

## **Monthly Energy Review**

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

Publication of this report is in keeping with responsibilities given to EIA in Public Law 95–91 (Department of Energy Organization Act), which states, in part, in Section 205(a)(2), that:

"The Administrator shall be responsible for carrying out a central, comprehensive, and unified energy data and information program which will collect, evaluate, assemble, analyze, and disseminate data and information..."

The *MER* is intended for use by Members of Congress, Federal and State agencies, energy analysts, and the general public. EIA welcomes suggestions from readers regarding the content of the *MER* and in other EIA publications.

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- Database Files (unrounded monthly data 1973 forward by table): ASCII comma-delimited files.
- Graph pages, MER sections, and complete MER: PDF files.

**Cover Image:** Optical glass fibers, though many times thinner than a human hair, carry vastly greater quantities of data than metallic wires, occupy less space, and are more secure. First introduced in the 1970s, high-purity optical fibers are capable of transmitting data over long distances and have replaced wires in many telecommunications, computing, and electronics applications.

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# Monthly Energy Review July 2005

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# **Contents**

			Page
Energy Plug:	Moi	nthly Flash Estimates of Electric Power Data	ix
Section	1.	Energy Overview.	1
Section	2.	Energy Consumption by Sector.	23
Section	3.	Petroleum	41
Section	4.	Natural Gas	71
Section	5.	Crude Oil and Natural Gas Resource Development	81
Section	6.	Coal	. 87
Section	7.	Electricity	95
Section	8.	Nuclear Energy	. 117
Section	9.	Energy Prices.	. 121
Section	10.	Renewable Energy	. 141
Section	11.	International Petroleum	149
Appendix	A.	Thermal Conversion Factors	159
Appendix	B.	Metric and Other Physical Conversion Factors	. 169
Appendix	C.	List of Energy Plugs	. 173
Glossary			. 175

# **Tables**

		Page
Section	1.	Energy Overview
1.1		Energy Overview
1.2		Energy Production by Source
1.3		Energy Consumption by Source
1.4		Energy Net Imports by Source
1.5		Merchandise Trade Value
1.6		Cost of Fuels to End Users in Constant (1982-1984) Dollars
1.7		Overview of U.S. Petroleum Trade
1.8		Energy Consumption per Dollar of Gross Domestic Product
1.8		
		Motor Vehicle Mileage, Fuel Consumption, and Fuel Rates
1.10		Heating Degree-Days by Census Division
1.11		Cooling Degree-Days by Census Division
Section	2.	Energy Consumption by Sector
2.1		Energy Consumption by Sector
2.2		Residential Sector Energy Consumption
2.3		Commercial Sector Energy Consumption
2.4		Industrial Sector Energy Consumption
2.5		Transportation Sector Energy Consumption
2.6		Electric Power Sector Energy Consumption
Section	3	Petroleum
3.1	٥.	Petroleum Overview
3.1		
		3.1a Supply
2.2		3.1b Disposition and Stocks
3.2		Crude Oil Overview
		3.2a Supply
		3.2b Disposition and Stocks
3.3		Petroleum Imports From
		3.3a Bahrain, Iran, Iraq, and Kuwait
		3.3b Qatar, Saudi Arabia, U.A.E., and Total Persian Gulf
		3.3c Algeria, Ecuador, Gabon, Indonesia, and Libya
		3.3d Nigeria, Venezuela, Total Other OPEC, and Total OPEC
		3.3e Angola, Australia, Bahamas, Brazil, Canada, and China
		3.3f Colombia, Ecuador, Gabon, Italy, Malaysia, and Mexico
		3.3g Netherlands, Netherlands Antilles, Norway, Puerto Rico, Russia, and Spain
		3.3h Trinidad and Tobago, United Kingdom, U.S. Virgin Islands, Other Non-OPEC,
2.4		Total Non-OPEC, and Total Imports
3.4		Finished Motor Gasoline Supply, Disposition, and Stocks
3.5		Distillate Fuel Oil Supply, Disposition, and Stocks
3.6		Residual Fuel Oil Supply, Disposition, and Stocks
3.7		Jet Fuel Supply, Disposition, and Stocks
3.8		Liquefied Petroleum Gases Supply, Disposition, and Stocks
3.9		Propane and Propylene Supply, Disposition, and Stocks
3.10		Other Petroleum Products Supply, Disposition, and Stocks
Section	4	Notural Cos
	4.	Natural Gas
4.1		Natural Gas Overview
4.2		Natural Gas Production
4.3		Natural Gas Trade by Country
4.4		Natural Gas Consumption by Sector
4.5		Natural Gas in Underground Storage

# **Tables (Continued)**

			Page
Section	5.	Crude Oil and Natural Gas Resource Development	O
5.1		Crude Oil and Natural Gas Drilling Activity Measurements	. 83
5.2		Crude Oil and Natural Gas Wells Drilled	84
5.3		Maximum U.S. Active Seismic Crew Counts.	85
Section	6.	Coal	
6.1		Coal Overview.	89
6.2		Coal Consumption by Sector.	
6.3		Coal Stocks by Sector.	
Section	7.	Electricity	
7.1		Electricity Overview.	97
7.2		Electricity Net Generation	
		7.2a Total (All Sectors).	99
		7.2b Electric Power Sector.	. 100
		7.2c Commercial and Industrial Sectors.	
7.3		Consumption of Combustible Fuels for Electricity Generation	
		7.3a Total (All Sectors)	. 103
		7.3b Electric Power Sector.	
		7.3c Commercial and Industrial Sectors (Selected Fuels)	
7.4		Consumption of Combustible Fuels for Electricity Generation and Useful Thermal Output	
		7.4a Total (All Sectors).	. 107
		7.4b Electric Power Sector.	
		7.4c Commercial and Industrial Sectors (Selected Fuels)	109
7.5		Stocks of Coal and Petroleum: Electric Power Sector.	. 111
7.6		Electricity End Use.	
Section	8.	Nuclear Energy	
8.1		Nuclear Energy Overview	. 119
Section	9.	Energy Prices	
9.1		Crude Oil Price Summary	. 123
9.2		F.O.B. Costs of Crude Oil Imports From Selected Countries	. 124
9.3		Landed Costs of Crude Oil Imports From Selected Countries	. 125
9.4		Motor Gasoline Retail Prices, U.S. City Average.	. 126
9.5		Refiner Prices of Residual Fuel Oil	. 127
9.6		Refiner Prices of Petroleum Products for Resale	128
9.7		Refiner Prices of Petroleum Products to End Users	. 129
9.8		No. 2 Distillate Prices to Residences	
		9.8a Northeastern States.	
		9.8b Selected South Atlantic and Midwestern States	. 131
		9.8c Selected Western States and U.S. Average	. 132
9.9		Average Retail Prices of Electricity	
9.10		Cost of Fossil-Fuel Receipts at Electric Generating Plants	
9.11		Natural Gas Prices.	. 137

