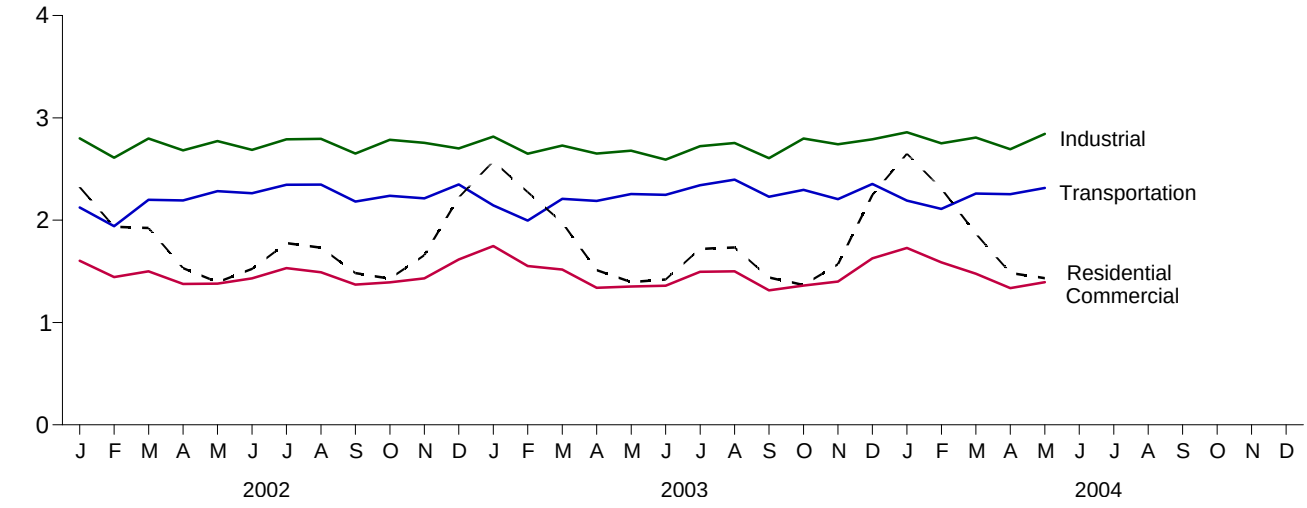
Electric power sector primary consumption was 3.2 quadrillion Btu in May 2004, 5 percent higher than the May 2003 level. Fossil fuels accounted for 69 percent of all primary energy consumed by the electric power sector; nuclear electric power 21 percent; and renewable energy 10 percent.

Figure 2.1 Energy Consumption by Sector
(Quadrillion Btu)

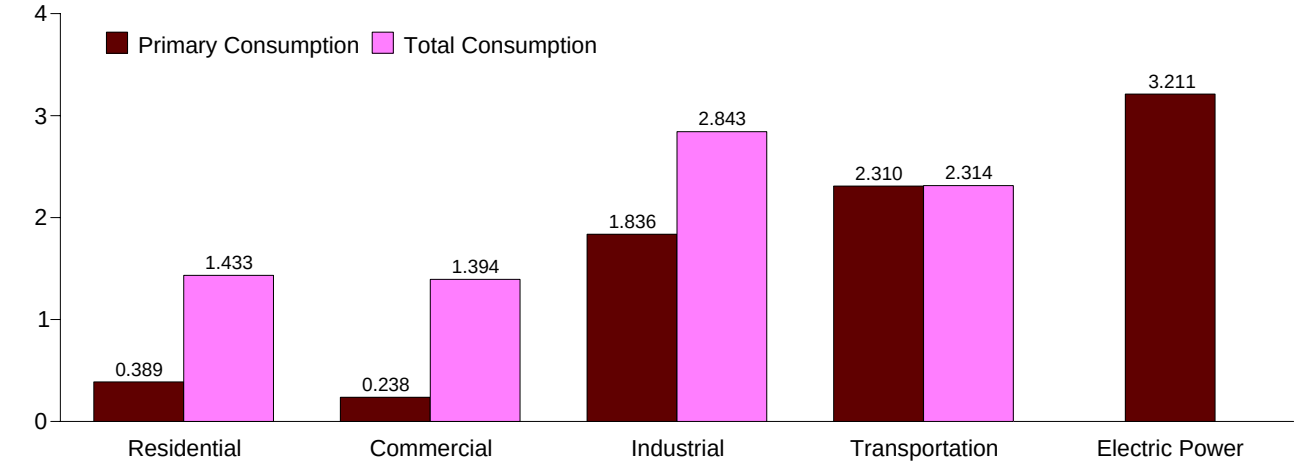
Total Consumption by End-Use Sector, 1973-2003



Total Consumption by End-Use Sector, Monthly



By Sector, May 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)

	End-Use Sectors								Electric Power Sector[c,d]	Adjustments[e]	Total[b]
	Residential		Commercial[a]		Industrial[b]		Transportation				
	Primary	Total	Primary	Total	Primary	Total	Primary	Total	Primary		
1973 Total	**8.250**	**14.930**	**4.381**	**9.507**	**24.741**	**32.653**	**18.576**	**18.612**	**19.753**	**0.007**	**75.708**
1974 Total	**7.928**	**14.683**	**4.221**	**9.363**	**23.816**	**31.819**	**18.086**	**18.119**	**19.933**	**.007**	**73.991**
1975 Total	**8.006**	**14.842**	**4.023**	**9.466**	**21.454**	**29.447**	**18.209**	**18.244**	**20.307**	**.001**	**71.999**
1976 Total	**8.408**	**15.441**	**4.333**	**10.035**	**22.685**	**31.429**	**19.065**	**19.099**	**21.513**	**.008**	**76.012**
1977 Total	**8.207**	**15.689**	**4.217**	**10.177**	**23.193**	**32.307**	**19.784**	**19.820**	**22.591**	**.007**	**78.000**
1978 Total	**8.272**	**16.156**	**4.269**	**10.481**	**23.277**	**32.733**	**20.580**	**20.615**	**23.587**	**.002**	**79.986**
1979 Total	**7.934**	**15.842**	**4.333**	**10.627**	**24.211**	**33.962**	**20.436**	**20.471**	**23.987**	**.002**	**80.903**
1980 Total	**7.504**	**15.848**	**4.097**	**10.594**	**22.673**	**32.152**	**19.658**	**19.696**	**24.359**	**-.001**	**78.289**
1981 Total	**7.103**	**15.353**	**3.831**	**10.638**	**21.404**	**30.836**	**19.476**	**19.513**	**24.525**	**.003**	**76.342**
1982 Total	**7.163**	**15.577**	**3.859**	**10.880**	**19.112**	**27.704**	**19.051**	**19.088**	**24.063**	**.004**	**73.253**
1983 Total	**6.834**	**15.459**	**3.827**	**10.952**	**18.598**	**27.511**	**19.133**	**19.176**	**24.705**	**.003**	**73.101**
1984 Total	**6.992**	**15.777**	**3.989**	**11.463**	**20.208**	**29.643**	**19.804**	**19.851**	**25.741**	**.003**	**76.736**
1985 Total	**6.992**	**15.928**	**3.708**	**11.465**	**19.540**	**28.958**	**20.075**	**20.122**	**26.158**	**-.004**	**76.469**
1986 Total	**6.812**	**15.927**	**3.647**	**11.600**	**19.133**	**28.375**	**20.828**	**20.877**	**26.359**	**.003**	**76.782**
1987 Total	**6.846**	**16.233**	**3.738**	**11.951**	**20.046**	**29.519**	**21.474**	**21.524**	**27.124**	**-.003**	**79.225**
1988 Total	**7.249**	**17.069**	**3.948**	**12.571**	**20.958**	**30.818**	**22.331**	**22.382**	**28.354**	**.003**	**82.844**
1989 Total	**7.495**	**17.774**	**3.952**	**13.156**	**20.888**	**31.396**	**22.568**	**22.622**	**[d]30.044**	**.009**	**84.957**
1990 Total	**6.460**	**16.900**	**3.810**	**13.281**	**21.235**	**31.918**	**22.535**	**22.589**	**30.647**	**-.020**	**84.668**
1991 Total	**6.692**	**17.414**	**3.860**	**13.458**	**20.903**	**31.527**	**22.142**	**22.195**	**30.999**	**.001**	**84.595**
1992 Total	**6.883**	**17.339**	**3.898**	**13.394**	**21.806**	**32.673**	**22.489**	**22.542**	**30.873**	**(s)**	**85.949**
1993 Total	**7.122**	**18.249**	**3.892**	**13.788**	**21.738**	**32.668**	**22.830**	**22.883**	**32.006**	**-.010**	**87.578**
1994 Total	**6.949**	**18.135**	**3.930**	**14.059**	**22.376**	**33.557**	**23.448**	**23.503**	**32.551**	**-.006**	**89.248**
1995 Total	**7.022**	**18.653**	**4.032**	**14.665**	**22.643**	**33.941**	**23.905**	**23.960**	**33.616**	**.003**	**91.221**
1996 Total	**7.556**	**19.643**	**4.218**	**15.161**	**23.364**	**34.905**	**24.456**	**24.511**	**34.626**	**.004**	**94.224**
1997 Total	**7.088**	**19.067**	**4.248**	**15.679**	**23.608**	**35.167**	**24.753**	**24.808**	**35.024**	**.006**	**94.727**
1998 Total	**6.462**	**19.052**	**3.956**	**15.964**	**23.067**	**34.777**	**25.301**	**25.357**	**36.363**	**-.003**	**95.146**
1999 Total	**6.810**	**19.634**	**3.984**	**16.347**	**22.826**	**34.679**	**26.050**	**26.108**	**37.097**	**.006**	**96.774**
2000 Total	**7.147**	**20.453**	**4.192**	**17.129**	**22.740**	**34.616**	**26.645**	**26.705**	**38.180**	**.002**	**98.905**
2001 Total	**6.909**	**20.247**	**4.044**	**17.323**	**21.834**	**32.527**	**26.215**	**26.276**	**37.372**	**.004**	**96.378**
2002 January	1.048	2.323	.550	1.604	1.970	2.799	2.120	2.124	3.162	-.001	8.849
February	.910	1.935	.495	1.445	1.807	2.611	1.938	1.942	2.782	-.004	7.928
March	.855	1.925	.467	1.500	1.928	2.799	2.196	2.200	2.978	-.003	8.421
April	.577	1.532	.345	1.377	1.807	2.682	2.188	2.193	2.866	-.002	7.782
May	.402	1.394	.259	1.380	1.840	2.772	2.279	2.284	3.050	.000	7.830
June	.299	1.524	.210	1.431	1.751	2.687	2.258	2.263	3.388	.004	7.910
July	.271	1.775	.204	1.531	1.824	2.791	2.340	2.346	3.803	.009	8.452
August	.257	1.731	.202	1.492	1.841	2.795	2.342	2.347	3.724	.008	8.374
September	.264	1.484	.204	1.370	1.758	2.651	2.178	2.183	3.284	.004	7.691
October	.414	1.428	.271	1.392	1.884	2.786	2.233	2.238	3.042	-.001	7.843
November	.661	1.658	.385	1.432	1.869	2.755	2.209	2.214	2.935	-.002	8.057
December	.987	2.223	.527	1.616	1.817	2.701	2.345	2.349	3.214	-.001	8.888
Total	**6.946**	**20.934**	**4.118**	**17.568**	**22.096**	**32.830**	**26.626**	**26.683**	**38.228**	**.011**	**98.026**
2003 January	1.214	2.575	.639	1.748	1.944	2.817	2.140	2.144	3.346	.001	9.285
February	1.110	2.275	.586	1.551	1.840	2.650	1.991	1.995	2.943	-.003	8.469
March	.876	1.976	.482	1.517	1.863	2.729	2.204	2.208	3.006	-.003	8.428
April	.590	1.512	[R].342	1.340	1.768	2.651	2.184	2.188	2.806	-.004	7.686
May	.394	1.395	.246	1.352	1.744	2.679	2.250	2.255	3.047	-.001	7.680
June	.292	1.421	.199	1.360	1.649	2.591	2.243	2.248	3.238	.001	7.622
July	.273	1.719	[R].200	1.496	1.768	2.724	2.336	2.341	3.702	.005	8.285
August	.263	1.733	[R].202	1.501	1.779	[R]2.755	2.391	2.397	3.750	.006	8.391
September	.278	1.439	[R].200	1.314	1.742	2.606	2.224	2.229	3.144	.001	7.590
October	.396	1.367	[R].254	[R]1.360	1.876	2.798	2.292	2.297	3.004	-.001	7.821
November	.590	1.569	.336	1.401	[R]1.832	[R]2.743	2.201	[R]2.206	2.960	-.002	[R]7.916
December	.971	2.247	.504	1.627	1.887	2.790	2.349	2.354	3.307	-.001	9.017
Total	**7.248**	**21.237**	**[R]4.192**	**[R]17.564**	**[R]21.693**	**[R]32.528**	**26.805**	**26.863**	**38.255**	**-.003**	**[R]98.189**
2004 January	[R]1.234	[R]2.650	.619	1.729	1.966	2.859	2.188	2.192	3.424	(s)	[R]9.431
February	1.086	2.309	.574	1.588	[R]1.894	[R]2.751	2.106	2.110	3.097	-.001	[R]8.756
March	.794	[R]1.869	[R].444	[R]1.477	[R]1.911	[R]2.808	2.257	2.260	3.008	-.004	[R]8.410
April	[R].561	[R]1.485	[R].330	[R]1.336	[R]1.793	[R]2.694	[R]2.251	[R]2.254	[R]2.833	[R]-.006	[R]7.762
May	.389	1.433	.238	1.394	1.836	2.843	2.310	2.314	3.211	-.001	7.983
5-Month Total	**4.064**	**9.745**	**2.205**	**7.524**	**9.401**	**13.955**	**11.111**	**11.131**	**15.573**	**-.012**	**42.343**
2003 5-Month Total	**4.184**	**9.732**	**2.296**	**7.508**	**9.160**	**13.526**	**10.769**	**10.791**	**15.149**	**-.011**	**41.547**
2002 5-Month Total	**3.793**	**9.108**	**2.116**	**7.306**	**9.352**	**13.664**	**10.721**	**10.743**	**14.839**	**-.010**	**40.811**

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

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

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

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

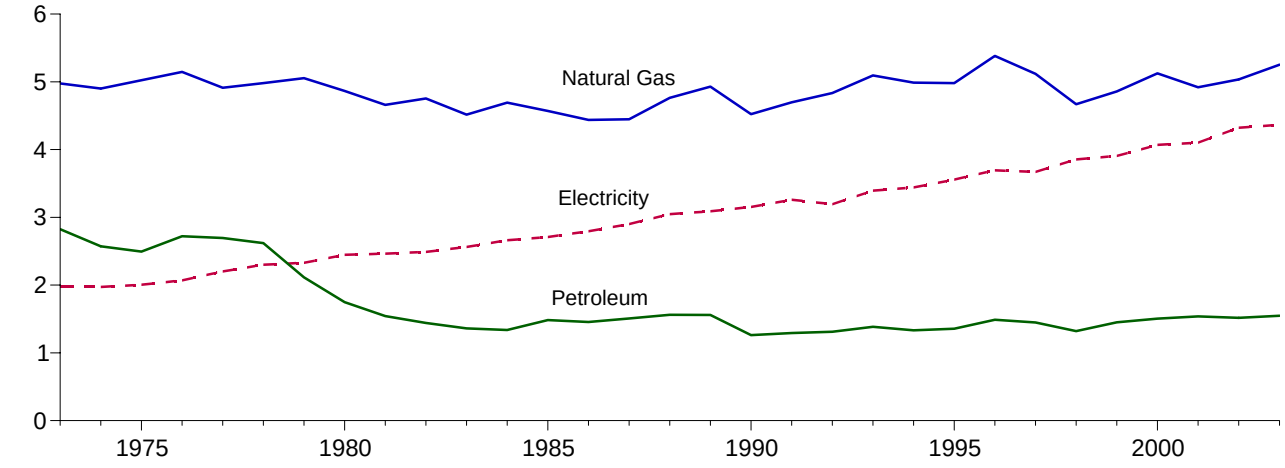
[e] A balancing item. The sum of primary consumption in the five energy-use sectors equals the sum of total consumption in the four end-use sectors. However, total energy consumption does not equal the sum of the sectoral components due to the use of sector-specific conversion factors for coal and natural gas.

R=Revised. (s)=Less than 0.5 trillion Btu.

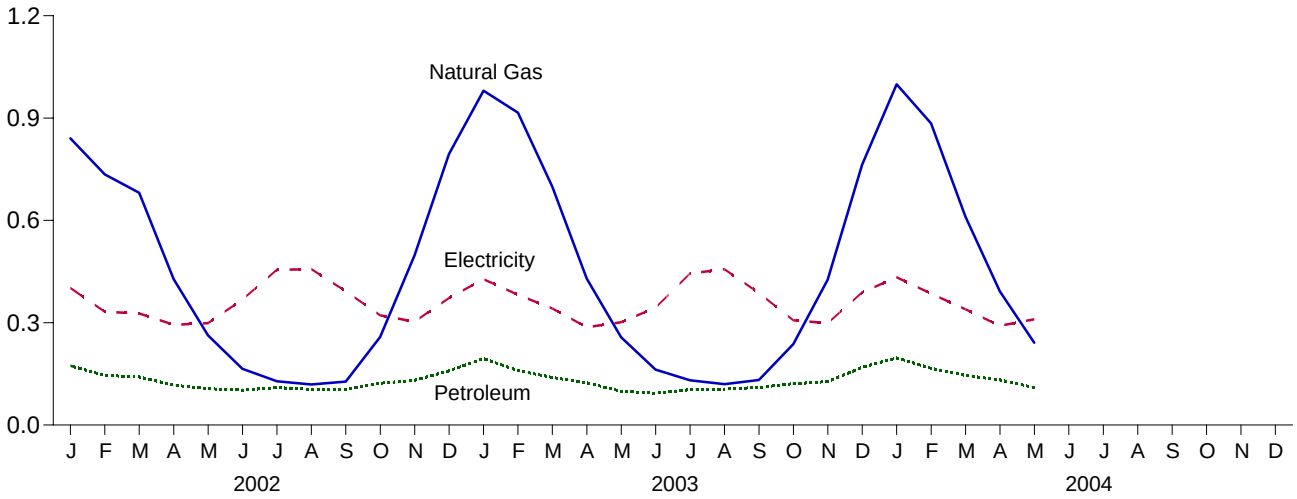
Notes: • Primary consumption includes coal, natural gas, petroleum, nuclear electric power, hydroelectric power, wood, waste, alcohol fuels, geothermal, solar, wind, coal coke net imports, and electricity net imports. • Total consumption includes primary consumption, electricity retail sales, and electrical 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)

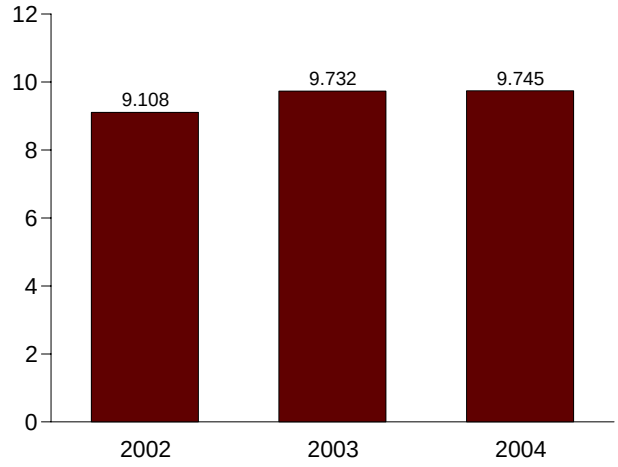
By Major Sources, 1973-2003



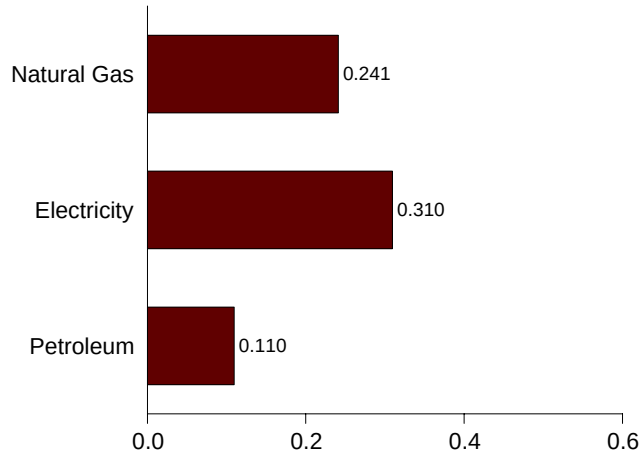
By Major Sources, Monthly



Total, January-May



By Major Sources, May 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											
	Fossil Fuels				Renewable Energy[a]							
	Coal	Natural Gas[b]	Petroleum	Total	Wood	Geo-thermal[c]	Solar[d]	Total	Total Primary	Electricity Retail Sales[e]	Electrical System Energy Losses[f]	Total
1973 Total	**0.094**	**4.977**	**2.825**	**7.896**	**0.354**	**NA**	**NA**	**0.354**	**8.250**	**1.976**	**4.703**	**14.930**
1974 Total	**.082**	**4.901**	**2.573**	**7.557**	**.371**	**NA**	**NA**	**.371**	**7.928**	**1.973**	**4.783**	**14.683**
1975 Total	**.063**	**5.023**	**2.495**	**7.580**	**.425**	**NA**	**NA**	**.425**	**8.006**	**2.007**	**4.829**	**14.842**
1976 Total	**.059**	**5.147**	**2.720**	**7.927**	**.482**	**NA**	**NA**	**.482**	**8.408**	**2.069**	**4.963**	**15.441**
1977 Total	**.057**	**4.913**	**2.695**	**7.666**	**.542**	**NA**	**NA**	**.542**	**8.207**	**2.202**	**5.280**	**15.689**
1978 Total	**.049**	**4.981**	**2.620**	**7.651**	**.622**	**NA**	**NA**	**.622**	**8.272**	**2.301**	**5.582**	**16.156**
1979 Total	**.037**	**5.055**	**2.114**	**7.206**	**.728**	**NA**	**NA**	**.728**	**7.934**	**2.330**	**5.578**	**15.842**
1980 Total	**.031**	**4.866**	**1.748**	**6.645**	**.859**	**NA**	**NA**	**.859**	**7.504**	**2.448**	**5.897**	**15.848**
1981 Total	**.030**	**4.660**	**1.543**	**6.234**	**.869**	**NA**	**NA**	**.869**	**7.103**	**2.464**	**5.786**	**15.353**
1982 Total	**.032**	**4.753**	**1.441**	**6.226**	**.937**	**NA**	**NA**	**.937**	**7.163**	**2.489**	**5.925**	**15.577**
1983 Total	**.031**	**4.516**	**1.362**	**5.909**	**.925**	**NA**	**NA**	**.925**	**6.834**	**2.562**	**6.063**	**15.459**
1984 Total	**.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**	**9.234**	**20.247**
2002 January	.001	.840	.174	1.015	.027	.001	.005	.032	1.048	.402	.873	2.323
February	.001	.735	.145	.881	.024	.001	.005	.029	.910	.332	.692	1.935
March	.001	.681	.141	.823	.027	.001	.005	.032	.855	.327	.742	1.925
April	.001	.428	.117	.546	.026	.001	.005	.031	.577	.294	.661	1.532
May	.001	.263	.106	.370	.027	.001	.005	.032	.402	.299	.693	1.394
June	.001	.165	.102	.268	.026	.001	.005	.031	.299	.368	.857	1.524
July	.001	.128	.109	.239	.027	.001	.005	.032	.271	.455	1.049	1.775
August	.001	.119	.105	.224	.027	.001	.005	.032	.257	.457	1.017	1.731
September	.001	.128	.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	.630	.026	.001	.005	.031	.661	.303	.693	1.658
December	.001	.794	.159	.955	.027	.001	.005	.032	.987	.372	.863	2.223
Total	**.011**	**5.036**	**1.516**	**6.564**	**.313**	**.010**	**.059**	**.382**	**6.946**	**4.323**	**9.665**	**20.934**
2003 January	.001	.980	.195	1.177	.030	.002	.005	.037	1.214	.428	.933	2.575
February	.001	.916	.160	1.077	.028	.001	.004	.033	1.110	.382	.782	2.275
March	.001	.699	.140	.839	.030	.002	.005	.037	.876	.342	.758	1.976
April	.001	.429	.124	.554	.030	.001	.005	.036	.590	.287	.635	1.512
May	.001	.257	.099	.357	.030	.002	.005	.037	.394	.301	.700	1.395
June	.001	.163	.093	.257	.030	.001	.005	.036	.292	.344	.784	1.421
July	.001	.131	.104	.236	.030	.002	.005	.037	.273	.444	1.002	1.719
August	.001	.120	.105	.226	.030	.002	.005	.037	.263	.457	1.013	1.733
September	.001	.132	.110	.243	.030	.001	.005	.036	.278	.387	.774	1.439
October	.001	.237	.121	.359	.030	.002	.005	.037	.396	.307	.664	1.367
November	.001	.426	.127	.554	.030	.001	.005	.036	.590	.298	.681	1.569
December	.002	.763	.169	.934	.030	.002	.005	.037	.971	.389	.887	2.247
Total	**.012**	**5.253**	**1.547**	**6.813**	**.359**	**.018**	**.058**	**.435**	**7.248**	**4.367**	**9.622**	**21.237**
2004 January	.002	R .999	.197	R 1.197	.030	.002	.005	.037	R 1.234	.433	.983	R 2.650
February	.001	.884	.166	1.052	.028	.001	.005	.034	1.086	.385	.837	2.309
March	.001	R .611	.146	.757	.030	.002	.005	.037	.794	.339	.735	R 1.869
April	.001	R .392	R .132	R .525	.029	.001	.005	.036	R .561	R .291	R .633	R 1.485
May	.001	F .241	.110	.352	.030	.002	.005	.037	.389	.310	.734	1.433
5-Month Total	**.005**	**E 3.127**	**.751**	**3.883**	**.149**	**.007**	**.024**	**.181**	**4.064**	**1.758**	**3.922**	**9.745**
2003 5-Month Total	**.005**	**3.281**	**.717**	**4.004**	**.149**	**.007**	**.024**	**.180**	**4.184**	**1.740**	**3.808**	**9.732**
2002 5-Month Total	**.005**	**2.947**	**.683**	**3.635**	**.129**	**.004**	**.024**	**.158**	**3.793**	**1.653**	**3.662**	**9.108**

[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.
[f] See Note 12 at end of section.

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

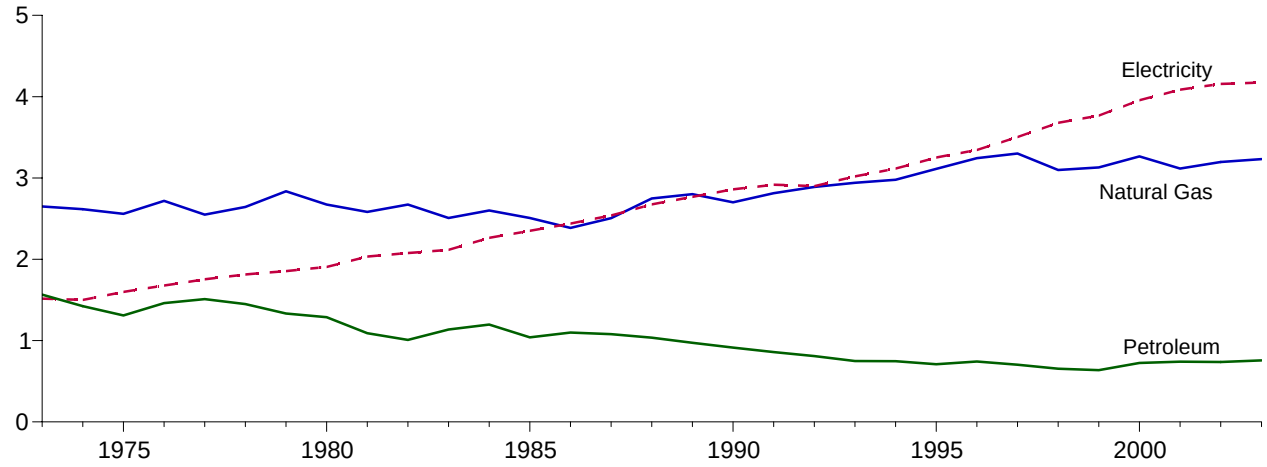
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

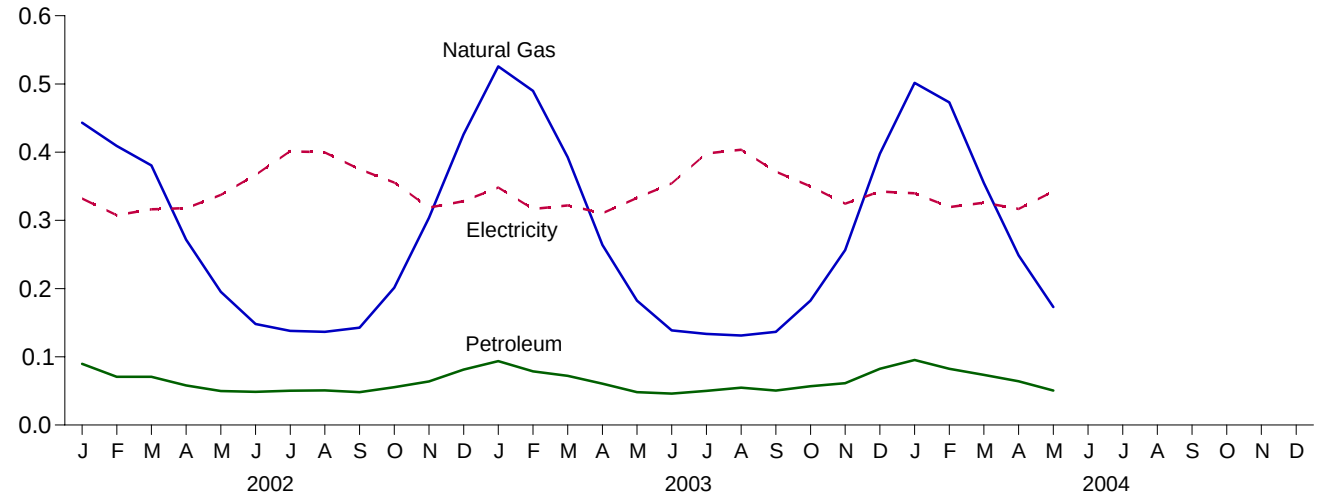
Additional Notes and Sources: See end of section.

Figure 2.3 Commercial Sector Energy Consumption
(Quadrillion Btu)

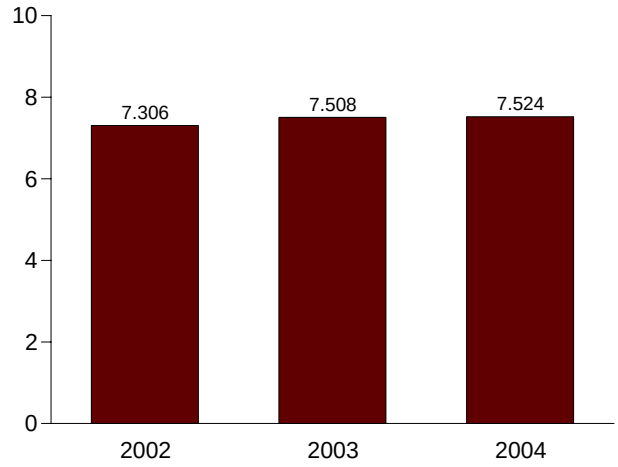
By Major Sources, 1973-2003



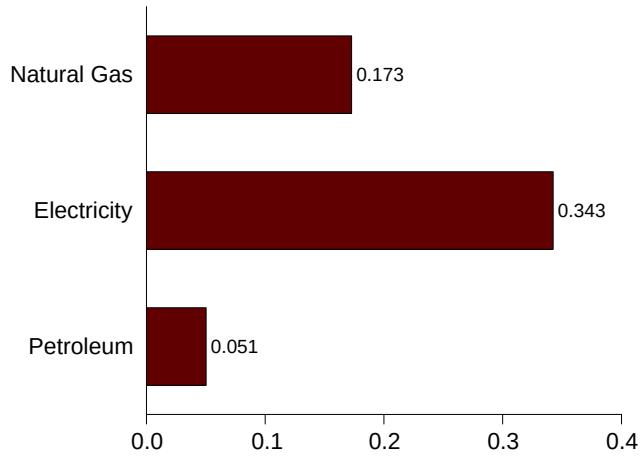
By Major Sources, Monthly



Total, January-May



By Major Sources, May 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											
	Fossil Fuels				Renewable Energy[a]							
	Coal	Natural Gas[b]	Petroleum	Total	Hydro-power[c]	Wood and Waste	Geo-thermal[d]	Total	Total Primary	Electricity Retail Sales[e]	Electrical System Energy Losses[f]	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**	**9.194**	**17.323**
2002 January	.010	.443	.090	.543	(s)	.007	.001	.007	.550	.332	.721	1.604
February	.009	.409	.071	.489	(s)	.006	.001	.007	.495	.308	.642	1.445
March	.008	.381	.071	.460	(s)	.007	.001	.007	.467	.316	.717	1.500
April	.007	.272	.058	.337	(s)	.007	.001	.007	.345	.318	.715	1.377
May	.006	.195	.050	.251	(s)	.007	.001	.008	.259	.337	.784	1.380
June	.005	.148	.049	.202	(s)	.007	.001	.008	.210	.367	.854	1.431
July	.007	.138	.050	.196	(s)	.008	.001	.008	.204	.401	.925	1.531
August	.006	.137	.051	.194	(s)	.008	.001	.008	.202	.400	.890	1.492
September	.005	.143	.048	.196	(s)	.007	.001	.008	.204	.375	.791	1.370
October	.006	.201	.055	.263	(s)	.007	.001	.008	.271	.355	.766	1.392
November	.009	.304	.064	.377	(s)	.007	.001	.008	.385	.319	.729	1.432
December	.012	.426	.081	.519	(s)	.007	.001	.007	.527	.328	.761	1.616
Total	**.091**	**3.196**	**.738**	**4.025**	**(s)**	**.084**	**.009**	**.093**	**4.118**	**4.157**	**9.293**	**17.568**
2003 January	.012	.526	.094	.631	(s)	.007	.001	.008	.639	.348	.760	1.748
February	.010	.490	.079	.579	(s)	.007	.001	.008	.586	.317	.648	1.551
March	.007	.393	.072	.472	(s)	.008	.001	.009	.482	.322	.714	1.517
April	.008	.264	.061	.333	(s)	.008	.001	.009	R .342	.311	.687	1.340
May	.006	R .182	.048	.237	(s)	.008	.001	.009	.246	.333	.773	1.352
June	.005	.139	.046	.190	(s)	.008	.001	.009	.199	.354	.807	1.360
July	.007	.134	.050	.191	(s)	.008	.001	.009	R .200	.398	.897	1.496
August	.007	.131	.055	R .193	(s)	.008	.001	.009	R .202	.403	.895	1.501
September	.005	.137	.051	.192	(s)	.007	.001	.008	R .200	.371	.742	1.314
October	.006	R .182	.057	.245	(s)	.008	.001	.009	R .254	.350	.756	R 1.360
November	.009	.256	.061	.327	(s)	.008	.001	.009	.336	.325	.740	1.401
December	.014	.398	.082	.494	(s)	.008	.001	.009	.504	.342	.781	1.627
Total	**.099**	R **3.231**	**.756**	R **4.085**	**.001**	**.090**	**.015**	**.107**	R **4.192**	**4.174**	**9.198**	R **17.564**
2004 January	.013	.502	.095	.610	(s)	.008	.001	.009	.619	.340	.771	1.729
February	.010	.473	.082	.566	(s)	.007	.001	.008	.574	.320	.695	1.588
March	.007	R .355	.073	R .435	(s)	.008	.001	.009	R .444	.326	.707	R 1.477
April	.008	R .249	R .064	R .321	(s)	.008	.001	R .009	R .330	R .317	R .688	R 1.336
May	.006	F .173	.051	.229	(s)	.008	.001	.009	.238	.343	.813	1.394
5-Month Total	**.044**	E **1.751**	**.366**	**2.161**	**(s)**	**.038**	**.006**	**.044**	**2.205**	**1.645**	**3.673**	**7.524**
2003 5-Month Total	**.044**	**1.855**	**.354**	**2.252**	**.001**	**.037**	**.006**	**.044**	**2.296**	**1.630**	**3.582**	**7.508**
2002 5-Month Total	**.040**	**1.700**	**.339**	**2.079**	**(s)**	**.033**	**.004**	**.037**	**2.116**	**1.611**	**3.579**	**7.306**

[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.

[f] See Note 12 at end of section.

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

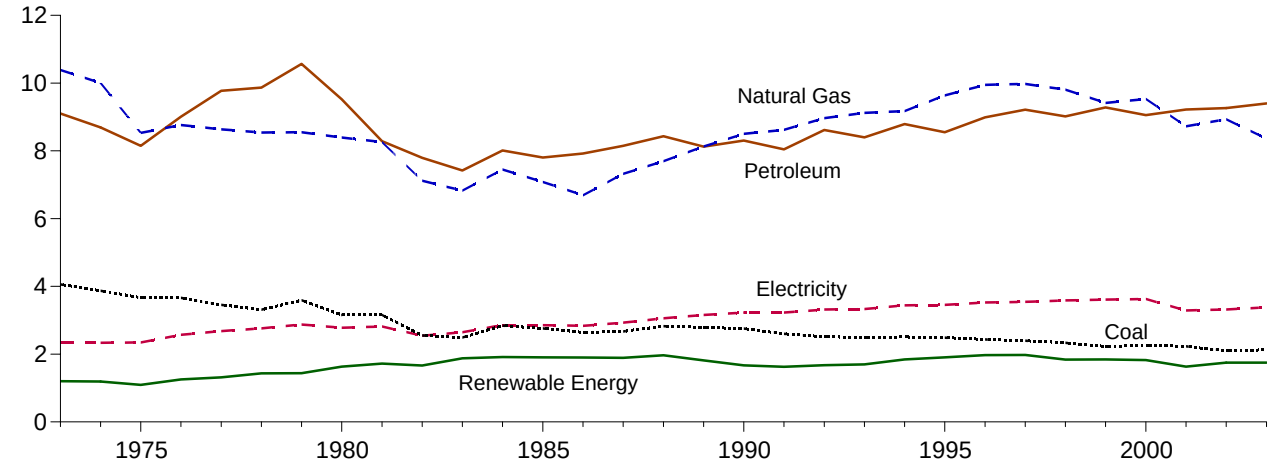
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

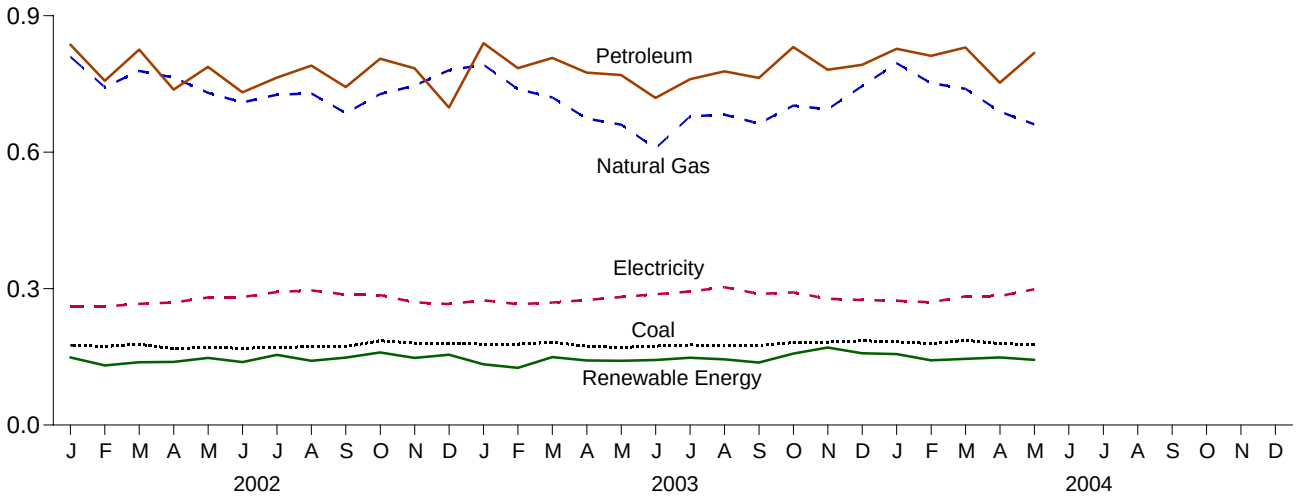
Additional Notes and Sources: See end of section.

Figure 2.4 Industrial Sector Energy Consumption
(Quadrillion Btu)

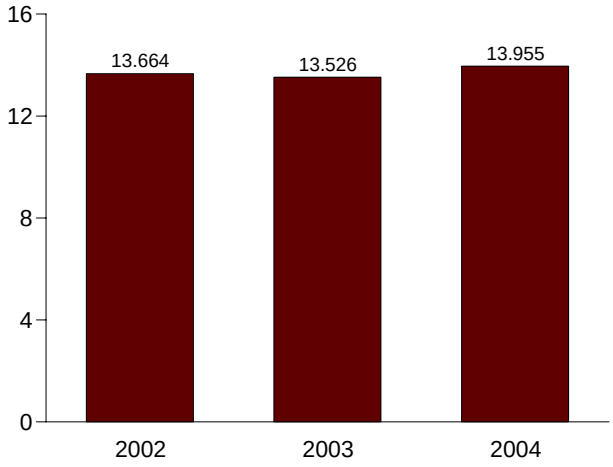
By Major Sources, 1973-2003



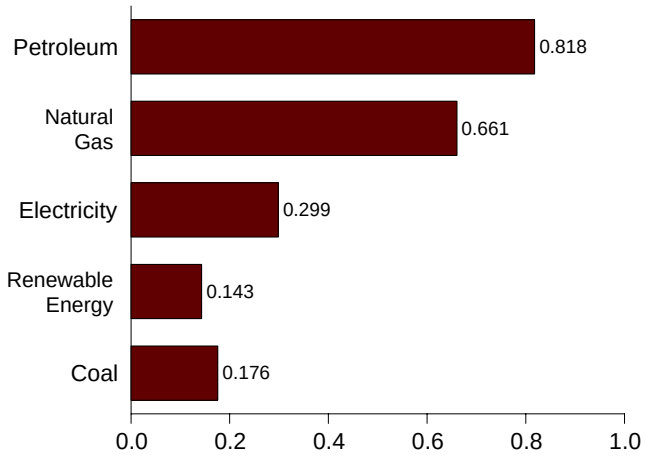
By Major Sources, Monthly



Total, January-May



By Major Sources, May 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											
	Fossil Fuels				Renewable Energy[a]							
	Coal	Natural Gas[b]	Petroleum	Total[c]	Hydro-power[d]	Wood[e] and Waste[f]	Geo-thermal[g]	Total	Total Primary	Electricity Retail Sales[h]	Electrical System Energy Losses[i]	Total[c]
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**	**.032**	**1.593**	**.005**	**1.630**	**21.834**	**3.290**	**7.404**	**32.527**
2002 January	.175	.810	.837	1.821	.003	.145	(s)	.149	1.970	.261	.568	2.799
February	.173	.743	.757	1.676	.003	.128	(s)	.131	1.807	.261	.544	2.611
March	.177	.779	.826	1.789	.003	.135	(s)	.138	1.928	.267	.605	2.799
April	.168	.764	.738	1.668	.003	.135	(s)	.139	1.807	.269	.605	2.682
May	.170	.731	.788	1.693	.003	.144	(s)	.147	1.840	.281	.652	2.772
June	.169	.710	.732	1.612	.003	.136	(s)	.139	1.751	.281	.655	2.687
July	.170	.726	.764	1.670	.003	.151	(s)	.154	1.824	.292	.674	2.791
August	.173	.729	.790	1.699	.003	.138	(s)	.141	1.841	.296	.659	2.795
September	.172	.686	.743	1.610	.002	.145	(s)	.148	1.758	.287	.606	2.651
October	.185	.728	.806	1.725	.003	.156	(s)	.159	1.884	.286	.616	2.786
November	.180	.746	.785	1.721	.005	.143	(s)	.148	1.869	.270	.617	2.755
December	.180	.780	.698	1.662	.005	.149	(s)	.155	1.817	.266	.618	2.701
Total	**2.094**	**8.931**	**9.262**	**20.348**	**.039**	**1.705**	**.005**	**1.748**	**22.096**	**3.317**	**7.416**	**32.830**
2003 January	.178	.792	.840	1.811	.004	.129	(s)	.134	1.944	.274	.598	2.817
February	.178	.739	.785	1.715	.004	.122	(s)	.126	1.840	.266	.544	2.650
March	.182	.720	.807	1.713	.005	.144	(s)	.149	1.863	.269	.597	2.729
April	.173	.674	.775	1.626	.004	.137	(s)	.142	1.768	.275	.608	2.651
May	.171	.661	.769	1.603	.005	.135	(s)	.141	1.744	.281	.654	2.679
June	.174	.609	.719	1.505	.005	.138	(s)	.143	1.649	.288	.655	2.591
July	.176	.679	.761	1.620	.005	.143	(s)	.148	1.768	.294	.662	2.724
August	.174	.682	.778	1.635	.005	.139	(s)	.144	1.779	.303	.672	R 2.755
September	.175	.663	.763	1.604	.004	.133	(s)	.137	1.742	.288	.576	2.606
October	.181	.702	.831	1.719	.004	.153	(s)	.157	1.876	.292	.630	2.798
November	.183	R .694	.781	R 1.661	.004	.166	(s)	.170	R 1.832	.278	.633	R 2.743
December	.185	.745	.792	1.729	.006	.151	(s)	.158	1.887	.275	.628	2.790
Total	**2.129**	R **8.361**	**9.402**	R **19.942**	**.057**	**1.689**	**.005**	**1.750**	R **21.693**	**3.383**	**7.453**	R **32.528**
2004 January	.183	.796	.827	1.810	.005	.150	(s)	.156	1.966	.273	.620	2.859
February	.179	R .752	.812	R 1.752	.004	.138	(s)	.142	R 1.894	.270	.587	R 2.751
March	.186	R .740	.830	R 1.765	.004	.141	(s)	.145	R 1.911	.283	.614	R 2.808
April	R .179	R .689	R .753	R 1.645	.004	R .145	(s)	R .149	R 1.793	R .284	R .617	R 2.694
May	.176	F .661	.818	1.693	.004	.139	(s)	.143	1.836	.299	.708	2.843
5-Month Total	**.904**	E **3.637**	**4.040**	**8.665**	**.021**	**.713**	**.002**	**.736**	**9.401**	**1.409**	**3.145**	**13.955**
2003 5-Month Total	**.882**	**3.586**	**3.977**	**8.468**	**.023**	**.667**	**.002**	**.692**	**9.160**	**1.366**	**3.001**	**13.526**
2002 5-Month Total	**.864**	**3.826**	**3.944**	**8.648**	**.015**	**.688**	**.002**	**.704**	**9.352**	**1.339**	**2.973**	**13.664**

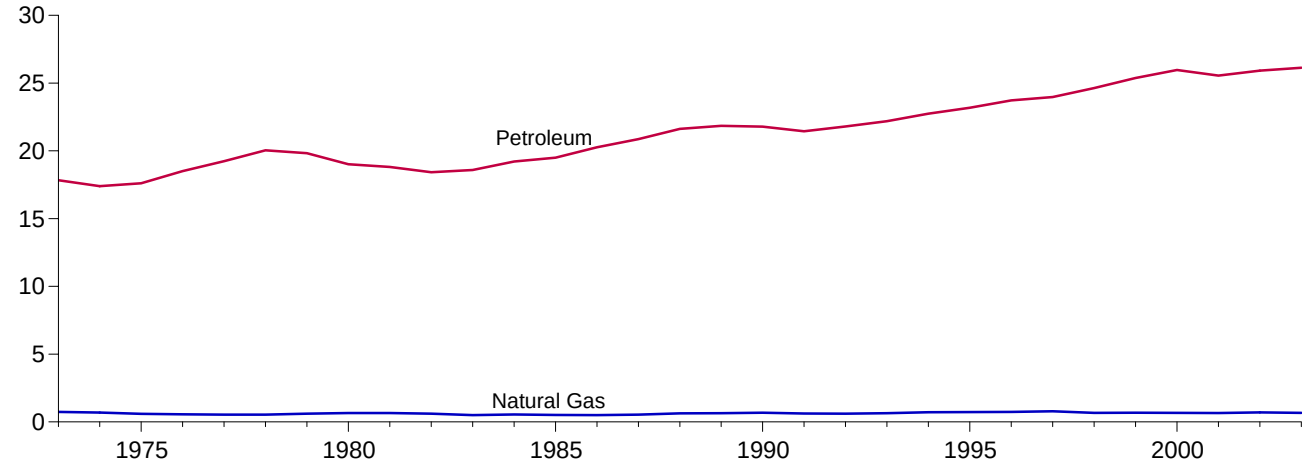
[a] All values are estimated; see Table 10.2b.
[b] Natural gas, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
[c] Includes coal coke net imports, which are not separately displayed. See Table 1.4.
[d] Conventional hydroelectric power.
[e] Wood, black liquor, and other wood waste.
[f] Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.
[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 at end of section.

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

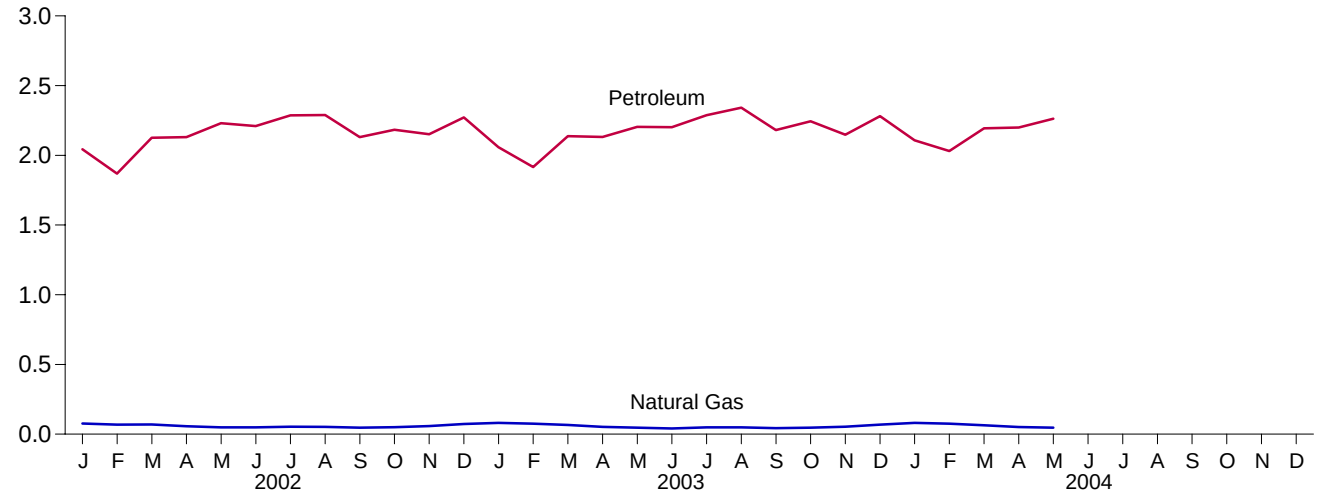
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: http://www.eia.doe.gov/emeu/mer/consump.html.
Additional Notes and Sources: See end of section.

Figure 2.5 Transportation Sector Energy Consumption
(Quadrillion Btu)

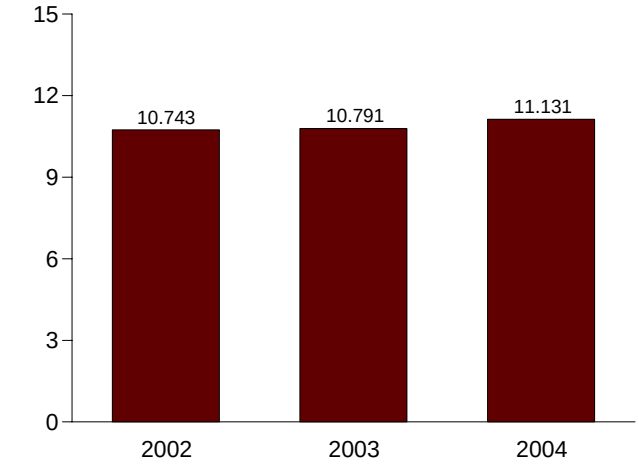
By Major Sources, 1973-2003



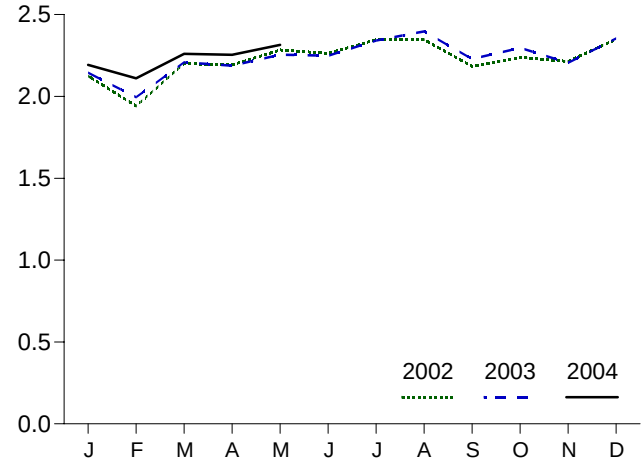
By Major Sources, Monthly



Total, January-May



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[f]	Electrical System Energy Losses[g]	Total[d]
	Fossil Fuels				Renewable Energy[a]				
	Coal	Natural Gas[b]	Petroleum[c,d]	Total	Alcohol Fuels[d,e]	Total Primary[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	**(h)**	**.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	**(h)**	**.519**	**19.504**	**20.023**	**.052**	**20.075**	**.014**	**.033**	**20.122**
1986 Total	**(h)**	**.499**	**20.269**	**20.768**	**.060**	**20.828**	**.015**	**.034**	**20.877**
1987 Total	**(h)**	**.535**	**20.870**	**21.405**	**.069**	**21.474**	**.016**	**.035**	**21.524**
1988 Total	**(h)**	**.632**	**21.629**	**22.261**	**.070**	**22.331**	**.016**	**.035**	**22.382**
1989 Total	**(h)**	**.649**	**21.848**	**22.497**	**.071**	**22.568**	**.016**	**.038**	**22.622**
1990 Total	**(h)**	**.680**	**21.792**	**22.472**	**.063**	**22.535**	**.016**	**.037**	**22.589**
1991 Total	**(h)**	**.620**	**21.448**	**22.069**	**.073**	**22.142**	**.016**	**.037**	**22.195**
1992 Total	**(h)**	**.608**	**21.798**	**22.406**	**.083**	**22.489**	**.016**	**.037**	**22.542**
1993 Total	**(h)**	**.645**	**[d]22.185**	**22.830**	**[d].097**	**[d]22.830**	**.016**	**.037**	**[d]22.883**
1994 Total	**(h)**	**.709**	**22.739**	**23.448**	**.109**	**23.448**	**.017**	**.038**	**23.503**
1995 Total	**(h)**	**.724**	**23.181**	**23.905**	**.117**	**23.905**	**.017**	**.039**	**23.960**
1996 Total	**(h)**	**.737**	**23.719**	**24.456**	**.084**	**24.456**	**.017**	**.038**	**24.511**
1997 Total	**(h)**	**.780**	**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	**(h)**	**.672**	**25.973**	**26.645**	**.139**	**26.645**	**.018**	**.042**	**26.705**
2001 Total	**(h)**	**.659**	**25.556**	**26.215**	**.147**	**26.215**	**.019**	**.042**	**26.276**
2002 January	(h)	.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	(h)	.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
June	(h)	.048	2.210	2.258	.012	2.258	.002	.004	2.263
July	(h)	.053	2.287	2.340	.015	2.340	.002	.004	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	**(h)**	**.702**	**25.924**	**26.626**	**.174**	**26.626**	**.018**	**.039**	**26.683**
2003 January	(h)	.081	2.059	2.140	.017	2.140	.001	.003	2.144
February	(h)	.075	1.916	1.991	.020	1.991	.001	.003	1.995
March	(h)	.066	2.138	2.204	.017	2.204	.001	.003	2.208
April	(h)	.052	2.131	2.184	.020	2.184	.001	.003	2.188
May	(h)	.046	2.205	2.250	.019	2.250	.001	.003	2.255
June	(h)	.041	2.202	2.243	.019	2.243	.002	.004	2.248
July	(h)	.048	2.288	2.336	.020	2.336	.002	.004	2.341
August	(h)	.049	2.342	2.391	.021	2.391	.002	.004	2.397
September	(h)	.042	2.182	2.224	.018	2.224	.002	.003	2.229
October	(h)	.047	2.245	2.292	.021	2.292	.002	.003	2.297
November	(h)	.053	2.148	2.201	.024	2.201	.001	.003	[R]2.206
December	(h)	.068	2.280	2.349	.025	2.349	.002	.003	2.354
Total	**(h)**	**.670**	**26.135**	**26.805**	**.239**	**26.805**	**.018**	**.040**	**26.863**
2004 January	(h)	[E].080	2.108	2.188	.024	2.188	.001	.003	2.192
February	(h)	[E].075	2.031	2.106	.022	2.106	.001	.003	2.110
March	(h)	[E].063	2.193	2.257	.024	2.257	.001	.002	2.260
April	(h)	[RE].051	[R]2.199	[R]2.251	.024	[R]2.251	.001	[R].002	[R]2.254
May	(h)	[E].046	2.263	2.310	.025	2.310	.001	.003	2.314
5-Month Total	**(h)**	**[E].316**	**10.795**	**11.111**	**.120**	**11.111**	**.006**	**.014**	**11.131**
2003 5-Month Total	**(h)**	**.321**	**10.448**	**10.769**	**.092**	**10.769**	**.007**	**.015**	**10.791**
2002 5-Month Total	**(h)**	**.321**	**10.400**	**10.721**	**.062**	**10.721**	**.007**	**.015**	**10.743**

[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 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.

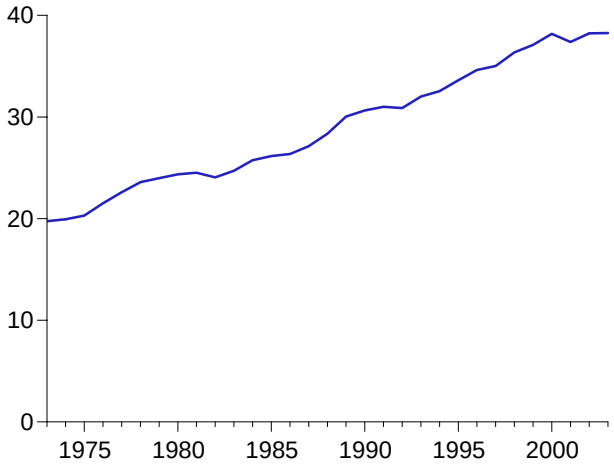
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

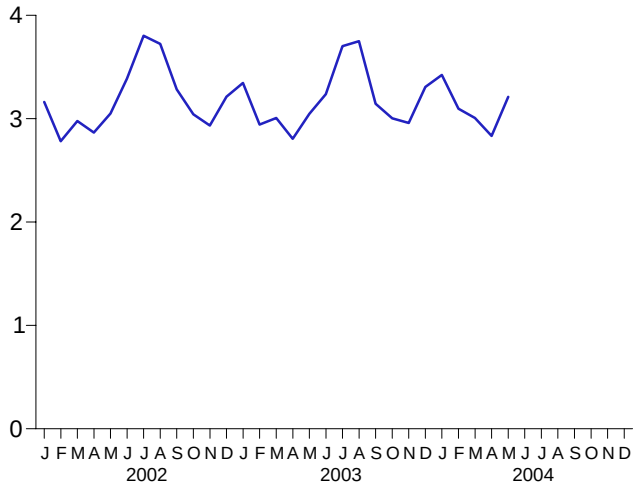
Additional Notes and Sources: See end of section.

Figure 2.6 Electric Power Sector Energy Consumption
(Quadrillion Btu)

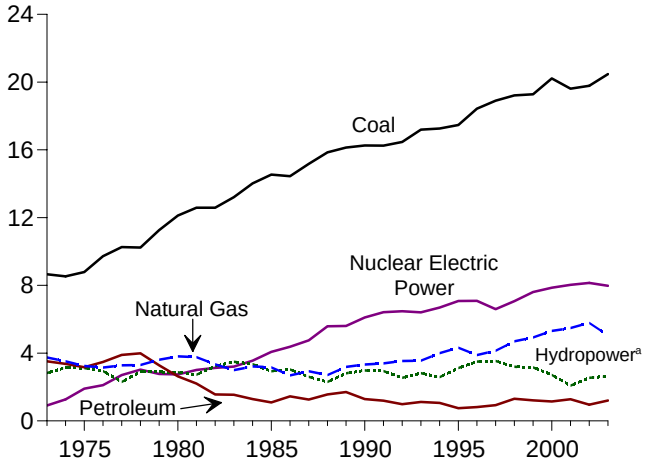
Total, 1973-2003



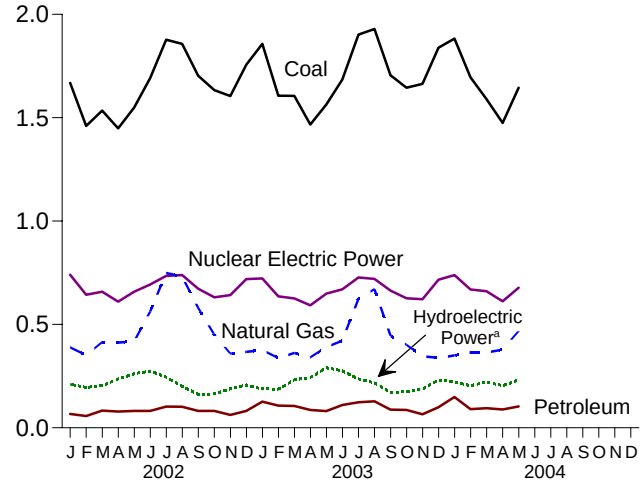
Total, Monthly



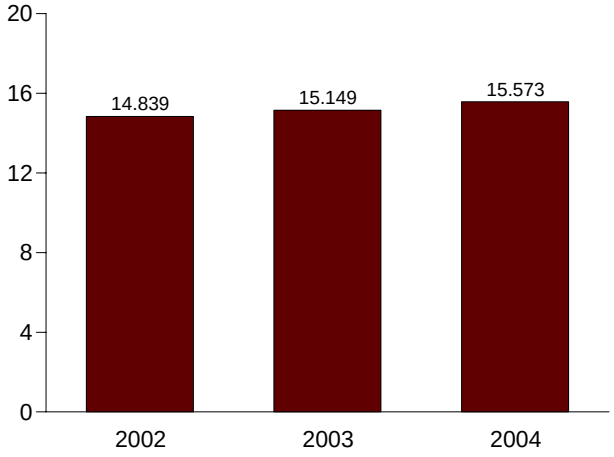
By Major Sources, 1973-2003



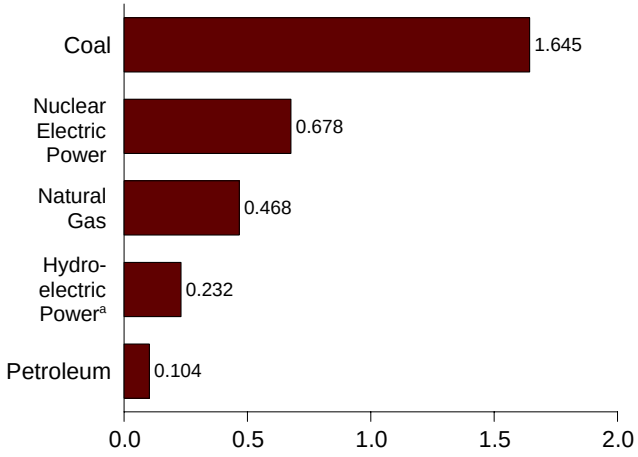
By Major Sources, Monthly



Total, January-May



By Major Sources, May 2004



[a]Conventional and pumped storage hydroelectric power.
Note: Because vertical scales differ, graphs should not be compared.

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

Table 2.6 Electric Power Sector Energy Consumption

(Quadrillion Btu)

	Primary Consumption												
	Fossil Fuels						Renewable Energy						
	Coal	Natural Gas[a]	Petroleum	Total	Nuclear Electric Power	Hydro-electric Pumped Storage[b]	Conventional Hydroelectric Power	Wood[c] and Waste[d]	Geo-thermal[e]	Solar[f] and Wind[g]	Total	Electricity Net Imports	Total Primary
1973 Total	**8.658**	**3.748**	**3.515**	**15.921**	**0.910**	**(h)**	**2.827**	**0.003**	**0.043**	**NA**	**2.873**	**0.049**	**19.753**
1974 Total	**8.534**	**3.519**	**3.365**	**15.418**	**1.272**	**(h)**	**3.143**	**.003**	**.053**	**NA**	**3.199**	**.043**	**19.933**
1975 Total	**8.786**	**3.240**	**3.166**	**15.191**	**1.900**	**(h)**	**3.122**	**.002**	**.070**	**NA**	**3.194**	**.021**	**20.307**
1976 Total	**9.720**	**3.152**	**3.477**	**16.349**	**2.111**	**(h)**	**2.943**	**.003**	**.078**	**NA**	**3.024**	**.029**	**21.513**
1977 Total	**10.262**	**3.284**	**3.901**	**17.446**	**2.702**	**(h)**	**2.301**	**.005**	**.077**	**NA**	**2.383**	**.059**	**22.591**
1978 Total	**10.238**	**3.297**	**3.987**	**17.522**	**3.024**	**(h)**	**2.905**	**.003**	**.064**	**NA**	**2.973**	**.067**	**23.587**
1979 Total	**11.260**	**3.613**	**3.283**	**18.156**	**2.776**	**(h)**	**2.897**	**.005**	**.084**	**NA**	**2.986**	**.069**	**23.987**
1980 Total	**12.123**	**3.810**	**2.634**	**18.567**	**2.739**	**(h)**	**2.867**	**.005**	**.110**	**NA**	**2.982**	**.071**	**24.359**
1981 Total	**12.583**	**3.768**	**2.202**	**18.553**	**3.008**	**(h)**	**2.725**	**.004**	**.123**	**NA**	**2.852**	**.113**	**24.525**
1982 Total	**12.582**	**3.342**	**1.568**	**17.491**	**3.131**	**(h)**	**3.233**	**.003**	**.105**	**NA**	**3.341**	**.100**	**24.063**
1983 Total	**13.213**	**2.998**	**1.544**	**17.754**	**3.203**	**(h)**	**3.494**	**.004**	**.129**	**(s)**	**3.627**	**.121**	**24.705**
1984 Total	**14.019**	**3.220**	**1.286**	**18.526**	**3.553**	**(h)**	**3.353**	**.009**	**.165**	**(s)**	**3.527**	**.135**	**25.741**
1985 Total	**14.542**	**3.160**	**1.090**	**18.792**	**4.076**	**(h)**	**2.937**	**.014**	**.198**	**(s)**	**3.150**	**.140**	**26.158**
1986 Total	**14.444**	**2.691**	**1.452**	**18.586**	**4.380**	**(h)**	**3.038**	**.012**	**.219**	**(s)**	**3.270**	**.122**	**26.359**
1987 Total	**15.173**	**2.935**	**1.257**	**19.365**	**4.754**	**(h)**	**2.602**	**.015**	**.229**	**(s)**	**2.846**	**.158**	**27.124**
1988 Total	**15.850**	**2.709**	**1.563**	**20.123**	**5.587**	**(h)**	**2.302**	**.017**	**.217**	**(s)**	**2.536**	**.108**	**28.354**
1989 Total[i]	**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**	**5.481**	**1.277**	**26.371**	**8.033**	**-.090**	**2.169**	**.450**	**.289**	**.074**	**2.982**	**.075**	**37.372**
2002 January	1.668	.389	.067	2.124	.740	-.008	.218	.043	.027	.008	.296	.009	3.162
February	1.460	.351	.057	1.868	.644	-.006	.201	.037	.024	.007	.270	.007	2.782
March	1.535	.415	.084	2.033	.658	-.007	.210	.043	.026	.009	.288	.006	2.978
April	1.448	.412	.079	1.939	.610	-.006	.242	.040	.023	.011	.316	.006	2.866
May	1.549	.418	.082	2.049	.658	-.005	.267	.041	.026	.011	.345	.003	3.050
June	1.691	.562	.082	2.335	.693	-.009	.283	.043	.024	.012	.362	.007	3.388
July	1.877	.749	.102	2.728	.735	-.010	.255	.046	.027	.010	.337	.012	3.803
August	1.857	.732	.102	2.691	.739	-.009	.211	.046	.026	.011	.293	.010	3.724
September	1.703	.580	.082	2.365	.673	-.008	.170	.045	.025	.008	.248	.006	3.284
October	1.633	.451	.081	2.166	.631	-.007	.170	.043	.026	.008	.247	.005	3.042
November	1.605	.359	.062	2.026	.642	-.007	.195	.043	.025	.007	.270	.004	2.935
December	1.756	.367	.081	2.205	.719	-.007	.214	.046	.026	.008	.293	.003	3.214
Total	**19.783**	**5.785**	**.961**	**26.529**	**8.143**	**-.088**	**2.636**	**.516**	**.305**	**.110**	**3.567**	**.078**	**38.228**
2003 January	1.857	.376	.126	2.360	.722	-.008	.195	.042	.024	.006	.267	.005	3.346
February	1.607	.337	.107	2.051	.636	-.008	.195	.036	.022	.007	.260	.004	2.943
March	1.605	.362	.105	2.073	.626	-.008	.241	.042	.023	.011	.317	-.001	3.006
April	1.467	.341	.086	1.894	.593	-.006	.248	.040	.022	.012	.322	.003	2.806
May	1.563	.391	.081	2.035	.649	-.006	.297	.039	.022	.010	.368	.001	3.047
June	1.685	.421	.110	2.216	.670	-.008	.283	.041	.023	.011	.358	.001	3.238
July	1.902	.624	.124	2.650	.727	-.008	.244	.046	.023	.010	.323	.010	3.702
August	1.929	.670	.128	2.728	.721	-.008	.226	.045	.023	.009	.302	.008	3.750
September	1.706	.445	.088	2.239	.664	-.008	.180	.040	.023	.009	.251	-.002	3.144
October	1.645	.401	.087	2.133	.627	-.006	.181	.044	.023	.010	.258	-.006	3.004
November	1.663	.346	.066	2.075	.622	-.007	.195	.044	.023	.010	.272	-.003	2.960
December	1.838	.338	.099	2.275	.716	-.007	.238	.047	.026	.011	.322	.001	3.307
Total	**20.468**	**5.053**	**1.207**	**26.729**	**7.973**	**-.088**	**2.722**	**.507**	**.276**	**.114**	**3.619**	**.022**	**38.255**
2004 January	1.883	.350	.149	2.382	.739	-.008	.230	.045	.026	.009	.310	(s)	3.424
February	1.695	.365	.091	2.151	.669	-.006	.209	.040	.025	.010	.284	.000	3.097
March	1.590	.364	.095	2.049	.661	-.007	.228	.042	.025	.013	.309	-.003	3.008
April	R 1.475	R .378	R .089	R 1.941	R .612	R -.007	R .210	R .040	.024	R .013	R .286	(s)	R 2.833
May	1.645	.468	.104	2.217	.678	-.007	.239	.043	.025	.017	.323	.001	3.211
5-Month Total	**8.288**	**1.925**	**.527**	**10.739**	**3.359**	**-.034**	**1.115**	**.210**	**.124**	**.062**	**1.512**	**-.002**	**15.573**
2003 5-Month Total	**8.100**	**1.807**	**.506**	**10.413**	**3.226**	**-.035**	**1.176**	**.199**	**.113**	**.045**	**1.533**	**.013**	**15.149**
2002 5-Month Total	**7.660**	**1.986**	**.368**	**10.014**	**3.310**	**-.032**	**1.138**	**.205**	**.126**	**.047**	**1.516**	**.031**	**14.839**

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

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

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

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

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

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

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

Transportation Sector—An energy-consuming sector that consists of all vehicles whose primary purpose is transporting people and/or goods from one physical location to another. Included are automobiles; trucks; buses; motorcycles; trains, subways, and other rail vehicles; aircraft; and ships, barges, and other waterborne vehicles. Vehicles whose primary purpose is not transportation (e.g., construction cranes and bulldozers, farming vehicles, and warehouse tractors and forklifts) are classified in the sector of their primary use. *Note:* Various EIA programs differ in sectoral coverage. For further information see: http://www.eia.doe.gov/neic/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—For 1973-1979, consumption of distillate fuel is assumed to be the amount of petroleum (minus small amounts of kerosene and kerosene-type jet fuel deliveries) consumed in gas turbine and internal combustion plants. For 1980 forward, consumption of distillate fuel is assumed to be the amount of light oil (minus small amounts of kerosene deliveries through 1982) consumed by the electric power sector. See Table 7.3e.

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

Following are notes on the individual sector groupings:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Following are notes on the individual sector groupings:

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

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

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

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

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

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

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

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

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

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

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

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

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

Note 12. Electrical System Energy Losses: Electrical system energy losses are calculated as the difference between total primary consumption by the electric power sector-see Table 2.6-and the total energy content of the retail sales of electricity-see Tables 7.5 and A6. Most of these losses occur at steam-electric power plants (conventional and nuclear) in the conversion of heat energy into mechanical energy to turn electric generators. The loss is a thermodynamically necessary feature of the steam-electric cycle. Part of the energy input-to-output losses is a result of imputing fossil energy equivalent inputs for hydroelectric and other energy sources, since there is no generally accepted practice for measuring those thermal conversion rates. In addition to conversion losses, other losses include power plant use of electricity, transmission and distribution of electricity from power plants to end-use consumers (also called "line losses"), and unaccounted for electricity. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales. Overall, approximately 67 percent of total energy input is lost in conversion; of electricity generated, approximately 5 percent is lost in plant use and 9 percent is lost in transmission and distribution. Calculated electrical system energy losses may be less than actual losses, because primary consumption does not include the energy equivalent of utility purchases of electricity from non-electric utilities and from Canada and Mexico, although they are included in electricity sales.

Section 3. Petroleum

Total petroleum imports[1] averaged 13.0 million barrels per day in June 2004, slightly lower than both the previous month's rate and the June 2003 rate.

In June 2004, 20.5 million barrels per day of petroleum products were supplied for domestic use, 3 percent higher than the June 2003 rate. Motor gasoline accounted for 45 percent of the total; distillate fuel oil, 19 percent; and kerosene-type jet fuel, 8 percent.

Motor gasoline product supplied during June 2004 averaged 9.2 million barrels per day, 1 percent higher than both the previous month's rate and the June 2003 rate. Total motor gasoline stocks were 206 million barrels at the end of June 2004, 2 million barrels above the stock level in the previous month but the same as the level 1 year earlier.

Distillate fuel oil product supplied during June 2004 averaged 4.0 million barrels per day, 3 percent higher than the previous month's rate and 5 percent higher than the June 2003 rate. Distillate fuel oil ending stocks for June 2004 were 114 million barrels, 7 mllion barrels above the stock level in the previous month and 2 million barrels above the level 1 year earlier.

Kerosene-type jet fuel product supplied in June 2004 averaged 1.7 million barrels per day, 6 percent higher than the previous month's rate and 7 percent more than the June 2003 rate. Kerosene-type jet fuel stocks measured 38 million barrels at the end of June 2004, the same as the stock level in both the previous month and the level 1 year earlier.

Section 3 has not been updated this month.

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

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

	Field Production			Stock Change[a]			Stocks[b]
	Total Domestic[c]	Crude Oil	Natural Gas Plant Liquids	Crude Oil[d]	Petroleum Products	Petroleum Products Supplied	Crude Oil[d] and Petroleum Products
	Thousand Barrels per Day						Million Barrels
1973 Average	**10,975**	**9,208**	**1,738**	**-11**	**146**	**17,308**	**1,008**
1974 Average	**10,498**	**8,774**	**1,688**	**62**	**117**	**16,653**	**[e]1,074**
1975 Average	**10,045**	**8,375**	**1,633**	**[e]17**	**[e]15**	**16,322**	**1,133**
1976 Average	**9,774**	**8,132**	**[f]1,604**	**39**	**-96**	**17,461**	**1,112**
1977 Average	**9,913**	**8,245**	**1,618**	**170**	**378**	**18,431**	**1,312**
1978 Average	**10,328**	**8,707**	**1,567**	**78**	**-172**	**18,847**	**1,278**
1979 Average	**10,179**	**8,552**	**1,584**	**148**	**25**	**18,513**	**1,341**
1980 Average	**10,214**	**8,597**	**1,573**	**98**	**42**	**17,056**	**[e]1,392**
1981 Average	**10,230**	**8,572**	**1,609**	**[e]290**	**[e]-130**	**16,058**	**1,484**
1982 Average	**10,252**	**8,649**	**1,550**	**136**	**-283**	**15,296**	**[e]1,430**
1983 Average	**10,299**	**8,688**	**1,559**	**[e]214**	**[e]-234**	**15,231**	**1,454**
1984 Average	**10,554**	**8,879**	**1,630**	**199**	**81**	**15,726**	**1,556**
1985 Average	**10,636**	**8,971**	**1,609**	**50**	**-153**	**15,726**	**1,519**
1986 Average	**10,289**	**8,680**	**1,551**	**78**	**124**	**16,281**	**1,593**
1987 Average	**10,008**	**8,349**	**1,595**	**128**	**-87**	**16,665**	**1,607**
1988 Average	**9,818**	**8,140**	**1,625**	**1**	**-29**	**17,283**	**1,597**
1989 Average	**9,219**	**7,613**	**1,546**	**86**	**-129**	**17,325**	**1,581**
1990 Average	**8,994**	**7,355**	**1,559**	**-35**	**142**	**16,988**	**1,621**
1991 Average	**9,168**	**7,417**	**1,659**	**-42**	**32**	**16,714**	**1,617**
1992 Average	**8,996**	**7,171**	**1,697**	**-1**	**-68**	**17,033**	**[e]1,592**
1993 Average	**[g]8,836**	**6,847**	**1,736**	**81**	**[e]70**	**17,237**	**[e]1,647**
1994 Average	**8,645**	**6,662**	**1,727**	**18**	**-2**	**17,718**	**1,653**
1995 Average	**8,626**	**6,560**	**1,762**	**-93**	**-153**	**17,725**	**1,563**
1996 Average	**8,607**	**6,465**	**1,830**	**-124**	**-28**	**18,309**	**1,507**
1997 Average	**8,611**	**6,452**	**1,817**	**51**	**93**	**18,620**	**1,560**
1998 Average	**8,392**	**6,252**	**1,759**	**74**	**165**	**18,917**	**1,647**
1999 Average	**8,107**	**5,881**	**1,850**	**-118**	**-304**	**19,519**	**1,493**
2000 Average	**8,110**	**5,822**	**1,911**	**-70**	**(s)**	**19,701**	**1,468**
2001 Average	**8,054**	**5,801**	**1,868**	**99**	**227**	**19,649**	**1,586**
2002 January	8,068	5,848	1,827	409	-270	19,454	1,591
February	8,126	5,871	1,900	443	-951	19,444	1,576
March	8,139	5,883	1,901	248	-364	19,676	1,573
April	8,215	5,859	1,925	-120	641	19,552	1,588
May	8,317	5,924	1,936	222	504	19,728	1,611
June	8,206	5,915	1,870	-143	316	19,875	1,616
July	8,022	5,770	1,846	-362	190	20,076	1,611
August	8,205	5,811	1,937	-139	-328	20,221	1,596
September	7,748	5,411	1,898	-687	-56	19,461	1,574
October	7,645	5,363	1,875	749	-782	19,678	1,573
November	7,949	5,597	1,891	96	85	19,991	1,578
December	7,887	5,699	1,760	-234	-751	19,943	1,548
Average	**8,043**	**5,746**	**1,880**	**40**	**-145**	**19,761**	**1,548**
2003 January	[R]7,968	[R]5,785	[R]1,758	[R]-110	[R]-1,293	[R]20,017	1,504
February	[R]8,014	[R]5,791	[R]1,812	[R]-106	[R]-1,464	[R]20,375	1,460
March	[R]7,963	[R]5,817	[R]1,729	[R]339	[R]114	[R]19,708	[R]1,474
April	[R]7,845	[R]5,774	[R]1,701	[R]338	[R]383	[R]19,830	[R]1,496
May	[R]7,791	[R]5,733	[R]1,564	[R]-75	[R]1,263	[R]19,344	[R]1,533
June	[R]7,692	[R]5,701	[R]1,582	[R]150	[R]745	[R]19,793	[R]1,560
July	[R]7,615	[R]5,526	[R]1,649	[R]135	[R]209	[R]20,094	[R]1,570
August	[R]7,710	[R]5,595	[R]1,703	[R]15	[R]35	[R]20,586	[R]1,572
September	[R]7,956	[R]5,683	1,761	[R]441	[R]426	[R]19,933	[R]1,598
October	[R]7,853	[R]5,635	[R]1,818	[R]468	[R]-348	[R]20,182	[R]1,602
November	[R]7,771	[R]5,560	[R]1,839	-356	[R]241	[R]19,873	1,598
December	[R]7,717	[R]5,579	[R]1,723	[R]-244	[R]-721	[R]20,679	[R]1,568
Average	**[R]7,823**	**[R]5,681**	**[R]1,719**	**[R]84**	**[R]-28**	**[R]20,034**	**[R]1,568**
2004 January	[E]7,853	[E]5,644	1,803	199	-692	20,393	1,552
February	[E]7,798	[E]5,584	1,798	380	-549	20,549	1,547
March	[E]7,892	[E]5,622	1,829	720	-91	20,161	1,566
April	[E]7,766	[E]5,568	1,784	379	-111	20,207	1,574
May	[RE]7,841	[RE]5,612	[R]1,795	[R]186	[R]646	[R]20,209	[R]1,600
June	[E]7,671	[PE]5,415	[E]1,823	[E]178	[E]564	[E]20,484	[E]1,629
6-Month Average	**[E]7,805**	**[PE]5,575**	**[E]1,805**	**[E]341**	**[E]-36**	**[E]20,331**	**[E]1,629**
2003 6-Month Average	**7,878**	**5,767**	**1,690**	**91**	**-25**	**19,836**	**1,560**
2002 6-Month Average	**8,179**	**5,884**	**1,893**	**176**	**-11**	**19,623**	**1,616**

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

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

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

[d] Includes stocks located in the Strategic Petroleum Reserve.

[e] See Note 4 at end of section.

[f] See Note 6 at end of section.

[g] Beginning in 1993, includes fuel ethanol blended into finished motor gasoline and oxygenate production from merchant MTBE (methyl tertiary butyl ether) plants.

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

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

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

Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S1. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S1.