# **Tables (Continued)**

Section	10. Renewable Energy	
10.1	Renewable Energy Consumption by Source	43
10.2	Renewable Energy Consumption	
	10.2a Residential and Commercial Sectors (Estimated)	44
	10.2b Industrial and Transportation Sectors (Estimated)	45
	10.2c Electric Power Sector	46
Section	11. International Petroleum	
11.1	Crude Oil Production	
	11.1a OPEC Members	50
	11.1b Persian Gulf Nations, Non-OPEC, and World	51
11.2	Petroleum Consumption in OECD Countries	55
11.3	Petroleum Stocks in OECD Countries	57
Appendi	ix A. Thermal Conversion Factors	
A1.	Approximate Heat Content of Petroleum Products	59
A2.	Approximate Heat Content of Crude Oil, Total Petroleum, and Natural Gas Plant Liquids 16	60
A3.	Approximate Heat Content of Petroleum Product Weighted Averages	61
A4.	Approximate Heat Content of Natural Gas	62
A5.	Approximate Heat Content of Coal and Coal Coke	63
A6.	Approximate Heat Rates for Electricity	64
Appendi	ix B. Metric and Other Physical Conversion Factors	
B1.	Metric Conversion Factors	70
B2.	Metric Prefixes	71
R3	Other Physical Conversion Factors	71

# **Figures**

<b>a</b>	_	Page
Section	1.	Energy Overview
1.1		Energy Overview
1.2 1.3		Energy Production
1.3		Energy Consumption. 6
1.4		Energy Net Imports. 8 Merchandise Trade Value. 10
1.6		Cost of Fuels to End Users in Constant (1982-1984) Dollars
1.7		Overview of U.S. Petroleum Trade.
1.7		Energy Consumption per Dollar of Gross Domestic Product
1.9		Motor Vehicle Fuel Rates
1.,		Though the fact that the state of the state
Section	2.	Energy Consumption by Sector
2.1		Energy Consumption by Sector
2.2		Residential Sector Energy Consumption
2.3		Commercial Sector Energy Consumption
2.4		Industrial Sector Energy Consumption
2.5		Transportation Sector Energy Consumption
2.6		Electric Power Sector Energy Consumption
Section	3.	Petroleum
3.1		Petroleum
		3.1a Overview and Production
		3.1b Products Supplied, Imports, and Stocks
3.2		Finished Motor Gasoline
3.3		Distillate Fuel Oil
3.4		Residual Fuel Oil. 60
3.5		Jet Fuel. 62
3.6		Liquefied Petroleum Gases
3.7		Propane and Propylene
Section	4.	Natural Gas
4.1		Natural Gas. 72
Section	5.	Crude Oil and Natural Gas Resource Development
5.1		Crude Oil and Natural Gas Resource Development Indicators
Section	6.	Coal
6.1		Coal
Section	7.	Electricity
7.1		Electricity Overview
7.2		Electricity Net Generation
7.3		Consumption of Selected Combustible Fuels for Electricity Generation
7.4		Consumption of Selected Combustible Fuels for Electricity Generation and Useful
		Thermal Output
7.5		Stocks of Coal and Petroleum: Electric Power Sector
7.6		Electricity End Use. 112
Section	8.	Nuclear Energy
8.1	٠.	Nuclear Energy Overview

# **Figures (Continued)**

			Page
Section	9.	Energy Prices	Ü
9.1		Petroleum Prices.	. 122
9.2		Average Retail Prices of Electricity	133
9.3		Cost of Fossil-Fuel Receipts at Electric Generating Plants	
9.4		Natural Gas Prices	
Section	10.	Renewable Energy	
10.1		Renewable Energy Consumption.	. 142
Section	11.	International Petroleum	
11.1		Crude Oil Production	
		11.1a Overview	. 152
		11.1b By Selected Country	. 153
11.2		Petroleum Consumption in OECD Countries.	
11.3		Petroleum Stocks in OECD Countries.	



# Monthly Flash Estimates of Electric Power Data

In February 2005, the Energy Information Administration (EIA) introduced Monthly Flash Estimates of Electric Power Data, which presents the most recent EIA electricity data. The report is released approximately 45 days after the end of the reporting month. about 30 days ahead of the more detailed Electric Power Monthly report.

**Contents.** Flash Estimates presents national-level data for the reporting month, the previous month, the same month in the previous year, rolling 12-month periods, and a year-to-date summation. Topics include:

- Electricity generation
- Fuel consumption
- Fuel stocks
- Electricity sales
- Average retail electricity prices
- Heating and cooling degree-days

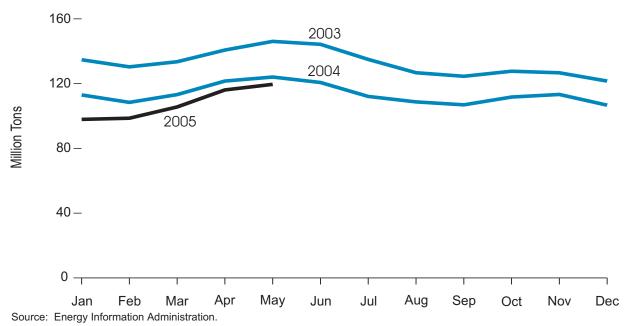
The ten-page report begins with a brief commentary to put the information into a useful context. The next tric Power Monthly, which uses essentially complete four pages present tables and charts displaying data and samples and includes State-level values.

trends in net generation, fossil fuel consumption, and fossil fuel stocks. Pages six through eight contain tables and charts for electric power retail sales and average prices, price trends, and sales trends. Page nine presents heating and cooling degree-days, including up to two years of actual data compared to normal heating or cooling degree-days. The last page contains supporting information and definitions.

**Methodology**. Information published in the *Flash* Estimates is compiled from survey data collected monthly from a statistically-derived sample of power plants and electricity retailers. The nominal sample sizes are approximately 450 electric utilities and other energy service providers, approximately 300 combined-heat-and-power (CHP) plants, and about 1,440 non-CHP plants. For the most part a regression-based method is used to estimate totals from the sample.

Updated information is later released in the Elec-

#### Trend in Coal Stocks, Electric Power Sector



Monthly Flash Estimates of Electric Power Data is available on the EIA Web site at http://eia.doe.gov. Select "Monthly Electricity Flash Estimates" from the Featured Topics. Questions about the contents of the report should be directed to Orhan Yildiz, Office of Coal, Nuclear, Electric and Alternate Fuels, at Orhan. Yildiz@eia.doe.gov or 202-287-1586. For general information about energy, contact the National Energy Information Center at infoctr@eia.doe.gov or 202-586-8800.

## **Section 1. Energy Overview**

Energy production during April 2005 totaled 5.7 quadrillion Btu, a 0.3-percent decrease compared with the level of production during April 2004. Production of conventional hydroelectric power increased 9.4 percent; nuclear electric power decreased 4.4 percent; natural gas (dry) decreased 1.0 percent; crude oil decreased 0.7 percent; and coal decreased 0.3 percent, compared with the level of production during April 2004.