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

	Imports			Exports			
	Total	Crude Oil[a]	Petroleum Products	Total	Crude Oil	Petroleum Products	Net Imports[b]
	Thousand Barrels per Day						
1973 Average	**6,256**	**3,244**	**3,012**	**231**	**2**	**229**	**6,025**
1974 Average	**6,112**	**3,477**	**2,635**	**221**	**3**	**218**	**5,892**
1975 Average	**6,056**	**4,105**	**1,951**	**209**	**6**	**204**	**5,846**
1976 Average	**7,313**	**5,287**	**2,026**	**223**	**8**	**215**	**7,090**
1977 Average	**8,807**	**6,615**	**2,193**	**243**	**50**	**193**	**8,565**
1978 Average	**8,363**	**6,356**	**2,008**	**362**	**158**	**204**	**8,002**
1979 Average	**8,456**	**6,519**	**1,937**	[c] **471**	**235**	[c] **236**	[c] **7,985**
1980 Average	**6,909**	**5,263**	**1,646**	**544**	**287**	**258**	**6,365**
1981 Average	**5,996**	**4,396**	**1,599**	**595**	**228**	**367**	**5,401**
1982 Average	**5,113**	**3,488**	**1,625**	**815**	**236**	**579**	**4,298**
1983 Average	**5,051**	**3,329**	**1,722**	**739**	**164**	**575**	**4,312**
1984 Average	**5,437**	**3,426**	**2,011**	**722**	**181**	**541**	**4,715**
1985 Average	**5,067**	**3,201**	**1,866**	**781**	**204**	**577**	**4,286**
1986 Average	**6,224**	**4,178**	**2,045**	**785**	**154**	**631**	**5,439**
1987 Average	**6,678**	**4,674**	**2,004**	**764**	**151**	**613**	**5,914**
1988 Average	**7,402**	**5,107**	**2,295**	**815**	**155**	**661**	**6,587**
1989 Average	**8,061**	**5,843**	**2,217**	**859**	**142**	**717**	**7,202**
1990 Average	**8,018**	**5,894**	**2,123**	**857**	**109**	**748**	**7,161**
1991 Average	**7,627**	**5,782**	**1,844**	**1,001**	**116**	**885**	**6,626**
1992 Average	**7,888**	**6,083**	**1,805**	**950**	**89**	**861**	**6,938**
1993 Average	**8,620**	**6,787**	**1,833**	**1,003**	**98**	**904**	**7,618**
1994 Average	**8,996**	**7,063**	**1,933**	**942**	**99**	**843**	**8,054**
1995 Average	**8,835**	**7,230**	**1,605**	**949**	**95**	**855**	**7,886**
1996 Average	**9,478**	**7,508**	**1,971**	**981**	**110**	**871**	**8,498**
1997 Average	**10,162**	**8,225**	**1,936**	**1,003**	**108**	**896**	**9,158**
1998 Average	**10,708**	**8,706**	**2,002**	**945**	**110**	**835**	**9,764**
1999 Average	**10,852**	**8,731**	**2,122**	**940**	**118**	**822**	**9,912**
2000 Average	**11,459**	**9,071**	**2,389**	**1,040**	**50**	**990**	**10,419**
2001 Average	**11,871**	**9,328**	**2,543**	**971**	**20**	**951**	**10,900**
2002 January	11,088	8,709	2,380	861	11	850	10,228
February	10,904	8,753	2,151	1,175	4	1,170	9,729
March	11,198	8,799	2,399	853	8	845	10,345
April	11,765	9,301	2,464	890	8	882	10,876
May	11,769	9,323	2,446	910	7	903	10,859
June	11,753	9,324	2,429	880	5	874	10,873
July	11,624	9,184	2,440	839	33	806	10,785
August	11,890	9,544	2,346	1,138	9	1,129	10,752
September	11,075	8,797	2,278	1,015	7	1,008	10,059
October	11,893	9,532	2,361	962	4	958	10,931
November	12,268	9,654	2,613	1,026	10	1,016	11,242
December	11,100	8,741	2,359	1,272	2	1,270	9,828
Average	**11,530**	**9,140**	**2,390**	**984**	**9**	**975**	**10,546**
2003 January	[R] 11,104	[R] 8,633	[R] 2,471	1,212	10	1,202	[R] 9,892
February	[R] 10,921	[R] 8,474	[R] 2,447	1,067	5	1,062	[R] 9,854
March	[R] 12,044	[R] 9,226	[R] 2,819	1,051	10	1,042	[R] 10,993
April	[R] 12,599	[R] 9,928	[R] 2,671	1,053	12	1,041	[R] 11,546
May	[R] 12,918	[R] 10,153	[R] 2,765	1,097	15	1,082	[R] 11,822
June	[R] 13,001	[R] 10,038	[R] 2,962	1,065	45	1,020	[R] 11,936
July	[R] 12,736	[R] 10,034	[R] 2,702	976	7	969	[R] 11,760
August	[R] 12,769	[R] 10,023	[R] 2,746	[R] 947	4	[R] 943	[R] 11,822
September	[R] 12,868	[R] 10,287	[R] 2,581	960	3	956	[R] 11,908
October	[R] 12,373	[R] 10,063	[R] 2,310	970	14	956	[R] 11,402
November	[R] 11,712	[R] 9,351	[R] 2,361	933	21	911	[R] 10,780
December	[R] 12,033	[R] 9,684	[R] 2,349	990	4	986	[R] 11,043
Average	[R] **12,264**	[R] **9,665**	[R] **2,599**	[R] **1,027**	**12**	[R] **1,014**	[R] **11,238**
2004 January	11,727	9,322	2,405	748	6	742	10,979
February	12,329	9,258	3,071	1,046	8	1,038	11,283
March	13,073	10,073	3,000	1,024	19	1,005	12,048
April	12,450	10,062	2,389	1,153	55	1,099	11,297
May	[R] 12,989	[R] 10,324	[R] 2,665	[R] 1,052	[R] 26	[R] 1,026	[R] 11,937
June	[E] 12,962	[E] 10,321	[E] 2,641	[E] 947	[E] 10	[E] 937	[E] 12,015
6-Month Average	[E] **12,590**	[E] **9,897**	[E] **2,693**	[E] **994**	[E] **21**	[E] **973**	[E] **11,596**
2003 6-Month Average	**12,110**	**9,418**	**2,692**	**1,092**	**16**	**1,075**	**11,018**
2002 6-Month Average	**11,418**	**9,037**	**2,381**	**924**	**7**	**917**	**10,493**

[a] Includes crude oil for storage in the Strategic Petroleum Reserve.
[b] Net imports equals imports minus exports.
[c] See Note 6 at end of section.
R=Revised. E=Estimate.

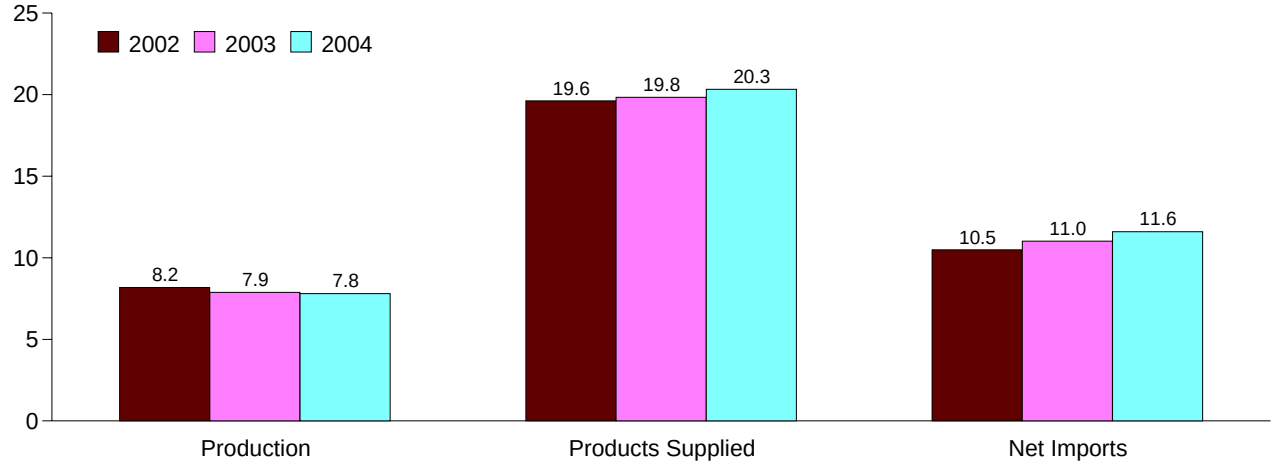
Notes: • Crude oil includes lease condensate. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

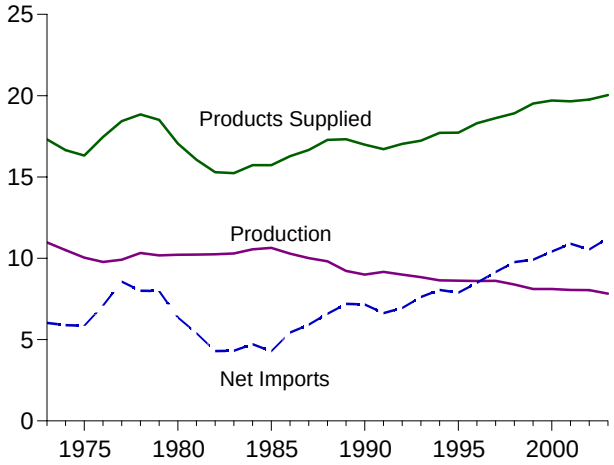
Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S1. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S1.

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

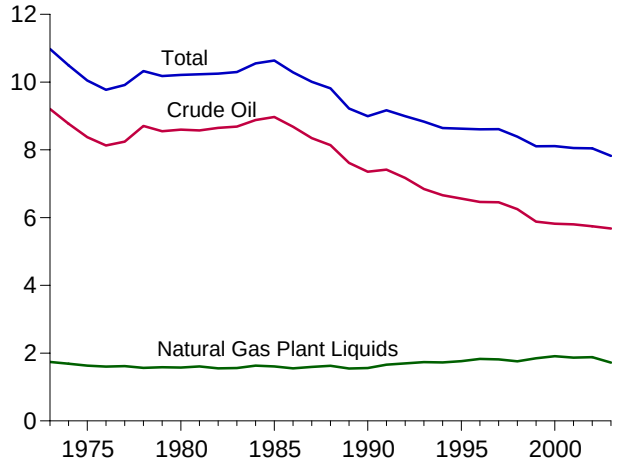
Overview, January-June



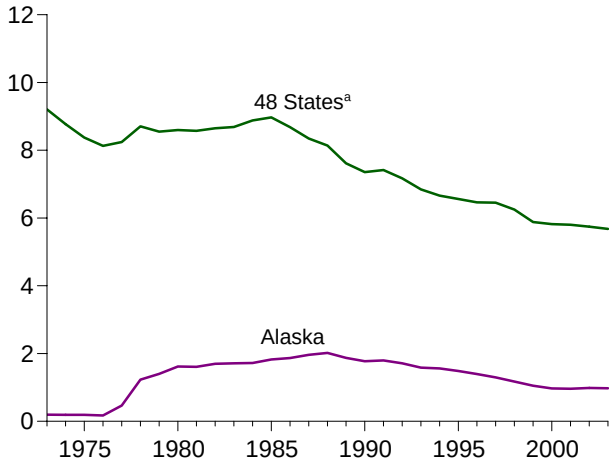
Overview, 1973-2003



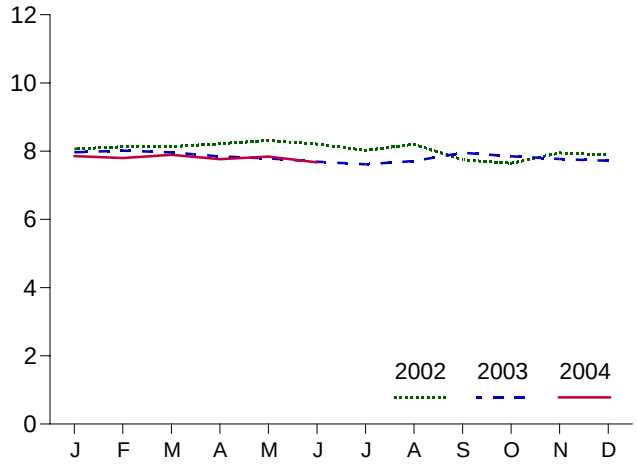
Production, 1973-2003



Crude Oil Production, 1973-2003



Total Production, Monthly



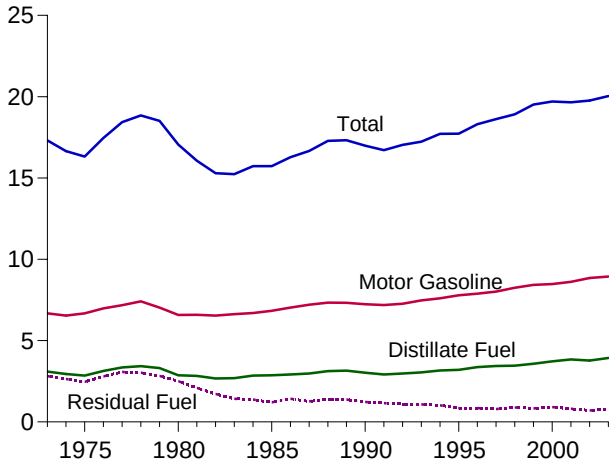
[a]United States excluding Alaska and Hawaii.
Note: Because vertical scales differ, graphs should not be compared.

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

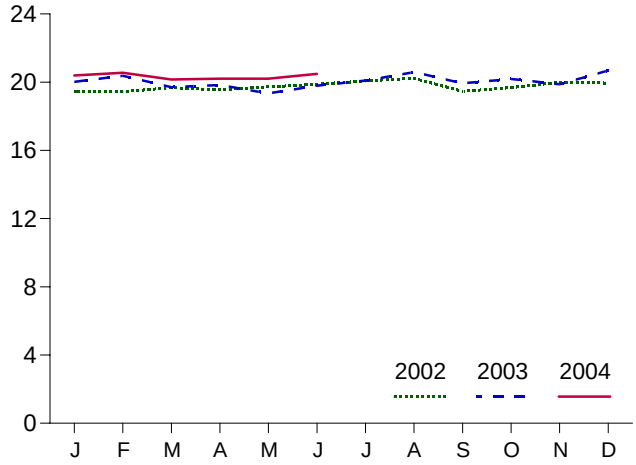
Figure 3.1b Petroleum Products Supplied, Imports, and Stocks

(Million Barrels per Day, Except as Noted)

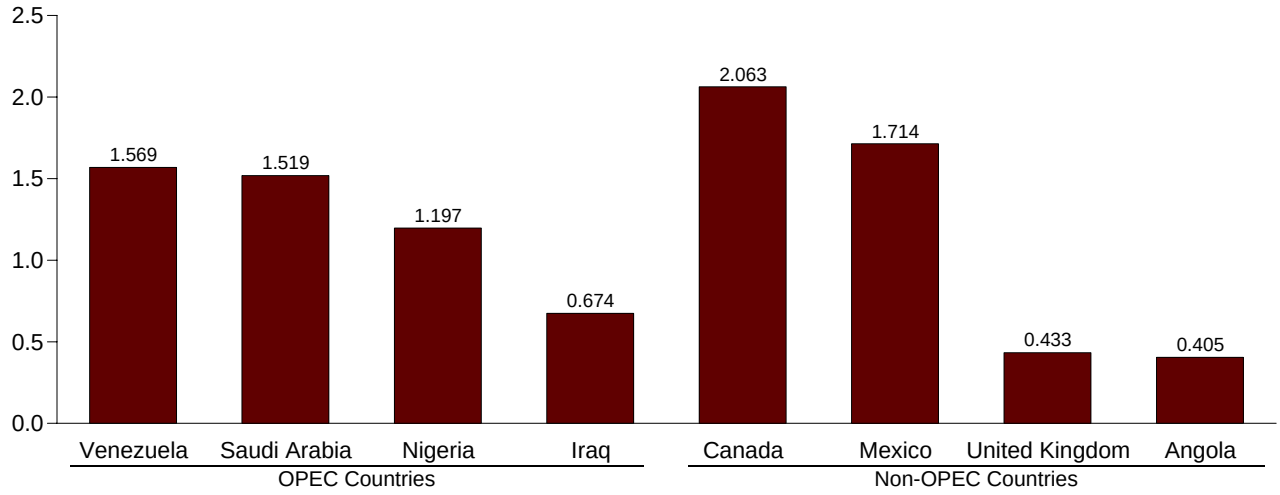
Products Supplied, 1973-2003



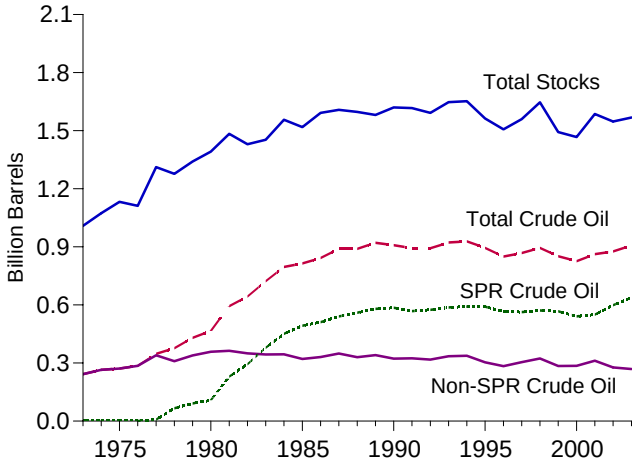
Products Supplied, Monthly



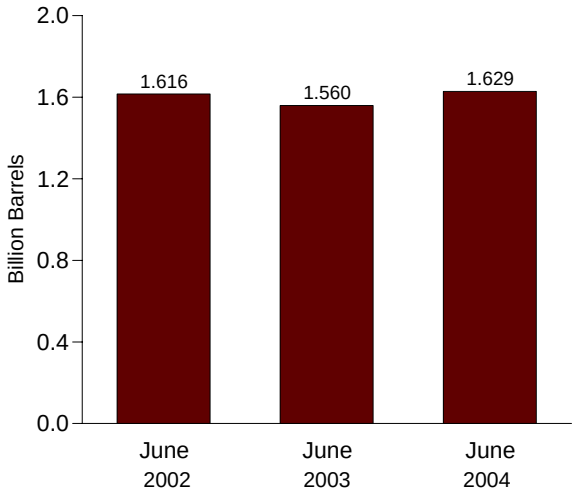
Imports from Selected Countries, May 2004



Stocks, End of Year, 1973-2003



Total Stocks, End of Month



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

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

Table 3.2a Crude Oil Supply and Disposition: Supply

	Supply						
	Field Production		Imports			Unaccounted-for Crude Oil[b]	Crude Oil Used Directly[c]
	Total Domestic	Alaskan	Total	SPR[a]	Other		
	Thousand Barrels per Day						
1973 Average	**9,208**	**198**	**3,244**	–	**3,244**	**3**	**-19**
1974 Average	**8,774**	**193**	**3,477**	–	**3,477**	**-25**	**-15**
1975 Average	**8,375**	**191**	**4,105**	–	**4,105**	**17**	**-17**
1976 Average	**8,132**	**173**	**5,287**	–	**5,287**	**77**	[d] **-19**
1977 Average	**8,245**	**464**	**6,615**	**21**	**6,594**	**-6**	**-14**
1978 Average	**8,707**	**1,229**	**6,356**	[d] **161**	**6,195**	**-57**	[d] **-15**
1979 Average	**8,552**	**1,401**	**6,519**	**67**	**6,452**	**-11**	[d] **-14**
1980 Average	**8,597**	**1,617**	**5,263**	**44**	**5,219**	**34**	[d] **-14**
1981 Average	**8,572**	**1,609**	**4,396**	**256**	**4,141**	**83**	**-58**
1982 Average	**8,649**	**1,696**	**3,488**	**165**	**3,323**	**71**	**-59**
1983 Average	**8,688**	**1,714**	**3,329**	**234**	**3,096**	**114**	**–**
1984 Average	**8,879**	**1,722**	**3,426**	**197**	**3,229**	**185**	**–**
1985 Average	**8,971**	**1,825**	**3,201**	**118**	**3,083**	**145**	**–**
1986 Average	**8,680**	**1,867**	**4,178**	**48**	**4,130**	**139**	**–**
1987 Average	**8,349**	**1,962**	**4,674**	**73**	**4,601**	**145**	**–**
1988 Average	**8,140**	**2,017**	**5,107**	**51**	**5,055**	**196**	**–**
1989 Average	**7,613**	**1,874**	**5,843**	**56**	**5,787**	**200**	**–**
1990 Average	**7,355**	**1,773**	**5,894**	**27**	**5,867**	**258**	**–**
1991 Average	**7,417**	**1,798**	**5,782**	**0**	**5,782**	**195**	**–**
1992 Average	**7,171**	**1,714**	**6,083**	**10**	**6,073**	**258**	**–**
1993 Average	**6,847**	**1,582**	**6,787**	**15**	**6,772**	**168**	**–**
1994 Average	**6,662**	**1,559**	**7,063**	**12**	**7,051**	**266**	**–**
1995 Average	**6,560**	**1,484**	**7,230**	**0**	**7,230**	**193**	**–**
1996 Average	**6,465**	**1,393**	**7,508**	**0**	**7,508**	**215**	**–**
1997 Average	**6,452**	**1,296**	**8,225**	**0**	**8,225**	**145**	**–**
1998 Average	**6,252**	**1,175**	**8,706**	**0**	**8,706**	**115**	**–**
1999 Average	**5,881**	**1,050**	**8,731**	**8**	**8,722**	**191**	**–**
2000 Average	**5,822**	**970**	**9,071**	**8**	**9,062**	**155**	**–**
2001 Average	**5,801**	**963**	**9,328**	**11**	**9,318**	**117**	**–**
2002 January	5,848	1,036	8,709	33	8,675	351	–
February	5,871	1,031	8,753	59	8,694	129	–
March	5,883	1,036	8,799	0	8,799	99	–
April	5,859	1,009	9,301	0	9,301	53	–
May	5,924	1,002	9,323	16	9,307	283	–
June	5,915	1,019	9,324	17	9,307	21	–
July	5,770	931	9,184	0	9,184	146	–
August	5,811	965	9,544	0	9,544	-148	–
September	5,411	886	8,797	0	8,797	-27	–
October	5,363	983	9,532	0	9,532	161	–
November	5,597	908	9,654	34	9,620	10	–
December	5,699	1,010	8,741	34	8,707	228	–
Average	**5,746**	**984**	**9,140**	**16**	**9,124**	**110**	**–**
2003 January	[R] 5,785	984	[R] 8,633	0	[R] 8,633	[R] -180	–
February	[R] 5,791	1,015	[R] 8,474	0	[R] 8,474	[R] 15	–
March	[R] 5,817	1,022	[R] 9,226	0	[R] 9,226	[R] 239	–
April	[R] 5,774	971	[R] 9,928	0	[R] 9,928	[R] 223	–
May	[R] 5,733	990	[R] 10,153	0	[R] 10,153	[R] -36	–
June	[R] 5,701	991	[R] 10,038	0	[R] 10,038	[R] 76	–
July	[R] 5,526	927	[R] 10,034	0	[R] 10,034	[R] 128	–
August	[R] 5,595	945	[R] 10,023	0	[R] 10,023	[R] 94	–
September	[R] 5,683	964	[R] 10,287	0	[R] 10,287	[R] -80	–
October	[R] 5,635	967	[R] 10,063	0	[R] 10,063	[R] 126	–
November	[R] 5,560	963	[R] 9,351	0	[R] 9,351	[R] 209	–
December	[R] 5,579	956	[R] 9,684	0	[R] 9,684	[R] -159	–
Average	[R] **5,681**	**974**	[R] **9,665**	**0**	[R] **9,665**	[R] **54**	**–**
2004 January	[E] 5,644	[E] 976	9,322	0	9,322	55	–
February	[E] 5,584	[E] 933	9,258	0	9,258	256	–
March	[E] 5,622	[E] 979	10,073	0	10,073	-154	–
April	[E] 5,568	[E] 950	10,062	0	10,062	350	–
May	[RE] 5,612	[RE] 942	[R] 10,324	0	[R] 10,324	[R] 237	–
June	[PE] 5,415	[PE] 915	[E] 10,321	[E] 0	[E] 10,321	[E] 503	–
6-Month Average	[PE] **5,575**	[PE] **950**	[E] **9,897**	[E] **0**	[E] **9,897**	[E] **205**	**–**
2003 6-Month Average	**5,767**	**995**	**9,418**	**0**	**9,418**	**56**	**–**
2002 6-Month Average	**5,884**	**1,022**	**9,037**	**20**	**9,016**	**158**	**–**

[a] Strategic Petroleum Reserve.
[b] A balancing item.
[c] Beginning in January 1983, crude oil used directly as fuel is shown as product supplied.
[d] See Note 6 at end of section.
PE=Preliminary estimate. R=Revised. – =Not applicable. E=Estimate.
Notes: • Crude oil includes lease condensate. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S2. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S2.

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

	Disposition						Stocks[a]		
	Crude Losses	Stock Change[b] SPR[c]	Stock Change[b] Other	Refinery Inputs	Exports	Product Supplied[d]	Total	SPR[c]	Other Primary
	Thousand Barrels per Day						Million Barrels		
1973 Average	**13**	–	**-11**	**12,431**	**2**	–	**242**	–	**242**
1974 Average	**13**	–	**62**	**12,133**	**3**	–	**265**	–	**265**
1975 Average	**13**	–	**17**	**12,442**	**6**	–	**271**	–	**271**
1976 Average	[e] **14**	–	**39**	**13,416**	**8**	–	**285**	–	**285**
1977 Average	**16**	**20**	**150**	**14,602**	**50**	–	**348**	**7**	**340**
1978 Average	**16**	**163**	**-84**	**14,739**	**158**	–	**376**	**67**	**309**
1979 Average	**16**	**67**	**81**	**14,648**	**235**	–	**430**	**91**	**339**
1980 Average	[e] **14**	**45**	**52**	**13,481**	**287**	–	[f] **466**	**108**	[f] **358**
1981 Average	**5**	**336**	[f] **-46**	**12,470**	**228**	–	**594**	**230**	**363**
1982 Average	**3**	**174**	**-38**	**11,774**	**236**	–	[g] **644**	**294**	[g] **350**
1983 Average	**2**	**234**	[g] **-20**	**11,685**	**164**	**66**	**723**	**379**	**344**
1984 Average	**2**	**195**	**4**	**12,044**	**181**	**64**	**796**	**451**	**345**
1985 Average	**1**	**117**	**-67**	**12,002**	**204**	**60**	**814**	**493**	**321**
1986 Average	**(s)**	**50**	**28**	**12,716**	**154**	**49**	**843**	**512**	**331**
1987 Average	**(s)**	**80**	**49**	**12,854**	**151**	**34**	**890**	**541**	**349**
1988 Average	**(s)**	**52**	**-51**	**13,246**	**155**	**40**	**890**	**560**	**330**
1989 Average	**(s)**	**56**	**30**	**13,401**	**142**	**28**	**921**	**580**	**341**
1990 Average	**(s)**	**16**	**-51**	**13,409**	**109**	**24**	**908**	**586**	**323**
1991 Average	**(s)**	**-47**	**5**	**13,301**	**116**	**18**	**893**	**569**	**325**
1992 Average	**(s)**	**17**	**-18**	**13,411**	**89**	**13**	**893**	**575**	**318**
1993 Average	**(s)**	**34**	**47**	**13,613**	**98**	**10**	**922**	**587**	**335**
1994 Average	**(s)**	**13**	**5**	**13,866**	**99**	**9**	**929**	**592**	**337**
1995 Average	**(s)**	**(s)**	**-93**	**13,973**	**95**	**7**	**895**	**592**	**303**
1996 Average	**(s)**	**-71**	**-53**	**14,195**	**110**	**6**	**850**	**566**	**284**
1997 Average	**0**	**-7**	**57**	**14,662**	**108**	**2**	**868**	**563**	**305**
1998 Average	**(s)**	**22**	**52**	**14,889**	**110**	**0**	**895**	**571**	**324**
1999 Average	**(s)**	**-11**	**-107**	**14,804**	**118**	**0**	**852**	**567**	**284**
2000 Average	**0**	**-73**	**3**	**15,067**	**50**	**0**	**826**	**541**	**286**
2001 Average	**0**	**26**	**73**	**15,128**	**20**	**0**	**862**	**550**	**312**
2002 January	0	141	268	14,487	11	0	875	555	320
February	0	191	252	14,306	4	0	887	560	327
March	0	50	198	14,526	8	0	895	561	334
April	0	175	-295	15,325	8	0	891	567	325
May	0	146	77	15,301	7	0	898	571	327
June	0	173	-316	15,397	5	0	894	576	318
July	0	67	-428	15,430	33	0	883	579	304
August	0	121	-260	15,338	9	0	878	582	296
September	0	166	-852	14,861	7	0	858	587	271
October	0	77	672	14,303	4	0	881	590	291
November	0	209	-113	15,155	10	0	884	596	288
December	0	103	-337	14,900	2	0	877	599	278
Average	**0**	**134**	**-94**	**14,947**	**9**	**0**	**877**	**599**	**278**
2003 January	0	5	[R] -115	[R] 14,338	10	0	[R] 873	599	[R] 274
February	0	0	[R] -106	[R] 14,381	5	0	870	599	[R] 271
March	0	0	[R] 339	[R] 14,933	10	0	[R] 881	599	[R] 282
April	0	11	[R] 326	15,575	12	0	[R] 891	600	[R] 291
May	0	114	[R] -189	[R] 15,910	15	0	[R] 889	603	[R] 286
June	0	181	[R] -31	[R] 15,620	45	0	[R] 893	609	[R] 285
July	0	125	[R] 11	[R] 15,546	7	0	[R] 897	612	[R] 285
August	0	190	[R] -175	[R] 15,693	4	0	[R] 898	618	[R] 279
September	0	202	[R] 239	[R] 15,446	3	0	[R] 911	624	[R] 287
October	0	210	[R] 258	15,342	14	0	[R] 926	631	[R] 295
November	0	91	-447	15,455	21	0	[R] 915	634	[R] 281
December	0	154	[R] -398	[R] 15,345	4	0	[R] 907	638	[R] 269
Average	**0**	**108**	[R] **-24**	[R] **15,304**	**12**	**0**	[R] **907**	**638**	[R] **269**
2004 January	0	89	110	14,816	6	0	913	641	271
February	0	197	183	14,711	8	0	924	647	277
March	0	170	550	14,802	19	0	946	652	294
April	0	202	177	15,546	55	0	957	658	299
May	0	101	[R] 85	[R] 15,962	[R] 26	0	963	661	302
June	[E] 0	[E] 75	[E] 103	[E] 16,051	[E] 10	[E] 0	[E] 968	[E] 663	[E] 305
6-Month Average	[E] **0**	[E] **138**	[E] **202**	[E] **15,316**	[E] **21**	[E] **0**	[E] **968**	[E] **663**	[E] **305**
2003 6-Month Average	**0**	**52**	**39**	**15,133**	**16**	**0**	**893**	**609**	**285**
2002 6-Month Average	**0**	**145**	**31**	**14,895**	**7**	**0**	**894**	**576**	**318**

[a] Stocks are at end of period.
[b] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[c] Strategic Petroleum Reserve. Crude oil stocks in the SPR include non-U.S. stocks held under foreign or commercial storage agreements.
[d] Beginning in January 1983, crude oil used directly as fuel is shown as product supplied.
[e] See Note 6 at end of section.
[f] Stocks of Alaskan crude oil in transit are included from January 1981 forward. See Note 5 at end of section.
[g] See Note 4 at end of section.
R=Revised. – =Not applicable. E=Estimate. (s)=Less than +500 barrels per day and greater than -500 barrels per day.

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

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

Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S2. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S2.

Table 3.3a Petroleum Imports From Bahrain, Iran, Iraq, and Kuwait

(Thousand Barrels per Day)

	Persian Gulf[a]							
	Bahrain		Iran		Iraq		Kuwait[b]	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1973 Average	**11**	**0**	**223**	**216**	**4**	**4**	**47**	**42**
1974 Average	**12**	**0**	**469**	**463**	**0**	**0**	**5**	**5**
1975 Average	**16**	**0**	**280**	**278**	**2**	**2**	**16**	**4**
1976 Average	**3**	**0**	**298**	**298**	**26**	**26**	**5**	**1**
1977 Average	**10**	**0**	**535**	**530**	**74**	**74**	**48**	**42**
1978 Average	**3**	**0**	**555**	**554**	**62**	**62**	**6**	**5**
1979 Average	**1**	**0**	**304**	**297**	**88**	**88**	**8**	**5**
1980 Average	**(s)**	**0**	**9**	**8**	**28**	**28**	**27**	**27**
1981 Average	**1**	**0**	**0**	**0**	**(s)**	**0**	**0**	**0**
1982 Average	**1**	**0**	**35**	**35**	**3**	**3**	**5**	**2**
1983 Average	**2**	**0**	**48**	**48**	**10**	**10**	**14**	**7**
1984 Average	**1**	**0**	**10**	**10**	**12**	**12**	**36**	**24**
1985 Average	**4**	**0**	**27**	**27**	**46**	**46**	**21**	**4**
1986 Average	**2**	**0**	**19**	**19**	**81**	**81**	**68**	**28**
1987 Average	**0**	**0**	**98**	**98**	**83**	**82**	**84**	**70**
1988 Average	**2**	**0**	[c] **(s)**	[c] **(s)**	**345**	**343**	**92**	**80**
1989 Average	**0**	**0**	**0**	**0**	**449**	**441**	**157**	**155**
1990 Average	**1**	**0**	**0**	**0**	**518**	**514**	**86**	**79**
1991 Average	**2**	**0**	**32**	**32**	**0**	**0**	**6**	**6**
1992 Average	**0**	**0**	**0**	**0**	**0**	**0**	**51**	**39**
1993 Average	**1**	**0**	**0**	**0**	**0**	**0**	**353**	**344**
1994 Average	**1**	**0**	**0**	**0**	**0**	**0**	**312**	**307**
1995 Average	**1**	**0**	**0**	**0**	**0**	**0**	**218**	**213**
1996 Average	**1**	**0**	**0**	**0**	**1**	**1**	**236**	**235**
1997 Average	**0**	**0**	**0**	**0**	**89**	**89**	**253**	**253**
1998 Average	**1**	**0**	**0**	**0**	**336**	**336**	**301**	**300**
1999 Average	**0**	**0**	**0**	**0**	**725**	**725**	**248**	**246**
2000 Average	**1**	**0**	**0**	**0**	**620**	**620**	**272**	**263**
2001 Average	**(s)**	**0**	**0**	**0**	**795**	**795**	**250**	**237**
2002 January	0	0	0	0	988	988	213	207
February	0	0	0	0	709	709	290	279
March	0	0	0	0	813	813	184	179
April	0	0	0	0	619	619	208	201
May	0	0	0	0	482	482	182	163
June	0	0	0	0	167	167	265	244
July	0	0	0	0	301	301	244	238
August	0	0	0	0	246	246	178	169
September	0	0	0	0	148	148	297	286
October	0	0	0	0	248	248	199	182
November	0	0	0	0	403	403	291	264
December	0	0	0	0	394	394	193	190
Average	**0**	**0**	**0**	**0**	**459**	**459**	**228**	**216**
2003 January	4	0	0	0	[R] 634	[R] 634	166	134
February	11	0	0	0	[R] 963	[R] 963	241	223
March	0	0	0	0	[R] 681	[R] 681	251	220
April	0	0	0	0	[R] 739	[R] 739	[R] 301	[R] 294
May	0	0	0	0	128	128	[R] 217	[R] 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	125	189	183
September	0	0	0	0	362	362	250	248
October	0	0	0	0	[R] 735	[R] 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**	[R] **481**	[R] **481**	[R] **220**	[R] **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
5-Month Average	**1**	**0**	**0**	**0**	**657**	**654**	**234**	**226**
2003 5-Month Average	**3**	**0**	**0**	**0**	**622**	**622**	**235**	**214**
2002 5-Month Average	**0**	**0**	**0**	**0**	**723**	**723**	**214**	**204**

[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.

R=Revised. (s)=Less than 500 barrels per day.

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

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

Sources: • **Bahrain:** Energy Information Administration (EIA), Form EIA-814, "Monthly Imports Report." • **All Other Data: 1973-1991—**EIA, *Petroleum Supply Annual 1992, Volume 1,* May, 1993, Table S3. **1992 forward—**EIA, *Petroleum Supply Monthly,* July 2004, Table S3.

Table 3.3b Petroleum Imports From Qatar, Saudi Arabia, U.A.E., and Total Persian Gulf

(Thousand Barrels per Day)

	Persian Gulf[a]							
	Qatar		Saudi Arabia[b]		United Arab Emirates		Total[a]	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1973 Average	**7**	**7**	**486**	**462**	**71**	**71**	**848**	**802**
1974 Average	**17**	**17**	**461**	**438**	**74**	**69**	**1,039**	**992**
1975 Average	**18**	**18**	**715**	**701**	**117**	**117**	**1,165**	**1,121**
1976 Average	**24**	**24**	**1,230**	**1,222**	**254**	**254**	**1,840**	**1,825**
1977 Average	**67**	**67**	**1,380**	**1,373**	**335**	**333**	**2,448**	**2,418**
1978 Average	**64**	**64**	**1,144**	**1,142**	**385**	**385**	**2,219**	**2,212**
1979 Average	**31**	**31**	**1,356**	**1,347**	**281**	**281**	**2,069**	**2,049**
1980 Average	**22**	**22**	**1,261**	**1,250**	**172**	**172**	**1,519**	**1,508**
1981 Average	**7**	**7**	**1,129**	**1,112**	**81**	**77**	**1,219**	**1,196**
1982 Average	**7**	**7**	**552**	**530**	**92**	**81**	**696**	**659**
1983 Average	**(s)**	**0**	**337**	**321**	**30**	**18**	**442**	**405**
1984 Average	**5**	**4**	**325**	**309**	**117**	**90**	**506**	**450**
1985 Average	**(s)**	**0**	**168**	**132**	**45**	**35**	**311**	**244**
1986 Average	**13**	**12**	**685**	**618**	**44**	**38**	**912**	**796**
1987 Average	**0**	**0**	**751**	**642**	**61**	**56**	**1,077**	**949**
1988 Average	**0**	**0**	**1,073**	**911**	**29**	**23**	**1,541**	**1,357**
1989 Average	**2**	**2**	**1,224**	**1,116**	**28**	**21**	**1,861**	**1,734**
1990 Average	**4**	**4**	**1,339**	**1,195**	**17**	**9**	**1,966**	**1,801**
1991 Average	**0**	**0**	**1,802**	**1,703**	**3**	**2**	**1,845**	**1,743**
1992 Average	**1**	**0**	**1,720**	**1,597**	**6**	**0**	**1,778**	**1,636**
1993 Average	**1**	**0**	**1,414**	**1,282**	**14**	**12**	**1,782**	**1,637**
1994 Average	**0**	**0**	**1,402**	**1,297**	**13**	**11**	**1,728**	**1,615**
1995 Average	**0**	**0**	**1,344**	**1,260**	**10**	**5**	**1,573**	**1,479**
1996 Average	**0**	**0**	**1,363**	**1,248**	**3**	**3**	**1,604**	**1,488**
1997 Average	**4**	**0**	**1,407**	**1,293**	**2**	**0**	**1,755**	**1,635**
1998 Average	**4**	**1**	**1,491**	**1,404**	**3**	**3**	**2,136**	**2,044**
1999 Average	**10**	**1**	**1,478**	**1,387**	**2**	**0**	**2,464**	**2,360**
2000 Average	**9**	**0**	**1,572**	**1,523**	**15**	**3**	**2,488**	**2,409**
2001 Average	**13**	**(s)**	**1,662**	**1,611**	**40**	**21**	**2,761**	**2,664**
2002 January	9	0	1,456	1,430	5	0	2,670	2,625
February	11	0	1,474	1,445	0	0	2,484	2,434
March	0	0	1,558	1,526	0	0	2,556	2,517
April	0	0	1,556	1,538	16	16	2,400	2,375
May	10	0	1,564	1,520	0	0	2,238	2,165
June	10	0	1,598	1,565	51	51	2,090	2,026
July	44	35	1,392	1,354	18	0	1,999	1,928
August	9	0	1,444	1,411	25	0	1,903	1,826
September	44	37	1,531	1,512	31	17	2,052	2,000
October	40	32	1,690	1,633	0	0	2,177	2,096
November	0	0	1,511	1,474	17	17	2,222	2,158
December	0	0	1,843	1,815	18	16	2,449	2,415
Average	**15**	**9**	**1,552**	**1,519**	**15**	**10**	**2,269**	**2,213**
2003 January	0	0	R 1,841	R 1,803	90	34	R 2,735	R 2,605
February	0	0	R 1,447	R 1,407	13	0	R 2,676	R 2,593
March	0	0	R 1,886	R 1,838	0	0	R 2,818	R 2,739
April	0	0	R 2,070	R 2,024	R 39	19	R 3,148	R 3,075
May	9	0	R 2,305	R 2,244	9	0	R 2,669	R 2,572
June	0	0	R 2,002	R 1,921	33	17	R 2,327	R 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	R 1,451	1,388	0	0	R 2,353	R 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**	R **1,774**	R **1,726**	**21**	**10**	R **2,501**	R **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
5-Month Average	**1**	**1**	**1,415**	**1,374**	**9**	**6**	**2,317**	**2,261**
2003 5-Month Average	**2**	**0**	**1,918**	**1,871**	**31**	**11**	**2,810**	**2,717**
2002 5-Month Average	**6**	**0**	**1,522**	**1,492**	**4**	**3**	**2,470**	**2,423**

[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.

R=Revised. (s)=Less than 500 barrels per day.

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

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

Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S3. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S3.

Table 3.3c Petroleum Imports From Algeria, Ecuador, Gabon, Indonesia, and Libya

(Thousand Barrels per Day)

	Other OPEC[a]									
	Algeria		Ecuador[b]		Gabon[c]		Indonesia		Libya	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1973 Average	**136**	**120**	**48**	**47**	**0**	**0**	**213**	**200**	**164**	**133**
1974 Average	**190**	**180**	**42**	**42**	**23**	**23**	**300**	**284**	**4**	**4**
1975 Average	**282**	**264**	**57**	**57**	**27**	**27**	**390**	**379**	**232**	**223**
1976 Average	**432**	**408**	**51**	**51**	**28**	**26**	**539**	**537**	**453**	**444**
1977 Average	**559**	**544**	**57**	**55**	**42**	**35**	**541**	**507**	**723**	**704**
1978 Average	**649**	**634**	**54**	**38**	**41**	**38**	**573**	**533**	**654**	**638**
1979 Average	**636**	**608**	**42**	**30**	**42**	**42**	**420**	**380**	**658**	**642**
1980 Average	**488**	**456**	**27**	**17**	**26**	**25**	**348**	**314**	**554**	**548**
1981 Average	**311**	**261**	**48**	**38**	**35**	**35**	**366**	**318**	**319**	**317**
1982 Average	**170**	**90**	**42**	**32**	**40**	**40**	**248**	**226**	**26**	**23**
1983 Average	**240**	**176**	**61**	**56**	**59**	**59**	**338**	**315**	**0**	**0**
1984 Average	**323**	**194**	**55**	**47**	**58**	**57**	**343**	**304**	**1**	**0**
1985 Average	**187**	**84**	**67**	**56**	**52**	**51**	**314**	**292**	**4**	**0**
1986 Average	**271**	**78**	**77**	**64**	**26**	**25**	**318**	**297**	**0**	**0**
1987 Average	**295**	**115**	**29**	**23**	**35**	**35**	**285**	**262**	**0**	**0**
1988 Average	**300**	**58**	**47**	**33**	**16**	**15**	**205**	**186**	**0**	**0**
1989 Average	**269**	**60**	**89**	**80**	**50**	**49**	**183**	**158**	**0**	**0**
1990 Average	**280**	**63**	**49**	**38**	**64**	**64**	**114**	**98**	**0**	**0**
1991 Average	**253**	**44**	**63**	**53**	**84**	**84**	**111**	**102**	**0**	**0**
1992 Average	**196**	**24**	**65**	**62**	**124**	**123**	**78**	**70**	**0**	**0**
1993 Average	**220**	**24**	([b])	([b])	**152**	**151**	**81**	**65**	**0**	**0**
1994 Average	**243**	**21**	([b])	([b])	**194**	**194**	**111**	**92**	**0**	**0**
1995 Average	**234**	**27**	([b])	([b])	([c])	([c])	**88**	**64**	**0**	**0**
1996 Average	**256**	**8**	([b])	([b])	([c])	([c])	**59**	**44**	**0**	**0**
1997 Average	**285**	**6**	([b])	([b])	([c])	([c])	**58**	**51**	**0**	**0**
1998 Average	**290**	**10**	([b])	([b])	([c])	([c])	**66**	**50**	**0**	**0**
1999 Average	**259**	**25**	([b])	([b])	([c])	([c])	**81**	**70**	**0**	**0**
2000 Average	**225**	**1**	([b])	([b])	([c])	([c])	**48**	**36**	**0**	**0**
2001 Average	**278**	**11**	([b])	([b])	([c])	([c])	**51**	**40**	**0**	**0**
2002 January	265	0	([b])	([b])	([c])	([c])	80	67	0	0
February	248	0	([b])	([b])	([c])	([c])	104	84	0	0
March	347	75	([b])	([b])	([c])	([c])	63	63	0	0
April	366	77	([b])	([b])	([c])	([c])	60	58	0	0
May	343	53	([b])	([b])	([c])	([c])	76	76	0	0
June	293	19	([b])	([b])	([c])	([c])	57	57	0	0
July	160	0	([b])	([b])	([c])	([c])	15	14	0	0
August	183	0	([b])	([b])	([c])	([c])	34	34	0	0
September	249	32	([b])	([b])	([c])	([c])	49	49	0	0
October	239	40	([b])	([b])	([c])	([c])	68	66	0	0
November	226	21	([b])	([b])	([c])	([c])	13	13	0	0
December	245	40	([b])	([b])	([c])	([c])	21	21	0	0
Average	**264**	**30**	([b])	([b])	([c])	([c])	**53**	**50**	**0**	**0**
2003 January	R 291	39	([b])	([b])	([c])	([c])	25	25	0	0
February	R 213	0	([b])	([b])	([c])	([c])	15	15	0	0
March	R 304	40	([b])	([b])	([c])	([c])	10	10	0	0
April	R 395	77	([b])	([b])	([c])	([c])	46	43	0	0
May	377	81	([b])	([b])	([c])	([c])	10	10	0	0
June	R 700	282	([b])	([b])	([c])	([c])	11	11	0	0
July	R 444	86	([b])	([b])	([c])	([c])	0	0	0	0
August	R 459	192	([b])	([b])	([c])	([c])	66	39	0	0
September	R 479	243	([b])	([b])	([c])	([c])	35	8	0	0
October	R 244	86	([b])	([b])	([c])	([c])	133	92	0	0
November	R 371	R 151	([b])	([b])	([c])	([c])	71	44	0	0
December	R 301	69	([b])	([b])	([c])	([c])	23	15	0	0
Average	R **382**	R **112**	([b])	([b])	([c])	([c])	**37**	**26**	**0**	**0**
2004 January	345	123	([b])	([b])	([c])	([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
5-Month Average	**416**	**193**	([b])	([b])	([c])	([c])	**42**	**40**	**0**	**0**
2003 5-Month Average	**317**	**48**	([b])	([b])	([c])	([c])	**21**	**21**	**0**	**0**
2002 5-Month Average	**315**	**42**	([b])	([b])	([c])	([c])	**76**	**70**	**0**	**0**

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

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

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

R=Revised.

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

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

Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S3. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S3.

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

(Thousand Barrels per Day)

	Other OPEC[a]						Total OPEC[b]	
	Nigeria		Venezuela		Total			
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1973 Average	**459**	**448**	**1,135**	**344**	**2,156**	**1,293**	**2,993**	**2,095**
1974 Average	**713**	**697**	**979**	**319**	**2,253**	**1,549**	**3,280**	**2,540**
1975 Average	**762**	**746**	**702**	**395**	**2,452**	**2,091**	**3,601**	**3,211**
1976 Average	**1,025**	**1,014**	**700**	**241**	**3,229**	**2,721**	**5,066**	**4,545**
1977 Average	**1,143**	**1,130**	**690**	**250**	**3,754**	**3,225**	**6,193**	**5,643**
1978 Average	**919**	**910**	**646**	**181**	**3,536**	**2,972**	**5,751**	**5,184**
1979 Average	**1,080**	**1,069**	**690**	**293**	**3,569**	**3,063**	**5,637**	**5,112**
1980 Average	**857**	**841**	**481**	**156**	**2,781**	**2,356**	**4,300**	**3,864**
1981 Average	**620**	**611**	**406**	**147**	**2,106**	**1,726**	**3,323**	**2,922**
1982 Average	**514**	**510**	**412**	**155**	**1,451**	**1,075**	**2,146**	**1,734**
1983 Average	**302**	**301**	**422**	**164**	**1,422**	**1,072**	**1,862**	**1,477**
1984 Average	**216**	**207**	**548**	**253**	**1,544**	**1,062**	**2,049**	**1,512**
1985 Average	**293**	**280**	**605**	**306**	**1,522**	**1,069**	**1,830**	**1,312**
1986 Average	**440**	**437**	**793**	**416**	**1,926**	**1,317**	**2,837**	**2,113**
1987 Average	**535**	**529**	**804**	**488**	**1,983**	**1,451**	**3,060**	**2,400**
1988 Average	**618**	**607**	**794**	**439**	**1,981**	**1,339**	**3,520**	**2,696**
1989 Average	**815**	**800**	**873**	**495**	**2,279**	**1,642**	**4,140**	**3,376**
1990 Average	**800**	**784**	**1,025**	**666**	**2,332**	**1,713**	**4,296**	**3,514**
1991 Average	**703**	**683**	**1,035**	**668**	**2,249**	**1,634**	**4,092**	**3,377**
1992 Average	**681**	**665**	**1,170**	**826**	**2,313**	**1,770**	**4,092**	**3,406**
1993 Average	**740**	**722**	**1,300**	**1,010**	**2,493**	**1,972**	**4,273**	**3,609**
1994 Average	**637**	**624**	**1,334**	**1,034**	**2,520**	**1,965**	**4,247**	**3,580**
1995 Average	**627**	**621**	**1,480**	**1,151**	**2,430**	**1,862**	**4,002**	**3,341**
1996 Average	**617**	**595**	**1,676**	**1,303**	**2,609**	**1,950**	**4,211**	**3,438**
1997 Average	**698**	**689**	**1,773**	**1,394**	**2,814**	**2,140**	**4,569**	**3,775**
1998 Average	**696**	**689**	**1,719**	**1,377**	**2,771**	**2,125**	**4,905**	**4,169**
1999 Average	**657**	**623**	**1,493**	**1,150**	**2,489**	**1,869**	**4,953**	**4,228**
2000 Average	**896**	**875**	**1,546**	**1,223**	**2,716**	**2,135**	**5,203**	**4,544**
2001 Average	**885**	**842**	**1,553**	**1,291**	**2,768**	**2,184**	**5,528**	**4,848**
2002 January	565	540	1,450	1,233	2,359	1,839	5,029	4,465
February	453	426	1,444	1,222	2,249	1,732	4,733	4,165
March	621	590	1,404	1,148	2,435	1,877	4,991	4,394
April	645	584	1,134	1,014	2,206	1,734	4,606	4,108
May	591	576	1,312	1,117	2,323	1,822	4,561	3,987
June	728	702	1,188	958	2,266	1,737	4,356	3,763
July	607	585	1,585	1,341	2,367	1,940	4,366	3,868
August	820	792	1,699	1,514	2,735	2,341	4,638	4,167
September	547	489	1,556	1,302	2,401	1,871	4,452	3,871
October	597	566	1,605	1,453	2,509	2,125	4,686	4,221
November	596	562	1,625	1,453	2,459	2,048	4,682	4,206
December	670	645	778	652	1,715	1,358	4,164	3,774
Average	**621**	**589**	**1,398**	**1,201**	**2,336**	**1,870**	**4,605**	**4,083**
2003 January	R 831	R 804	R 426	399	R 1,573	R 1,267	R 4,303	R 3,873
February	R 547	R 505	613	559	R 1,388	R 1,079	R 4,052	R 3,672
March	R 1,002	R 945	R 1,297	R 1,149	R 2,614	R 2,144	R 5,433	R 4,883
April	733	697	R 1,626	R 1,387	R 2,801	R 2,204	R 5,949	R 5,279
May	958	907	R 1,737	R 1,491	R 3,082	R 2,488	R 5,751	R 5,060
June	R 866	R 836	R 1,622	R 1,381	R 3,199	R 2,510	R 5,526	R 4,722
July	843	804	R 1,279	R 1,150	R 2,566	R 2,040	R 4,736	R 4,112
August	995	988	R 1,564	R 1,345	R 3,085	R 2,564	R 4,934	R 4,347
September	936	905	R 1,547	R 1,307	R 2,997	R 2,463	R 5,394	R 4,798
October	R 1,049	R 990	R 1,564	R 1,295	R 2,989	R 2,463	R 5,342	R 4,754
November	646	622	R 1,562	R 1,352	R 2,651	R 2,170	R 5,237	R 4,733
December	959	938	R 1,631	R 1,340	R 2,913	R 2,362	R 5,225	R 4,650
Average	R **867**	R **832**	R **1,376**	R **1,183**	R **2,662**	R **2,153**	R **5,162**	R **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
5-Month Average	**1,143**	**1,075**	**1,547**	**1,336**	**3,149**	**2,645**	**5,464**	**4,906**
2003 5-Month Average	**820**	**777**	**1,147**	**1,003**	**2,306**	**1,849**	**5,113**	**4,566**
2002 5-Month Average	**577**	**545**	**1,348**	**1,146**	**2,316**	**1,803**	**4,786**	**4,226**

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

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

R=Revised.

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

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

Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S3. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S3.

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

(Thousand Barrels per Day)

	Non-OPEC[a]											
	Angola		Australia		Bahamas		Brazil		Canada		China	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1973 Average	**49**	**49**	**2**	**0**	**174**	**0**	**9**	**0**	**1,325**	**1,001**	**(s)**	**0**
1974 Average	**49**	**48**	**1**	**0**	**164**	**0**	**2**	**0**	**1,070**	**791**	**0**	**0**
1975 Average	**75**	**71**	**5**	**0**	**152**	**0**	**5**	**0**	**846**	**600**	**0**	**0**
1976 Average	**12**	**7**	**2**	**0**	**118**	**0**	**0**	**0**	**599**	**371**	**0**	**0**
1977 Average	**24**	**17**	**3**	**0**	**171**	**0**	**0**	**0**	**517**	**279**	**0**	**0**
1978 Average	**20**	**6**	**5**	**0**	**160**	**0**	**0**	**0**	**467**	**248**	**0**	**0**
1979 Average	**43**	**39**	**6**	**0**	**147**	**0**	**1**	**0**	**538**	**271**	**13**	**13**
1980 Average	**42**	**37**	**1**	**0**	**78**	**0**	**3**	**1**	**455**	**199**	**(s)**	**0**
1981 Average	**49**	**45**	**5**	**0**	**74**	**0**	**23**	**14**	**447**	**164**	**18**	**0**
1982 Average	**44**	**42**	**5**	**(s)**	**65**	**0**	**47**	**19**	**482**	**214**	**40**	**8**
1983 Average	**78**	**71**	**4**	**0**	**125**	**0**	**41**	**2**	**547**	**274**	**34**	**6**
1984 Average	**90**	**85**	**38**	**25**	**88**	**0**	**60**	**(s)**	**630**	**341**	**46**	**15**
1985 Average	**110**	**104**	**37**	**21**	**40**	**0**	**61**	**0**	**770**	**468**	**59**	**36**
1986 Average	**112**	**102**	**41**	**30**	**37**	**0**	**50**	**0**	**807**	**570**	**90**	**68**
1987 Average	**192**	**180**	**58**	**49**	**37**	**0**	**84**	**0**	**848**	**608**	**82**	**63**
1988 Average	**212**	**203**	**64**	**59**	**32**	**0**	**98**	**0**	**999**	**681**	**88**	**82**
1989 Average	**284**	**279**	**36**	**31**	**34**	**0**	**82**	**0**	**931**	**630**	**80**	**76**
1990 Average	**237**	**236**	**53**	**47**	**37**	**0**	**49**	**0**	**934**	**643**	**80**	**77**
1991 Average	**254**	**254**	**26**	**21**	**35**	**0**	**22**	**0**	**1,033**	**743**	**91**	**87**
1992 Average	**336**	**336**	**19**	**17**	**36**	**0**	**20**	**0**	**1,069**	**797**	**90**	**84**
1993 Average	**336**	**336**	**19**	**18**	**28**	**0**	**33**	**0**	**1,181**	**900**	**51**	**50**
1994 Average	**331**	**322**	**17**	**16**	**29**	**0**	**31**	**1**	**1,272**	**983**	**65**	**64**
1995 Average	**367**	**360**	**16**	**16**	**2**	**0**	**8**	**0**	**1,332**	**1,040**	**53**	**53**
1996 Average	**351**	**344**	**31**	**25**	**1**	**0**	**9**	**0**	**1,424**	**1,075**	**57**	**57**
1997 Average	**427**	**425**	**48**	**31**	**1**	**0**	**5**	**0**	**1,563**	**1,198**	**49**	**48**
1998 Average	**468**	**465**	**57**	**31**	**4**	**0**	**26**	**0**	**1,598**	**1,266**	**42**	**42**
1999 Average	**361**	**357**	**42**	**31**	**3**	**0**	**26**	**0**	**1,539**	**1,178**	**21**	**13**
2000 Average	**301**	**295**	**56**	**49**	**0**	**0**	**51**	**5**	**1,807**	**1,348**	**44**	**33**
2001 Average	**328**	**321**	**43**	**34**	**10**	**0**	**82**	**13**	**1,828**	**1,356**	**24**	**13**
2002 January	310	297	41	41	20	0	48	16	1,901	1,307	2	0
February	304	290	69	69	26	0	84	52	1,897	1,374	45	42
March	321	300	42	42	46	0	131	65	1,844	1,339	4	0
April	384	371	66	66	7	0	163	84	2,032	1,497	1	0
May	336	336	63	63	19	0	144	77	1,969	1,496	16	15
June	475	463	21	21	16	0	149	69	1,914	1,466	51	34
July	308	298	43	43	35	0	114	59	1,901	1,359	43	32
August	233	220	45	23	47	0	191	119	2,020	1,526	45	34
September	342	329	87	65	53	0	90	53	1,883	1,413	16	0
October	258	246	67	67	55	0	132	75	2,110	1,578	49	48
November	402	390	84	64	37	0	73	17	2,083	1,484	22	21
December	317	312	61	51	42	0	66	14	2,090	1,493	15	13
Average	**332**	**321**	**57**	**51**	**34**	**0**	**116**	**58**	**1,971**	**1,445**	**26**	**20**
2003 January	263	245	20	20	R 38	0	114	48	R 2,272	R 1,654	19	16
February	265	251	23	23	27	0	R 119	36	R 1,997	R 1,447	15	14
March	R 396	R 396	20	20	41	0	76	15	R 1,895	R 1,428	R 45	7
April	494	482	R 24	R 24	35	0	75	17	R 1,779	R 1,287	R 21	6
May	356	356	20	20	37	0	67	33	R 2,015	R 1,502	22	7
June	403	390	44	22	67	0	R 84	R 60	R 1,956	R 1,517	R 32	6
July	529	517	47	23	18	0	144	63	R 2,131	R 1,616	R 74	25
August	483	471	62	41	37	0	198	82	R 2,132	1,586	21	13
September	401	401	84	63	6	0	132	68	R 2,082	1,538	R 39	24
October	385	373	45	45	25	0	R 95	R 32	R 2,179	R 1,700	R 6	5
November	203	191	22	22	4	0	93	68	R 2,186	1,639	R 30	28
December	269	269	0	0	22	0	99	77	R 2,227	1,663	0	0
Average	**R 371**	**R 363**	**R 34**	**R 27**	**R 30**	**0**	**R 108**	**R 50**	**R 2,072**	**R 1,549**	**R 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
5-Month Average	**329**	**319**	**21**	**21**	**16**	**0**	**95**	**50**	**2,092**	**1,586**	**19**	**13**
2003 5-Month Average	**356**	**347**	**22**	**22**	**36**	**0**	**90**	**30**	**1,993**	**1,465**	**25**	**10**
2002 5-Month Average	**331**	**319**	**56**	**56**	**24**	**0**	**114**	**59**	**1,928**	**1,402**	**13**	**11**

[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.

R=Revised. (s)=Less than 500 barrels per day.

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

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

Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S3. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S3.

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

(Thousand Barrels per Day)

	Non-OPEC[a]											
	Colombia		Ecuador[b]		Gabon[c]		Italy		Malaysia		Mexico	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1973 Average	**9**	**2**	**–**	**–**	**–**	**–**	**125**	**0**	**12**	**1**	**16**	**1**
1974 Average	**5**	**0**	**–**	**–**	**–**	**–**	**74**	**0**	**12**	**1**	**8**	**2**
1975 Average	**9**	**0**	**–**	**–**	**–**	**–**	**27**	**0**	**8**	**5**	**71**	**70**
1976 Average	**21**	**6**	**–**	**–**	**–**	**–**	**39**	**0**	**18**	**16**	**87**	**87**
1977 Average	**17**	**0**	**–**	**–**	**–**	**–**	**51**	**0**	**66**	**55**	**179**	**177**
1978 Average	**20**	**0**	**–**	**–**	**–**	**–**	**38**	**0**	**42**	**37**	**318**	**316**
1979 Average	**18**	**0**	**–**	**–**	**–**	**–**	**30**	**0**	**66**	**52**	**439**	**437**
1980 Average	**4**	**0**	**–**	**–**	**–**	**–**	**4**	**0**	**70**	**61**	**533**	**507**
1981 Average	**1**	**0**	**–**	**–**	**–**	**–**	**11**	**0**	**36**	**33**	**522**	**469**
1982 Average	**5**	**0**	**–**	**–**	**–**	**–**	**18**	**(s)**	**20**	**18**	**685**	**645**
1983 Average	**10**	**0**	**–**	**–**	**–**	**–**	**18**	**(s)**	**4**	**3**	**826**	**766**
1984 Average	**8**	**0**	**–**	**–**	**–**	**–**	**45**	**(s)**	**1**	**0**	**748**	**659**
1985 Average	**23**	**0**	**–**	**–**	**–**	**–**	**60**	**(s)**	**3**	**1**	**816**	**715**
1986 Average	**87**	**57**	**–**	**–**	**–**	**–**	**76**	**0**	**12**	**11**	**699**	**621**
1987 Average	**148**	**115**	**–**	**–**	**–**	**–**	**54**	**1**	**13**	**12**	**655**	**602**
1988 Average	**134**	**106**	**–**	**–**	**–**	**–**	**65**	**5**	**19**	**19**	**747**	**674**
1989 Average	**172**	**136**	**–**	**–**	**–**	**–**	**34**	**3**	**39**	**39**	**767**	**716**
1990 Average	**182**	**140**	**–**	**–**	**–**	**–**	**58**	**2**	**41**	**40**	**755**	**689**
1991 Average	**163**	**123**	**–**	**–**	**–**	**–**	**47**	**3**	**24**	**24**	**807**	**759**
1992 Average	**126**	**102**	**–**	**–**	**–**	**–**	**55**	**0**	**10**	**10**	**830**	**787**
1993 Average	**171**	**141**	**81**	**78**	**–**	**–**	**31**	**0**	**11**	**10**	**919**	**863**
1994 Average	**161**	**146**	**91**	**91**	**–**	**–**	**22**	**0**	**10**	**6**	**984**	**939**
1995 Average	**219**	**207**	**97**	**96**	**229**	**229**	**5**	**0**	**8**	**6**	**1,068**	**1,027**
1996 Average	**234**	**226**	**104**	**96**	**184**	**184**	**8**	**0**	**11**	**6**	**1,244**	**1,207**
1997 Average	**271**	**270**	**115**	**114**	**230**	**230**	**7**	**0**	**23**	**8**	**1,385**	**1,360**
1998 Average	**354**	**349**	**101**	**98**	**207**	**207**	**12**	**0**	**35**	**26**	**1,351**	**1,321**
1999 Average	**468**	**452**	**118**	**114**	**168**	**168**	**10**	**0**	**35**	**21**	**1,324**	**1,254**
2000 Average	**342**	**318**	**128**	**125**	**143**	**143**	**30**	**0**	**45**	**29**	**1,373**	**1,313**
2001 Average	**296**	**260**	**120**	**113**	**140**	**140**	**40**	**0**	**37**	**15**	**1,440**	**1,394**
2002 January	260	228	116	83	206	206	30	0	33	14	1,416	1,373
February	352	331	84	77	61	61	26	0	11	0	1,611	1,571
March	242	233	110	104	124	124	54	0	6	0	1,473	1,437
April	291	266	93	75	164	164	38	0	0	0	1,486	1,442
May	210	192	91	82	188	188	36	0	30	22	1,565	1,492
June	229	204	117	105	123	123	16	0	7	0	1,519	1,474
July	224	203	110	93	206	206	22	0	20	11	1,604	1,529
August	239	217	79	79	170	170	24	0	38	29	1,500	1,475
September	275	263	114	102	164	164	24	0	0	0	1,453	1,417
October	255	232	156	151	88	88	34	0	22	17	1,574	1,524
November	270	212	153	148	127	127	40	0	23	12	1,580	1,532
December	289	248	100	100	88	88	58	0	4	0	1,781	1,734
Average	**260**	**235**	**110**	**100**	**143**	**143**	**34**	**0**	**16**	**9**	**1,547**	**1,500**
2003 January	R 160	R 138	R 85	R 85	113	113	25	0	12	11	R 1,604	R 1,530
February	R 269	240	93	93	168	168	21	0	15	0	R 1,646	R 1,542
March	R 220	R 163	82	82	98	98	49	0	8	0	R 1,355	R 1,313
April	R 212	170	101	95	135	135	R 68	0	27	21	R 1,663	R 1,633
May	162	133	R 149	R 137	129	129	39	0	31	22	R 1,556	R 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	R 1,694	R 1,645
August	226	206	173	170	144	144	32	0	62	62	R 1,618	R 1,575
September	200	182	173	167	102	102	28	0	R 46	22	R 1,665	R 1,631
October	231	186	245	234	141	141	25	0	R 15	9	R 1,692	R 1,620
November	129	102	103	103	142	142	49	0	R 9	0	R 1,657	R 1,585
December	175	168	244	237	161	161	25	0	21	11	1,801	1,765
Average	**R 195**	**R 166**	**R 145**	**R 139**	**131**	**131**	**R 34**	**0**	**R 31**	**21**	**R 1,623**	**R 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
5-Month Average	**174**	**152**	**208**	**195**	**130**	**130**	**35**	**0**	**16**	**9**	**1,619**	**1,579**
2003 5-Month Average	**203**	**167**	**102**	**98**	**128**	**128**	**41**	**0**	**19**	**11**	**1,562**	**1,505**
2002 5-Month Average	**269**	**248**	**99**	**84**	**150**	**150**	**37**	**0**	**16**	**7**	**1,508**	**1,461**

[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.

R=Revised. – =Not applicable. (s)=Less than 500 barrels per day.

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

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

Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S3. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S3.

Table 3.3g Petroleum Imports From Netherlands, Netherlands Antilles, Norway, Puerto Rico, Russia, and Spain

(Thousand Barrels per Day)

	Non-OPEC[a]											
	Netherlands		Netherlands Antilles		Norway		Puerto Rico		Russia[b]		Spain	
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1973 Average	**53**	**0**	**585**	**0**	**1**	**0**	**99**	**0**	**26**	**0**	**26**	**0**
1974 Average	**43**	**0**	**511**	**0**	**1**	**1**	**90**	**0**	**20**	**0**	**12**	**0**
1975 Average	**19**	**4**	**332**	**0**	**17**	**12**	**90**	**0**	**14**	**0**	**1**	**0**
1976 Average	**8**	**0**	**275**	**0**	**36**	**35**	**88**	**0**	**11**	**2**	**1**	**0**
1977 Average	**31**	**4**	**211**	**0**	**50**	**48**	**105**	**0**	**12**	**2**	**10**	**0**
1978 Average	**5**	**2**	**229**	**0**	**104**	**104**	**94**	**0**	**8**	**1**	**3**	**0**
1979 Average	**23**	**7**	**231**	**0**	**75**	**75**	**92**	**0**	**1**	**0**	**4**	**0**
1980 Average	**2**	**(s)**	**225**	**0**	**144**	**144**	**88**	**0**	**1**	**0**	**1**	**0**
1981 Average	**30**	**(s)**	**197**	**0**	**119**	**114**	**62**	**0**	**5**	**(s)**	**1**	**(s)**
1982 Average	**35**	**(s)**	**175**	**0**	**102**	**102**	**50**	**0**	**1**	**0**	**3**	**(s)**
1983 Average	**65**	**3**	**189**	**0**	**66**	**65**	**40**	**0**	**1**	**(s)**	**2**	**(s)**
1984 Average	**65**	**3**	**188**	**0**	**114**	**112**	**42**	**0**	**13**	**(s)**	**11**	**0**
1985 Average	**58**	**0**	**40**	**0**	**32**	**31**	**28**	**0**	**8**	**(s)**	**29**	**1**
1986 Average	**54**	**0**	**25**	**0**	**60**	**53**	**21**	**0**	**18**	**(s)**	**53**	**0**
1987 Average	**60**	**0**	**29**	**0**	**80**	**70**	**21**	**0**	**11**	**0**	**55**	**0**
1988 Average	**61**	**0**	**36**	**0**	**67**	**62**	**22**	**0**	**29**	**0**	**68**	**0**
1989 Average	**49**	**0**	**42**	**0**	**138**	**127**	**32**	**0**	**48**	**0**	**67**	**0**
1990 Average	**55**	**0**	**31**	**0**	**102**	**96**	**32**	**0**	**45**	**1**	**47**	**0**
1991 Average	**29**	**0**	**81**	**0**	**82**	**74**	**27**	**0**	**29**	**1**	**33**	**0**
1992 Average	**26**	**0**	**65**	**0**	**127**	**119**	**26**	**0**	**18**	**5**	**32**	**0**
1993 Average	**10**	**0**	**82**	**0**	**142**	**137**	**29**	**0**	**55**	**36**	**37**	**0**
1994 Average	**32**	**0**	**98**	**0**	**202**	**190**	**22**	**0**	**30**	**27**	**37**	**0**
1995 Average	**15**	**0**	**52**	**0**	**273**	**258**	**15**	**0**	**25**	**14**	**16**	**1**
1996 Average	**19**	**0**	**64**	**0**	**313**	**293**	**20**	**0**	**25**	**18**	**29**	**1**
1997 Average	**25**	**0**	**74**	**0**	**309**	**288**	**16**	**0**	**13**	**3**	**21**	**0**
1998 Average	**31**	**0**	**82**	**0**	**236**	**221**	**15**	**0**	**24**	**9**	**18**	**0**
1999 Average	**27**	**0**	**65**	**0**	**304**	**263**	**13**	**0**	**89**	**21**	**10**	**0**
2000 Average	**30**	**1**	**90**	**0**	**343**	**302**	**15**	**0**	**72**	**7**	**25**	**0**
2001 Average	**43**	**0**	**81**	**0**	**341**	**281**	**4**	**0**	**90**	**0**	**31**	**0**
2002 January	25	0	120	0	155	135	0	0	61	0	16	0
February	48	0	145	0	264	224	0	0	51	0	10	0
March	77	0	112	0	338	296	0	0	95	12	19	0
April	111	0	94	0	577	523	2	0	192	36	8	0
May	103	0	48	0	519	467	0	0	371	220	23	0
June	69	0	76	0	527	490	0	0	231	78	8	0
July	39	0	51	0	495	448	0	0	220	79	30	0
August	87	0	56	0	478	402	0	0	236	100	29	0
September	21	0	77	0	342	294	0	0	225	104	0	0
October	75	0	71	0	318	308	0	0	295	190	0	0
November	70	0	84	0	409	388	0	0	255	85	19	0
December	61	0	43	0	288	202	0	0	276	108	41	0
Average	**66**	**0**	**81**	**0**	**393**	**348**	**(s)**	**0**	**210**	**85**	**17**	**0**
2003 January	R 123	0	49	0	210	R 139	0	0	R 181	99	R 30	0
February	R 62	0	R 129	0	R 280	R 236	0	0	271	121	26	0
March	R 108	0	64	0	R 242	R 181	0	0	R 257	16	16	0
April	R 89	0	83	0	R 282	R 182	0	0	R 132	19	17	0
May	76	0	143	0	303	190	0	0	R 208	142	49	0
June	97	0	R 49	0	R 375	R 244	0	0	R 527	R 441	44	0
July	100	0	59	0	R 265	R 162	0	0	550	479	16	0
August	R 91	0	R 27	0	R 352	192	0	0	411	288	7	0
September	102	0	46	0	288	214	0	0	275	142	11	0
October	R 79	0	R 42	0	296	190	0	0	93	34	10	0
November	R 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	R **87**	**0**	R **70**	**0**	R **270**	R **181**	**0**	**0**	R **254**	R **151**	R **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	15	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
5-Month Average	**103**	**0**	**54**	**0**	**246**	**170**	**0**	**0**	**206**	**79**	**27**	**1**
2003 5-Month Average	**92**	**0**	**93**	**0**	**263**	**184**	**0**	**0**	**209**	**79**	**28**	**0**
2002 5-Month Average	**73**	**0**	**103**	**0**	**371**	**330**	**(s)**	**0**	**156**	**55**	**15**	**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.

R=Revised. (s)=Less than 500 barrels per day.

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

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

Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S3. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S3.

Table 3.3h Petroleum Imports From Trinidad and Tobago, United Kingdom, U.S. Virgin Islands, Other Non-OPEC, Total Non-OPEC, and Total Imports

(Thousand Barrels per Day)

	Non-OPEC[a]										Total Imports	
	Trinidad and Tobago		United Kingdom		U.S. Virgin Islands		Other Non-OPEC[b]		Total			
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1973 Average	**255**	**60**	**15**	**0**	**329**	**0**	**153**	**36**	**3,263**	**1,149**	**6,256**	**3,244**
1974 Average	**251**	**63**	**8**	**0**	**391**	**0**	**122**	**30**	**2,832**	**937**	**6,112**	**3,477**
1975 Average	**242**	**115**	**14**	**(s)**	**406**	**0**	**120**	**14**	**2,454**	**893**	**6,056**	**4,105**
1976 Average	**274**	**104**	**31**	**13**	**422**	**0**	**203**	**101**	**2,247**	**742**	**7,313**	**5,287**
1977 Average	**289**	**134**	**126**	**97**	**466**	**0**	**287**	**157**	**2,614**	**971**	**8,807**	**6,615**
1978 Average	**253**	**142**	**180**	**169**	**428**	**0**	**239**	**146**	**2,612**	**1,172**	**8,363**	**6,356**
1979 Average	**190**	**123**	**202**	**197**	**431**	**0**	**269**	**192**	**2,819**	**1,407**	**8,456**	**6,519**
1980 Average	**176**	**115**	**176**	**173**	**388**	**0**	**219**	**162**	**2,609**	**1,399**	**6,909**	**5,263**
1981 Average	**133**	**102**	**375**	**369**	**327**	**0**	**236**	**163**	**2,672**	**1,474**	**5,996**	**4,396**
1982 Average	**112**	**92**	**456**	**441**	**316**	**0**	**306**	**174**	**2,968**	**1,754**	**5,113**	**3,488**
1983 Average	**96**	**83**	**382**	**365**	**282**	**0**	**378**	**215**	**3,189**	**1,853**	**5,051**	**3,329**
1984 Average	**94**	**87**	**402**	**378**	**294**	**0**	**411**	**210**	**3,388**	**1,914**	**5,437**	**3,426**
1985 Average	**113**	**98**	**310**	**278**	**247**	**0**	**394**	**137**	**3,237**	**1,888**	**5,067**	**3,201**
1986 Average	**125**	**93**	**350**	**317**	**244**	**0**	**426**	**144**	**3,387**	**2,065**	**6,224**	**4,178**
1987 Average	**106**	**75**	**352**	**304**	**272**	**0**	**459**	**196**	**3,617**	**2,274**	**6,678**	**4,674**
1988 Average	**97**	**71**	**315**	**254**	**242**	**0**	**487**	**196**	**3,882**	**2,411**	**7,402**	**5,107**
1989 Average	**94**	**73**	**215**	**160**	**321**	**0**	**457**	**197**	**3,921**	**2,467**	**8,061**	**5,843**
1990 Average	**96**	**76**	**189**	**155**	**282**	**0**	**417**	**180**	**3,721**	**2,381**	**8,018**	**5,894**
1991 Average	**88**	**72**	**138**	**106**	**243**	**0**	**282**	**137**	**3,535**	**2,405**	**7,627**	**5,782**
1992 Average	**95**	**70**	**230**	**200**	**249**	**0**	**335**	**149**	**3,796**	**2,676**	**7,888**	**6,083**
1993 Average	**74**	**55**	**350**	**312**	**254**	**0**	**452**	**240**	**[c]4,347**	**[c]3,178**	**8,620**	**6,787**
1994 Average	**77**	**62**	**458**	**396**	**328**	**0**	**450**	**239**	**4,749**	**3,483**	**8,996**	**7,063**
1995 Average	**70**	**62**	**383**	**341**	**278**	**0**	**302**	**181**	**4,833**	**3,889**	**8,835**	**7,230**
1996 Average	**76**	**58**	**308**	**216**	**313**	**0**	**440**	**265**	**5,267**	**4,070**	**9,478**	**7,508**
1997 Average	**61**	**56**	**226**	**169**	**300**	**0**	**422**	**250**	**5,593**	**4,450**	**10,162**	**8,225**
1998 Average	**66**	**53**	**250**	**161**	**293**	**0**	**531**	**288**	**5,803**	**4,537**	**10,708**	**8,706**
1999 Average	**58**	**40**	**365**	**284**	**280**	**1**	**575**	**304**	**5,899**	**4,502**	**10,852**	**8,731**
2000 Average	**85**	**56**	**366**	**291**	**291**	**0**	**618**	**214**	**6,257**	**4,526**	**11,459**	**9,071**
2001 Average	**72**	**51**	**324**	**244**	**268**	**0**	**702**	**244**	**6,343**	**4,480**	**11,871**	**9,328**
2002 January	53	53	366	284	278	0	604	207	6,059	4,244	11,088	8,709
February	84	84	360	279	242	0	398	133	6,171	4,588	10,904	8,753
March	72	68	272	220	198	0	631	164	6,207	4,405	11,198	8,799
April	59	59	454	380	168	0	772	230	7,160	5,193	11,765	9,301
May	71	63	436	351	165	0	804	273	7,208	5,337	11,769	9,323
June	89	76	726	613	236	0	799	346	7,397	5,561	11,753	9,324
July	72	72	529	481	240	0	951	403	7,258	5,316	11,624	9,184
August	58	50	574	480	234	0	872	454	7,252	5,378	11,890	9,544
September	104	76	353	278	231	0	769	367	6,622	4,926	11,075	8,797
October	112	75	582	486	235	0	718	225	7,207	5,311	11,893	9,532
November	102	82	669	632	321	0	762	255	7,586	5,448	12,268	9,654
December	85	55	415	376	281	0	534	173	6,935	4,968	11,100	8,741
Average	**80**	**68**	**478**	**405**	**236**	**0**	**720**	**270**	**6,925**	**5,058**	**11,530**	**9,140**
2003 January	[R]111	73	[R]493	411	179	0	[R]700	181	[R]6,801	[R]4,760	[R]11,104	[R]8,633
February	78	44	[R]463	407	[R]253	0	[R]649	179	[R]6,869	[R]4,802	[R]10,921	[R]8,474
March	105	78	[R]389	299	328	0	[R]818	[R]245	[R]6,612	[R]4,342	[R]12,044	[R]9,226
April	110	82	[R]407	[R]308	245	0	[R]651	189	[R]6,650	[R]4,649	[R]12,599	[R]9,928
May	97	82	[R]557	[R]470	258	0	[R]894	358	[R]7,167	[R]5,093	[R]12,918	[R]10,153
June	50	44	[R]512	373	278	0	[R]959	[R]340	[R]7,475	[R]5,316	[R]13,001	[R]10,038
July	128	98	[R]512	[R]454	351	0	[R]809	348	[R]8,000	[R]5,922	[R]12,736	[R]10,034
August	58	36	[R]381	319	345	0	[R]974	490	[R]7,836	[R]5,676	[R]12,769	[R]10,023
September	124	87	558	487	[R]326	0	786	359	[R]7,474	[R]5,489	[R]12,868	[R]10,287
October	[R]91	60	[R]319	[R]285	[R]307	0	[R]711	396	[R]7,031	[R]5,309	[R]12,373	[R]10,063
November	112	68	300	234	291	0	[R]676	307	[R]6,475	[R]4,618	[R]11,712	[R]9,351
December	112	56	390	261	287	0	634	228	6,808	5,034	[R]12,033	[R]9,684
Average	**98**	**67**	**[R]440**	**[R]359**	**288**	**0**	**773**	**303**	**[R]7,103**	**[R]5,087**	**[R]12,264**	**[R]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
5-Month Average	**105**	**61**	**385**	**253**	**289**	**0**	**882**	**290**	**7,052**	**4,907**	**12,516**	**9,813**
2003 5-Month Average	**101**	**72**	**462**	**379**	**253**	**0**	**745**	**232**	**6,820**	**4,729**	**11,933**	**9,295**
2002 5-Month Average	**68**	**65**	**377**	**303**	**210**	**0**	**646**	**203**	**6,565**	**4,754**	**11,351**	**8,979**

[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.

R=Revised. (s)=Less than 500 barrels per day.

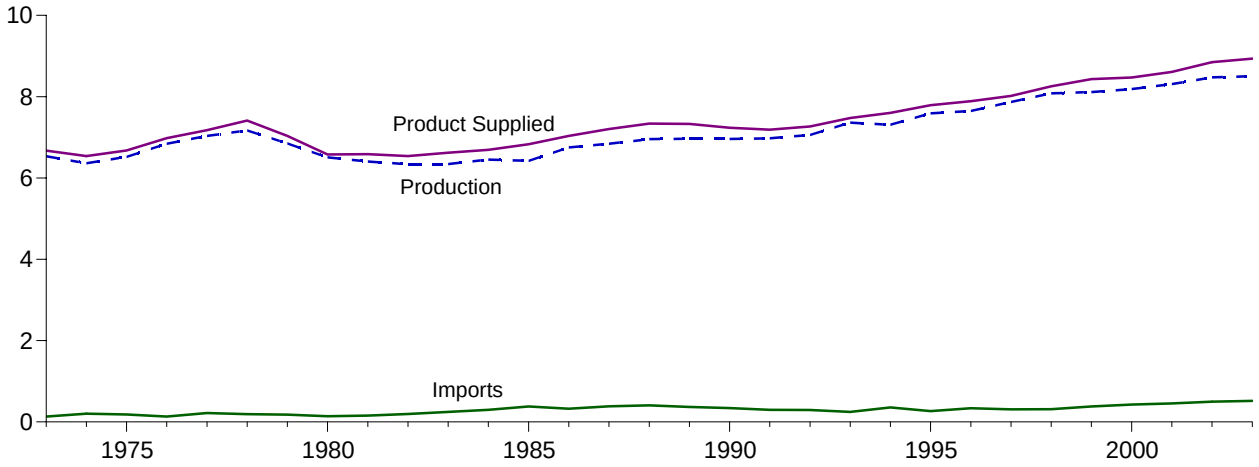
Notes: • Beginning in October 1977, Strategic Petroleum Reserve imports are included. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

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

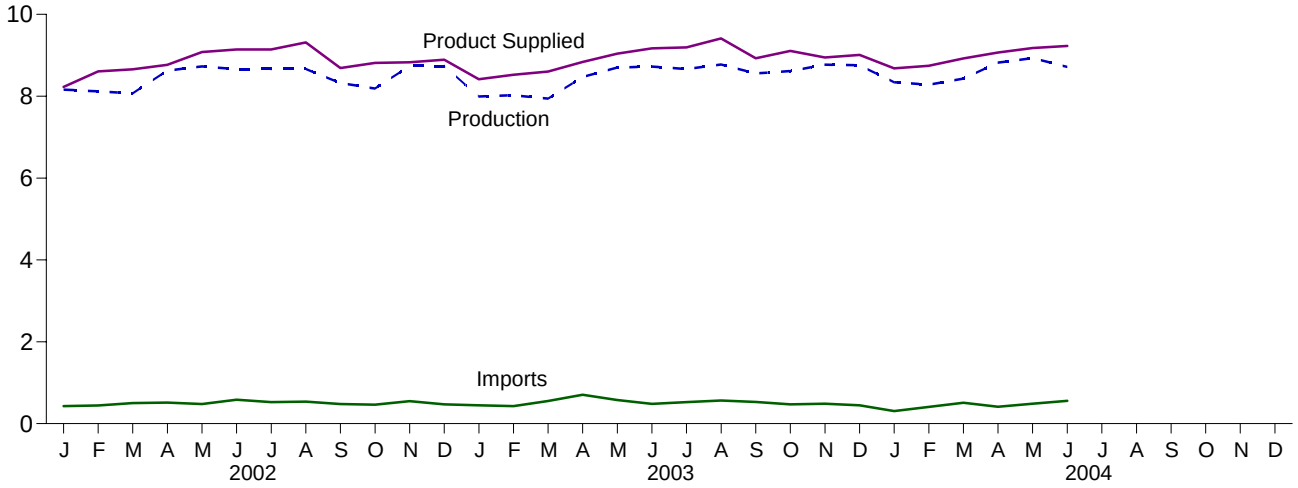
Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S3. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S3.