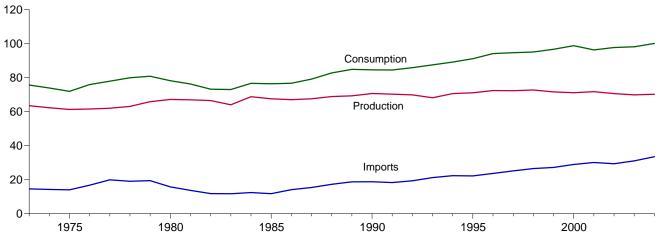
Energy consumption during April 2005 totaled 7.8 quadrillion Btu, a 0.6-percent decrease compared with the level of consumption during April 2004. Consumption of

conventional hydroelectric power increased 9.4 percent; nuclear electric power decreased 4.4 percent; coal increased 2.1 percent; petroleum decreased 1.8 percent; and natural gas decreased 0.1 percent, compared with the level 1 year earlier.

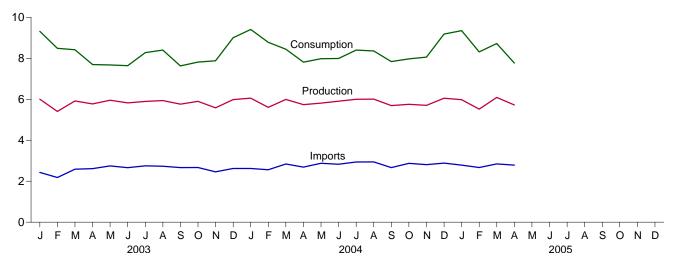
Net imports of energy during April 2005 totaled 2.4 quadrillion Btu, 3.8 percent above the level of net imports 1 year earlier. Coal net exports decreased 38 percent; natural gas net imports increased 7.4 percent; petroleum products net imports increased 6.0 percent; and crude oil net imports increased 1.6 percent, compared with the level in April 2004.

Figure 1.1 Energy Overview (Quadrillion Btu)

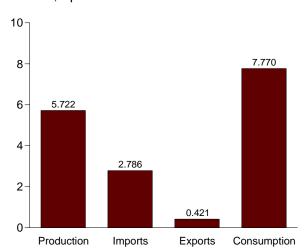
Consumption, Production, and Imports, 1973-2004



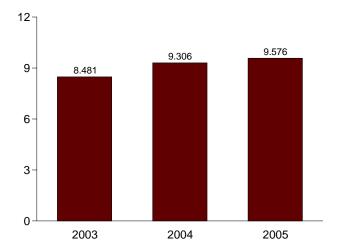
Consumption, Production, and Imports, Monthly



Overview, April 2005



Net Imports, January-April



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

Sources: Tables 1.1 and 1.4.

**Table 1.1 Energy Overview** 

(Quadrillion Btu)

	Production	Imports	Exports	Adjustments <sup>a</sup>	Consumptio
70 T-4-1	60 505	44.040	0.000	0.450	75 700
73 Total		14.613	2.033	-0.456	75.708
75 Total		14.032	2.323	-1.067	71.999
80 Total		15.796	3.695	-1.054	78.289
85 Total	. 67.647	11.781	4.196	1.238	76.469
90 Total	. 70.729	18.817	4.752	126	84.668
95 Total	. 71.156	22.260	4.511	2.315	91.221
96 Total	. 72,472	23.702	4.633	2.683	94,224
97 Total		25,215	4.514	1.637	94,727
98 Total		26.581	4.299	.078	95.146
99 Total		27.252	3.715	1.585	96.774
000 Total		28.973	4.006	2.720	98.905
001 Total		30.157	3.770	-1.799	96.380
02 Total	. 70.673	29.406	3.661	1.370	97.788
<b>03</b> January	. 6.002	2.429	.377	1.262	9.316
February	. 5.406	2.180	.300	1.201	8.487
March	. 5.917	2.585	.316	.230	8.416
April		2.613	.333	358	7.693
May		2.747	.357	667	7.674
June		2.661	.351	494	7.639
		2.752	.339	030	8.275
July			.335	.069	
August		2.731			8.401
September		2.666	.325	474	7.627
October		2.668	.349	402	7.815
November	. 5.581	2.458	.338	.178	7.879
December	. 5.983	2.624	.345	.739	9.001
Total	. 69.921	31.115	4.066	1.253	98.223
<b>004</b> January	. R 6.056	R 2.623	.299	<sup>R</sup> 1.028	R 9.408
February		R 2.561	.312	R .927	R 8.780
March	D	R 2.842	.388	R003	R 8.443
April		R 2.688	.410	R - 205	R 7.813
•	D	R 2.875		R314	<sup>R</sup> 7.981
May			.390		
June		R 2.831	.390	R358	R 7.990
July	D	R 2.939	.372	R167	R 8.401
August		R 2.943	.375	R216	R 8.360
September		<sup>R</sup> 2.665	.362	<sup>R</sup> 157	<sup>R</sup> 7.837
October	. R 5.756	R 2.872	.351	<sup>R</sup> 304	<sup>R</sup> 7.973
November	. 5.702	R 2.811	.350	<sup>R</sup> 104	R 8.059
December		R 2.883	.434	R .684	<sup>R</sup> 9.181
Total		R 33.535	4.433	R .810	R 100.227
105 January	. 5.980	R 2.787	.340	R .923	<sup>R</sup> 9.351
February		R 2.667	.354	R .477	<sup>R</sup> 8.310
•		R 2.844		R .181	R 8.722
March			.393		
April		2.786	.421	317	7.770
4-Month Total	. 23.313	11.083	1.507	1.264	34.153
004 4-Month Total		10.715	1.409	1.747	34.445
003 4-Month Total	. 23.096	9.807	1.327	2.335	33.912

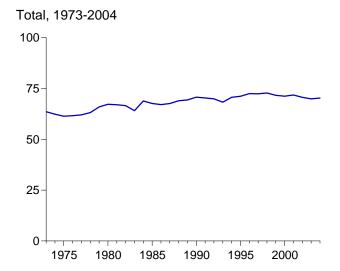
<sup>&</sup>lt;sup>a</sup> A balancing item. Includes stock changes, losses, gains, miscellaneous blending components, and unaccounted-for supply. R=Revised.

Web Page: For annual data not displayed between 1973 and 1995, see

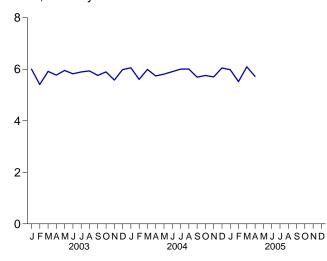
web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/overview.html.
Sources: • Production: Table 1.2. • Consumption: Table 1.3. • Imports and Exports: Tables 3.1a, 3.1b, 4.3, 6.1, 7.1, A2-A6, and Section 2, "Energy Consumption Notes and Sources," Note 5.

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.