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

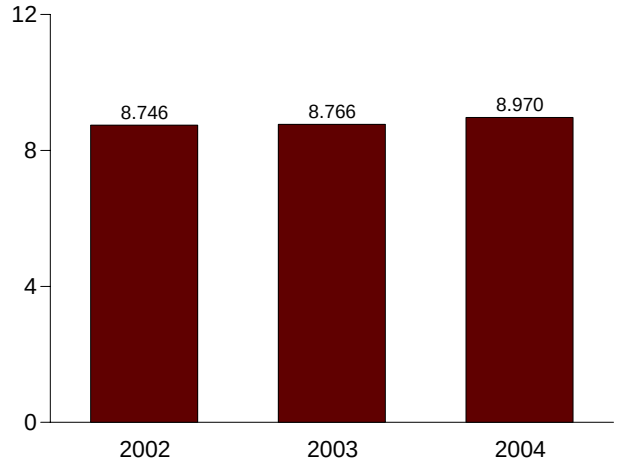
Overview, 1973-2003



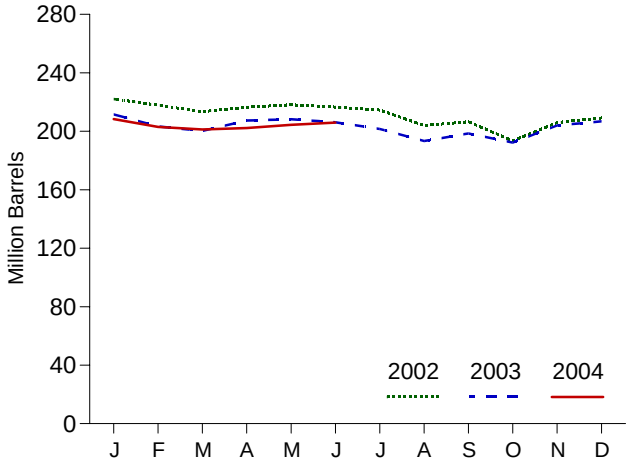
Overview, Monthly



Product Supplied, January-June



Total Stocks, End of Month



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

Table 3.4 Finished Motor Gasoline Supply and Disposition

	Supply		Disposition			Motor Gasoline Stocks[a]		Oxygenates Stocks[a]
	Total Production	Imports[b]	Stock Change[b,c]	Exports	Product Supplied	Total[d]	Finished	
	Thousand Barrels per Day					Million Barrels		
1973 Average	**6,535**	**134**	**-9**	**4**	**6,674**	**209**	**NA**	**NA**
1974 Average	**6,360**	**204**	**24**	**2**	**6,537**	**[e]218**	**NA**	**NA**
1975 Average	**6,520**	**184**	**[e]28**	**2**	**6,675**	**235**	**NA**	**NA**
1976 Average	**6,841**	**131**	**-10**	**3**	**6,978**	**231**	**NA**	**NA**
1977 Average	**7,033**	**217**	**72**	**2**	**7,177**	**258**	**NA**	**NA**
1978 Average	**7,169**	**190**	**-54**	**1**	**7,412**	**238**	**NA**	**NA**
1979 Average	**6,852**	**181**	**-2**	**(s)**	**7,034**	**237**	**NA**	**NA**
1980 Average	**6,506**	**140**	**66**	**1**	**6,579**	**[e]261**	**NA**	**NA**
1981 Average[f]	**6,405**	**157**	**[e]-28**	**2**	**6,588**	**253**	**203**	**NA**
1982 Average	**6,338**	**197**	**-25**	**20**	**6,539**	**[e]235**	**[e]194**	**NA**
1983 Average	**6,340**	**247**	**[e]-45**	**10**	**6,622**	**222**	**186**	**NA**
1984 Average	**6,453**	**299**	**54**	**6**	**6,693**	**243**	**205**	**NA**
1985 Average	**6,419**	**381**	**-41**	**10**	**6,831**	**223**	**190**	**NA**
1986 Average	**6,752**	**326**	**11**	**33**	**7,034**	**233**	**194**	**NA**
1987 Average	**6,841**	**384**	**-15**	**35**	**7,206**	**226**	**189**	**NA**
1988 Average	**6,956**	**405**	**3**	**22**	**7,336**	**228**	**190**	**NA**
1989 Average	**6,963**	**369**	**-35**	**39**	**7,328**	**213**	**177**	**NA**
1990 Average	**6,959**	**342**	**10**	**55**	**7,235**	**220**	**181**	**NA**
1991 Average	**6,975**	**297**	**3**	**82**	**7,188**	**219**	**182**	**NA**
1992 Average	**7,058**	**294**	**-11**	**96**	**7,268**	**216**	**178**	**NA**
1993 Average	**[g]7,360**	**247**	**26**	**105**	**[g]7,476**	**226**	**187**	**[h]13**
1994 Average	**7,312**	**356**	**-31**	**97**	**7,601**	**215**	**176**	**17**
1995 Average	**7,588**	**265**	**-40**	**104**	**7,789**	**202**	**161**	**12**
1996 Average	**7,647**	**336**	**-12**	**104**	**7,891**	**195**	**157**	**13**
1997 Average	**7,870**	**309**	**26**	**137**	**8,017**	**210**	**166**	**12**
1998 Average	**8,082**	**311**	**15**	**125**	**8,253**	**216**	**172**	**14**
1999 Average	**8,111**	**382**	**-49**	**111**	**8,431**	**193**	**154**	**14**
2000 Average	**8,186**	**427**	**-3**	**144**	**8,472**	**196**	**153**	**12**
2001 Average	**8,312**	**454**	**23**	**133**	**8,610**	**210**	**161**	**13**
2002 January	8,160	428	265	96	8,227	222	170	15
February	8,117	442	-149	102	8,607	218	166	14
March	8,072	504	-183	104	8,655	213	160	14
April	8,626	512	239	134	8,766	216	167	14
May	8,729	480	42	88	9,078	218	168	15
June	8,661	586	-25	131	9,140	217	168	15
July	8,665	526	-89	136	9,143	215	165	15
August	8,666	538	-241	133	9,313	204	157	14
September	8,320	480	1	113	8,687	206	157	13
October	8,190	465	-295	135	8,814	194	148	13
November	8,738	548	327	130	8,829	206	158	13
December	8,734	470	124	186	8,893	209	162	12
Average	**8,475**	**498**	**1**	**124**	**8,848**	**209**	**162**	**12**
2003 January	[R]7,991	[R]446	[R]-151	175	[R]8,414	[R]211	[R]157	13
February	[R]8,023	[R]427	[R]-219	143	[R]8,525	203	[R]151	[R]13
March	[R]7,942	[R]555	[R]-207	102	[R]8,602	200	145	[R]14
April	[R]8,470	[R]704	[R]225	111	[R]8,838	[R]207	[R]151	[R]13
May	[R]8,702	[R]575	[R]122	113	[R]9,042	208	[R]155	15
June	[R]8,723	[R]482	[R]-74	109	[R]9,170	206	153	14
July	[R]8,663	524	[R]-95	90	[R]9,192	[R]202	150	13
August	[R]8,774	565	[R]-156	84	[R]9,411	[R]193	145	11
September	[R]8,556	[R]529	[R]30	129	[R]8,926	[R]199	[R]146	14
October	[R]8,613	[R]469	[R]-185	159	[R]9,108	192	140	13
November	[R]8,771	489	[R]196	118	[R]8,946	[R]204	146	12
December	[R]8,756	446	[R]19	172	[R]9,011	207	147	11
Average	**[R]8,501**	**[R]518**	**[R]-41**	**125**	**[R]8,935**	**207**	**147**	**11**
2004 January	8,339	309	-126	93	8,680	208	143	11
February	8,282	410	-209	159	8,743	203	137	11
March	8,429	512	-125	144	8,922	201	133	11
April	8,820	411	37	127	9,067	202	134	10
May	[R]8,932	[R]485	[R]116	[R]122	[R]9,178	[R]204	[R]138	9
June	[E]8,715	[E]558	[E]-69	[E]115	[E]9,227	[E]206	[E]137	NA
6-Month Average	**[E]8,587**	**[E]447**	**[E]-62**	**[E]126**	**[E]8,970**	**[E]206**	**[E]137**	**NA**
2003 6-Month Average	**8,310**	**532**	**-49**	**125**	**8,766**	**206**	**153**	**14**
2002 6-Month Average	**8,396**	**492**	**34**	**109**	**8,746**	**217**	**168**	**15**

[a] Stocks are at end of period.
[b] From 1981 forward, blending components are excluded.
[c] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[d] Includes motor gasoline blending components and gasohol, but excludes oxygenates, which are reported separately.
[e] See Note 4 at end of section.
[f] See Note 2 at end of section.
[g] Beginning in 1993, motor gasoline production and product supplied include blending of fuel ethanol and an adjustment to correct for the imbalance of motor gasoline blending components. See Note 2 at end of section.
[h] See Note 1 at end of section.

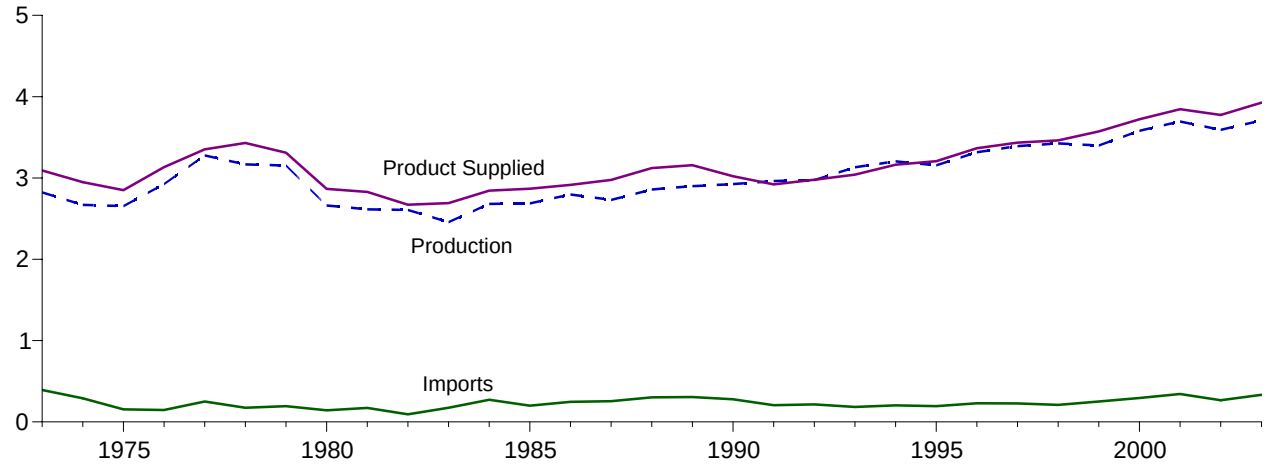
R=Revised. NA=Not available. E=Estimate. (s)=Less than 500 barrels per day.

Note: Geographic coverage is the 50 States and the District of Columbia.
Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S4. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S4.

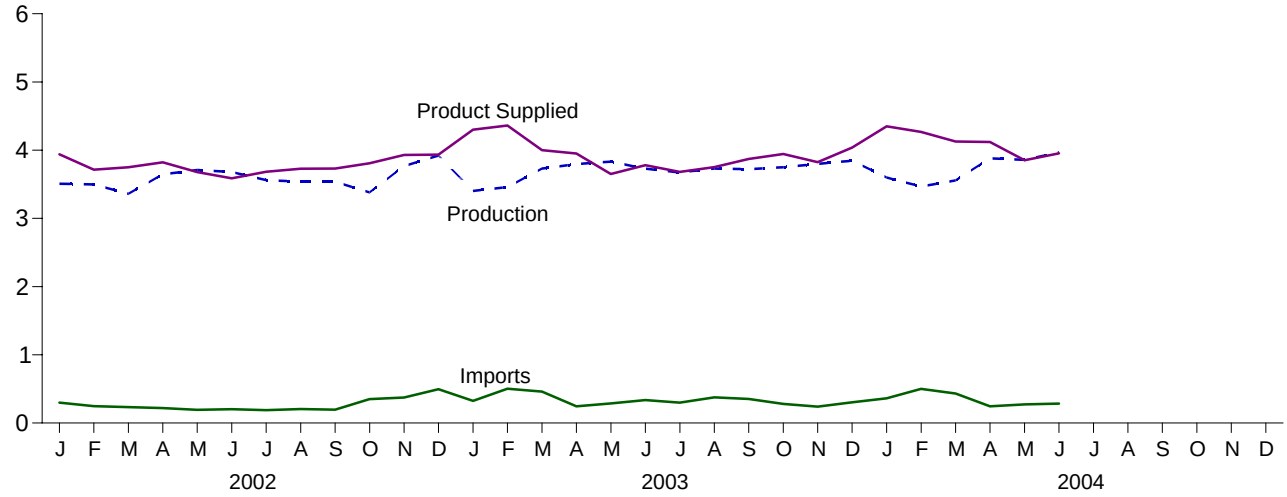
Figure 3.3 Distillate Fuel Oil

(Million Barrels per Day, Except as Noted)

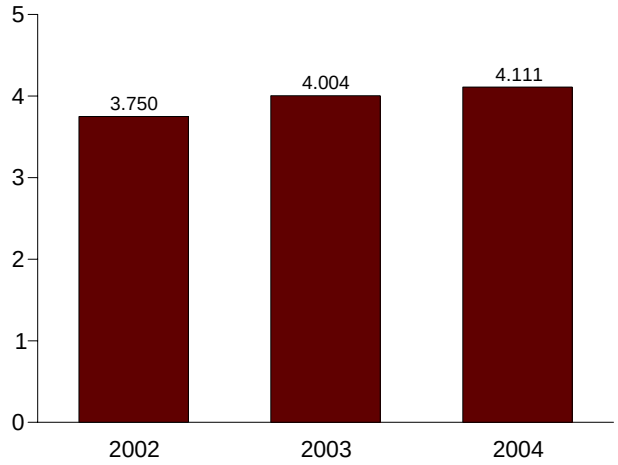
Overview, 1973-2003



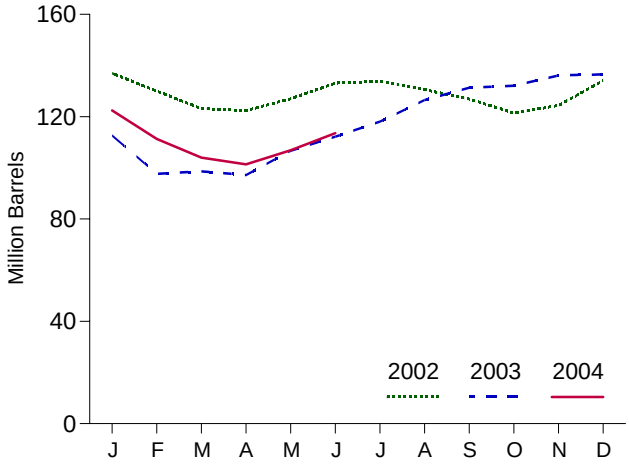
Overview, Monthly



Product Supplied, January-June



Stocks, End of Month



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

Table 3.5 Distillate Fuel Oil Supply and Disposition

	Supply			Disposition			Stocks[a]		
								Sulfur Content	
	Total Production	Imports	Crude Oil Used Directly[b]	Stock Change[c]	Exports	Product Supplied[b]	Total	0.05 Percent or Less[d]	Greater Than 0.05 Percent[d]
	Thousand Barrels per Day						Million Barrels		
1973 Average	**2,822**	**392**	**2**	**115**	**9**	**3,092**	**196**	**NA**	**NA**
1974 Average	**2,669**	**289**	**2**	[e] **10**	**2**	**2,948**	[f] **200**	**NA**	**NA**
1975 Average	**2,654**	**155**	**2**	[e,f] **-41**	**1**	**2,851**	**209**	**NA**	**NA**
1976 Average	**2,924**	**146**	**1**	**-62**	**1**	**3,133**	**186**	**NA**	**NA**
1977 Average	**3,278**	**250**	**1**	**176**	**1**	**3,352**	**250**	**NA**	**NA**
1978 Average	**3,167**	**173**	**1**	**-93**	**3**	**3,432**	**216**	**NA**	**NA**
1979 Average	**3,153**	**193**	**1**	**34**	**3**	**3,311**	**229**	**NA**	**NA**
1980 Average	**2,662**	**142**	**1**	**-64**	**3**	**2,866**	[f] **205**	**NA**	**NA**
1981 Average[g]	**2,613**	**173**	**10**	[f] **-38**	**5**	**2,829**	**192**	**NA**	**NA**
1982 Average	**2,606**	**93**	**10**	**-35**	**74**	**2,671**	[f] **179**	**NA**	**NA**
1983 Average	**2,456**	**174**	**–**	[f] **-124**	**64**	**2,690**	**140**	**NA**	**NA**
1984 Average	**2,681**	**272**	**–**	**57**	**51**	**2,845**	**161**	**NA**	**NA**
1985 Average	**2,687**	**200**	**–**	**-48**	**67**	**2,868**	**144**	**NA**	**NA**
1986 Average	**2,798**	**247**	**–**	**31**	**100**	**2,914**	**155**	**NA**	**NA**
1987 Average	**2,731**	**255**	**–**	**-56**	**66**	**2,976**	**134**	**NA**	**NA**
1988 Average	**2,859**	**302**	**–**	**-30**	**69**	**3,122**	**124**	**NA**	**NA**
1989 Average	**2,899**	**306**	**–**	**-49**	**97**	**3,157**	**106**	**NA**	**NA**
1990 Average	**2,925**	**278**	**–**	**73**	**109**	**3,021**	**132**	**NA**	**NA**
1991 Average	**2,962**	**205**	**–**	**31**	**215**	**2,921**	**144**	**NA**	**NA**
1992 Average	**2,974**	**216**	**–**	**-8**	**219**	**2,979**	**141**	**NA**	**NA**
1993 Average	**3,132**	**184**	**–**	**1**	**274**	**3,041**	**141**	[g] **64**	[g] **77**
1994 Average	**3,205**	**203**	**–**	**12**	**234**	**3,162**	**145**	**73**	**73**
1995 Average	**3,155**	**193**	**–**	**-41**	**183**	**3,207**	**130**	**67**	**63**
1996 Average	**3,316**	**230**	**–**	**-10**	**190**	**3,365**	**127**	**68**	**58**
1997 Average	**3,392**	**228**	**–**	**32**	**152**	**3,435**	**138**	**68**	**70**
1998 Average	**3,424**	**210**	**–**	**48**	**124**	**3,461**	**156**	**77**	**79**
1999 Average	**3,399**	**250**	**–**	**-84**	**162**	**3,572**	**125**	**69**	**56**
2000 Average	**3,580**	**295**	**–**	**-20**	**173**	**3,722**	**118**	**72**	**46**
2001 Average	**3,695**	**344**	**–**	**73**	**119**	**3,847**	**145**	**82**	**62**
2002 January	3,508	298	–	-244	109	3,940	137	80	57
February	3,498	248	–	-248	279	3,714	130	78	52
March	3,360	234	–	-223	67	3,750	123	74	49
April	3,647	219	–	-23	68	3,821	122	74	48
May	3,709	193	–	149	74	3,679	127	77	50
June	3,679	204	–	203	93	3,587	133	79	54
July	3,561	188	–	22	44	3,683	134	77	57
August	3,538	205	–	-104	119	3,728	131	71	60
September	3,536	196	–	-124	127	3,730	127	68	59
October	3,380	350	–	-175	96	3,808	121	66	56
November	3,768	373	–	99	114	3,929	124	71	53
December	3,922	496	–	312	171	3,934	134	81	53
Average	**3,592**	**267**	**–**	**-29**	**112**	**3,776**	**134**	**81**	**53**
2003 January	3,403	[R] 325	–	[R] -693	119	[R] 4,301	[R] 113	[R] 69	44
February	[R] 3,459	[R] 503	–	[R] -532	132	[R] 4,362	[R] 98	[R] 61	37
March	[R] 3,732	460	–	[R] 30	161	[R] 4,001	99	63	35
April	[R] 3,796	246	–	[R] -47	139	[R] 3,951	97	66	31
May	[R] 3,833	287	–	[R] 307	162	[R] 3,651	[R] 107	72	[R] 35
June	3,728	337	–	[R] 184	101	[R] 3,781	112	74	38
July	3,673	299	–	[R] 188	103	[R] 3,680	118	75	43
August	[R] 3,730	375	–	[R] 274	[R] 80	[R] 3,752	[R] 127	76	[R] 51
September	3,721	352	–	[R] 159	43	[R] 3,871	131	77	[R] 55
October	3,750	[R] 281	–	[R] 25	62	[R] 3,945	[R] 132	[R] 74	[R] 59
November	3,800	[R] 241	–	[R] 136	81	[R] 3,824	[R] 136	[R] 78	[R] 58
December	3,845	305	–	[R] 13	100	[R] 4,037	137	82	55
Average	[R] **3,707**	[R] **333**	**–**	[R] **7**	[R] **107**	[R] **3,927**	**137**	**82**	**55**
2004 January	3,599	362	–	-461	72	4,350	122	77	46
February	3,467	501	–	-385	86	4,268	111	68	43
March	3,558	432	–	-235	99	4,126	104	66	38
April	3,881	244	–	-87	92	4,121	101	66	35
May	[R] 3,858	[R] 273	–	[R] 177	[R] 100	[R] 3,854	[R] 107	[R] 71	[R] 36
June	[E] 3,967	[E] 284	–	[E] 166	[E] 130	[E] 3,954	[E] 114	[E] 71	[E] 43
6-Month Average	[E] **3,722**	[E] **349**	**–**	[E] **-137**	[E] **97**	[E] **4,111**	[E] **114**	[E] **71**	[E] **43**
2003 6-Month Average	**3,661**	**358**	**–**	**-121**	**136**	**4,004**	**112**	**74**	**38**
2002 6-Month Average	**3,567**	**233**	**–**	**-63**	**113**	**3,750**	**133**	**79**	**54**

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

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

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

[d] By weight.

[e] See Note 6 at end of section.

[f] See Note 4 at end of section.

[g] See Note 3 at end of section.

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

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

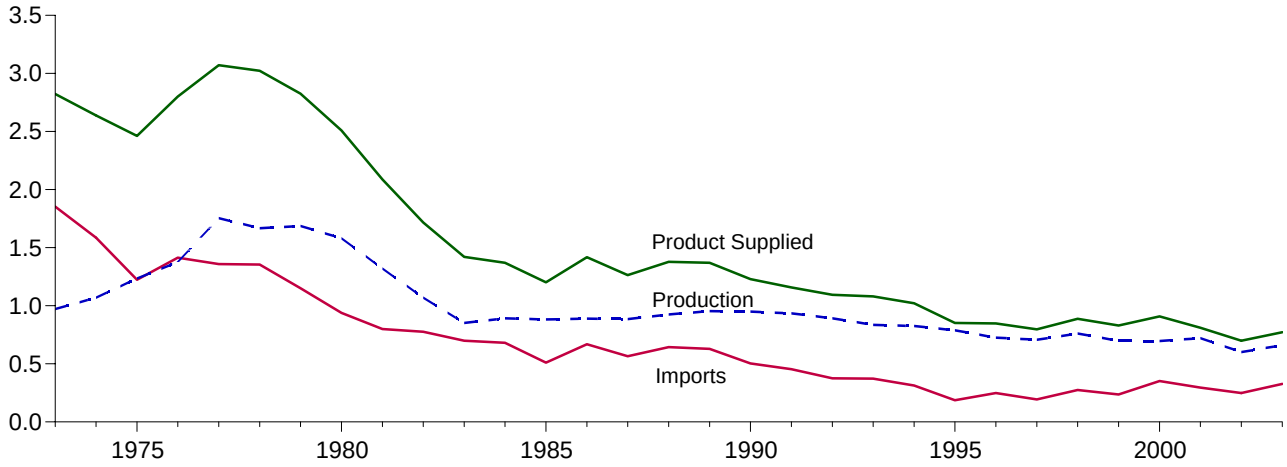
Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.

Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S5. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S5.

Figure 3.4 Residual Fuel Oil

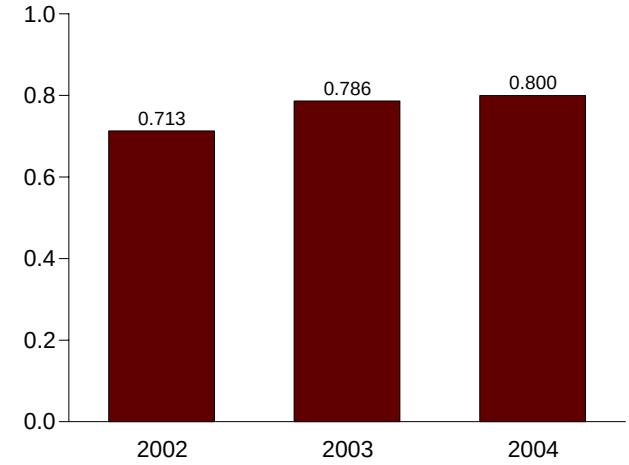
(Million Barrels per Day, Except as Noted)

Overview, 1973-2003

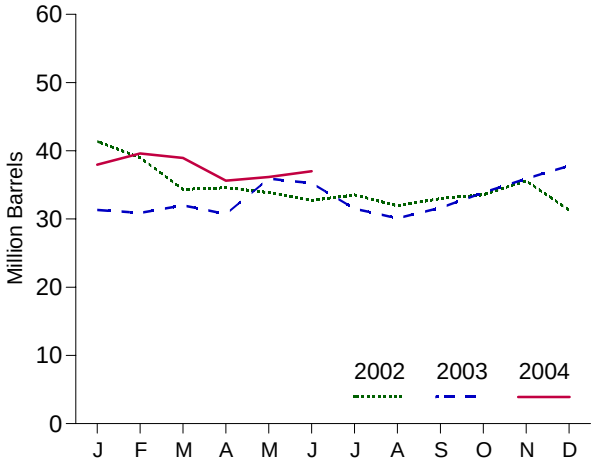


Overview, Monthly

Product Supplied, January-June



Stocks, End of Month



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

Table 3.6 Residual Fuel Oil Supply and Disposition

	Supply			Disposition			
	Total Production	Imports	Crude Oil Used Directly[a]	Stock Change[b]	Exports	Product Supplied[a]	Stocks[c]
	Thousand Barrels per Day						Million Barrels
1973 Average	**971**	**1,853**	**17**	**-5**	**23**	**2,822**	**53**
1974 Average	**1,070**	**1,587**	**13**	**17**	**14**	**2,639**	[d] **60**
1975 Average	**1,235**	**1,223**	**15**	[d] **-2**	**15**	**2,462**	**74**
1976 Average	**1,377**	**1,413**	**17**	**-5**	**12**	**2,801**	**72**
1977 Average	**1,754**	**1,359**	**13**	**48**	**6**	**3,071**	**90**
1978 Average	**1,667**	**1,355**	**13**	**1**	**13**	**3,023**	**90**
1979 Average	**1,687**	**1,151**	**12**	**15**	**9**	**2,826**	**96**
1980 Average	**1,580**	**939**	**12**	**-10**	**33**	**2,508**	[d] **92**
1981 Average[e]	**1,321**	**800**	**48**	[d] **-37**	**118**	**2,088**	**78**
1982 Average	**1,070**	**776**	**48**	**-32**	**209**	**1,716**	[d] **66**
1983 Average	**852**	**699**	**–**	[d] **-55**	**185**	**1,421**	**49**
1984 Average	**891**	**681**	**–**	**12**	**190**	**1,369**	**53**
1985 Average	**882**	**510**	**–**	**-7**	**197**	**1,202**	**50**
1986 Average	**889**	**669**	**–**	**-8**	**147**	**1,418**	**47**
1987 Average	**885**	**565**	**–**	**(s)**	**186**	**1,264**	**47**
1988 Average	**926**	**644**	**–**	**-8**	**200**	**1,378**	**45**
1989 Average	**954**	**629**	**–**	**-2**	**215**	**1,370**	**44**
1990 Average	**950**	**504**	**–**	**13**	**211**	**1,229**	**49**
1991 Average	**934**	**453**	**–**	**4**	**226**	**1,158**	**50**
1992 Average	**892**	**375**	**–**	**-20**	**193**	**1,094**	**43**
1993 Average	**835**	**373**	**–**	**4**	**123**	**1,080**	**44**
1994 Average	**826**	**314**	**–**	**-6**	**125**	**1,021**	**42**
1995 Average	**788**	**187**	**–**	**-13**	**136**	**852**	**37**
1996 Average	**726**	**248**	**–**	**24**	**102**	**848**	**46**
1997 Average	**708**	**194**	**–**	**-15**	**120**	**797**	**40**
1998 Average	**762**	**275**	**–**	**12**	**138**	**887**	**45**
1999 Average	**698**	**237**	**–**	**-25**	**129**	**830**	**36**
2000 Average	**696**	**352**	**–**	**1**	**139**	**909**	**36**
2001 Average	**721**	**295**	**–**	**13**	**191**	**811**	**41**
2002 January	625	233	–	10	138	710	41
February	613	136	–	-84	171	662	39
March	617	225	–	-151	171	821	34
April	601	296	–	9	159	730	35
May	582	235	–	-23	160	680	34
June	540	256	–	-38	165	669	33
July	566	245	–	26	171	614	34
August	583	249	–	-52	272	612	32
September	607	254	–	36	200	625	33
October	593	228	–	18	153	650	34
November	648	366	–	68	160	786	36
December	641	259	–	-138	205	832	31
Average	**601**	**249**	**–**	**-27**	**177**	**700**	**31**
2003 January	[R] 658	[R] 343	–	[R] (s)	231	[R] 770	31
February	[R] 683	[R] 363	–	[R] -15	173	[R] 888	31
March	[R] 652	[R] 467	–	[R] 35	161	[R] 923	32
April	[R] 632	[R] 349	–	[R] -43	247	[R] 778	31
May	[R] 729	[R] 307	–	[R] 168	195	[R] 673	36
June	[R] 666	284	–	-22	280	[R] 693	[R] 35
July	[R] 632	276	–	[R] -121	252	[R] 777	32
August	663	347	–	[R] -45	[R] 158	[R] 897	30
September	662	[R] 240	–	[R] 51	191	[R] 660	32
October	[R] 640	[R] 311	–	[R] 72	164	[R] 716	[R] 34
November	616	319	–	[R] 68	163	[R] 703	[R] 36
December	686	322	–	[R] 61	155	[R] 792	38
Average	[R] **660**	[R] **327**	**–**	**18**	**197**	**772**	**38**
2004 January	658	335	–	5	97	891	38
February	658	433	–	57	163	872	40
March	633	291	–	-21	158	786	39
April	691	277	–	-111	282	797	36
May	[R] 661	[R] 346	–	[R] 17	[R] 280	[R] 711	36
June	[E] 633	[E] 319	–	[E] 47	[E] 161	[E] 744	[E] 37
6-Month Average	[E] **656**	[E] **333**	**–**	[E] **-1**	[E] **190**	[E] **800**	[E] **37**
2003 6-Month Average	**670**	**353**	**–**	**22**	**215**	**786**	**35**
2002 6-Month Average	**596**	**231**	**–**	**-46**	**160**	**713**	**33**

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

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

[c] Stocks are at end of period.

[d] See Note 4 at end of section.

[e] See Note 3 at end of section.

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

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

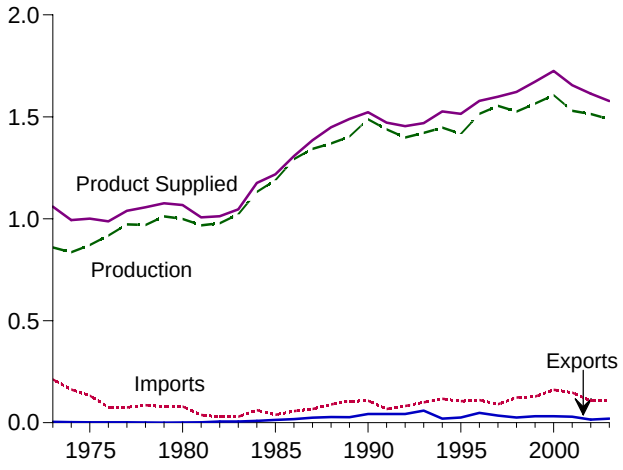
Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.

Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S6. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S6.

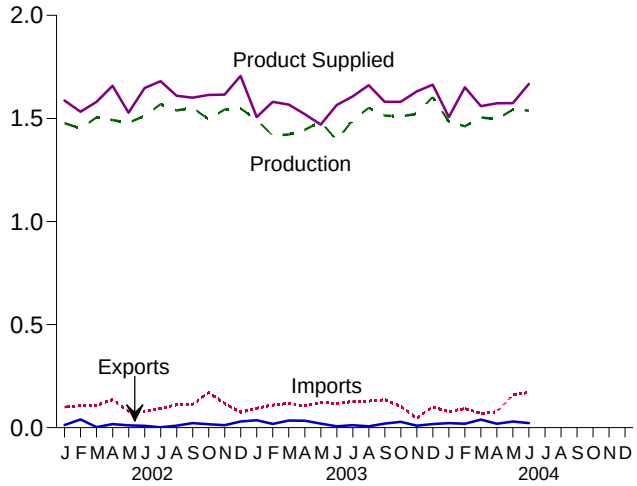
Figure 3.5 Jet Fuel

(Million Barrels Per Day, Except as Noted)

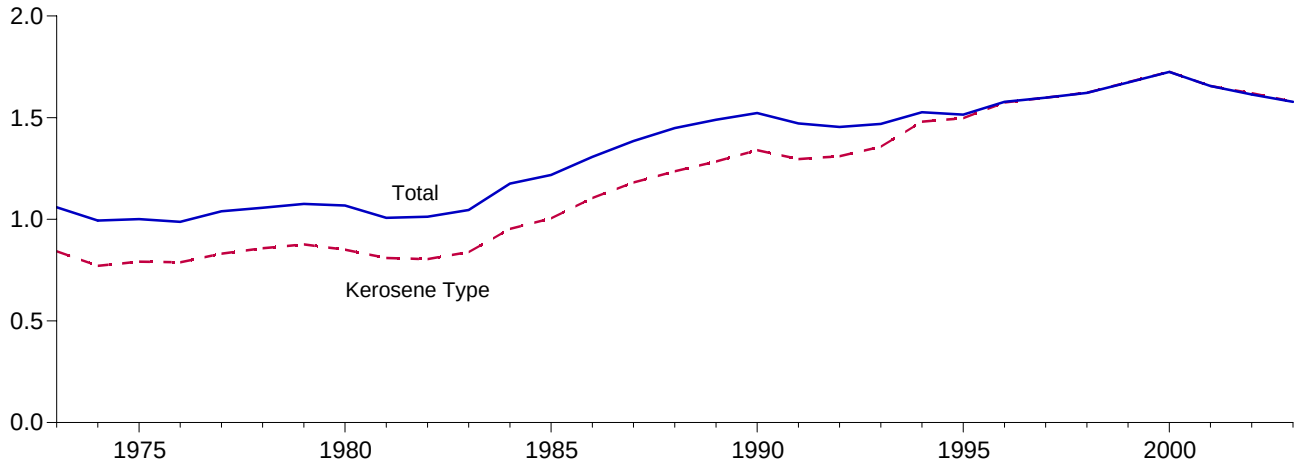
Overview, 1973-2003



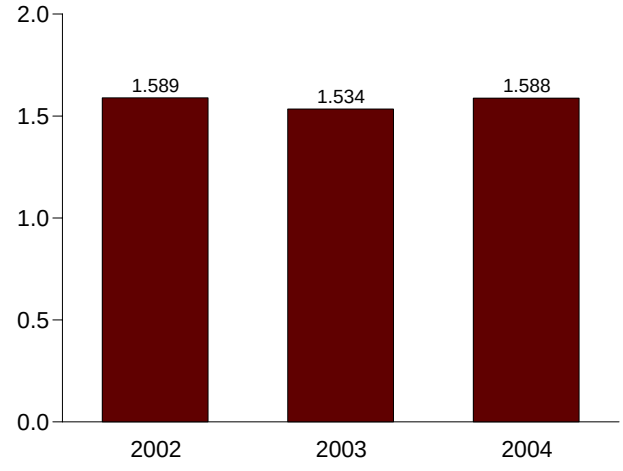
Overview, Monthly



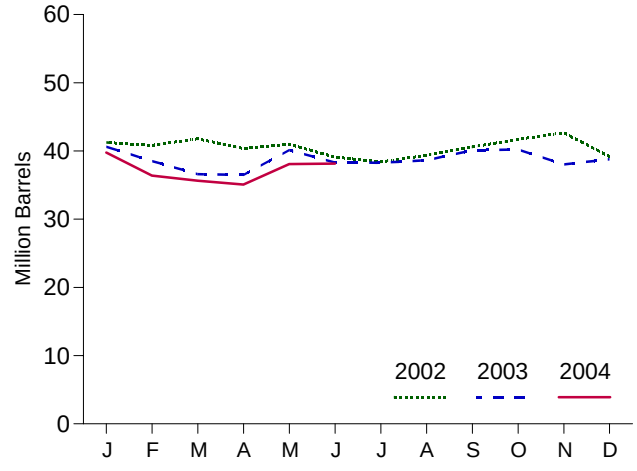
Product Supplied by Type, 1973-2003



Product Supplied, January-June



Stocks, End of Month



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

Table 3.7 Jet Fuel Supply and Disposition

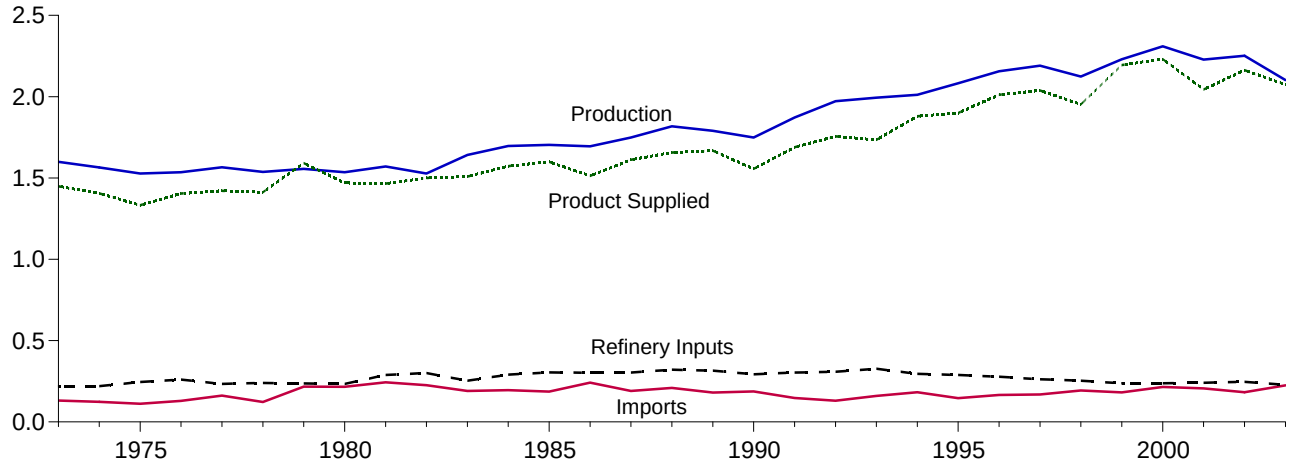
	Supply			Disposition				Stocks[a]	
	Production					Product Supplied			
	Total	Kerosene Type	Imports	Stock Change[b]	Exports	Total	Kerosene Type	Total	Kerosene Type
	Thousand Barrels per Day							Million Barrels	
1973 Average	**859**	**679**	**212**	**8**	**4**	**1,059**	**842**	**29**	**23**
1974 Average	**836**	**641**	**163**	**2**	**3**	**993**	**771**	[c] **29**	[c] **24**
1975 Average	**871**	**691**	**133**	[c] **2**	**2**	**1,001**	**791**	**30**	**25**
1976 Average	**918**	**731**	**76**	**5**	**2**	**987**	**789**	**32**	**26**
1977 Average	**973**	**787**	**75**	**7**	**2**	**1,039**	**831**	**35**	**28**
1978 Average	**970**	**791**	**86**	**-2**	**1**	**1,057**	**858**	**34**	**28**
1979 Average	**1,012**	**835**	**78**	**13**	**1**	**1,076**	**876**	**39**	**33**
1980 Average	**999**	**811**	**80**	**10**	**1**	**1,068**	**851**	[c] **42**	[c] **36**
1981 Average	**968**	**775**	**38**	[c] **-4**	**2**	**1,007**	**809**	**41**	**34**
1982 Average	**978**	**778**	**29**	**-12**	**6**	**1,013**	**804**	[c] **37**	[c] **31**
1983 Average	**1,022**	**817**	**29**	[c] **(s)**	**6**	**1,046**	**839**	**39**	**32**
1984 Average	**1,132**	**919**	**62**	**9**	**9**	**1,175**	**953**	**42**	**35**
1985 Average	**1,189**	**983**	**39**	**-4**	**13**	**1,218**	**1,005**	**40**	**34**
1986 Average	**1,293**	**1,097**	**57**	**25**	**18**	**1,307**	**1,105**	**50**	**43**
1987 Average	**1,343**	**1,138**	**67**	**(s)**	**24**	**1,385**	**1,181**	**50**	**42**
1988 Average	**1,370**	**1,164**	**90**	**-17**	**28**	**1,449**	**1,236**	**44**	**38**
1989 Average	**1,403**	**1,197**	**106**	**-8**	**27**	**1,489**	**1,284**	**41**	**34**
1990 Average	**1,488**	**1,311**	**108**	**31**	**43**	**1,522**	**1,340**	**52**	**46**
1991 Average	**1,438**	**1,274**	**67**	**-9**	**43**	**1,471**	**1,296**	**49**	**44**
1992 Average	**1,399**	**1,254**	**82**	**-16**	**43**	**1,454**	**1,310**	**43**	**39**
1993 Average	**1,422**	**1,309**	**100**	**-7**	**59**	**1,469**	**1,357**	**40**	**38**
1994 Average	**1,448**	**1,410**	**117**	**18**	**20**	**1,527**	**1,480**	**47**	**46**
1995 Average	**1,416**	**1,407**	**106**	**-19**	**26**	**1,514**	**1,497**	**40**	**39**
1996 Average	**1,515**	**1,513**	**111**	**(s)**	**48**	**1,578**	**1,575**	**40**	**40**
1997 Average	**1,554**	**1,554**	**91**	**11**	**35**	**1,599**	**1,598**	**44**	**44**
1998 Average	**1,526**	**1,525**	**124**	**2**	**26**	**1,622**	**1,623**	**45**	**45**
1999 Average	**1,565**	**1,565**	**128**	**-11**	**32**	**1,673**	**1,675**	**41**	**40**
2000 Average	**1,606**	**1,606**	**162**	**11**	**32**	**1,725**	**1,725**	**45**	**44**
2001 Average	**1,530**	**1,529**	**148**	**-7**	**29**	**1,655**	**1,656**	**42**	**42**
2002 January	1,477	1,477	99	-23	13	1,587	1,591	41	41
February	1,451	1,451	107	-15	40	1,532	1,532	41	41
March	1,505	1,505	109	31	3	1,581	1,581	42	42
April	1,492	1,491	137	-47	18	1,658	1,674	40	40
May	1,479	1,479	79	20	11	1,527	1,535	41	41
June	1,512	1,512	81	-63	9	1,647	1,656	39	39
July	1,569	1,568	92	-22	2	1,680	1,679	38	38
August	1,539	1,538	112	31	10	1,610	1,616	39	39
September	1,552	1,552	111	40	22	1,601	1,609	41	41
October	1,495	1,495	171	36	17	1,614	1,629	42	42
November	1,543	1,543	117	33	12	1,616	1,615	43	43
December	1,548	1,547	75	-113	30	1,706	1,722	39	39
Average	**1,514**	**1,514**	**107**	**-8**	**15**	**1,614**	**1,621**	**39**	**39**
2003 January	1,495	1,495	94	[R] 46	36	[R] 1,507	[R] 1,505	41	41
February	1,416	1,416	109	-74	19	1,581	[R] 1,581	39	[R] 39
March	1,422	1,430	[R] 117	[R] -62	[R] 34	[R] 1,567	[R] 1,575	37	37
April	1,445	1,445	106	[R] -4	[R] 34	[R] 1,521	[R] 1,520	[R] 36	[R] 36
May	1,484	1,484	[R] 122	117	[R] 19	[R] 1,470	[R] 1,470	40	40
June	1,393	1,393	[R] 119	-60	7	[R] 1,565	[R] 1,565	38	38
July	1,491	1,491	[R] 126	[R] -2	[R] 12	[R] 1,607	[R] 1,606	38	38
August	1,551	1,551	[R] 129	[R] 12	[R] 7	[R] 1,661	[R] 1,661	[R] 39	[R] 39
September	1,514	1,513	[R] 136	[R] 49	[R] 20	[R] 1,581	[R] 1,581	[R] 40	[R] 40
October	1,510	1,510	[R] 103	[R] 4	[R] 28	[R] 1,580	[R] 1,580	40	40
November	1,522	1,522	[R] 46	[R] -73	10	[R] 1,631	[R] 1,631	38	38
December	1,605	1,605	[R] 101	[R] 24	18	[R] 1,664	1,663	39	39
Average	**1,488**	**1,489**	**109**	[R] **-1**	[R] **20**	[R] **1,578**	[R] **1,578**	**39**	**39**
2004 January	1,484	1,484	77	33	22	1,507	1,506	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	[R] 1,543	[R] 1,543	[R] 158	[R] 97	[R] 30	[R] 1,574	[R] 1,574	38	38
June	[E] 1,538	[E] 1,538	[E] 172	[E] 19	[E] 22	[E] 1,668	[E] 1,668	[E] 38	[E] 38
6-Month Average	[E] **1,505**	[E] **1,505**	[E] **108**	[E] **0**	[E] **25**	[E] **1,588**	[E] **1,588**	[E] **38**	[E] **38**
2003 6-Month Average	**1,443**	**1,444**	**111**	**-5**	**25**	**1,534**	**1,535**	**38**	**38**
2002 6-Month Average	**1,487**	**1,486**	**102**	**-16**	**15**	**1,589**	**1,595**	**39**	**39**

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

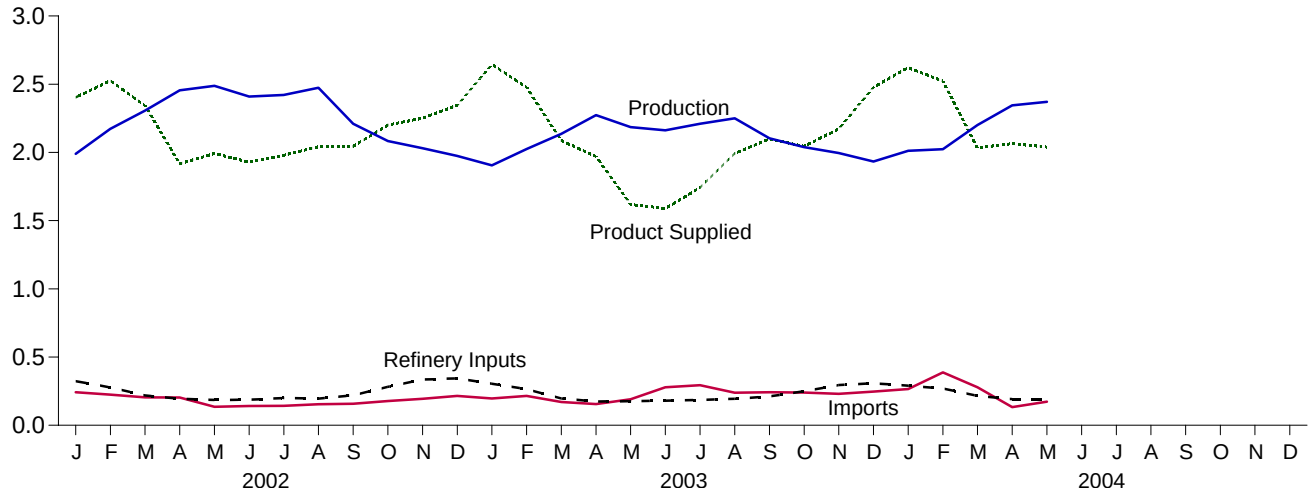
Note: Geographic coverage is the 50 States and the District of Columbia.
Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S7. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S7.

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

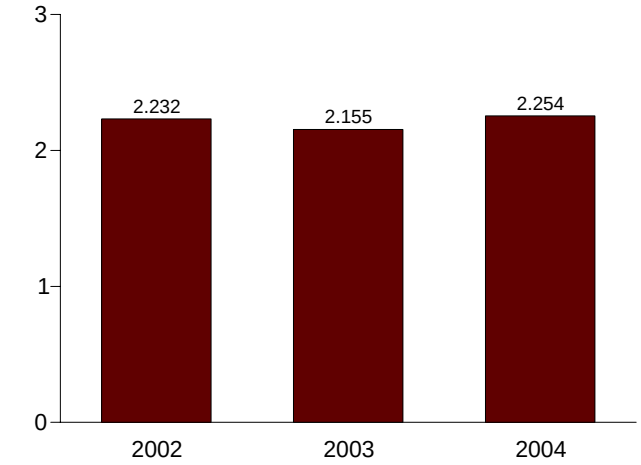
Overview, 1973-2003



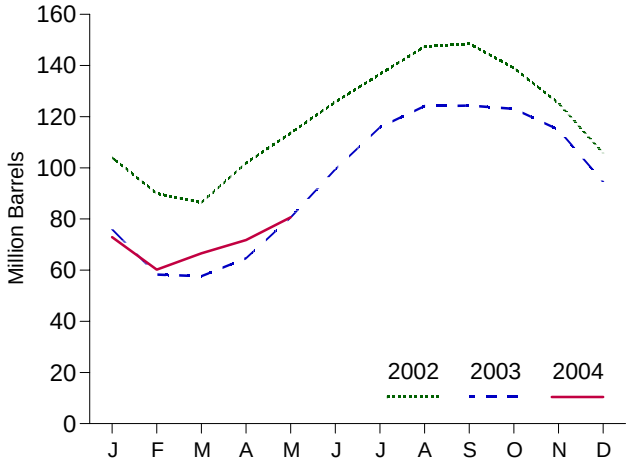
Overview, Monthly



Product Supplied, January-May



Stocks, End of Month



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

Table 3.8 Liquefied Petroleum Gases Supply and Disposition

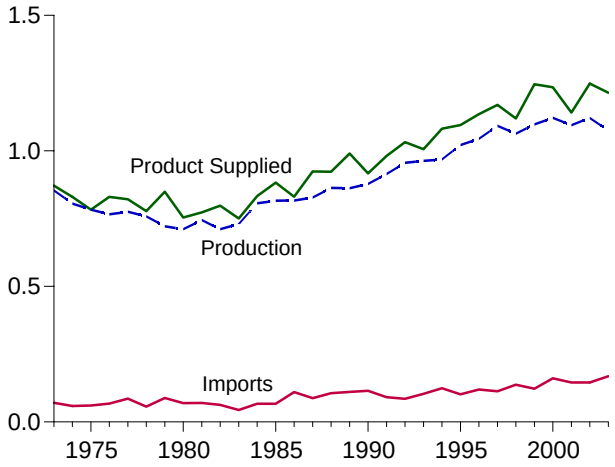
	Supply		Disposition				
	Total Production	Imports	Stock Change[a]	Refinery Inputs	Exports	Product Supplied	Stocks[b]
	Thousand Barrels per Day						Million Barrels
1973 Average	**1,600**	**132**	**35**	**220**	**27**	**1,449**	**99**
1974 Average	**1,565**	**123**	**38**	**220**	**25**	**1,406**	**[c] 113**
1975 Average	**1,527**	**112**	**[c] 35**	**246**	**26**	**1,333**	**125**
1976 Average	**1,535**	**130**	**-24**	**260**	**25**	**1,404**	**116**
1977 Average	**1,566**	**161**	**55**	**233**	**18**	**1,422**	**136**
1978 Average	**1,537**	**123**	**-12**	**239**	**20**	**1,413**	**[c] 132**
1979 Average	**1,556**	**217**	**[c] -70**	**236**	**15**	**1,592**	**111**
1980 Average	**1,535**	**216**	**27**	**233**	**21**	**1,469**	**[c] 120**
1981 Average	**1,571**	**244**	**[c] 18**	**289**	**42**	**1,466**	**135**
1982 Average	**[d] 1,527**	**226**	**-111**	**300**	**65**	**1,499**	**[c] 94**
1983 Average	**1,642**	**190**	**[c] -4**	**253**	**73**	**1,509**	**[c] 101**
1984 Average	**1,697**	**195**	**[c] -19**	**291**	**48**	**1,572**	**101**
1985 Average	**1,704**	**187**	**-75**	**304**	**62**	**1,599**	**74**
1986 Average	**1,695**	**242**	**80**	**302**	**42**	**1,512**	**103**
1987 Average	**1,748**	**190**	**-15**	**304**	**38**	**1,612**	**97**
1988 Average	**1,817**	**209**	**1**	**321**	**49**	**1,656**	**97**
1989 Average	**1,791**	**181**	**-47**	**315**	**35**	**1,668**	**80**
1990 Average	**1,749**	**188**	**48**	**293**	**40**	**1,556**	**98**
1991 Average	**1,871**	**147**	**-15**	**304**	**41**	**1,689**	**92**
1992 Average	**1,972**	**131**	**-10**	**309**	**49**	**1,755**	**89**
1993 Average	**1,993**	**160**	**49**	**327**	**43**	**1,734**	**106**
1994 Average	**2,012**	**183**	**-19**	**296**	**38**	**1,880**	**99**
1995 Average	**2,082**	**146**	**-17**	**289**	**58**	**1,899**	**93**
1996 Average	**2,156**	**166**	**-19**	**278**	**51**	**2,012**	**86**
1997 Average	**2,190**	**169**	**9**	**263**	**50**	**2,038**	**89**
1998 Average	**2,124**	**194**	**70**	**253**	**42**	**1,952**	**115**
1999 Average	**2,230**	**182**	**-71**	**238**	**50**	**2,195**	**89**
2000 Average	**2,310**	**215**	**-19**	**238**	**74**	**2,231**	**83**
2001 Average	**2,228**	**206**	**105**	**241**	**44**	**2,044**	**121**
2002 January	1,990	242	-546	323	52	2,403	104
February	2,173	225	-500	277	96	2,525	90
March	2,306	204	-115	218	64	2,343	86
April	2,455	203	516	194	32	1,916	102
May	2,488	136	379	186	67	1,992	114
June	2,409	141	403	187	31	1,929	126
July	2,421	142	353	199	33	1,979	137
August	2,475	154	347	195	46	2,041	147
September	2,210	158	36	220	67	2,045	149
October	2,083	178	-307	282	85	2,201	139
November	2,030	195	-458	334	98	2,251	125
December	1,974	216	-630	344	131	2,345	106
Average	**2,252**	**183**	**-42**	**247**	**67**	**2,163**	**106**
2003 January	[R] 1,905	[R] 197	[R] -960	304	113	[R] 2,645	76
February	[R] 2,025	[R] 216	[R] -632	265	130	[R] 2,478	58
March	[R] 2,136	[R] 171	[R] -20	197	43	[R] 2,087	[R] 58
April	[R] 2,274	156	[R] 235	175	51	[R] 1,970	[R] 65
May	[R] 2,186	[R] 191	[R] 514	176	67	[R] 1,619	[R] 81
June	[R] 2,162	279	[R] 628	179	45	[R] 1,589	99
July	[R] 2,210	294	530	186	47	[R] 1,742	116
August	[R] 2,250	[R] 239	[R] 266	194	[R] 36	[R] 1,993	124
September	[R] 2,104	242	[R] 6	212	29	[R] 2,098	124
October	[R] 2,038	[R] 240	[R] -41	249	25	[R] 2,045	123
November	[R] 1,995	[R] 231	-271	295	31	[R] 2,171	115
December	[R] 1,934	[R] 246	[R] -660	307	56	[R] 2,477	94
Average	**[R] 2,102**	**[R] 225**	**-31**	**228**	**[R] 56**	**[R] 2,074**	**94**
2004 January	2,011	266	-693	291	58	2,622	73
February	2,023	388	-438	270	57	2,522	60
March	2,201	278	205	215	26	2,033	67
April	2,345	134	173	192	49	2,065	72
May	2,371	173	287	191	29	2,039	81
5-Month Average	**2,192**	**247**	**-91**	**231**	**44**	**2,254**	**81**
2003 5-Month Average	**2,106**	**186**	**-166**	**223**	**80**	**2,155**	**81**
2002 5-Month Average	**2,283**	**201**	**-48**	**239**	**62**	**2,232**	**114**

[a] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[b] Stocks are at end of period.
[c] See Note 4 at end of section.
[d] See Note 6 at end of section.

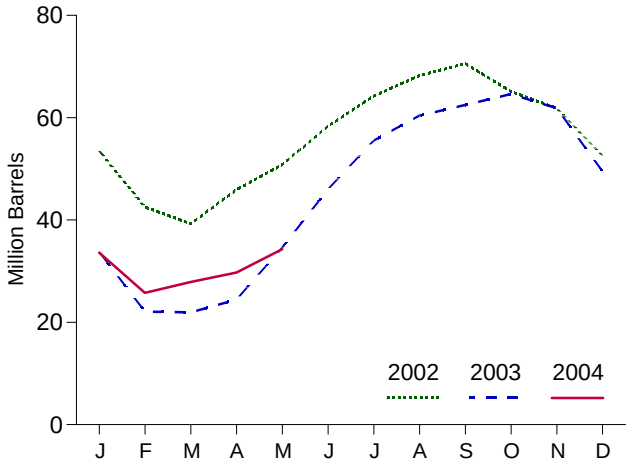
Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S8. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S9.

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

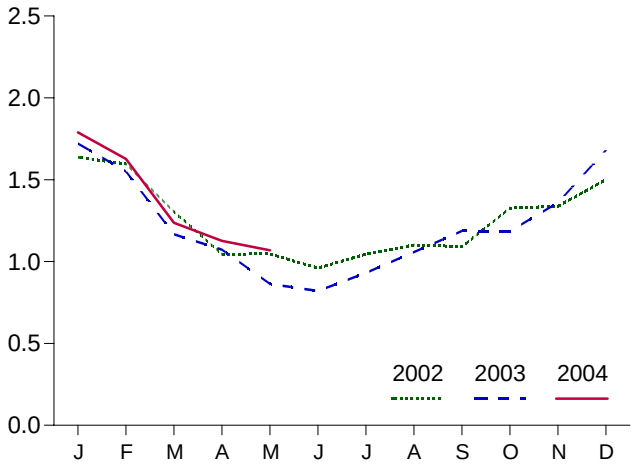
Overview, 1973-2003



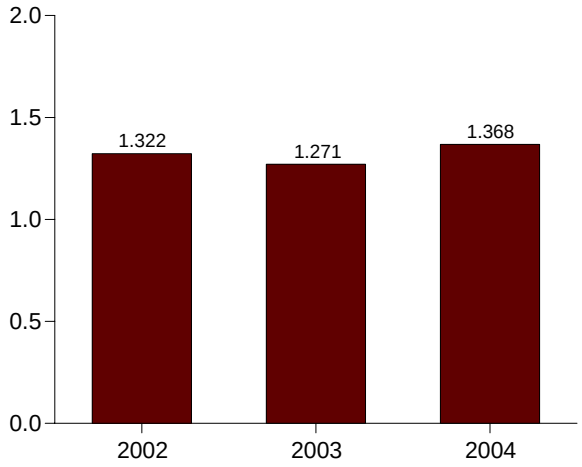
Stocks, End of Month



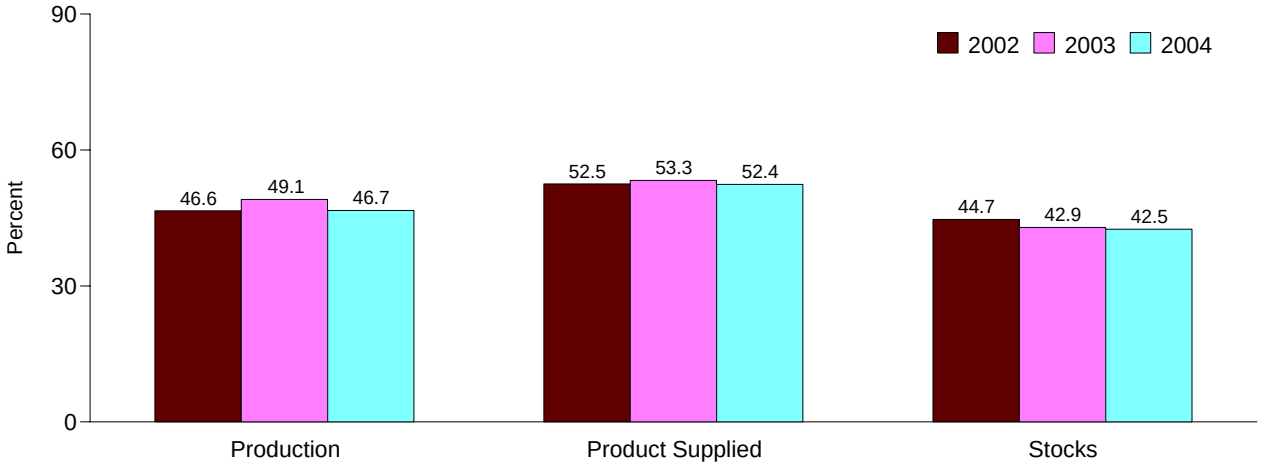
Product Supplied, Monthly



Product Supplied, January-May



Share of Liquefied Petroleum Gases, May



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

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

	Supply		Disposition				
	Total Production	Imports	Stock Change[a]	Refinery Inputs	Exports	Product Supplied	Stocks[b]
	Thousand Barrels per Day						Million Barrels
1973 Average	**854**	**71**	**30**	**8**	**15**	**872**	**65**
1974 Average	**805**	**59**	**11**	**9**	**14**	**830**	**69**
1975 Average	**783**	**60**	**36**	**11**	**13**	**783**	**82**
1976 Average	**766**	**68**	**-22**	**12**	**13**	**830**	**74**
1977 Average	**775**	**86**	**21**	**10**	**10**	**821**	**81**
1978 Average	**758**	**57**	**15**	**13**	**9**	**778**	[c] **87**
1979 Average	**721**	**88**	[c] **-61**	**14**	**8**	**849**	**64**
1980 Average	**711**	**69**	**4**	**12**	**10**	**754**	[c] **65**
1981 Average	**745**	**70**	[c] **18**	**5**	**18**	**773**	**76**
1982 Average	**711**	**63**	**-59**	**4**	**31**	**798**	[c] **54**
1983 Average	**730**	**44**	[c] **-24**	**4**	**43**	**751**	[c] **48**
1984 Average	**806**	**67**	[c] **7**	**4**	**30**	**833**	**58**
1985 Average	**816**	**67**	**-50**	**3**	**48**	**883**	**39**
1986 Average	**817**	**110**	**64**	**4**	**28**	**831**	**63**
1987 Average	**828**	**88**	**-41**	**8**	**24**	**924**	**48**
1988 Average	**863**	**106**	**7**	**8**	**31**	**923**	**50**
1989 Average	**862**	**111**	**-52**	**11**	**24**	**990**	**32**
1990 Average	**878**	**115**	**48**	**(s)**	**28**	**917**	**49**
1991 Average	**915**	**91**	**-3**	**(s)**	**28**	**982**	**48**
1992 Average	**956**	**85**	**-24**	**(s)**	**33**	**1,032**	**39**
1993 Average	**963**	**103**	**34**	**(s)**	**26**	**1,006**	**51**
1994 Average	**969**	**124**	**-13**	**0**	**24**	**1,082**	**46**
1995 Average	**1,021**	**102**	**-10**	**0**	**38**	**1,096**	**43**
1996 Average	**1,044**	**119**	**(s)**	**0**	**28**	**1,136**	**43**
1997 Average	**1,092**	**113**	**3**	**0**	**32**	**1,170**	**44**
1998 Average	**1,064**	**137**	**56**	**0**	**25**	**1,120**	**65**
1999 Average	**1,097**	**122**	**-59**	**0**	**33**	**1,246**	**43**
2000 Average	**1,122**	**161**	**-5**	**0**	**53**	**1,235**	**41**
2001 Average	**1,095**	**145**	**67**	**0**	**31**	**1,142**	**66**
2002 January	1,082	201	-396	0	42	1,636	53
February	1,114	179	-391	0	87	1,597	43
March	1,111	147	-106	0	60	1,304	39
April	1,135	157	222	0	25	1,046	46
May	1,159	87	157	0	43	1,046	51
June	1,133	101	252	0	23	960	58
July	1,137	120	190	0	22	1,045	64
August	1,142	116	129	0	28	1,101	68
September	1,091	131	78	0	54	1,091	71
October	1,080	144	-176	0	74	1,327	65
November	1,143	170	-109	0	85	1,337	62
December	1,127	193	-299	0	119	1,501	53
Average	**1,121**	**145**	**-36**	**0**	**55**	**1,248**	**53**
2003 January	[R] 1,045	[R] 165	[R] -606	0	95	[R] 1,720	34
February	1,068	[R] 181	[R] -417	0	116	[R] 1,551	22
March	[R] 1,060	[R] 133	[R] -4	0	31	[R] 1,167	22
April	[R] 1,081	[R] 95	[R] 83	0	20	[R] 1,072	24
May	[R] 1,073	[R] 139	[R] 327	0	22	[R] 863	[R] 35
June	[R] 1,048	179	[R] 380	0	27	[R] 820	46
July	[R] 1,056	200	307	0	18	[R] 931	[R] 56
August	1,070	[R] 163	[R] 157	0	[R] 19	[R] 1,058	60
September	[R] 1,093	182	[R] 70	0	19	[R] 1,186	62
October	[R] 1,087	[R] 187	69	0	20	[R] 1,185	65
November	[R] 1,110	[R] 181	[R] -92	0	24	[R] 1,360	62
December	1,115	[R] 213	[R] -399	0	46	[R] 1,681	[R] 50
Average	[R] **1,075**	[R] **168**	[R] **-8**	**0**	[R] **37**	[R] **1,215**	[R] **50**
2004 January	1,101	227	-509	0	49	1,789	34
February	1,099	309	-270	0	51	1,627	26
March	1,105	221	68	0	21	1,236	28
April	1,116	95	61	0	22	1,127	30
May	1,106	128	147	0	19	1,069	34
5-Month Average	**1,105**	**195**	**-99**	**0**	**32**	**1,368**	**34**
2003 5-Month Average	**1,065**	**142**	**-119**	**0**	**56**	**1,271**	**35**
2002 5-Month Average	**1,120**	**154**	**-99**	**0**	**51**	**1,322**	**51**

[a] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[b] Stocks are at end of period.
[c] See Note 4 at end of section.
R=Revised. (s)=Less than 500 barrels per day.
Note: Geographic coverage is the 50 States and the District of Columbia.
Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.

Sources: • **1973 through 1975:** U.S. Department of the Interior, Bureau of Mines, *Mineral Industry Surveys,* "Petroleum Statement, Annual." • **1976 through 1980:** Energy Information Administration (EIA), *Energy Data Reports,* Petroleum Statement, Annual." • **1981-1991:** EIA, *Petroleum Supply Annual 1993, Volume 1,* June 1994, Table S8. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S8.

Table 3.10 Other Petroleum Products Supply and Disposition

	Supply		Disposition				
	Total Production	Imports	Stock Change[a]	Refinery Inputs	Exports	Products Supplied	Stocks[b]
	Thousand Barrels per Day						Million Barrels
1973 Average	**2,833**	**290**	**1**	**750**	**162**	**2,211**	**179**
1974 Average	**2,722**	**269**	**25**	**665**	**172**	**2,129**	[c] **188**
1975 Average	**2,547**	**144**	[c] **-6**	**537**	**158**	**2,001**	**188**
1976 Average	**2,725**	**129**	**(s)**	**524**	**172**	**2,158**	**188**
1977 Average	**2,939**	**130**	**20**	**514**	**164**	**2,371**	**195**
1978 Average	**3,076**	**80**	**-12**	**492**	**165**	**2,511**	**191**
1979 Average	**3,141**	**116**	**24**	**352**	**208**	**2,673**	**200**
1980 Average	**2,957**	**130**	**15**	**310**	**197**	**2,566**	[c] **205**
1981 Average	**2,771**	**188**	[c] **-42**	**723**	**197**	**2,081**	**241**
1982 Average	**2,475**	**305**	**-68**	**787**	**205**	[d] **1,857**	[c] **216**
1983 Average	**2,437**	**382**	[c] **-6**	**712**	**236**	**1,877**	[c] **217**
1984 Average	**2,500**	**503**	[c] **-32**	**791**	**236**	**2,007**	**198**
1985 Average	**2,532**	**550**	**22**	**886**	**227**	**1,947**	**206**
1986 Average	**2,704**	**504**	**-15**	**888**	**291**	**2,045**	**201**
1987 Average	**2,737**	**543**	**-1**	**829**	**264**	**2,187**	**200**
1988 Average	**2,773**	**645**	**22**	**799**	**294**	**2,303**	**208**
1989 Average	**2,771**	**627**	**12**	**797**	**305**	**2,285**	**213**
1990 Average	**2,842**	**705**	**-32**	**887**	**289**	**2,402**	**201**
1991 Average	**2,826**	**675**	**18**	**936**	**277**	**2,269**	**208**
1992 Average	**2,928**	**707**	**-3**	**906**	**263**	**2,470**	[c] **207**
1993 Average	[e] **3,035**	**770**	[c] **-2**	**1,081**	[e] **300**	[e] **2,426**	**206**
1994 Average	**2,973**	**761**	**24**	**861**	**329**	**2,518**	**215**
1995 Average	**3,031**	**708**	**-23**	**958**	**348**	**2,457**	**206**
1996 Average	**3,108**	**879**	**-11**	**1,014**	**376**	**2,608**	**202**
1997 Average	**3,204**	**945**	**30**	**985**	**402**	**2,733**	**213**
1998 Average	**3,253**	**888**	**18**	**1,002**	**380**	**2,741**	**219**
1999 Average	**3,211**	**943**	**-64**	**1,061**	**338**	**2,819**	**196**
2000 Average	**3,154**	**938**	**30**	**991**	**429**	**2,642**	**207**
2001 Average	**3,053**	**1,095**	**20**	**1,013**	**434**	**2,681**	**214**
2002 January	2,931	1,079	268	714	441	2,586	223
February	3,005	993	45	1,068	482	2,403	224
March	3,072	1,123	277	955	436	2,526	232
April	3,178	1,097	-53	1,195	472	2,660	231
May	3,140	1,322	-64	1,253	503	2,771	229
June	3,225	1,162	-164	1,204	445	2,903	224
July	3,295	1,246	-100	1,244	420	2,977	221
August	3,312	1,088	-309	1,240	550	2,918	211
September	3,261	1,078	-45	1,131	479	2,774	210
October	3,039	969	-59	1,005	471	2,592	208
November	3,109	1,014	16	1,024	503	2,581	209
December	3,071	844	-307	1,442	547	2,233	199
Average	**3,137**	**1,085**	**-42**	**1,123**	**479**	**2,662**	**199**
2003 January	[R] 3,137	[R] 1,066	[R] 466	[R] 831	526	[R] 2,381	213
February	[R] 2,981	[R] 829	[R] 8	[R] 796	464	[R] 2,541	[R] 214
March	[R] 3,178	[R] 1,048	[R] 338	[R] 820	[R] 541	[R] 2,527	[R] 224
April	[R] 3,054	[R] 1,110	[R] 17	[R] 915	[R] 459	[R] 2,773	225
May	[R] 3,270	[R] 1,284	[R] 35	[R] 1,104	[R] 527	[R] 2,888	[R] 226
June	[R] 3,057	[R] 1,461	[R] 89	[R] 955	[R] 479	[R] 2,996	228
July	[R] 3,231	[R] 1,183	[R] -291	[R] 1,144	[R] 464	[R] 3,097	219
August	[R] 3,199	[R] 1,091	[R] -316	[R] 1,156	[R] 578	[R] 2,871	[R] 210
September	[R] 3,367	[R] 1,082	[R] 130	[R] 977	[R] 545	[R] 2,797	[R] 214
October	[R] 3,128	[R] 905	[R] -223	[R] 949	[R] 518	[R] 2,789	[R] 207
November	[R] 3,166	[R] 1,037	[R] 184	913	[R] 508	[R] 2,598	212
December	[R] 3,269	[R] 929	[R] -179	[R] 1,193	487	[R] 2,698	[R] 207
Average	[R] **3,171**	[R] **1,087**	[R] **21**	[R] **981**	[R] **509**	[R] **2,747**	[R] **207**
2004 January	2,883	1,056	550	646	400	2,343	223
February	2,945	1,246	543	601	554	2,492	239
March	3,129	1,417	109	1,165	538	2,734	242
April	2,998	1,246	-104	1,232	531	2,584	239
May	3,163	1,229	-48	1,122	465	2,853	238
5-Month Average	**3,025**	**1,239**	**208**	**956**	**497**	**2,603**	**238**
2003 5-Month Average	**3,127**	**1,072**	**177**	**895**	**504**	**2,623**	**226**
2002 5-Month Average	**3,066**	**1,126**	**96**	**1,035**	**467**	**2,593**	**229**

[a] A negative number indicates a decrease in stocks and a positive number indicates an increase.
[b] Stocks are at end of period.
[c] See Note 4 at end of section.
[d] See Note 6 at end of section.
[e] Beginning in 1993, other petroleum products production, exports, and products supplied include an adjustment to oxygenates and motor gasoline blending components.
R=Revised. (s)=Less than +500 barrels per day and greater than -500 barrels per day.

Notes: • Other petroleum products include pentanes plus, other hydrocarbons and alcohol, unfinished oils, gasoline blending components, and all finished petroleum products except finished motor gasoline, distillate fuel oil, residual fuel oil, jet fuel, liquefied petroleum gases, and crude oil that is used as fuel. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: • **1973-1991:** Energy Information Administration (EIA), *Petroleum Supply Annual 1992, Volume 1,* May 1993, Table S9. • **1992 forward:** EIA, *Petroleum Supply Monthly,* July 2004, Table S10.

Petroleum

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

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

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

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

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

Note 3. Distillate and Residual Fuel Oils: The requirement to report crude oil in pipelines or burned on leases as either distillate or residual fuel oil has been eliminated. Prior to January 1981, the refinery input of unfinished oils typically exceeded the available supply of unfinished oils. That discrepancy was assumed to be due to the redesignation of distillate and residual fuel oils received as such but used as unfinished oil inputs by the receiving refinery. The imbalance between supply and disposition of unfinished oils would then be subtracted from the production of distillate and residual fuel oils. Two-thirds of that difference was subtracted from distillate and one-third from residual. Beginning in January 1981, the EIA modified its survey forms to account for redesignated product and discontinued the above-mentioned adjustment.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Section 4. Natural Gas

Total dry natural gas production in the United States during May 2004 was forecast as 1.6 trillion cubic feet, 1 percent lower than production during May 2003.

Consumption of natural and supplemental gas in May 2004 was estimated as 1.5 trillion cubic feet, 3 percent higher than the level in May 2003.

Deliveries to residential consumers in May 2004 were forecast as 235 billion cubic feet, 6 percent lower than the previous May's deliveries. Total deliveries to industrial consumers during May 2004 were forecast as 643 billion cubic feet, slightly higher than the previous May's level. The electric power sector's use of natural gas in May 2004 was 456 billion cubic feet, 20 percent higher than the rate in May 2003.

Net imports of natural gas in May 2004 were estimated as 263 billion cubic feet, 2 percent lower than net imports in the previous May.

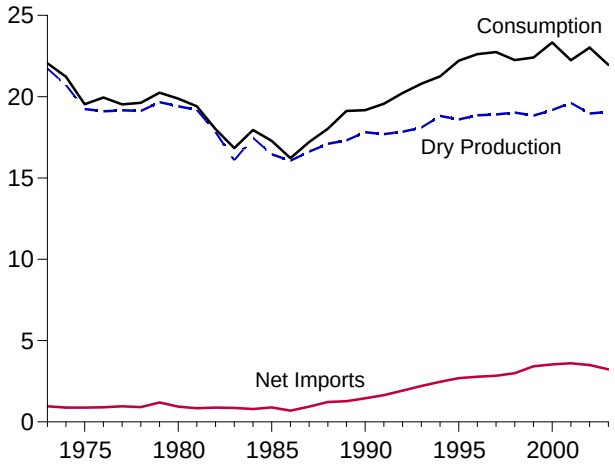
Stocks of working gas[1] in underground natural gas storage reservoirs at the end of May 2004 were 1,624 billlion cubic feet, 25 percent higher than the level of stocks available 1 year earlier.

Net injections into underground storage during May 2004 were 379 billion cubic feet, 8 percent less than the amount of net injections during May 2003.

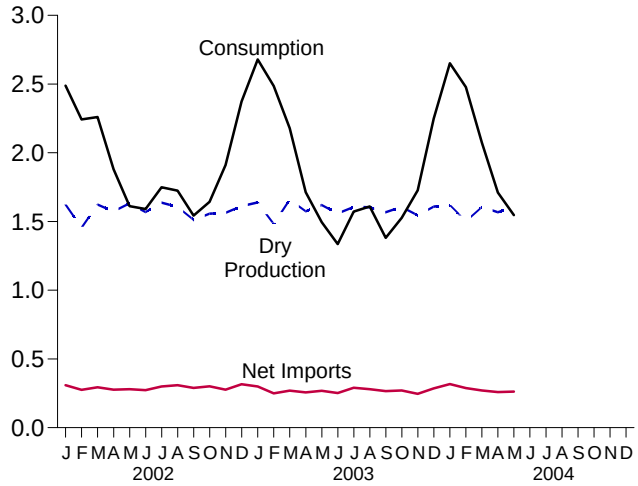
[1]Gas available for withdrawal.

Figure 4.1 Natural Gas
(Trillion Cubic Feet)

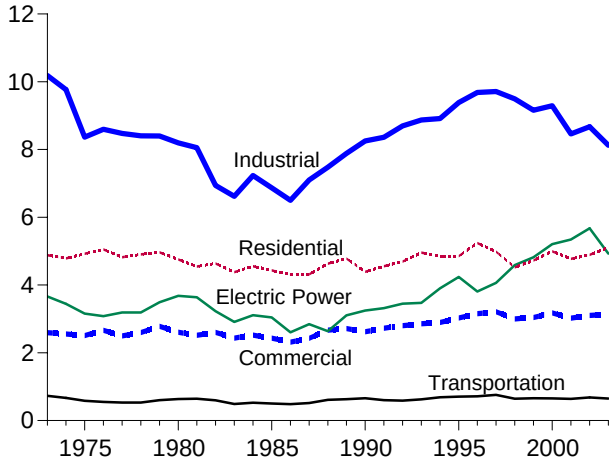
Overview, 1973-2003



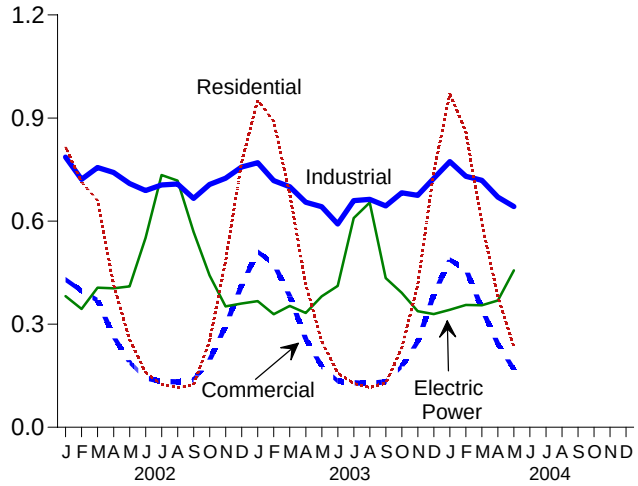
Overview, Monthly



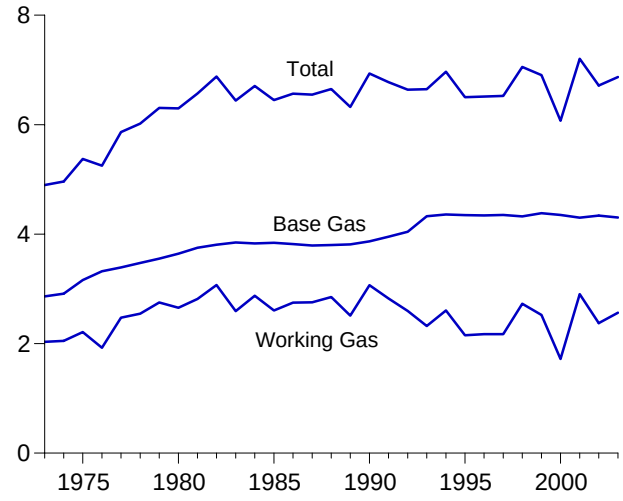
Consumption by Sector, 1973-2003



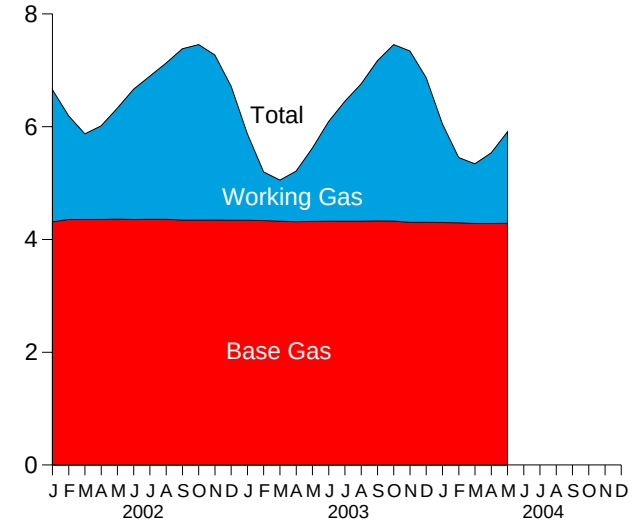
Consumption by Sector, Monthly



Underground Storage, End of Year, 1973-2003



Underground Storage, End of Month



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

Table 4.1 Natural Gas Overview

(Billion Cubic Feet)

	Dry Gas Production[a]	Supplemental Gaseous Fuels[b]	Trade			Net Withdrawals[c]	Balancing Item[d]	Consumption[e]
			Imports	Exports	Net Imports			
1973 Total	[f]**21,731**	**NA**	**1,033**	**77**	**956**	**-442**	**-196**	**22,049**
1974 Total	[f]**20,713**	**NA**	**959**	**77**	**882**	**-84**	**-289**	**21,223**
1975 Total	[f]**19,236**	**NA**	**953**	**73**	**880**	**-344**	**-235**	**19,538**
1976 Total	[f]**19,098**	**NA**	**964**	**65**	**899**	**165**	**-216**	**19,946**
1977 Total	[f]**19,163**	**NA**	**1,011**	**56**	**955**	**-557**	**-41**	**19,521**
1978 Total	[f]**19,122**	**NA**	**966**	**53**	**913**	**-120**	**-287**	**19,627**
1979 Total	[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	1,623	6	343	34	309	558	-8	2,488
February	1,455	6	306	30	276	474	33	2,243
March	1,624	6	333	38	294	327	9	2,260
April	1,573	5	315	39	276	-129	156	1,881
May	1,631	5	319	39	280	-330	26	1,612
June	1,569	5	318	45	273	-350	94	1,591
July	1,638	6	345	45	300	-248	54	1,749
August	1,607	6	356	47	310	-242	44	1,725
September	1,511	5	336	47	289	-276	13	1,543
October	1,558	6	343	42	301	-89	-132	1,643
November	1,563	6	331	55	276	202	-137	1,911
December	1,612	7	371	55	316	572	-133	2,373
Total	**18,964**	**68**	**4,015**	**516**	**3,499**	**468**	**19**	**23,018**
2003 January	[E]1,638	[E]6	359	60	299	841	-105	2,679
February	[E]1,483	[E]6	309	59	250	676	71	2,486
March	[E]1,660	[E]5	324	55	270	136	108	2,178
April	[E]1,574	[E]4	308	52	257	-158	36	1,713
May	[E]1,620	[E]6	319	50	269	-412	13	1,495
June	[E]1,558	[E]5	305	54	252	-470	-9	[R]1,335
July	[E]1,606	[E]6	341	50	291	-361	32	1,572
August	[E]1,604	[E]6	332	51	280	-309	28	1,609
September	[E]1,568	[E]5	321	55	266	-411	-47	1,381
October	[E]1,605	[E]5	331	61	270	-284	-69	1,527
November	[E]1,544	[E]6	317	71	246	86	[R]-156	[R]1,727
December	[E]1,609	[E]6	362	76	286	473	-126	2,248
Total	[E]**19,068**	[E]**65**	**3,928**	**692**	**3,236**	**-193**	**-225**	[R]**21,951**
2004 January	[RE]1,620	[E]6	[R]372	[R]55	[R]317	811	[R]-102	2,652
February	[RE]1,502	[E]6	[R]346	[R]57	[R]289	600	[R]82	[R]2,478
March	[RE]1,605	[E]5	[R]341	[R]70	[R]271	103	[R]89	[R]2,074
April	[RE]1,567	[E]5	[RE]319	[E]60	[RE]259	-198	[R]79	[R]1,711
May	[F]1,606	[F]5	[E]316	[E]53	[E]263	-379	51	[E]1,547
5-Month Total	[E]**7,901**	[E]**27**	[E]**1,693**	[E]**295**	[E]**1,398**	**937**	**199**	[E]**10,461**
2003 5-Month Total	[E]**7,975**	[E]**26**	**1,620**	**275**	**1,345**	**1,082**	**123**	**10,551**
2002 5-Month Total	**7,906**	**28**	**1,617**	**182**	**1,435**	**899**	**216**	**10,484**

[a] "Marketed Production (Wet)" minus "Extraction Loss." See Table 4.2.
[b] See Note 1 at end of section.
[c] Underground storage. For 1980-2002, also includes liquefied natural gas in above-ground tanks.
[d] See Note 3 at end of section. Since 1980, excludes transit shipments that cross the U.S.-Canada border (i.e., natural gas delivered to its destination via the other country).
[e] See Note 4 at end of section.
[f] May include unknown quantities of nonhydrocarbon gases.
[g] For 1989-1992, a small amount of consumption at independent power producers may be counted in both "Other Industrial" and "Electric Power Sector" on Table 4.4. See Note 5 at end of section.
R=Revised. E=Estimate. NA=Not available. F=Forecast.

Notes: • Totals may not equal sum of components due to independent rounding.
• Geographic coverage is the 50 States and the District of Columbia.
Web Page: http://www.eia.doe.gov/emeu/mer/natgas.html.
Sources: • **Dry Gas Production:** Table 4.2. • **Supplemental Gaseous Fuels: 1980-1997:** Energy Information Administration (EIA), *Natural Gas Annual (NGA),* annual reports. **1998 forward:** EIA, *Natural Gas Monthly (NGM),* July 2004, Table 2. • **Trade:** Table 4.3. • **Net Withdrawals: 1973-1997:** EIA, *NGA 2000,* Table 94. **1998 forward:** EIA, *NGM,* July 2004, Table 2. • **Consumption:** Table 4.4. • **Balancing Item:** Calculated as consumption minus dry gas production, supplemental gaseous fuels, net imports, and net withdrawals. • **Forecast values:** EIA, Short-Term Integrated Forecasting System. See Note 10 at end of section.

Table 4.2 Natural Gas Production

(Billion Cubic Feet)

	Gross Withdrawals[a]	Repressuring[b]	Nonhydrocarbon Gases Removed[c]	Vented and Flared[d]	Marketed Production[e]	Extraction Loss[f]	Dry Gas Production[g]
1973 Total	**24,067**	**1,171**	**NA**	**248**	[h] **22,648**	**917**	[h] **21,731**
1974 Total	**22,850**	**1,080**	**NA**	**169**	[h] **21,601**	**887**	[h] **20,713**
1975 Total	**21,104**	**861**	**NA**	**134**	[h] **20,109**	**872**	[h] **19,236**
1976 Total	**20,944**	**859**	**NA**	**132**	[h] **19,952**	**854**	[h] **19,098**
1977 Total	**21,097**	**935**	**NA**	**137**	[h] **20,025**	**863**	[h] **19,163**
1978 Total	**21,309**	**1,181**	**NA**	**153**	[h] **19,974**	**852**	[h] **19,122**
1979 Total	**21,883**	**1,245**	**NA**	**167**	[h] **20,471**	**808**	[h] **19,663**
1980 Total	**21,870**	**1,365**	**199**	**125**	**20,180**	**777**	**19,403**
1981 Total	**21,587**	**1,312**	**222**	**98**	**19,956**	**775**	**19,181**
1982 Total	**20,272**	**1,388**	**208**	**93**	**18,582**	**762**	**17,820**
1983 Total	**18,659**	**1,458**	**222**	**95**	**16,884**	**790**	**16,094**
1984 Total	**20,267**	**1,630**	**224**	**108**	**18,304**	**838**	**17,466**
1985 Total	**19,607**	**1,915**	**326**	**95**	**17,270**	**816**	**16,454**
1986 Total	**19,131**	**1,838**	**337**	**98**	**16,859**	**800**	**16,059**
1987 Total	**20,140**	**2,208**	**376**	**124**	**17,433**	**812**	**16,621**
1988 Total	**20,999**	**2,478**	**460**	**143**	**17,918**	**816**	**17,103**
1989 Total	**21,074**	**2,475**	**362**	**142**	**18,095**	**785**	**17,311**
1990 Total	**21,523**	**2,489**	**289**	**150**	**18,594**	**784**	**17,810**
1991 Total	**21,750**	**2,772**	**276**	**170**	**18,532**	**835**	**17,698**
1992 Total	**22,132**	**2,973**	**280**	**168**	**18,712**	**872**	**17,840**
1993 Total	**22,726**	**3,103**	**414**	**227**	**18,982**	**886**	**18,095**
1994 Total	**23,581**	**3,231**	**412**	**228**	**19,710**	**889**	**18,821**
1995 Total	**23,744**	**3,565**	**388**	**284**	**19,506**	**908**	**18,599**
1996 Total	**24,114**	**3,511**	**518**	**272**	**19,812**	**958**	**18,854**
1997 Total	**24,213**	**3,492**	**599**	**256**	**19,866**	**964**	**18,902**
1998 Total	**24,108**	**3,427**	**617**	**103**	**19,961**	**938**	**19,024**
1999 Total	**23,823**	**3,293**	**615**	**110**	**19,805**	**973**	**18,832**
2000 Total	**24,174**	**3,380**	**505**	**91**	**20,198**	**1,016**	**19,182**
2001 Total	**24,501**	**3,371**	**463**	**97**	**20,570**	**954**	**19,616**
2002 January	2,062	305	43	9	1,705	82	1,623
February	1,864	289	39	7	1,528	73	1,455
March	2,066	308	44	8	1,706	82	1,624
April	1,986	284	43	8	1,652	79	1,573
May	2,030	264	44	8	1,713	82	1,631
June	1,969	270	43	8	1,648	79	1,569
July	2,038	266	44	8	1,720	83	1,638
August	2,023	281	44	9	1,688	81	1,607
September	1,918	279	43	8	1,588	76	1,511
October	1,982	302	37	8	1,636	78	1,558
November	1,987	298	39	8	1,642	79	1,563
December	2,052	309	40	10	1,693	81	1,612
Total	**23,977**	**3,455**	**502**	**99**	**19,921**	**957**	**18,964**
2003 January	[E] 2,095	[E] 333	[E] 33	[E] 9	[E] 1,721	[E] 83	[E] 1,638
February	[E] 1,905	[E] 310	[E] 30	[E] 8	[E] 1,558	[E] 75	[E] 1,483
March	[E] 2,115	[E] 331	[E] 32	[E] 9	[E] 1,743	[E] 84	[E] 1,660
April	[E] 1,999	[E] 307	[E] 30	[E] 8	[E] 1,654	[E] 79	[E] 1,574
May	[E] 2,042	[E] 302	[E] 30	[E] 9	[E] 1,701	[E] 82	[E] 1,620
June	[E] 1,973	[E] 297	[E] 31	[E] 7	[E] 1,637	[E] 79	[E] 1,558
July	[E] 2,014	[E] 287	[E] 32	[E] 8	[E] 1,687	[E] 81	[E] 1,606
August	[E] 2,027	[E] 302	[E] 33	[E] 8	[E] 1,684	[E] 81	[E] 1,604
September	[E] 1,981	[E] 294	[E] 32	[E] 8	[E] 1,647	[E] 79	[E] 1,568
October	[E] 2,044	[E] 316	[E] 34	[E] 8	[E] 1,686	[E] 81	[E] 1,605
November	[E] 1,977	[E] 314	[E] 33	[E] 7	[E] 1,622	[E] 78	[E] 1,544
December	[E] 2,072	[E] 341	[E] 34	[E] 8	[E] 1,690	[E] 81	[E] 1,609
Total	[E] **24,243**	[E] **3,735**	[E] **384**	[E] **95**	[E] **20,030**	[E] **962**	[E] **19,068**
2004 January	[RE] 2,088	[E] 344	[E] 34	[E] 8	[RE] 1,702	[E] 82	[RE] 1,620
February	[RE] 1,939	[RE] 323	[E] 31	[E] 7	[RE] 1,578	[E] 76	[RE] 1,502
March	[RE] 2,077	[RE] 349	[E] 34	[E] 8	[RE] 1,686	[RE] 81	[RE] 1,605
April	[RE] 2,023	[RE] 337	[RE] 33	[E] 8	[RE] 1,646	[RE] 79	[RE] 1,567
May	[F] 2,035	[F] 315	[F] 32	[F] 8	[F] 1,680	[F] 73	[F] 1,606
5-Month Total	[E] **10,162**	[E] **1,668**	[E] **164**	[E] **38**	[E] **8,292**	[E] **391**	[E] **7,901**
2003 5-Month Total	[E] **10,156**	[E] **1,583**	[E] **154**	[E] **42**	[E] **8,377**	[E] **402**	[E] **7,975**
2002 5-Month Total	**10,009**	**1,451**	**213**	**40**	**8,305**	**399**	**7,906**

[a] Gas withdrawn from gas and oil wells.
[b] The injection of natural gas into oil and gas formations for pressure maintenance and cycling purposes.
[c] See Note 6 at end of section.
[d] Vented: Natural gas released into the air on the base site or at processing plants. Flared: Natural gas burned in flares on the base site or at gas processing plants.
[e] "Gross Withdrawals" minus "Repressuring," "Nonhydrocarbon Gases Removed," and "Vented and Flared." See Note 7 at end of section.
[f] See Note 8 at end of section.
[g] "Marketed Production (Wet)" minus "Extraction Loss."
[h] May include unknown quantities of nonhydrocarbon gases.
R=Revised. NA=Not available. E=Estimate. F=Forecast.

Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: http://www.eia.doe.gov/emeu/mer/natgas.html.
Sources: • **1973-1997:** Energy Information Administration (EIA), *Natural Gas Annual 2000,* Table 93. • **1998 forward:** EIA, *Natural Gas Monthly,* July 2004, Table 1. • **Forecast values:** EIA, Short-Term Integrated Forecasting System. See Note 10 at end of section.

Table 4.3 Natural Gas Trade by Country

(Billion Cubic Feet)

	Imports								Exports			
	Algeria[a]	Australia[a]	Canada[b]	Mexico[b]	Qatar[a]	Trinidad and Tobago[a]	Other[c]	Total	Canada[b]	Japan[a]	Mexico[b]	Total
1973 Total	**3**	**0**	**1,028**	**2**	**0**	**0**	**0**	**1,033**	**15**	**48**	**14**	**77**
1974 Total	**0**	**0**	**959**	**(s)**	**0**	**0**	**0**	**959**	**13**	**50**	**13**	**77**
1975 Total	**5**	**0**	**948**	**0**	**0**	**0**	**0**	**953**	**10**	**53**	**9**	**73**
1976 Total	**10**	**0**	**954**	**0**	**0**	**0**	**0**	**964**	**8**	**50**	**7**	**65**
1977 Total	**11**	**0**	**997**	**2**	**0**	**0**	**0**	**1,011**	**(s)**	**52**	**4**	**56**
1978 Total	**84**	**0**	**881**	**0**	**0**	**0**	**0**	**966**	**(s)**	**48**	**4**	**53**
1979 Total	**253**	**0**	**1,001**	**0**	**0**	**0**	**0**	**1,253**	**(s)**	**51**	**4**	**56**
1980 Total	**86**	**0**	**797**	**102**	**0**	**0**	**0**	**985**	**(s)**	**45**	**4**	**49**
1981 Total	**37**	**0**	**762**	**105**	**0**	**0**	**(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	336	0	0	23	0	359	27	4	28	60
February	0	0	288	0	0	21	0	309	28	6	25	59
March	3	0	293	0	2	26	0	324	32	6	17	55
April	11	0	276	0	0	19	3	308	26	6	20	52
May	4	0	273	0	0	30	11	319	18	4	29	50
June	3	0	258	0	0	34	11	305	20	3	30	54
July	5	0	283	0	3	44	5	341	16	7	27	50
August	3	0	283	0	0	35	11	332	16	5	30	51
September	8	0	267	0	6	29	11	321	21	5	28	55
October	11	0	273	0	3	38	6	331	20	8	33	61
November	3	0	270	0	0	40	4	317	32	6	33	71
December	3	0	322	0	0	37	0	362	38	6	32	76
Total	**53**	**0**	**3,421**	**0**	**14**	**378**	**61**	**3,928**	**294**	**64**	**333**	**692**
2004 January	R 5	R 0	R 319	0	R 0	R 43	R 5	R 372	R 21	5	R 29	R 55
February	R 8	R 0	R 297	0	R 0	R 41	R 0	R 346	R 26	5	R 26	R 57
March	R 11	R 0	R 292	0	R 0	R 38	R 0	R 341	R 36	6	R 28	R 70
April	NA	NA	R 270	0	NA	NA	NA	RE 319	E 21	7	E 32	E 60
May	NA	NA	E 267	0	NA	NA	NA	E 316	E 19	2	E 32	E 53
5-Month Total	**NA**	**NA**	**E 1,444**	**0**	**NA**	**NA**	**NA**	**E 1,693**	**E 123**	**24**	**E 148**	**E 295**
2003 5-Month Total	**18**	**0**	**1,466**	**0**	**2**	**120**	**14**	**1,620**	**130**	**25**	**120**	**275**
2002 5-Month Total	**12**	**0**	**1,544**	**2**	**11**	**44**	**5**	**1,617**	**74**	**24**	**84**	**182**

[a] As liquefied natural gas.

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

[c] Indonesia 1986 and 2000; the United Arab Emirates 1996-2000; Malaysia 1999, 2002, and 2003; Nigeria 2000 forward; Oman 2000 forward; and Brunei 2002.

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

Notes: • See Note 9 at end of section. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

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

Sources: • **1973-1997:** Energy Information Administration (EIA), Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." • **1998 forward:** EIA, *Natural Gas Monthly,* July 2004, Tables 5 and 6; and Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."

Table 4.4 Natural Gas Consumption by Sector

(Billion Cubic Feet)

	End-Use Sectors											
			Industrial					Transportation				
				Other Industrial								
	Resi-dential	Com-mercial[a]	Lease and Plant Fuel	CHP[b]	Non-CHP[c]	Total	Total	Pipeline Fuel[d]	Vehicle Fuel	Total	Electric Power Sector[e,f]	Total
1973 Total	**4,879**	**2,597**	**1,496**	**(g)**	**8,689**	**8,689**	**10,185**	**728**	**NA**	**728**	**3,660**	**22,049**
1974 Total	**4,786**	**2,556**	**1,477**	**(g)**	**8,292**	**8,292**	**9,769**	**669**	**NA**	**669**	**3,443**	**21,223**
1975 Total	**4,924**	**2,508**	**1,396**	**(g)**	**6,968**	**6,968**	**8,365**	**583**	**NA**	**583**	**3,158**	**19,538**
1976 Total	**5,051**	**2,668**	**1,634**	**(g)**	**6,964**	**6,964**	**8,598**	**548**	**NA**	**548**	**3,081**	**19,946**
1977 Total	**4,821**	**2,501**	**1,659**	**(g)**	**6,815**	**6,815**	**8,474**	**533**	**NA**	**533**	**3,191**	**19,521**
1978 Total	**4,903**	**2,601**	**1,648**	**(g)**	**6,757**	**6,757**	**8,405**	**530**	**NA**	**530**	**3,188**	**19,627**
1979 Total	**4,965**	**2,786**	**1,499**	**(g)**	**6,899**	**6,899**	**8,398**	**601**	**NA**	**601**	**3,491**	**20,241**
1980 Total	**4,752**	**2,611**	**1,026**	**(g)**	**7,172**	**7,172**	**8,198**	**635**	**NA**	**635**	**3,682**	**19,877**
1981 Total	**4,546**	**2,520**	**928**	**(g)**	**7,128**	**7,128**	**8,055**	**642**	**NA**	**642**	**3,640**	**19,404**
1982 Total	**4,633**	**2,606**	**1,109**	**(g)**	**5,831**	**5,831**	**6,941**	**596**	**NA**	**596**	**3,226**	**18,001**
1983 Total	**4,381**	**2,433**	**978**	**(g)**	**5,643**	**5,643**	**6,621**	**490**	**NA**	**490**	**2,911**	**16,835**
1984 Total	**4,555**	**2,524**	**1,077**	**(g)**	**6,154**	**6,154**	**7,231**	**529**	**NA**	**529**	**3,111**	**17,951**
1985 Total	**4,433**	**2,432**	**966**	**(g)**	**5,901**	**5,901**	**6,867**	**504**	**NA**	**504**	**3,044**	**17,281**
1986 Total	**4,314**	**2,318**	**923**	**(g)**	**5,579**	**5,579**	**6,502**	**485**	**NA**	**485**	**2,602**	**16,221**
1987 Total	**4,315**	**2,430**	**1,149**	**(g)**	**5,953**	**5,953**	**7,103**	**519**	**NA**	**519**	**2,844**	**17,211**
1988 Total	**4,630**	**2,670**	**1,096**	**(g)**	**6,383**	**6,383**	**7,479**	**614**	**NA**	**614**	**2,636**	**18,030**
1989 Total	**4,781**	**2,718**	**1,070**	**914**	**5,903**	**[h] 6,816**	**7,886**	**629**	**NA**	**629**	**[f,h] 3,105**	**[h] 19,119**
1990 Total	**4,391**	**2,623**	**1,236**	**1,055**	**5,963**	**[h] 7,018**	**8,255**	**660**	**(s)**	**660**	**[h] 3,245**	**[h] 19,174**
1991 Total	**4,556**	**2,729**	**1,129**	**1,061**	**6,170**	**[h] 7,231**	**8,360**	**601**	**(s)**	**602**	**[h] 3,316**	**[h] 19,562**
1992 Total	**4,690**	**2,803**	**1,171**	**1,107**	**6,420**	**[h] 7,527**	**8,698**	**588**	**2**	**590**	**[h] 3,448**	**[h] 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	816	430	96	114	577	691	786	73	[E] 1	74	381	2,488
February	713	397	86	100	535	635	721	66	[E] 1	67	344	2,243
March	661	369	96	107	553	660	756	66	[E] 1	67	407	2,260
April	415	264	92	97	552	649	742	54	[E] 1	56	404	1,881
May	255	190	95	107	507	614	709	46	[E] 1	47	410	1,612
June	160	144	92	102	495	597	689	46	[E] 1	47	551	1,591
July	125	134	95	111	499	610	705	50	[E] 1	52	734	1,749
August	116	133	94	108	506	614	708	50	[E] 1	51	718	1,725
September	124	139	89	101	476	577	666	44	[E] 1	45	569	1,543
October	251	195	92	97	517	615	706	47	[E] 1	49	442	1,643
November	483	295	92	97	535	632	725	55	[E] 1	57	352	1,911
December	771	414	95	98	564	662	758	69	[E] 1	71	360	2,373
Total	**4,890**	**3,103**	**1,114**	**1,240**	**6,316**	**7,557**	**8,671**	**667**	**[E] 15**	**682**	**5,672**	**23,018**
2003 January	953	511	[E] 96	106	567	673	770	78	[E] 1	79	367	2,679
February	890	476	[E] 87	93	537	631	718	72	[E] 1	73	329	2,486
March	679	382	[E] 98	98	505	603	700	63	[E] 1	64	353	2,178
April	417	257	[E] 93	87	475	562	655	50	[E] 1	51	333	1,713
May	250	177	[E] 95	85	462	547	642	43	[E] 1	45	381	1,495
June	158	135	[E] 92	93	407	500	591	39	[E] 1	40	411	[R] 1,335
July	127	130	[E] 94	99	466	565	[R] 660	46	[E] 1	47	609	1,572
August	116	[R] 127	[E] 94	104	465	569	663	47	[E] 1	48	654	1,609
September	128	133	[E] 92	83	469	552	644	40	[E] 1	41	434	1,381
October	230	[R] 177	[E] 94	98	490	588	[R] 683	44	[E] 1	46	391	1,527
November	414	249	[E] 91	95	[R] 490	[R] 584	[R] 675	50	[E] 1	51	338	[R] 1,727
December	742	386	[E] 95	98	532	630	724	65	[E] 1	66	329	2,248
Total	**5,105**	**[R] 3,140**	**[E] 1,121**	**1,138**	**[R] 5,866**	**[R] 7,004**	**[R] 8,125**	**636**	**[E] 15**	**651**	**4,930**	**[R] 21,951**
2004 January	[R] 971	488	[E] 95	89	589	678	773	77	[E] 1	[E] 78	342	2,652
February	859	460	[E] 88	92	[R] 550	[R] 642	[R] 731	72	[E] 1	[E] 73	356	[R] 2,478
March	[R] 594	[R] 345	[RE] 94	91	533	624	[R] 719	60	[E] 1	[E] 61	355	[R] 2,074
April	[R] 381	[R] 242	[E] 92	[R] 90	[R] 487	[R] 578	[R] 670	[R] 49	[E] 1	[RE] 50	[R] 369	[R] 1,711
May	[F] 235	[F] 168	[F] 95	104	443	[F] 548	[F] 643	[F] 44	[E] 1	[E] 45	456	[E] 1,547
5-Month Total	**[E] 3,039**	**[E] 1,702**	**[E] 465**	**468**	**2,602**	**[E] 3,070**	**[E] 3,535**	**[E] 301**	**[E] 6**	**[E] 308**	**1,878**	**[E] 10,461**
2003 5-Month Total	**3,189**	**1,802**	**[E] 469**	**470**	**2,546**	**3,016**	**3,485**	**306**	**[E] 6**	**312**	**1,763**	**10,551**
2002 5-Month Total	**2,861**	**1,650**	**465**	**525**	**2,725**	**3,250**	**3,715**	**305**	**[E] 6**	**311**	**1,947**	**10,484**

[a] All commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See note at end of Section 7. See Table 7.3c for CHP fuel use.

[b] Industrial combined-heat-and-power (CHP) and a small number of industrial electrity-only plants. See note at end of Section 7.

[c] All industrial sector fuel use other than that in "Lease and Plant Fuel" and "CHP."

[d] Natural gas consumed in the operation of pipelines, primarily in compressors.

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

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

[g] Included in "Non-CHP."

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

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

Notes: • Data are for natural gas, plus a small amount of supplemental gaseous fuels that cannot be identified separately. • 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.

Table 4.5 Natural Gas in Underground Storage

(Volumes in Billion Cubic Feet)

	Natural Gas in Underground Storage, End of Period			Change in Working Gas From Same Period Previous Year		Storage Activity		
	Base Gas	Working Gas	Total[a]	Volume	Percent	Withdrawals	Injections	Net[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	4,342	1,534	5,876	-810	-34.5	886	44	841
February	4,334	864	5,198	-974	-53.0	723	48	676
March	4,324	730	5,054	-788	-51.9	305	169	136
April	4,315	896	5,211	-763	-46.0	118	277	-158
May	4,322	1,300	5,622	-668	-33.9	41	453	-412
June	4,323	1,768	6,091	-540	-23.4	36	506	-470
July	4,323	2,129	6,451	-410	-16.1	64	426	-361
August	4,324	2,435	6,760	-338	-12.2	62	371	-309
September	4,328	2,843	7,171	-199	-6.5	31	441	-411
October	4,327	3,130	7,457	14	.5	59	343	-284
November	4,305	3,038	7,343	110	3.7	228	142	86
December	4,305	2,565	6,869	189	8.0	543	70	473
Total	**4,305**	**2,565**	**6,869**	**189**	**8.0**	**3,095**	**3,288**	**-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
5-Month Total	–	–	–	–	–	**1,922**	**985**	**937**
2003 5-Month Total	–	–	–	–	–	**2,072**	**990**	**1,082**
2002 5-Month Total	–	–	–	–	–	**1,725**	**842**	**883**

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

[b] For 1980-2002, 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 at end of section.

– =Not applicable.

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

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

Sources: See end of section.

Natural Gas

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

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

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

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

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

1975 . . . 6,280	**1985** . . 8,087	**1995** . . . 7,953
1976 . . . 6,544	**1986** . . 8,145	**1996** . . . 7,980
1977 . . . 6,678	**1987** . . 8,124	**1997** . . . 8,332
1978 . . . 6,890	**1988** . . 8,124	**1998** . . . 8,179
1979 . . . 6,929	**1989** . . 8,124	**1999** . . . 8,229
1980 . . . 7,434	**1990** . . 8,125	**2000** . . . 8,241
1981 . . . 7,805	**1991** . . 7,993	**2001** . . . 8,415
1982 . . . 7,915	**1992** . . 7,932	**2002** . . . 8,207
1983 . . . 7,985	**1993** . . 7,989	
1984 . . . 8,043	**1994** . . 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 1980–2001 include both underground and liquefied natural gas (LNG) storage. Annual data on LNG additions and withdrawals are from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying the ratio to the annual LNG data.

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

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

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

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

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

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

For further information on methods of estimating preliminary monthly data, see the EIA *NGM*.

Note 7. Production.

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

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

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

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

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

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

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

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

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

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

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

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

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

Table 4.4 Sources

Residential, Commercial, Lease and Plant Fuel, and Pipeline Fuel
1973–1997: Energy Information Administration (EIA), *Natural Gas Annual 2000*, Table 95.
1998 forward: EIA, *Natural Gas Monthly*, July 2004, Table 3.

Other Industrial Total
1973–1992: EIA, *Natural Gas Annual 2000*, Table 95.
1993–1997: EIA, Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers."
1998 forward: EIA, *Natural Gas Monthly*, July 2004, Table 3.

Other Industrial CHP
Table 7.3c.

Electric Power Sector
1973–1988: Table 7.3e.
1989 forward: Table 7.3b.

Vehicle Fuel
Annual Data:
1990 and 1991: EIA, *Natural Gas Annual 2000*, Table 95.
1992–1995: Science Applications International Corporation, "Alternative Transportation Fuels and Vehicles Data Development," unpublished final report prepared for EIA (McLean, VA, July 1996) and U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy.

1996–2002: EIA, Office of Coal, Nuclear, Electric, and Alternative Fuels.

Monthly Estimates: Derived by dividing the annual value by the number of days in the year and then multiplying by the number of days in the month.

All Other Series: Calculated.

Forecast Values: EIA, Short-Term Integrated Forecasting System. See Note 10.

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 and 1997: EIA, *Natural Gas Monthly*, February 2003, Table 9.
1998 forward: EIA, *Natural Gas Monthly*, July 2004, 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 and 1997: EIA, *Natural Gas Monthly*, February 2003, Table 9.
1998 forward: EIA, *Natural Gas Monthly*, July 2004, Table 9.

Section 5. Crude Oil and Natural Gas Resource Development

The July 2004 rotary rig count was 1,213, 3 percent higher than the count in June 2004 and 12 percent higher than the count in July 2003. Of the total number of rigs in operation, 1,116 were onshore and 97 were offshore. For July 2004, the number of onshore rigs was up 15 percent but the number of offshore rigs was down 9 percent from the July 2003 count. Rotary rigs drilling for natural gas as a share of total rigs stood at 86 percent in July 2004.

Total footage drilled in July 2004 was 16.7 million feet, 2 percent higher than the footage drilled in June 2004 and up 7 percent from that drilled in July 2003.

The number of exploratory and development crude oil and natural gas wells drilled during July 2004 was 2,507, up 2 percent from the number drilled in June 2004 and up 12 percent from the number drilled in July 2003. The number of crude oil wells drilled was 513, and the number of natural gas wells was 1,994, 11 percent higher and 13 percent higher, respectively, than their July 2003 levels.

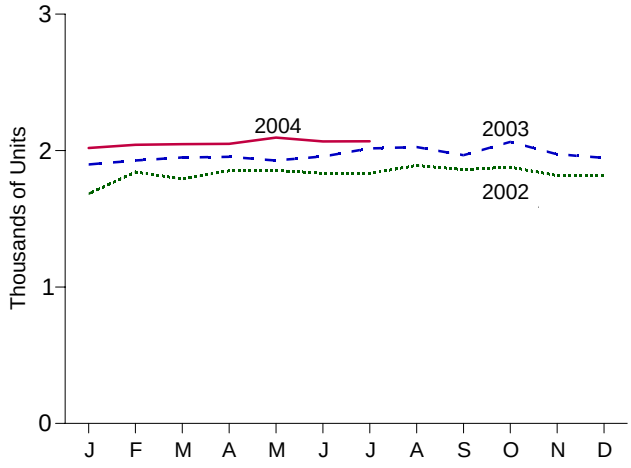
The number of dry holes drilled in July 2004 was 419, up 2 percent from the number drilled in June 2004 and up 8 percent from the number drilled in July 2003.

There were 2.1 thousand well service rigs active in July 2004, slightly higher than the previous month and 3 percent more than the count a year ago.

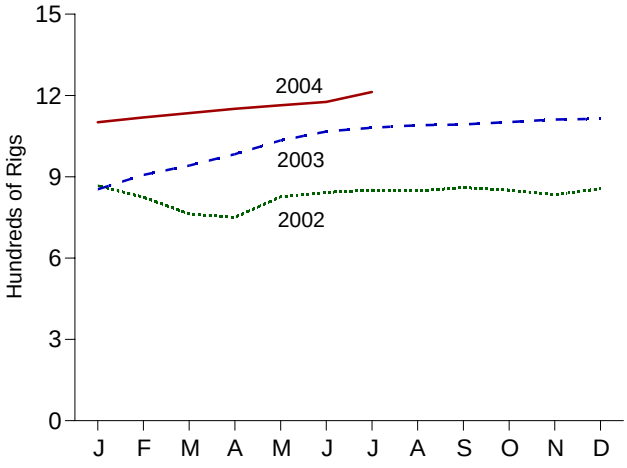
The number of seismic crews active in the 48 States onshore in July 2004 was 38, 10 more than a year earlier. The number of crews active in the 48 States offshore was 8, 3 fewer than a year earlier. Two crews were active in Alaska in July 2004, the same as a year ago.

Figure 5.1 Crude Oil and Natural Gas Resource Development Indicators

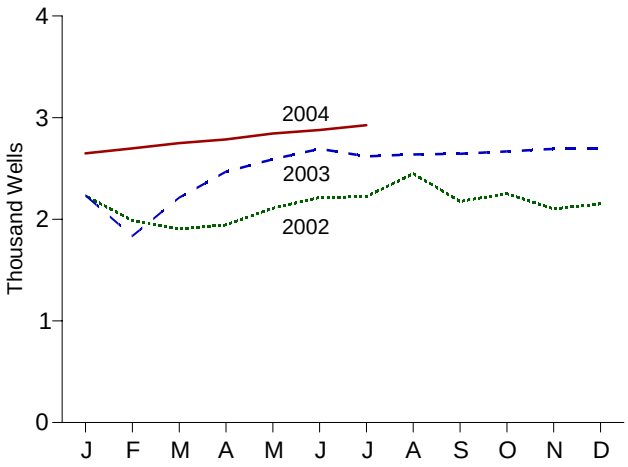
Active Well Service Rig Count



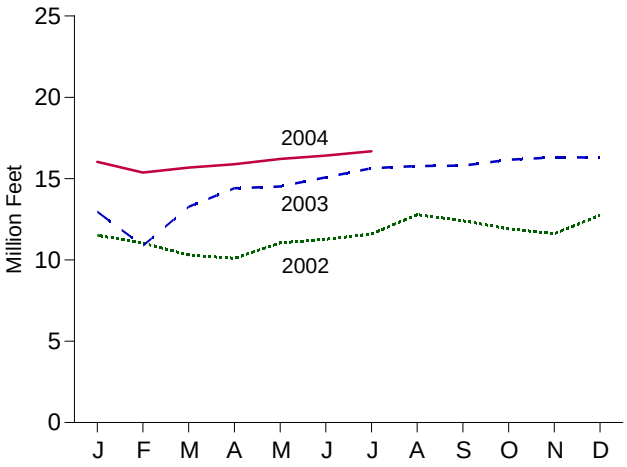
Rotary Rigs in Operation



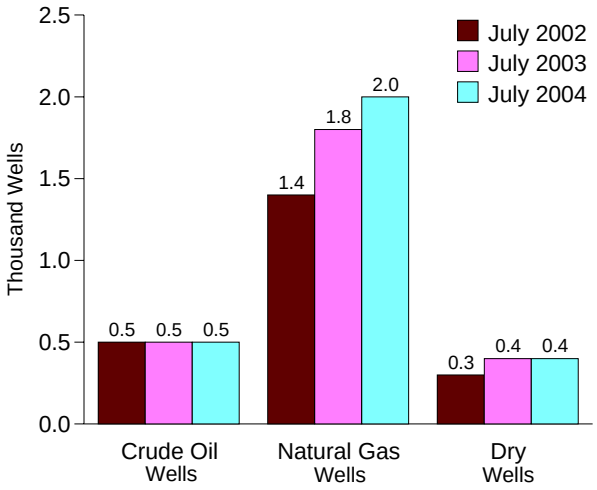
Wells Drilled



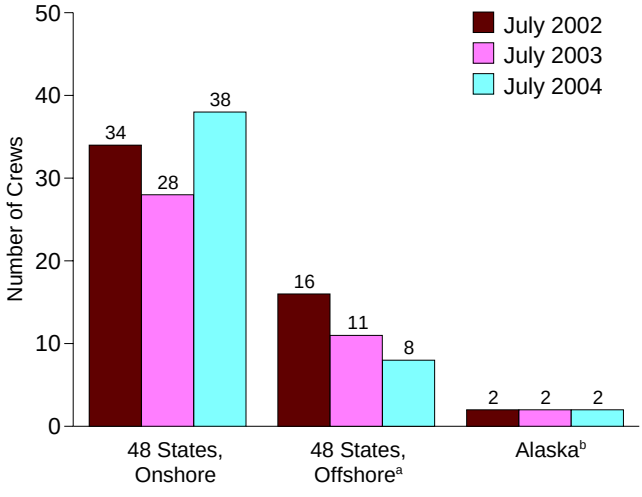
Footage Drilled



Wells Drilled by Type



Maximum U.S. Active Seismic Crew Counts



[a]Federal and State Jurisdiction waters of Gulf of Mexico.
[b]All onshore.

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

Table 5.1 Crude Oil and Natural Gas Drilling Activity Measurements

	Rotary Rigs in Operation[a]					Total Footage Drilled[c]	Active Well Service Rig Count[d]
	By Site		By Objective				
	Onshore	Offshore	Crude Oil	Natural Gas	Total[b]		
	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**	**189,967**	**NA**
2002 January	741	126	141	725	867	11,513	1,683
February	702	123	144	679	825	11,031	1,843
March	649	114	144	617	763	10,303	1,791
April	645	105	136	612	750	10,102	1,852
May	721	105	134	690	826	11,039	1,856
June	732	110	138	704	842	11,274	1,832
July	740	111	133	716	851	11,590	1,832
August	737	111	125	721	848	12,782	1,891
September	746	114	122	736	860	12,410	1,861
October	740	111	140	709	851	11,907	1,878
November	725	109	146	683	834	11,612	1,817
December	742	114	137	714	856	12,747	1,821
Average	**717**	**113**	**137**	**691**	**830**	**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	16,035	2,019
February	1,020	99	153	961	1,119	15,373	2,043
March	1,041	94	164	968	1,135	15,675	2,047
April	1,058	93	154	996	1,151	15,880	2,050
May	1,068	96	156	1,007	1,164	16,206	2,095
June	1,080	96	164	1,011	1,176	16,411	2,067
July	1,116	97	170	1,041	1,213	16,679	2,068
7-Month Average	**1,057**	**96**	**158**	**993**	**1,153**	**112,259**	**2,056**
2003 7-Month Average	**872**	**109**	**159**	**818**	**981**	**96,738**	**1,947**
2002 7-Month Average	**704**	**113**	**139**	**678**	**818**	**76,852**	**1,813**

[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.

NA=Not available.

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

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

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

Table 5.2 Crude Oil and Natural Gas Wells Drilled

(Number of Wells)

	Exploratory				Development				Total			
	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total	Crude Oil	Natural Gas	Dry	Total
1973 Total	**642**	**1,067**	**5,952**	**7,661**	**9,525**	**5,866**	**4,368**	**19,759**	**10,167**	**6,933**	**10,320**	**27,420**
1974 Total	**859**	**1,190**	**6,833**	**8,882**	**12,788**	**5,948**	**5,283**	**24,019**	**13,647**	**7,138**	**12,116**	**32,901**
1975 Total	**982**	**1,248**	**7,129**	**9,359**	**15,966**	**6,879**	**6,517**	**29,362**	**16,948**	**8,127**	**13,646**	**38,721**
1976 Total	**1,086**	**1,346**	**6,772**	**9,204**	**16,602**	**8,063**	**6,986**	**31,651**	**17,688**	**9,409**	**13,758**	**40,855**
1977 Total	**1,164**	**1,548**	**7,283**	**9,995**	**17,581**	**10,574**	**7,702**	**35,857**	**18,745**	**12,122**	**14,985**	**45,852**
1978 Total	**1,171**	**1,771**	**7,965**	**10,907**	**18,010**	**12,642**	**8,586**	**39,238**	**19,181**	**14,413**	**16,551**	**50,145**
1979 Total	**1,321**	**1,907**	**7,437**	**10,665**	**19,530**	**13,347**	**8,662**	**41,539**	**20,851**	**15,254**	**16,099**	**52,204**
1980 Total	**1,764**	**2,081**	**9,039**	**12,884**	**30,875**	**15,252**	**11,599**	**57,726**	**32,639**	**17,333**	**20,638**	**70,610**
1981 Total	**2,636**	**2,514**	**12,349**	**17,499**	**40,962**	**17,652**	**15,440**	**74,054**	**43,598**	**20,166**	**27,789**	**91,553**
1982 Total	**2,431**	**2,125**	**11,247**	**15,803**	**36,768**	**16,854**	**14,972**	**68,594**	**39,199**	**18,979**	**26,219**	**84,397**
1983 Total	**2,023**	**1,593**	**10,148**	**13,764**	**35,097**	**12,971**	**14,005**	**62,073**	**37,120**	**14,564**	**24,153**	**75,837**
1984 Total	**2,198**	**1,521**	**11,278**	**14,997**	**40,407**	**15,606**	**14,403**	**70,416**	**42,605**	**17,127**	**25,681**	**85,413**
1985 Total	**1,679**	**1,190**	**8,924**	**11,793**	**33,439**	**12,978**	**12,132**	**58,549**	**35,118**	**14,168**	**21,056**	**70,342**
1986 Total	**1,084**	**793**	**5,549**	**7,426**	**18,013**	**7,723**	**7,129**	**32,865**	**19,097**	**8,516**	**12,678**	**40,291**
1987 Total	**925**	**754**	**5,049**	**6,728**	**15,239**	**7,301**	**6,063**	**28,603**	**16,164**	**8,055**	**11,112**	**35,331**
1988 Total	**855**	**743**	**4,693**	**6,291**	**12,781**	**7,812**	**5,348**	**25,941**	**13,636**	**8,555**	**10,041**	**32,232**
1989 Total	**607**	**705**	**3,924**	**5,236**	**9,597**	**8,834**	**4,264**	**22,695**	**10,204**	**9,539**	**8,188**	**27,931**
1990 Total	**654**	**689**	**3,715**	**5,058**	**11,544**	**10,355**	**4,598**	**26,497**	**12,198**	**11,044**	**8,313**	**31,555**
1991 Total	**592**	**534**	**3,314**	**4,440**	**11,178**	**8,992**	**4,282**	**24,452**	**11,770**	**9,526**	**7,596**	**28,892**
1992 Total	**493**	**423**	**2,513**	**3,429**	**8,264**	**7,786**	**3,605**	**19,655**	**8,757**	**8,209**	**6,118**	**23,084**
1993 Total	**502**	**548**	**2,469**	**3,519**	**7,905**	**9,469**	**3,859**	**21,233**	**8,407**	**10,017**	**6,328**	**24,752**
1994 Total	**570**	**726**	**2,405**	**3,701**	**6,151**	**8,812**	**2,902**	**17,865**	**6,721**	**9,538**	**5,307**	**21,566**
1995 Total	**542**	**570**	**2,198**	**3,310**	**7,085**	**7,784**	**2,877**	**17,746**	**7,627**	**8,354**	**5,075**	**21,056**
1996 Total	**483**	**570**	**2,136**	**3,189**	**7,831**	**8,732**	**3,146**	**19,709**	**8,314**	**9,302**	**5,282**	**22,898**
1997 Total	**428**	**536**	**2,110**	**3,074**	**10,008**	**10,791**	**3,592**	**24,391**	**10,436**	**11,327**	**5,702**	**27,465**
1998 Total	**291**	**504**	**1,647**	**2,442**	**6,773**	**10,640**	**3,193**	**20,606**	**7,064**	**11,144**	**4,840**	**23,048**
1999 Total	**157**	**539**	**1,195**	**1,891**	**4,019**	**10,338**	**2,169**	**16,526**	**4,176**	**10,877**	**3,364**	**18,417**
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 January	15	60	108	183	513	1,328	207	2,048	528	1,388	315	2,231
February	16	72	103	191	418	1,231	148	1,797	434	1,303	251	1,988
March	16	62	96	174	419	1,126	185	1,730	435	1,188	281	1,904
April	29	39	94	162	459	1,142	182	1,783	488	1,181	276	1,945
May	24	48	103	175	447	1,287	199	1,933	471	1,335	302	2,108
June	R 18	49	86	R 153	R 529	1,310	222	R 2,061	547	1,359	308	2,214
July	22	45	97	164	522	1,323	214	2,059	544	1,368	311	2,223
August	14	59	105	178	540	1,530	200	2,270	554	1,589	305	2,448
September	18	61	106	185	440	1,349	203	1,992	458	1,410	309	2,177
October	16	58	123	197	569	1,300	186	2,055	585	1,358	309	2,252
November	R 23	56	R 97	R 176	R 516	1,252	R 158	R 1,926	539	1,308	255	2,102
December	20	50	106	176	455	1,318	203	1,976	475	1,368	309	2,152
Total	R **231**	**659**	R **1,224**	R **2,114**	R **5,827**	**15,496**	R **2,307**	R **23,630**	**6,058**	**16,155**	**3,531**	**25,744**
2003 January	23	R 49	106	R 178	528	R 1,326	202	R 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	68	136	493	1,423	160	2,076	515	1,469	228	2,212
April	21	65	92	178	R 621	1,458	211	R 2,290	R 642	1,523	303	R 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	17	76	133	226	444	1,694	255	2,393	461	1,770	388	2,619
August	17	77	134	228	444	1,708	257	2,409	461	1,785	391	2,637
September	17	77	131	225	447	1,716	256	2,419	464	1,793	387	2,644
October	18	78	132	228	458	1,724	258	2,440	476	1,802	390	2,668
November	18	78	134	230	458	1,745	260	2,463	476	1,823	394	2,693
December	17	79	134	230	444	1,758	260	2,462	461	1,837	394	2,692
Total	**254**	R **766**	**1,321**	R **2,341**	R **6,030**	R **18,956**	**2,657**	R **27,643**	R **6,284**	**19,722**	**3,978**	R **29,984**
2004 January	16	79	132	227	415	1,750	256	2,421	431	1,829	388	2,648
February	17	79	134	230	444	1,762	261	2,467	461	1,841	395	2,697
March	21	80	136	237	473	1,774	266	2,513	494	1,854	402	2,750
April	17	82	138	237	453	1,826	270	2,549	470	1,908	408	2,786
May	20	81	137	238	487	1,848	270	2,605	507	1,929	407	2,843
June	20	81	139	240	511	1,855	273	2,639	531	1,936	412	2,879
July	20	83	141	244	493	1,911	278	2,682	513	1,994	419	2,926
7-Month Total	**131**	**565**	**957**	**1,653**	**3,276**	**12,726**	**1,874**	**17,876**	**3,407**	**13,291**	**2,831**	**19,529**
2003 7-Month Total	**167**	**377**	**656**	**1,200**	**3,779**	**10,305**	**1,366**	**15,450**	**3,946**	**10,682**	**2,022**	**16,650**
2002 7-Month Total	**140**	**375**	**687**	**1,202**	**3,307**	**8,747**	**1,357**	**13,411**	**3,447**	**9,122**	**2,044**	**14,613**

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.

Table 5.3 Maximum U.S. Active Seismic Crew Counts

(Number of Crews)

	48 States, Onshore				48 States, Offshore[a]				Alaska[b]				
	Dimensions[c]				Dimensions[c]				Dimensions[c]				
	2	3	4	Total[d]	2	3	4	Total[d]	2	3	4	Total[d]	Total
2000 March	4	36	1	41	7	11	0	19	1	1	0	2	62
April	4	36	1	41	7	11	0	19	1	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

[a] Federal and State Jurisdiction waters of the Gulf of Mexico.

[b] All onshore.

[c] In **two-dimensional** (2D) reflection seismic surveying both the sound source and the sound detectors (numbering up to a hundred or more per shot) are moved along a straight line. The resultant product can be thought of as a vertical sonic cross-section of the subsurface beneath the survey line. It is constructed by summing many compressional (pressure) wave reflections from the various sound source and sound detector locations at the halfway sound path points beneath each location (common depth point stacking). In **three-dimensional** (3D) reflection seismic surveying the sound detectors (numbering up to a thousand or more) are spread out over an area and the sound source is moved from location to location through the area. The resultant product can be thought of as a cube of common depth point stacked reflections. Advantages over 2D include the additional dimension, the fact that many more reflections are available for stacking at each point, which provides greatly improved resolution of subsurface features, and elimination of the "ghost" or "side swipe" reflections from nearby offline features that 2D surveys are prone to (except, of course, along the outer faces of the cube). **Four dimensional** (4D) reflection seismic surveying is the exact repetition of a 3D survey at two or more time intervals. The primary application of 4D is mapping the movement of fluid interfaces in producing oil and gas reservoirs.

[d] Includes crews with unknown survey dimension.

Notes: • 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.

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 July 2004 totaled 92 million short tons, 4 percent higher than in July 2003.

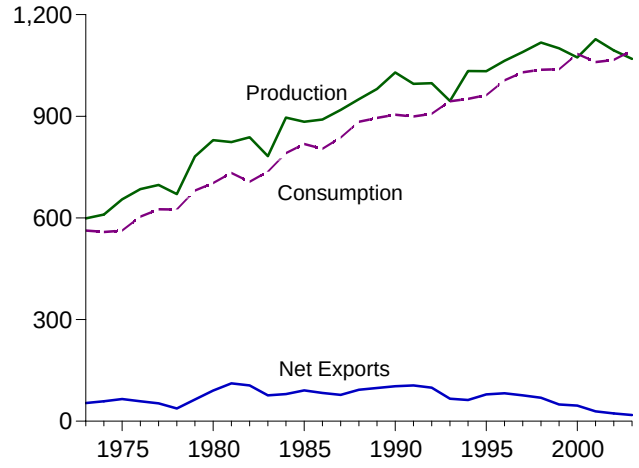
Coal consumed by the electric power sector in May 2004 was 81 million short tons, 5 percent higher than the level in May 2003.

Electric power sector coal stocks were 124 million short tons at the end of May 2004, 14 percent lower than the level a year earlier.

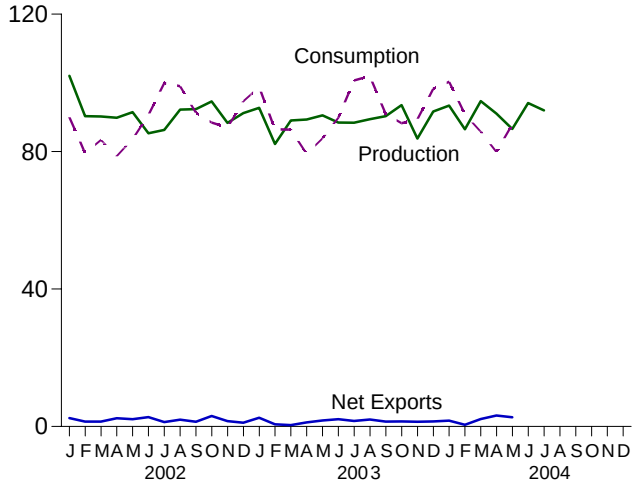
Coal exports in May 2004 totaled 5 million short tons, 27 percent higher than exports in May 2003. Coal imports in May 2004 totaled 2 million short tons, 6 percent higher than imports in May 2003.

Figure 6.1 Coal
(Million Short Tons)

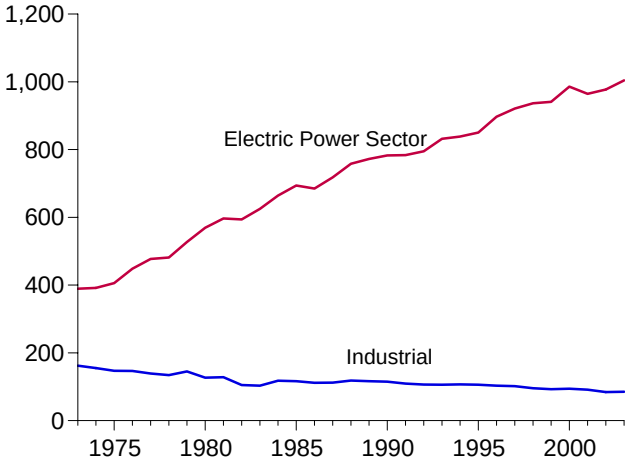
Overview, 1973-2003



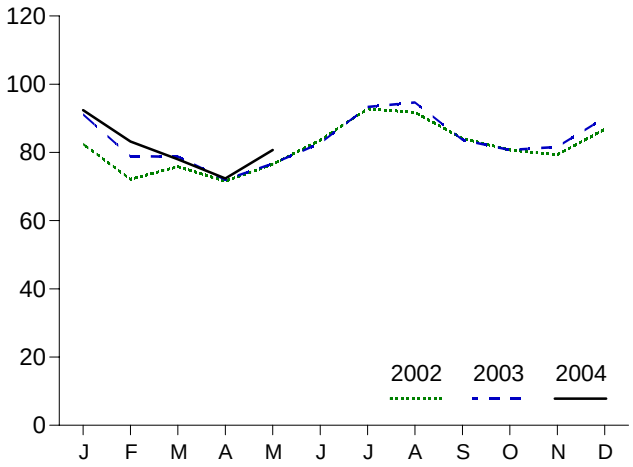
Overview, Monthly



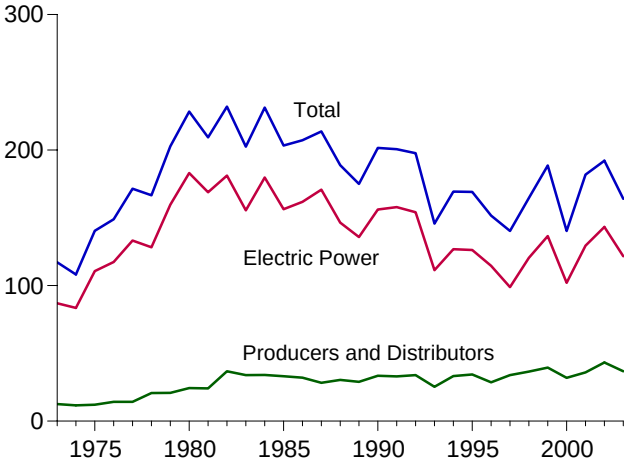
Consumption by Sector, 1973-2003



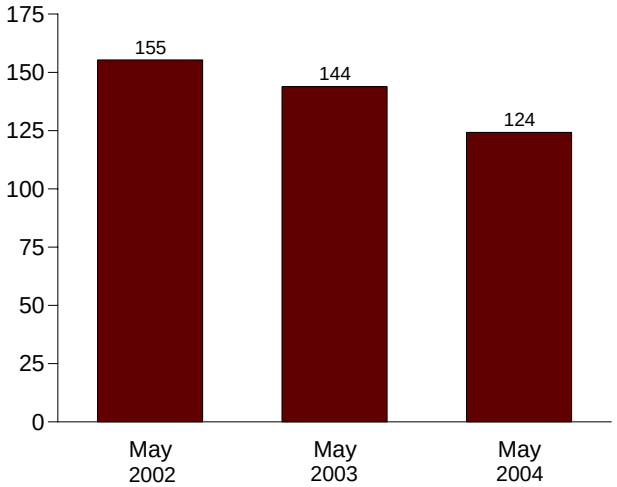
Electric Power Sector Consumption, Monthly



Stocks, End of Year, 1973-2003



Electric Power Sector Stocks, End of Month



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

Table 6.1 Coal Overview

(Thousand Short Tons)

	Production[a]	Waste Coal[b,c]	Imports	Exports	Stock Change[d]	Losses and Unaccounted for[e]	Consumption
1973 Total	**598,568**	**NA**	**127**	**53,587**	**(f)**	**[g] -17,476**	**562,584**
1974 Total	**610,023**	**NA**	**2,080**	**60,661**	**-8,918**	**1,958**	**558,402**
1975 Total	**654,641**	**NA**	**940**	**66,309**	**32,154**	**-5,522**	**562,640**
1976 Total	**684,913**	**NA**	**1,203**	**60,021**	**8,508**	**13,797**	**603,790**
1977 Total	**697,205**	**NA**	**1,647**	**54,312**	**22,644**	**-3,395**	**625,291**
1978 Total	**670,164**	**NA**	**2,953**	**40,714**	**-4,938**	**12,116**	**625,225**
1979 Total	**781,134**	**NA**	**2,059**	**66,042**	**36,206**	**421**	**680,524**
1980 Total	**829,700**	**NA**	**1,194**	**91,742**	**25,595**	**10,827**	**702,730**
1981 Total	**823,775**	**NA**	**1,043**	**112,541**	**-18,983**	**-1,366**	**732,627**
1982 Total	**838,112**	**NA**	**742**	**106,277**	**22,614**	**3,052**	**706,911**
1983 Total	**782,091**	**NA**	**1,271**	**77,772**	**-29,453**	**-1,629**	**736,672**
1984 Total	**895,921**	**NA**	**1,286**	**81,483**	**28,716**	**-4,288**	**791,296**
1985 Total	**883,638**	**NA**	**1,952**	**92,680**	**-27,934**	**2,796**	**818,049**
1986 Total	**890,315**	**NA**	**2,212**	**85,518**	**3,953**	**-1,175**	**804,231**
1987 Total	**918,762**	**NA**	**1,747**	**79,607**	**6,461**	**-2,499**	**836,941**
1988 Total	**950,265**	**NA**	**2,134**	**95,023**	**-24,949**	**-1,316**	**883,642**
1989 Total	**980,729**	**1,407**	**2,851**	**100,815**	**-13,744**	**2,916**	**895,000**
1990 Total	**1,029,076**	**3,339**	**2,699**	**105,804**	**26,542**	**-1,730**	**904,498**
1991 Total	**995,984**	**3,950**	**3,390**	**108,969**	**-947**	**-3,925**	**899,227**
1992 Total	**997,545**	**6,287**	**3,803**	**102,516**	**-2,997**	**461**	**907,655**
1993 Total	**945,424**	**8,137**	**8,181**	**74,519**	**-51,943**	**-4,916**	**944,081**
1994 Total	**1,033,504**	**8,227**	**8,870**	**71,359**	**23,617**	**4,340**	**951,286**
1995 Total	**1,032,974**	**8,561**	**9,473**	**88,547**	**-275**	**632**	**962,104**
1996 Total	**1,063,856**	**8,778**	**8,115**	**90,473**	**-17,456**	**1,411**	**1,006,321**
1997 Total	**1,089,932**	**8,096**	**7,487**	**83,545**	**-11,253**	**3,678**	**1,029,544**
1998 Total	**1,117,535**	**8,690**	**8,724**	**78,048**	**24,228**	**-4,430**	**1,037,103**
1999 Total	**1,100,431**	**8,683**	**9,089**	**58,476**	**23,988**	**-2,906**	**1,038,647**
2000 Total	**1,073,612**	**9,089**	**12,513**	**58,489**	**-48,309**	**938**	**1,084,095**
2001 Total	**1,127,689**	**(c)**	**19,787**	**48,666**	**41,630**	**-2,966**	**1,060,146**
2002 January	102,056	(c)	1,439	3,873	4,081	5,537	90,004
February	90,311	(c)	1,222	2,630	5,364	3,970	79,569
March	90,206	(c)	1,339	2,749	1,572	3,829	83,395
April	89,849	(c)	1,208	3,584	11,722	-2,938	78,688
May	91,478	(c)	1,227	3,330	1,035	4,681	83,658
June	85,341	(c)	1,422	4,128	-5,678	-2,301	90,613
July	86,326	(c)	1,573	2,843	-10,022	-4,898	99,977
August	92,203	(c)	1,555	3,529	-9,241	457	99,012
September	92,368	(c)	1,526	2,884	-1,726	1,431	91,305
October	94,608	(c)	1,369	4,407	4,288	-1,186	88,469
November	88,352	(c)	1,393	2,930	5,490	-5,690	87,016
December	91,184	(c)	1,602	2,712	3,330	-7,905	94,648
Total	**1,094,283**	**(c)**	**16,875**	**39,601**	**10,215**	**-5,012**	**1,066,355**
2003 January	92,740	(c)	1,134	3,680	-13,191	4,594	98,790
February	82,207	(c)	1,804	2,428	-6,474	1,623	86,434
March	89,074	(c)	2,017	2,410	3,383	-1,103	86,402
April	89,317	(c)	2,390	3,571	10,181	-1,358	79,314
May	90,550	(c)	2,109	3,875	308	4,642	83,834
June	88,455	(c)	1,894	4,003	-684	-2,827	89,856
July	88,398	(c)	2,619	4,223	-11,499	-2,427	100,718
August	89,451	(c)	2,133	4,164	-10,112	-4,431	101,962
September	90,304	(c)	2,300	3,707	-677	-1,336	90,911
October	93,542	(c)	2,545	3,997	4,947	-1,108	88,251
November	83,794	(c)	2,358	3,737	2,118	-9,078	89,375
December	91,665	(c)	1,742	3,219	-6,651	-1,438	98,278
Total	**1,069,496**	**(c)**	**25,044**	**43,014**	**-28,352**	**-14,247**	**1,094,126**
2004 January	93,380	(c)	1,748	3,447	-10,274	[R] 1,646	[R] 100,309
February	86,490	(c)	1,789	2,276	-3,076	-1,783	90,862
March	94,698	(c)	1,788	3,965	3,422	3,310	85,789
April	91,037	(c)	2,157	5,359	[R] 10,870	[R] -2,901	[R] 79,867
May	86,571	(c)	2,232	4,910	[E] 186	[E] -4,289	[E] 87,995
June	94,125	(c)	NA	NA	NA	NA	NA
July	91,998	(c)	NA	NA	NA	NA	NA
7-Month Total	**638,299**	**(c)**	**NA**	**NA**	**NA**	**NA**	**NA**
2003 7-Month Total	**620,741**	**(c)**	**13,966**	**24,191**	**-17,977**	**3,144**	**625,349**
2002 7-Month Total	**635,566**	**(c)**	**9,431**	**23,138**	**8,074**	**7,881**	**605,904**

[a] Beginning in 2001, includes bituminous refuse.

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

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

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

[e] "Losses and Unaccounted for" is calculated as the sum of production, imports, and waste coal, minus exports, stock change, and consumption.

[f] Included in "Losses and Unaccounted for."

[g] Includes stock change.

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

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

Sources: See end of section.

Table 6.2 Coal Consumption by Sector

(Thousand Short Tons)

	End-Use Sectors											
		Commercial			Industrial							
						Other Industrial						
	Resi-dential	CHP[a]	Other[b]	Total	Coke Plants	CHP[c]	Non-CHP[d]	Total	Total	Trans-portation	Electric Power Sector[e,f]	Total
1973 Total	**4,113**	([g])	**7,004**	**7,004**	**94,101**	([h])	**68,038**	**68,038**	**162,139**	**116**	**389,212**	**562,584**
1974 Total	**3,653**	([g])	**7,764**	**7,764**	**90,191**	([h])	**64,903**	**64,903**	**155,094**	**80**	**391,811**	**558,402**
1975 Total	**2,823**	([g])	**6,587**	**6,587**	**83,598**	([h])	**63,646**	**63,646**	**147,244**	**24**	**405,962**	**562,640**
1976 Total	**2,586**	([g])	**6,330**	**6,330**	**84,704**	([h])	**61,787**	**61,787**	**146,491**	**12**	**448,371**	**603,790**
1977 Total	**2,507**	([g])	**6,447**	**6,447**	**77,739**	([h])	**61,463**	**61,463**	**139,202**	**9**	**477,126**	**625,291**
1978 Total	**2,188**	([g])	**7,323**	**7,323**	**71,394**	([h])	**63,085**	**63,085**	**134,479**	([h])	**481,235**	**625,225**
1979 Total	**1,678**	([g])	**6,710**	**6,710**	**77,368**	([h])	**67,717**	**67,717**	**145,085**	([h])	**527,051**	**680,524**
1980 Total	**1,355**	([g])	**5,097**	**5,097**	**66,657**	([h])	**60,347**	**60,347**	**127,004**	([h])	**569,274**	**702,730**
1981 Total	**1,336**	([g])	**6,085**	**6,085**	**61,014**	([h])	**67,395**	**67,395**	**128,409**	([h])	**596,797**	**732,627**
1982 Total	**1,401**	([g])	**6,839**	**6,839**	**40,908**	([h])	**64,097**	**64,097**	**105,005**	([h])	**593,666**	**706,911**
1983 Total	**1,352**	([g])	**7,096**	**7,096**	**37,033**	([h])	**65,980**	**65,980**	**103,013**	([h])	**625,211**	**736,672**
1984 Total	**1,735**	([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])	[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**	([h])	**964,433**	**1,060,146**
2002 January	54	127	313	440	1,861	2,278	2,946	5,224	7,085	([h])	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	60	146	337	484	1,941	2,484	2,713	5,196	7,138	([h])	91,109	98,790
February	50	127	278	405	1,958	2,169	3,014	5,183	7,141	([h])	78,838	86,434
March	37	125	173	298	2,105	2,254	2,939	5,193	7,297	([h])	78,770	86,402
April	42	110	228	338	2,047	2,089	2,805	4,893	6,941	([h])	71,993	79,314
May	30	94	147	241	1,964	1,952	2,934	4,886	6,849	([h])	76,714	83,834
June	26	118	94	212	2,059	2,139	2,761	4,900	6,959	([h])	82,659	89,856
July	37	137	164	301	2,079	2,391	2,585	4,975	7,055	([h])	93,326	100,718
August	37	144	155	299	2,007	2,397	2,574	4,971	6,977	([h])	94,649	101,962
September	24	121	70	192	2,024	1,995	2,982	4,977	7,001	([h])	83,695	90,911
October	29	114	121	235	2,001	2,247	3,028	5,276	7,277	([h])	80,710	88,251
November	46	118	255	373	1,976	2,180	3,181	5,360	7,336	([h])	81,620	89,375
December	72	137	442	579	2,087	2,431	2,908	5,340	7,427	([h])	90,201	98,278
Total	**489**	**1,492**	**2,464**	**3,956**	**24,248**	**26,728**	**34,423**	**61,150**	**85,398**	([h])	**1,004,283**	**1,094,126**
2004 January	63	157	351	508	1,996	2,760	2,597	5,357	7,353	([h])	[R] 92,386	[R] 100,309
February	50	148	260	408	1,829	2,305	3,086	5,391	7,220	([h])	83,183	90,862
March	33	143	128	271	2,080	2,278	3,123	5,401	7,481	([h])	78,005	85,789
April	42	[R] 113	[R] 225	338	[RF] 2,352	[R] 2,128	[R] 2,658	[RE] 4,786	[R] 7,138	([h])	[R] 72,349	[R] 79,867
May	[F] 27	127	[F] 95	[E] 222	[F] 2,277	1,914	[F] 2,845	[E] 4,759	[E] 7,035	([h])	80,710	[E] 87,995
5-Month Total	[E] **216**	**688**	[E] **1,059**	[E] **1,747**	[E] **10,533**	**11,384**	[E] **14,310**	[E] **25,693**	[E] **36,227**	([h])	**406,632**	[E] **444,822**
2003 5-Month Total	**218**	**603**	**1,164**	**1,767**	**10,015**	**10,947**	**14,404**	**25,351**	**35,366**	([h])	**397,423**	**434,774**
2002 5-Month Total	**217**	**558**	**1,195**	**1,753**	**9,468**	**10,643**	**14,754**	**25,397**	**34,864**	([h])	**378,480**	**415,314**

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

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

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

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

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

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

[g] Included in "Commercial Other."

[h] Included in "Industrial Non-CHP."

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

Notes: • CHP monthly data are from Table 7.3c; electric power sector monthly data are from Table 7.3b; 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. **Forecast values:** Energy Information Administration, Short-Term Integrated Forecasting System. See Note 4 at end of section.

Table 6.3 Coal Stocks by Sector

(Thousand Short Tons)

	Producers and Distributors	End-Use Sectors					Electric Power Sector[b,c]	Total
		Residential and Commercial	Industrial			Total		
			Coke Plants	Other[a]	Total			
1973 Year	**12,530**	**290**	**6,998**	**10,370**	**17,368**	**17,658**	**86,967**	**117,155**
1974 Year	**11,634**	**280**	**6,209**	**6,605**	**12,814**	**13,094**	**83,509**	**108,237**
1975 Year	**12,108**	**233**	**8,797**	**8,529**	**17,326**	**17,559**	**110,724**	**140,391**
1976 Year	**14,221**	**240**	**9,902**	**7,100**	**17,002**	**17,242**	**117,436**	**148,899**
1977 Year	**14,225**	**220**	**12,816**	**11,063**	**23,879**	**24,099**	**133,219**	**171,543**
1978 Year	**20,695**	**360**	**8,278**	**9,048**	**17,326**	**17,686**	**128,225**	**166,606**
1979 Year	**20,826**	**340**	**10,155**	**11,777**	**21,932**	**22,272**	**159,714**	**202,812**
1980 Year	**24,379**	**NA**	**9,067**	**11,951**	**21,018**	**21,018**	**183,010**	**228,407**
1981 Year	**24,149**	**NA**	**6,475**	**9,906**	**16,381**	**16,381**	**168,893**	**209,423**
1982 Year	**36,784**	**NA**	**4,642**	**9,479**	**14,121**	**14,121**	**181,132**	**232,038**
1983 Year	**33,931**	**NA**	**4,346**	**8,710**	**13,056**	**13,056**	**155,598**	**202,584**
1984 Year	**34,090**	**NA**	**6,166**	**11,317**	**17,483**	**17,483**	**179,727**	**231,300**
1985 Year	**33,133**	**NA**	**3,420**	**10,438**	**13,857**	**13,857**	**156,376**	**203,367**
1986 Year	**32,093**	**NA**	**2,992**	**10,429**	**13,420**	**13,420**	**161,806**	**207,319**
1987 Year	**28,321**	**NA**	**3,884**	**10,777**	**14,662**	**14,662**	**170,797**	**213,780**
1988 Year	**30,418**	**NA**	**3,137**	**8,768**	**11,906**	**11,906**	**146,507**	**188,831**
1989 Year	**29,000**	**NA**	**2,864**	**7,363**	**10,227**	**10,227**	**135,860**	**175,087**
1990 Year	**33,418**	**NA**	**3,329**	**8,716**	**12,044**	**12,044**	**156,166**	**201,629**
1991 Year	**32,971**	**NA**	**2,773**	**7,061**	**9,835**	**9,835**	**157,876**	**200,682**
1992 Year	**33,993**	**NA**	**2,597**	**6,965**	**9,562**	**9,562**	**154,130**	**197,685**
1993 Year	**25,284**	**NA**	**2,401**	**6,716**	**9,117**	**9,117**	**111,341**	**145,742**
1994 Year	**33,219**	**NA**	**2,657**	**6,585**	**9,243**	**9,243**	**126,897**	**169,358**
1995 Year	**34,444**	**NA**	**2,632**	**5,702**	**8,334**	**8,334**	**126,304**	**169,083**
1996 Year	**28,648**	**NA**	**2,667**	**5,688**	**8,355**	**8,355**	**114,623**	**151,627**
1997 Year	**33,973**	**NA**	**1,978**	**5,597**	**7,576**	**7,576**	**98,826**	**140,374**
1998 Year	**36,530**	**NA**	**2,026**	**5,545**	**7,571**	**7,571**	**120,501**	**164,602**
1999 Year	**39,475**	**NA**	**1,943**	**5,569**	**7,511**	**7,511**	[c] **141,604**	**188,590**
2000 Year	**31,905**	**NA**	**1,494**	**4,587**	**6,081**	**6,081**	**102,296**	**140,282**
2001 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	[F] 36,498	NA	1,353	5,314	6,667	6,667	135,771	178,935
February	[F] 37,456	NA	1,341	4,837	6,177	6,177	128,828	172,461
March	[F] 38,994	NA	1,329	4,359	5,688	5,688	131,162	175,844
April	[F] 41,456	NA	1,377	4,297	5,674	5,674	138,895	186,025
May	[F] 36,789	NA	1,426	4,234	5,660	5,660	143,884	186,333
June	[F] 37,678	NA	1,474	4,172	5,646	5,646	142,325	185,649
July	[F] 35,435	NA	1,345	4,407	5,751	5,751	132,964	174,150
August	[F] 32,456	NA	1,215	4,642	5,857	5,857	125,725	164,038
September	[F] 34,973	NA	1,085	4,878	5,963	5,963	122,425	163,360
October	[F] 36,456	NA	1,025	4,824	5,849	5,849	126,002	168,307
November	[F] 38,489	NA	965	4,771	5,736	5,736	126,200	170,425
December	[F] **36,781**	**NA**	**905**	**4,718**	**5,623**	**5,623**	**121,371**	**163,775**
2004 January	[F] 33,486	NA	1,020	4,458	5,478	5,478	114,537	153,501
February	[F] 34,947	NA	1,134	4,198	5,332	5,332	110,145	150,425
March	[F] 35,350	NA	1,249	3,938	5,187	5,187	113,310	153,847
April	[F] 37,489	NA	[RF] 1,611	[RF] 4,176	[R] 5,788	[R] 5,788	[R] 121,440	[R] 164,716
May	[F] 34,587	NA	[F] 1,906	[F] 4,177	6,084	6,084	124,232	[E] 164,903

[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.

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

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

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

Notes: • Stocks are at end of period. • Producer and distributor monthly values are estimates derived from collected quarterly and annual data; end-use sector monthly values are estimates derived from collected quarterly data; and electric power sector monthly values are data from Table 7.4. See Note 3 at end of section.

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

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

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

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

Coal

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Table 6.1 Sources

Production
1973–September 1977: U.S. Department of the Interior, Bureau of Mines, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977 forward: Energy Information Administration (EIA), *Weekly Coal Production*.

Waste Coal
EIA, Form EIA-860B, "Annual Electric Generator Report-Nonutility" and predecessor form.

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

Stocks Change
Calculated from data in Table 6.3.

Losses and Unaccounted for
Calculated.

Consumption
Table 6.2.

Table 6.2 Sources

Residential and Commercial
1973–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*.
January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers-Upper Lake Docks."

October 1977–1979: Energy Information Administration (EIA), Form EIA-2, "Monthly Coal Report, Retail Dealers-Upper Lake Docks."
1980–1997: EIA, Form EIA-6, "Coal Distribution Report," quarterly.
1998 forward: DOI, Mine Safety and Health Administration, Form 7000-2, "Quarterly Mine Employment and Coal Production."

Industrial Coke Plants
1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977–1980: EIA, Form EIA-5/5A, "Coke and Coal Chemicals-Monthly/Annual Supplement."
1981–1984: EIA, Form EIA-5/5A, "Coke Plant Report-Quarterly/Annual Supplement."
1985 forward: EIA, Form EIA-5, "Coke Plant Report-Quarterly."

Industrial Other
1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977–1979: EIA, Form EIA-3, "Monthly Coal Consumption Report-Manufacturing Plants."
1980 forward: EIA, Form EIA-3, "Quarterly Coal Consumption Report-Manufacturing Plants," and Form EIA-6, "Coal Distribution Report," quarterly.

Transportation
1973–1976: DOI, BOM, *Minerals Yearbook*.
January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers-Upper Lake Docks."
October–December 1977: EIA, Form EIA-6, "Coal Distribution Report," quarterly.

Electric Power
1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977–1988: EIA, Form EIA-759 (formerly Form FPC-4), "Monthly Power Plant Report."
1989 –2000: Table 7.3b
2001 forward: EIA, Form EIA-906, "Power Plant Report."

Table 6.3 Sources

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

Residential and Commercial
1973–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*.
January-September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers-Upper Lake Docks."
October 1977–1979: EIA, Form EIA-2, "Monthly Coal Report, Retail Dealers-Upper Lake Docks."

Industrial Coke Plants
1973–September 1977: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977–1980: Energy Information Administration (EIA), Form EIA-5/5A, "Coke and Coal Chemicals-Monthly/Annual."
1981–1984: EIA, Form EIA 5/5A, "Coke Plant Report-Quarterly/Annual Supplement."
1985 forward: EIA, Form EIA-5, "Coke Plant Report-Quarterly."

Industrial Other
1973–September 1977: DOI, BOM, *Minerals Yearbook* and *Minerals Industry Surveys*.
October 1977–1979: EIA, Form EIA-3, "Monthly Coal Consumption Report-Manufacturing Plants."
1980 forward: EIA, Form EIA-3, "Quarterly Coal Consumption Report-Manufacturing Plants."

Electric Power
Table 7.4.

Section 7. Electricity

Overview. In 2003, net generation of electricity totaled 3.8 trillion kilowatthours, down slightly compared with the total in 2002. 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 30 billion kilowatthours and exported 24 billion kilowatthours of electricity in 2003.

Net Generation. In May 2004, total net generation of electricity was 325 billion kilowatthours, 7 percent higher than in May 2003.

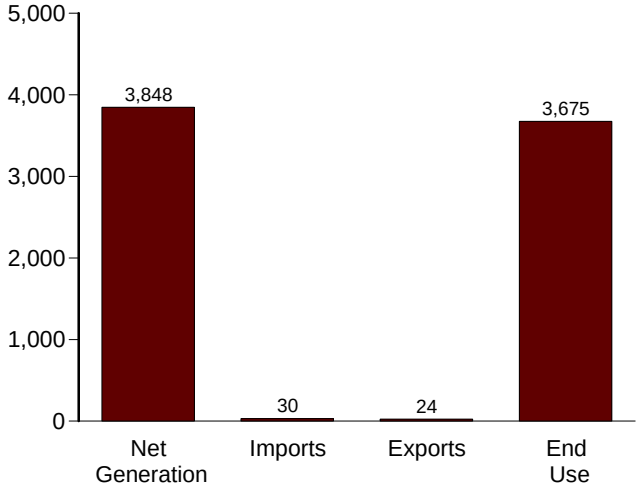
Consumption of Combustible Fuels. The consumption of coal for electricity generation and useful thermal output by all sectors was 83 million short tons in May 2004, 5 percent higher than in May 2003. Total petroleum consumption was 19 million barrels, 17 percent higher than a year earlier, and natural gas consumption was 567 billion cubic feet, 20 percent higher than a year ago.

Stocks of Coal and Petroleum. Stocks of coal held by the electric power sector in May 2004 were 124 million short tons, 14 percent below the level held a year earlier. Total petroleum was 48 million barrels in May 2004, 5 percent lower than a year earlier.

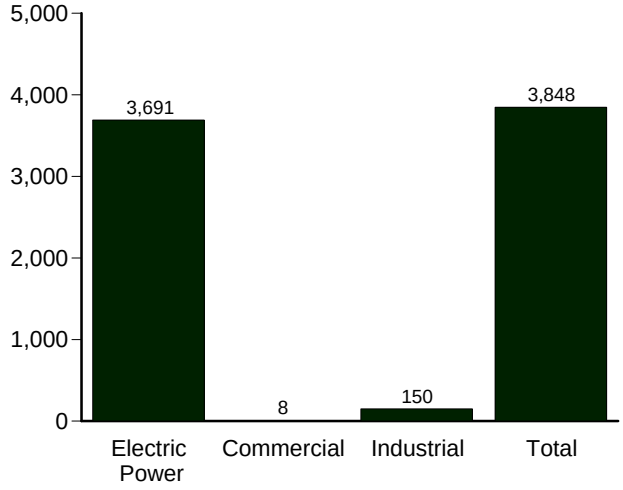
Retail Sales of Electricity. Total retail sales of electricity in May 2004 were 279 billion kilowatthours, 4 percent higher than sales in May 2003. Sales to residential users in May 2004 were 91 billion kilowatthours, 3 percent higher than a year ago; commercial sector sales were 100 billion kilowatt-hours, 3 percent higher than a year ago; and industrial sector sales were 88 billion kilowatthours, 6 percent higher than a year ago.

Figure 7.1 Electricity Overview
(Billion Kilowatthours)

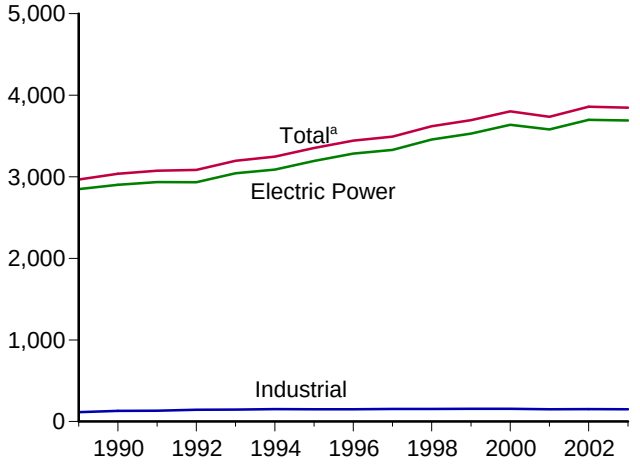
Overview, 2003



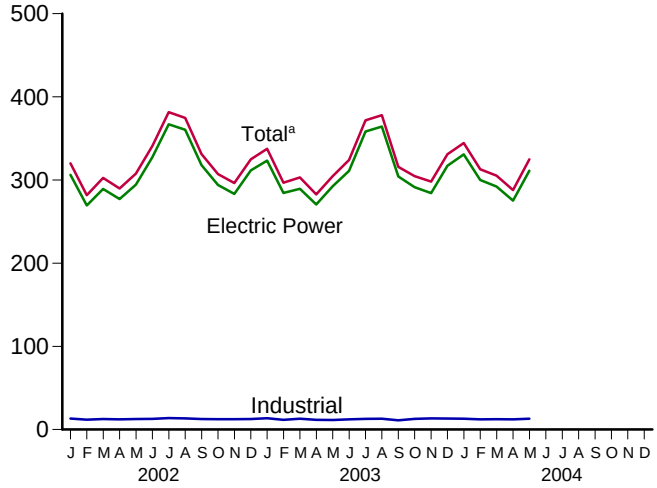
Net Generation, 2003



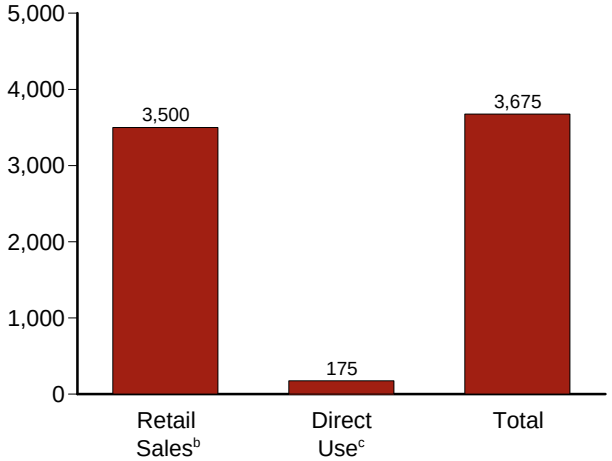
Net Generation by Sector, 1989-2003



Net Generation by Sector, Monthly



End Use, 2003



Trade, 1973-2003

[a]Includes commercial sector.
[b]Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.
[c]Commercial and industrial facility use of onsite net electricity generation; and electricity sales among adjacent or co-located facilities for which revenue information is not available.
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							End Use		
	Electric Power Sector[a]	Commercial Sector[b]	Industrial Sector[c]	Total	Imports[d]	Exports[d]	Losses and Unaccounted for[e]	Retail Sales[f]	Direct Use[g]	Total
1973 Total	**1,861**	**NA**	**3**	**1,864**	**17**	**3**	**165**	**1,713**	**NA**	**1,713**
1974 Total	**1,867**	**NA**	**3**	**1,870**	**15**	**3**	**177**	**1,706**	**NA**	**1,706**
1975 Total	**1,918**	**NA**	**3**	**1,921**	**11**	**5**	**180**	**1,747**	**NA**	**1,747**
1976 Total	**2,038**	**NA**	**3**	**2,041**	**11**	**2**	**194**	**1,855**	**NA**	**1,855**
1977 Total	**2,124**	**NA**	**3**	**2,127**	**20**	**3**	**197**	**1,948**	**NA**	**1,948**
1978 Total	**2,206**	**NA**	**3**	**2,209**	**21**	**1**	**211**	**2,018**	**NA**	**2,018**
1979 Total	**2,247**	**NA**	**3**	**2,251**	**23**	**2**	**200**	**2,071**	**NA**	**2,071**
1980 Total	**2,286**	**NA**	**3**	**2,290**	**25**	**4**	**216**	**2,094**	**NA**	**2,094**
1981 Total	**2,295**	**NA**	**3**	**2,298**	**36**	**3**	**184**	**2,147**	**NA**	**2,147**
1982 Total	**2,241**	**NA**	**3**	**2,244**	**33**	**4**	**187**	**2,086**	**NA**	**2,086**
1983 Total	**2,310**	**NA**	**3**	**2,313**	**39**	**3**	**198**	**2,151**	**NA**	**2,151**
1984 Total	**2,416**	**NA**	**3**	**2,419**	**42**	**3**	**173**	**2,286**	**NA**	**2,286**
1985 Total	**2,470**	**NA**	**3**	**2,473**	**46**	**5**	**190**	**2,324**	**NA**	**2,324**
1986 Total	**2,487**	**NA**	**3**	**2,490**	**41**	**5**	**158**	**2,369**	**NA**	**2,369**
1987 Total	**2,572**	**NA**	**3**	**2,575**	**52**	**6**	**164**	**2,457**	**NA**	**2,457**
1988 Total	**2,704**	**NA**	**3**	**2,707**	**39**	**7**	**161**	**2,578**	**NA**	**2,578**
1989 Total	**2,848**	**4**	**115**	**2,967**	**26**	**15**	**223**	**2,647**	**108**	**2,755**
1990 Total	**2,901**	**6**	**131**	**3,038**	**18**	**16**	**214**	**2,713**	**114**	**2,827**
1991 Total	**2,936**	**6**	**133**	**3,074**	**22**	**2**	**213**	**2,762**	**118**	**2,880**
1992 Total	**2,934**	**6**	**143**	**3,084**	**28**	**3**	**224**	**2,763**	**122**	**2,886**
1993 Total	**3,044**	**7**	**146**	**3,197**	**31**	**4**	**236**	**2,861**	**128**	**2,989**
1994 Total	**3,089**	**8**	**151**	**3,248**	**47**	**2**	**224**	**2,935**	**134**	**3,069**
1995 Total	**3,194**	**8**	**151**	**3,353**	**43**	**4**	**235**	**3,013**	**144**	**3,157**
1996 Total	**3,284**	**9**	**151**	**3,444**	**43**	**3**	**237**	**3,101**	**146**	**3,247**
1997 Total	**3,329**	**9**	**154**	**3,492**	**43**	**9**	**232**	**3,146**	**148**	**3,294**
1998 Total	**3,457**	**9**	**154**	**3,620**	**40**	**14**	**221**	**3,264**	**161**	**3,425**
1999 Total	**3,530**	**9**	**156**	**3,695**	**43**	**14**	**229**	**3,312**	**183**	**3,495**
2000 Total	**3,638**	**8**	**157**	**3,802**	**49**	**15**	**231**	**3,421**	**183**	**3,605**
2001 Total	**3,580**	**7**	**149**	**3,737**	**39**	**16**	**215**	**3,370**	[E] **174**	**3,544**
2002 January	306	1	13	320	3	1	15	292	[E] 15	307
February	269	(s)	12	282	3	1	6	264	[E] 14	278
March	289	1	13	303	3	2	22	267	[E] 15	282
April	277	1	12	290	3	1	19	259	[E] 15	273
May	295	1	13	308	2	2	24	269	[E] 15	284
June	328	1	13	341	3	1	30	298	[E] 15	313
July	367	1	14	382	4	1	33	337	[E] 15	352
August	360	1	13	375	4	1	24	338	[E] 15	353
September	318	1	13	331	3	1	9	309	[E] 15	324
October	294	1	12	307	2	1	11	283	[E] 15	298
November	283	1	12	296	3	1	21	262	[E] 15	276
December	312	1	13	325	2	1	27	284	[E] 15	299
Total	**3,698**	**7**	**153**	**3,858**	**36**	**14**	**241**	**3,463**	[E] **178**	**3,641**
2003 January	323	1	14	338	3	1	16	308	[E] 15	323
February	284	1	12	297	3	2	1	283	[E] 13	297
March	289	1	13	303	3	3	14	274	[E] 15	289
April	270	1	12	283	3	2	13	256	[E] 14	270
May	292	1	11	305	3	2	21	269	[E] 15	284
June	311	1	12	324	3	2	21	289	[E] 14	304
July	358	1	13	372	4	1	26	334	[E] 15	348
August	364	1	13	378	4	1	24	341	[E] 15	356
September	304	1	11	316	2	2	-6	307	[E] 14	322
October	291	1	13	305	1	3	9	279	[E] 15	293
November	284	1	13	298	1	2	19	264	[E] 14	279
December	317	1	13	331	2	2	21	295	[E] 15	310
Total	**3,691**	**8**	**150**	**3,848**	**30**	**24**	**179**	**3,500**	[E] **175**	**3,675**
2004 January	331	1	13	344	2	2	23	307	[E] 15	322
February	300	1	12	313	2	2	13	286	[E] 14	300
March	[R] 292	1	12	[R] 305	2	3	11	278	[E] 15	293
April	[R] 275	1	12	[R] 288	2	2	[R] 12	[R] 262	[E] 14	[R] 276
May	311	1	13	325	2	2	31	279	[E] 15	294
5-Month Total	**1,510**	**3**	**63**	**1,575**	**10**	**11**	**90**	**1,412**	[E] **73**	**1,485**
2003 5-Month Total	**1,460**	**3**	**61**	**1,525**	**14**	**10**	**66**	**1,390**	[E] **72**	**1,462**
2002 5-Month Total	**1,437**	**3**	**62**	**1,502**	**15**	**6**	**86**	**1,351**	[E] **74**	**1,425**

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

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

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

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

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

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

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

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

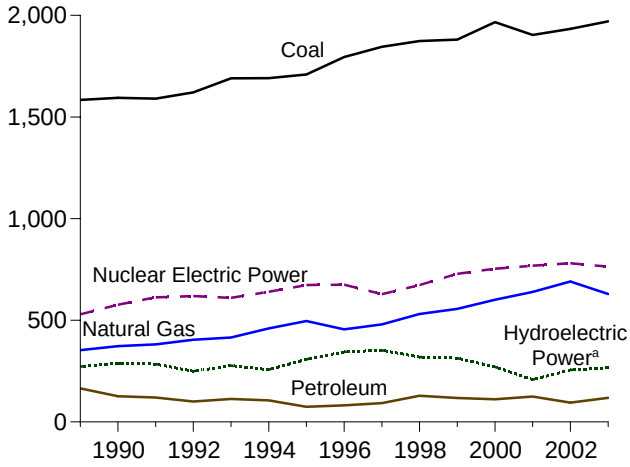
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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

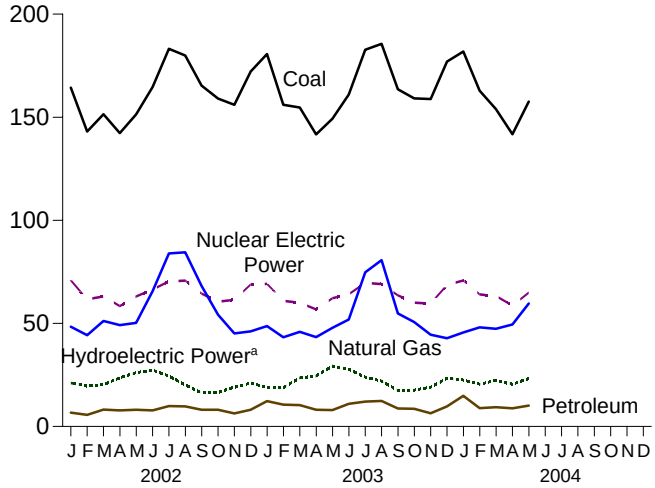
Sources: • **Net Generation:** Tables 7.2a-7.2c. • **Imports and Exports:** See end of section. • **Losses and Unaccounted for:** Calculated as the sum of total net generation and imports minus total end use and exports. • **End Use:** Table 7.5.