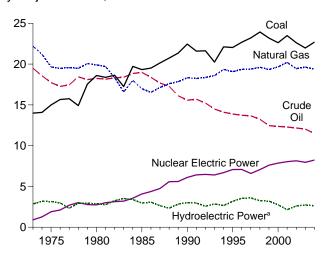
Figure 1.2 Energy Production (Quadrillion Btu)



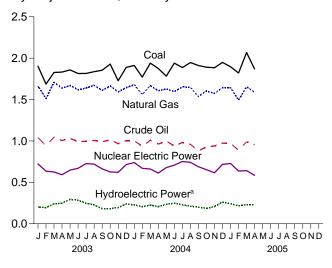
Total, Monthly



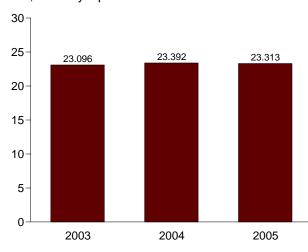
By Major Sources, 1973-2004



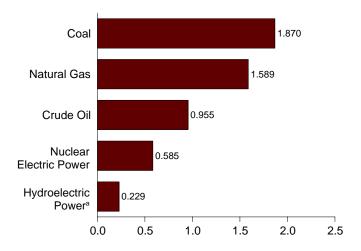
By Major Sources, Monthly



Total, January-April



By Major Sources, April 2005



<sup>&</sup>lt;sup>a</sup>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 <sup>a</sup>					
	Coal	Natural Gas (Dry)	Crude Oil <sup>b</sup>	Natural Gas Plant Liquids	Total	Nuclear Electric Power	Hydro- electric Pumped Storage <sup>c</sup>	Conventional Hydroelectric Power	Wood, Waste, Alcohol <sup>d</sup>	Geo- thermal	Solar and Wind	Total	Total
1973 Total	13.992	22.187	19.493	2.569	58.241	0.910	(°)	2.861	1.529	0.043	NA	4,433	63.585
1975 Total	14.989	19.640	17.729	2.374	54.733	1.900	ìeí	3.155	1.499	.070	NA	4.723	61.357
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
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
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
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	7.073	020	3.590	3.127	.316	.102	7.137	72.472
	23.211	19.344	13.723	2.495	58.758	6.597	032 041	3.640	3.006	.325	.104	7.137	72.389
1997 Total													
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	23.490	20.205	12.282	2.547	58.523	8.033	091	2.242	2.640	.311	.135	5.328	71.793
2002 Total	22.622	19.439	12.163	2.559	56.783	8.143	089	2.689	2.648	.328	.170	5.835	70.673
2003 January	1.902	1.661	1.040	.204	4.807	.721	008	.211	.229	.029	.012	.481	6.002
February	1.686	1.510	.940	.190	4.327	.635	008	.203	.210	.027	.012	.452	5.406
March	1.827	1.709	1.046	.200	4.782	.625	008	.248	.226	.029	.016	.518	5.917
April	1.832	1.636	1.005	.191	4.664	.592	006	.254	.224	.027	.017	.521	5.771
May	1.857	1.671	1.031	.181	4.740	.648	006	.301	.225	.028	.016	.569	5.952
June	1.814	1.618	.992	.177	4.602	.669	008	.293	.223	.029	.016	.560	5.823
July	1.815	1.639	.994	.191	4.638	.726	008	.254	.238	.029	.015	.536	5.893
August	1.836	1.671	1.006	.197	4.711	.719	008	.235	.236	.029	.014	.514	5.936
September	1.854	1.610	.989	.198	4.651	.663	008	.189	.223	.028	.015	.455	5.761
October	1.928	1.665	1.013	.211	4.817	.625	006	.189	.230	.028	.014	.462	5.898
November	1.727	1.592	.968	.206	4.493	.621	007	.202	.230	.027	.015	.474	5.581
December	1.889	1.644	1.003	.200	4.736	.715	007	.246	.247	.030	.016	.539	5.983
Total	21.970	19.626	12.026	2.346	55.968	7.959	087	2.825	2.740	.339	.178	6.082	69.921
2004 January	1.912	E 1.679	R 1.002	.208	R 4.801	.739	007	.235	.243	.030	.016	.523	R 6.056
February	1.771	E 1.560	R .935	.194	R 4.460	.669	007	.213	.224	.028	.015	.481	R 5.604
March	1.940	E 1.667	R 1.008	.211	R 4.826	.660	006	.231	.234	.028	.019	.513	R 5.993
April	1.875	E 1.605	R .962	.199	R 4.641	.612	006	.212	.236	.027	.018	.493	R 5.739
May	1.782	E 1.627	R .998	R .206	R 4.613	.678	007	.242	.234	.028	.023	.527	R 5.811
June	1.940	E 1.596	R .939	.194	R 4.669	.708	007	.255	.235	.028	.019	.537	R 5.907
July	1.886	E 1.653	R .981	.209	R 4.730	.751	007	.235	.246	.029	.017	.527	R 6.001
August	1.946	E 1.649	R .959	.215	R 4.769	.742	008	.220	.241	.029	.016	.505	R 6.008
September	1.911	E 1.536	R .881	.201	R 4.529	.688	007	.208	.230	.027	.016	.482	R 5.692
October	1.891	E 1.604	R .927	.210	R 4.633	.653	007	.193	.239	.029	.016	.477	R 5.756
November	1.884	E 1.574	.939	.209	R 4.605	.615	006	.213	.232	.028	.015	.488	5.702
December	1.949	E 1.644	R .973	.210	R 4.776	.716	006	.267	.251	.029	.017	.564	R 6.050
Total	22.686	E 19.395	R 11.503	R <b>2.466</b>	R 56.050	8.232	082	2.725	2.845	.340	.206	6.116	R 70.316
2005 January	1.897	RE 1.646	E .970	.209	4.721	.728	007	.248	.247	.029	.015	.539	5.980
February	1.820	RE 1.493	E .888	.209	R 4.721	.635	007	.221	.234	.029	.013	.493	R 5.519
March	2.067	E 1.654	E .988	.194	4.924	.641	004	.234	.234	.025	.013	.530	6.091
April	1.870	E 1.589	E .955	.215	4.619	.585	005	.234	.246 .241	.029	.019	.522	5.722
4-Month Total	7.654	E <b>6.382</b>	E 3.801	.204 . <b>822</b>	18.659	.565 <b>2.589</b>	004 019	.232 . <b>935</b>	.241 .970	.028 .111	.020 .068	.522 <b>2.084</b>	23.313
2004 4-Month Total	7.497	E 6.512	3.906	.812	18.728	2.681	027	.892	.937	.112	.068	2.010	23.392
2003 4-Month Total	7.248	6.517	4.031	.785	18.580	2.573	030	.915	.889	.112	.056	1.973	23.096

 $<sup>\</sup>stackrel{\text{a}}{\cdot}$  End-use consumption and electricity net generation.

equal sum of components due to independent rounding.  $\bullet\,$  Geographic coverage is the 50 States and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see 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.

b Includes lease condensate.

<sup>&</sup>lt;sup>c</sup> Pumped storage facility production minus energy used for pumping.

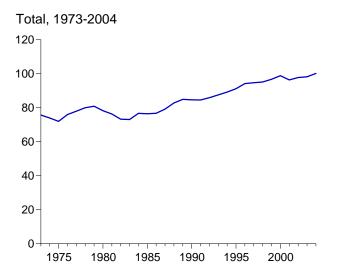
d "Alcohol" is ethanol blended into motor gasoline.