Figure 7.2 Electricity Net Generation
(Billion Kilowatthours)

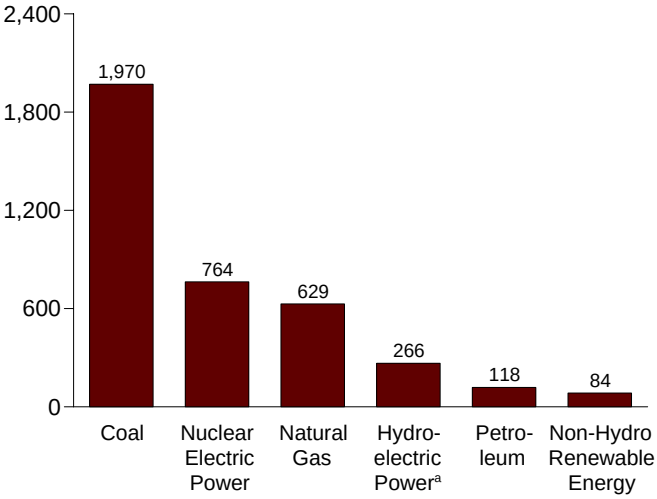
Total (All Sectors), Major Sources, 1989-2003



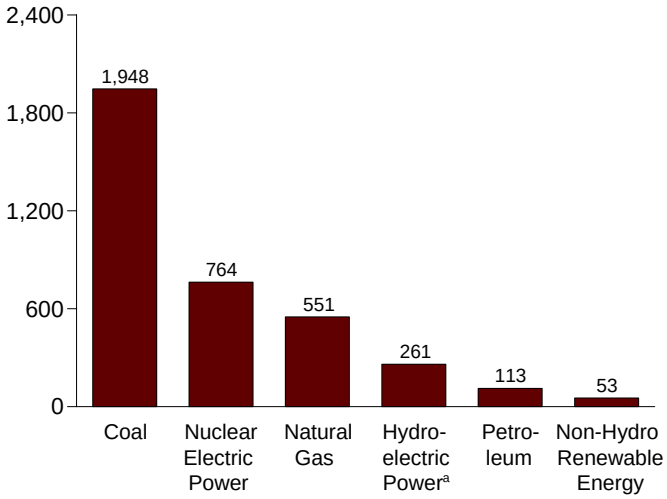
Total (All Sectors), Major Sources, Monthly



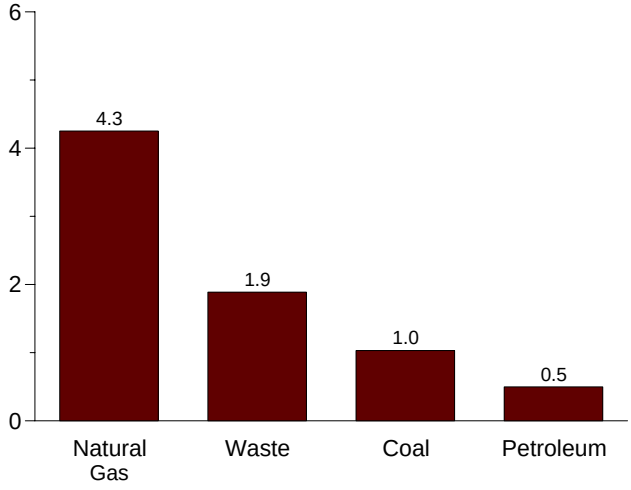
Total (All Sectors), Major Sources, 2003



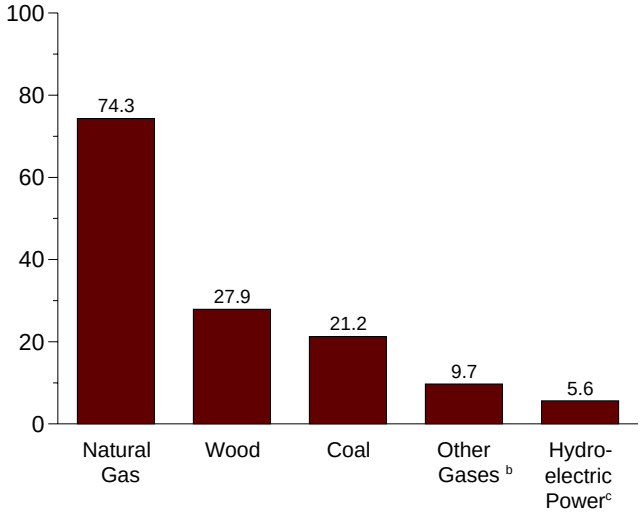
Electric Power Sector, Major Sources, 2003



Commercial Sector, Major Sources, 2003



Industrial Sector, Major Sources, 2003



[a]Conventional and pumped storage hydroelectric power.
[b]Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.
[c]Conventional only.

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

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

(Million Kilowatthours)

	Fossil Fuels						Renewable Energy						
	Coal[a]	Petroleum[b]	Natural Gas[c]	Other Gases[d]	Nuclear Electric Power	Hydroelectric Pumped Storage[e]	Conventional Hydroelectric Power	Wood[f]	Waste[g]	Geothermal	Solar[h]	Wind	Total[i]
1973 Total	**847,651**	**314,343**	**340,858**	**NA**	**83,479**	**(j)**	**275,431**	**130**	**198**	**1,966**	**NA**	**NA**	**1,864,057**
1974 Total	**828,433**	**300,931**	**320,065**	**NA**	**113,976**	**(j)**	**304,212**	**69**	**182**	**2,453**	**NA**	**NA**	**1,870,319**
1975 Total	**852,786**	**289,095**	**299,778**	**NA**	**172,505**	**(j)**	**303,153**	**18**	**174**	**3,246**	**NA**	**NA**	**1,920,755**
1976 Total	**944,391**	**319,988**	**294,624**	**NA**	**191,104**	**(j)**	**286,924**	**84**	**182**	**3,616**	**NA**	**NA**	**2,040,914**
1977 Total	**985,219**	**358,179**	**305,505**	**NA**	**250,883**	**(j)**	**223,599**	**308**	**173**	**3,582**	**NA**	**NA**	**2,127,447**
1978 Total	**975,742**	**365,060**	**305,391**	**NA**	**276,403**	**(j)**	**283,465**	**197**	**140**	**2,978**	**NA**	**NA**	**2,209,377**
1979 Total	**1,075,037**	**303,525**	**329,485**	**NA**	**255,155**	**(j)**	**283,076**	**300**	**198**	**3,889**	**NA**	**NA**	**2,250,665**
1980 Total	**1,161,562**	**245,994**	**346,240**	**NA**	**251,116**	**(j)**	**279,182**	**275**	**158**	**5,073**	**NA**	**NA**	**2,289,600**
1981 Total	**1,203,203**	**206,421**	**345,777**	**NA**	**272,674**	**(j)**	**263,845**	**245**	**123**	**5,686**	**NA**	**NA**	**2,297,973**
1982 Total	**1,192,004**	**146,797**	**305,260**	**NA**	**282,773**	**(j)**	**312,374**	**196**	**125**	**4,843**	**NA**	**NA**	**2,244,372**
1983 Total	**1,259,424**	**144,499**	**274,098**	**NA**	**293,677**	**(j)**	**335,291**	**216**	**163**	**6,075**	**NA**	**3**	**2,313,446**
1984 Total	**1,341,681**	**119,808**	**297,394**	**NA**	**327,634**	**(j)**	**324,311**	**461**	**425**	**7,741**	**5**	**6**	**2,419,465**
1985 Total	**1,402,128**	**100,202**	**291,946**	**NA**	**383,691**	**(j)**	**284,311**	**743**	**640**	**9,325**	**11**	**6**	**2,473,002**
1986 Total	**1,385,831**	**136,585**	**248,508**	**NA**	**414,038**	**(j)**	**294,005**	**492**	**685**	**10,308**	**14**	**4**	**2,490,471**
1987 Total	**1,463,781**	**118,493**	**272,621**	**NA**	**455,270**	**(j)**	**252,856**	**783**	**694**	**10,775**	**10**	**4**	**2,575,288**
1988 Total	**1,540,653**	**148,900**	**252,801**	**NA**	**526,973**	**(j)**	**226,101**	**936**	**738**	**10,300**	**9**	**1**	**2,707,411**
1989 Total[k]	**1,583,779**	**164,518**	**352,629**	**7,862**	**529,355**	**(j)**	**271,977**	**27,237**	**9,163**	**14,593**	**251**	**2,112**	**2,967,306**
1990 Total	**1,594,011**	**126,621**	**372,765**	**10,383**	**576,862**	**-3,508**	**292,866**	**32,522**	**13,260**	**15,434**	**367**	**2,789**	**3,037,988**
1991 Total	**1,590,623**	**119,752**	**381,553**	**11,336**	**612,565**	**-4,541**	**288,994**	**33,725**	**15,665**	**15,966**	**472**	**2,951**	**3,073,799**
1992 Total	**1,621,206**	**100,154**	**404,074**	**13,270**	**618,776**	**-4,177**	**253,088**	**36,529**	**17,816**	**16,138**	**400**	**2,888**	**3,083,882**
1993 Total	**1,690,070**	**112,788**	**414,927**	**12,956**	**610,291**	**-4,036**	**280,494**	**37,623**	**18,333**	**16,789**	**462**	**3,006**	**3,197,191**
1994 Total	**1,690,694**	**105,901**	**460,219**	**13,319**	**640,440**	**-3,378**	**260,126**	**37,937**	**19,129**	**15,535**	**487**	**3,447**	**3,247,522**
1995 Total	**1,709,426**	**74,554**	**496,058**	**13,870**	**673,402**	**-2,725**	**310,833**	**36,521**	**20,405**	**13,378**	**497**	**3,164**	**3,353,487**
1996 Total	**1,795,196**	**81,411**	**455,056**	**14,356**	**674,729**	**-3,088**	**347,162**	**36,800**	**20,911**	**14,329**	**521**	**3,234**	**3,444,188**
1997 Total	**1,845,016**	**92,555**	**479,399**	**13,351**	**628,644**	**-4,040**	**356,453**	**36,948**	**21,709**	**14,726**	**511**	**3,288**	**3,492,172**
1998 Total	**1,873,516**	**128,800**	**531,257**	**13,492**	**673,702**	**-4,467**	**323,336**	**36,338**	**22,448**	**14,774**	**502**	**3,026**	**3,620,295**
1999 Total	**1,881,087**	**118,061**	**556,396**	**14,126**	**728,254**	**-6,097**	**319,536**	**37,041**	**22,572**	**14,827**	**495**	**4,488**	**3,694,810**
2000 Total	**1,966,265**	**111,221**	**601,038**	**13,955**	**753,893**	**-5,539**	**275,573**	**37,595**	**23,131**	**14,093**	**493**	**5,593**	**3,802,105**
2001 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	68,905	-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	180,632	12,338	48,684	908	69,211	-760	19,714	2,976	1,741	1,144	13	558	337,504
February	156,063	10,560	43,291	730	60,942	-774	19,630	2,681	1,619	1,028	18	692	296,735
March	154,690	10,323	45,901	900	59,933	-797	24,349	3,151	1,928	1,118	50	1,008	303,087
April	141,676	8,148	43,341	734	56,776	-554	25,002	2,992	1,905	1,043	60	1,099	282,721
May	149,296	7,971	47,854	757	62,194	-619	29,928	2,792	1,923	1,035	68	891	304,550
June	161,009	10,968	51,899	863	64,181	-780	28,500	2,942	1,917	1,092	91	964	324,042
July	182,761	12,102	74,809	898	69,653	-755	24,681	3,109	2,027	1,099	63	917	371,782
August	185,595	12,345	80,665	818	69,024	-818	22,837	3,009	1,965	1,096	62	779	377,929
September	163,589	8,716	54,833	830	63,584	-785	18,215	2,714	1,770	1,086	56	824	315,800
October	159,162	8,599	50,604	1,037	60,016	-634	18,310	3,194	1,948	1,077	36	909	304,711
November	158,824	6,434	44,515	1,233	59,600	-715	19,733	4,064	1,975	1,085	14	995	298,165
December	176,975	9,752	42,810	1,229	68,612	-677	24,107	3,329	2,092	1,246	4	1,095	330,967
Total	**1,970,273**	**118,256**	**629,207**	**10,937**	**763,725**	**-8,668**	**275,007**	**36,951**	**22,811**	**13,149**	**535**	**10,729**	**3,847,990**
2004 January	181,842	14,896	45,585	1,262	70,789	-753	23,228	3,216	1,866	1,254	12	918	344,419
February	162,857	8,924	48,111	1,181	64,103	-642	21,172	3,038	1,709	1,177	18	967	312,843
March	153,976	9,383	47,394	1,264	63,285	-683	23,012	3,041	1,870	1,199	53	1,187	305,207
April	R 141,790	R 8,771	R 49,485	R 1,322	R 58,635	R -670	R 21,110	R 3,016	R 1,889	R 1,119	R 57	R 1,236	R 287,978
May	157,585	10,102	59,612	1,275	64,917	-664	23,988	2,935	2,022	1,172	81	1,635	324,908
5-Month Total	**798,050**	**52,076**	**250,187**	**6,304**	**321,730**	**-3,411**	**112,509**	**15,247**	**9,357**	**5,921**	**221**	**5,944**	**1,575,355**
2003 5-Month Total	**782,358**	**49,339**	**229,071**	**4,029**	**309,056**	**-3,504**	**118,623**	**14,592**	**9,116**	**5,369**	**210**	**4,246**	**1,524,596**
2002 5-Month Total	**752,603**	**36,532**	**243,357**	**4,386**	**317,094**	**-3,144**	**113,905**	**15,418**	**9,141**	**5,995**	**183**	**4,479**	**1,501,839**

[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.

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

[e] Pumped storage facility production minus energy used for pumping.

[f] Wood, black liquor, and other wood waste.

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

[h] Solar thermal and photovoltaic energy.

[i] "Total" includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies, which are not separately displayed.

[j] Included in "Conventional Hydroelectric Power."

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

R=Revised. NA=Not available.

Notes, Web Page, and Sources: See end of section.

Table 7.2b Electricity Net Generation: Electric Power Sector

(Million Kilowatthours)

	Fossil Fuels						Renewable Energy						
	Coal[a]	Petroleum[b]	Natural Gas[c]	Other Gases[d]	Nuclear Electric Power	Hydroelectric Pumped Storage[e]	Conventional Hydroelectric Power	Wood[f]	Waste[g]	Geothermal	Solar[h]	Wind	Total[i]
1973 Total	**847,651**	**314,343**	**340,858**	**NA**	**83,479**	**(j)**	**272,083**	**130**	**198**	**1,966**	**NA**	**NA**	**1,860,710**
1974 Total	**828,433**	**300,931**	**320,065**	**NA**	**113,976**	**(j)**	**301,032**	**69**	**182**	**2,453**	**NA**	**NA**	**1,867,139**
1975 Total	**852,786**	**289,095**	**299,778**	**NA**	**172,505**	**(j)**	**300,047**	**18**	**174**	**3,246**	**NA**	**NA**	**1,917,649**
1976 Total	**944,391**	**319,988**	**294,624**	**NA**	**191,104**	**(j)**	**283,707**	**84**	**182**	**3,616**	**NA**	**NA**	**2,037,696**
1977 Total	**985,219**	**358,179**	**305,505**	**NA**	**250,883**	**(j)**	**220,475**	**308**	**173**	**3,582**	**NA**	**NA**	**2,124,323**
1978 Total	**975,742**	**365,060**	**305,391**	**NA**	**276,403**	**(j)**	**280,419**	**197**	**140**	**2,978**	**NA**	**NA**	**2,206,331**
1979 Total	**1,075,037**	**303,525**	**329,485**	**NA**	**255,155**	**(j)**	**279,783**	**300**	**198**	**3,889**	**NA**	**NA**	**2,247,372**
1980 Total	**1,161,562**	**245,994**	**346,240**	**NA**	**251,116**	**(j)**	**276,021**	**275**	**158**	**5,073**	**NA**	**NA**	**2,286,439**
1981 Total	**1,203,203**	**206,421**	**345,777**	**NA**	**272,674**	**(j)**	**260,684**	**245**	**123**	**5,686**	**NA**	**NA**	**2,294,812**
1982 Total	**1,192,004**	**146,797**	**305,260**	**NA**	**282,773**	**(j)**	**309,213**	**196**	**125**	**4,843**	**NA**	**NA**	**2,241,211**
1983 Total	**1,259,424**	**144,499**	**274,098**	**NA**	**293,677**	**(j)**	**332,130**	**216**	**163**	**6,075**	**NA**	**3**	**2,310,285**
1984 Total	**1,341,681**	**119,808**	**297,394**	**NA**	**327,634**	**(j)**	**321,150**	**461**	**425**	**7,741**	**5**	**6**	**2,416,304**
1985 Total	**1,402,128**	**100,202**	**291,946**	**NA**	**383,691**	**(j)**	**281,149**	**743**	**640**	**9,325**	**11**	**6**	**2,469,841**
1986 Total	**1,385,831**	**136,585**	**248,508**	**NA**	**414,038**	**(j)**	**290,844**	**492**	**685**	**10,308**	**14**	**4**	**2,487,310**
1987 Total	**1,463,781**	**118,493**	**272,621**	**NA**	**455,270**	**(j)**	**249,695**	**783**	**694**	**10,775**	**10**	**4**	**2,572,127**
1988 Total	**1,540,653**	**148,900**	**252,801**	**NA**	**526,973**	**(j)**	**222,940**	**936**	**738**	**10,300**	**9**	**1**	**2,704,250**
1989 Total[k]	**1,562,366**	**159,005**	**297,295**	**454**	**529,355**	**(j)**	**269,189**	**5,582**	**7,743**	**14,593**	**251**	**2,112**	**2,848,227**
1990 Total	**1,572,109**	**118,864**	**309,486**	**621**	**576,862**	**-3,508**	**289,753**	**7,032**	**11,500**	**15,434**	**367**	**2,789**	**2,901,322**
1991 Total	**1,568,846**	**112,798**	**317,773**	**719**	**612,565**	**-4,541**	**286,019**	**7,736**	**13,854**	**15,966**	**472**	**2,951**	**2,935,561**
1992 Total	**1,597,714**	**92,238**	**334,274**	**1,212**	**618,776**	**-4,177**	**250,016**	**8,491**	**15,924**	**16,138**	**400**	**2,888**	**2,934,374**
1993 Total	**1,665,464**	**105,425**	**342,222**	**967**	**610,291**	**-4,036**	**277,524**	**9,152**	**16,223**	**16,789**	**462**	**3,006**	**3,043,897**
1994 Total	**1,666,276**	**98,677**	**385,689**	**1,092**	**640,440**	**-3,378**	**254,005**	**9,232**	**16,984**	**15,535**	**487**	**3,447**	**3,088,725**
1995 Total	**1,686,056**	**68,146**	**419,179**	**1,927**	**673,402**	**-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	178,525	11,653	41,058	111	69,211	-760	19,295	820	1,534	1,144	13	558	323,210
February	154,267	10,021	36,778	97	60,942	-774	19,263	700	1,429	1,028	18	692	284,466
March	152,801	9,805	39,085	99	59,933	-797	23,816	754	1,673	1,118	50	1,008	289,424
April	139,899	7,743	37,302	123	56,776	-554	24,577	703	1,657	1,043	60	1,099	270,496
May	147,568	7,541	41,967	105	62,194	-619	29,367	604	1,670	1,035	68	891	292,431
June	159,239	10,500	45,284	94	64,181	-780	27,995	688	1,671	1,092	91	964	311,065
July	180,771	11,630	67,944	92	69,653	-755	24,173	819	1,782	1,099	63	917	358,244
August	183,600	11,895	73,491	90	69,024	-818	22,331	835	1,706	1,096	62	779	364,220
September	161,900	8,346	49,084	94	63,584	-785	17,783	721	1,517	1,086	56	824	304,244
October	157,345	8,111	43,940	112	60,016	-634	17,899	805	1,677	1,077	36	909	291,341
November	157,073	6,064	38,250	110	59,600	-715	19,289	781	1,727	1,085	14	995	284,297
December	175,019	9,212	36,464	103	68,612	-677	23,500	816	1,827	1,246	4	1,095	317,231
Total	**1,948,007**	**112,522**	**550,647**	**1,230**	**763,725**	**-8,668**	**269,289**	**9,047**	**19,870**	**13,149**	**535**	**10,729**	**3,690,670**
2004 January	179,816	14,152	39,351	145	70,789	-753	22,710	826	1,648	1,254	12	918	330,891
February	160,973	8,517	41,725	142	64,103	-642	20,725	792	1,505	1,177	18	967	300,051
March	152,104	8,972	40,843	175	63,285	-683	22,593	788	1,642	1,199	53	1,187	292,194
April	R 140,060	R 8,368	R 43,131	R 223	R 58,635	R -670	R 20,736	R 690	R 1,634	R 1,119	R 57	R 1,236	R 275,242
May	155,821	9,712	52,275	179	64,917	-664	23,604	715	1,757	1,172	81	1,635	311,233
5-Month Total	**788,774**	**49,721**	**217,326**	**864**	**321,730**	**-3,411**	**110,367**	**3,811**	**8,186**	**5,921**	**221**	**5,944**	**1,509,610**
2003 5-Month Total	**773,060**	**46,764**	**196,190**	**535**	**309,056**	**-3,504**	**116,318**	**3,581**	**7,963**	**5,369**	**210**	**4,246**	**1,460,028**
2002 5-Month Total	**743,819**	**34,621**	**208,137**	**728**	**317,094**	**-3,144**	**112,446**	**3,596**	**8,089**	**5,995**	**183**	**4,479**	**1,436,613**

[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.
[d] Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.
[e] Pumped storage facility production minus energy used for pumping.
[f] Wood, black liquor, and other wood waste.
[g] Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.
[h] Solar thermal and photovoltaic energy.
[i] "Total" includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies, which are not separately displayed.
[j] Included in "Conventional Hydroelectric Power."
[k] Through 1988, data are for generation at electric utilities only. Beginning in 1989, data also include generation at independent power producers.
R=Revised. NA=Not available.
Notes, Web Page, and Sources: See end of section.

Table 7.2c Electricity Net Generation: Commercial and Industrial Sectors

(Million Kilowatthours)

	Commercial Sector[a]					Industrial Sector[b]							
	Coal[c]	Petroleum[d]	Natural Gas[e]	Waste[f]	Total[g]	Coal[c]	Petroleum[d]	Natural Gas[e]	Other Gases[h]	Hydropower[i]	Wood[j]	Waste[f]	Total[k]
1989 Total	**736**	**558**	**2,155**	**527**	**4,251**	**20,677**	**4,955**	**53,179**	**7,297**	**2,722**	**21,557**	**893**	**114,828**
1990 Total	**796**	**589**	**3,272**	**812**	**5,837**	**21,107**	**7,169**	**60,007**	**9,641**	**2,975**	**25,379**	**949**	**130,830**
1991 Total	**775**	**413**	**3,213**	**883**	**5,659**	**21,002**	**6,540**	**60,567**	**10,501**	**2,844**	**25,863**	**927**	**132,579**
1992 Total	**749**	**302**	**3,867**	**961**	**6,228**	**22,743**	**7,615**	**65,933**	**11,953**	**2,950**	**27,916**	**932**	**143,280**
1993 Total	**864**	**334**	**4,471**	**1,018**	**7,000**	**23,742**	**7,028**	**68,234**	**11,890**	**2,871**	**28,358**	**1,092**	**146,294**
1994 Total	**850**	**417**	**4,929**	**1,162**	**7,619**	**23,568**	**6,808**	**69,600**	**12,112**	**6,028**	**28,650**	**983**	**151,178**
1995 Total	**998**	**379**	**5,162**	**1,519**	**8,232**	**22,372**	**6,030**	**71,717**	**11,943**	**5,304**	**28,868**	**900**	**151,025**
1996 Total	**1,051**	**369**	**5,249**	**2,176**	**9,030**	**22,172**	**6,260**	**71,049**	**13,015**	**5,878**	**28,354**	**919**	**151,017**
1997 Total	**1,040**	**427**	**4,725**	**2,342**	**8,701**	**23,214**	**5,649**	**75,078**	**11,814**	**5,685**	**28,225**	**882**	**154,097**
1998 Total	**985**	**383**	**4,879**	**2,335**	**8,748**	**22,337**	**6,206**	**77,085**	**11,170**	**5,349**	**27,693**	**880**	**154,132**
1999 Total	**995**	**434**	**4,607**	**2,393**	**8,563**	**21,474**	**6,088**	**78,793**	**12,519**	**4,758**	**28,060**	**686**	**156,264**
2000 Total	**1,097**	**432**	**4,262**	**1,985**	**7,903**	**22,056**	**5,597**	**78,798**	**11,927**	**4,135**	**28,652**	**839**	**156,673**
2001 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	90	98	376	132	703	2,017	587	7,250	797	413	2,155	75	13,591
February	86	77	293	121	584	1,710	462	6,220	633	362	1,980	69	11,685
March	85	42	356	168	662	1,804	476	6,460	802	524	2,396	88	13,001
April	81	23	341	171	632	1,696	381	5,698	610	414	2,288	77	11,593
May	66	23	415	168	694	1,663	406	5,472	652	539	2,187	85	11,425
June	83	32	466	165	752	1,686	436	6,150	769	499	2,253	81	12,225
July	100	39	396	164	713	1,890	434	6,468	805	498	2,289	82	12,825
August	103	44	427	161	745	1,892	407	6,748	729	497	2,173	97	12,963
September	87	27	284	152	554	1,602	343	5,465	736	428	1,992	101	11,001
October	79	27	322	171	604	1,738	461	6,342	926	407	2,389	100	12,766
November	82	26	293	146	552	1,669	345	5,973	1,124	440	3,281	102	13,315
December	89	43	284	167	590	1,867	497	6,062	1,125	601	2,511	98	13,146
Total	**1,033**	**499**	**4,252**	**1,888**	**7,785**	**21,233**	**5,235**	**74,308**	**9,707**	**5,621**	**27,895**	**1,053**	**149,534**
2004 January	97	102	297	137	639	1,929	642	5,937	1,118	514	2,389	81	12,890
February	98	39	313	124	583	1,786	367	6,073	1,039	440	2,245	80	12,209
March	91	37	300	141	581	1,781	374	6,251	1,089	408	2,253	87	12,432
April	R 72	R 34	R 285	R 149	R 550	R 1,659	R 370	R 6,069	R 1,099	R 363	R 2,325	R 107	R 12,186
May	90	29	337	164	633	1,674	362	7,000	1,096	371	2,219	101	13,042
5-Month Total	**447**	**240**	**1,533**	**715**	**2,986**	**8,829**	**2,115**	**31,329**	**5,440**	**2,096**	**11,431**	**456**	**62,759**
2003 5-Month Total	**409**	**263**	**1,781**	**761**	**3,275**	**8,890**	**2,313**	**31,100**	**3,494**	**2,251**	**11,007**	**393**	**61,293**
2002 5-Month Total	**374**	**158**	**1,626**	**575**	**2,781**	**8,411**	**1,753**	**33,595**	**3,658**	**1,454**	**11,815**	**477**	**62,445**

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

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

[c] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

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

[e] Natural gas, 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] Includes a small amount of other gases, wood, and other, which are not separately displayed.

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

[i] Conventional hydroelectric power.

[j] Wood, black liquor, and other wood waste.

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

R=Revised.

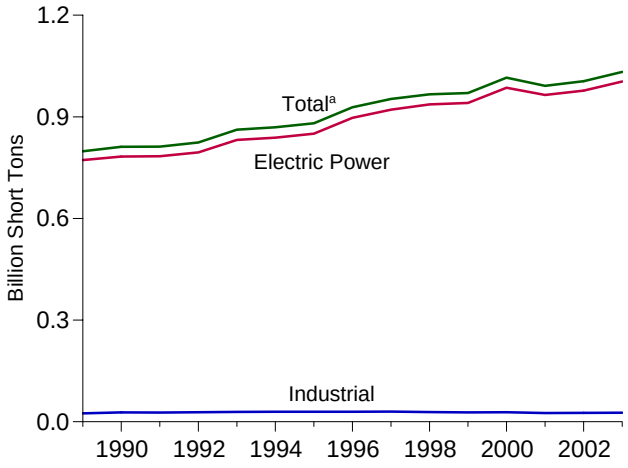
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

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

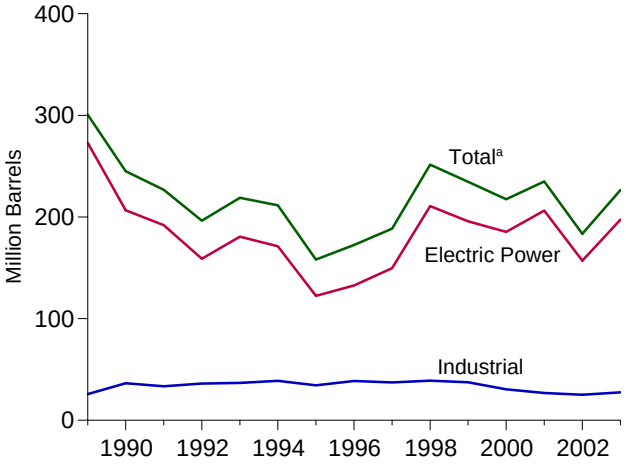
Sources: • **1989-1997:** Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-860B, "Annual Electric Generator Report-Nonutility." • **2001 and 2002:** EIA, Form EIA-860, "Annual Electric Generator Report" and Form EIA-906, "Power Plant Report." • **2003 forward:** EIA, Form EIA-906, "Power Plant Report."

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

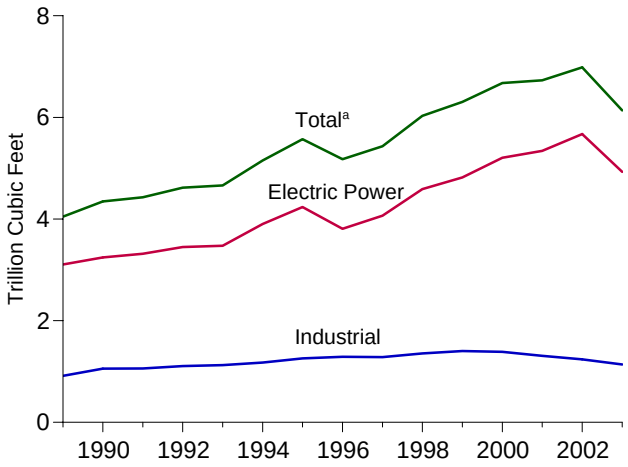
Coal by Sector, 1989-2003



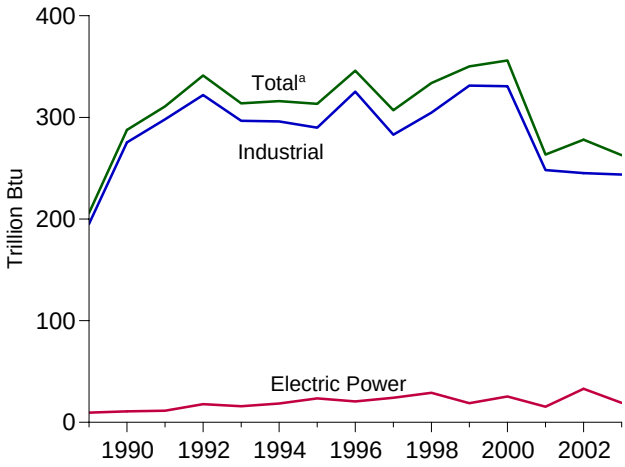
Petroleum by Sector, 1989-2003



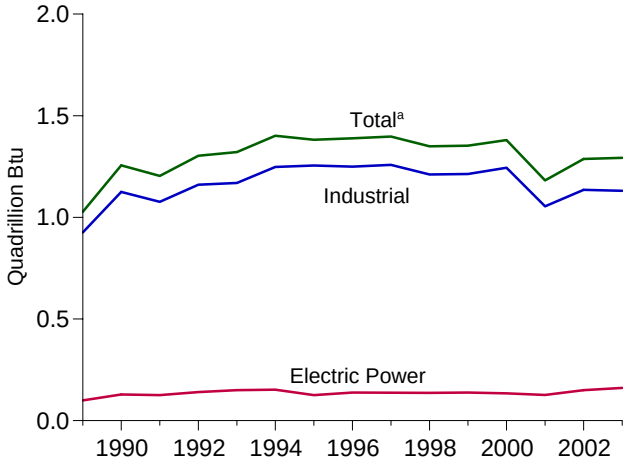
Natural Gas by Sector, 1989-2003



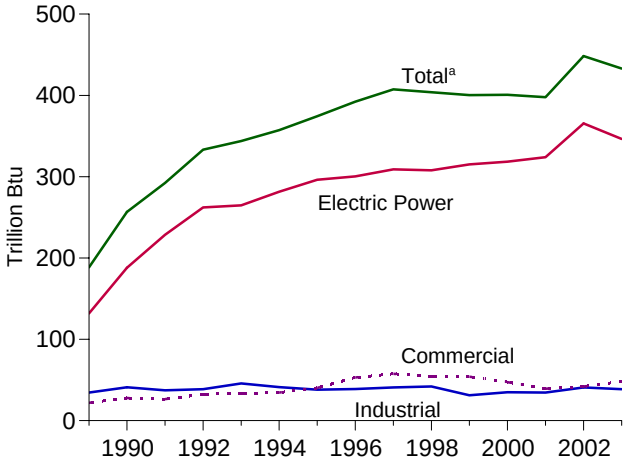
Other Gases[b] by Sector, 1989-2003



Wood by Sector, 1989-2003



Waste by Sector, 1989-2003



[a]Includes commercial sector.
[b]Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

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

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

	Coal[a]	Petroleum					Natural Gas[f]	Other Gases[g]	Wood[h]	Waste[i]	Other[j]
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e]					
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	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	93,739	5,235	15,522	398	527	23,791	480	21	97	32	4
February	81,134	4,228	13,434	542	438	20,395	427	19	92	30	4
March	81,148	3,704	13,768	400	395	19,845	457	23	110	36	5
April	74,192	1,783	11,277	353	538	16,103	425	20	103	35	5
May	78,760	3,192	9,724	465	516	15,963	472	18	99	36	5
June	84,916	3,410	13,330	537	624	20,396	510	22	105	36	4
July	95,854	2,531	15,918	623	710	22,623	715	23	110	39	4
August	97,190	2,265	16,990	494	684	23,171	766	22	106	38	4
September	85,811	1,333	11,095	454	658	16,173	522	19	99	34	4
October	83,072	1,686	11,055	448	685	16,614	495	23	119	38	4
November	83,918	1,248	7,730	269	680	12,649	437	26	133	38	4
December	92,769	1,992	12,909	232	733	18,800	433	28	119	40	5
Total	**1,032,503**	**32,608**	**152,752**	**5,214**	**7,190**	**226,522**	**6,139**	**263**	**1,293**	**433**	**51**
2004 January	R 95,303	4,575	R 19,330	875	721	R 28,387	437	32	118	37	5
February	85,636	1,454	12,224	194	607	16,907	454	29	107	33	3
March	80,425	1,399	12,759	209	622	17,478	452	33	108	35	3
April	R 74,590	R 1,261	R 11,726	R 178	R 624	R 16,288	R 465	R 33	111	R 35	R 3
May	82,751	1,930	13,261	224	653	18,681	567	33	103	39	3
5-Month Total	**418,704**	**10,619**	**69,301**	**1,680**	**3,228**	**97,740**	**2,375**	**160**	**548**	**180**	**17**
2003 5-Month Total	**408,973**	**18,142**	**63,724**	**2,157**	**2,415**	**96,096**	**2,261**	**101**	**501**	**170**	**22**
2002 5-Month Total	**389,680**	**9,658**	**44,857**	**1,304**	**2,948**	**70,557**	**2,501**	**109**	**511**	**179**	**36**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.
[b] For 1989-2000, electric utility data are for light oil (fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel).
[c] For 1989-2000, electric utility data are for heavy oil (fuel oil nos. 5 and 6, and small amounts of fuel oil no. 4).
[d] Jet fuel, kerosene, other petroleum liquids, and waste oil.
[e] Petroleum coke is converted from short tons to barrels by multiplying by 5.
[f] Natural gas, 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 fossil fuels.
[h] Wood, black liquor, and other wood waste.
[i] Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.
[j] Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.
R=Revised.
Notes: • Data are for fuels consumed to produce electricity and useful thermal output at electricity-only and combined-heat-and-power (CHP) plants. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.
Web Page: http://www.eia.doe.gov/emeu/mer/elect.html.
Sources: See sources for Tables 7.3b and 7.3c.

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

	Coal[a]	Petroleum					Natural Gas[f]	Other Gases[g]	Wood[h]	Waste[i]	Other[j]
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e]					
	Thousand 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	91,109	4,441	14,061	251	402	20,764	367	2	15	27	(s)
February	78,838	3,691	11,984	387	343	17,778	329	2	12	24	(s)
March	78,770	3,273	12,320	260	292	17,311	353	2	13	29	(s)
April	71,993	1,590	10,123	87	432	13,960	333	2	12	28	(s)
May	76,714	2,378	8,778	87	401	13,249	381	1	11	29	(s)
June	82,659	3,159	12,227	99	493	17,951	411	1	13	29	(s)
July	93,326	2,283	14,758	136	589	20,122	609	1	14	32	(s)
August	94,649	2,047	15,767	187	575	20,874	654	2	15	30	(s)
September	83,695	1,192	10,255	91	547	14,273	434	2	13	27	(s)
October	80,710	1,475	9,724	92	559	14,087	391	2	15	30	(s)
November	81,620	1,088	6,671	157	577	10,799	338	2	14	30	(s)
December	90,201	1,668	11,402	124	588	16,133	329	2	15	32	(s)
Total	**1,004,283**	**28,285**	**138,070**	**1,959**	**5,797**	**197,301**	**4,930**	**19**	**161**	**346**	**2**
2004 January	R 92,386	4,036	R 16,948	700	628	R 24,825	342	2	15	30	(s)
February	83,183	1,251	10,723	79	525	14,677	356	2	14	26	(s)
March	78,005	1,215	11,352	116	542	15,394	355	3	14	28	(s)
April	R 72,349	R 1,098	R 10,484	R 85	R 542	R 14,377	R 369	R 3	12	R 28	(s)
May	80,710	1,760	12,136	140	569	16,882	456	3	13	30	(s)
5-Month Total	**406,632**	**9,360**	**61,644**	**1,120**	**2,806**	**86,154**	**1,878**	**14**	**67**	**142**	**1**
2003 5-Month Total	**397,423**	**15,374**	**57,266**	**1,072**	**1,870**	**83,063**	**1,763**	**8**	**63**	**136**	**(s)**
2002 5-Month Total	**378,480**	**8,560**	**39,289**	**435**	**2,374**	**60,152**	**1,947**	**13**	**58**	**146**	**2**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

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

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

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

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

[f] Natural gas, 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 fossil fuels.

[h] Wood, black liquor, and other wood waste.

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

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

R=Revised. (s)=Less than 0.5 trillion Btu.

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

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

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

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

	Commercial Sector[a]				Industrial Sector[b]						
	Coal[c]	Petroleum[d]	Natural Gas[e]	Waste[f]	Coal[c]	Petroleum[d]	Natural Gas[e]	Other Gases[g]	Wood[h]	Waste[f]	Other[i]
	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu			
1989 Total	**1,125**	**1,967**	**30**	**22**	**24,867**	**25,685**	**914**	**195**	**926**	**35**	**85**
1990 Total	**1,191**	**2,056**	**46**	**28**	**27,781**	**36,392**	**1,055**	**275**	**1,125**	**41**	**86**
1991 Total	**1,228**	**1,337**	**52**	**26**	**27,021**	**33,460**	**1,061**	**298**	**1,076**	**37**	**110**
1992 Total	**1,175**	**1,235**	**62**	**32**	**28,244**	**36,135**	**1,107**	**322**	**1,161**	**39**	**87**
1993 Total	**1,373**	**1,515**	**65**	**33**	**28,886**	**36,715**	**1,124**	**297**	**1,169**	**46**	**80**
1994 Total	**1,344**	**1,625**	**72**	**35**	**29,707**	**38,744**	**1,176**	**296**	**1,248**	**41**	**89**
1995 Total	**1,419**	**1,245**	**78**	**40**	**29,363**	**34,448**	**1,258**	**290**	**1,255**	**38**	**95**
1996 Total	**1,660**	**1,246**	**82**	**53**	**29,434**	**38,661**	**1,289**	**325**	**1,249**	**39**	**89**
1997 Total	**1,738**	**1,584**	**87**	**58**	**29,853**	**37,265**	**1,282**	**283**	**1,259**	**41**	**102**
1998 Total	**1,443**	**1,807**	**87**	**54**	**28,553**	**38,910**	**1,355**	**305**	**1,211**	**42**	**93**
1999 Total	**1,490**	**1,613**	**84**	**54**	**27,763**	**37,312**	**1,401**	**331**	**1,213**	**31**	**99**
2000 Total	**1,547**	**1,615**	**85**	**47**	**28,031**	**30,520**	**1,386**	**331**	**1,244**	**35**	**108**
2001 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	146	322	6	3	2,484	2,705	106	19	82	3	4
February	127	270	5	3	2,169	2,347	93	17	79	3	3
March	125	155	6	4	2,254	2,378	98	21	96	3	5
April	110	86	5	4	2,089	2,056	87	18	92	3	4
May	94	67	6	4	1,952	2,647	85	17	88	3	5
June	118	104	7	4	2,139	2,341	93	21	92	3	4
July	137	144	7	4	2,391	2,356	99	21	96	3	4
August	144	155	8	4	2,397	2,142	104	21	91	3	4
September	121	80	5	4	1,995	1,820	83	17	87	4	4
October	114	83	6	4	2,247	2,444	98	21	104	4	4
November	118	80	5	4	2,180	1,770	95	24	119	4	4
December	137	163	5	4	2,431	2,504	98	26	103	4	5
Total	**1,492**	**1,709**	**71**	**48**	**26,728**	**27,511**	**1,138**	**244**	**1,131**	**39**	**50**
2004 January	157	338	6	4	2,760	3,223	89	30	103	4	5
February	148	188	6	4	2,305	2,042	92	26	93	3	3
March	143	156	6	4	2,278	1,928	91	31	94	3	3
April	R 113	R 110	6	R 4	R 2,128	R 1,801	R 90	R 30	R 99	3	R 2
May	127	98	6	4	1,914	1,702	104	30	91	5	3
5-Month Total	**688**	**891**	**29**	**20**	**11,384**	**10,696**	**468**	**146**	**479**	**18**	**16**
2003 5-Month Total	**603**	**900**	**28**	**19**	**10,947**	**12,134**	**470**	**93**	**438**	**14**	**21**
2002 5-Month Total	**558**	**444**	**29**	**16**	**10,643**	**9,961**	**525**	**96**	**452**	**17**	**33**

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

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

[c] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

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

[e] Natural gas, 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.

[h] Wood, black liquor, and other wood waste.

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

R=Revised.

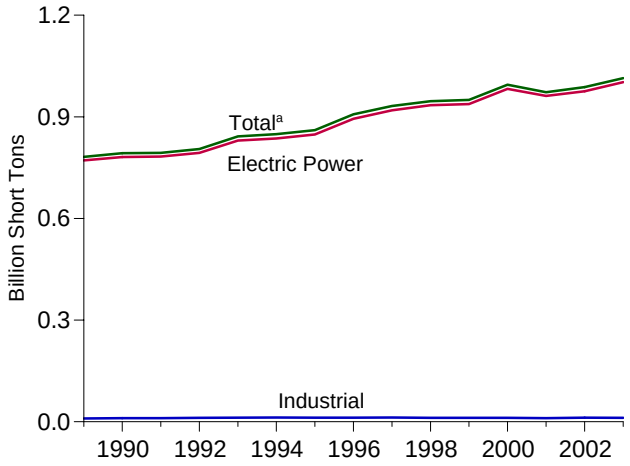
Notes: • Data are for fuels consumed to produce electricity and useful thermal output at electricity-only and combined-heat-and-power (CHP) plants. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

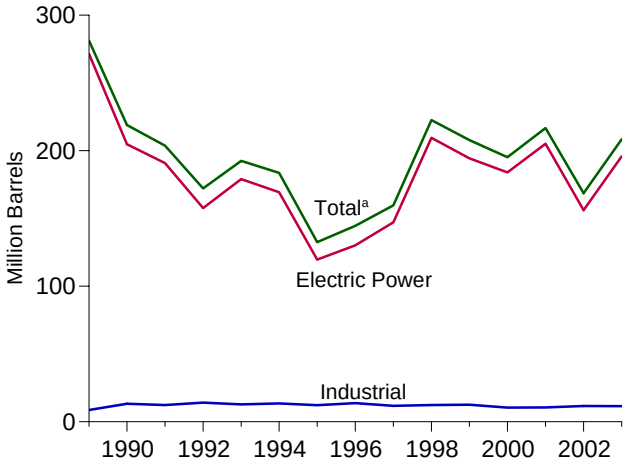
Sources: • **1989-1997:** Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001 and 2002:** EIA, Form EIA-860, "Annual Electric Generator Report" and Form EIA-906,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

Figure 7.3b Consumption of Selected Combustible Fuels for Electricity Generation

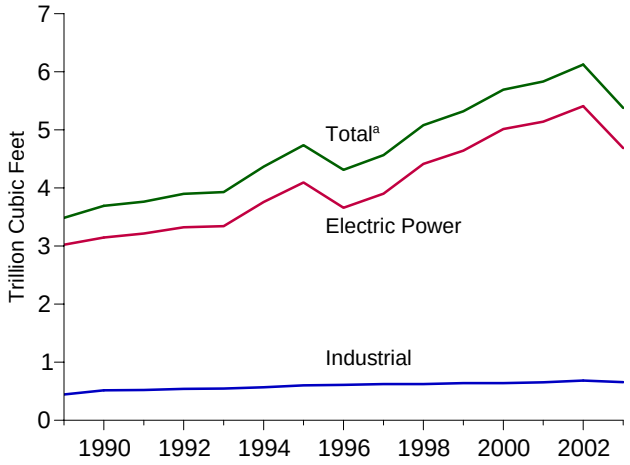
Coal by Sector, 1989-2003



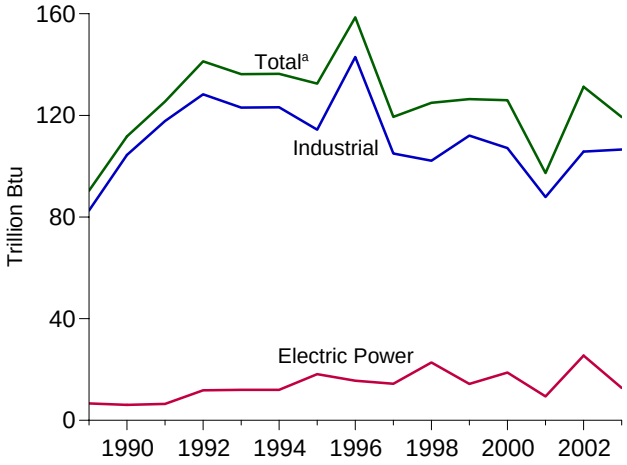
Petroleum by Sector, 1989-2003



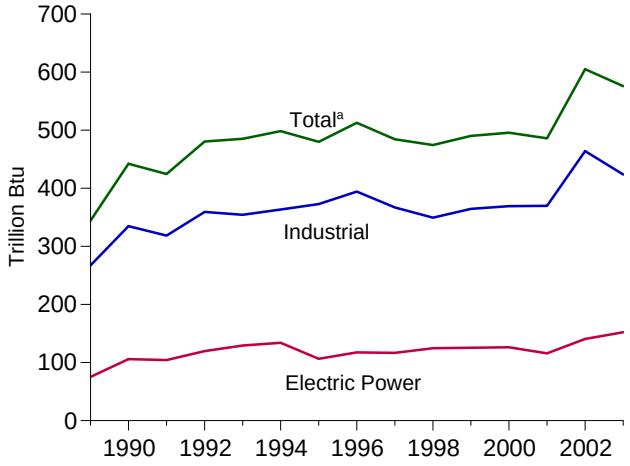
Natural Gas by Sector, 1989-2003



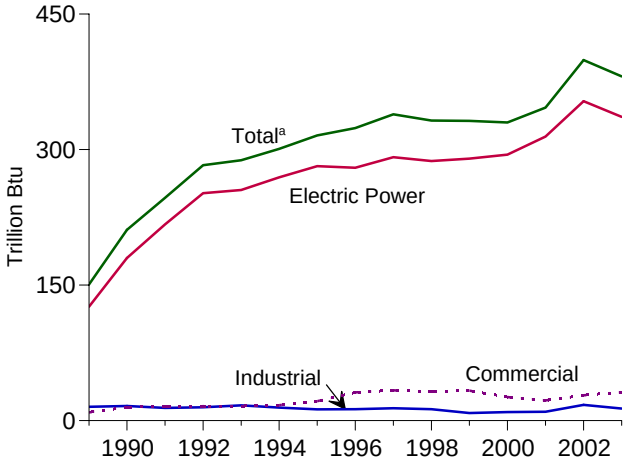
Other Gases[b] by Sector, 1989-2003



Wood by Sector, 1989-2003



Waste by Sector, 1989-2003



[a]Includes commercial sector.
[b]Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

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

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

	Coal[a]	Petroleum					Natural Gas[f]	Other Gases[g]	Wood[h]	Waste[i]	Other[j]
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e]					
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	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[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	92,030	4,816	14,529	298	460	21,941	408	10	50	29	2
February	79,659	3,956	12,367	415	388	18,679	365	8	44	26	2
March	79,600	3,427	12,768	320	338	18,203	391	9	49	32	3
April	72,784	1,670	10,478	196	478	14,732	365	8	46	31	2
May	77,505	2,682	9,095	257	453	14,299	417	8	42	32	3
June	83,468	3,270	12,594	297	560	18,960	452	10	46	32	2
July	94,233	2,425	15,076	353	649	21,097	646	9	47	35	2
August	95,573	2,166	16,077	345	611	21,642	697	10	47	34	2
September	84,466	1,267	10,470	273	598	15,001	468	8	43	30	2
October	81,518	1,590	10,245	307	619	15,236	432	11	52	33	2
November	82,392	1,164	6,982	195	625	11,465	374	14	57	33	2
December	91,078	1,856	11,876	156	659	17,182	366	14	53	35	3
Total	**1,014,307**	**30,290**	**142,557**	**3,411**	**6,435**	**208,436**	**5,380**	**119**	**576**	**381**	**27**
2004 January	93,288	4,236	17,748	725	666	26,038	376	14	49	31	2
February	84,006	1,310	11,210	104	560	15,425	394	13	45	27	1
March	78,874	1,284	11,817	148	569	16,093	394	15	44	30	1
April	R 73,166	R 1,192	R 10,915	R 132	R 574	R 15,108	R 407	R 16	R 48	R 31	R 1
May	81,436	1,842	12,580	175	605	17,622	505	16	49	32	2
5-Month Total	**410,770**	**9,863**	**64,271**	**1,285**	**2,973**	**90,285**	**2,076**	**74**	**236**	**151**	**7**
2003 5-Month Total	**401,578**	**16,551**	**59,237**	**1,486**	**2,116**	**87,854**	**1,946**	**44**	**231**	**149**	**11**
2002 5-Month Total	**382,273**	**9,094**	**41,122**	**666**	**2,740**	**64,581**	**2,145**	**50**	**242**	**157**	**18**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

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

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

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

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

[f] Natural gas, 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 fossil fuels.

[h] Wood, black liquor, and other wood waste.

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

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

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

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

Notes, Web Page, and Sources: See end of section.

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

	Coal[a]	Petroleum					Natural Gas[f]	Other Gases[g]	Wood[h]	Waste[i]	Other[j]
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[e]					
	Thousand Short Tons	Thousand Barrels			Thousand Short Tons	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[k]	**771,551**	**26,036**	**242,708**	**9**	**517**	**271,340**	**3,024**	**7**	**75**	**126**	**2**
1990 Total	**781,301**	**16,394**	**183,285**	**25**	**1,008**	**204,745**	**3,147**	**6**	**106**	**180**	**(s)**
1991 Total	**782,653**	**14,255**	**171,629**	**58**	**974**	**190,810**	**3,216**	**6**	**104**	**217**	**4**
1992 Total	**793,390**	**12,469**	**137,681**	**118**	**1,490**	**157,719**	**3,325**	**12**	**120**	**252**	**3**
1993 Total	**829,851**	**14,559**	**151,407**	**213**	**2,571**	**179,034**	**3,344**	**12**	**129**	**255**	**3**
1994 Total	**836,113**	**20,241**	**137,198**	**667**	**2,256**	**169,387**	**3,758**	**12**	**134**	**269**	**2**
1995 Total	**847,854**	**18,066**	**88,895**	**441**	**2,452**	**119,663**	**4,094**	**18**	**106**	**282**	**2**
1996 Total	**894,400**	**18,472**	**98,795**	**567**	**2,467**	**130,168**	**3,660**	**16**	**117**	**280**	**2**
1997 Total	**919,009**	**18,646**	**112,423**	**130**	**3,201**	**147,202**	**3,903**	**14**	**117**	**292**	**1**
1998 Total	**934,126**	**23,166**	**165,875**	**411**	**3,999**	**209,447**	**4,416**	**23**	**125**	**287**	**2**
1999 Total	**937,888**	**23,875**	**151,921**	**514**	**3,607**	**194,345**	**4,644**	**14**	**125**	**290**	**1**
2000 Total	**982,713**	**29,722**	**138,047**	**403**	**3,155**	**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	9	26	1
March	75,613	1,823	9,258	57	476	13,515	385	2	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	1
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	86,591	1,642	9,164	128	453	13,199	336	2	13	31	(s)
Total	**975,251**	**21,810**	**104,577**	**1,243**	**5,705**	**156,154**	**5,408**	**25**	**141**	**353**	**7**
2003 January	90,900	4,349	13,974	237	392	20,522	343	1	14	26	(s)
February	78,666	3,641	11,906	364	336	17,589	308	1	11	23	(s)
March	78,581	3,235	12,281	257	280	17,175	332	1	13	28	(s)
April	71,814	1,586	10,084	86	419	13,850	312	1	11	27	(s)
May	76,535	2,376	8,754	86	392	13,178	365	1	10	28	(s)
June	82,496	3,153	12,207	98	485	17,883	394	1	12	28	(s)
July	93,165	2,280	14,690	136	582	20,015	588	1	14	31	(s)
August	94,486	2,044	15,696	186	553	20,690	634	1	14	30	(s)
September	83,551	1,190	10,187	91	539	14,164	416	1	12	26	(s)
October	80,557	1,478	9,706	92	551	14,031	373	1	14	29	(s)
November	81,447	1,075	6,603	157	573	10,699	317	1	13	29	(s)
December	90,010	1,655	11,333	123	583	16,027	306	1	14	31	(s)
Total	**1,002,210**	**28,062**	**137,421**	**1,912**	**5,685**	**195,823**	**4,688**	**13**	**152**	**336**	**1**
2004 January	92,181	3,944	16,939	668	614	24,619	323	2	13	28	(s)
February	82,992	1,225	10,718	77	513	14,586	340	1	13	25	(s)
March	77,821	1,199	11,348	114	520	15,259	339	2	13	27	(s)
April	R 72,205	R 1,094	R 10,479	R 83	R 528	R 14,297	R 353	R 2	R 11	R 27	(s)
May	80,538	1,750	12,130	133	561	16,816	440	2	12	29	(s)
5-Month Total	**405,738**	**9,212**	**61,613**	**1,075**	**2,736**	**85,578**	**1,796**	**9**	**62**	**135**	**(s)**
2003 5-Month Total	**396,497**	**15,186**	**56,999**	**1,030**	**1,820**	**82,315**	**1,661**	**5**	**59**	**132**	**(s)**
2002 5-Month Total	**377,525**	**8,538**	**39,221**	**428**	**2,325**	**59,814**	**1,843**	**9**	**55**	**140**	**2**

[a] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.
[b] For 1973-1979, gas turbine and internal combustion plant use of petroleum. For 1980-2000, electric utility data are for light oil (fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel.)
[c] For 1973-1979, steam plant use of petroleum. For 1980-2000, electric utility data are for heavy oil (fuel oil nos. 5 and 6, and small amounts of fuel oil no. 4.)
[d] Jet fuel, kerosene, other petroleum liquids, and waste oil.
[e] Petroleum coke is converted from short tons to barrels by multiplying by 5.
[f] Natural gas, 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 fossil fuels.
[h] Wood, black liquor, and other wood waste.
[i] Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.
[j] Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.
[k] Through 1988, data are for consumption at electric utilities only. Beginning in 1989, data also include consumption at independent power producers.
R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.
Notes, Web Page, and Sources: See end of section.

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

	Commercial Sector[a]				Industrial Sector[b]						
	Coal[c]	Petroleum[d]	Natural Gas[e]	Waste[f]	Coal[c]	Petroleum[d]	Natural Gas[e]	Other Gases[g]	Wood[h]	Waste[f]	Other[i]
	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu			
1989 Total	**414**	**1,165**	**18**	**9**	**9,707**	**8,688**	**444**	**83**	**267**	**15**	**37**
1990 Total	**417**	**953**	**28**	**15**	**10,740**	**13,299**	**517**	**104**	**335**	**16**	**36**
1991 Total	**403**	**576**	**27**	**15**	**10,610**	**12,283**	**522**	**118**	**318**	**14**	**55**
1992 Total	**371**	**429**	**33**	**16**	**11,379**	**14,093**	**542**	**128**	**359**	**15**	**37**
1993 Total	**404**	**672**	**37**	**16**	**11,898**	**12,755**	**547**	**123**	**355**	**17**	**31**
1994 Total	**404**	**694**	**41**	**17**	**12,279**	**13,537**	**568**	**123**	**364**	**14**	**38**
1995 Total	**569**	**649**	**43**	**21**	**12,171**	**12,265**	**601**	**114**	**373**	**13**	**40**
1996 Total	**656**	**645**	**42**	**31**	**12,153**	**13,813**	**610**	**143**	**394**	**13**	**35**
1997 Total	**630**	**790**	**39**	**34**	**12,311**	**11,723**	**623**	**105**	**367**	**14**	**36**
1998 Total	**440**	**802**	**41**	**32**	**11,728**	**12,392**	**625**	**102**	**349**	**13**	**35**
1999 Total	**481**	**931**	**39**	**33**	**11,432**	**12,595**	**639**	**112**	**364**	**8**	**39**
2000 Total	**514**	**823**	**37**	**26**	**11,706**	**10,459**	**640**	**107**	**369**	**10**	**45**
2001 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	48	228	3	2	1,082	1,192	62	9	36	1	2
February	41	186	2	2	952	904	54	7	33	1	2
March	40	90	3	3	978	938	56	8	37	1	3
April	36	53	3	3	934	829	50	7	35	1	2
May	33	46	3	3	937	1,075	49	8	32	1	3
June	43	71	4	3	929	1,006	54	10	34	1	2
July	50	100	3	3	1,018	983	55	8	34	1	2
August	51	100	4	3	1,036	852	59	8	33	1	2
September	44	56	2	2	871	781	49	7	31	1	2
October	36	57	3	3	925	1,148	56	10	39	1	2
November	35	58	3	3	910	708	55	13	43	1	2
December	44	116	2	3	1,025	1,039	57	13	38	1	3
Total	**501**	**1,161**	**35**	**32**	**11,596**	**11,453**	**656**	**107**	**424**	**13**	**25**
2004 January	48	207	3	2	1,059	1,212	51	12	36	1	2
February	48	87	3	2	966	751	51	12	32	1	1
March	49	80	3	2	1,005	753	52	14	31	1	1
April	R 36	R 77	3	3	R 925	R 734	R 51	R 14	R 37	1	R 1
May	44	65	3	2	853	740	62	13	38	1	1
5-Month Total	**225**	**517**	**14**	**11**	**4,808**	**4,190**	**266**	**65**	**174**	**5**	**7**
2003 5-Month Total	**198**	**602**	**14**	**13**	**4,884**	**4,937**	**271**	**38**	**172**	**5**	**11**
2002 5-Month Total	**191**	**286**	**12**	**10**	**4,557**	**4,481**	**290**	**40**	**187**	**7**	**16**

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

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

[c] Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

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

[e] Natural gas, 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.

[h] Wood, black liquor, and other wood waste.

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

R=Revised.

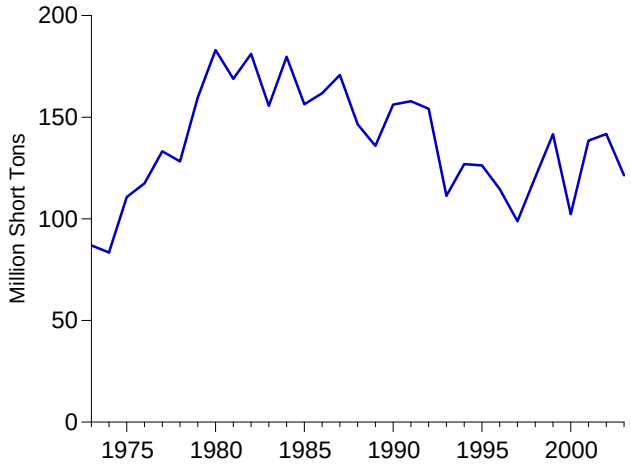
Notes: • Estimates are for fuels consumed to produce electricity; they exclude fuels consumed to produce useful thermal output. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

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

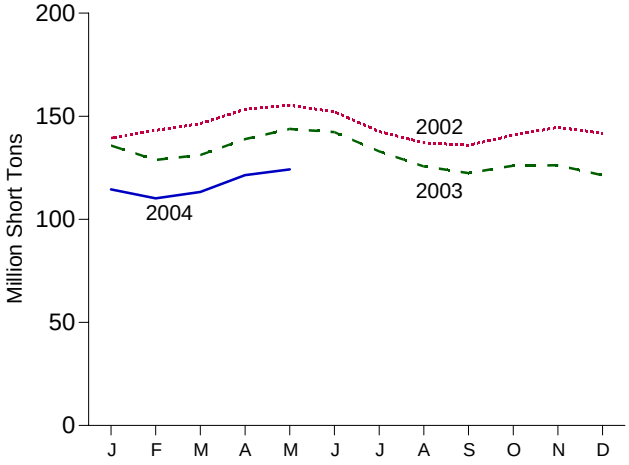
Sources: • **1989-1997:** Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • **1998-2000:** EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • **2001 and 2002:** EIA, Form EIA-860, "Annual Electric Generator Report" and Form EIA-906,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

Figure 7.4 Stocks of Coal and Petroleum: Electric Power Sector

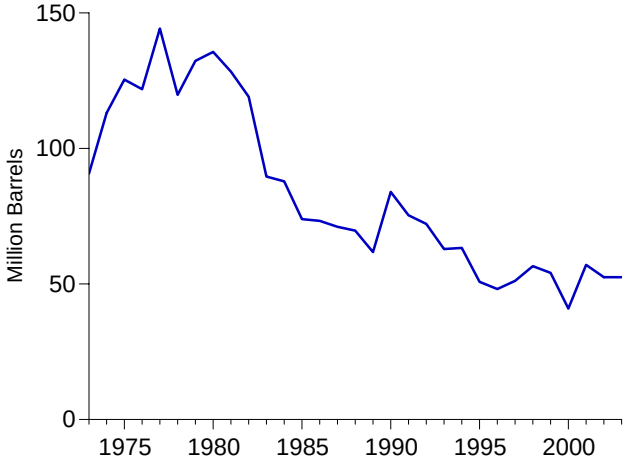
Coal, 1973-2003



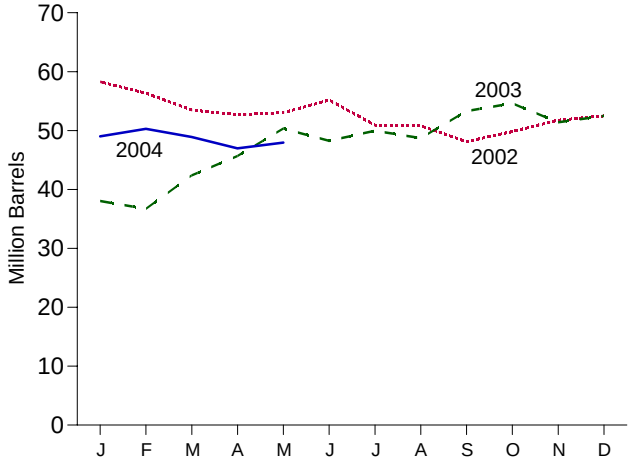
Coal, Monthly



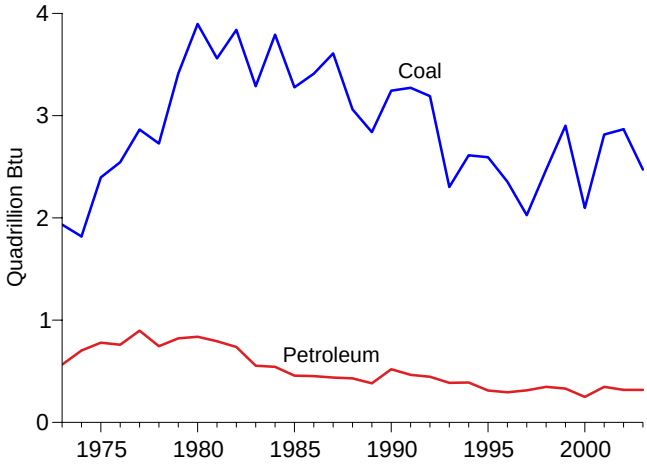
Total Petroleum, 1973-2003



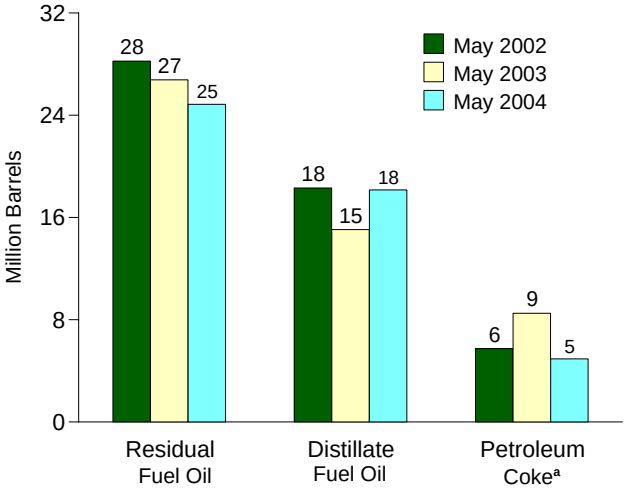
Total Petroleum, Monthly



Coal and Petroleum Stocks, 1973-2003



Petroleum by Type, End of Month



[a]Converted from short tons to barrels by multiplying by 5.
Note: Because vertical scales differ, graphs should not be compared.

Web Page: http://www.eia.doe.gov/emeu/mer/elect.html.
Source: Tables 7.4, A1, and A5.

Table 7.4 Stocks of Coal and Petroleum: Electric Power Sector

	Coal[a]	Petroleum				
		Distillate Fuel Oil[b]	Residual Fuel Oil[c]	Other Liquids[d]	Petroleum Coke[e]	Total[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[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	135,771	15,431	20,870	NA	350	38,051
February	128,828	14,564	20,621	NA	306	36,713
March	131,162	19,849	20,961	NA	315	42,385
April	138,895	15,351	22,737	NA	1,519	45,681
May	143,884	15,058	26,772	NA	1,702	50,339
June	142,325	15,426	24,447	NA	1,675	48,250
July	132,964	16,570	25,029	NA	1,672	49,957
August	125,725	15,771	24,758	NA	1,638	48,722
September	122,425	20,509	24,796	NA	1,601	53,309
October	126,002	21,213	25,831	NA	1,514	54,617
November	126,200	16,776	26,699	NA	1,585	51,400
December	**121,371**	**19,563**	**25,653**	**NA**	**1,455**	**52,489**
2004 January	114,537	18,567	24,020	NA	1,286	49,015
February	110,145	18,502	25,609	NA	1,235	50,284
March	113,310	18,137	24,489	NA	1,254	48,898
April	R 121,440	R 17,568	R 24,291	NA	R 1,026	R 46,987
May	124,232	18,156	24,853	NA	987	47,944

[a] Anthracite, bituminous coal, subbituminous coal, and lignite.
[b] For 1973-1979, gas turbine and internal combustion plant stocks of petroleum. For 1980-2001, electric utility data are for light oil (fuel oil nos. 1 and 2, and small amounts of kerosene and jet fuel).
[c] For 1973-1979, steam plant stocks of petroleum. For 1980-2001, electric utility data are for heavy oil (fuel oil nos. 5 and 6, and small amounts of fuel oil no. 4).
[d] Jet fuel, kerosene, other petroleum liquids,and waste oil.
[e] Petroleum coke is converted from short tons to barrels by multiplying by 5.
[f] Through 1998, data are for stocks at electric utilities only. Beginning in 1999, data also include stocks at independent power producers.
R=Revised. NA=Not available.

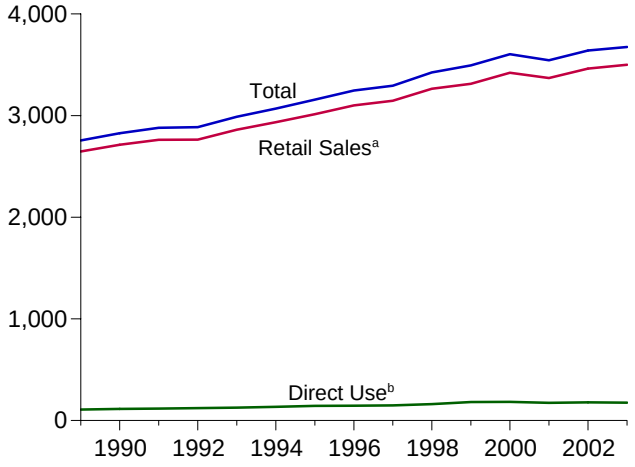
Notes: • The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. • Stocks are at end of year. • Totals may not equal sum of components due to independent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

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

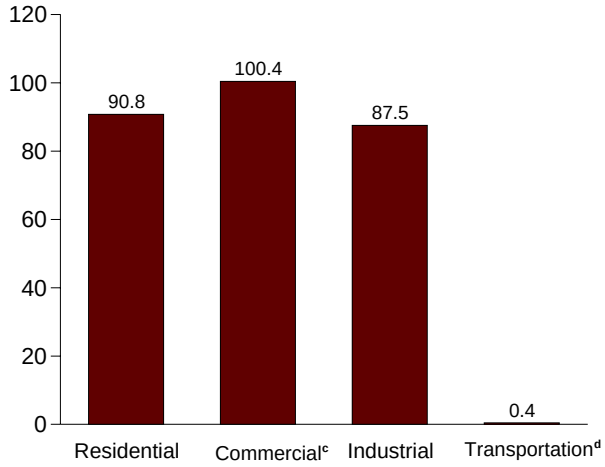
Sources: • **1973-September 1977:** Federal Power Commission, Form FPC-4, "Monthly Power Plant Report." • **October 1977-1981:** Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report." • **1982-1988:** Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant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

Figure 7.5 Electricity End Use
(Billion Kilowatthours)

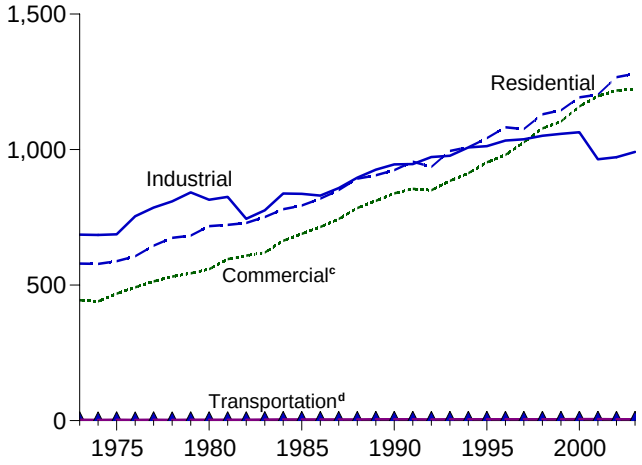
Electricity End Use Overview, 1989-2003



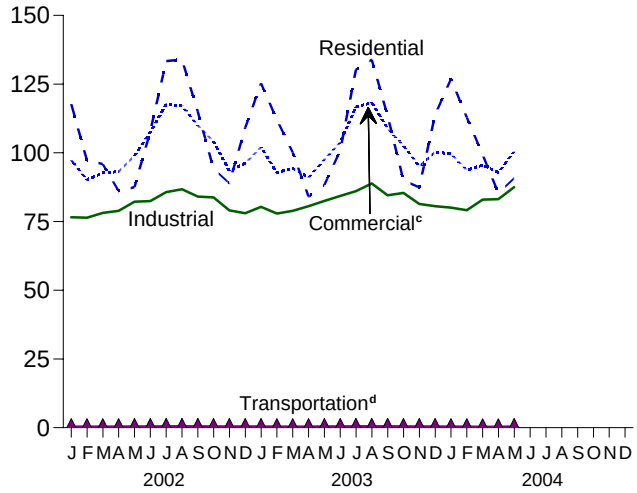
Retail Sales[a] by Sector, May 2004



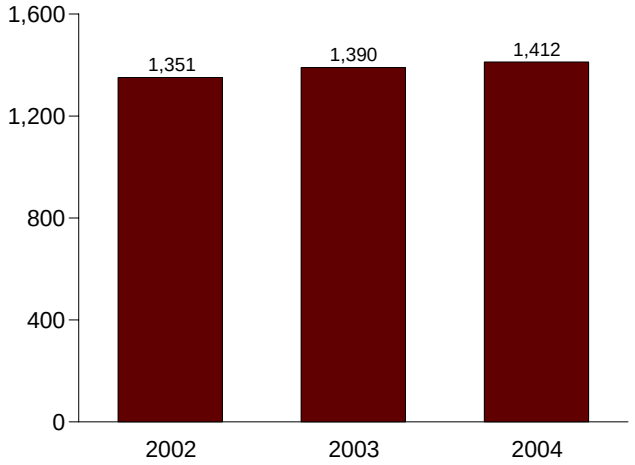
Retail Sales[a] by Sector, 1973-2003



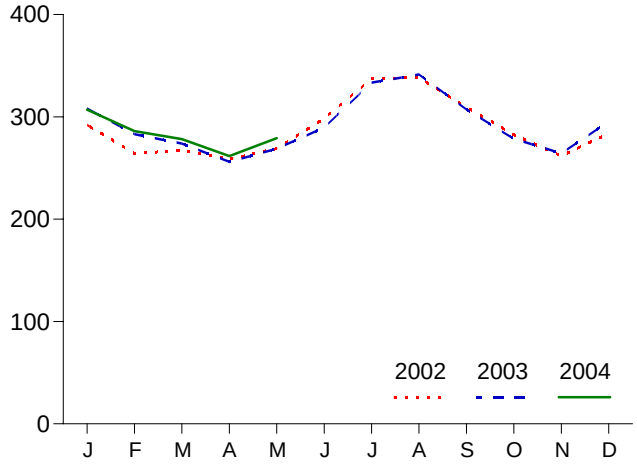
Retail Sales[a] by Sector, Monthly



Retail Sales[a] Total, January-May



Retail Sales[a] Total, Monthly



[a]Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.
[b]Commercial and industrial facility use of onsite net electricity generation; and electricity sales among adjacent or co-located facilities for which revenue information is not available.
[c]Commercial sector, including public street and highway lighting, interdepartmental sales, and other sales to public authorities.
[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 7.5.

Table 7.5 Electricity End Use

(Million Kilowatthours)

	Retail Sales[a]										
	Old Basis				New Basis						
	Residential	Commercial[b]	Industrial[c]	Other[d]	Residential	Commercial[e]	Industrial[f]	Transportation[g]	Total[h]	Direct Use[i]	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**	**108,145**	**2,754,954**
1990 Total	**924,019**	**751,027**	**945,522**	**91,988**	**924,019**	**E 838,263**	**945,522**	**E 4,751**	**2,712,555**	**114,036**	**2,826,591**
1991 Total	**955,417**	**765,664**	**946,583**	**94,339**	**955,417**	**E 855,244**	**946,583**	**E 4,758**	**2,762,003**	**118,033**	**2,880,036**
1992 Total	**935,939**	**761,271**	**972,714**	**93,442**	**935,939**	**E 850,007**	**972,714**	**E 4,706**	**2,763,365**	**122,251**	**2,885,616**
1993 Total	**994,781**	**794,573**	**977,164**	**94,944**	**994,781**	**E 884,746**	**977,164**	**E 4,771**	**2,861,462**	**127,503**	**2,988,966**
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**	**134,111**	**3,068,674**
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**	**144,063**	**3,157,350**
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**	**145,857**	**3,246,984**
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**	**148,428**	**3,294,039**
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**	**160,897**	**3,425,128**
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**	**182,508**	**3,494,595**
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**	**183,263**	**3,604,677**
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**	**E 174,370**	**3,544,151**
2002 January	117,742	89,366	76,600	8,315	117,742	E 97,280	76,600	E 401	292,023	E 15,131	307,154
February	97,309	82,526	76,413	8,028	97,309	E 90,166	76,413	E 387	264,275	E 13,667	277,942
March	95,919	85,055	78,122	8,010	95,919	E 92,678	78,122	E 386	267,105	E 15,131	282,237
April	86,103	85,549	78,918	8,009	86,103	E 93,171	78,918	E 386	258,578	E 14,643	273,221
May	87,494	90,819	82,242	8,501	87,494	E 98,910	82,242	E 410	269,055	E 15,131	284,186
June	107,853	98,638	82,432	9,306	107,853	E 107,496	82,432	E 449	298,230	E 14,643	312,873
July	133,389	108,091	85,724	10,064	133,389	E 117,670	85,724	E 485	337,268	E 15,131	352,400
August	133,951	107,439	86,739	10,183	133,951	E 117,131	86,739	E 491	338,312	E 15,131	353,444
September	114,951	100,138	84,107	10,266	114,951	E 109,909	84,107	E 495	309,462	E 14,643	324,105
October	94,237	95,188	83,783	9,456	94,237	E 104,189	83,783	E 456	282,665	E 15,131	297,796
November	88,926	85,363	79,057	8,464	88,926	E 93,419	79,057	E 408	261,810	E 14,643	276,454
December	109,085	88,076	78,032	8,546	109,085	E 96,209	78,032	E 412	283,738	E 15,131	298,870
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**	**E 178,161**	**3,640,681**
2003 January	125,307	93,712	80,351	8,743	125,307	E 102,034	80,351	E 422	308,113	E 14,878	322,992
February	112,021	84,886	77,901	8,327	112,021	E 92,812	77,901	E 401	283,136	E 13,439	296,574
March	100,154	86,482	78,914	8,265	100,154	E 94,349	78,914	E 398	273,816	E 14,878	288,694
April	84,102	83,470	80,561	7,924	84,102	E 91,012	80,561	E 382	256,057	E 14,399	270,456
May	88,340	89,391	82,495	8,581	88,340	E 97,558	82,495	E 414	268,807	E 14,878	283,686
June	100,912	94,911	84,296	9,353	100,912	E 103,813	84,296	E 451	289,472	E 14,399	303,871
July	130,254	106,961	86,064	10,232	130,254	E 116,699	86,064	E 493	333,510	E 14,878	348,389
August	133,889	108,218	88,825	10,550	133,889	E 118,259	88,825	E 509	341,481	E 14,878	356,360
September	113,506	99,408	84,526	9,939	113,506	E 108,868	84,526	E 479	307,379	E 14,399	321,778
October	90,044	93,497	85,438	9,525	90,044	E 102,563	85,438	E 459	278,504	E 14,878	293,383
November	87,474	86,722	81,374	8,838	87,474	E 95,134	81,374	E 426	264,408	E 14,399	278,807
December	113,903	91,592	80,612	9,176	113,903	E 100,326	80,612	E 442	295,283	E 14,878	310,161
Total	**1,279,907**	**1,119,250**	**991,359**	**109,452**	**1,279,907**	**E 1,223,425**	**991,359**	**E 5,277**	**3,499,968**	**E 175,182**	**3,675,150**
2004 January	–	–	–	–	126,944	99,595	80,082	F 373	306,994	E 14,838	321,832
February	–	–	–	–	112,888	93,670	79,107	F 357	286,022	E 13,881	299,902
March	–	–	–	–	99,415	95,553	82,981	F 313	278,262	E 14,838	293,100
April	–	–	–	–	R 85,349	R 92,860	R 83,152	RF 310	R 261,672	E 14,359	R 276,031
May	–	–	–	–	90,780	100,431	87,543	F 431	279,185	E 14,838	294,023
5-Month Total	**–**	**–**	**–**	**–**	**515,376**	**482,108**	**412,866**	**F 1,784**	**E 1,412,134**	**E 72,753**	**E 1,484,887**
2003 5-Month Total	**509,925**	**437,941**	**400,224**	**41,840**	**509,925**	**E 477,764**	**400,224**	**E 2,017**	**1,389,929**	**E 72,473**	**1,462,402**
2002 5-Month Total	**484,566**	**433,314**	**392,294**	**40,862**	**484,566**	**E 472,206**	**392,294**	**E 1,970**	**1,351,036**	**E 73,705**	**1,424,741**

[a] Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers. Beginning in 2004, the category "Other" has been replaced by "Transportation," and the categories "Commercial" and "Industrial" have been redefined. For all years, data for "Electricity Retail Sales" in Tables 2.2-2.5 are based on the "New Basis" data in this table.