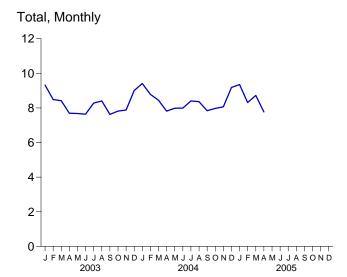
e Included in "Conventional Hydroelectric Power."

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

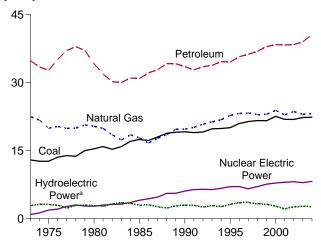
Notes: • See Note 1, "Energy Production," at end of section. • Totals may not

Figure 1.3 Energy Consumption (Quadrillion Btu)

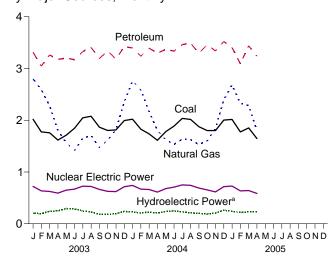




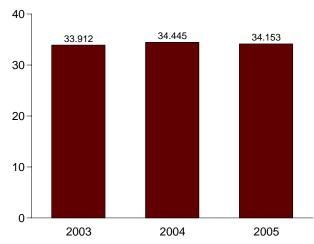




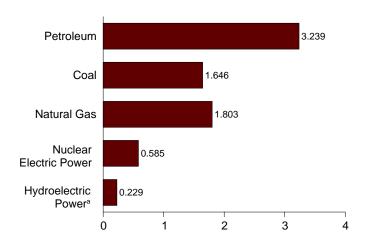
By Major Sources, Monthly



Total, January-April



By Major Sources, April 2005



<sup>a</sup>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					Renewa	ble Energy	а		
	Coal	Natural Gas <sup>b</sup>	Petro- leum <sup>c,d</sup>	Totale	Nuclear Electric Power	Hydro- electric Pumped Storage <sup>f</sup>	Conventional Hydroelectric Power	Wood, Waste, Alcohol <sup>d,g</sup>	Geo- thermal	Solar and Wind	Total	Total <sup>d,h</sup>
1973 Total	12.971	22.512	34.840	70.316	0.910	( i )	2.861	1.529	0.043	NA	4.433	75.708
1975 Total	12.663	19.948	32.731	65.355	1.900	(!)	3.155	1.499	.070	NA	4.723	71.999
1980 Total	15.423	20.394	34.202	69.984	2.739	( i )	2.900	2.485	.110	NA	5.494	78.289
1985 Total	17.478	17.834	30.922	66.221	4.076	(1)	2.970	2.864	.198	(s)	6.033	76.469
1990 Total	19.173	19.730	33.553	72.460	6.104	036	3.046	2.662	.336	.089	6.133	84.668
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	21.914	22.906	38.333	83.182	8.033	091	2.242	2.640	.311	.135	5.328	96.380
2002 Total	21.904	23.628	38.401	83.994	8.143	089	2.689	2.648	.328	.170	5.835	97.788
2003 January	2.019	2.800	3.314	8.134	.721	008	.211	.229	.029	.012	.481	9.316
February	1.774	2.589	3.046	7.423	.635	008	.203	.210	.027	.012	.452	8.487
March	1.757	2.276	3.262	7.299	.625	008	.248	.226	.029	.016	.518	8.416
April	1.617	1.805	3.177	6.602	.592	006	.254	.224	.027	.017	.521	7.693
May	1.710	1.567	3.202	6.481	.648	006	.301	.225	.028	.016	.569	7.674
June	1.845	1.415	3.171	6.435	.669	008	.293	.223	.029	.016	.560	7.639
July	2.046	1.653	3.326	7.031	.726	008	.254	.238	.029	.015	.536	8.275
August	2.077	1.704	3.408	7.190	.719	008	.235	.236	.029	.014	.514	8.401
September	1.866	1.475	3.193	6.537	.663	008	.189	.223	.028	.015	.455	7.627
October	1.802	1.615	3.341	6.762	.625	006	.189	.230	.028	.014	.462	7.815
November	1.813 1.994	1.817 2.355	3.184 3.423	6.817	.621 .715	007 007	.202 .246	.230 .247	.027 .030	.015 .016	.474 .539	7.879 9.001
December Total	22.321	23.069	39.047	7.778 <b>84.487</b>	7.959	007 087	2.825	2.740	.339	.178	6.082	98.223
2004 January	2.020	2.758	R 3.396	R 8.178	.739	007	.235	.243	.030	.016	.523	R 9.408
February	1.827	2.585	R 3.238	R 7.660	.669	007	.213	.224	.028	.015	.481	R 8.780
March	1.736	2.166	R 3.392	R 7.303	.660	006	.231	.234	.028	.019	.513	R 8.443
April	1.612	1.805	R 3.297	R 6.738	.612	006	.212	.236	.027	.018	.493	R 7.813
May	1.779	1.622	R 3.369	R 6.807	.678	007	.242	.234	.028	.023	.527	<sup>R</sup> 7.981
June	1.887	1.533	R 3.335	R 6.775	.708	007	.255	.235	.028	.019	.537	R 7.990
July	2.036	1.636	R 3.463	<sup>R</sup> 7.144	.751	007	.235	.246	.029	.017	.527	<sup>R</sup> 8.401
August	2.015	1.624	R 3.487	<sup>R</sup> 7.134	.742	008	.220	.241	.029	.016	.505	R 8.360
September	1.875	1.529	R 3.295	R 6.697	.688	007	.208	.230	.027	.016	.482	<sup>R</sup> 7.837
October	1.801	1.605	R 3.460	R 6.871	.653	007	.193	.239	.029	.016	.477	<sup>R</sup> 7.973
November	1.801	1.837	R 3.339	R 6.983	.615	006	.213	.232	.028	.015	.488	R 8.059
December	2.003	2.396	R 3.521	R 7.928	.716	006	.267	.251	.029	.017	.564	R 9.181
Total	22.390	R 23.097	R 40.594	R 86.218	8.232	082	2.725	2.845	.340	.206	6.116	R 100.227
2005 January	2.015	R 2.684	R 3.404	R 8.113	.728	007	.248	.247	.029	.015	.539	<sup>R</sup> 9.351
February	1.775	R 2.326	R 3.093	R 7.207	.635	004	.221	.234	.025	.013	.493	<sup>R</sup> 8.310
March	1.851	R 2.282	R 3.438	R 7.581	.641	005	.234	.248	.029	.019	.530	R 8.722
April	1.646	1.803	3.239	6.695	.585	004	.232	.241	.028	.020	.522	7.770
4-Month Total	7.287	9.095	13.174	29.596	2.589	019	.935	.970	.111	.068	2.084	34.153
2004 4-Month Total	7.194	9.314	13.324	29.879	2.681	027	.892	.937	.112	.068	2.010	34.445
2003 4-Month Total	7.167	9.469	12.799	29.457	2.573	030	.915	.889	.112	.056	1.973	33.912

<sup>&</sup>lt;sup>a</sup> End-use consumption and electricity net generation.

separately displayed. See Table 1.4.