[b] Commercial sector, excluding public street and highway lighting, interdepartmental sales, and other sales to public authorities.

[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 other sales to public authorities. Through 2003, data are estimated as the sum of "Old Basis Commercial" and approximately 95 percent of "Other"; beginning in 2004, data are actual survey data.

[f] Industrial sector. Through 2003, excludes agriculture and irrigation; beginning in 2004, includes agriculture and irrigation.

[g] Transportation sector, including sales to railroads and railways. Through 2003, data are estimated as approximately 5 percent of "Other"; beginning in 2004, forecast values are used until actual survey data become available.

[h] The sum of the four "Old Basis" categories, as well as the sum of the four "New Basis" categories.

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

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

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

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

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

Sources: See end of section.

Electricity

Note. Classification of Power Plants Into Energy-Use Sectors

The Energy Information Administration (EIA) classifies power plants (both electricity-only and combined-heat-and-power plants) into energy-use sectors based on the North American Industry Classification System (NAICS), which replaced the Standard Industrial Classification (SIC) system in 1997. Plants with a NAICS code of 22 are assigned to the Electric Power Sector. Those with NAICS codes beginning with 11 (agriculture, forestry, fishing, and hunting); 21 (mining, including oil and gas extraction); 23 (construction); 31-33 (manufacturing); 2212 (natural gas distribution); and 22131 (water supply and irrigation systems) are assigned to the Industrial Sector. Those with all other codes are assigned to the Commercial Sector. Form EIA-860, "Annual Electric Generator Report," asks respondents to indicate the primary purpose of the facility by assigning a NAICS code from the universal list at: www.census.gov/epcd/naics02/naicod02.htm.

Table 7.1 Sources: Imports and Exports of Electricity

Electricity Trade With Canada and Mexico, 1973-1989:
1973–September 1977: Unpublished Federal Power Commission data.
October 1977–1980: Unpublished Economic Regulatory Administration (ERA) data.
1981: Department of Energy (DOE), Office of Energy Emergency Operations, "Report on Electric Energy Exchanges with Canada and Mexico for Calendar Year 1981," April 1982 (revised June 1982).
1982 and 1983: DOE, ERA, *Electricity Exchanges Across International Borders*.
1984–1986: DOE, ERA, *Electricity Transactions Across International Borders*.
1987 and 1988: DOE, ERA, Form ERA-781R, "Annual Report of International Electrical Export/Import Data."
1989: DOE, Fossil Energy, Form FE-781R, "Annual Report of International Electrical Export/Import Data."

Electricity Trade with Canada, 1990 Forward:
National Energy Board of Canada, data for total sales (firm and interruptible; which exclude non-revenue, inadvertent, and service) from Canada to the United States, and data for total purchases (which exclude non-revenue, inadvertent, and service) by Canada from the United States.

Electricity Trade with Mexico, 1990 Forward:
DOE, Fossil Energy, Office of Fuels Programs, Form FE-781R, "Annual Report of International Electrical Export/Import Data."

Table 7.2a 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:
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 and 2002: EIA, Form EIA-860, "Annual Electric Generator Report" and Form EIA-906, "Power Plant Report."
2003 forward: EIA, Form EIA-906, "Power Plant Report."

Table 7.3d Notes:
• Data are for fuels consumed to produce electricity; they exclude fuels consumed to produce useful thermal output. Consumption for electricity generation at combined-heat-and-power (CHP) plants is estimated. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Table 7.3d Web Page:
Http://www.eia.doe.gov/emeu/mer/elect.html.

Table 7.3d Sources:
See sources for Tables 7.3e and 7.3f.

Table 7.3e Notes:

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

Table 7.3e Web Page:

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

Table 7.3e 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 and 2002: EIA, Form EIA-860, "Annual Electric Generator Report" and Form EIA-906, "Power Plant Report."

2003 forward: EIA, Form EIA-906, "Power Plant Report."

Table 7.5 Sources:

Retail Sales:

1973-September 1977: Federal Power Commission (FPC), Form FPC-5, "Monthly Statement of Electric Operating Revenue and Income."

October 1977-February 1980: Federal Energy Regulatory Commission (FERC), Form FPC-5, "Monthly Statement of Electric Operating Revenue and Income."

March 1980-1982: FERC, Form FPC-5, "Electric Utility Company Monthly Statement."

1983: Energy Information Administration (EIA), Form EIA-826, "Monthly Electric Utility Sales and Revenue Report with State Distributions" (formerly "Electric Utility Company Monthly Statement").

1984-1989: EIA, Form EIA-861, "Annual Electric Utility Report."

1990 forward: EIA, *Electric Power Monthly*, August 2004, Table 5.1.

Direct Use, Annual:

1989-1997: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."

1998-2000: EIA, Form EIA-860B, "Annual Electric Generator Report–Nonutility."

2001-2003: Estimates are based on the 2000 value adjusted by the percentage increase in commercial and industrial net generation on Table 7.1.

Direct Use, Monthly: Estimates are derived by dividing the annual value by the number of days in the year and then multiplying by the number of days in the month. (To derive monthly estimates for the current year, the previous year's annual value is used in the calculation.)

Section 8. Nuclear Energy

U.S. nuclear electricity net generation during May 2004 was 65 net terawatthours (billion kilowatthours) of electricity, 4 percent higher than the level in May 2003.

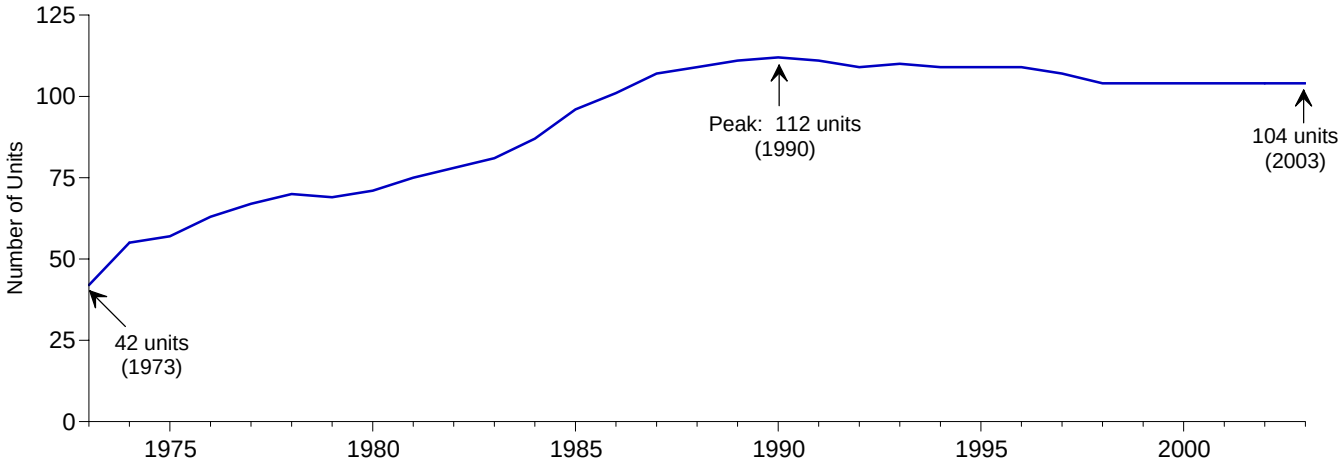
Nuclear units generated at a average capacity factor of 88.3 percent in May 2004, 3.7 percentage points higher than the capacity factor in May 2003.

The nuclear share of total electricity net generation in May 2004 was 20.0 percent, compared with 20.4 percent 1 year earlier.

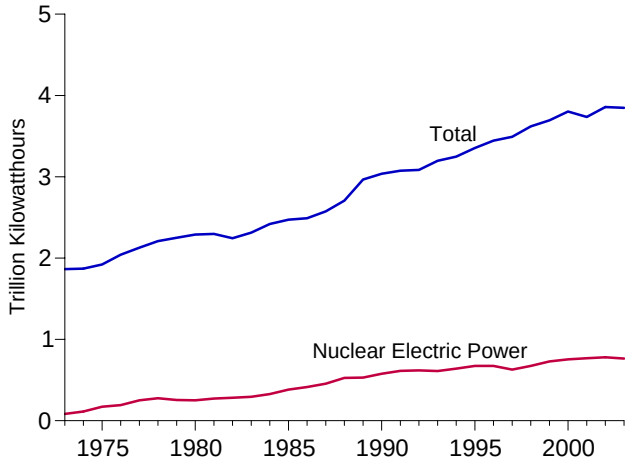
On May 31, 2004, there were 104 operable nuclear generating units in the United States, with a collective net summer capacity of 98.8 million kilowatts of electricity.

Figure 8.1 Nuclear Energy Overview

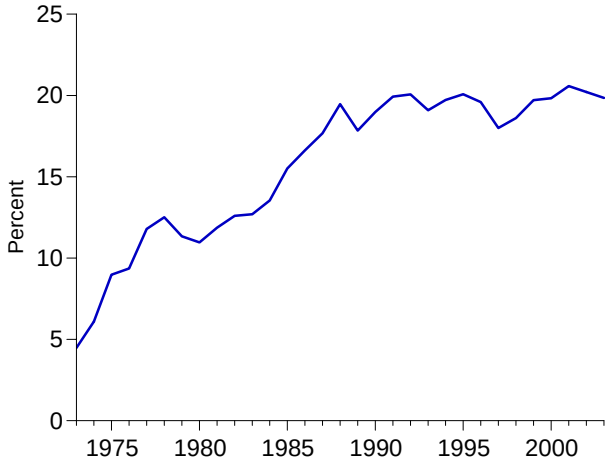
Operable Units, End of Year, 1973-2003



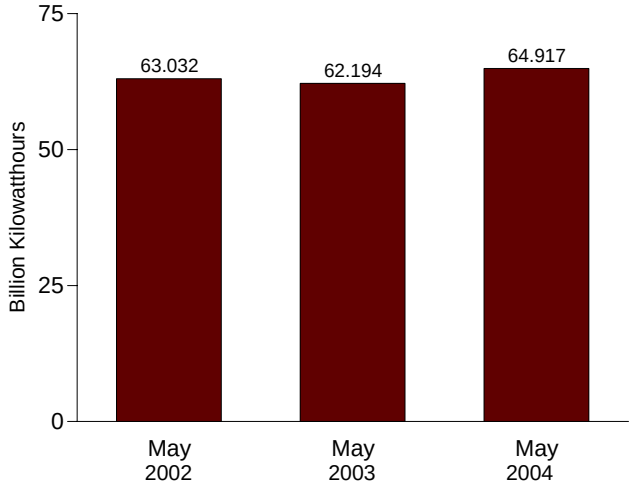
Electricity Net Generation, 1973-2003



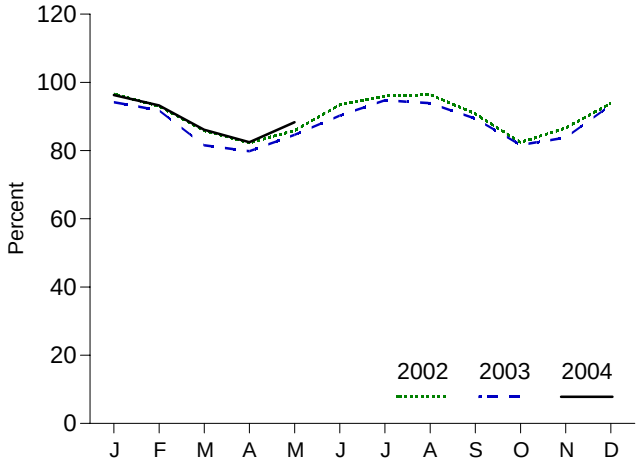
Nuclear Share of Electricity Net Generation, 1973-2003



Nuclear Electricity Net Generation



Capacity Factor, Monthly



Web Page: http://www.eia.doe.gov/emeu/mer/nuclear.html.
Sources: Table 7.1 and 8.1.

Table 8.1 Nuclear Energy Overview

	Total Operable Units[a,b]	Net Summer Capacity of Operable Units[b,c]	Nuclear Electricity Net Generation	Nuclear Share of Electricity Net Generation	Capacity Factor[d]
	Number	Million Kilowatts	Million Kilowatthours	Percent	
1973 Year	**42**	**22.683**	**83,479**	**4.5**	**53.5**
1974 Year	**55**	**31.867**	**113,976**	**6.1**	**47.8**
1975 Year	**57**	**37.267**	**172,505**	**9.0**	**55.9**
1976 Year	**63**	**43.822**	**191,104**	**9.4**	**54.7**
1977 Year	**67**	**46.303**	**250,883**	**11.8**	**63.3**
1978 Year	**70**	**50.824**	**276,403**	**12.5**	**64.5**
1979 Year	**69**	**49.747**	**255,155**	**11.3**	**58.4**
1980 Year	**71**	**51.810**	**251,116**	**11.0**	**56.3**
1981 Year	**75**	**56.042**	**272,674**	**11.9**	**58.2**
1982 Year	**78**	**60.035**	**282,773**	**12.6**	**56.6**
1983 Year	**81**	**63.009**	**293,677**	**12.7**	**54.4**
1984 Year	**87**	**69.652**	**327,634**	**13.5**	**56.3**
1985 Year	**96**	**79.397**	**383,691**	**15.5**	**58.0**
1986 Year	**101**	**85.241**	**414,038**	**16.6**	**56.9**
1987 Year	**107**	**93.583**	**455,270**	**17.7**	**57.4**
1988 Year	**109**	**94.695**	**526,973**	**19.5**	**63.5**
1989 Year	**111**	**98.161**	**529,355**	**17.8**	**62.2**
1990 Year	**112**	**99.624**	**576,862**	**19.0**	**66.0**
1991 Year	**111**	**99.589**	**612,565**	**19.9**	**70.2**
1992 Year	**109**	**98.985**	**618,776**	**20.1**	**70.9**
1993 Year	**110**	**99.041**	**610,291**	**19.1**	**70.5**
1994 Year	**109**	**99.148**	**640,440**	**19.7**	**73.8**
1995 Year	**109**	**99.515**	**673,402**	**20.1**	**77.4**
1996 Year	**109**	**100.784**	**674,729**	**19.6**	**76.2**
1997 Year	**107**	**99.716**	**628,644**	**18.0**	**71.1**
1998 Year	**104**	**97.070**	**673,702**	**18.6**	**78.2**
1999 Year	**104**	**97.411**	**728,254**	**19.7**	**85.3**
2000 Year	**104**	**97.860**	**753,893**	**19.8**	**88.1**
2001 Year	**104**	**98.159**	**768,826**	**20.6**	**89.4**
2002 January	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	98.657	68,905	21.2	93.9
Year	**104**	**98.657**	**780,064**	**20.2**	**90.3**
2003 January	104	98.794	69,211	20.5	94.2
February	104	98.794	60,942	20.5	91.8
March	104	98.794	59,933	19.8	81.5
April	104	98.794	56,776	20.1	79.8
May	104	98.794	62,194	20.4	84.6
June	104	98.794	64,181	19.8	90.2
July	104	98.794	69,653	18.7	94.8
August	104	98.794	69,024	18.3	93.9
September	104	98.794	63,584	20.1	89.4
October	104	98.794	60,016	19.7	81.7
November	104	98.794	59,600	20.0	83.8
December	104	98.794	68,612	20.7	R 93.4
Year	**104**	**98.794**	**763,725**	**19.8**	**88.2**
2004 January	104	98.794	70,789	20.6	96.3
February	104	98.794	64,103	20.5	93.2
March	104	98.794	63,285	20.7	86.1
April	104	98.794	R 58,635	R 20.4	R 82.4
May	104	98.794	64,917	20.0	88.3
5 Months	**104**	**98.794**	**321,730**	**20.4**	**89.3**
2003 5 Months	**104**	**98.794**	**309,056**	**20.3**	**86.3**
2002 5 Months	**104**	**98.657**	**317,094**	**21.1**	**88.7**

[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 2002,* October 2003, Table 9.1.

[b] At end of period.

[c] For the definition of "Net Summer Capacity," see Note 2(a) at end of section.

[d] For an explanation of the method of calculating the capacity factor, see Note 2 at end of section.

R=Revised.

Notes: • See Note 1 at end of section for discussion of reactor unit coverage. • Nuclear electricity net generation totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: http://www.eia.doe.gov/emeu/mer/nuclear.html.

Sources: See end of section.

Nuclear Energy

Note 1. A reactor is generally defined as operable while it possessed a full-power license from the Nuclear Regulatory Commission or its predecessor the Atomic Energy Commission, or equivalent permission to operate, at the end of the year or month shown. The definition is liberal in that it does not exclude units retaining full-power licenses during long, non-routine shutdowns that for a time rendered them unable to generate electricity. Examples are:

(a) In 1985 the five then-active Tennessee Valley Authority (TVA) units (Browns Ferry 1, 2, and 3 and Sequoyah 1 and 2) were shut down under a regulatory forced outage. Browns Ferry 1 remains shut down and has been defueled, while the other units were idle for several years, restarting in 1991, 1995, 1988, and 1988, respectively. All five units are counted as operable during the shutdowns. Browns Ferry 1 is the only one of the five TVA plants that has not returned to service. Because it is still fully licensed to operate, it continues to meet the definition of operable.

(b) Shippingport was shut down from 1974 through 1976 for conversion to a light-water breeder reactor, but is counted as operable from 1957 until its retirement in 1982.

(c) Calvert Cliffs 2 was shut down in 1989 and 1990 for replacement of pressurizer heater sleeves but is counted as operable during those years.

Exceptions to the definition are Shoreham and Three Mile Island 2. Shoreham was granted a full-power license in April 1989, but was shut down two months later and never restarted. In 1991, the license was changed to Possession Only. Although not operable at the end of the year, Shoreham is counted as operable during 1989. A major accident closed Three Mile Island 2 in 1979, and although the unit retained its full-power license for several years, it is considered permanently shut down since that year.

Note 2. Capacity: Nuclear generating units may have more than one type of net capacity rating, including the following:

(a) Net Summer Capacity—The steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary power, as demonstrated by test at the time of summer peak demand. Auxiliary power of a typical nuclear power plant is about 5 percent of gross generation.

b) Net Design Capacity or Net Design Electrical Rating (DER)—The nominal net electrical output of a unit, specified by the utility and used for plant design.

The monthly capacity factors are computed as the actual monthly generation divided by the maximum possible generation for that month. The maximum possible generation is the number of hours in the month multiplied by the net summer capacity at the end of the month. That fraction is then multiplied by 100 to obtain a percentage. Annual capacity factors are averages of the monthly values for that year.

Table 8.1 Sources

Total Operable Units and **Net Summer Capacity of Operable Units**: 1973-1982: Compiled from various sources, primarily DOE, Office of Nuclear Reactor Programs, "U.S. Central Station Nuclear Electric Generating Units: Significant Milestones." 1983 forward: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report," and monthly updates as appropriate. For a list of currently operable units, see: http://eia.doe.gov/cneaf/nuclear/page/nuc_reactors/operational.html.
Nuclear Electricity Net Generation and **Nuclear Share of Electricity Net Generation**: See Table 7.2a for actual data.

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 $35.58 per barrel in May 2004, 43 percent above the level of May 2003. The refiner acquisition cost of imported crude oil in May 2004 was $35.79 per barrel, 42 percent higher than the May 2003 level. The average cost of domestic crude oil in May 2004 was $37.22, 39 percent more than the May 2003 average.

Motor Gasoline. The national city average retail price of unleaded regular gasoline at all types of stations was $2.04 per gallon in June 2004, 35 percent higher than the price in June 2003. The price of unleaded premium gasoline averaged $2.23 in June 2004, 31 percent higher than the price in June 2003.

Residual Fuel Oil. The average price, excluding taxes, of residual fuel oil sold to end users in May 2004 was 73 cents per gallon, 6 percent higher than the previous month's price and 18 percent higher than the May 2003 average. The average resale price, excluding taxes, of residual fuel oil in May 2004 was 69 cents, 7 percent higher than the April 2004 price and 19 percent higher than the price 1 year earlier.

Jet Fuel. The average price, excluding taxes, of kerosene-type jet fuel sold to end users in May 2004 was $1.17 per gallon, 10 percent higher than the previous month's average price and 54 percent more than the May 2003 average price.

No. 2 Distillate Fuel Oil. The May 2004 national average price, excluding taxes, of heating oil sold to residential customers was $1.42 per gallon, 1 percent higher than the April 2004 price and 12 percent higher than the May 2003 price. The average price of No. 2 fuel oil sold to all end users was $1.07 per gallon in May 2004, 5 percent higher than the April 2004 price and 33 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 May 2004 (latest month for which data are available) was 7.42 cents per kilowatthour, slightly higher than the average price in May 2003. The price of electricity sold to residential consumers in May 2004 averaged 9.07 cents per kilowatthour, 1 percent higher than the May 2003 price. The price of electricity sold to commercial consumers averaged 8.02 cents per kilowatthour in May 2004, 2 percent lower than the May 2003 price. The price of electricity sold to industrial users in May 2004 averaged 5.01 cents per kilowatthour, 2 percent higher than the price 1 year earlier.

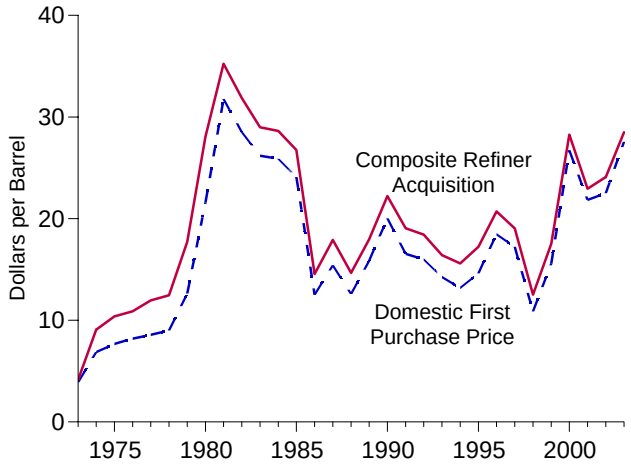
Beginning with January 1986, new series of national average price estimates were based on a statistically derived sample of both publicly and privately owned electric utilities. Previously, average price estimates were derived from selected privately owned electric utilities and were not national averages.

Natural Gas. The average wellhead price of natural gas for April 2004 (latest month for which data are available) was estimated as $5.20 per thousand cubic feet, 10 percent higher than the April 2003 price.

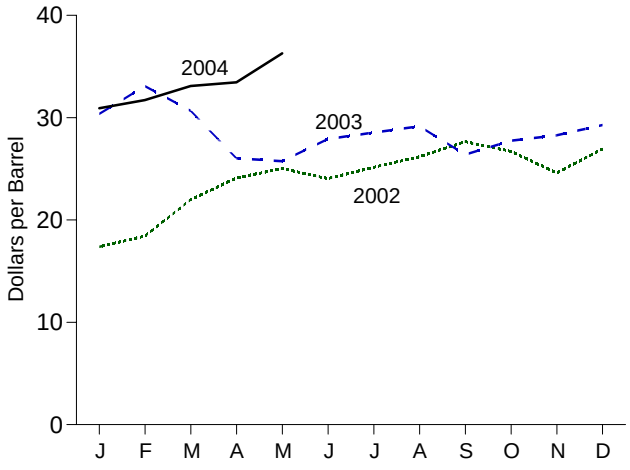
The average price of natural gas delivered to the electric power sector was $5.76 per thousand cubic feet in April 2004, 7 percent higher than the April 2003 price. The average price of natural gas used by residential consumers in April 2004 was $10.43 per thousand cubic feet, 4 percent higher than the April 2003 price. The average price of natural gas used by commercial consumers in April 2004 was $8.88 per thousand cubic feet, 1 percent higher than the April 2003 price. The average price of natural gas used by industrial consumers in April 2004 was $5.93 per thousand cubic feet, 1 percent above the April 2003 price.

Figure 9.1 Petroleum Prices

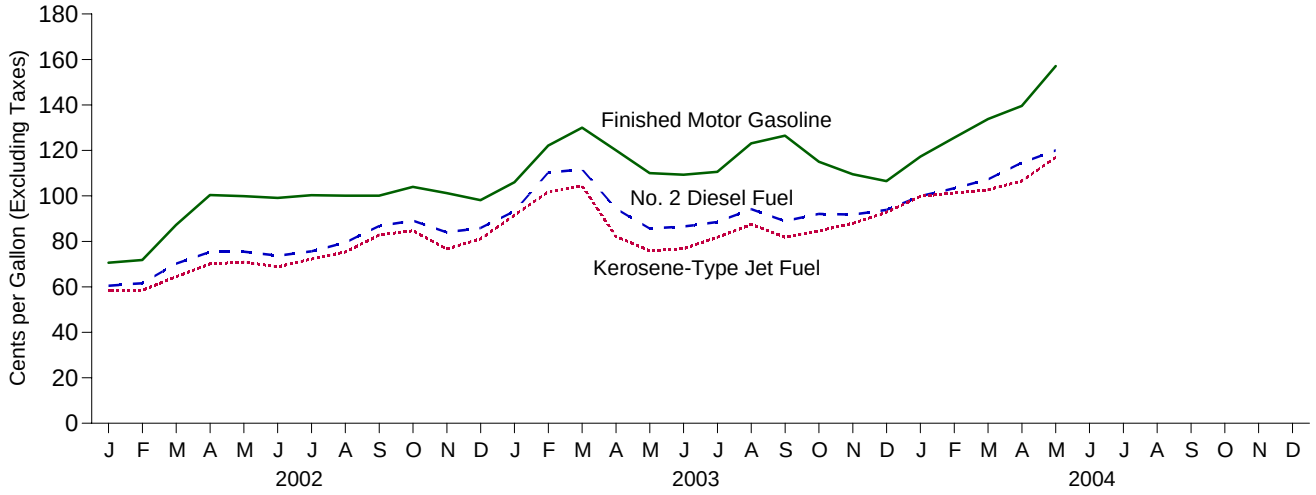
Crude Oil Prices, 1973-2003



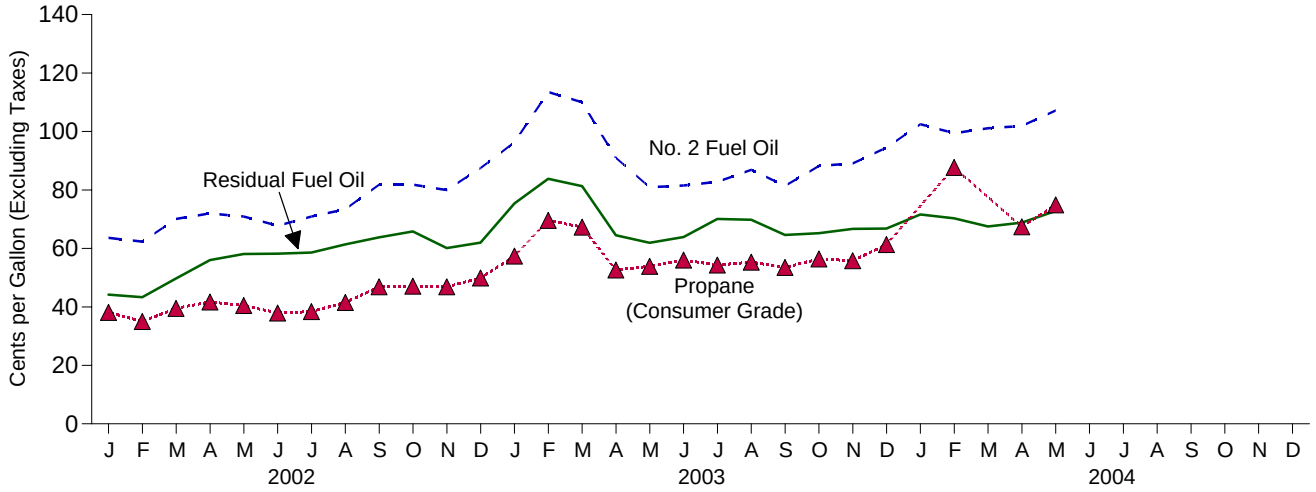
Composite Refiner Acquisition Cost, Monthly



Refiner Prices to End Users: Motor Gasoline, Diesel Fuel, and Jet Fuel, Monthly



Refiner Prices to End Users: No. 2 Fuel Oil, Propane, and Residual Fuel, Monthly



Web Page: http://www.eia.doe.gov/emeu/mer/prices.html.
Sources: Tables 9.1, 9.5, and 9.7.

Table 9.1 Crude Oil Price Summary

(Dollars per Barrel)

	Domestic First Purchase Price[b]	F.O.B. Cost of Imports[c]	Landed Cost of Imports[d]	Refiner Acquisition Cost[a]		
				Domestic	Imported	Composite
1973 Average	**3.89**	[e] **5.21**	[e] **6.41**	[E] **4.17**	[E] **4.08**	[E] **4.15**
1974 Average	**6.87**	**10.91**	**12.32**	**7.18**	**12.52**	**9.07**
1975 Average	**7.67**	**11.18**	**12.70**	**8.39**	**13.93**	**10.38**
1976 Average	**8.19**	**12.15**	**13.32**	**8.84**	**13.48**	**10.89**
1977 Average	**8.57**	**13.24**	**14.36**	**9.55**	**14.53**	**11.96**
1978 Average	**9.00**	**13.29**	**14.35**	**10.61**	**14.57**	**12.46**
1979 Average	**12.64**	**20.07**	**21.45**	**14.27**	**21.67**	**17.72**
1980 Average	**21.59**	**32.37**	**33.67**	**24.23**	**33.89**	**28.07**
1981 Average	**31.77**	**35.15**	**36.47**	**34.33**	**37.05**	**35.24**
1982 Average	**28.52**	**32.02**	**33.18**	**31.22**	**33.55**	**31.87**
1983 Average	**26.19**	**27.81**	**28.93**	**28.87**	**29.30**	**28.99**
1984 Average	**25.88**	**27.60**	**28.54**	**28.53**	**28.88**	**28.63**
1985 Average	**24.09**	**25.84**	**26.67**	**26.66**	**26.99**	**26.75**
1986 Average	**12.51**	**12.52**	**13.49**	**14.82**	**14.00**	**14.55**
1987 Average	**15.40**	**16.69**	**17.65**	**17.76**	**18.13**	**17.90**
1988 Average	**12.58**	**13.25**	**14.08**	**14.74**	**14.56**	**14.67**
1989 Average	**15.86**	**16.89**	**17.68**	**17.87**	**18.08**	**17.97**
1990 Average	**20.03**	**20.37**	**21.13**	**22.59**	**21.76**	**22.22**
1991 Average	**16.54**	**16.89**	**18.02**	**19.33**	**18.70**	**19.06**
1992 Average	**15.99**	**16.77**	**17.75**	**18.63**	**18.20**	**18.43**
1993 Average	**14.25**	**14.71**	**15.72**	**16.67**	**16.14**	**16.41**
1994 Average	**13.19**	**14.18**	**15.18**	**15.67**	**15.51**	**15.59**
1995 Average	**14.62**	**15.69**	**16.78**	**17.33**	**17.14**	**17.23**
1996 Average	**18.46**	**19.32**	**20.31**	**20.77**	**20.64**	**20.71**
1997 Average	**17.23**	**16.94**	**18.11**	**19.61**	**18.53**	**19.04**
1998 Average	**10.87**	**10.76**	**11.84**	**13.18**	**12.04**	**12.52**
1999 Average	**15.56**	**16.47**	**17.23**	**17.90**	**17.26**	**17.51**
2000 Average	**26.72**	**26.27**	**27.53**	**29.11**	**27.70**	**28.26**
2001 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	28.35	29.16	30.34	30.47	30.32	30.38
February	31.85	29.78	31.33	33.98	32.42	33.08
March	30.09	26.32	28.86	32.68	29.31	30.68
April	25.46	22.75	25.21	28.54	24.52	26.03
May	24.96	23.49	25.39	26.75	25.15	25.74
June	26.83	25.35	27.36	29.07	27.22	27.92
July	27.53	26.11	27.73	29.54	27.95	28.55
August	27.94	26.87	28.01	30.28	28.50	29.15
September	25.23	24.10	25.91	27.75	25.66	26.39
October	26.52	26.06	27.37	28.43	27.32	27.75
November	27.21	26.03	27.68	29.55	27.47	28.28
December	28.54	26.75	28.79	30.27	28.63	29.28
Average	**27.56**	**25.86**	**27.69**	**29.76**	**27.71**	**28.50**
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	[R] 30.02	[R] 32.30	34.53	32.25	33.09
April	[R] 33.23	[R] 31.10	[R] 32.88	[R] 35.25	32.42	[R] 33.46
May	35.58	33.60	35.12	37.22	35.79	36.28

[a] See Note 4 at end of section.
[b] See Note 1 at end of section.
[c] See Note 2 at end of section.
[d] See Note 3 at end of section.
[e] Based on October, November, and December data only.
R=Revised. E=Estimate.

Notes: • Values for Domestic First Purchase Price and Refiner Acquisition Cost for the current month and for F.O.B. and Landed Costs of Imports for the current 2 months are preliminary. • F.O.B. and landed costs through 1980 reflect the period of reporting; prices since then reflect the period of loading. • Annual averages are the averages of the monthly prices, weighted by volume. • Geographic coverage is the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, and all U.S. Territories and Possessions.

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

Sources: See end of section.

Table 9.2 F.O.B. Costs of Crude Oil Imports From Selected Countries

(Dollars per Barrel)

	Selected Countries							Persian Gulf Nations[a]	Total OPEC[b]	Total Non-OPEC
	Angola	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela			
1973 Average[c]	**W**	**W**	**NA**	**7.81**	**3.25**	**NA**	**5.39**	**3.68**	**5.43**	**4.80**
1974 Average	**11.87**	**W**	**W**	**12.44**	**10.17**	**NA**	**10.71**	**10.60**	**11.33**	**9.59**
1975 Average	**10.97**	**(d)**	**11.44**	**11.82**	**10.87**	**NA**	**11.04**	**10.88**	**11.34**	**10.62**
1976 Average	**12.02**	**(d)**	**12.22**	**13.08**	**11.62**	**W**	**11.39**	**11.65**	**12.23**	**11.70**
1977 Average	**13.29**	**(d)**	**13.42**	**14.44**	**12.38**	**14.11**	**12.63**	**12.56**	**13.29**	**12.97**
1978 Average	**13.32**	**(d)**	**13.24**	**14.05**	**12.70**	**13.82**	**12.38**	**12.77**	**13.31**	**13.23**
1979 Average	**19.85**	**(d)**	**20.27**	**21.69**	**17.28**	**21.70**	**16.90**	**18.77**	**19.88**	**20.92**
1980 Average	**33.45**	**W**	**31.06**	**35.93**	**28.17**	**34.36**	**24.81**	**28.92**	**32.21**	**32.85**
1981 Average	**35.55**	**(d)**	**33.01**	**38.31**	**32.60**	**36.06**	**28.95**	**33.00**	**35.17**	**35.12**
1982 Average	**31.86**	**(d)**	**28.08**	**35.13**	**33.73**	**33.42**	**23.74**	**33.55**	**33.48**	**30.58**
1983 Average	**28.14**	**(d)**	**25.20**	**29.81**	**27.53**	**29.91**	**21.48**	**27.70**	**28.46**	**27.20**
1984 Average	**27.46**	**(d)**	**26.39**	**29.51**	**27.67**	**28.87**	**24.23**	**27.48**	**27.79**	**27.45**
1985 Average	**26.30**	**(d)**	**25.33**	**28.04**	**22.04**	**27.64**	**23.64**	**23.31**	**25.67**	**25.96**
1986 Average	**13.30**	**12.34**	**11.84**	**14.35**	**11.36**	**13.84**	**10.92**	**11.35**	**12.21**	**12.87**
1987 Average	**17.27**	**17.84**	**16.36**	**18.47**	**15.12**	**18.28**	**15.08**	**15.97**	**16.43**	**16.99**
1988 Average	**13.70**	**13.61**	**12.18**	**15.16**	**12.16**	**14.80**	**12.96**	**12.38**	**13.43**	**13.05**
1989 Average	**17.66**	**17.89**	**15.96**	**18.31**	**16.29**	**17.89**	**16.09**	**16.61**	**17.06**	**16.72**
1990 Average	**20.23**	**20.75**	**19.26**	**22.46**	**20.36**	**23.43**	**19.55**	**18.54**	**20.40**	**20.32**
1991 Average	**18.47**	**18.49**	**15.37**	**20.29**	**14.62**	**20.81**	**14.91**	**15.22**	**16.99**	**16.77**
1992 Average	**18.41**	**18.02**	**15.26**	**19.98**	**15.85**	**19.61**	**14.39**	**16.35**	**16.87**	**16.66**
1993 Average	**16.23**	**15.87**	**13.74**	**17.79**	**13.77**	**16.64**	**12.46**	**14.21**	**14.78**	**14.65**
1994 Average	**15.40**	**14.99**	**13.68**	**16.32**	**14.12**	**15.66**	**12.21**	**13.97**	**14.00**	**14.34**
1995 Average	**16.58**	**16.73**	**15.64**	**17.40**	**W**	**16.94**	**13.86**	**W**	**15.36**	**16.02**
1996 Average	**20.71**	**21.33**	**19.14**	**21.27**	**19.28**	**19.43**	**17.73**	**19.22**	**18.94**	**19.65**
1997 Average	**18.81**	**18.85**	**16.72**	**19.43**	**15.16**	**18.59**	**15.33**	**15.24**	**16.26**	**17.51**
1998 Average	**12.11**	**12.56**	**10.49**	**12.97**	**8.87**	**12.52**	**9.31**	**9.09**	**10.20**	**11.21**
1999 Average	**17.46**	**17.20**	**15.89**	**17.32**	**17.65**	**19.14**	**14.33**	**17.15**	**15.90**	**16.84**
2000 Average	**27.90**	**29.04**	**25.39**	**28.70**	**24.62**	**27.21**	**24.45**	**24.72**	**25.56**	**26.77**
2001 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	27.76	31.66	W	27.81	29.08	29.21
February	33.49	35.25	28.44	33.64	26.67	32.97	28.50	27.17	28.65	30.53
March	29.34	31.28	24.98	30.82	24.87	28.78	22.83	25.09	25.39	26.99
April	24.81	24.85	21.54	25.27	21.01	W	21.00	21.12	21.84	23.41
May	25.63	25.13	22.58	27.03	22.56	25.28	21.61	22.61	22.80	24.00
June	26.66	27.63	24.39	27.79	26.55	W	22.98	26.47	24.90	25.67
July	27.83	W	25.64	29.14	25.54	W	24.51	25.58	25.63	26.43
August	28.76	28.97	25.88	30.08	26.22	29.42	24.87	25.99	26.33	27.20
September	26.41	27.44	23.33	27.36	23.82	W	22.76	23.80	23.79	24.35
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	27.69	29.32	23.75	26.87	26.09	25.99
December	29.58	30.02	25.56	30.60	27.58	W	25.71	27.24	27.02	26.55
Average	**28.24**	**28.89**	**24.83**	**29.40**	**25.01**	**28.76**	**23.81**	**25.16**	**25.36**	**26.22**
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	R 29.76	R 30.08	R 29.97
April	R 32.43	R 34.47	R 29.46	R 34.21	W	W	R 31.23	R 30.82	R 31.78	R 30.47
May	W	35.96	32.68	38.20	W	W	33.63	32.23	34.23	33.16

[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.

R=Revised. NA=Not available. W=Value withheld to avoid disclosure of individual company data.

Notes: • The Free on Board (F.O.B.) cost at the country of origin excludes all costs related to insurance and transportation. See Note 2 at end of section. • Values for the current 2 months are preliminary. • Prices through 1980 reflect the period of reporting; prices since then reflect the period of loading. • Annual averages are averages of the monthly prices, including prices not published, weighted by volume. • Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements whereby the actual purchase price is not established at the time the crude oil is acquired for importation into the United States, are not included in the published data until the actual prices have been determined and reported. • U.S. geographic coverage is the 50 States and the District of Columbia.

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

Sources: See end of section.

Table 9.3 Landed Costs of Crude Oil Imports From Selected Countries

(Dollars per Barrel)

	Selected Countries								Persian Gulf Nations[a]	Total OPEC[b]	Total Non-OPEC
	Angola	Canada	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela			
1973 Average[c]	**W**	**5.33**	**W**	**NA**	**9.08**	**5.37**	**NA**	**5.99**	**5.91**	**6.85**	**5.64**
1974 Average	**12.48**	**11.48**	**W**	**W**	**13.16**	**11.63**	**NA**	**11.25**	**12.21**	**12.49**	**11.81**
1975 Average	**11.81**	**12.84**	**(d)**	**12.61**	**12.70**	**12.50**	**NA**	**12.36**	**12.64**	**12.70**	**12.70**
1976 Average	**12.71**	**13.36**	**(d)**	**12.64**	**13.81**	**13.06**	**W**	**11.89**	**13.03**	**13.32**	**13.35**
1977 Average	**14.04**	**14.13**	**(d)**	**13.82**	**15.29**	**13.69**	**14.83**	**13.11**	**13.85**	**14.35**	**14.42**
1978 Average	**14.07**	**14.41**	**(d)**	**13.56**	**14.88**	**13.94**	**14.53**	**12.84**	**14.01**	**14.34**	**14.38**
1979 Average	**21.06**	**20.22**	**(d)**	**20.77**	**22.97**	**18.95**	**22.97**	**17.65**	**20.42**	**21.29**	**22.10**
1980 Average	**34.76**	**30.11**	**W**	**31.77**	**37.15**	**29.80**	**35.68**	**25.92**	**30.59**	**33.56**	**33.99**
1981 Average	**36.84**	**32.32**	**(d)**	**33.70**	**39.66**	**34.20**	**37.29**	**29.91**	**34.61**	**36.60**	**36.14**
1982 Average	**33.08**	**27.15**	**(d)**	**28.63**	**36.16**	**34.99**	**34.25**	**24.93**	**34.94**	**34.81**	**31.47**
1983 Average	**29.31**	**25.63**	**(d)**	**25.78**	**30.85**	**29.27**	**30.87**	**22.94**	**29.37**	**29.84**	**28.08**
1984 Average	**28.49**	**26.56**	**(d)**	**26.85**	**30.36**	**29.20**	**29.45**	**25.19**	**29.07**	**29.06**	**28.14**
1985 Average	**27.39**	**25.71**	**(d)**	**25.63**	**28.96**	**24.72**	**28.36**	**24.43**	**25.50**	**26.86**	**26.53**
1986 Average	**14.09**	**13.43**	**12.85**	**12.17**	**15.29**	**12.84**	**14.63**	**11.52**	**12.92**	**13.46**	**13.52**
1987 Average	**18.20**	**17.04**	**18.43**	**16.69**	**19.32**	**16.81**	**18.78**	**15.76**	**17.47**	**17.64**	**17.66**
1988 Average	**14.48**	**13.50**	**14.47**	**12.58**	**15.88**	**13.37**	**15.82**	**13.66**	**13.51**	**14.18**	**13.96**
1989 Average	**18.36**	**16.81**	**18.10**	**16.35**	**19.19**	**17.34**	**18.74**	**16.78**	**17.37**	**17.78**	**17.54**
1990 Average	**21.51**	**20.48**	**22.34**	**19.64**	**23.33**	**21.82**	**22.65**	**20.31**	**20.55**	**21.23**	**20.98**
1991 Average	**19.90**	**17.16**	**19.55**	**15.89**	**21.39**	**17.22**	**21.37**	**15.92**	**17.34**	**18.08**	**17.93**
1992 Average	**19.36**	**17.04**	**18.46**	**15.60**	**20.78**	**17.48**	**20.63**	**15.13**	**17.58**	**17.81**	**17.67**
1993 Average	**17.40**	**15.27**	**16.54**	**14.11**	**18.73**	**15.40**	**17.92**	**13.39**	**15.26**	**15.68**	**15.78**
1994 Average	**16.36**	**14.83**	**15.80**	**14.09**	**17.21**	**15.11**	**16.64**	**13.12**	**15.00**	**15.08**	**15.29**
1995 Average	**17.66**	**16.65**	**17.45**	**16.19**	**18.25**	**16.84**	**17.91**	**14.81**	**16.78**	**16.61**	**16.95**
1996 Average	**21.86**	**19.94**	**22.02**	**19.64**	**21.95**	**20.49**	**20.88**	**18.59**	**20.45**	**20.14**	**20.47**
1997 Average	**20.24**	**17.63**	**19.71**	**17.30**	**20.64**	**17.52**	**20.64**	**16.35**	**17.44**	**17.73**	**18.45**
1998 Average	**13.37**	**11.62**	**13.26**	**11.04**	**14.14**	**11.16**	**13.55**	**10.16**	**11.18**	**11.46**	**12.22**
1999 Average	**18.37**	**17.54**	**18.09**	**16.12**	**17.63**	**17.48**	**18.26**	**15.58**	**17.37**	**16.94**	**17.51**
2000 Average	**29.57**	**26.69**	**29.68**	**26.03**	**30.04**	**26.58**	**29.26**	**26.05**	**26.77**	**27.29**	**27.80**
2001 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	30.56	32.89	29.38	30.22	30.79	29.99
February	35.83	30.10	36.79	29.28	35.65	29.25	34.74	30.80	29.85	30.73	31.93
March	32.00	29.93	32.73	26.20	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	24.47	28.23	23.33	24.27	24.86	25.63
May	27.39	24.98	26.85	23.15	28.33	25.36	26.75	23.42	25.11	25.28	25.51
June	28.52	26.91	29.35	25.09	29.49	28.21	29.58	25.06	28.10	27.38	27.33
July	29.60	26.88	30.17	26.08	30.40	27.54	29.83	26.11	27.50	27.58	27.85
August	30.04	27.48	30.24	26.37	31.10	27.08	30.52	26.23	26.93	27.70	28.27
September	27.99	25.18	28.13	23.76	29.04	25.81	28.95	24.09	25.88	25.98	25.85
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	30.51	31.46	27.70	30.14	29.82	27.79
Average	**30.13**	**26.77**	**30.55**	**25.49**	**31.06**	**27.49**	**30.62**	**25.70**	**27.53**	**27.69**	**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	R 33.11	36.41	30.00	R 32.89	R 32.92	R 31.60
April	R 35.29	R 31.20	R 35.30	R 29.82	R 36.65	R 33.56	R 35.11	R 32.39	R 33.29	R 33.76	R 31.97
May	37.60	32.72	37.60	33.08	39.21	35.80	38.15	34.83	34.95	36.05	34.39

[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.

R=Revised. NA=Not available. W=Value withheld to avoid disclosure of individual company data.

Notes: • See Note 3 at end of section. • Values for the current 2 months are preliminary. • Prices through 1980 reflect the period of reporting; prices since then reflect the period of loading. • Annual averages are averages of the monthly prices, including prices not published, weighted by volume. • Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements whereby the actual purchase price is not established at the time the crude oil is acquired for importation into the United States, are not included in the published data until the actual prices have been determined and reported. • U.S. geographic coverage is the 50 States and the District of Columbia.

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

Sources: • **October 1973-September 1977:** Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report." • **October 1977-December 1977:** Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report." • **1978 forward:** EIA, *Petroleum Marketing Monthly,* August 2004, Table 25.

Table 9.4 Motor Gasoline Retail Prices, U.S. City Average

(Cents per Gallon, Including Taxes)

	Leaded Regular	Unleaded Regular	Unleaded Premium	All Types[a]
1973 Average	**38.8**	**NA**	**NA**	**NA**
1974 Average	**53.2**	**NA**	**NA**	**NA**
1975 Average	**56.7**	**NA**	**NA**	**NA**
1976 Average	**59.0**	**61.4**	**NA**	**NA**
1977 Average	**62.2**	**65.6**	**NA**	**NA**
1978 Average	**62.6**	**67.0**	**NA**	**65.2**
1979 Average	**85.7**	**90.3**	**NA**	**88.2**
1980 Average	**119.1**	**124.5**	**NA**	**122.1**
1981 Average[b]	**131.1**	**137.8**	[c] **147.0**	**135.3**
1982 Average	**122.2**	**129.6**	**141.5**	**128.1**
1983 Average	**115.7**	**124.1**	**138.3**	**122.5**
1984 Average	**112.9**	**121.2**	**136.6**	**119.8**
1985 Average	**111.5**	**120.2**	**134.0**	**119.6**
1986 Average	**85.7**	**92.7**	**108.5**	**93.1**
1987 Average	**89.7**	**94.8**	**109.3**	**95.7**
1988 Average	**89.9**	**94.6**	**110.7**	**96.3**
1989 Average	**99.8**	**102.1**	**119.7**	**106.0**
1990 Average	**114.9**	**116.4**	**134.9**	**121.7**
1991 Average	**NA**	**114.0**	**132.1**	**119.6**
1992 Average	**NA**	**112.7**	**131.6**	**119.0**
1993 Average	**NA**	**110.8**	**130.2**	**117.3**
1994 Average	**NA**	**111.2**	**130.5**	**117.4**
1995 Average	**NA**	**114.7**	**133.6**	**120.5**
1996 Average	**NA**	**123.1**	**141.3**	**128.8**
1997 Average	**NA**	**123.4**	**141.6**	**129.1**
1998 Average	**NA**	**105.9**	**125.0**	**111.5**
1999 Average	**NA**	**116.5**	**135.7**	**122.1**
2000 Average	**NA**	**151.0**	**169.3**	**156.3**
2001 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

[a] Also includes types of motor gasoline not shown separately.

[b] In September 1981, the Bureau of Labor Statistics changed the weights used in the calculation of average motor gasoline prices. From September 1981 forward, gasohol is included in the average for all types, and unleaded premium is weighted more heavily.

[c] Based on September through December data only.

NA=Not available.

Notes: • See Note 5 at end of section. • Geographic coverage for 1973-1977 is 56 urban areas. Geographic coverage for 1978 forward is 85 urban areas.

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

Sources: • **Monthly Data:** U.S. Department of Labor, Bureau of Labor Statistics, *Consumer Prices: Energy.* • **Annual Data: 1973**—*Platt's Oil Price Handbook and Oilmanac,* 1974, 51st Edition. **1974 forward**—calculated by the Energy Information Administration as the simple averages of monthly data.

Table 9.5 Refiner Prices of Residual Fuel Oil

(Cents per Gallon, Excluding Taxes)

	Residual Fuel Oil Sulfur Content Less Than or Equal to 1 Percent		Residual Fuel Oil Sulfur Content Greater Than 1 Percent		Average	
	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users
1978 Average	**29.3**	**31.4**	**24.5**	**27.5**	**26.3**	**29.8**
1979 Average	**45.0**	**46.8**	**36.6**	**38.9**	**39.9**	**43.6**
1980 Average	**60.8**	**67.5**	**47.9**	**52.3**	**52.8**	**60.7**
1981 Average	**74.8**	**82.9**	**62.2**	**67.3**	**66.3**	**75.6**
1982 Average	**69.5**	**74.7**	**57.2**	**61.1**	**61.2**	**67.6**
1983 Average	**64.3**	**69.5**	**59.1**	**61.1**	**60.9**	**65.1**
1984 Average	**68.5**	**72.0**	**63.9**	**65.9**	**65.4**	**68.7**
1985 Average	**61.0**	**64.4**	**56.0**	**58.2**	**57.7**	**61.0**
1986 Average	**32.8**	**37.2**	**28.9**	**31.7**	**30.5**	**34.3**
1987 Average	**41.2**	**44.7**	**36.2**	**39.6**	**38.5**	**42.3**
1988 Average	**33.3**	**37.2**	**27.1**	**30.0**	**30.0**	**33.4**
1989 Average	**40.7**	**43.6**	**33.1**	**34.4**	**36.0**	**38.5**
1990 Average	**47.2**	**50.5**	**37.2**	**40.0**	**41.3**	**44.4**
1991 Average	**36.4**	**40.2**	**29.2**	**30.6**	**31.4**	**34.0**
1992 Average	**35.1**	**38.9**	**28.6**	**31.2**	**30.8**	**33.6**
1993 Average	**33.7**	**39.7**	**25.6**	**30.3**	**29.3**	**33.7**
1994 Average	**34.5**	**40.1**	**28.7**	**33.0**	**31.7**	**35.2**
1995 Average	**38.3**	**43.6**	**33.8**	**37.7**	**36.3**	**39.2**
1996 Average	**45.6**	**52.6**	**38.9**	**43.3**	**42.0**	**45.5**
1997 Average	**41.5**	**48.8**	**36.6**	**40.3**	**38.7**	**42.3**
1998 Average	**29.9**	**35.4**	**26.9**	**28.7**	**28.0**	**30.5**
1999 Average	**38.2**	**40.5**	**32.9**	**36.2**	**35.4**	**37.4**
2000 Average	**62.7**	**70.8**	**51.2**	**56.6**	**56.6**	**60.2**
2001 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	79.5	86.1	NA	70.9	72.2	75.4
February	93.9	95.6	74.8	77.0	85.8	83.8
March	88.1	97.4	62.5	72.3	77.2	81.3
April	60.0	78.1	52.2	59.4	56.6	64.5
May	62.6	74.9	53.9	58.8	57.7	61.9
June	62.4	71.9	54.5	60.0	57.6	63.9
July	65.0	74.5	58.4	67.7	61.3	70.1
August	66.9	75.4	60.1	67.3	63.0	69.8
September	62.2	72.0	57.2	61.2	59.2	64.6
October	65.0	70.7	57.2	62.8	60.1	65.2
November	67.0	76.7	58.8	62.2	62.2	66.7
December	66.5	79.3	54.5	60.7	62.2	66.8
Average	**72.4**	**80.5**	**58.8**	**65.2**	**65.6**	**70.0**
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	[R] 75.8	[R] 58.4	[R] 64.8	[R] 64.4	[R] 68.8
May	76.4	79.1	62.8	69.8	68.9	72.8

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,* August 2004, Table 19.

Table 9.6 Refiner Prices of Petroleum Products for Resale

(Cents per Gallon, Excluding Taxes)

	Finished Motor Gasoline[a]	Finished Aviation Gasoline	Kerosene-Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
1978 Average	**43.4**	**53.7**	**38.6**	**40.4**	**36.9**	**36.5**	**23.7**
1979 Average	**63.7**	**72.1**	**66.0**	**62.4**	**56.9**	**57.4**	**29.1**
1980 Average	**94.1**	**112.8**	**86.8**	**86.4**	**80.3**	**80.1**	**41.5**
1981 Average	**106.4**	**125.0**	**101.2**	**106.6**	**97.6**	**97.2**	**46.6**
1982 Average	**97.3**	**122.8**	**95.3**	**101.8**	**91.4**	**91.4**	**42.7**
1983 Average	**88.2**	**117.8**	**85.4**	**89.2**	**81.5**	**80.8**	**48.4**
1984 Average	**83.2**	**116.5**	**83.0**	**91.6**	**82.1**	**80.3**	**45.0**
1985 Average	**83.5**	**113.0**	**79.4**	**87.4**	**77.6**	**77.2**	**39.8**
1986 Average	**53.1**	**91.2**	**49.5**	**60.6**	**48.6**	**45.2**	**29.0**
1987 Average	**58.9**	**85.9**	**53.8**	**59.2**	**52.7**	**53.4**	**25.2**
1988 Average	**57.7**	**85.0**	**49.5**	**54.9**	**47.3**	**47.3**	**24.0**
1989 Average	**65.4**	**95.0**	**58.3**	**66.9**	**56.5**	**56.7**	**24.7**
1990 Average	**78.6**	**106.3**	**77.3**	**83.9**	**69.7**	**69.4**	**38.6**
1991 Average	**69.9**	**100.1**	**65.0**	**72.2**	**62.2**	**61.5**	**34.9**
1992 Average	**67.7**	**99.1**	**60.5**	**63.2**	**57.9**	**59.1**	**32.8**
1993 Average	**62.6**	**96.5**	**57.7**	**60.4**	**54.4**	**57.0**	**35.1**
1994 Average	**59.9**	**93.3**	**53.4**	**61.8**	**50.6**	**52.9**	**32.4**
1995 Average	**62.6**	**97.5**	**53.9**	**58.0**	**51.1**	**53.8**	**34.4**
1996 Average	**71.3**	**105.5**	**64.6**	**71.4**	**63.9**	**65.9**	**46.1**
1997 Average	**70.0**	**106.5**	**61.3**	**65.3**	**59.0**	**60.6**	**41.6**
1998 Average	**52.6**	**91.2**	**45.0**	**46.5**	**42.2**	**44.4**	**28.8**
1999 Average	**64.5**	**100.7**	**53.3**	**55.0**	**49.3**	**54.6**	**34.2**
2000 Average	**96.3**	**133.0**	**88.0**	**96.9**	**88.6**	**89.8**	**59.5**
2001 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	94.6	124.9	89.5	97.8	89.5	89.2	60.5
February	110.0	130.2	102.8	118.6	107.8	108.1	72.8
March	112.6	135.8	101.7	110.3	104.5	102.1	69.1
April	99.7	126.8	82.6	86.1	82.4	86.7	53.9
May	93.8	121.7	75.1	74.5	75.5	79.3	54.3
June	95.6	NA	77.0	77.5	76.8	81.1	57.5
July	98.1	129.1	81.4	82.8	78.9	83.8	55.9
August	110.2	139.7	86.3	88.2	83.7	88.9	58.5
September	102.5	134.9	80.9	82.7	77.4	80.7	56.6
October	98.2	131.3	83.9	91.5	84.2	87.1	59.7
November	94.3	124.4	87.1	89.4	84.2	86.5	58.7
December	93.9	124.4	90.7	97.0	88.6	89.2	64.8
Average	**100.2**	**129.0**	**87.2**	**94.9**	**87.9**	**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	[R] 103.3	104.3	95.5	107.6	60.4
May	143.8	172.8	114.7	119.4	103.9	112.5	65.5

[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,* August 2004, Table 4.

Table 9.7 Refiner Prices of Petroleum Products to End Users

(Cents per Gallon, Excluding Taxes)

	Finished Motor Gasoline[a]	Finished Aviation Gasoline	Kerosene-Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consumer Grade)
1978 Average	**48.4**	**51.6**	**38.7**	**42.1**	**40.0**	**37.7**	**33.5**
1979 Average	**71.3**	**68.9**	**54.7**	**58.5**	**51.6**	**58.5**	**35.7**
1980 Average	**103.5**	**108.4**	**86.8**	**90.2**	**78.8**	**81.8**	**48.2**
1981 Average	**114.7**	**130.3**	**102.4**	**112.3**	**91.4**	**99.5**	**56.5**
1982 Average	**106.0**	**131.2**	**96.3**	**108.9**	**90.5**	**94.2**	**59.2**
1983 Average	**95.4**	**125.5**	**87.8**	**96.1**	**91.6**	**82.6**	**70.9**
1984 Average	**90.7**	**123.4**	**84.2**	**103.6**	**91.6**	**82.3**	**73.7**
1985 Average	**91.2**	**120.1**	**79.6**	**103.0**	**84.9**	**78.9**	**71.7**
1986 Average	**62.4**	**101.1**	**52.9**	**79.0**	**56.0**	**47.8**	**74.5**
1987 Average	**66.9**	**90.7**	**54.3**	**77.0**	**58.1**	**55.1**	**70.1**
1988 Average	**67.3**	**89.1**	**51.3**	**73.8**	**54.4**	**50.0**	**71.4**
1989 Average	**75.6**	**99.5**	**59.2**	**70.9**	**58.7**	**58.5**	**61.5**
1990 Average	**88.3**	**112.0**	**76.6**	**92.3**	**73.4**	**72.5**	**74.5**
1991 Average	**79.7**	**104.7**	**65.2**	**83.8**	**66.5**	**64.8**	**73.0**
1992 Average	**78.7**	**102.7**	**61.0**	**78.8**	**62.7**	**61.9**	**64.3**
1993 Average	**75.9**	**99.0**	**58.0**	**75.4**	**60.2**	**60.2**	**67.3**
1994 Average	**73.8**	**95.7**	**53.4**	**66.0**	**57.2**	**55.4**	**53.0**
1995 Average	**76.5**	**100.5**	**54.0**	**58.9**	**56.2**	**56.0**	**49.2**
1996 Average	**84.7**	**111.6**	**65.1**	**74.0**	**67.3**	**68.1**	**60.5**
1997 Average	**83.9**	**112.8**	**61.3**	**74.5**	**63.6**	**64.2**	**55.2**
1998 Average	**67.3**	**97.5**	**45.2**	**50.1**	**48.2**	**49.4**	**40.5**
1999 Average	**78.1**	**105.9**	**54.3**	**60.5**	**55.8**	**58.4**	**45.8**
2000 Average	**110.6**	**130.6**	**89.9**	**112.3**	**92.7**	**93.5**	**60.3**
2001 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	91.5	121.0	96.3	93.3	57.4
February	122.1	W	101.8	137.4	113.5	110.2	69.6
March	130.0	W	104.4	138.7	110.0	111.7	67.3
April	120.1	W	82.2	127.9	91.0	94.4	52.6
May	110.0	139.8	75.8	NA	80.9	85.7	53.9
June	109.3	145.1	76.8	90.8	81.5	86.5	56.0
July	110.6	151.9	81.8	89.8	82.8	88.5	54.3
August	123.1	162.2	87.4	100.7	86.9	94.2	55.3
September	126.5	158.9	81.9	NA	81.4	88.9	53.5
October	115.0	150.8	84.6	117.2	88.2	92.1	56.4
November	109.5	W	87.9	120.9	89.1	91.8	55.8
December	106.5	146.6	92.8	NA	94.5	93.8	61.3
Average	**115.6**	**149.3**	**87.3**	**122.4**	**93.2**	**94.3**	**57.6**
2004 January	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	[R] 101.9	114.6	67.4
May	157.1	194.9	117.0	111.8	107.2	120.0	74.9

[a] See Note 5 at end of section.

R=Revised. NA=Not available. W=Value withheld to avoid disclosure of individual company data.

Notes: • Sales to end users are those made directly to ultimate consumers, including bulk consumers (such as agriculture, industry, and electric utilities) and residential and commercial consumers. Sales for resale are shown in Table 9.6; they are sales made to purchasers other than ultimate consumers. • Values for the current month are preliminary. • Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at end of section. • Geographic coverage is the 50 States and the District of Columbia.

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

Source: EIA, *Petroleum Marketing Monthly,* August 2004, 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	127.9	127.4	126.5	135.4	132.3	130.9	138.7	146.5	127.5
February	142.5	145.0	138.9	153.8	151.8	149.7	156.1	167.4	147.7
March	147.0	148.4	144.0	153.0	151.4	152.5	160.0	170.9	153.7
April	130.1	132.6	131.9	136.3	131.7	134.0	141.6	146.2	131.4
May	125.2	126.4	125.7	132.8	124.0	127.5	137.1	135.6	124.0
June	124.9	121.4	122.1	129.6	119.9	125.9	130.0	133.9	NA
July	121.3	118.6	120.3	126.5	117.3	120.6	128.2	128.5	105.6
August	120.6	119.1	121.0	127.4	NA	120.8	125.3	NA	108.7
September	121.5	119.5	121.3	126.0	120.6	123.3	129.5	126.2	110.8
October	122.8	120.4	126.0	126.2	121.1	123.7	132.6	132.8	116.7
November	124.2	122.0	126.9	129.8	127.3	129.0	137.5	137.2	121.7
December	129.4	126.1	129.0	134.8	133.1	132.9	142.5	145.0	128.6
Average	**131.5**	**131.3**	**130.9**	**138.7**	**134.5**	**135.5**	**143.6**	**149.2**	**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	R 136.9	133.6	R 138.9	R 142.0	137.4	R 137.7	146.8	151.1	R 135.6
May	138.5	133.7	138.8	145.0	141.7	139.4	148.5	152.3	136.1

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,* August 2004, 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	130.5	131.7	129.4	130.7	130.3	125.0	127.1	122.0
February	161.7	W	159.9	146.4	155.5	144.8	148.5	146.7	134.9	137.0	136.5
March	167.5	W	166.8	142.5	155.9	141.2	148.9	142.4	130.1	140.5	136.7
April	142.3	NA	146.4	126.4	130.9	126.4	131.8	W	115.1	125.5	120.9
May	129.8	NA	136.7	117.4	116.5	115.8	121.0	W	108.1	117.5	114.5
June	125.8	127.6	129.4	119.1	113.7	113.3	114.5	W	105.5	115.3	115.6
July	119.1	124.3	124.4	117.5	109.9	111.5	114.1	W	NA	112.1	114.9
August	117.2	W	125.6	119.0	113.8	114.4	120.0	106.0	114.9	114.2	116.3
September	121.7	W	127.2	119.7	112.3	114.4	120.0	W	114.0	117.3	113.9
October	125.6	W	134.0	121.9	117.2	120.4	122.5	W	116.5	122.1	120.4
November	130.0	W	136.7	122.7	119.3	122.2	125.8	112.7	117.7	122.7	118.9
December	139.8	W	143.2	128.3	128.9	125.3	126.3	123.0	119.9	123.6	119.9
Average	**143.5**	**W**	**146.1**	**130.1**	**130.4**	**128.3**	**132.3**	**120.2**	**120.9**	**128.8**	**122.9**
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	R 148.6	W	153.1	R 130.0	R 136.3	R 140.3	139.8	W	134.2	R 134.1	R 133.0
May	146.7	160.4	150.2	NA	140.5	137.7	141.3	W	NA	NA	134.9

R=Revised. NA=Not available. W=Value withheld to avoid disclosure of individual company data.

Notes: • States are grouped in Tables 9.8a, 9.8b, and 9.8c by geographic region of the country. • Values for the current month are preliminary. • Prices prior to 1983 are Energy Information Administration (EIA) estimates. See Note 6 at end of section.

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

Source: EIA, *Petroleum Marketing Monthly,* August 2004, Table 18.

Table 9.8c No. 2 Distillate Prices to Residences: Selected Western States and U.S. Average

(Cents per Gallon, Excluding Taxes)

	Idaho	Washington	Oregon	Alaska	U.S. Average
1978 Average	**43.6**	**48.6**	**45.8**	**53.2**	**49.0**
1979 Average	**62.1**	**69.7**	**68.0**	**68.2**	**70.4**
1980 Average	**91.6**	**100.8**	**97.3**	**97.8**	**97.4**
1981 Average	**110.4**	**116.5**	**111.4**	**118.0**	**119.4**
1982 Average	**110.4**	**117.6**	**111.6**	**117.4**	**116.0**
1983 Average	**101.8**	**109.0**	**103.6**	**108.8**	**107.8**
1984 Average	**98.5**	**102.6**	**99.3**	**106.9**	**109.1**
1985 Average	**97.2**	**101.1**	**97.1**	**108.3**	**105.3**
1986 Average	**73.8**	**77.5**	**70.4**	**94.9**	**83.6**
1987 Average	**68.8**	**79.5**	**72.5**	**86.5**	**80.3**
1988 Average	**68.8**	**78.5**	**70.9**	**86.9**	**81.3**
1989 Average	**77.8**	**87.4**	**80.2**	**96.4**	**90.0**
1990 Average	**97.4**	**102.9**	**97.0**	**110.1**	**106.3**
1991 Average	**95.1**	**101.6**	**93.3**	**105.0**	**101.9**
1992 Average	**85.7**	**94.0**	**87.6**	**94.1**	**93.4**
1993 Average	**86.2**	**99.9**	**91.8**	**96.1**	**91.1**
1994 Average	**78.9**	**95.0**	**88.7**	**86.5**	**88.4**
1995 Average	**83.9**	**96.2**	**89.4**	**83.4**	**86.7**
1996 Average	**93.3**	**108.0**	**98.9**	**90.9**	**98.9**
1997 Average	**95.3**	**113.9**	**103.1**	**97.3**	**98.4**
1998 Average	**78.4**	**97.8**	**86.1**	**85.2**	**85.2**
1999 Average	**76.2**	**106.5**	**93.8**	**96.6**	**87.6**
2000 Average	**117.0**	**144.5**	**136.8**	**133.7**	**131.1**
2001 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	107.2	137.1	124.5	116.7	133.3
February	126.5	156.1	144.6	121.1	150.7
March	133.9	179.5	158.8	137.4	153.9
April	121.0	154.8	131.2	131.1	134.6
May	111.3	143.0	121.6	123.5	126.7
June	NA	143.3	126.6	128.2	122.0
July	118.6	139.1	132.4	124.5	116.4
August	123.3	144.2	133.6	127.2	117.7
September	111.9	137.0	119.2	NA	118.9
October	NA	135.1	116.9	NA	123.7
November	122.6	141.8	123.5	NA	128.3
December	120.2	147.2	125.6	126.9	134.1
Average	**119.8**	**148.9**	**130.8**	**125.5**	**135.6**
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	R 144.3	R 178.7	R 159.3	143.5	R 141.1
May	162.5	191.5	176.3	155.2	142.1

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.

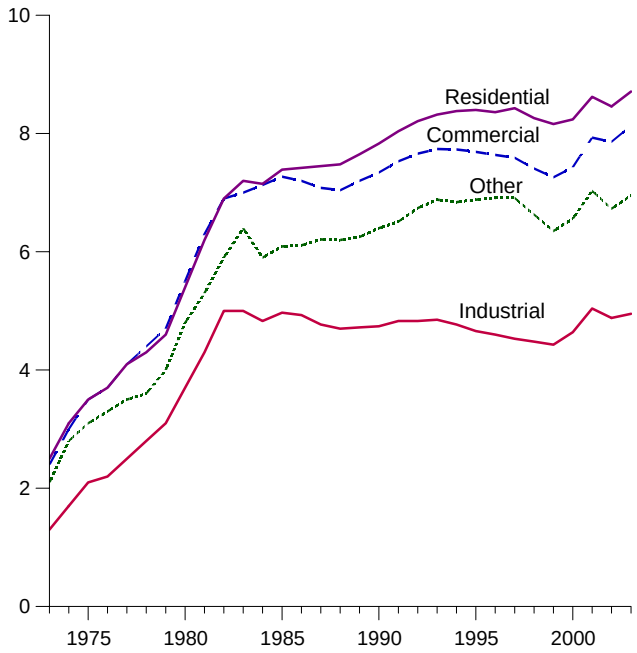
See Note 6 at end of section.

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

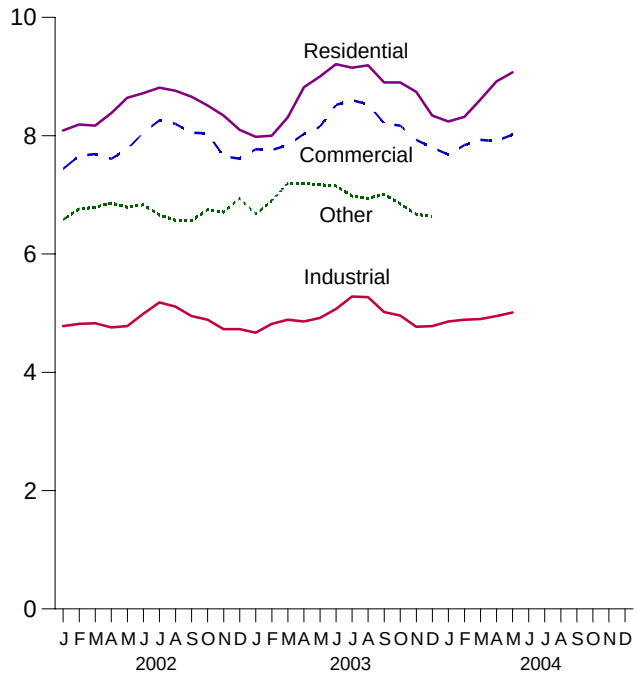
Source: EIA, *Petroleum Marketing Monthly,* August 2004, Table 18.

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

By Sector, 1973-2003



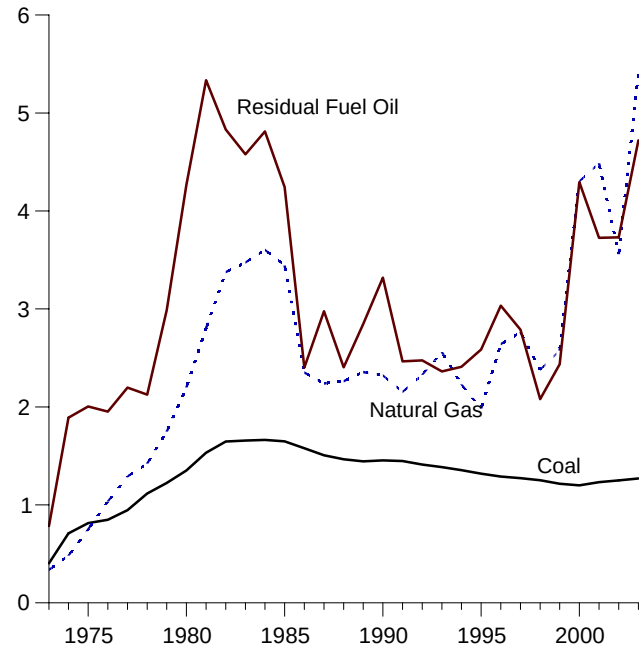
By Sector, Monthly



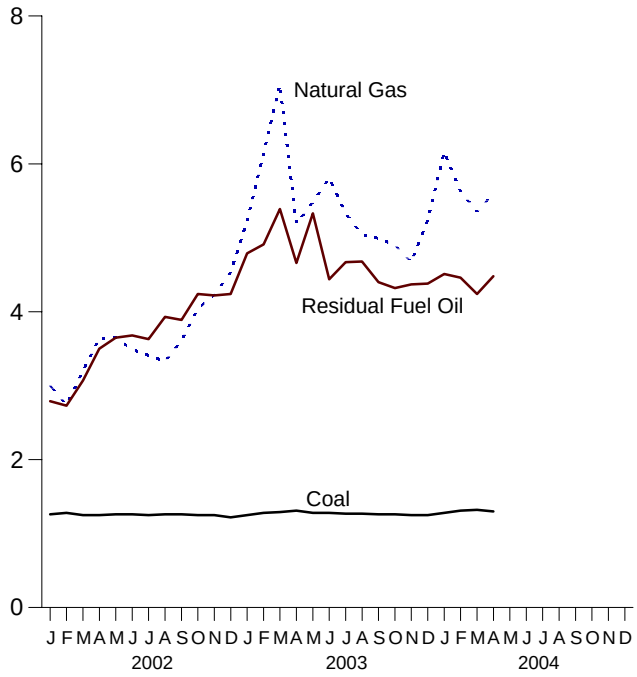
Note: Excludes taxes.
Web Page: http://www.eia.doe.gov/emeu/mer/prices.html.
Source: Table 9.9.

Figure 9.3 Cost of Fossil-Fuel Receipts at Electric Generating Plants
(Dollars per Million Btu)

Costs, 1973-2003



Costs, Monthly



Note: Because vertical scales differ, graphs should not be compared.
Web Page: http://www.eia.doe.gov/emeu/mer/prices.html.
Source: Table 9.10.

Table 9.9 Average Retail Prices of Electricity

(Cents per Kilowatthour, Excluding Taxes)

	Residential	Commercial[a]	Industrial[b]	Transportation[c]	Other[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**	**7.43**	**4.64**	**NA**	**6.56**	**6.81**
2001 Average	**8.62**	**7.93**	**5.04**	**NA**	**7.03**	**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	7.65	4.73	NA	6.71	6.97
December	8.10	7.61	4.73	NA	6.94	6.99
Average	**8.46**	**7.86**	**4.88**	**NA**	**6.73**	**7.21**
2003 January	7.98	7.77	4.67	NA	6.68	7.02
February	8.00	7.76	4.82	NA	6.90	7.02
March	8.31	7.84	4.89	NA	7.19	7.14
April	8.82	8.03	4.86	NA	7.20	7.27
May	9.00	8.15	4.92	NA	7.17	7.40
June	9.21	8.52	5.07	NA	7.15	7.71
July	9.15	8.60	5.28	NA	6.98	7.91
August	9.19	8.53	5.27	NA	6.94	7.89
September	8.90	8.21	5.02	NA	7.01	7.55
October	8.90	8.17	4.96	NA	6.85	7.38
November	8.74	7.93	4.77	NA	6.67	7.18
December	8.34	7.80	4.78	NA	6.64	7.15
Average	**8.71**	**8.13**	**4.95**	**NA**	**6.95**	**7.40**
2004 January	8.24	7.68	4.86	NA	NA	7.17
February	8.32	7.84	4.89	NA	NA	7.21
March	8.61	7.93	4.90	NA	NA	7.27
April	8.92	7.91	4.95	NA	NA	7.30
May	9.07	8.02	5.01	NA	NA	7.42
5-Month Average	**8.59**	**7.87**	**4.92**	**NA**	**NA**	**7.27**
2003 5-Month Average	**8.36**	**7.91**	**4.83**	**NA**	**7.03**	**7.16**
2002 5-Month Average	**8.28**	**7.64**	**4.79**	**NA**	**6.76**	**7.01**

[a] Commercial sector. For 1973-2003, prices exclude public street and highway lighting, interdepartmental sales, and other sales to public authorities.

[b] Industrial sector. For 1973-2003, 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.

Notes: • Beginning in 2004, 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. See Note 7 at end of section. • Geographic coverage is the 50 States and the District of Columbia.

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

Sources: • **1973-September 1977:** Federal Power Commission, Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • **October 1977-February 1980:** Federal Energy Regulatory Commission (FERC), Form FPC-5, "Monthly Statement of Electric Operating Revenues and Income." • **March 1980-1982:** FERC, Form FERC-5, "Electric Utility Company Monthly Statement." • **1983:** Energy Information Administration (EIA), Form EIA-826, "Electric Utility Company Monthly Statement." • **1984-1989:** EIA, Form EIA-861, "Annual Electric Utility Report." • **1990 forward:** EIA, *Electric Power Monthly,* August 2004, Table 5.3.

Table 9.10 Cost of Fossil-Fuel Receipts at Electric Generating Plants

(Dollars per Million Btu)

	Coal	Petroleum				Natural Gas[d]	All Fossil Fuels[e]
		Residual Fuel Oil[a]	Distillate Fuel Oil[b]	Petroleum Coke	Total[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	4.79	6.39	.65	4.37	5.23	2.09
February	1.28	4.91	7.77	.63	4.90	6.14	2.36
March	1.29	R 5.39	8.29	.72	R 5.39	7.07	R 2.54
April	1.31	4.66	6.55	.52	4.34	R 5.19	2.17
May	1.28	5.33	6.06	.65	4.74	5.48	2.27
June	1.28	4.44	5.96	.66	4.27	5.81	2.30
July	1.27	4.67	6.05	.79	4.28	5.33	2.42
August	1.27	4.68	6.43	.69	4.06	5.04	2.33
September	1.26	4.40	6.08	.75	3.75	4.99	2.15
October	1.26	4.32	6.49	.69	3.81	4.90	2.04
November	1.25	4.37	6.32	.70	3.51	4.67	1.95
December	1.25	4.38	6.61	.75	3.90	5.24	2.10
Average	**1.27**	**R 4.72**	**6.70**	**.69**	**R 4.31**	**5.40**	**R 2.22**
2004 January	1.28	4.51	7.27	.74	4.34	6.16	2.32
February	1.31	4.46	7.29	.75	4.32	5.63	2.36
March	1.32	4.24	6.67	.82	3.87	5.35	2.23
April	1.30	4.48	7.34	.75	3.96	5.60	2.32
4-Month Average	**1.30**	**4.42**	**7.14**	**.77**	**4.14**	**5.68**	**2.31**
2003 4-Month Average	**1.28**	**4.97**	**7.36**	**.63**	**4.81**	**5.91**	**2.29**
2002 4-Month Average	**1.26**	**3.08**	**4.61**	**.85**	**2.75**	**3.16**	**1.50**

[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 1973-2001 and 2003, data also include a small amount of blast furnace gas and other gases derived from fossil fuels.

[e] Includes a small amount of blast furnace gas and other gases derived from fossil fuels.

[f] Through 2001, data are for electric utilities only. Beginning in 2002, data also include independent power producers, and electric generating plants in the commercial and industrial sectors. See Note 8 at end of section for plant coverage.

R=Revised. NA=Not available.

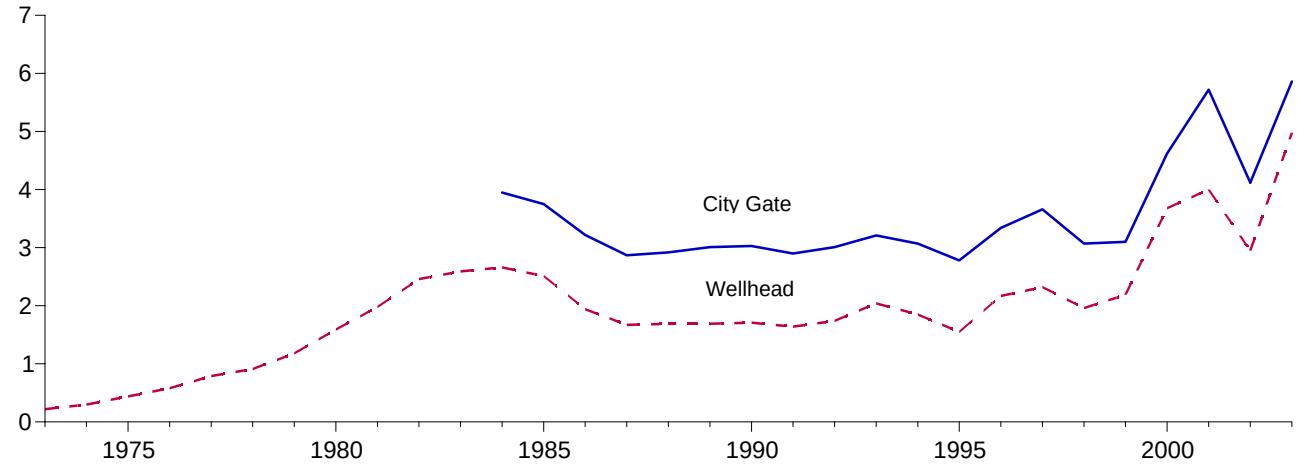
Notes: • Receipts are purchases of fuel. • Yearly costs are averages of monthly values, weighted by quantities in Btu. • Geographic coverage is the 50 States and the District of Columbia.

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

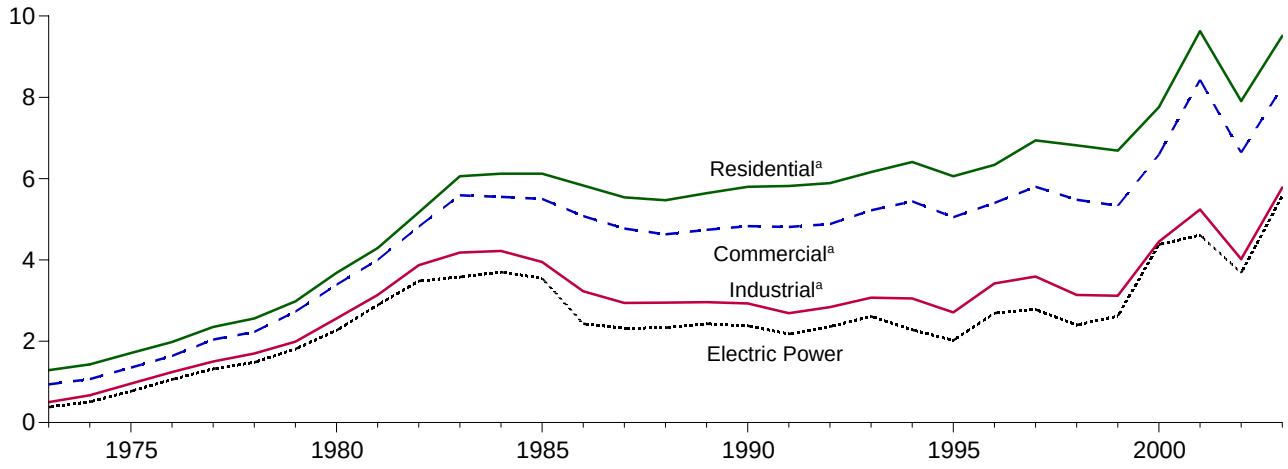
Sources: See end of section.