<sup>1</sup> Included in conventional hydroelectric power.

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

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

Web Page: For annual data not display:
http://www.eia.doe.gov/emeu/mer/overview.html.
Sources: • Coal: Tables 6.1 and A5. • Natural Gas: Tables 4.1 and A4.

Tables 3.1b and A3. • Nuclear Electric Power and

Renewable Energy: Hydroelectric Pumped Storage: Tables 7.2a and A6. • Renewable Energy: Table 10.1. • Net Imports of Coal Coke and Electricity: Table 1.4.

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

<sup>&</sup>lt;sup>c</sup> Petroleum products supplied, including natural gas plant liquids and crude oil burned as fuel. Beginning in 1993, also includes ethanol blended into motor

<sup>&</sup>lt;sup>d</sup> 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.

Includes coal coke net imports. See Table 1.4.

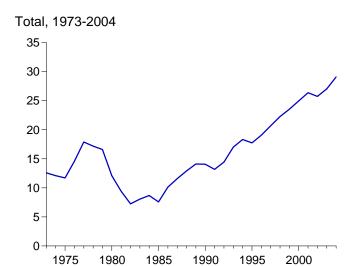
Pumped storage facility production minus energy used for pumping.

g "Alcohol" is ethanol blended into motor gasoline.

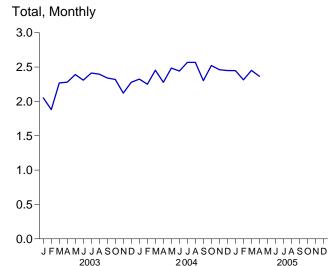
h Includes coal coke net imports and electricity net imports, which are not

Figure 1.4 Energy Net Imports

(Quadrillion Btu, Except as noted)



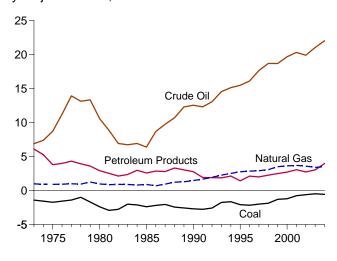
1985



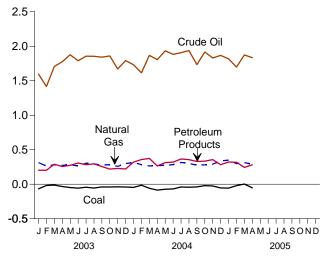
By Major Sources, 1973-2004

1980

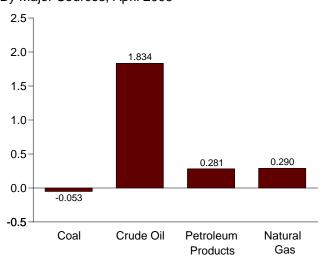
1975



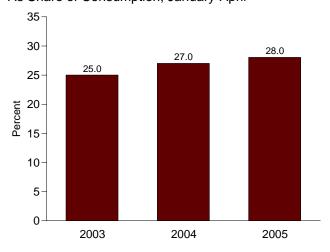
By Major Sources, Monthly



By Major Sources, April 2005



As Share of Consumption, January-April



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

Sources: Tables 1.3 and 1.4.

Table 1.4 Energy Net Imports by Source

(Quadrillion Btu)

	Coal	Coal Coke	Natural Gas	Crude Oil <sup>a</sup>	Petroleum Products <sup>b</sup>	Electricity	Total
072 Total	-1.422	-0.007	0.981	6.883	6.097	0.049	12.580
973 Total	-1. <del>4</del> 22 -1.738						
975 Total		.014	.904	8.708	3.800	.021	11.709
980 Total	-2.391	035	.957	10.586	2.912	.071	12.101
985 Total	-2.389	013	.896	6.381	2.570	.140	7.584
990 Total	-2.705	.005	1.464	12.536	2.757	.008	14.065
995 Total	-2.081	.061	2.745	15.469	1.422	.134	17.750
996 Total	-2.165	.023	2.847	16.108	2.119	.137	19.069
997 Total	-2.006	.046	2.904	17.648	1.993	.116	20.701
998 Total	-1.874	.067	3.064	18.684	2.252	.088	22.281
999 Total	-1.298	.058	3.500	18.686	2.493	.099	23.537
000 Total	-1.215	.065	3.623	19.676	2.701	.115	24.967
001 Total	771	.029	3.691	20.305	3.056	.075	26.386
002 Total	610	.061	3.583	19.901	2.732	.078	25.745
<b>003</b> January	067	.001	.314	1.596	.203	.005	2.052
February	018	.013	.263	1.416	.202	.004	1.880
March	012	.004	.283	1.706	.290	001	2.269
April	033	.004	.273	1.776	.257	.003	2.280
May	048	.002	.285	1.876	.274	.001	2.390
June	057	.002	.263	1.790	.308	.001	2.310
July	044	.005	.304	1.856	.283	.010	2.413
,	055	.003	.293	1.854	.295	.008	2.397
August							
September	039	.004	.279	1.842	.256	002	2.340
October	040	.004	.283	1.860	.219	006	2.320
November	038	.003	.258	1.671	.228	003	2.120
December	040	.006	.300	1.792	.221	.001	2.279
Total	491	.051	3.398	21.034	3.035	.022	27.049
<b>004</b> January	046	.004	.314	<sup>R</sup> 1.732	R .320	(s)	R 2.325
February	015	.009	.283	<sup>R</sup> 1.615	R .357	.000	R 2.250
March	059	.010	.265	<sup>R</sup> 1.867	R .374	003	R 2.454
April	086	.024	.270	R 1.805	R .265	(s)	R 2.278
May	072	.037	.273	R 1.933	R .313	.001	R 2.484
June	069	.020	.285	R 1.882	R .320	.002	R 2.441
July	040	.009	.316	R 1.906	R .366	.010	R 2.567
August	044	.007	.300	R 1.937	R .356	.012	R 2.568
September	040	002	.277	R 1.734	R .329	.003	R 2.303
•			.282	R 1.734	R .334		R 2.522
October	021	.006				.004	
November	026	.006	.290	R 1.830	R .357	.005	R 2.462
December	055	.008	.339	R 1.867	R .283	.005	R 2.448
Total	571	.138	3.495	R 22.025	<sup>R</sup> 3.976	.039	<sup>R</sup> 29.101
005 January	056	.011	E.348	1.818	R .322	.005	R 2.447
February	021	.013	E.299	R 1.698	R.319	.006	R 2.313
March	.002	.009	RE .313	1.874	R .244	.008	<sup>R</sup> 2.451
April	053	.006	_ <sup>E</sup> .290	1.834	.281	.006	2.365
4-Month Total	127	.039	E 1.249	7.224	1.166	.025	9.576
004 4-Month Total	206	.046	1.133	7.019	1.317	003	9.306
003 4-Month Total	130	.022	1.132	6.493	.951	.012	8,481

<sup>&</sup>lt;sup>a</sup> Crude oil and lease condensate. Includes imports into the Strategic Petroleum Reserve, which began in 1977.

<sup>b</sup> Petroleum products, unfinished oils, pentanes plus, and gasoline blending

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

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

components.

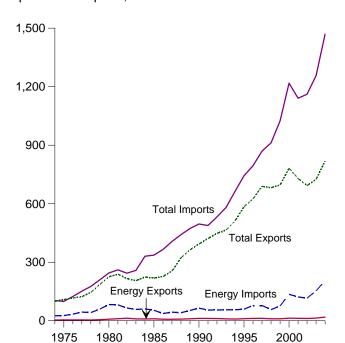
R=Revised. E=Estimate. (s)=Less than +0.5 trillion Btu and greater than -0.5

Notes: • See Note 3, "Energy Imports," and 4, "Energy Exports," at end of section. • Net imports equal imports minus exports. Minus sign indicates exports are greater than imports. • Totals may not equal sum of components due to

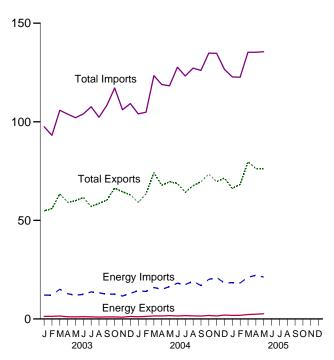
For annual data not displayed between 1973 and 1995, see Web Page: http://www.eia.doe.gov/emeu/mer/overview.html.

Figure 1.5 Merchandise Trade Value (Billion Dollars)

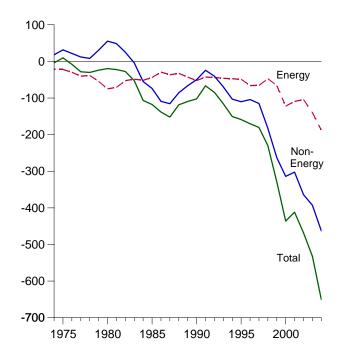
Imports and Exports, 1974-2004



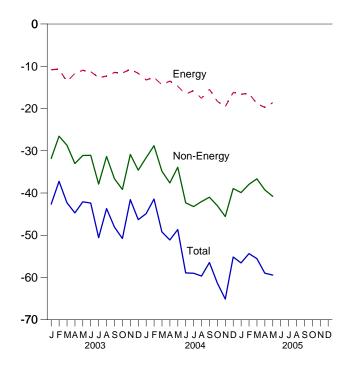
#### Imports and Exports, Monthly



Trade Balance, 1974-2004



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)