Figure 9.4 Natural Gas Prices
(Dollars per Thousand Cubic Feet)

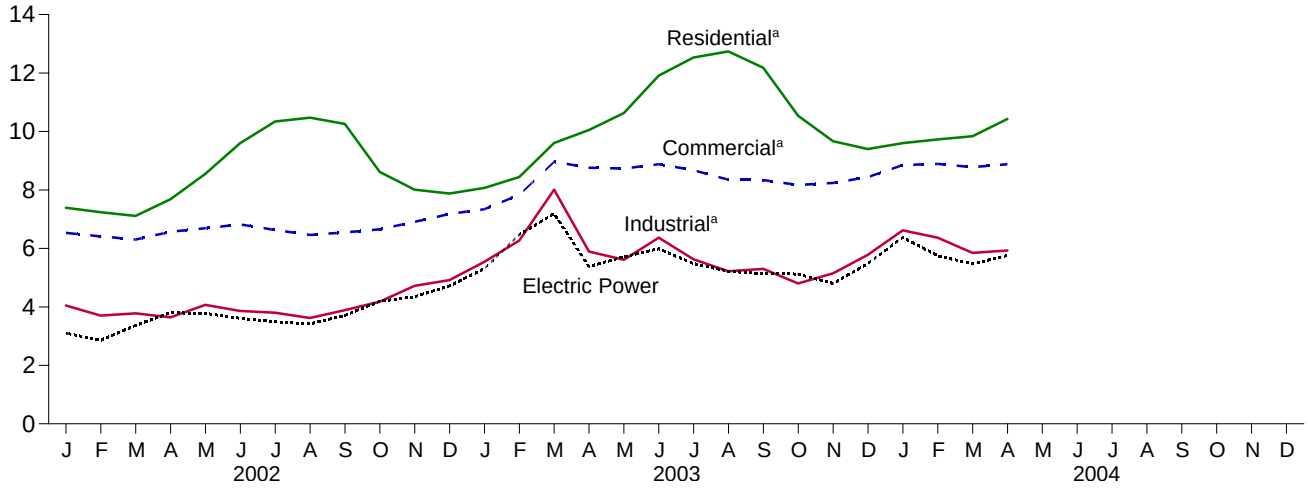
Selected Prices, 1973-2003



Consuming Sectors, 1973-2003



Consuming Sectors, Monthly



[a]Includes taxes.
Note: Because vertical scales differ, graphs should not be compared.

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

Table 9.11 Natural Gas Prices

(Dollars per Thousand Cubic Feet)

	Wellhead Price	City Gate Price	Consuming Sectors[a]							
			Residential		Commercial[b]		Industrial[c]		Electric Power[d]	
			Price[e]	Percentage of Sector[f]	Price[e]	Percentage of Sector[f]	Price[e]	Percentage of Sector[f]	Price	Percentage of Sector[f]
1973 Average	**0.22**	**NA**	**1.29**	**NA**	**0.94**	**NA**	**0.50**	**NA**	**0.38**	**92.1**
1974 Average	**.30**	**NA**	**1.43**	**NA**	**1.07**	**NA**	**.67**	**NA**	**.51**	**92.7**
1975 Average	**.44**	**NA**	**1.71**	**NA**	**1.35**	**NA**	**.96**	**NA**	**.77**	**96.1**
1976 Average	**.58**	**NA**	**1.98**	**NA**	**1.64**	**NA**	**1.24**	**NA**	**1.06**	**96.2**
1977 Average	**.79**	**NA**	**2.35**	**NA**	**2.04**	**NA**	**1.50**	**NA**	**1.32**	**97.1**
1978 Average	**.91**	**NA**	**2.56**	**NA**	**2.23**	**NA**	**1.70**	**NA**	**1.48**	**98.0**
1979 Average	**1.18**	**NA**	**2.98**	**NA**	**2.73**	**NA**	**1.99**	**NA**	**1.81**	**96.1**
1980 Average	**1.59**	**NA**	**3.68**	**NA**	**3.39**	**NA**	**2.56**	**NA**	**2.27**	**96.9**
1981 Average	**1.98**	**NA**	**4.29**	**NA**	**4.00**	**NA**	**3.14**	**NA**	**2.89**	**97.6**
1982 Average	**2.46**	**NA**	**5.17**	**NA**	**4.82**	**NA**	**3.87**	**85.1**	**3.48**	**92.6**
1983 Average	**2.59**	**NA**	**6.06**	**NA**	**5.59**	**NA**	**4.18**	**80.7**	**3.58**	**93.9**
1984 Average	**2.66**	**3.95**	**6.12**	**NA**	**5.55**	**NA**	**4.22**	**74.7**	**3.70**	**94.4**
1985 Average	**2.51**	**3.75**	**6.12**	**NA**	**5.50**	**NA**	**3.95**	**68.8**	**3.55**	**94.0**
1986 Average	**1.94**	**3.22**	**5.83**	**NA**	**5.08**	**NA**	**3.23**	**59.8**	**2.43**	**91.7**
1987 Average	**1.67**	**2.87**	**5.54**	**NA**	**4.77**	**93.1**	**2.94**	**47.4**	**2.32**	**91.6**
1988 Average	**1.69**	**2.92**	**5.47**	**NA**	**4.63**	**90.7**	**2.95**	**42.6**	**2.33**	**89.6**
1989 Average	**1.69**	**3.01**	**5.64**	**99.9**	**4.74**	**89.1**	**2.96**	**36.9**	**2.43**	**88.6**
1990 Average	**1.71**	**3.03**	**5.80**	**99.3**	**4.83**	**86.6**	**2.93**	**35.2**	**2.38**	**89.2**
1991 Average	**1.64**	**2.90**	**5.82**	**99.2**	**4.81**	**85.1**	**2.69**	**32.7**	**2.18**	**93.2**
1992 Average	**1.74**	**3.01**	**5.89**	**99.1**	**4.88**	**83.2**	**2.84**	**30.3**	**2.36**	**93.2**
1993 Average	**2.04**	**3.21**	**6.16**	**99.1**	**5.22**	**83.9**	**3.07**	**29.7**	**2.61**	**93.4**
1994 Average	**1.85**	**3.07**	**6.41**	**99.1**	**5.44**	**79.3**	**3.05**	**25.5**	**2.28**	**93.5**
1995 Average	**1.55**	**2.78**	**6.06**	**99.1**	**5.05**	**76.7**	**2.71**	**24.5**	**2.02**	**92.0**
1996 Average	**2.17**	**3.34**	**6.34**	**99.1**	**5.40**	**77.6**	**3.42**	**19.4**	**2.69**	**92.2**
1997 Average	**2.32**	**3.66**	**6.94**	**98.8**	**5.80**	**70.8**	**3.59**	**18.1**	**2.78**	**91.0**
1998 Average	**1.96**	**3.07**	**6.82**	**97.7**	**5.48**	**67.0**	**3.14**	**16.1**	**2.40**	**82.5**
1999 Average	**2.19**	**3.10**	**6.69**	**95.2**	**5.33**	**66.1**	**3.12**	**18.8**	**2.62**	**75.3**
2000 Average	**3.68**	**4.62**	**7.76**	**92.6**	**6.59**	**63.9**	**4.45**	**19.8**	**4.38**	**64.3**
2001 Average	**4.00**	**5.72**	**9.63**	**92.4**	**8.43**	**66.0**	**5.24**	**20.8**	**4.61**	**41.9**
2002 January	2.50	3.79	7.39	NA	6.53	80.8	4.05	20.1	[d]3.10	[d]80.8
February	2.19	3.76	7.24	NA	6.41	81.2	3.70	20.4	2.86	87.4
March	2.40	3.84	7.11	NA	6.30	82.3	3.78	20.0	3.37	86.1
April	2.94	4.21	7.68	NA	6.57	77.8	3.64	26.1	3.80	84.4
May	2.94	4.07	8.55	NA	6.69	74.1	4.07	23.8	3.78	81.8
June	2.96	4.15	9.60	NA	6.82	74.4	3.86	25.4	3.61	78.7
July	2.92	3.95	10.34	NA	6.63	72.7	3.80	23.8	3.49	74.5
August	2.76	3.67	10.47	NA	6.46	73.3	3.62	22.4	3.42	78.6
September	2.97	3.99	10.26	NA	6.55	71.0	3.89	22.4	3.71	79.1
October	3.24	4.32	8.62	NA	6.65	74.7	4.18	21.6	4.19	81.0
November	3.59	4.65	8.01	NA	6.91	79.5	4.72	21.7	4.35	84.9
December	3.96	4.74	7.88	NA	7.18	80.7	4.92	23.0	4.72	88.2
Average	**2.95**	**4.12**	**7.91**	**91.4**	**6.64**	**78.4**	**4.02**	**22.5**	**3.68**	**81.1**
2003 January	[E]4.47	5.31	8.07	NA	7.34	79.1	5.54	21.2	5.31	83.8
February	[E]5.45	5.86	8.44	NA	7.83	79.6	6.27	21.8	6.47	83.5
March	[E]6.69	7.60	9.61	NA	8.96	80.0	8.01	21.4	7.19	86.1
April	[E]4.71	5.61	10.05	NA	8.76	[R]76.8	5.89	21.2	5.38	89.8
May	[E]4.97	5.67	10.63	NA	8.73	[R]73.7	5.61	20.5	5.71	88.5
June	[E]5.35	6.40	11.91	NA	8.88	[R]72.6	6.37	20.0	5.99	83.0
July	[E]4.91	5.82	12.53	NA	8.68	[R]71.5	5.63	25.7	5.48	79.1
August	[E]4.72	5.50	12.74	NA	8.35	[R]73.6	5.22	[R]23.7	5.22	78.1
September	[E]4.58	5.58	12.18	NA	8.34	[R]72.7	[R]5.30	23.1	5.14	85.7
October	[E]4.43	5.25	10.54	NA	8.17	[R]73.1	4.80	23.3	5.12	78.5
November	[E]4.34	5.50	9.67	NA	8.24	77.2	5.15	22.3	4.80	83.6
December	[E]5.08	5.90	9.40	NA	8.44	80.0	5.78	[R]23.3	5.48	93.1
Average	[E]**4.98**	**5.86**	**9.51**	[E]**92.1**	**8.26**	[R]**77.4**	**5.78**	**22.3**	**5.57**	**83.6**
2004 January	[E]5.53	6.40	9.60	NA	8.85	80.5	[R]6.62	22.0	6.38	92.4
February	[E]5.15	6.34	9.73	NA	8.89	80.8	[R]6.37	[R]23.0	5.75	89.7
March	[E]4.97	6.22	9.84	NA	[R]8.78	[R]78.4	5.85	22.2	5.47	93.4
April	[E]5.20	6.33	10.43	NA	8.88	76.3	5.93	22.9	5.76	95.9
4-Month Average	[E]**5.21**	**6.34**	**9.80**	**NA**	**8.85**	**79.4**	**6.21**	**22.5**	**NA**	**NA**
2003 4-Month Average	[E]**5.33**	**6.03**	**8.82**	**NA**	**8.09**	**79.2**	**6.41**	**21.4**	**6.05**	**NA**
2002 4-Month Average	**2.51**	**3.87**	**7.33**	**NA**	**6.45**	**80.7**	**3.79**	**21.6**	**3.30**	**NA**

[a] See Note 9 at end of section.

[b] Commercial sector, including commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See note at end of Section 7.

[c] Industrial sector, including industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See note at end of Section 7.

[d] The electric power sector comprises electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 2001, data are for electric utilities only; beginning in 2002, data also include independent power producers. See Note 8 at end of section for plant coverage.

[e] Includes taxes.

[f] The percentage of the sector's consumption in Table 4.4 for which price data are available.

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

Notes: • Prices are for natural gas, 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. company-owned refineries in the Caribbean. Landed costs do not include supplemental fees.

Note 4. Beginning with January 1981, refiner acquisition costs of crude oil are from data collected on Energy Information Administration (EIA) Form EIA-14, "Refiners' Monthly Cost Report." Those costs were previously published from data collected on Economic Regulatory Administration (ERA) Form ERA-49, "Domestic Crude Oil Entitlements Program Refiners Monthly Report." Form ERA-49 was discontinued with the decontrol of crude oil on January 28, 1981. Crude oil purchases and costs are defined for Form EIA-14 in accordance with conventions used for Form ERA-49. The respondents for the two forms are also essentially the same. However, due to possible different interpretations of the filing requirements and a different method for handling prior period adjustments, care must be taken when comparing the data collected on the two forms.

The refiner acquisition cost of crude oil is the average price paid by refiners for crude oil booked into their refineries in accordance with accounting procedures generally accepted and consistently and historically applied by the refiners concerned. Domestic crude oil is that oil produced in the United States or from the outer continental shelf as defined in 43 USC Section 1331. Imported crude oil is either that oil reported on Form ERA-51, "Transfer Pricing Report," or any crude oil that is not domestic oil. The composite cost is the weighted average of domestic and imported crude oil costs.

Crude oil costs and volumes reported on Form ERA-49 excluded unfinished oils but included the Strategic Petroleum Reserve (SPR). Crude oil costs and volumes reported on Federal Energy Administration (FEA) Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report," included unfinished oils but excluded SPR. Imported averages derived from Form ERA-49 exclude oil purchased for SPR, whereas the composite averages derived from Form ERA-49 include SPR. None of the prices derived from Form EIA-14 include either unfinished oils or SPR.

Note 5. Several different series of motor gasoline prices are published in this section. U.S. city average retail prices of motor gasoline are calculated monthly by the Bureau of Labor Statistics during the development of the Consumer Price Index (CPI). These prices include all Federal, State, and local taxes paid at the time of sale. From 1974-1977, prices were collected in 56 urban areas. From 1978 forward, prices were collected from a new sample of service stations in 85 urban areas selected to represent all urban consumers-about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-serve).

Refiner prices of finished motor gasoline for resale and to end users are determined by the EIA in a monthly survey of refiners and gas plant operators (Form EIA-782A). The prices do not include any Federal, State, or local taxes paid at the time of sale. Estimates of prices prior to January 1983 are based on Form FEA-P302-M-1/EIA-460, "Petroleum Industry Monthly Report for Product Prices," and also exclude all Federal, State, or local taxes paid at the time of sale. Sales for resale are those made to purchasers who are other-than-ultimate consumers. Sales to end users are sales made directly to the consumer of the product, including bulk consumers (such as agriculture, industry, and utilities) and residential and commercial consumers.

Note 6. Starting in January 1983, Form EIA-782, "Monthly Petroleum Product Sales Report," replaced 10 previous surveys. Every attempt was made to continue the most important price series. However, prices published through December 1982 and those published since January 1983 do not necessarily form continuous data series due to changes in survey forms, definitions, instructions, populations, samples, processing systems, and statistical procedures. To provide historical data, continuous series were generated for annual data 1978–1982 and for monthly data 1981 and 1982 by estimating the prices that would have been published had Form EIA-782 survey and system been in operation at that time. This form of estimation was performed after detailed adjustment was made for product and sales type matching and for discontinuity due to other factors. An important difference between the previous and present prices is the distinction between wholesale and resale and between retail and end user. The resale category continues to include sales among resellers. However, sales to bulk consumers, such as utility, industrial, and commercial accounts previously included in the wholesale category, are now counted as

made to end users. The end-user category continues to include retail sales through company-owned and operated outlets but also includes sales to the bulk consumers such as agriculture, industry, and electric utilities. Additional information may be found in "Estimated Historic Time Series for the EIA-782," a feature article reprinted from the December 1983 [3] *Petroleum Marketing Monthly*, published by EIA.

Note 7. Preliminary monthly data are based on submissions from over 250 publicly and privately owned electric utilities reporting on Form EIA-826, "Monthly Electric Utility Sales and Revenue Report With State Distributions." These utilities are statistically chosen as a cutoff sample from more than 3,000 electric utilities that report annually on Form EIA-861, "Annual Electric Utility Report." Preliminary annual values are the sum of the monthly revenues divided by the sum of the monthly sales. When final Form EIA-861 annual data become available each year, their ratios to the preliminary Form EIA-826 values are used to derive adjusted final monthly values. Prior to January 1986, only privately owned electric utilities were included in the monthly survey and the sample was chosen using stratification techniques through December 1992.

Note 8. Data for 1973–1982 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units combined totaled 25 megawatts or greater. From 1974–1982, peaking units were included in the data and counted towards the 25-megawatt-or-greater total. Data for 1983–1990 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units combined totaled 50 megawatts or greater. Data for 1991–2001 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units and combined-cycle units together totaled 50 megawatts or greater. Data for 2002 forward cover the aforementioned regulated generating plants plus unregulated generating plants (independent power producers, as well as combined-heat-and-power generating plants and electricity-only plants in the commercial and industrial sector) whose total facility fossil-fueled nameplate generating capacity is 50 or more megawatts, regardless of unit type.

Note 9. Natural gas prices are intended to include all taxes. Instructions on the data collection forms specifically direct that all Federal, State, and local taxes, surcharges, and/or adjustments billed to consumers are to be included. However, sales and other taxes itemized on more than 3,000 consumers' bills are sometimes excluded by the reporting utilities. Delivered-to-consumers prices for 1987 forward represent natural gas delivered and sold to residential, commercial, industrial, and electric power consumers. They do not include the price of natural gas delivered to industrial and commercial consumers on behalf of third parties. Volumes of natural gas delivered on behalf of third parties are included in the consumption data shown in Table 4.4. Additional information is available in the EIA *Natural Gas Monthly*, Appendix C.

Table 9.1 Sources

Domestic First Purchase Price
1973–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*, "Crude Petroleum and Petroleum Products" chapter.
1977: Federal Energy Administration (FEA), based on Form FEA-P124, "Domestic Crude Oil Purchaser's Monthly Report."
1978 forward: Energy Information Administration (EIA), *Petroleum Marketing Monthly*, August 2004, 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*, August 2004, 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*, August 2004, 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*, August 2004, 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*, August 2004, 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:
1973–1997: Energy Information Administration (EIA), *Natural Gas Annual 2000*, Table 96.
1998 forward: EIA, *Natural Gas Monthly*, July 2004, 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;
1993–1997: EIA, *Natural Gas Monthly*, December 1999, Table 4.
1998 forward: EIA, *Natural Gas Monthly*, July 2004, Table 4.

Residential, Commercial, and Industrial Sector Prices:
1973–1997: EIA, *Natural Gas Annual 2001*, Table 96.
1998 forward: EIA, *Natural Gas Monthly*, July 2004, 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:
1973–1997: EIA, *Natural Gas Annual 2000*, Table 96.
1998–2001: EIA, *Natural Gas Monthly*, December 2003, Table 4.
2002 and 2003: Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report on Cost and Quality of Fuels for Electric Utility Plants," and EIA, Form EIA-423 "Monthly Cost and Quality of Fuels for Electric Plants Report."

Percentage of Electric Power Sector:
1973–2001: Calculated by EIA as the quantity of natural gas receipts reported on FERC Form-423, "Monthly Report on Cost and Quantity of Fuels for Electric Utility Plants" (and predecessor forms) divided by the quantity of natural gas consumed in the electric power sector, as shown on *Monthly Energy Review* Table 7.3b. Natural gas receipts, 1973–1975: Feder al 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 and 2003: Calculated by EIA as the quantity of natural gas receipts reported on FERC Form-423, "Monthly Report on Cost and Quantity of Fuels for Electric Utility Plants" (and published in EIA, *Electric Power Monthly*, August 2004, 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 7.3b.

Section 10. Renewable Energy

Sources. The Nation consumed 6.2 quadrillion Btu of renewable energy in 2003, accounting for 6 percent[1] of total energy consumption during the year. At 2.8 quadrillion Btu, conventional hydroelectric power was the largest component of the renewable energy total, measuring 45 percent of the total. Wood was the next largest component at 2.1 quadrillion Btu and 34 percent of the total. Waste, the third largest component of the renewable energy total, contributed 0.6 quadrillion Btu in 2003, a 9-percent share of the total.

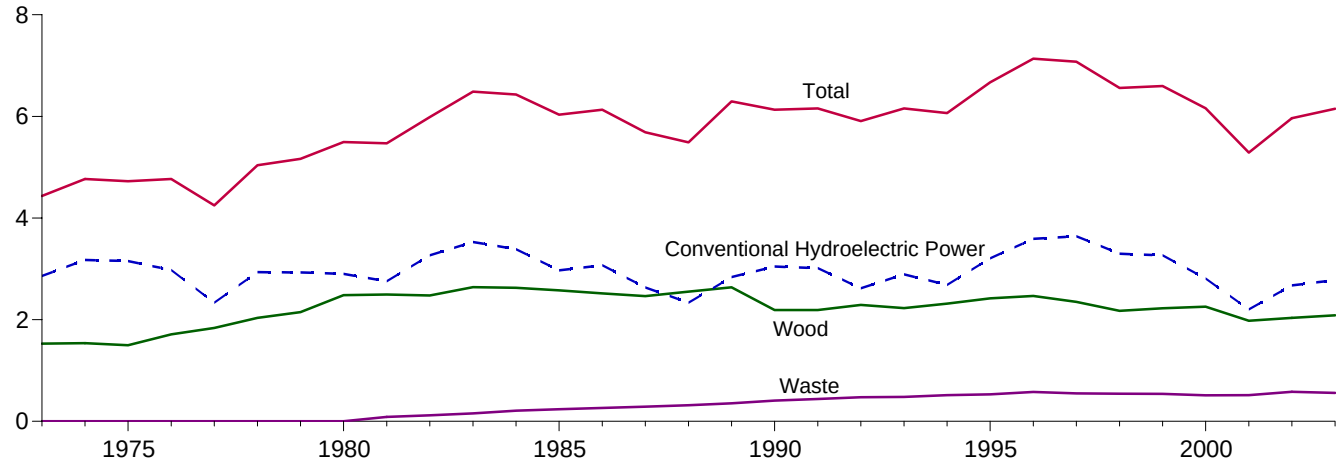
Electric Power Sector. In 2003, the electric power sector consumed 3.6 quadrillion Btu of renewable energy resources, 1.1 quadrillion Btu more than all of the end-use sectors combined and a share of 59 percent of the total. Conventional hydroelectric power recorded 2.7 quadrillion Btu in 2003, for 75 percent of the electric power sector total. Waste, at 0.3 quadrillion Btu, was the second largest source consumed for electricity generation, followed by geothermal and wood.

End-Use Sectors. Of the end-use sectors, the industrial sector was the largest consumer of renewable energy in 2003. Industrial facilities used 1.8 quadrillion Btu of renewable energy in 2003, 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 2003, alcohol fuel use was 0.2 quadrillion Btu. The commercial sector used 0.1 quadrillion Btu in 2003, 45 percent of it as waste and 39 percent as wood.

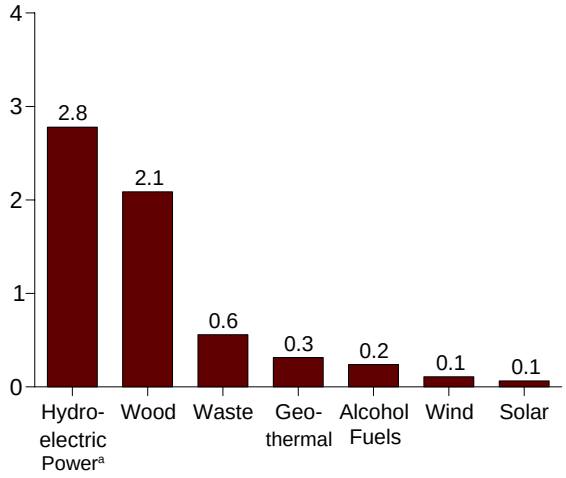
[1]A small amount of alcohol fuel (ethanol blended into motor gasoline) is both fossil fuel (as petroleum) and renewable energy and is counted in both those subtotals but counted only once in total energy consumption.

Figure 10.1 Renewable Energy Consumption
(Quadrillion Btu)

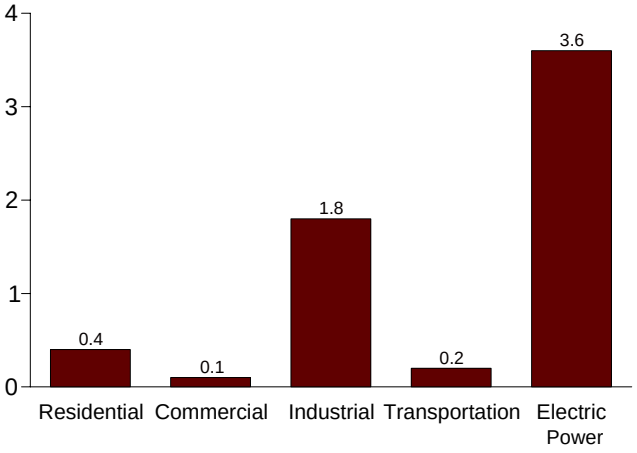
Total and Major Sources, 1973-2003



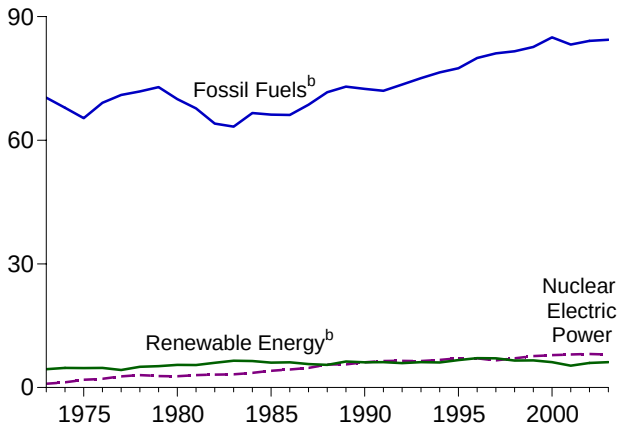
By Source, 2003



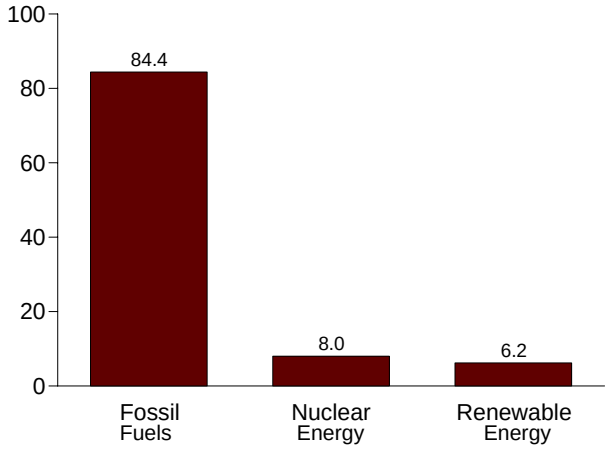
By Sector, 2003



Compared With Other Resources, 1973-2003



Compared With Other Resources, 2003



[a]Conventional hydroelectric power.
[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 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[a]	Wood[b]	Waste[c]	Alcohol Fuels[d]	Geothermal[e]	Solar[f]	Wind[g]	Total
1973 Total	**2,861**	**1,527**	**2**	**NA**	**43**	**NA**	**NA**	**4,433**
1974 Total	**3,177**	**1,538**	**2**	**NA**	**53**	**NA**	**NA**	**4,769**
1975 Total	**3,155**	**1,497**	**2**	**NA**	**70**	**NA**	**NA**	**4,723**
1976 Total	**2,976**	**1,711**	**2**	**NA**	**78**	**NA**	**NA**	**4,768**
1977 Total	**2,333**	**1,837**	**2**	**NA**	**77**	**NA**	**NA**	**4,249**
1978 Total	**2,937**	**2,036**	**1**	**NA**	**64**	**NA**	**NA**	**5,039**
1979 Total	**2,931**	**2,150**	**2**	**NA**	**84**	**NA**	**NA**	**5,166**
1980 Total	**2,900**	**2,483**	**2**	**NA**	**110**	**NA**	**NA**	**5,494**
1981 Total	**2,758**	**2,495**	**88**	**7**	**123**	**NA**	**NA**	**5,471**
1982 Total	**3,266**	**2,477**	**119**	**19**	**105**	**NA**	**NA**	**5,985**
1983 Total	**3,527**	**2,639**	**157**	**35**	**129**	**NA**	**(s)**	**6,488**
1984 Total	**3,386**	**2,629**	**208**	**43**	**165**	**(s)**	**(s)**	**6,431**
1985 Total	**2,970**	**2,576**	**236**	**52**	**198**	**(s)**	**(s)**	**6,033**
1986 Total	**3,071**	**2,518**	**263**	**60**	**219**	**(s)**	**(s)**	**6,132**
1987 Total	**2,635**	**2,465**	**289**	**69**	**229**	**(s)**	**(s)**	**5,687**
1988 Total	**2,334**	**2,552**	**315**	**70**	**217**	**(s)**	**(s)**	**5,489**
1989 Total	**2,837**	**2,637**	**354**	**71**	**317**	**55**	**22**	**6,294**
1990 Total	**3,046**	**2,191**	**408**	**63**	**336**	**60**	**29**	**6,133**
1991 Total	**3,016**	**2,190**	**440**	**73**	**346**	**63**	**31**	**6,158**
1992 Total	**2,617**	**2,290**	**473**	**83**	**349**	**64**	**30**	**5,907**
1993 Total	**2,892**	**2,227**	**479**	**97**	**364**	**66**	**31**	**6,156**
1994 Total	**2,683**	**2,315**	**515**	**109**	**338**	**69**	**36**	**6,065**
1995 Total	**3,205**	**2,420**	**531**	**117**	**294**	**70**	**33**	**6,669**
1996 Total	**3,590**	**2,467**	**577**	**84**	**316**	**71**	**33**	**7,137**
1997 Total	**3,640**	**2,350**	**551**	**106**	**325**	**70**	**34**	**7,075**
1998 Total	**3,297**	**2,175**	**542**	**117**	**328**	**70**	**31**	**6,561**
1999 Total	**3,268**	**2,224**	**540**	**122**	**331**	**69**	**46**	**6,599**
2000 Total	**2,811**	**2,257**	**511**	**139**	**317**	**66**	**57**	**6,158**
2001 Total	**2,201**	**1,980**	**514**	**147**	**311**	**65**	**68**	**5,286**
2002 January	221	173	49	13	29	5	8	497
February	204	152	43	12	26	5	7	449
March	213	163	49	12	28	5	9	478
April	245	162	46	12	25	5	10	506
May	270	171	48	14	28	6	11	547
June	285	163	49	12	26	6	11	552
July	258	180	52	15	29	6	9	547
August	213	167	51	14	28	6	10	490
September	173	175	48	15	27	5	7	450
October	174	184	48	17	28	5	7	464
November	200	170	48	20	27	5	7	476
December	219	178	50	19	28	5	8	506
Total	**2,675**	**2,036**	**581**	**174**	**328**	**64**	**105**	**5,963**
2003 January	199	165	43	17	27	5	6	462
February	198	153	40	20	25	5	7	446
March	246	177	47	17	27	5	10	529
April	253	169	46	20	25	5	11	528
May	302	167	46	19	25	6	9	574
June	288	170	46	19	26	6	10	564
July	249	178	50	20	26	6	9	537
August	231	174	48	21	26	6	8	513
September	184	165	44	18	26	5	8	451
October	185	187	49	21	26	5	9	482
November	199	199	48	24	26	5	10	511
December	244	186	51	25	29	5	11	552
Total	**2,779**	**2,087**	**559**	**239**	**314**	**63**	**108**	**6,150**
2004 January	235	185	48	24	30	5	9	536
February	214	170	43	22	28	5	10	491
March	233	175	46	24	28	5	12	524
April	[R] 213	176	[R] 46	24	27	5	[R] 12	[R] 504
May	242	170	50	25	28	6	17	538
5-Month Total	**1,137**	**877**	**232**	**120**	**140**	**26**	**60**	**2,593**
2003 5-Month Total	**1,199**	**830**	**222**	**92**	**129**	**26**	**43**	**2,540**
2002 5-Month Total	**1,153**	**821**	**234**	**62**	**136**	**26**	**45**	**2,477**

[a] Hydroelectricity generated by pumped storage is not included in renewable energy.
[b] Wood, black liquor, and other wood waste.
[c] Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.
[d] Ethanol blended into motor gasoline.
[e] Geothermal electricity net generation, heat pump, and direct use energy.
[f] Solar thermal and photovoltaic electricity net generation, and solar thermal direct use energy.
[g] Wind electricity net generation.
R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.
Web Page: http://www.eia.doe.gov/emeu/mer/renew.html.
Sources: Tables 10.2a, 10.2b, and 10.2c.

Table 10.2a Estimated Renewable Energy Consumption: Residential and Commercial Sectors

(Trillion Btu)

	Residential Sector				Commercial Sector[a]				
	Wood[b]	Geothermal[c]	Solar[d]	Total	Hydropower[e]	Wood[b]	Waste[f]	Geothermal[c]	Total
1973 Total	**354**	**NA**	**NA**	**354**	**NA**	**7**	**NA**	**NA**	**7**
1974 Total	**371**	**NA**	**NA**	**371**	**NA**	**7**	**NA**	**NA**	**7**
1975 Total	**425**	**NA**	**NA**	**425**	**NA**	**8**	**NA**	**NA**	**8**
1976 Total	**482**	**NA**	**NA**	**482**	**NA**	**9**	**NA**	**NA**	**9**
1977 Total	**542**	**NA**	**NA**	**542**	**NA**	**10**	**NA**	**NA**	**10**
1978 Total	**622**	**NA**	**NA**	**622**	**NA**	**12**	**NA**	**NA**	**12**
1979 Total	**728**	**NA**	**NA**	**728**	**NA**	**14**	**NA**	**NA**	**14**
1980 Total	**859**	**NA**	**NA**	**859**	**NA**	**21**	**NA**	**NA**	**21**
1981 Total	**869**	**NA**	**NA**	**869**	**NA**	**21**	**NA**	**NA**	**21**
1982 Total	**937**	**NA**	**NA**	**937**	**NA**	**22**	**NA**	**NA**	**22**
1983 Total	**925**	**NA**	**NA**	**925**	**NA**	**22**	**NA**	**NA**	**22**
1984 Total	**923**	**NA**	**NA**	**923**	**NA**	**22**	**NA**	**NA**	**22**
1985 Total	**899**	**NA**	**NA**	**899**	**NA**	**24**	**NA**	**NA**	**24**
1986 Total	**876**	**NA**	**NA**	**876**	**NA**	**27**	**NA**	**NA**	**27**
1987 Total	**852**	**NA**	**NA**	**852**	**NA**	**29**	**NA**	**NA**	**29**
1988 Total	**885**	**NA**	**NA**	**885**	**NA**	**32**	**NA**	**NA**	**32**
1989 Total	**918**	**5**	**53**	**976**	**1**	**36**	**22**	**3**	**61**
1990 Total	**581**	**6**	**56**	**642**	**1**	**39**	**28**	**3**	**71**
1991 Total	**613**	**6**	**58**	**677**	**1**	**41**	**26**	**3**	**72**
1992 Total	**645**	**6**	**60**	**711**	**1**	**44**	**32**	**3**	**81**
1993 Total	**548**	**7**	**62**	**616**	**1**	**46**	**33**	**3**	**84**
1994 Total	**537**	**6**	**64**	**607**	**1**	**46**	**35**	**4**	**86**
1995 Total	**596**	**7**	**65**	**667**	**1**	**46**	**40**	**5**	**92**
1996 Total	**595**	**7**	**65**	**667**	**1**	**50**	**53**	**5**	**110**
1997 Total	**433**	**8**	**65**	**506**	**1**	**49**	**58**	**6**	**113**
1998 Total	**387**	**8**	**65**	**459**	**1**	**48**	**54**	**7**	**111**
1999 Total	**414**	**9**	**64**	**486**	**1**	**52**	**54**	**7**	**114**
2000 Total	**433**	**9**	**61**	**503**	**1**	**53**	**47**	**8**	**109**
2001 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	1	5	32	(s)	4	3	1	7
Total	**313**	**10**	**59**	**382**	**(s)**	**42**	**42**	**9**	**93**
2003 January	30	2	5	37	(s)	4	3	1	8
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)	3	4	1	9
May	30	2	5	37	(s)	4	4	1	9
June	30	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	30	1	5	36	(s)	3	4	1	8
October	30	2	5	37	(s)	4	4	1	9
November	30	1	5	36	(s)	3	4	1	9
December	30	2	5	37	(s)	4	4	1	9
Total	**359**	**18**	**58**	**435**	**1**	**42**	**48**	**15**	**107**
2004 January	30	2	5	37	(s)	4	4	1	9
February	28	1	5	34	(s)	3	4	1	8
March	30	2	5	37	(s)	4	4	1	9
April	29	1	5	36	(s)	R 4	R 4	1	R 9
May	30	2	5	37	(s)	4	4	1	9
5-Month Total	**149**	**7**	**24**	**181**	**(s)**	**18**	**20**	**6**	**44**
2003 5-Month Total	**149**	**7**	**24**	**180**	**1**	**18**	**19**	**6**	**44**
2002 5-Month Total	**129**	**4**	**24**	**158**	**(s)**	**17**	**16**	**4**	**37**

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

[b] Wood, black liquor, and other wood waste.

[c] Geothermal heat pump and direct use energy.

[d] Solar thermal direct use energy and photovoltaic electricity generation. Small amounts of commercial sector use are included in the residential sector.

[e] Conventional hydroelectric power.

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

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

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

Web Page: http://www.eia.doe.gov/emeu/mer/renew.html.

Sources: See end of section.

Table 10.2b Estimated Renewable Energy Consumption: Industrial and Transportation Sectors

(Trillion Btu)

	Industrial Sector[a]					Transportation Sector
	Hydropower[b]	Wood[c]	Waste[d]	Geothermal[e]	Total	Alcohol Fuels[f]
1973 Total	**35**	**1,165**	**NA**	**NA**	**1,200**	**NA**
1974 Total	**33**	**1,159**	**NA**	**NA**	**1,192**	**NA**
1975 Total	**32**	**1,063**	**NA**	**NA**	**1,096**	**NA**
1976 Total	**33**	**1,220**	**NA**	**NA**	**1,253**	**NA**
1977 Total	**33**	**1,281**	**NA**	**NA**	**1,314**	**NA**
1978 Total	**32**	**1,400**	**NA**	**NA**	**1,432**	**NA**
1979 Total	**34**	**1,405**	**NA**	**NA**	**1,439**	**NA**
1980 Total	**33**	**1,600**	**NA**	**NA**	**1,633**	**NA**
1981 Total	**33**	**1,602**	**87**	**NA**	**1,722**	**7**
1982 Total	**33**	**1,516**	**118**	**NA**	**1,667**	**19**
1983 Total	**33**	**1,690**	**155**	**NA**	**1,879**	**35**
1984 Total	**33**	**1,679**	**204**	**NA**	**1,916**	**43**
1985 Total	**33**	**1,645**	**230**	**NA**	**1,908**	**52**
1986 Total	**33**	**1,610**	**256**	**NA**	**1,899**	**60**
1987 Total	**33**	**1,576**	**282**	**NA**	**1,891**	**69**
1988 Total	**33**	**1,625**	**308**	**NA**	**1,965**	**70**
1989 Total	**28**	**1,584**	**200**	**2**	**1,814**	**71**
1990 Total	**31**	**1,442**	**192**	**2**	**1,667**	**63**
1991 Total	**30**	**1,410**	**185**	**2**	**1,626**	**73**
1992 Total	**31**	**1,461**	**179**	**2**	**1,672**	**83**
1993 Total	**30**	**1,483**	**181**	**2**	**1,696**	**97**
1994 Total	**62**	**1,580**	**199**	**3**	**1,844**	**109**
1995 Total	**55**	**1,652**	**195**	**3**	**1,905**	**117**
1996 Total	**61**	**1,683**	**224**	**3**	**1,971**	**84**
1997 Total	**58**	**1,731**	**184**	**3**	**1,976**	**106**
1998 Total	**55**	**1,603**	**180**	**3**	**1,841**	**117**
1999 Total	**49**	**1,620**	**171**	**4**	**1,843**	**122**
2000 Total	**42**	**1,636**	**145**	**4**	**1,828**	**139**
2001 Total	**32**	**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	2	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	116	13	(s)	134	17
February	4	110	12	(s)	126	20
March	5	130	14	(s)	149	17
April	4	124	13	(s)	142	20
May	5	122	14	(s)	141	19
June	5	125	13	(s)	143	19
July	5	129	13	(s)	148	20
August	5	125	14	(s)	144	21
September	4	119	14	(s)	137	18
October	4	138	15	(s)	157	21
November	4	151	14	(s)	170	24
December	6	137	15	(s)	158	25
Total	**57**	**1,524**	**164**	**5**	**1,750**	**239**
2004 January	5	136	14	(s)	156	24
February	4	124	13	(s)	142	22
March	4	127	14	(s)	145	24
April	4	R 131	R 14	(s)	R 149	24
May	4	124	15	(s)	143	25
5-Month Total	**21**	**643**	**70**	**2**	**736**	**120**
2003 5-Month Total	**23**	**601**	**66**	**2**	**692**	**92**
2002 5-Month Total	**15**	**615**	**72**	**2**	**704**	**62**

[a] Industrial sector fuel use, including that at industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See note at end of Section 7.
[b] Conventional hydroelectric power.
[c] Wood, black liquor, and other wood waste.
[d] Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.
[e] Geothermal heat pump and direct use energy.
[f] Ethanol blended into motor gasoline.

R=Revised. NA=Not available. (s)=Less than 0.5 trillion Btu.

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

Web Page: http://www.eia.doe.gov/emeu/mer/renew.html.

Sources: See end of section.

Table 10.2c Renewable Energy Consumption: Electric Power Sector and Total

(Trillion Btu)

	Electric Power Sector[a,b]							Renewable Energy Consumption Total
	Hydropower[c]	Wood[d]	Waste[e]	Geothermal[f]	Solar[g]	Wind[h]	Total	
1973 Total	**2,827**	**1**	**2**	**43**	**NA**	**NA**	**2,873**	**4,433**
1974 Total	**3,143**	**1**	**2**	**53**	**NA**	**NA**	**3,199**	**4,769**
1975 Total	**3,122**	**(s)**	**2**	**70**	**NA**	**NA**	**3,194**	**4,723**
1976 Total	**2,943**	**1**	**2**	**78**	**NA**	**NA**	**3,024**	**4,768**
1977 Total	**2,301**	**3**	**2**	**77**	**NA**	**NA**	**2,383**	**4,249**
1978 Total	**2,905**	**2**	**1**	**64**	**NA**	**NA**	**2,973**	**5,039**
1979 Total	**2,897**	**3**	**2**	**84**	**NA**	**NA**	**2,986**	**5,166**
1980 Total	**2,867**	**3**	**2**	**110**	**NA**	**NA**	**2,982**	**5,494**
1981 Total	**2,725**	**3**	**1**	**123**	**NA**	**NA**	**2,852**	**5,471**
1982 Total	**3,233**	**2**	**1**	**105**	**NA**	**NA**	**3,341**	**5,985**
1983 Total	**3,494**	**2**	**2**	**129**	**NA**	**(s)**	**3,627**	**6,488**
1984 Total	**3,353**	**5**	**4**	**165**	**(s)**	**(s)**	**3,527**	**6,431**
1985 Total	**2,937**	**8**	**7**	**198**	**(s)**	**(s)**	**3,150**	**6,033**
1986 Total	**3,038**	**5**	**7**	**219**	**(s)**	**(s)**	**3,270**	**6,132**
1987 Total	**2,602**	**8**	**7**	**229**	**(s)**	**(s)**	**2,846**	**5,687**
1988 Total	**2,302**	**10**	**8**	**217**	**(s)**	**(s)**	**2,536**	**5,489**
1989 Total	[b]**2,808**	[b]**100**	[b]**132**	[b]**308**	[b]**3**	[b]**22**	[b]**3,372**	**6,294**
1990 Total	**3,014**	**129**	**188**	**326**	**4**	**29**	**3,689**	**6,133**
1991 Total	**2,985**	**126**	**229**	**335**	**5**	**31**	**3,710**	**6,158**
1992 Total	**2,586**	**140**	**262**	**338**	**4**	**30**	**3,360**	**5,907**
1993 Total	**2,861**	**150**	**265**	**351**	**5**	**31**	**3,662**	**6,156**
1994 Total	**2,620**	**152**	**282**	**325**	**5**	**36**	**3,420**	**6,065**
1995 Total	**3,149**	**125**	**296**	**280**	**5**	**33**	**3,889**	**6,669**
1996 Total	**3,528**	**138**	**300**	**300**	**5**	**33**	**4,305**	**7,137**
1997 Total	**3,581**	**137**	**309**	**309**	**5**	**34**	**4,375**	**7,075**
1998 Total	**3,241**	**137**	**308**	**311**	**5**	**31**	**4,032**	**6,561**
1999 Total	**3,218**	**138**	**315**	**312**	**5**	**46**	**4,034**	**6,599**
2000 Total	**2,768**	**134**	**318**	**296**	**5**	**57**	**3,579**	**6,158**
2001 Total	**2,169**	**126**	**324**	**289**	**6**	**68**	**2,982**	**5,286**
2002 January	218	13	30	27	(s)	8	296	497
February	201	10	27	24	(s)	7	270	449
March	210	13	30	26	(s)	9	288	478
April	242	11	28	23	(s)	10	316	506
May	267	11	30	26	1	11	345	547
June	283	12	31	24	1	11	362	552
July	255	13	33	27	1	9	337	547
August	211	13	33	26	1	10	293	490
September	170	14	31	25	1	7	248	450
October	170	13	30	26	(s)	7	247	464
November	195	13	30	25	(s)	7	270	476
December	214	14	32	26	(s)	8	293	506
Total	**2,636**	**150**	**365**	**305**	**6**	**105**	**3,567**	**5,963**
2003 January	195	15	27	24	(s)	6	267	462
February	195	12	24	22	(s)	7	260	446
March	241	13	29	23	1	10	317	529
April	248	12	28	22	1	11	322	528
May	297	11	29	22	1	9	368	574
June	283	13	29	23	1	10	358	564
July	244	14	32	23	1	9	323	537
August	226	15	30	23	1	8	302	513
September	180	13	27	23	1	8	251	451
October	181	15	30	23	(s)	9	258	482
November	195	14	30	23	(s)	10	272	511
December	238	15	32	26	(s)	11	322	552
Total	**2,722**	**161**	**346**	**276**	**5**	**108**	**3,619**	**6,150**
2004 January	230	15	30	26	(s)	9	310	536
February	209	14	26	25	(s)	10	284	491
March	228	14	28	25	1	12	309	524
April	[R]210	12	[R]28	24	[R]1	[R]12	[R]286	[R]504
May	239	13	30	25	1	17	323	538
5-Month Total	**1,115**	**67**	**142**	**124**	**2**	**60**	**1,512**	**2,593**
2003 5-Month Total	**1,176**	**63**	**136**	**113**	**2**	**43**	**1,533**	**2,540**
2002 5-Month Total	**1,138**	**58**	**146**	**126**	**2**	**45**	**1,516**	**2,477**

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

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

[c] Conventional hydroelectric power.

[d] Wood, black liquor, and other wood waste.

[e] Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

[f] Geothermal electricity net generation.

[g] Solar thermal and photovoltaic electricity net generation.

[h] Wind electricity net generation.

R=Revised. 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: **Wood and Waste • 1973-1988:** Table 7.3d. • **1989 forward:** Table 7.3b. **Hydropower, Geothermal, Solar, and Wind:** Tables 7.2b and A6. **Electric Power Sector Total:** Calculated as the sum of the individual fuels. **Renewable Energy Consumption Total:** Table 10.1.

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: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 1.
1990–2001: EIA, *Renewable Energy Annual*, annual reports, Table 6. Includes revisions published in the EIA, *Annual Energy Review 2000*, Table 10.2a.
2002 forward: EIA, Office of Coal, Nuclear, Electric and Alternate Fuels (CNEAF), estimates.

Wood, Commercial
1973–1979: EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.
1980–1983: EIA, *Estimates of U.S. Wood Energy Consumption 1980–1983*, Table ES1.
1984–EIA, CNEAF, estimate.
1985–1992: Values interpolated.
1993–2001: EIA, *Renewable Energy Annual*, annual reports, Table 6. Includes revisions published in the EIA, *Annual Energy Review 2000*, Table 10.2a.
2002 forward: EIA, CNEAF, estimates.

Wood, Industrial
1973–1979: EIA, *Estimates of U.S. Wood Energy Consumption from 1949 to 1981*, Table A2.
1980–1983: EIA, *Estimates of U.S. Wood Energy Consumption 1980–1983*, Table ES1.
1984: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 1.
1985 and 1986: Values interpolated.
1987: EIA, *Estimates of Biofuels Consumption in the United States During 1987*, Table 2.
1988: Value interpolated.
1989: American Paper Institute, *Fact Sheet on 1990 Energy Use in the U.S. Pulp and Paper Industry* (July 1991), total pulp and paper industry wood consumption, minus nonutility power producers' use of wood to produce electricity (see Table 10.3b).
1990–2001: EIA, *Renewable Energy Annual 2001* (November 2002), Table B1, and CNEAF staff for subsequent data updates.
2002 forward: EIA, CNEAF, estimates.

Waste, Commercial
Table 7.3c

Waste, Industrial
1981: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8, total waste consumption, minus electric utilities' use of waste to produce electricity (see Table 10.3a).
1982 and 1983: EIA, CNEAF, estimates for total waste consumption, minus electric utilities' use of waste to produce electricity (see Table 10.3a).
1984: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8, total waste consumption, minus electric utilities' use of waste to produce electricity (see Table 10.3a).
1985 and 1986: Values interpolated.
1987: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8, total waste consumption, minus electric utilities' use of waste to produce electricity (see Table 10.3a).
1988: Value interpolated.
1989: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8, total waste consumption, minus electric utilities' and nonutility power producers' use of waste to produce electricity (see Tables 10.3a and 10.3b).
1990–2001: EIA, *Renewable Energy Annual 2001* (November 2002), Table B1, and CNEAF staff for subsequent data updates.
2002 forward: EIA, CNEAF, estimates.

Hydroelectric, Commercial
Hydroelectric total (all sectors) from Table 7.2a minus electric power sector hydroelectric from Table 7.2b minus industrial sector hydroelectric from Table 7.2c, times the fossil-fueled steam-electric plants heat rate from Table A6.

Hydroelectric, Industrial
1973–1978: Federal Power Commission (FPC), Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and FPC, Form FPC-12C, "Industrial Electric Generating Capacity," for all other plants, and Table A6.
1979—FPC, Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and EIA estimates for all other plants; and Table A6.
1980–1988: Estimated by EIA as the average generation over the 6-year period of 1974-1979, and Table A6.
1989 forward: Tables 7.2c and A6.

Alcohol Fuels
1981: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 10.
1982 and 1983: EIA, CNEAF, estimates.
1984: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 10.
1985 and 1986: Values interpolated.
1987: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 10.
1988: Value interpolated.
1989: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 10.

1990: EIA, *Estimates of U.S. Biomass Energy Consumption 1992*, Table D1.
1991: Value interpolated.
1992: EIA, *Estimates of U.S. Biomass Energy Consumption 1992*, Table D1.
1993 forward: EIA, *Petroleum Supply Monthly* (*PSM*), Tables 2 and 28, and *Monthly Energy Review* (*MER*) Table A1. Ten percent of the "Field Production" of "Oxygenated Finished Motor Gasoline" from *PSM* Table 2 is added to the "Refinery Input of Fuel Ethanol" from *PSM* Table 28. The sum is multiplied by the conversion factor of 3.539 million Btu per barrel as shown in the *MER* Table A1.

Geothermal
1989 forward: John Lund, Oregon Institute of Technology Geoheat Center, unpublished data.

Solar
1989–1991: EIA, CNEAF, estimates.
1992–2001: EIA *Renewable Energy Annual*, annual reports, Table 2. Includes revisions published in the EIA, *Annual Energy Review 2000*, Table 10.2a and 10.2b.
2002 forward: EIA, CNEAF, estimates.

Section 11. International Petroleum

Crude Oil Production. World crude oil production during May 2004 was 72 million barrels per day, down 0.2 million barrels per day from the level in the previous month.

Organization of Petroleum Exporting Countries (OPEC) production during May 2004 averaged 29 million barrels per day, down 0.2 million barrels per day from the level in the previous month. During May 2004, production increased in Saudi Arabia by 100 thousand barrels per day; the United Arab Emirates by 60 thousand barrels per day; Kuwait by 50 thousand barrels per day; and Iran by 10 thousand barrels per day. Production decreased in Iraq by 400 thousand barrels per day and Indonesia by 5 thousand barrels per day. Production remained unchanged in Venezuela, Nigeria, Algeria, Libya, and Qatar.

Among the non-OPEC nations, production during May 2004 increased in Russia by 77 thousand barrels per day; the United States by 44 thousand barrels per day; Canada by 21 thousand barrels per day; and Egypt by 11 thousand barrels per day. Production decreased in the United Kingdom by 166 thousand barrels per day; Mexico by 45 thousand barrels per day; Norway by 23 thousand barrels per day; and China by 15 thousand barrels per day.

Petroleum Consumption. In April 2004, consumption in all Organization for Economic Cooperation and Development (OECD) countries was 48.7 million barrels per day, 2 percent[1] higher than the April 2003 rate. Comparing April rates in 2004 and 2003, consumption was higher in 2004 in the United Kingdom (+15 percent); France (+6 percent); Canada (+5 percent); South Korea (+4 percent); and the United States (+2 percent). The April 2004 consumption rate was lower in Germany (-3 percent); Japan (-2 percent); and Italy (less than -1 percent), compared with the rate 1 year earlier.

Petroleum Stocks. For all OECD countries, petroleum stocks at the end of April 2004 totaled 3.9 billion barrels, 3 percent[1] higher than the ending stock level in April 2003. Stock levels were higher in April 2004 in Canada (+12 percent); the United States and South Korea (both +5 percent); France (+4 percent); and Germany (less than +1 percent). Stock levels were lower in the United Kingdom (-7 percent); Italy (-4 percent); and Japan (-1 percent), compared with levels 1 year earlier.

[1]Percentage changes are based on unrounded data.

Table 11.1a World Crude Oil Production: OPEC Members

(Thousand Barrels per Day)

	Algeria	Indonesia	Iran	Iraq	Kuwait[a]	Libya	Nigeria	Qatar	Saudi Arabia[a]	United Arab Emirates	Venezuela	OPEC[b]
1973 Average	**1,097**	**1,339**	**5,861**	**2,018**	**3,020**	**2,175**	**2,054**	**570**	**7,596**	**1,533**	**3,366**	**30,629**
1974 Average	**1,009**	**1,375**	**6,022**	**1,971**	**2,546**	**1,521**	**2,255**	**518**	**8,480**	**1,679**	**2,976**	**30,351**
1975 Average	**983**	**1,307**	**5,350**	**2,262**	**2,084**	**1,480**	**1,783**	**438**	**7,075**	**1,664**	**2,346**	**26,771**
1976 Average	**1,075**	**1,504**	**5,883**	**2,415**	**2,145**	**1,933**	**2,067**	**497**	**8,577**	**1,936**	**2,294**	**30,327**
1977 Average	**1,152**	**1,686**	**5,663**	**2,348**	**1,969**	**2,063**	**2,085**	**445**	**9,245**	**1,999**	**2,238**	**30,893**
1978 Average	**1,231**	**1,635**	**5,242**	**2,563**	**2,131**	**1,983**	**1,897**	**487**	**8,301**	**1,831**	**2,165**	**29,464**
1979 Average	**1,224**	**1,591**	**3,168**	**3,477**	**2,500**	**2,092**	**2,302**	**508**	**9,532**	**1,831**	**2,356**	**30,581**
1980 Average	**1,106**	**1,577**	**1,662**	**2,514**	**1,656**	**1,787**	**2,055**	**472**	**9,900**	**1,709**	**2,168**	**26,606**
1981 Average	**1,002**	**1,605**	**1,380**	**1,000**	**1,125**	**1,140**	**1,433**	**405**	**9,815**	**1,474**	**2,102**	**22,481**
1982 Average	**987**	**1,339**	**2,214**	**1,012**	**823**	**1,150**	**1,295**	**330**	**6,483**	**1,250**	**1,895**	**18,778**
1983 Average	**968**	**1,343**	**2,440**	**1,005**	**1,064**	**1,105**	**1,241**	**295**	**5,086**	**1,149**	**1,801**	**17,497**
1984 Average	**1,014**	**1,412**	**2,174**	**1,209**	**1,157**	**1,087**	**1,388**	**394**	**4,663**	**1,146**	**1,798**	**17,442**
1985 Average	**1,037**	**1,325**	**2,250**	**1,433**	**1,023**	**1,059**	**1,495**	**301**	**3,388**	**1,193**	**1,677**	**16,181**
1986 Average	**945**	**1,390**	**2,035**	**1,690**	**1,419**	**1,034**	**1,467**	**308**	**4,870**	**1,330**	**1,787**	**18,275**
1987 Average	**1,048**	**1,343**	**2,298**	**2,079**	**1,585**	**972**	**1,341**	**293**	**4,265**	**1,541**	**1,752**	**18,517**
1988 Average	**1,040**	**1,342**	**2,240**	**2,685**	**1,492**	**1,175**	**1,450**	**346**	**5,086**	**1,565**	**1,903**	**20,324**
1989 Average	**1,095**	**1,409**	**2,810**	**2,897**	**1,783**	**1,150**	**1,716**	**380**	**5,064**	**1,860**	**1,907**	**22,071**
1990 Average	**1,175**	**1,462**	**3,088**	**2,040**	**1,175**	**1,375**	**1,810**	**406**	**6,410**	**2,117**	**2,137**	**23,195**
1991 Average	**1,230**	**1,592**	**3,312**	**305**	**190**	**1,483**	**1,892**	**395**	**8,115**	**2,386**	**2,375**	**23,275**
1992 Average	**1,214**	**1,504**	**3,429**	**425**	**1,058**	**1,433**	**1,943**	**423**	**8,332**	**2,266**	**2,371**	**24,398**
1993 Average	**1,162**	**1,511**	**3,540**	**512**	**1,852**	**1,361**	**1,960**	**413**	**8,198**	**2,159**	**2,450**	**25,119**
1994 Average	**1,180**	**1,510**	**3,618**	**553**	**2,025**	**1,378**	**1,931**	**415**	**8,120**	**2,193**	**2,588**	**25,510**
1995 Average	**1,202**	**1,503**	**3,643**	**560**	**2,057**	**1,390**	**1,993**	**442**	**8,231**	**2,233**	**2,750**	**26,004**
1996 Average	**1,242**	**1,547**	**3,686**	**579**	**2,062**	**1,401**	**2,001**	**510**	**8,218**	**2,278**	**2,938**	**26,461**
1997 Average	**1,277**	**1,520**	**3,664**	**1,155**	**2,007**	**1,446**	**2,132**	**550**	**8,362**	**2,316**	**3,280**	**27,710**
1998 Average	**1,246**	**1,518**	**3,634**	**2,150**	**2,085**	**1,390**	**2,153**	**696**	**8,389**	**2,345**	**3,167**	**28,774**
1999 Average	**1,202**	**1,472**	**3,557**	**2,508**	**1,898**	**1,319**	**2,130**	**665**	**7,833**	**2,169**	**2,826**	**27,579**
2000 Average	**1,254**	**1,423**	**3,696**	**2,571**	**2,079**	**1,410**	**2,165**	**737**	**8,404**	**2,368**	**3,155**	**29,262**
2001 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	[R] 2,540	[R] 29,533
February	1,645	1,130	3,950	2,003	2,300	1,450	2,530	795	8,700	2,420	[R] 2,540	[R] 29,463
March	1,645	1,120	3,960	2,203	2,355	1,450	2,530	795	8,400	2,370	[R] 2,540	[R] 29,368
April	1,645	1,120	3,970	2,303	2,350	1,450	2,530	795	8,400	2,220	[R] 2,540	[R] 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
5-Mo. Avg.	**1,645**	**1,123**	**3,962**	**2,103**	**2,341**	**1,450**	**2,530**	**793**	**8,539**	**2,338**	**2,540**	**29,364**
2003 5-Mo. Avg.	**1,567**	**1,201**	**3,733**	**1,339**	**2,207**	**1,409**	**2,140**	**780**	**9,183**	**2,351**	**1,944**	**27,853**
2002 5-Mo. Avg.	**1,239**	**1,282**	**3,381**	**2,088**	**1,849**	**1,288**	**2,114**	**643**	**7,347**	**2,059**	**2,623**	**25,914**

[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 May 2004, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 600 thousand barrels per day.

[b] Current members of OPEC are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela. Ecuador and Gabon, which withdrew from OPEC membership at the end of 1992 and 1994, respectively, are excluded from all OPEC totals.

R=Revised.

Notes: • Crude oil includes lease condensate but excludes natural gas plant liquids. • Monthly data are often preliminary figures and may not average to the annual totals because of rounding or because updates to the preliminary monthly data are not available.

Web Page: http://www.eia.doe.gov/emeu/mer/inter.html.

Sources: See end of section.

Table 11.1b World Crude Oil Production: Persian Gulf Nations, Non-OPEC, and World

(Thousand Barrels per Day)

	Persian Gulf Nations[a]	Selected Non-OPEC Producers									Total Non-OPEC	World
		Canada	China	Egypt	Mexico	Norway	Former U.S.S.R.	Russia	United Kingdom	United States		
1973 Average	**20,668**	**1,798**	**1,090**	**165**	**465**	**32**	**8,324**	**NA**	**2**	**9,208**	**25,050**	**55,679**
1974 Average	**21,282**	**1,551**	**1,315**	**150**	**571**	**35**	**8,912**	**NA**	**2**	**8,774**	**25,366**	**55,716**
1975 Average	**18,934**	**1,430**	**1,490**	**235**	**705**	**189**	**9,523**	**NA**	**12**	**8,375**	**26,058**	**52,828**
1976 Average	**21,514**	**1,314**	**1,670**	**330**	**831**	**279**	**10,060**	**NA**	**245**	**8,132**	**27,018**	**57,344**
1977 Average	**21,725**	**1,321**	**1,874**	**415**	**981**	**280**	**10,603**	**NA**	**768**	**8,245**	**28,814**	**59,707**
1978 Average	**20,606**	**1,316**	**2,082**	**485**	**1,209**	**356**	**11,105**	**NA**	**1,082**	**8,707**	**30,694**	**60,158**
1979 Average	**21,066**	**1,500**	**2,122**	**525**	**1,461**	**403**	**11,384**	**NA**	**1,568**	**8,552**	**32,094**	**62,674**
1980 Average	**17,961**	**1,435**	**2,114**	**595**	**1,936**	**528**	**11,706**	**NA**	**1,622**	**8,597**	**32,994**	**59,600**
1981 Average	**15,245**	**1,285**	**2,012**	**598**	**2,313**	**501**	**11,850**	**NA**	**1,811**	**8,572**	**33,595**	**56,076**
1982 Average	**12,156**	**1,271**	**2,045**	**670**	**2,748**	**520**	**11,912**	**NA**	**2,065**	**8,649**	**34,703**	**53,481**
1983 Average	**11,081**	**1,356**	**2,120**	**727**	**2,689**	**614**	**11,972**	**NA**	**2,291**	**8,688**	**35,759**	**53,256**
1984 Average	**10,784**	**1,438**	**2,296**	**822**	**2,780**	**697**	**11,861**	**NA**	**2,480**	**8,879**	**37,047**	**54,489**
1985 Average	**9,630**	**1,471**	**2,505**	**887**	**2,745**	**788**	**11,585**	**NA**	**2,530**	**8,971**	**37,801**	**53,982**
1986 Average	**11,696**	**1,474**	**2,620**	**813**	**2,435**	**870**	**11,895**	**NA**	**2,539**	**8,680**	**37,952**	**56,227**
1987 Average	**12,103**	**1,535**	**2,690**	**896**	**2,548**	**1,022**	**12,050**	**NA**	**2,406**	**8,349**	**38,149**	**56,666**
1988 Average	**13,457**	**1,616**	**2,730**	**848**	**2,512**	**1,158**	**12,053**	**NA**	**2,232**	**8,140**	**38,413**	**58,737**
1989 Average	**14,837**	**1,560**	**2,757**	**865**	**2,520**	**1,554**	**11,715**	**NA**	**1,802**	**7,613**	**37,792**	**59,863**
1990 Average	**15,278**	**1,553**	**2,774**	**873**	**2,553**	**1,704**	**10,975**	**NA**	**1,820**	**7,355**	**37,371**	**60,566**
1991 Average	**14,741**	**1,548**	**2,835**	**874**	**2,680**	**1,890**	**9,992**	**NA**	**1,797**	**7,417**	**36,932**	**60,207**
1992 Average	**15,970**	**1,605**	**2,845**	**881**	**2,669**	**2,229**	**–**	**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	–	7,765	2,256	5,785	R 40,853	R 67,622
February	20,215	2,215	3,375	630	3,325	3,015	–	7,831	2,275	5,791	R 41,046	R 69,156
March	20,163	2,235	3,385	625	3,317	2,965	–	7,868	2,250	5,817	40,972	69,680
April	19,078	2,185	3,445	625	3,282	2,860	–	7,922	2,145	5,774	R 40,813	R 68,631
May	18,953	2,190	3,430	625	3,320	2,845	–	8,030	2,005	5,733	R 40,742	R 68,625
June	18,128	2,250	3,450	620	3,396	2,576	–	8,180	1,950	5,701	R 40,750	R 67,853
July	18,188	2,405	3,405	610	3,400	2,840	–	8,250	1,988	5,526	R 41,181	R 68,399
August	18,658	2,365	3,425	605	3,426	2,699	–	8,345	1,892	5,595	R 41,154	R 68,897
September	18,908	2,350	3,371	614	3,417	2,689	–	8,470	2,047	5,683	R 41,500	R 69,593
October	19,488	2,325	3,401	615	3,398	2,816	–	8,490	2,171	5,635	R 41,804	R 70,467
November	19,558	2,440	3,426	610	3,380	2,941	–	8,500	1,956	5,560	R 42,015	R 70,693
December	20,083	2,480	3,438	610	3,455	2,978	–	8,510	2,192	5,579	R 42,691	R 71,974
Average	**19,262**	**2,306**	**3,409**	**618**	**3,371**	**2,846**	–	**8,182**	**2,093**	**5,681**	**R 41,296**	**R 69,301**
2004 January	20,273	R 2,394	3,440	610	3,417	3,179	–	8,686	R 2,041	E 5,644	R 42,737	R 72,270
February	20,203	R 2,450	3,474	607	3,360	3,180	–	8,630	R 1,898	E 5,584	R 42,512	R 71,975
March	20,118	R 2,420	3,393	590	3,368	3,193	–	8,681	R 2,028	E 5,622	R 42,689	R 72,057
April	20,073	R 2,343	3,435	580	3,439	3,053	–	8,760	R 1,966	E 5,568	R 42,520	R 71,843
May	19,893	2,364	3,420	591	3,394	3,030	–	8,837	1,800	E 5,612	42,480	71,618
5-Mo. Avg.	**20,111**	**2,394**	**3,432**	**596**	**3,396**	**3,127**	**–**	**8,720**	**1,947**	**E 5,606**	**42,589**	**71,953**
2003 5-Mo. Avg.	**19,628**	**2,209**	**3,398**	**627**	**3,315**	**2,923**	**–**	**7,884**	**2,185**	**5,780**	**40,882**	**68,735**
2002 5-Mo. Avg.	**17,403**	**2,150**	**3,349**	**636**	**3,167**	**3,037**	**–**	**7,127**	**2,369**	**5,877**	**40,394**	**66,308**

[a] The Persian Gulf Nations are Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. Production from the Neutral Zone between Kuwait and Saudi Arabia is included in "Persian Gulf Nations."

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

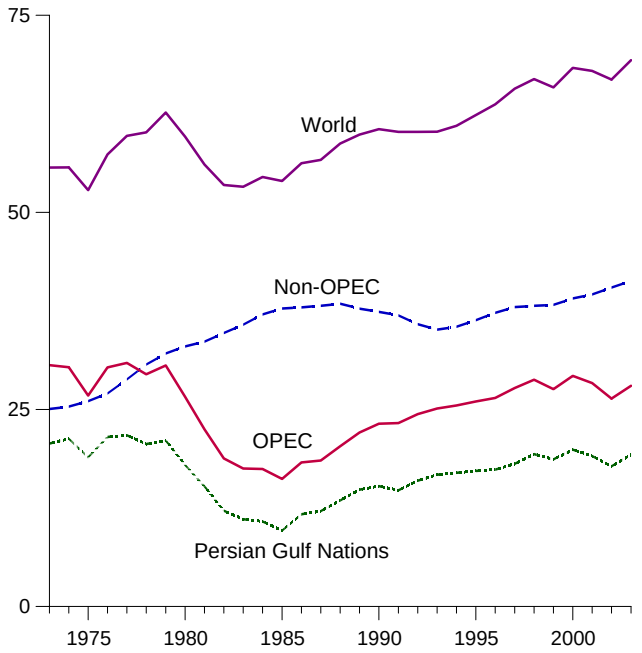
Notes: • Crude oil includes lease condensate but excludes natural gas plant liquids. • Monthly data are often preliminary figures and may not average to the annual totals because of rounding or because updates to the preliminary monthly data are not available. • Data for countries may not sum to World totals due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: http://www.eia.doe.gov/emeu/mer/inter.html.

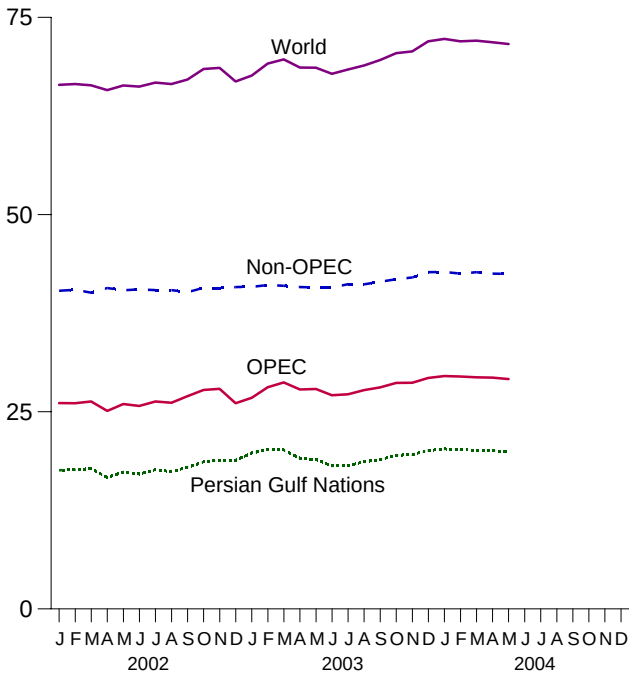
Sources: See end of section.

Figure 11.1a Crude Oil Production Overview
(Million Barrels per Day)

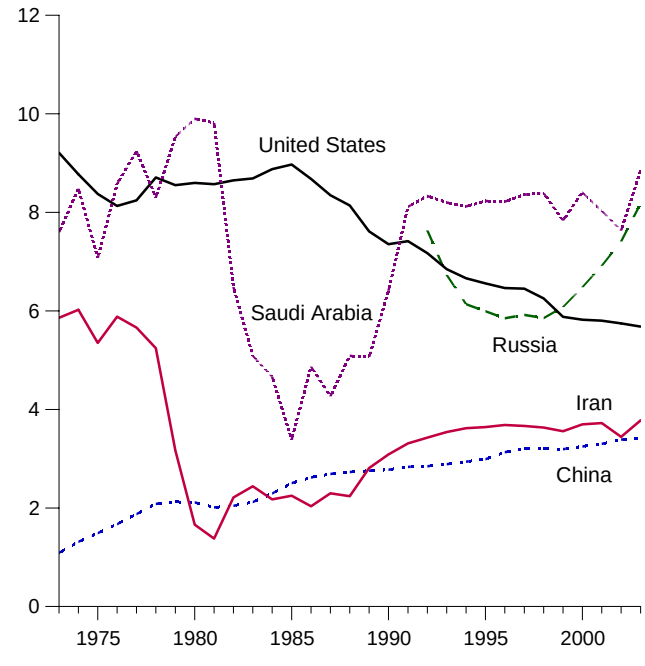
World Production, 1973-2003



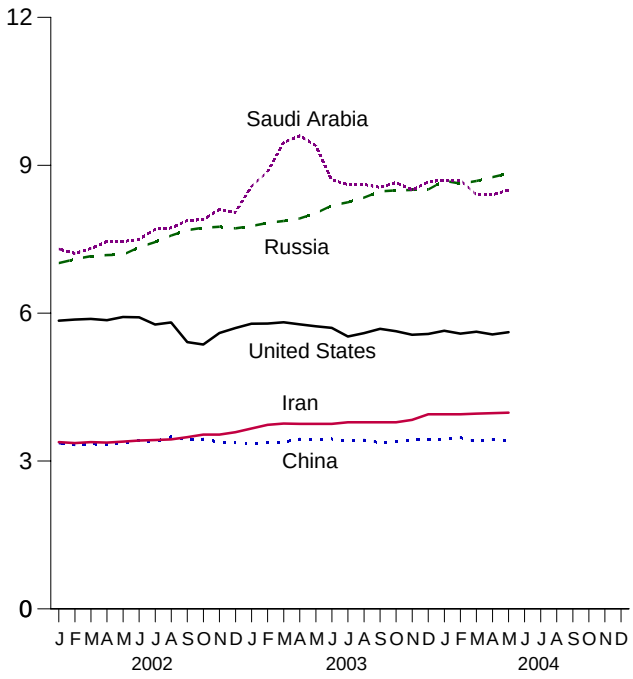
World Production, Monthly



Selected Producers, 1973-2003



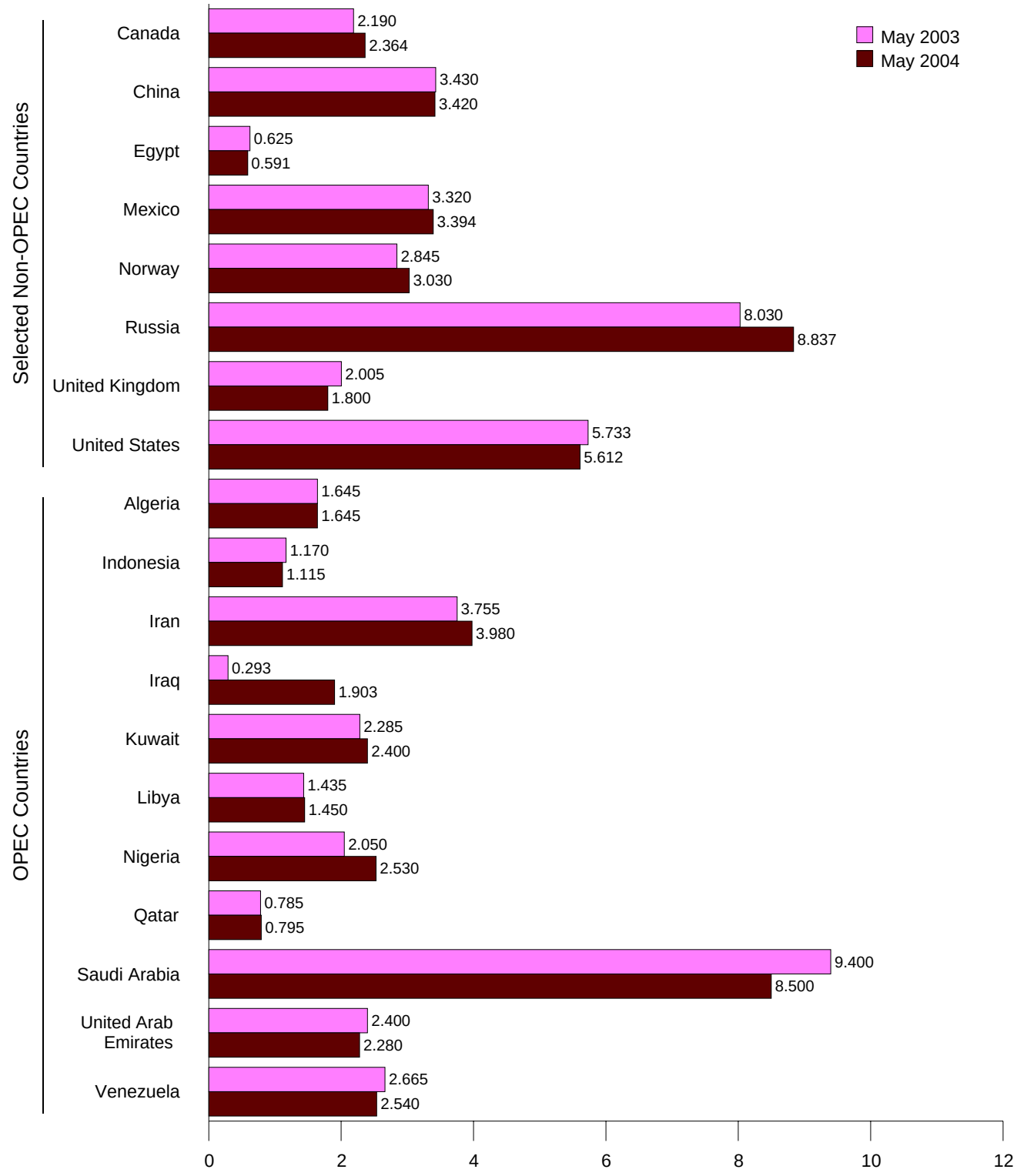
Selected Producers, Monthly



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: Tables 11.1a and 11.b.

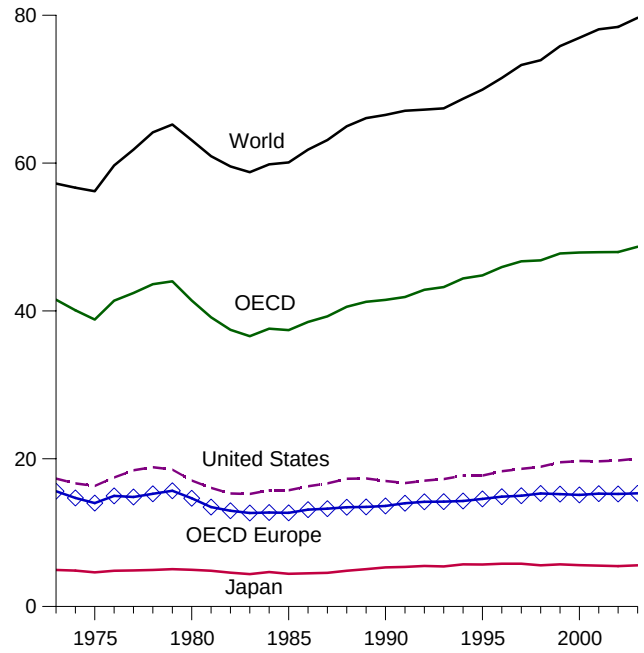
Figure 11.1b Crude Oil Production by Selected Country
(Million Barrels per Day)



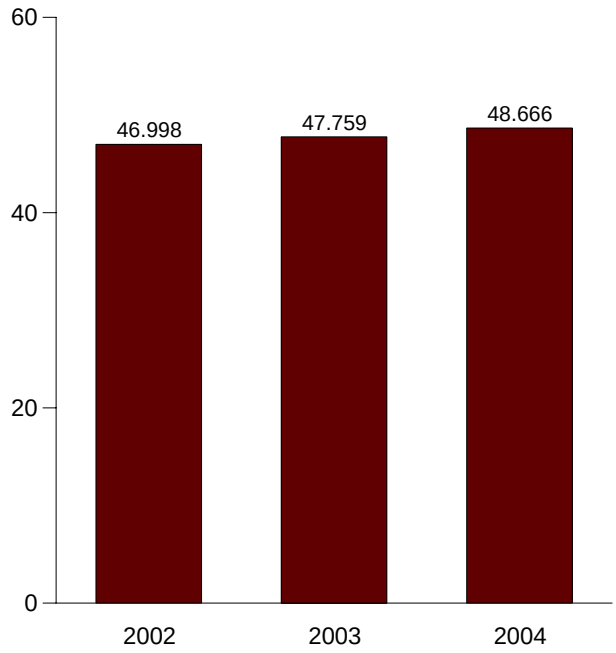
Note: OPEC is the Organization of Petroleum Exporting Countries.
Web Page: http://www.eia.doe.gov/emeu/mer/inter.html.
Sources: Tables 11.1a and 11.1b.

Figure 11.2 Petroleum Consumption in OECD Countries
(Million Barrels per Day)

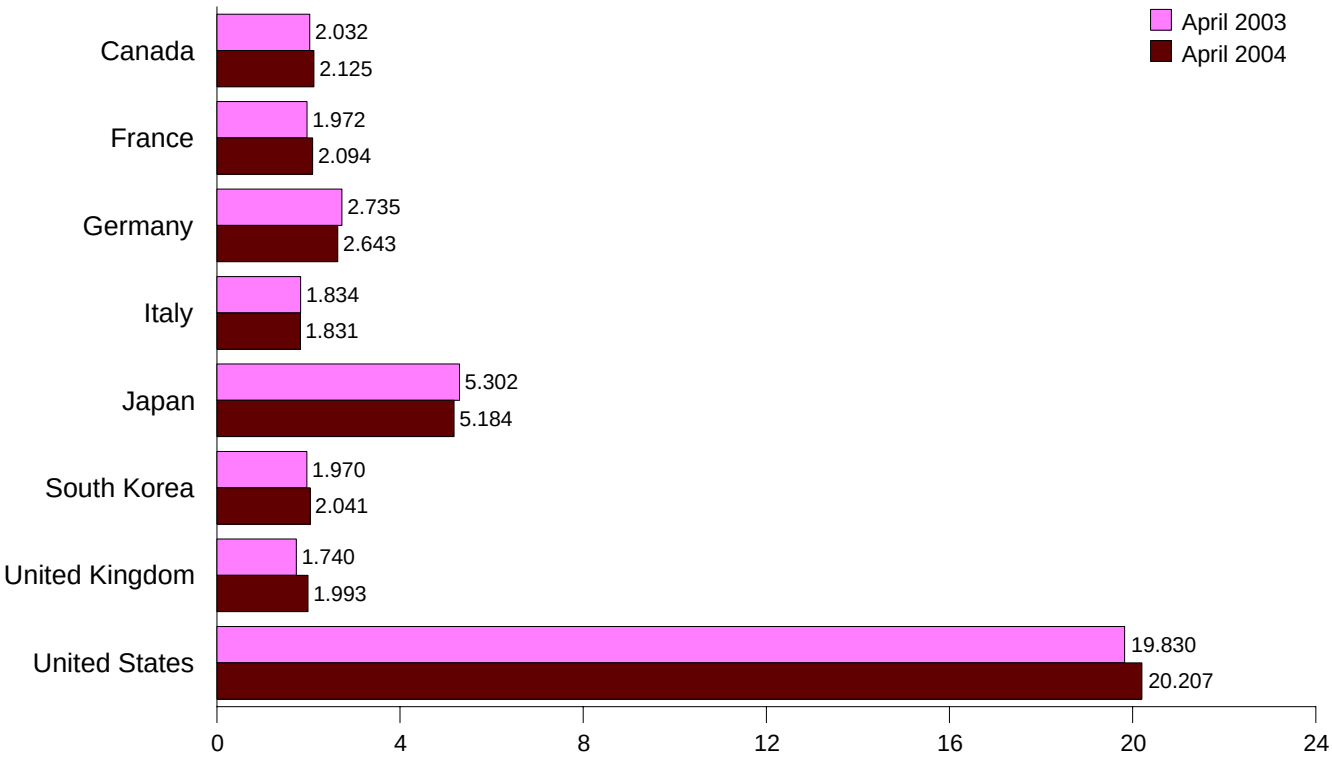
Overview, 1973-2003



OECD Total, April



By Selected OECD Country



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

Web Page: http://www.eia.doe.gov/emeu/mer/inter.html.
Source: Table 11.2.

Table 11.2 Petroleum Consumption in OECD Countries

(Thousand Barrels per Day)

	Canada	France	Germany[a]	Italy	Japan	South Korea	United Kingdom	United States	OECD Europe[b]	Other OECD[c]	OECD[d]	World
1973 Average	**1,729**	**2,601**	**3,324**	**2,068**	**4,949**	**281**	**2,341**	**17,308**	**15,598**	**1,658**	**41,523**	**57,237**
1974 Average	**1,779**	**2,447**	**3,030**	**2,004**	**4,864**	**287**	**2,210**	**16,653**	**14,699**	**1,806**	**40,089**	**56,677**
1975 Average	**1,779**	**2,252**	**2,957**	**1,855**	**4,621**	**311**	**1,911**	**16,322**	**13,998**	**1,794**	**38,825**	**56,198**
1976 Average	**1,818**	**2,420**	**3,206**	**1,971**	**4,837**	**357**	**1,892**	**17,461**	**14,964**	**1,946**	**41,382**	**59,673**
1977 Average	**1,850**	**2,294**	**3,212**	**1,897**	**4,880**	**422**	**1,905**	**18,431**	**14,810**	**2,035**	**42,429**	**61,826**
1978 Average	**1,902**	**2,408**	**3,290**	**1,952**	**4,945**	**482**	**1,938**	**18,847**	**15,247**	**2,194**	**43,616**	**64,158**
1979 Average	**1,971**	**2,463**	**3,373**	**2,039**	**5,050**	**525**	**1,971**	**18,513**	**15,668**	**2,278**	**44,005**	**65,220**
1980 Average	**1,873**	**2,256**	**3,082**	**1,934**	**4,960**	**537**	**1,725**	**17,056**	**14,640**	**2,342**	**41,408**	**63,108**
1981 Average	**1,768**	**2,023**	**2,804**	**1,874**	**4,848**	**536**	**1,590**	**16,058**	**13,452**	**2,479**	**39,141**	**60,944**
1982 Average	**1,578**	**1,880**	**2,743**	**1,781**	**4,582**	**534**	**1,590**	**15,296**	**12,965**	**2,484**	**37,439**	**59,543**
1983 Average	**1,448**	**1,835**	**2,661**	**1,750**	**4,395**	**561**	**1,531**	**15,231**	**12,650**	**2,303**	**36,588**	**58,779**
1984 Average	R **1,520**	R **1,771**	R **2,557**	R **1,720**	R **4,666**	R **554**	R **1,825**	**15,726**	R **12,727**	R **2,408**	R **37,601**	R **59,829**
1985 Average	R **1,526**	R **1,753**	R **2,651**	R **1,705**	R **4,436**	R **552**	R **1,617**	**15,726**	R **12,683**	R **2,469**	R **37,392**	R **60,087**
1986 Average	R **1,531**	R **1,764**	R **2,792**	R **1,734**	R **4,503**	R **592**	R **1,637**	**16,281**	R **13,114**	R **2,491**	R **38,512**	R **61,826**
1987 Average	R **1,607**	R **1,785**	R **2,723**	R **1,815**	R **4,567**	R **627**	R **1,611**	**16,665**	R **13,240**	R **2,549**	R **39,255**	R **63,127**
1988 Average	R **1,681**	R **1,801**	R **2,723**	R **1,829**	R **4,849**	R **746**	R **1,692**	**17,283**	R **13,429**	R **2,578**	R **40,567**	R **64,991**
1989 Average	R **1,754**	R **1,844**	**2,581**	R **1,897**	R **5,058**	R **860**	R **1,731**	**17,325**	R **13,485**	R **2,744**	R **41,227**	R **66,097**
1990 Average	R **1,746**	R **1,826**	R **2,682**	R **1,874**	R **5,296**	R **1,048**	R **1,776**	**16,988**	R **13,607**	R **2,804**	R **41,489**	R **66,514**
1991 Average	R **1,674**	R **1,940**	R **2,829**	R **1,862**	R **5,369**	R **1,263**	R **1,802**	**16,714**	R **13,966**	R **2,897**	R **41,883**	R **67,090**
1992 Average	R **1,725**	R **1,932**	R **2,841**	R **1,894**	R **5,488**	R **1,527**	R **1,815**	**17,033**	R **14,168**	R **2,919**	R **42,860**	R **67,236**
1993 Average	R **1,755**	R **1,877**	R **2,908**	R **1,891**	R **5,414**	R **1,684**	R **1,829**	**17,237**	R **14,193**	R **2,942**	R **43,225**	R **67,400**
1994 Average	R **1,771**	R **1,865**	R **2,883**	R **1,869**	R **5,703**	R **1,840**	R **1,833**	**17,718**	R **14,275**	R **3,089**	R **44,396**	R **68,709**
1995 Average	R **1,819**	R **1,919**	R **2,882**	R **1,942**	R **5,676**	R **2,008**	R **1,815**	**17,725**	R **14,567**	R **3,005**	R **44,799**	R **69,951**
1996 Average	R **1,870**	R **1,949**	R **2,922**	R **1,920**	R **5,785**	R **2,101**	R **1,851**	**18,309**	R **14,867**	R **2,996**	R **45,928**	R **71,517**
1997 Average	R **1,956**	R **1,969**	R **2,917**	R **1,934**	R **5,797**	R **2,255**	R **1,803**	**18,620**	R **14,998**	R **3,091**	R **46,717**	R **73,283**
1998 Average	R **1,942**	R **2,040**	R **2,923**	R **1,941**	R **5,577**	R **1,917**	R **1,791**	**18,917**	R **15,304**	R **3,191**	R **46,848**	R **73,923**
1999 Average	R **2,027**	R **2,029**	R **2,838**	R **1,891**	R **5,698**	R **2,084**	R **1,794**	**19,519**	R **15,215**	R **3,236**	R **47,780**	R **75,822**
2000 Average	R **2,027**	R **2,001**	R **2,772**	R **1,854**	R **5,607**	R **2,135**	R **1,758**	**19,701**	R **15,103**	R **3,325**	R **47,899**	R **76,958**
2001 Average	**2,043**	R **2,051**	**2,815**	R **1,837**	R **5,530**	**2,132**	**1,724**	**19,649**	R **15,265**	R **3,326**	R **47,944**	R **78,116**
2002 January	R 2,038	R 2,213	2,583	R 1,947	R 5,811	R 2,404	R 1,737	19,454	R 15,506	R 3,210	R 48,422	NA
February	R 2,117	R 2,068	2,684	R 2,032	R 6,147	R 2,266	R 1,797	19,444	R 15,511	R 3,418	R 48,903	NA
March	R 2,072	R 1,954	2,648	R 1,866	R 5,555	R 2,286	R 1,806	19,676	R 14,977	R 3,211	R 47,777	NA
April	R 1,986	R 1,932	2,675	R 1,828	R 5,034	R 2,144	R 1,786	19,552	R 14,963	R 3,319	R 46,998	NA
May	R 2,001	R 1,785	2,491	R 1,811	R 4,638	R 1,865	R 1,778	19,728	R 14,494	R 3,231	R 45,956	NA
June	R 2,056	R 1,936	2,775	R 1,831	R 4,721	R 1,886	R 1,679	19,875	R 15,018	R 3,189	R 46,743	NA
July	R 2,089	R 2,093	2,921	R 1,941	R 5,199	R 1,866	R 1,801	20,076	R 15,633	R 3,293	R 48,157	NA
August	R 2,144	R 1,865	R 2,789	R 1,757	R 5,170	R 1,965	R 1,725	20,221	R 14,862	R 3,299	R 47,660	NA
September	R 2,025	R 1,998	2,933	R 1,842	R 5,216	R 2,107	R 1,738	19,461	R 15,454	R 3,281	R 47,545	NA
October	R 2,142	R 2,069	2,771	R 1,934	R 5,273	R 2,118	R 1,808	19,678	R 15,748	R 3,339	R 48,299	NA
November	R 2,170	R 1,978	2,746	R 1,794	R 6,099	R 2,334	R 1,801	19,991	R 15,354	R 3,207	R 49,155	NA
December	R 2,115	R 1,908	2,642	R 1,869	R 6,753	R 2,555	R 1,757	19,943	R 15,243	R 3,376	R 49,985	NA
Average	R **2,079**	R **1,983**	**2,721**	R **1,870**	R **5,465**	R **2,149**	R **1,768**	**19,761**	R **15,228**	R **3,280**	R **47,963**	R **78,429**
2003 January	R 2,125	R 2,173	R 2,359	R 1,796	R 6,224	R 2,520	R 1,759	20,017	R 15,159	R 3,301	R 49,346	NA
February	R 2,267	R 2,244	2,698	R 2,047	R 6,665	R 2,408	R 1,746	20,375	R 15,987	R 3,399	R 51,102	NA
March	R 2,113	R 1,927	R 2,530	R 1,821	R 6,241	R 2,206	R 1,742	19,708	R 14,826	R 3,347	R 48,440	NA
April	R 2,032	R 1,972	2,735	R 1,834	R 5,302	R 1,970	R 1,740	19,830	R 15,208	R 3,417	R 47,759	NA
May	R 2,163	R 1,885	2,752	R 1,808	R 5,073	R 1,991	R 1,684	19,344	R 14,925	R 3,451	R 46,946	NA
June	R 2,088	R 2,026	2,676	R 1,870	R 5,127	R 2,051	R 1,684	19,793	R 15,052	R 3,393	R 47,505	NA
July	R 2,128	R 2,141	2,641	R 1,918	R 4,994	R 1,920	R 1,714	20,094	R 15,451	R 3,476	R 48,063	NA
August	R 2,198	R 1,887	2,454	R 1,762	R 5,012	R 1,951	R 1,608	20,586	R 14,573	R 3,339	R 47,658	NA
September	R 2,168	R 2,188	2,867	R 1,945	R 5,108	R 1,991	R 1,755	19,933	R 15,980	R 3,469	R 48,649	NA
October	R 2,275	R 2,193	2,742	R 1,924	R 5,377	R 2,203	R 1,720	20,182	R 15,957	R 3,406	R 49,400	NA
November	R 2,209	R 1,928	2,608	R 1,808	R 5,510	R 2,331	R 1,737	19,873	R 15,089	R 3,360	R 48,371	NA
December	R 2,239	R 2,168	R 2,591	R 1,976	R 6,316	R 2,489	R 1,784	20,679	R 15,754	R 3,582	R 51,060	NA
Average	R **2,167**	R **2,060**	**2,636**	R **1,874**	R **5,574**	R **2,168**	R **1,722**	**20,034**	R **15,325**	R **3,412**	R **48,678**	R **79,669**
2004 January	R 2,219	R 2,122	2,502	R 1,796	R 6,002	R 2,376	R 1,797	20,393	R 15,128	R 3,418	R 49,535	NA
February	R 2,248	R 2,159	R 2,677	R 1,903	R 6,203	R 2,247	R 1,866	20,549	R 15,788	R 3,525	R 50,560	NA
March	R 2,230	R 2,117	2,764	R 1,949	R 5,980	R 2,248	R 1,887	20,161	R 15,977	R 3,500	R 50,095	NA
April	2,125	2,094	2,643	1,831	5,184	2,041	1,993	20,207	15,738	3,371	48,666	NA
4-Mo. Avg.	**2,205**	**2,122**	**2,646**	**1,869**	**5,841**	**2,229**	**1,885**	**20,325**	**15,655**	**3,453**	**49,709**	**NA**
2003 4-Mo. Avg.	**2,132**	**2,076**	**2,576**	**1,871**	**6,101**	**2,275**	**1,747**	**19,974**	**15,278**	**3,365**	**49,125**	**NA**
2002 4-Mo. Avg.	**2,052**	**2,042**	**2,646**	**1,916**	**5,629**	**2,276**	**1,781**	**19,533**	**15,235**	**3,286**	**48,011**	**NA**

[a] Data are for unified Germany, i.e., the former East Germany and West Germany.

[b] "OECD Europe" consists of Austria, Belgium, Czech Republic (beginning in 1993), Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

[c] "Other OECD" consists of Australia, Mexico, New Zealand, and the U.S. Territories.

[d] The Organization for Economic Cooperation and Development (OECD) consists of Canada, Japan, the United States, "OECD Europe" and "Other OECD."

R=Revised. NA=Not available.

Notes: • Data through 1996 are final. Subsequent data are preliminary. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

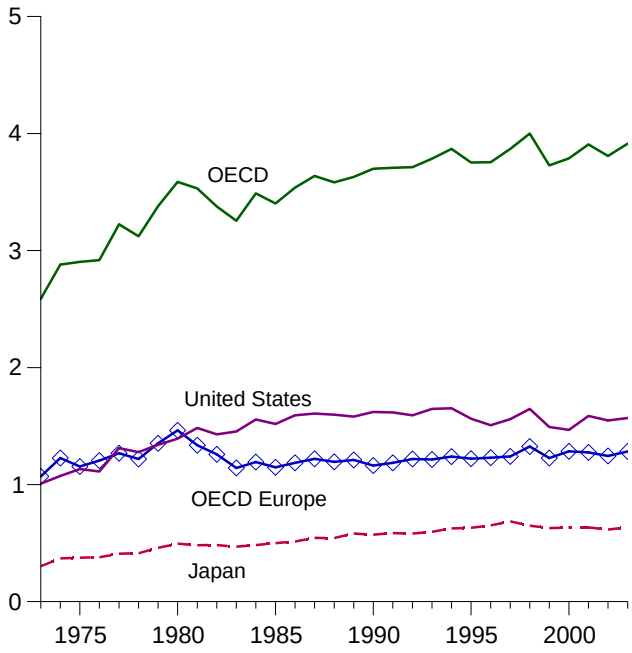
Web Page: http://www.eia.doe.gov/emeu/mer/inter.html.

Sources: • **United States:** Table 3.1a. • **All Other Data: 1973-1981—**International Energy Agency (IEA), *Quarterly Oil Statistics and Energy Balances in OECD Countries,* various issues. **1982-1983**—IEA, Monthly Oil and Gas Statistics Database. **1984-2003**—IEA, Monthly Oil Data Service, July 13, 2004.

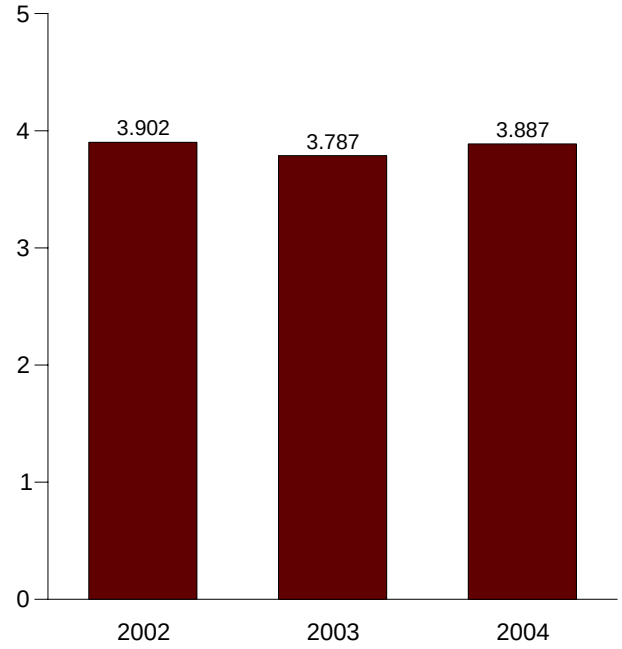
Historical revisions result from the International Energy Agency's annual review of Organization for Economic Cooperation and Development data.

Figure 11.3 Petroleum Stocks in OECD Countries
(Billion Barrels)

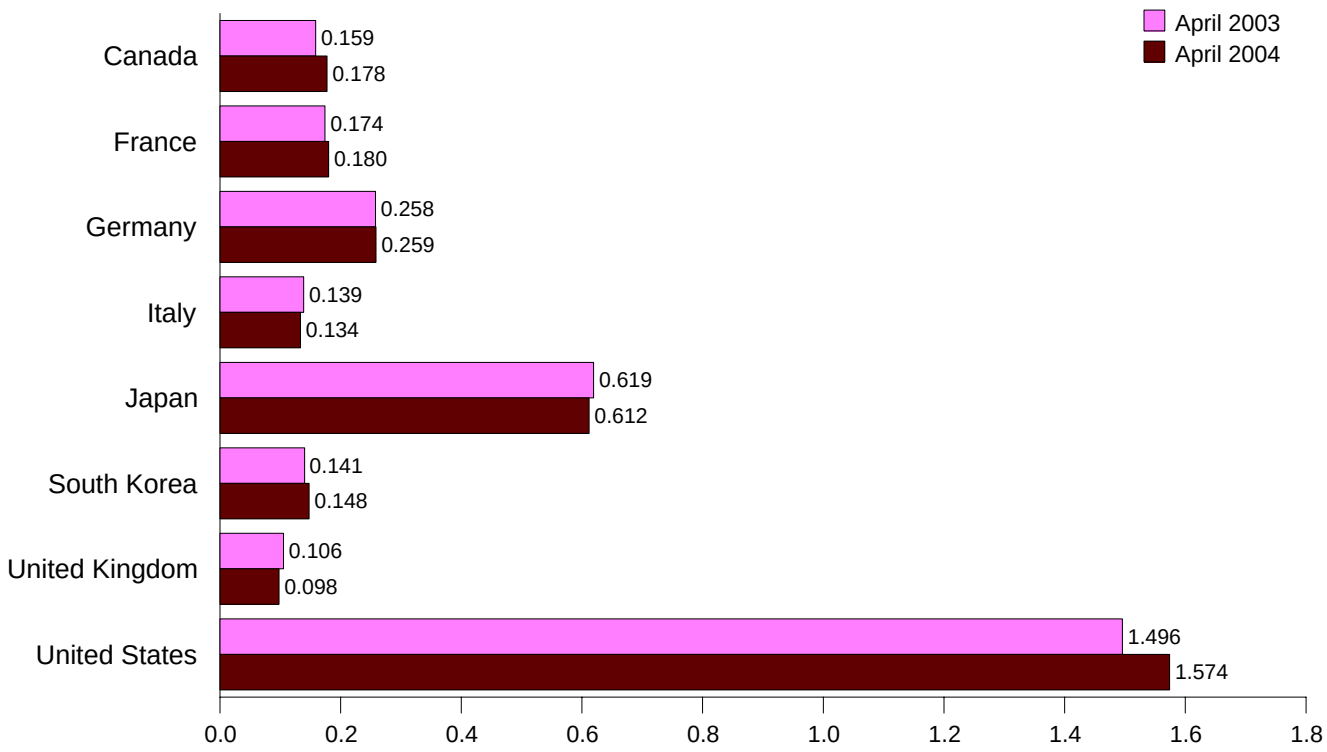
Overview, End of Year, 1973-2003



OECD Stocks, End of Month, April



By Selected OECD Country



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.

Table 11.3 Petroleum Stocks in OECD Countries

(Million Barrels)

	Canada	France	Germany[a]	Italy	Japan	South Korea[b]	United Kingdom	United States	OECD Europe[c]	Other OECD[d]	OECD[e]
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**	**NA**	**129**	**1,556**	**1,193**	**112**	**3,488**
1985 Year	**112**	**139**	**277**	**156**	**500**	**NA**	**131**	**1,519**	**1,148**	**110**	**3,402**
1986 Year	**111**	**127**	**295**	**154**	**514**	**NA**	**133**	**1,593**	**1,186**	**113**	**3,538**
1987 Year	**128**	**127**	**304**	**168**	**545**	**NA**	**133**	**1,607**	**1,221**	**115**	**3,637**
1988 Year	**119**	**140**	**303**	**155**	**543**	**NA**	**126**	**1,597**	**1,194**	**114**	**3,583**
1989 Year	**118**	**138**	**310**	**162**	**582**	**NA**	**131**	**1,581**	**1,211**	**114**	**3,629**
1990 Year	**143**	**143**	**265**	**143**	**572**	**NA**	**103**	**1,621**	**1,163**	**117**	**3,700**
1991 Year	**140**	**161**	**288**	**134**	**586**	**NA**	**109**	**1,617**	**1,185**	**113**	**3,707**
1992 Year	**127**	**157**	**311**	**149**	**582**	**NA**	**104**	**1,592**	**1,219**	**115**	**3,712**
1993 Year	**128**	**153**	**310**	**139**	**597**	**NA**	**109**	**1,647**	**1,215**	**115**	**3,785**
1994 Year	**142**	**153**	**314**	**143**	**625**	**NA**	**109**	**1,653**	**1,239**	**114**	**3,869**
1995 Year	**132**	**155**	**302**	**141**	**631**	**NA**	**101**	**1,563**	**1,222**	**113**	**3,753**
1996 Year	**127**	**154**	**303**	**135**	**651**	**NA**	**103**	**1,507**	**1,229**	**118**	**3,756**
1997 Year	**144**	**161**	**299**	**147**	**685**	**124**	**100**	**1,560**	**1,241**	**115**	**3,869**
1998 Year	**139**	**161**	**323**	**135**	**649**	**129**	**104**	**1,647**	**1,325**	**111**	**4,000**
1999 Year	**142**	**160**	**290**	**130**	**629**	**132**	**101**	**1,493**	**1,227**	**105**	**3,727**
2000 Year	**144**	**170**	**272**	**140**	**634**	**140**	**100**	**1,468**	**1,285**	**117**	**3,788**
2001 Year	**156**	**165**	**273**	**134**	**634**	**143**	R **116**	**1,586**	R **1,275**	**112**	R **3,906**
2002 January	156	164	277	140	631	142	R 116	1,591	R 1,304	114	R 3,937
February	160	167	276	138	620	137	R 114	1,576	R 1,310	116	R 3,918
March	160	163	276	132	630	144	R 109	1,573	R 1,284	110	R 3,901
April	159	164	276	133	624	140	R 111	1,588	R 1,277	114	R 3,902
May	155	173	274	136	626	144	R 108	1,611	R 1,291	110	R 3,936
June	155	170	269	132	634	154	R 116	1,616	R 1,289	112	R 3,960
July	159	169	264	137	633	153	R 116	1,611	R 1,283	111	R 3,949
August	162	171	264	142	633	152	R 108	1,596	R 1,281	123	R 3,948
September	163	174	259	136	627	149	R 107	1,574	R 1,261	115	R 3,889
October	162	176	254	140	628	150	R 113	1,573	R 1,282	111	R 3,906
November	R 159	170	253	143	616	149	R 113	1,578	R 1,260	114	R 3,876
December	R **155**	**175**	**253**	**138**	**615**	**140**	R **105**	**1,548**	R **1,244**	**105**	R **3,809**
2003 January	R 155	170	258	140	618	140	R 105	1,504	R 1,242	107	R 3,766
February	R 152	162	253	128	614	140	R 103	1,460	R 1,212	110	R 3,689
March	R 154	175	259	136	619	137	R 105	1,474	R 1,264	115	R 3,764
April	159	174	258	139	619	141	R 106	1,496	R 1,268	104	R 3,787
May	R 161	180	259	137	632	142	R 108	1,533	R 1,261	110	R 3,839
June	R 166	173	261	135	647	152	R 101	1,560	R 1,257	107	R 3,889
July	R 174	174	262	136	650	158	R 103	1,570	R 1,265	103	R 3,921
August	R 174	184	268	140	651	150	R 100	1,572	R 1,290	101	R 3,938
September	R 177	179	259	141	654	155	R 98	1,598	R 1,277	103	R 3,963
October	R 177	176	262	139	642	148	R 98	1,602	R 1,270	99	R 3,938
November	R 175	183	264	139	636	149	106	1,598	R 1,291	107	R 3,956
December	R **175**	**185**	**265**	**135**	**636**	**155**	**102**	**1,568**	R **1,283**	**96**	R **3,913**
2004 January	R 171	183	269	132	631	143	105	1,552	R 1,301	99	R 3,896
February	R 164	178	268	132	625	151	102	1,547	R 1,277	R 100	R 3,864
March	R 172	R 175	R 262	136	614	143	R 101	1,566	R 1,282	R 97	R 3,875
April	178	180	259	134	612	148	98	1,574	1,267	108	3,887

[a] Through December 1990, the data for Germany are for the former West Germany only. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

[b] Beginning in January 2002, data include previously confidential South Korean government-controlled oil stocks.

[c] "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom, and, for 1997 forward, Czech Republic, Hungary, and Poland.

[d] "Other OECD" consists of Australia, New Zealand, and the U.S. Territories, and, for 1997 forward, Mexico.

[e] The Organization for Economic Cooperation and Development (OECD) consists of Canada, Japan, the United States, "OECD Europe" and "Other OECD."

R=Revised. NA=Not available.

Notes: • Stocks are at end of period. • Petroleum stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined products. Petroleum stocks include all nonmilitary petroleum held for storage, regardless of ownership, within each country in bulk terminals, refinery tanks, pipeline tankage, intercoastal tankers, tankers in port, and inland ship bunkers. Data exclude oil held in pipelines (except for those in the United States), rail and truck cars, sea-going ships' bunkers, service stations, retail stores, and tankers at sea. • In the United States in January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys, thereby affecting subsequent stocks reported. New-basis end-of-year U.S. stocks, in million barrels, would have been 1,121 in 1974, 1,425 in 1980, and 1,461 in 1982. • Data through 1996 are final. Subsequent data are preliminary. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: http://www.eia.doe.gov/emeu/mer/inter.html.

Sources: • **United States:** Table 3.1a. • **All Other Data:** International Energy Agency, quarterly and monthly computer tapes supporting *Quarterly Oil Statistics and Energy Balances.*

International Petroleum

Tables 11.1a and 11.1b Sources

United States: See Table 3.1a.

All Other Countries: Monthly Data
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.
1980–2002: Office of Energy Markets and End Use, International Energy Database, February 2004.
2003: 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.
1980–2002: Office of Energy Markets and End Use, International Energy Database, February 2004.
2003: Average of monthly data.

Appendix A. Thermal Conversion Factors

The thermal conversion factors presented in the following tables can be used to estimate the heat content in British thermal units (Btu) of a given amount of energy measured in physical units, such as barrels or cubic feet. For example, 10 barrels of asphalt has a heat content of approximately 66.36 million Btu (10 barrels x 6.636 million Btu per barrel = 66.36 million Btu).

The heat content rates (i.e., thermal conversion factors) provided in this section represent the gross (or upper) energy content of the fuels. Gross heat content rates are applied in all Btu calculations for the *Monthly Energy Review* and are commonly used in energy calculations in the United States; net (or lower) heat content rates are typically used in European energy calculations. The difference between the two rates is the amount of energy that is consumed to vaporize water that is created during the combustion process. Generally, the difference ranges from 2 percent to 10 percent, depending on the specific fuel and its hydrogen content. Some fuels, such as unseasoned wood, can be more than 40 percent different in their gross and net heat content rates. See **British Thermal Unit (Btu)** in the Glossary for more information.

Thermal conversion factors for hydrocarbon mixes (Table A1) are weighted averages of the thermal conversion factors for each hydrocarbon included in the mix. For example, in calculating the thermal conversion factor for a 60-40 butane-propane mixture, the thermal conversion factor for butane is weighted 1.5 times the thermal conversion factor for propane.

In general, the annual thermal conversion factors presented in Tables A2 through A6 are computed from final annual data or from the best available data and labeled "preliminary." Often, the previous year's factor is used as a preliminary value until data become available to calculate the factor appropriate to the year. The source of each factor is described in the section entitled "Thermal Conversion Factor Source Documentation," which follows Table A6 in this appendix.

Table A1. Approximate Heat Content of Petroleum Products
(Million Btu per Barrel)

Petroleum Product	Heat Content	Petroleum Product	Heat Content
Asphalt	6.636	Natural Gasoline and Isopentane	4.620
Aviation Gasoline	5.048	Pentanes Plus	4.620
Butane	4.326	Petrochemical Feedstocks	
Butane-Propane Mixture[a]	4.130	Naptha Less Than 401°F	5.248
Distillate Fuel Oil	5.825	Other Oils Equal to or Greater Than 401°F	5.825
Ethane	3.082	Still Gas	6.000
Ethane-Propane Mixture[b]	3.308	Petroleum Coke	6.024
Isobutane	3.974	Plant Condensate	5.418
Jet Fuel, Kerosene Type	5.670	Propane	3.836
Jet Fuel, 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[c]	5.253	Unfinished Oils	5.825
Reformulated[c]	5.150	Unfractionated Stream	5.418
Oxygenated[c]	5.150	Waxes	5.537
Fuel Ethanol[d]	3.539	Miscellaneous	5.796

[a] 60 percent butane and 40 percent propane
[b] 70 percent ethane and 30 percent propane
[c] See Table A3 for motor gasoline annual weighted averages beginning in 1994.
[d] Fuel ethanol, which is derived from agricultural feedstocks (primarily corn), is not a petroleum product but is blended into motor gasoline. Its gross heat content (3.539 million Btu per barrel) is used in *Monthly Energy Review* calculations; its net heat content (3.192 million Btu per barrel) is used in the Energy Information Administration's *Renewable Energy Annual* calculations.
Web Page: http://www.eia.doe.gov/emeu/mer/append.html.
Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

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[E]	5.800	3.739	5.970	5.438	5.857	5.800	5.739	5.740

E=Estimate.
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[a]							
	End-Use Sectors				Electric Power Sector[b]	Total	Liquefied Petroleum Gases	Motor Gasoline
	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	[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	[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	[E]4.824	[E]5.422	[E]5.120	[E]5.421	[E]6.173	5.324	3.613	5.208
2003	[E]4.824	[E]5.422	[E]5.120	[E]5.421	[P]6.181	5.340	3.629	5.207
2004	[E]4.824	[E]5.422	[E]5.120	[E]5.421	[E]6.181	[E]5.340	[E]3.629	[E]5.207

[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.

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.

Table A4. Approximate Heat Content of Natural Gas

(Btu per Cubic Foot)

	Production		Consumption[a]				
	Marketed	Dry	End-Use Sectors	Electric Power Sector[b]	Total	Imports	Exports
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	[b]1,028	1,031	1,004	1,019
1990	1,105	1,029	1,030	1,027	1,029	1,012	1,018
1991	1,108	1,030	1,031	1,025	1,030	1,014	1,022
1992	1,110	1,030	1,031	1,025	1,030	1,011	1,018
1993	1,106	1,027	1,028	1,025	1,027	1,020	1,016
1994	1,105	1,028	1,029	1,025	1,028	1,022	1,011
1995	1,106	1,026	1,027	1,021	1,026	1,021	1,011
1996	1,109	1,026	1,027	1,020	1,026	1,022	1,011
1997	1,107	1,026	1,027	1,020	1,026	1,023	1,011
1998	1,109	1,031	1,033	1,024	1,031	1,023	1,011
1999	1,107	1,027	1,028	1,022	1,027	1,022	1,006
2000	1,107	1,025	1,026	1,021	1,025	1,023	1,006
2001	1,105	1,030	1,031	1,026	1,030	1,023	1,010
2002	1,107	1,028	1,030	1,020	1,028	1,022	1,008
2003[P]	1,106	1,028	1,029	1,025	1,028	1,023	1,008
2004[E]	1,106	1,028	1,029	1,025	1,028	1,023	1,008

[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.

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.

Table A5. Approximate Heat Content of Coal and Coal Coke

(Million Btu per Short Ton)

	Coal								Coal Coke
		Consumption							
		End-Use Sectors							
			Industrial						
	Production	Residential and Commercial	Coke Plants	Other [a]	Electric Power Sector [b]	Total	Imports	Exports	Imports and Exports
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	[b]20.898	21.307	25.000	26.160	24.800
1990	21.822	23.137	26.799	22.457	20.779	21.197	25.000	26.202	24.800
1991	21.681	23.114	26.799	22.460	20.730	21.120	25.000	26.188	24.800
1992	21.682	23.105	26.799	22.250	20.709	21.068	25.000	26.161	24.800
1993	21.418	22.994	26.800	22.123	20.677	21.010	25.000	26.335	24.800
1994	21.394	23.112	26.800	22.068	20.589	20.929	25.000	26.329	24.800
1995	21.326	23.118	26.800	21.950	20.543	20.880	25.000	26.180	24.800
1996	21.322	23.011	26.800	22.105	20.547	20.870	25.000	26.174	24.800
1997	21.296	22.494	26.800	22.172	20.518	20.830	25.000	26.251	24.800
1998	21.418	21.620	27.426	23.164	20.516	20.881	25.000	26.800	24.800
1999	21.070	23.880	27.426	22.489	20.490	20.818	25.000	26.081	24.800
2000	21.072	25.020	27.426	22.433	20.511	20.828	25.000	26.117	24.800
2001	20.865	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[P]	20.861	24.916	27.425	23.941	20.381	20.754	25.000	25.972	24.800
2004[E]	20.861	24.916	27.425	23.941	20.381	20.754	25.000	25.972	24.800

[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.

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.

Table A6. Approximate Heat Rates for Electricity

(Btu per Kilowatthour)

	Electricity Net Generation			
	Fossil-Fueled Plants[a,b]	Nuclear Plants[c]	Geothermal Energy Plants[d]	Electricity Consumption[e]
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	10,146	10,448	21,017	3,412
2002	P10,119	10,439	21,017	3,412
2003	P10,107	P10,439	P21,017	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 hydroelectric, solar, and wind electricity net generation.

[b] Through 2000, heat rates are for fossil-fueled steam-electric plants at electric utilities. For 2001 and 2002, heat rates are for fossil-fueled steam-electric plants at electric utilities and independent power producers. For 2003 forward, 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.

P=Preliminary. 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 Bureau of Mines thermal conversion factor of 5.048 million Btu per barrel for "Gasoline, Aviation" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

Butane. EIA adopted the Bureau of Mines thermal conversion factor of 4.326 million Btu per barrel in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Butane-Propane Mixture. EIA adopted the Bureau of Mines calculation of 4.130 million Btu per barrel based on an assumed mixture of 60 percent butane and 40 percent propane. See **Butane** and **Propane**.

Crude Oil, Exports. Assumed by EIA to be 5.800 million Btu per barrel or equal to the thermal conversion factor for crude oil produced in the United States. See **Crude Oil and Lease Condensate, Production**.

Crude Oil, Imports. Calculated annually by EIA by weighting the thermal conversion factor of each type of crude oil imported by the quantity imported. Thermal conversion factors for each type were calculated on a foreign country basis through 1996, by determining the average American Petroleum Institute (API) gravity of crude imported from each foreign country from Form ERA-60 in 1977, or for 1997 and later, by determining the weighted average API gravity from the Form EIA-814, and converting average API gravity to average Btu content by using National Bureau of Standards, Miscellaneous Publication No. 97, *Thermal Properties of Petroleum Products*, 1933.

Crude Oil and Lease Condensate, Production. EIA adopted the thermal conversion factor of 5.800 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

Crude Oil and Petroleum Products, Exports. Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product exported and crude oil exported weighted by the quantity of each petroleum product and crude oil exported. See **Crude Oil, Exports** and **Petroleum Products, Exports**.

Crude Oil and Petroleum Products, Imports. Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product and each type of crude oil imported weighted by the quantity of each petroleum product and each type of crude oil imported. See **Crude Oil, Imports** and **Petroleum Products, Imports**.

Distillate Fuel Oil. EIA adopted the Bureau of Mines thermal conversion factor of 5.825 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Value of Various Fuels, Adopted January 3, 1950."

Ethane. EIA adopted the Bureau of Mines thermal conversion factor of 3.082 million Btu per barrel in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Ethane-Propane Mixture. EIA calculated 3.308 million Btu per barrel based on an assumed mixture of 70 percent ethane and 30 percent propane. See **Ethane** and **Propane**.

Fuel Ethanol Blended into Motor Gasoline. EIA adopted the thermal conversion factor of 3.539 million Btu per barrel published in "Oxygenate Flexibility for Future Fuels," a paper presented by William J. Piel of the ARCO Chemical Company at the National Conference on Reformulated Gasolines and Clean Air Act Implementation, Washington, D.C., October 1991.

Isobutane. EIA adopted the Bureau of Mines thermal conversion factor of 3.974 million Btu per barrel in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Jet Fuel, Kerosene Type. EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel for "Jet Fuel, Commercial" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

Jet Fuel, Naphtha Type. EIA adopted the Bureau of Mines thermal conversion factor of 5.355 million Btu per barrel for "Jet Fuel, Military" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

Kerosene. EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of

Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

Liquefied Petroleum Gases. 1973 forward: Calculated annually by EIA as a weighted average by multiplying the quantity consumed of each of the component products by each product's conversion factor, listed in this appendix, and dividing the sum of those heat contents by the sum of the quantities consumed. The component products are ethane (including ethylene), propane (including propylene), normal butane (including butylene), butane-propane mixtures, ethane-propane mixtures, and isobutane. Quantities consumed are from: 1973 through 1980: EIA, Energy Data Reports, *Petroleum Statement, Annual*, Table 1. 1981 forward: EIA, *Petroleum Supply Annual*, Table 2.

Lubricants. EIA adopted the thermal conversion factor of 6.065 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Miscellaneous Products. EIA adopted the thermal conversion factor of 5.796 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Motor Gasoline. 1973 through 1993: EIA adopted the Bureau of Mines thermal conversion factor of 5.253 million Btu per barrel for "Gasoline, Motor Fuel" as published by the Texas Eastern Transmission Corporation in Appendix V of *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics. 1994 forward: EIA calculated national annual quantity-weighted average conversion factors for conventional, reformulated, and oxygenated motor gasolines (shown in appendix Table A1). The factor for conventional motor gasoline is 5.253 million Btu per barrel, as used for previous years. The factors for reformulated and oxygenated gasolines, both currently 5.150 million Btu per barrel, are based on data published in the Environmental Protection Agency, Office of Mobile Sources, National Vehicle and Fuel Emissions Laboratory report EPA 420-F-95-003, Fuel Economy Impact Analysis of Reformulated Gasoline.

Natural Gas Plant Liquids, Production. Calculated annually by EIA as the average of the thermal conversion factors of each natural gas plant liquid produced weighted by the quantity of each natural gas plant liquid produced.

Natural Gasoline. EIA adopted the thermal conversion factor of 4.620 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Pentanes Plus. EIA assumed the thermal conversion factor to be 4.620 million Btu per barrel or equal to that for natural gasoline. See **Natural Gasoline**.

Petrochemical Feedstocks, Naphtha Less Than 401 Degrees Fahrenheit. Assumed by EIA to be 5.248 million Btu per barrel, equal to the thermal conversion factor for special naphthas. See **Special Naphthas**.

Petrochemical Feedstocks, Oils Equal to or Greater Than 401 Degrees Fahrenheit. Assumed by EIA to be 5.825 million Btu per barrel, equal to the thermal conversion factor for distillate fuel oil. See **Distillate Fuel Oil**.

Petrochemical Feedstocks, Still Gas. Assumed by EIA to be 6.000 million Btu per barrel, equal to the thermal conversion factor for still gas. See **Still Gas**.

Petroleum Coke. EIA adopted the thermal conversion factor of 6.024 million Btu per barrel as reported in Btu per short ton in the Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Value of Various Fuels, Adopted January 3, 1950." The Bureau of Mines calculated this factor by dividing 30.120 million Btu per short ton, as given in the referenced Bureau of Mines internal memorandum, by 5.0 barrels per short ton, as given in the Bureau of Mines Form 6-1300-M and successor EIA forms.

Petroleum Products, Total Consumption. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed, weighted by the quantity of each petroleum product consumed.

Petroleum Products, Consumption by the Electric Power Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the electric power sector, weighted by the quantity of each petroleum product consumed at by the electric power sector.

Petroleum Products, Consumption by Industrial Users. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed in the industrial sector, weighted by the estimated quantity of each petroleum product consumed in the industrial sector.

Petroleum Products, Consumption by Residential and Commercial Users. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the residential and commercial sector, weighted by the estimated quantity of each petroleum product consumed in the residential and commercial sector.

Petroleum Products, Consumption by Transportation Users. Calculated annually by EIA as the average of the thermal conversion factor for all petroleum products consumed in the transportation sector, weighted by the estimated quantity of each petroleum product consumed in the transportation sector.

Petroleum Products, Exports. Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product, weighted by the quantity of each petroleum product exported.

Petroleum Products, Imports. Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product imported, weighted by the quantity of each petroleum product imported.

Plant Condensate. Estimated to be 5.418 million Btu per barrel by EIA from data provided by McClanahan Consultants, Inc., Houston, Texas.

Propane. EIA adopted the Bureau of Mines thermal conversion factor of 3.836 million Btu per barrel in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

Residual Fuel Oil. EIA adopted the thermal conversion factor of 6.287 million Btu per barrel as reported in the Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

Road Oil. EIA adopted the Bureau of Mines thermal conversion factor of 6.636 million Btu per barrel, which was assumed to be equal to that of asphalt (see **Asphalt**) and was first published by the Bureau of Mines in the Petroleum Statement, Annual, 1970.

Special Naphthas. EIA adopted the Bureau of Mines thermal conversion factor of 5.248 million Btu per barrel, which was assumed to be equal to that of total gasoline (aviation and motor) factor and was first published in the *Petroleum Statement, Annual, 1970*.

Still Gas. EIA adopted the Bureau of Mines estimated thermal conversion factor of 6.000 million Btu per barrel and first published in the *Petroleum Statement, Annual, 1970*.

Unfinished Oils. EIA assumed the thermal conversion factor to be 5.825 million Btu per barrel or equal to that for distillate fuel oil (see **Distillate Fuel Oil**) and first published in the *Annual Report to Congress, Volume 3, 1977*.

Unfractionated Stream. EIA assumed the thermal conversion factor to be 5.418 million Btu per barrel or equal to that for plant condensate (see **Plant Condensate**) and first published in the *Annual Report to Congress, Volume 2, 1981*.

Waxes. EIA adopted the thermal conversion factor of 5.537 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement, Annual, 1956*.

Approximate Heat Content of Natural Gas

Natural Gas, Total Consumption. 1973-1979: EIA adopted the thermal conversion factor calculated annually by the American Gas Association (AGA) and published in *Gas Facts*, an AGA annual publication. 1980 forward: Calculated annually by EIA by dividing the total heat content of natural gas consumed by the total quantity of natural gas consumed. The heat content and quantity consumed are from Form EIA-176. Published sources are: 1980-1989: EIA, *Natural Gas Annual 1992, Volume 2*, Table 15. 1990-1992: EIA, *Natural Gas Annual 1992, Volume 2*, Table 16. 1993 forward: 1992 value used as an estimate.

Natural Gas, Consumption by the Electric Power Sector. Calculated annually by EIA by dividing the total heat content of natural gas consumed by the electric power sector by the total quantity received by the electric power sector.

Natural Gas, Consumption by the End-Use Sectors. Calculated annually by EIA by dividing the heat content of all natural gas consumed less the heat content of natural gas consumed by the electric power sector by the quantity of all natural gas consumed less the quantity of natural gas consumed by the electric power sector.

Natural Gas, Exports. Calculated annually by EIA by dividing the heat content of exported natural gas by the quantity of natural gas exported, both reported on Form FPC-14.

Natural Gas, Imports. Calculated annually by EIA by dividing the heat content of imported natural gas by the quantity of natural gas imported, both reported on Form FPC-14.

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

Natural Gas Production, Marketed (Wet). Calculated annually by EIA by adding the heat content of dry natural gas production and the total heat content of natural gas plant liquids production and dividing this sum by the total quantity of marketed (wet) natural gas production.

Approximate Heat Content of Coal and Coal Coke

Coal, Total Consumption. Calculated annually by EIA by dividing the sum of the heat content of coal (including waste coal) consumption by the total tonnage.

Coal, Consumption by the Electric Power Sector. Calculated annually by dividing the total heat content of coal (including waste coal) by total consumption tonnage of the electric power sector.

Coal, Consumption by End-Use Sectors. Calculated annually by EIA by dividing the sum of the heat content of coal (including waste coal) consumed by the end-use sectors by the sum of the total tonnage.

Coal, Exports. Calculated annually by EIA by dividing the sum of the heat content of coal exported by the sum of the total tonnage.

Coal, Imports. Calculated annually by EIA by dividing the sum of the heat content of coal imported by the sum of the total tonnage.

Coal, Production. Calculated annually by EIA by dividing the sum of the total heat content of coal (including some anthracite culm and, for 2001 forward, bituminous refuse) produced by the sum of the total tonnage.

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

Approximate Heat Rates for Electricity

Fossil-Fueled Steam-Electric Plant Generation. There is no generally accepted practice for measuring the thermal conversion rates for power plants that generate electricity from hydroelectric, wood and waste, wind, photovoltaic, or solar thermal energy sources. Therefore, EIA used data from Form EIA-767, "Steam-Electric Plant Operation and Design Report," to calculate a rate factor that is equal to the prevailing annual average heat rate factor for fossil-fueled steam-electric power plants in the United States. By using that factor, it is possible to evaluate fossil fuel requirements for replacing those sources during periods of interruption, such as droughts. The heat content of a kilowatthour of electricity produced, regardless of the generation process, is 3,412 Btu. 1973-1988: The weighted annual average heat rate for fossil-fueled steam-electric power plants in the United States, as published in EIA, *Electric Plant Cost and Power Production Expenses 1991*, Table 9. 1989 forward: Calculated annually by EIA by using the heat rate reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms EIA-860A, EIA-860B, and EIA-867), and the generation on Form EIA-906, "Power Plant Report" (and predecessor forms).

Geothermal Energy Plant Generation. 1973-1981: Calculated annually by EIA by weighting the annual average heat rates of operating geothermal units by the installed nameplate capacities as reported on Form FPC-12. 1982 forward: Estimated annually by EIA on the basis of an informal survey of relevant plants.

Nuclear Steam-Electric Plant Generation. 1973-1991: Calculated annually by EIA by dividing the total heat content consumed in nuclear generating units by the total (net) electricity generated by nuclear generating units. The heat content and electricity generation are reported on Form FERC-1, "Annual Report of Major Electric Utilities, Licenses, and Others"; Form EIA-412, "Annual Report of Public Electric Utilities"; and predecessor forms. The factors for 1982 through 1984 were published in the following EIA reports-1982: *Historical Plant Cost and Annual Production Expenses for Selected Electric Plants 1982*, page 215. 1983 and 1984: *Electric Plant Cost and Power Production Expenses 1991*, Table 13. 1985 forward: Calculated annually by EIA by using the heat rate reported on Form EIA-860, "Annual Electric Generator Report," and the generation reported on Form EIA-906, "Power Plant Report" (and predecessor forms).

Appendix B. Metric and Other Physical Conversion Factors

Data presented in the *Monthly Energy Review* and in other Energy Information Administration publications are expressed predominately in units that historically have been used in the United States, such as British thermal units, barrels, cubic feet, and short tons. However, because U.S. commerce involves other nations, most of which use metric units of measure, the U.S. Government is committed to the transition to the metric system, as stated in the Metric Conversion Act of 1975 (Public Law 94–168), amended by the Omnibus Trade and Competitiveness Act of 1988 (Public Law 100–418), and Executive Order 12770 of July 25, 1991.

The metric conversion factors presented in Table B1 can be used to calculate the metric-unit equivalents of values expressed in U.S. customary units. For example, 500 short tons are the equivalent of 453.6 metric tons (500 short tons x 0.9071847 metric tons/short ton = 453.6 metric tons).

In the metric system of weights and measures, the names of multiples and subdivisions of any unit may be derived by combining the name of the unit with prefixes, such as deka, hecto, and kilo, meaning, respectively, 10, 100, 1,000, and deci, centi, and milli, meaning, respectively, one-tenth, one-hundredth, and one-thousandth. Common metric prefixes can be found in Table B2.

The conversion factors presented in Table B3 can be used to calculate equivalents in various physical units commonly used in energy analyses. For example, 10 barrels are the equivalent of 420 U.S. gallons (10 barrels x 42 gallons/barrel = 420 gallons).

Table B1. Metric Conversion Factors

Type of Unit	U.S. Unit		Equivalent in Metric Units	
Mass	1 short ton (2,000 lb)	=	0.907 184 7	metric tons (t)
	1 long ton	=	1.016 047	metric tons (t)
	1 pound (lb)	=	0.453 592 37[a]	kilograms (kg)
	1 pound uranium oxide (lb U_3O_8)	=	0.384 647[b]	kilograms uranium (kgU)
	1 ounce, avoirdupois (avdp oz)	=	28.349 52	grams (g)
Volume	1 barrel of oil (bbl)	=	0.158 987 3	cubic meters (m^3)
	1 cubic yard (yd^3)	=	0.764 555	cubic meters (m^3)
	1 cubic foot (ft^3)	=	0.028 316 85	cubic meters (m^3)
	1 U.S. gallon (gal)	=	3.785 412	liters (L)
	1 ounce, fluid (fl oz)	=	29.573 53	milliliters (mL)
	1 cubic inch (in^3)	=	16.387 06	milliliters (mL)
Length	1 mile (mi)	=	1.609 344[a]	kilometers (km)
	1 yard (yd)	=	0.914 4[a]	meters (m)
	1 foot (ft)	=	0.304 8[a]	meters (m)
	1 inch (in)	=	2.54[a]	centimeters (cm)
Area	1 acre	=	0.404 69	hectares (ha)
	1 square mile (mi^2)	=	2.589 988	square kilometers (km^2)
	1 square yard (yd^2)	=	0.836 127 4	square meters (m^2)
	1 square foot (ft^2)	=	0.092 903 04[a]	square meters (m^2)
	1 square inch (in^2)	=	6.451 6[a]	square centimeters (cm^2)
Energy	1 British thermal unit (Btu)[c]	=	1,055.055 852 62[a]	joules (J)
	1 calorie (cal)	=	4.186 8[a]	joules (J)
	1 kilowatthour (kWh)	=	3.6[a]	megajoules (MJ)
Temperature[d]	32 degrees Fahrenheit (°F)	=	0[a]	degrees Celsius (°C)
	212 degrees Fahrenheit (°F)	=	100[a]	degrees Celsius (°C)

[a]Exact conversion.
[b]Calculated by the Energy Information Administration.
[c]The Btu used in this table is the International Table Btu adopted by the Fifth International Conference on Properties of Steam, London, 1956.
[d]To convert degrees Fahrenheit (°F) to degrees Celsius (°C) 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	µ
10^{9}	giga	G	10^{-9}	nano	n
10^{12}	tera	T	10^{-12}	pico	p
10^{15}	peta	P	10^{-15}	femto	f
10^{18}	exa	E	10^{-18}	atto	a
10^{21}	zetta	Z	10^{-21}	zepto	z
10^{24}	yotta	Y	10^{-24}	yocto	y

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[a]	U.S. gallons (gal)
Coal	1 short ton	=	2,000[a]	pounds (lb)
	1 long ton	=	2,240[a]	pounds (lb)
	1 metric ton (t)	=	1,000[a]	kilograms (kg)
Wood	1 cord (cd)	=	1.25[b]	shorts tons
	1 cord (cd)	=	128[a]	cubic feet (ft^3)

[a]Exact conversion.
[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
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
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
Delivered Energy Consumption Projections by Industry	June 2002
Uranium Industry Annual 2001	June 2002
Biomass for Electricity Generation	July 2002
Measuring Changes in Energy Efficiency	July 2002
Foreign Direct Investment in U.S. Energy in 2000	August 2002
U.S. Natural Gas Markets: Relationship Between Henry Hub Spot Prices and U.S. Wellhead Prices	August 2002
Diesel Fuel Price Pass-through	September 2002
Winter Fuels Outlook: 2002-2003	October 2002
Annual Energy Review 2001	November 2002
Renewable Energy Annual 2001	December 2002

2001

Energy Education Resources . . . . . January 2001
Impact of Interruptible Natural Gas Service on Northeast Heating Oil Demand . . . . . February 2001
Performance Profiles of Major Energy Producers 1999 . . . . . February 2001
Renewable Energy 2000: Issues and Trends . . . . . March 2001
Summer 2001 Motor Gasoline Outlook . . . . . April 2001
International Energy Outlook 2001 . . . . . April 2001
State Energy Data Report 1999: Consumption Estimates . . . . . May 2001
The Transition to Ultra-Low-Sulfur Diesel Fuel: Effects on Prices and Supply . . . . . May 2001
Energy Market Maps . . . . . June 2001
Coal Industry Annual 1999 . . . . . July 2001
Annual Energy Review 2000 . . . . . August 2001
World Energy "Areas To Watch" . . . . . August 2001
Electric Power Annual 2000, Volume I . . . . . September 2001
Winter Fuels Outlook: 2001-2002 . . . . . October 2001
Fuel Oil and Kerosene Sales 2000 . . . . . October 2001
The Majors' Shift to Natural Gas . . . . . October 2001
Annual Energy Outlook 2002, Early Release . . . . . November 2001
Emissions of Greenhouse Gases in the United States 2000 . . . . . November 2001
State Energy Price and Expenditure Report 1999 . . . . . November 2001
Energy Education Resources . . . . . December 2001
U.S. Natural Gas Markets: Mid-Term Prospects for Natural Gas Supply . . . . . December 2001

2000

Inventory of Nonutility Electric Power Plants in the United States 1998 . . . . . January 2000
The Changing Structure of the Electric Power Industry 1999: Mergers and Other Corporate Combinations . . . . . January 2000
International Energy Annual 1998 . . . . . February 2000
Performance Profiles of Major Energy Producers 1998 . . . . . February 2000
OPEC Revenues Fact Sheet . . . . . March 2000
Country Analysis Brief: Iran . . . . . March 2000
International Energy Outlook 2000 . . . . . April 2000
Outlook for Biomass Ethanol Production and Demand . . . . . April 2000
Summer 2000 Motor Gasoline Outlook . . . . . May 2000
State Energy Price and Expenditure Report 1997 . . . . . June 2000
Energy Consumption and Renewable Energy Development Potential on Indian Lands . . . . . June 2000
Annual Energy Review 1999 . . . . . July 2000
A Primer on Gasoline Prices . . . . . August 2000
Long-Term World Oil Supply: A Resource Base/Production Path Analysis . . . . . August 2000
U.S. Carbon Dioxide Emissions From Energy Sources: 1999 Flash Estimate . . . . . September 2000
The Electric Transmission Network: A Multi-Region Analysis . . . . . September 2000
Propane Prices: What Consumers Should Know . . . . . October 2000
Winter Fuels Outlook: 2000-2001 . . . . . October 2000
Advance Summary: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves 1999 Annual Report . . . . . October 2000
Residential Natural Gas Prices: What Consumers Should Know . . . . . November 2000
The Changing Structure of the Electric Power Industry 2000: An Update . . . . . November 2000
Annual Energy Outlook 2001 Early Release . . . . . December 2000
Residential Heating Oil Prices: What Consumers Should Know . . . . . December 2000

Glossary

Asphalt: A dark-brown-to-black cement-like material containing bitumens as the predominant constituents obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts.

ASTM: The American Society for Testing and Materials.

Aviation Gasoline Blending Components: Naphthas that will be used for blending or compounding into finished aviation gasoline (e.g., straight run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

Aviation Gasoline, Finished: A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating engines. Fuel specifications are provided in ASTM Specification D 910 and Military Specification MIL-G-5572. *Note:* Data on blending components are not counted in data on finished aviation gasoline.

Barrel (Petroleum): A unit of volume equal to 42 U.S. gallons.

Base Gas: The volume of gas needed as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the withdrawal season. All native gas is included in the base gas volume.

Black Liquor (Pulping Liquor): The alkaline spent liquor removed from the digesters in the process of chemically pulping wood. After evaporation, the liquor is burned as a fuel in a recovery furnace that permits the recovery of certain basic chemicals.

British Thermal Unit (Btu): The quantity of heat required to raise the temperature of 1 pound of liquid water by 1 degree Fahrenheit at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit). See **Heat Content of a Quantity of Fuel, Gross** and **Heat Content of a Quantity of Fuel, Net**.

Butane: A normally gaseous straight-chain or branched-chain hydrocarbon (C_4H_{10}). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

Isobutane: A normally gaseous branched-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9º 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 31.1º F. It is extracted from natural gas or refinery gas streams.

Butylene: An olefinic hydrocarbon (C_4H_8) 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 2,000º F so that the fixed carbon and residual ash are fused together. Coke is used as a fuel and as a reducing agent in smelting iron ore in a blast furnace. Coke (coal) has a heating value of 24.8 million Btu per ton.

Coke, Petroleum: A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion is 5 barrels (42 U.S. gallons each) per short ton. Coke (petroleum) has a heating value of 6.024 million Btu per barrel.

Coking Coal: Bituminous coal suitable for making coke. See **Coke, Coal**.

Combined-Heat-and-Power (CHP) Plant: A plant designed to produce both heat and electricity from a single heat source. Note: This term is being used in place of the term "cogenerator" that was used by EIA in the past. CHP better describes the facilities because some of the plants included do not produce heat and power in a sequential fashion and, as a result, do not meet the legal definition of cogeneration specified in the Public Utility Regulatory Policies Act (PURPA).

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

Completion: The installation of permanent equipment for the production of oil or gas. If a well is equipped to produce only oil or gas from one zone or reservoir, the definition of a well (classified as an oil well or gas well) and the definition of a completion are identical. However, if a well is equipped to produce oil and/or gas separately from more than one reservoir, a well is not synonymous with a completion.

Constant Dollars: See **Chained Dollars**.

Conventional Gasoline: Finished motor gasoline not included in the oxygenated or reformulated gasoline categories. *Note*: This category excludes reformulated gasoline blendstock for oxygenate blending (RBOB) as well as other blendstock.

Conventional Hydroelectric Power: Hydroelectric power generated from flowing water that is not created by **hydroelectric pumped storage**.

Conversion Factor: A number that translates units of one system into corresponding values of another system. Conversion factors can be used to translate physical units of measure for various fuels into Btu equivalents. See **British Thermal Unit**.

Cost, Insurance, Freight (CIF): A sales transaction in which the seller pays for the transportation and insurance of the goods to the port of destination specified by the buyer.

Crude Oil: A mixture of hydrocarbons that exists in liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Depending upon the characteristics of the crude stream, it may also include: 1) small amounts of hydrocarbons that exist in gaseous phase in natural underground reservoirs but are liquid at atmospheric pressure after being recovered from oil well (casinghead) gas in lease separators and are subsequently commingled with the crude stream without being separately measured. Lease condensate recovered as a liquid from natural gas wells in lease or field separation facilities and later mixed into the crude stream is also included; 2) small amounts of nonhydrocarbons produced with the oil, such as sulfur and various metals; and 3) drip gases, and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

Liquids produced at natural gas processing plants are excluded. Crude oil is refined to produce a wide array of petroleum products, including heating oils; gasoline, diesel and jet fuels; lubricants; asphalt; ethane, propane, and butane; and many other products used for their energy or chemical content.

Crude Oil F.O.B. Price: The crude oil price actually charged at the oil-producing country's port of loading. Includes deductions for any rebates and discounts or additions of premiums, where applicable. It is the actual price paid with no adjustment for credit terms.

Crude Oil (Including Lease Condensate): A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Where identifiable, liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded.

Crude Oil Landed Cost: The price of crude oil at the port of discharge, including charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. The cost does not include charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage).

Crude Oil Refinery Input: The total crude oil put into processing units at refineries.

Crude Oil Stocks: Stocks of crude oil and lease condensate held at refineries, in pipelines, at pipeline terminals, and on leases.

Crude Oil Used Directly: Crude oil consumed as fuel by crude oil pipelines and on crude oil leases.

Crude Oil Well: A well completed for the production of crude oil from one or more oil zones or reservoirs. Wells producing both crude oil and natural gas are classified as oil wells.

Cubic Foot (Natural Gas): A unit of volume equal to 1 cubic foot at a pressure base of 14.73 pounds standard per square inch absolute and a temperature base of 60º F.

Degree-Day Normals: Simple arithmetic averages of monthly or annual degree-days over a long period of time (usually the 30-year period 1961–1990). The averages may be simple degree-day normals or population-weighted degree-day normals.

Degree-Days, Cooling (CDD): A measure of how warm a location is over a period of time relative to a base temperature, most commonly specified as 65 degrees Fahrenheit. The measure is computed for each day by subtracting the base temperature (65 degrees) from the average of the day's high and low temperatures, with negative values set equal to zero. Each day's cooling degree-days are summed to create a cooling degree-day measure for a specified reference period. Cooling degree-days are used in energy analysis as an indicator of air conditioning energy requirements or use.

Degree-Days, Heating (HDD): A measure of how cold a location is over a period of time relative to a base temperature, most commonly specified as 65 degrees Fahrenheit. The measure is computed for each day by subtracting the average of the day's high and low temperatures from the base temperature (65 degrees), with negative values set equal to zero. Each day's heating degree-days are summed to create a heating degree-day measure for a specified reference period. Heating degree-days are used in energy analysis as an indicator of space heating energy requirements or use.

Degree-Days, Population-Weighted: Heating or cooling degree-days weighted by the population of the area in which the degree-days are recorded. To compute State population-weighted degree-days, each State is divided into from one to nine climatically homogeneous divisions, which are assigned weights based on the ratio of the population of the division to the total population of the State. Degree-day readings for each division are multiplied by the corresponding population weight for each division and those products are then summed to arrive at the State population-weighted degree-day figure. To compute national population-weighted degree-days, the Nation is divided into nine Census regions, each comprising from three to eight States, which are assigned weights based on the ratio of the population of the region to the total population of the Nation. Degree-day readings for each region are multiplied by the corresponding population weight for each region and those products are then summed to arrive at the national population-weighted degree-day figure.

Design Electrical Rating, Net: The nominal net electrical output of a nuclear unit as specified by the electric utility for the purpose of plant design.

Development Well: A well drilled within the proved area of an oil or gas reservoir to the depth of a stratigraphic horizon known to be productive.

Distillate Fuel Oil: A general classification for one of the petroleum fractions produced in conventional distillation operations. It includes diesel fuels and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery. Products known as No. 1, No. 2, and No. 4 fuel oils are used primarily for space heating and electric power generation.

Dry Hole: An exploratory or development well found to be incapable of producing either oil or gas in sufficient quantities to justify completion as an oil or gas well.

Dry Natural Gas Production: See **Natural Gas (Dry) Production**.

Electrical System Energy Losses: The amount of energy lost during generation, transmission, and distribution of electricity, including plant and unaccounted-for uses.

Electricity: A form of energy characterized by the presence and motion of elementary charged particles generated by friction, induction, or chemical change.

Electricity Generation: The process of producing electric energy, or the amount of electric energy produced by transforming other forms of energy, commonly expressed in **kilowatthours** (kWh) or megawatthours (Mwh).

Electricity Generation, Gross: The total amount of electric energy produced by generating units and

measured at the generating terminal in **kilowatthours** (kWh) or megawatthours (MWh).

Electricity Generation, Net: The amount of **gross electricity generation** less the electrical energy consumed at the generating station(s) for station service or auxiliaries. Note: Electricity required for pumping at **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 Celectricity only. See also **Combined-Heat-and-Power (CHP) Plant.**

Electricity Retail Sales: The amount of electricity sold to customers purchasing electricity for their own use and not for resale.

Electric Power Plant: A station containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

Electric Power Sector: An energy-consuming sector that consists of electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public—i.e., North American Industry Classification System 22 plants. See also **Combined-Heat-and-Power (CHP) Plant, Electricity-Only Plant, Electric Utility,** and **Independent Power Producer.**

Electric Utility: A corporation, person, agency, authority, or other legal entity or instrumentality aligned with distribution facilities for delivery of electric energy for use primarily by the public. Included are investor-owned electric utilities, municipal and State utilities, Federal electric utilities, and rural electric cooperatives. A few entities that are tariff based and corporately aligned with companies that own distribution facilities are also included. Note: Due to the issuance of FERC Order 888 that required traditional electric utilities to functionally unbundle their generation, transmission, and distribution operations, "electric utility" currently has inconsistent interpretations from State to State.

End-Use Sectors: The **residential**, **commercial**, **industrial**, and **transportation** sectors of the economy.

Energy: The capacity for doing work as measured by the capability of doing work (potential energy) or the conversion of this capability to motion (kinetic energy). Energy has several forms, some of which are easily convertible and can be changed to another form useful for work. Most of the world's convertible energy comes from fossil fuels that are burned to produce heat that is then used as a transfer medium to mechanical or other means in order to accomplish tasks. Electrical energy is usually measured in kilowatthours, while heat energy is usually measured in British thermal units.

Energy Consumption: The use of energy as a source of heat or power or as an input in the manufacturing process.

Energy Service Provider: An energy entity that provides service to a retail or end-use customer.

Energy-Use Sectors: A group of major energy-consuming components of U.S. society developed to measure and analyze energy use. The sectors most commonly referred to in EIA are: **residential**, **commercial**, **industrial**, **transportation**, and **electric power**.

Ethane: A normally gaseous straight-chain hydrocarbon (C_2H_6). It is a colorless, paraffinic gas that boils at a temperature of -127.48º 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 (C_2H_4) 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 (C_2H_5OH) intended for motor gasoline blending. See **Oxygenates**.

Full-Power Operation: Operation of a nuclear generating unit at 100 percent of its design capacity. Full-power operation precedes commercial operation.

Gasohol: A blend of finished motor gasoline containing alcohol (generally ethanol but sometimes methanol) at a concentration between 5.7 percent and 10 percent by volume. See **Motor Gasoline, Oxygenated**.

Gas Well: A well completed for the production of natural gas from one or more gas zones or reservoirs. (Wells producing both crude oil and natural gas are classified as oil wells.)

Geothermal Energy: Hot water or steam extracted from geothermal reservoirs in the earth's crust and used for geothermal heat pumps, water heating, or electricity generation.

Gross Domestic Product (GDP): The total value of goods and services produced by labor and property located in the United States. As long as the labor and property are located in the United States, the supplier (that is, the workers and, for property, the owners) may be either U.S. residents or residents of foreign countries.

GT/IC: Gas turbine and internal combustion plants.

Heat Content of a Quantity of Fuel, Gross: The total amount of heat released when a fuel is burned. Coal, crude oil, and natural gas all include chemical compounds of carbon and hydrogen. When those fuels are burned, the carbon and hydrogen combine with oxygen in the air to produce carbon dioxide and water. Some of the energy released in burning goes into transforming the water into steam and is usually lost. The amount of heat spent in transforming the water into steam is counted as part of gross heat content but is not counted as part of net heat content. It is also referred to as the higher heating value. Btu conversion factors typically used in EIA represent gross heat content.

Heat Content of a Quantity of Fuel, Net: The amount of usable heat energy released when a fuel is burned under conditions similar to those in which it is normally used. Also referred to as the lower heating value. Btu conversion factors typically used in EIA represent gross heat content.

Heavy Oil: The fuel oils remaining after the lighter oils have been distilled off during the refining process. Except for start-up and flame stabilization, virtually all petroleum used in steam-electric power plants is heavy oil.

Hydrocarbon: An organic chemical compound of hydrogen and carbon in the gaseous, liquid, or solid phase. The molecular structure of hydrocarbon compounds varies from the simplest (methane, the primary constituent of natural gas) to the very heavy and very complex.

Hydroelectric Power: The production of electricity from the kinetic energy of falling water.

Hydroelectric Power Plant: A plant in which the turbine generators are driven by falling water.

Hydroelectric Pumped Storage: Hydroelectricity that is generated during peak load periods by using water

previously pumped into an elevated storage reservoir during off-peak periods when excess generating capacity is available to do so. When additional generating capacity is needed, the water can be released from the reservoir through a conduit to turbine generators located in a power plant at a lower level.

Imports: Receipts of goods into the 50 States and the District of Columbia from U.S. possessions and territories or from foreign countries.

Independent Power Producer: A corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities for the generation of electricity for use primarily by the public, and that is not an **electric utility**.

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

Injections (Natural Gas): Natural gas injected into storage reservoirs.

Isobutane: A normally gaseous branch-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams. See **Butane**.

Isobutylene: An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

Isopentane: A saturated branched-chain hydrocarbon obtained by fractionation of natural gasoline or isomerization of normal pentane.

Jet Fuel: A refined petroleum product used in jet aircraft engines. It includes kerosene-type jet fuel and naphtha-type jet fuel.

Jet Fuel, Kerosene-Type: A kerosene-based product with a maximum distillation temperature of 400° F at the 10-percent recovery point and a final maximum boiling point of 572° F. Fuel specifications are provided in ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It is used primarily for commercial turbojet and turboprop aircraft engines.

Jet Fuel, Naphtha-Type: A fuel in the heavy naphtha boiling range, with an average gravity of 52.8 degrees API, 20 to 90 percent distillation temperatures of 290° to 470° F and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used by the military for turbojet and turboprop engines.

Kerosene: A petroleum distillate having a maximum distillation temperature of 401º F at the 10-percent recovery point, a final boiling point of 572º F, and a minimum flash point of 100º F. Included are the two grades designated in ASTM D3699 (No. 1-K and No. 2-K) and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters; it is suitable for use as an illuminant when burned in wick lamps.

Kilowatt: A unit of electrical power equal to 1,000 **watts**.

Kilowatthour (kWh): A measure of electricity defined as a unit of work or energy, measured as 1 **kilowatt** (1,000 **watts**) of power expended for 1 hour. One kilowatthour is equivalent to 3,412 Btu. See **Watthour**.

Landed Costs: The dollar-per-barrel price of crude oil at the port of discharge. Included are the charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. Not included are charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage charges).

Lease and Plant Fuel: Natural gas used in well, field, and lease operations (such as gas used in drilling operations, heaters, dehydrators, and field compressors) and used as fuel in natural gas processing plants.

Lease Condensate: A mixture consisting primarily of pentanes and heavier hydrocarbons, which is recovered as a liquid from natural gas in lease or field separation facilities. Note: This category excludes natural gas liquids, such as butane and propane, which are recovered at natural gas processing plants or facilities.

Light Oil: Lighter fuel oils distilled off during the refining process. Virtually all petroleum used in internal combustion and gas-turbine engines is light oil.

Lignite: The lowest rank of coal. Often referred to as brown coal, it is used almost exclusively as fuel for steam-electric power generation. It is brownish-black and has a high inherent moisture content, sometimes as high as 45 percent. The heat content of lignite ranges from 9 to 17 million Btu per ton on a moist, mineral-matter-free basis. The heat content of lignite consumed in the United States

averages 14 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Liquefied Natural Gas (LNG): Natural gas (primarily methane) that has been liquefied by reducing its temperature to -260º 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 (CH_4) that is the principal constituent of natural gas. It is also an important source of hydroge in various industrial processes.

Methyl Tertiary Butyl Ether (MTBE): An ether, $(CH_3)_3COCH_3$, intended for motor gasoline blending. See **Oxygenates**.

Methanol: A light, volatile alcohol (CH_3OH) eligible for motor gasoline blending. See **Oxygenates**.

Miscellaneous Petroleum Products: All finished petroleum products not classified elsewhere—for example, petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils.

Motor Gasoline Blending: Mechanical mixing of motor gasoline blending components and oxygenates as required, to produce finished motor gasoline. Finished motor gasoline may be further mixed with other motor gasoline blending components or oxygenates, resulting in increased volumes of finished motor gasoline and/or changes in the formulation of finished motor gasoline (e.g., conventional motor gasoline mixed with MTBE to produce oxygenated motor gasoline).

Motor Gasoline Blending Components: Naphtha (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene, xylene) used for blending or compounding into finished motor gasoline. These components include reformulated gasoline blendstock (RBOB) but exclude oxygenates (alcohols, ethers), butane, and pentanes plus. Note: oxygenates are reported as individual components and are included in the total for other hydrocarbons, hydrogens, and oxygenates.

Motor Gasoline, Finished: A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in spark-ignition. Motor gasoline, as defined in ASTM Specification D-4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122ºF to 158ºF at the 10-percent recovery point to 365ºF to 374ºF 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 400º F.

Natural Gas: A gaseous mixture of hydrocarbon compounds, primarily methane, used as a fuel for electricity generation and in a variety of ways in buildings, and as raw material input and fuel for industrial processes.

Natural Gas, Dry: Natural gas which remains after: 1) the liquefiable hydrocarbon portion has been removed from the gas stream (i.e., gas after lease, field, and/or plant separation); and 2) any volumes of nonhydrocarbon gases have been removed where they occur in sufficient quantity to render the gas unmarketable. Note: Dry natural gas is also known as consumer-grade natural gas. The parameters for measurement are cubic feet at 60 degrees Fahrenheit and 14.73 pounds per square inch absolute.

Natural Gas (Dry) Production: The process of producing consumer-grade natural gas. Natural gas withdrawn from reservoirs is reduced by volumes used at the production (lease) site and by processing losses. Volumes used at the production site include 1) the volume returned to reservoirs in cycling, repressuring of oil reservoirs, and conservation operations; and 2) gas vented and flared. Processing losses include 1) nonhydrocarbon gases (e.g., water vapor, carbon dioxide, helium, hydrogen sulfide, and nitrogen) removed from the gas stream; and 2) gas converted to liquid form, such as lease condensate and plant liquids. Volumes of dry gas withdrawn from gas storage reservoirs are not considered part of production. Dry natural gas production equals marketed production less extraction loss.

Natural Gas Marketed Production: Gross withdrawals of natural gas from production reservoirs, less gas used for reservoir repressuring; nonhydrocarbon gases removed in treating and processing operations; and quantities vented and flared.

Natural Gas Plant Liquids (NGPL): Natural gas liquids recovered from natural gas in processing plants and, in some situations, from natural gas field facilities, as well as those extracted by fractionators. Natural gas plant liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Material as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gas Wellhead Price: The wellhead price of natural gas is calculated by dividing the total reported value at the wellhead by the total quantity produced as reported by the appropriate agencies of individual producing States and the U.S. Minerals Management Service. The price includes all costs prior to shipment from the lease, including gathering and compression costs, in addition to State production, severance, and similar charges.

Natural Gasoline: A mixture of hydrocarbons (mostly pentanes and heavier) extracted from natural gas that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane, which is a saturated branch-chain hydrocarbon

obtained by fractionation of natural gasoline or isomerization of normal pentane.

Net Summer Capacity: The maximum output, commonly expressed in **kilowatts** (kW) or megawatts (MW), that generating equipment can supply to system load, as demonstrated by a multi-hour test, at the time of summer peak demand. This output reflects a reduction in capacity due to electricity use for station service or auxiliaries.

Neutral Zone: A 6,200 square-mile area shared equally between Kuwait and Saudi Arabia under a 1992 agreement. The Neutral Zone contains an estimated 5 billion barrels of oil and 8 trillion cubic feet of natural gas.

Nonhydrocarbon Gases: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

Nuclear Electric Power (Nuclear Power): Electricity generated by the use of the thermal energy released from the fission of nuclear fuel in a reactor.

Nuclear Electric Power Plant: A single-unit or multiunit facility in which heat produced in one or more reactors by the fissioning of nuclear fuel is used to drive one or more steam turbines.

Nuclear Reactor: An apparatus in which a nuclear fission chain reaction can be initiated, controlled, and sustained at a specific rate. A reactor includes fuel (fissionable material), moderating material to control the rate of fission, a heavy-walled pressure vessel to house reactor components, shielding to protect personnel, a system to conduct heat away from the reactor, and instrumentation for monitoring and controlling the reactor's systems.

Offshore: That geographic area that lies seaward of the coastline. In general, the coastline is the line of ordinary low water along with that portion of the coast that is in direct contact with the open sea or the line marking the seaward limit of inland water.

Oil: See **Crude Oil**.

Operable Unit (Nuclear): In the United States, a nuclear generating unit that has completed low-power testing and been issued a full-power operating license by the Nuclear Regulatory Commission, or equivalent permission to operate.

Organization for Economic Cooperation and Development (OECD): Members are Australia, Austria, Belgium, Canada, Denmark, Faeroe Islands, Finland, France, Germany, Greece, Greenland, Hawaiian Trade Zone, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States and its territories (Guam, Puerto Rico, and the Virgin Islands). In addition, Czech Republic, Hungary, Poland, and South Korea joined the OECD in 1996.

Organization of Petroleum Exporting Countries (OPEC): Countries that have organized for the purpose of negotiating with oil companies on matters of oil production, prices, and future concession rights. Current members are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

Oxygenates: Substances which, when added to gasoline, increase the amount of oxygen in that gasoline blend. Ethanol, Methyl Tertiary Butyl Ether (MTBE), Ethyl Tertiary Butyl Ether (ETBE), and methanol are common oxygenates.

PAD Districts: Petroleum Administration for Defense Districts. Geographic aggregations of the 50 States and the District of Columbia into five districts for the Petroleum Administration for Defense in 1950. The districts were originally instituted for economic and geographic reasons as Petroleum Administration for War (PAW) Districts, which were established in 1942.

Pentanes Plus: A mixture of hydrocarbons, mostly pentanes and heavier, extracted from natural gas. Includes isopentane, natural gasoline, and plant condensate.

Petrochemical Feedstocks: Chemical feedstocks derived from petroleum principally for the manufacture of chemicals, synthetic rubber, and a variety of plastics.

Petroleum: A broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids. Note: Volumes of finished petroleum products include nonhydrocarbon compounds, such as additives and detergents, after they have been blended into the products.

Petroleum Coke: See **Coke, Petroleum**.

Petroleum Consumption: The sum of all refined petroleum products supplied. For each refined petroleum product, the amount supplied is calculated by adding production and imports, then subtracting changes in primary stocks (net withdrawals are a plus quantity and net additions are a minus quantity) and exports.

Petroleum Imports: Imports of petroleum into the 50 States and the District of Columbia from foreign countries and from Puerto Rico, the Virgin Islands, and other U.S. territories and possessions. Included are imports for the Strategic Petroleum Reserve and withdrawals from bonded warehouses for onshore consumption, offshore bunker use, and military use. Excluded are receipts of

foreign petroleum into bonded warehouses and into U.S. territories and U.S. Foreign Trade Zones.

Petroleum Products: Products obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, liquefied petroleum gases, pentanes plus, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, petrochemical feedstocks, special naphthas, lubricants, waxes, petroleum coke, asphalt, road oil, still gas, and miscellaneous products.

Petroleum Products Supplied: Same as **Petroleum Consumption**.

Petroleum Stocks, Primary: For individual products, quantities that are held at refineries, in pipelines, and at bulk terminals that have a capacity of 50,000 barrels or more, or that are in transit thereto. Stocks held by product retailers and resellers, as well as tertiary stocks held at the point of consumption, are excluded. Stocks of individual products held at gas processing plants are excluded from individual product estimates but are included in other oils estimates and total.

Photovoltaic Energy: Direct-current electricity generated from sunlight through solid-state semiconductor devices that have no moving parts.

Pipeline Fuel: Gas consumed in the operation of pipelines, primarily in compressors.

Plant Condensate: One of the natural gas liquids, mostly pentanes and heavier hydrocarbons, recovered and separated as liquid at gas inlet separators or scrubbers in processing plants.

Prime Mover: The engine, turbine, water wheel, or similar machine that drives an electric generator; or, for reporting purposes, a device that converts energy to electricity directly.

Primary Consumption: Includes consumption of coal, natural gas, petroleum, nuclear electric power, hydroelectric power, wood, waste, alcohol fuels, geothermal, solar, wind, net imports of coal coke, and net imports of electricity.

Propane: A normally gaseous straight-chain hydrocarbon (C_3H_8). It is a colorless paraffinic gas that boils at a temperature of -43.67º F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

Propylene: An olefinic hydrocarbon (C_3H_6) recovered from refinery or petrochemical processes.

Refiner Acquisition Cost of Crude Oil: The cost of crude oil to the refiner, including transportation and fees. The composite cost is the weighted average of domestic and imported crude oil costs.

Refinery (Petroleum): An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

Renewable Energy: Energy obtained from sources that are essentially inexhaustible (unlike, for example, the **fossil fuels**, of which there is a finite supply). Renewable sources of energy include **conventional hydroelectric power**, **wood**, **waste**, **alcohol fuels**, **geothermal**, **solar**, and **wind**.

Repressuring: The injection of a pressurized fluid (such as air, gas, or water) into oil and gas reservoir formations to effect greater ultimate recovery.

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

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

Residual Fuel Oil: The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and that conform to ASTM Specifications D396 and 975. Included are No. 5, a residual fuel oil of medium viscosity; Navy Special, for use in steam-powered vessels in government service and in shore power plants; and No. 6, which includes Bunker C fuel oil and is used for commercial and industrial heating, for electricity generation, and to power ships. Imports of residual fuel oil include imported crude oil burned as fuel.

Road Oil: Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades, from 0, the most liquid, to 5, the most viscous.

Rotary Rig: A machine used for drilling wells that employs a rotating tube attached to a bit for boring holes through rock.

Short Ton (Coal): A unit of weight equal to 2,000 pounds.

SIC (Standard Industrial Classification): A set of codes developed by the U.S. Office of Management and Budget which categorizes industries into groups with similar

economic activities. Replaced by **NAICS (North American Industry Classification System)**.

Solar Energy: See **Solar Thermal Energy** and **Photovoltaic Energy**.

Solar Thermal Energy: The radiant energy of the sun that can be converted into other forms of energy, such as heat or **electricity**.

Special Naphthas: All finished products within the naphtha boiling ranges that are used as paint thinner, cleaners or solvents. Those products are refined to a specified flash point. Special naphthas include all commercial hexane and cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks, are excluded.

Steam Coal: All nonmetallurgical coal.

Steam-Electric Power Plant: A plant in which the prime mover is a steam turbine. The steam used to drive the turbine is produced in a boiler where fossil fuels are burned.

Still Gas (Refinery Gas): Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, and propylene. It is used primarily as refinery fuel and, petrochemical feedstock.

Stocks: See **Coal Stocks**, **Crude Oil Stocks**, or **Petroleum Stocks, Primary**.

Strategic Petroleum Reserve (SPR): Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

Supplemental Gaseous Fuels: Synthetic natural gas, propane-air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

Synthetic Natural Gas (SNG): (Also referred to as substitute natural gas) A manufactured product, chemically similar in most respects to natural gas, resulting from the conversion or reforming of petroleum hydrocarbons that may easily be substituted for or interchanged with pipeline-quality natural gas.

Thermal Conversion Factor: See **Conversion Factor**.

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

Unaccounted-for Crude Oil: Represents the arithmetic difference between the calculated supply and the calculated disposition of crude oil. The calculated supply is the sum of crude oil production and imports minus changes in crude oil stocks. The calculated disposition of crude oil is the sum of crude oil input to refineries, crude oil exports, crude oil burned as fuel, and crude oil losses.

Unfinished Oils: All oils requiring further refinery processing except those requiring only mechanical blending. Includes naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

Unfractionated Stream: Mixtures of unsegregated natural gas liquid components, excluding those in plant condensate. This product is extracted from natural gas.

Underground Storage: The storage of natural gas in underground reservoirs at a different location from which it was produced.

United States: The 50 States and the District of Columbia. Note: The United States has varying degrees of jurisdiction over a number of territories and other political entities outside the 50 States and the District of Columbia, including Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Johnston Atoll, Midway Islands, Wake Island, and the Northern Mariana Islands. EIA data programs may include data from some or all of these areas in U.S. totals. For these programs, data products will contain notes explaining the extent of geographic coverage included under the term "United States."

Useful Thermal Output: The thermal energy made available in a combined-heat-and-power system for use in any industrial or commercial process, heating or cooling application, or delivered to other end users, i.e., total thermal energy made available for processes and applications other than electrical generation.

U.S.S.R.: The Union of Soviet Socialist Republics consisted of 15 constituent republics: Armenia, Azerbaijan,

Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. As a political entity, the U.S.S.R. ceased to exist as of December 31, 1991.

Vented Natural Gas: Gas released into the air on the production site or at processing plants.

Vessel Bunkering: Includes sales for the fueling of commercial or private boats, such as pleasure craft, fishing boats, tugboats, and ocean-going vessels, including vessels operated by oil companies. Excluded are volumes sold to the U.S. Armed Forces.

Waste Energy: Municipal solid waste, landfill gas, methane, digester gas, liquid acetonitrile waste, tall oil, waste alcohol,

medical waste, paper pellets, sludge waste, solid byproducts, tires, agricultural byproducts, closed loop biomass, fish oil, and straw used as fuel.

Watt (W): The unit of electrical power equal to one ampere under a pressure of one volt. A watt is equal to 1/746 horsepower.

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.

Alternative Fuels Data

. . . from the Energy Information Administration

The publications listed below include data on alternative fuels and are available on the EIA Web site at http://eia.doe.gov. For more information on alternative fuels go to http://eia.doe.gov/fuelalternate.html. Some publications are also available in hard copy. For more information, contact the National Energy Information Center at 202–586–8800 or infoctr@eia.doe.gov.

Alternative Fueled Vehicles in Use

Article and survey data on the number of onroad alternative fuel vehicles (AFVs) in use for federal, State, and fuel provider fleets, as well as alternative fuel buses. Tables include data by vehicle type, fuel type, weight class, and configuration.

Alternative Fueled Vehicles Made Available

Survey data representing the number of onroad alternative fuel vehicles made available by original equipment manufacturers and aftermarket vehicle conversion facilities. Includes tables for onroad alternative fuel and gasoline-electric hybrid vehicles, by weight class, fuel type, vehicle type, supplier type, and configuration.

Estimated Data: Alternative Fueled Vehicles in Use and Alternative Fueled Consumption

Historical data with projections of the estimated number of alternative fuel vehicles in use in the United States, by fuel and fuel type, census region, State, and weight category. Includes separate tables for vehicles in use by U.S. private entities, local government, State governments, and the federal government. Also includes tables on consumption of vehicle fuels, and the estimated share of alternative transportation fuel consumption by census region, fuel, vehicle weight, and vehicle ownership.

Developments in U.S. Alternative Fuel Markets

Article with information on the U.S. alternative fuel marketplace. Alternative fuel vehicles, alternative transportation fuels, suppliers, and niche markets are discussed.

Annual Energy Review

Includes historical data on alternative fuel vehicles and fuel consumption.

Monthly Oxygenate Report

Production and stock data for fuel ethanol in the United States and major U.S. geographic regions.

Petroleum Supply Monthly

Includes data on imports of fuel ethanol.

Annual Energy Outlook

Data relevant to alternative fuels are found in the supplemental tables. Projections include alternative fuel vehicle sales and fuel consumption.

Analysis of Corporate Average Fuel Economy (CAFÉ) Standards for Light Trucks and Increased Alternative Fuel Use

Analysis of selected portions of Senate Bill 1766 (S. 1766, the Energy Policy Act of 2002), House Resolution 4 (the Securing America's Future Energy Act of 2001) and Senate Bill 517 (S. 517, the Energy Policy Act of 2002).