1974 Total	792 907 2,833 4,707 6,901 6,901 6,321 7,984 8,592 6,574 7,118 10,192 8,868 8,569 1,028 983 991 868 837 834	24,668 25,197 78,637 50,475 61,583 54,368 72,022 71,152 50,264 67,173 119,251 102,747 102,663 10,435 10,258 12,634 11,095 10,399	-23,876 -24,289 -75,803 -45,768 -54,682 -48,047 -64,038 -62,560 -43,690 -60,055 -109,059 -93,879 -94,094 -9,407 -9,275 -11,643	3,444 4,470 7,982 9,971 12,233 10,358 12,181 12,682 10,251 9,880 13,179 12,494 11,541 1,302 1,331	25,454 26,476 82,924 53,917 64,661 59,109 78,086 78,277 57,323 75,803 135,367 121,923 115,748	-22,010 -22,006 -74,942 -43,946 -52,428 -48,751 -65,905 -65,595 -47,072 -65,923 -122,188 -109,429 -104,207	18,126 31,557 55,246 -73,765 -50,068 -110,050 -104,309 -114,927 -182,686 -262,898 -313,916 -302,470 -364,056	99,437 108,856 225,566 218,815 393,592 584,742 625,075 689,182 682,138 695,797 781,918 729,100 693,103	103,321 99,305 245,262 336,526 496,088 743,543 795,289 869,704 911,896 1,024,618 1,218,022 1,140,999 1,161,366	-3,884 9,551 -19,696 -117,712 -102,496 -158,801 -170,214 -180,522 -229,758 -328,821 -436,104 -411,899 -468,263
1975 Total 1980 Total 1985 Total 1990 Total 1995 Total 1995 Total 1996 Total 1997 Total 1998 Total 1998 Total 2000 Total 2001 Total 2002 Total 2003 January February March April May June July August September October November December Total 1 2004 January February 1 2004 January February 1 2004 January February 1 2004 January February February 1 2004 January February	907 2,833 4,707 6,901 6,901 6,321 7,984 8,592 6,574 7,118 10,192 8,868 8,569 1,028 983 991 868 837 834	25,197 78,637 50,475 61,583 54,368 72,022 71,152 50,264 67,173 119,251 102,747 102,663 10,435 10,258 12,634 11,095	-24,289 -75,803 -45,768 -54,682 -48,047 -64,038 -62,560 -43,690 -60,055 -109,059 -93,879 -94,094	4,470 7,982 9,971 12,233 10,358 12,181 12,682 10,251 9,880 13,179 12,494 11,541	26,476 82,924 53,917 64,661 59,109 78,086 78,277 57,323 75,803 135,367 121,923 115,748	-22,006 -74,942 -43,946 -52,428 -48,751 -65,905 -65,595 -47,072 -65,923 -122,188 -109,429	31,557 55,246 -73,765 -50,068 -110,050 -104,309 -114,927 -182,686 -262,898 -313,916 -302,470	109,856 225,566 218,815 393,592 584,742 625,075 689,182 682,138 695,797 781,918 729,100	99,305 245,262 336,526 496,088 743,543 795,289 869,704 911,896 1,024,618 1,218,022 1,140,999	9,551 -19,696 -117,712 -102,496 -158,801 -170,214 -180,522 -229,758 -328,821 -436,104 -411,899
1975 Total 1980 Total 1985 Total 1990 Total 1995 Total 1995 Total 1996 Total 1997 Total 1998 Total 1998 Total 2000 Total 2001 Total 2002 Total 2003 January February March April May June July August September October November December Total 1 2004 January February 1 2004 January February 1 2004 January February 1 2004 January February February 1 2004 January February	907 2,833 4,707 6,901 6,901 6,321 7,984 8,592 6,574 7,118 10,192 8,868 8,569 1,028 983 991 868 837 834	25,197 78,637 50,475 61,583 54,368 72,022 71,152 50,264 67,173 119,251 102,747 102,663 10,435 10,258 12,634 11,095	-24,289 -75,803 -45,768 -54,682 -48,047 -64,038 -62,560 -43,690 -60,055 -109,059 -93,879 -94,094	4,470 7,982 9,971 12,233 10,358 12,181 12,682 10,251 9,880 13,179 12,494 11,541	26,476 82,924 53,917 64,661 59,109 78,086 78,277 57,323 75,803 135,367 121,923 115,748	-22,006 -74,942 -43,946 -52,428 -48,751 -65,905 -65,595 -47,072 -65,923 -122,188 -109,429	31,557 55,246 -73,765 -50,068 -110,050 -104,309 -114,927 -182,686 -262,898 -313,916 -302,470	108,856 225,566 218,815 393,592 584,742 625,075 689,182 682,138 695,797 781,918 729,100	99,305 245,262 336,526 496,088 743,543 795,289 869,704 911,896 1,024,618 1,218,022 1,140,999	9,551 -19,696 -117,712 -102,496 -158,801 -170,214 -180,522 -229,758 -328,821 -436,104 -411,899
1980 Total 1985 Total 1995 Total 1995 Total 1996 Total 1996 Total 1997 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 January February March April May June July August September October November December Total 1 2004 January February 1 2004 January February 1 2004 January February 1 2004 January February February 1	4,707 6,901 6,321 7,984 8,592 6,574 7,118 10,192 8,868 8,569 1,028 983 991 868 837 834	78,637 50,475 61,583 54,368 72,022 71,152 50,264 67,173 119,251 102,747 102,663 10,435 10,435 10,258 12,634 11,095	-75,803 -45,768 -54,682 -48,047 -64,038 -62,560 -43,690 -60,055 -109,059 -93,879 -94,094	7,982 9,971 12,233 10,358 12,181 12,682 10,251 9,880 13,179 12,494 11,541	82,924 53,917 64,661 59,109 78,086 78,277 57,323 75,803 135,367 121,923 115,748	-74,942 -43,946 -52,428 -48,751 -65,905 -65,595 -47,072 -65,923 -122,188 -109,429	55,246 -73,765 -50,068 -110,050 -104,309 -114,927 -182,686 -262,898 -313,916 -302,470	225,566 218,815 393,592 584,742 625,075 689,182 682,138 695,797 781,918 729,100	245,262 336,526 496,088 743,543 795,289 869,704 911,896 1,024,618 1,218,022 1,140,999	-19,696 -117,712 -102,496 -158,801 -170,214 -180,522 -229,758 -328,821 -436,104 -411,899
1985 Total 1990 Total 1995 Total 1995 Total 1996 Total 1997 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total  2003 January February March April May June July August September October November December Total 1 2004 January February 1 2004 January February 1 2004 January February 1 2004 January February February 1 2004 January February	4,707 6,901 6,321 7,984 8,592 6,574 7,118 10,192 8,868 8,569 1,028 983 991 868 837 834	50,475 61,583 54,368 72,022 71,152 50,264 67,173 119,251 102,747 102,663 10,435 10,258 12,634 11,095	-45,768 -54,682 -48,047 -64,038 -62,560 -43,690 -60,055 -109,059 -93,879 -94,094 -9,407 -9,275	9,971 12,233 10,358 12,181 12,682 10,251 9,880 13,179 12,494 11,541	53,917 64,661 59,109 78,086 78,277 57,323 75,803 135,367 121,923 115,748	-43,946 -52,428 -48,751 -65,905 -65,595 -47,072 -65,923 -122,188 -109,429	-73,765 -50,068 -110,050 -104,309 -114,927 -182,686 -262,898 -313,916 -302,470	218,815 393,592 584,742 625,075 689,182 682,138 695,797 781,918 729,100	336,526 496,088 743,543 795,289 869,704 911,896 1,024,618 1,218,022 1,140,999	-117,712 -102,496 -158,801 -170,214 -180,522 -229,758 -328,821 -436,104 -411,899
1990 Total	6,901 6,321 7,984 8,592 6,574 7,118 10,192 8,868 8,569 1,028 983 991 868 837 834	61,583 54,368 72,022 71,152 50,264 67,173 119,251 102,747 102,663 10,435 10,258 12,634 11,095	-54,682 -48,047 -64,038 -62,560 -43,690 -60,055 -109,059 -93,879 -94,094	12,233 10,358 12,181 12,682 10,251 9,880 13,179 12,494 11,541	64,661 59,109 78,086 78,277 57,323 75,803 135,367 121,923 115,748	-52,428 -48,751 -65,905 -65,595 -47,072 -65,923 -122,188 -109,429	-50,068 -110,050 -104,309 -114,927 -182,686 -262,898 -313,916 -302,470	393,592 584,742 625,075 689,182 682,138 695,797 781,918 729,100	496,088 743,543 795,289 869,704 911,896 1,024,618 1,218,022 1,140,999	-102,496 -158,801 -170,214 -180,522 -229,758 -328,821 -436,104 -411,899
1995 Total 1996 Total 1997 Total 1998 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 January February March April May June July August September October November December Total 1 2004 January February 1	6,321 7,984 8,592 6,574 7,118 10,192 8,868 8,569 1,028 983 991 868 837 834	54,368 72,022 71,152 50,264 67,173 119,251 102,747 102,663 10,435 10,258 12,634 11,095	-48,047 -64,038 -62,560 -43,690 -60,055 -109,059 -93,879 -94,094 -9,407 -9,275	10,358 12,181 12,682 10,251 9,880 13,179 12,494 11,541	59,109 78,086 78,277 57,323 75,803 135,367 121,923 115,748	-48,751 -65,905 -65,595 -47,072 -65,923 -122,188 -109,429	-110,050 -104,309 -114,927 -182,686 -262,898 -313,916 -302,470	584,742 625,075 689,182 682,138 695,797 781,918 729,100	743,543 795,289 869,704 911,896 1,024,618 1,218,022 1,140,999	-158,801 -170,214 -180,522 -229,758 -328,821 -436,104 -411,899
1996 Total 1997 Total 1998 Total 1998 Total 2000 Total 2001 Total 2002 Total  2003 January February March April May June July August September October November December Total 1 2004 January February 1997 1000 1000 1000 1000 1000 1000 1000	7,984 8,592 6,574 7,118 10,192 8,868 8,569 1,028 983 991 868 837 834	72,022 71,152 50,264 67,173 119,251 102,747 102,663 10,435 10,258 12,634 11,095	-64,038 -62,560 -43,690 -60,055 -109,059 -93,879 -94,094 -9,407 -9,275	12,181 12,682 10,251 9,880 13,179 12,494 11,541	78,086 78,277 57,323 75,803 135,367 121,923 115,748	-65,905 -65,595 -47,072 -65,923 -122,188 -109,429	-104,309 -114,927 -182,686 -262,898 -313,916 -302,470	625,075 689,182 682,138 695,797 781,918 729,100	795,289 869,704 911,896 1,024,618 1,218,022 1,140,999	-170,214 -180,522 -229,758 -328,821 -436,104 -411,899
1997 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total  2003 January February March April May June July August September October November December Total  1 2004 January February February	8,592 6,574 7,118 10,192 8,868 8,569 1,028 983 991 868 837 834	71,152 50,264 67,173 119,251 102,747 102,663 10,435 10,258 12,634 11,095	-62,560 -43,690 -60,055 -109,059 -93,879 -94,094 -9,407 -9,275	12,682 10,251 9,880 13,179 12,494 11,541	78,277 57,323 75,803 135,367 121,923 115,748	-65,595 -47,072 -65,923 -122,188 -109,429	-114,927 -182,686 -262,898 -313,916 -302,470	689,182 682,138 695,797 781,918 729,100	869,704 911,896 1,024,618 1,218,022 1,140,999	-180,522 -229,758 -328,821 -436,104 -411,899
1998 Total 1999 Total 2000 Total 2001 Total 2002 Total  2003 January February March April May June July August September October November December Total  1 2004 January 1990 Total 1	6,574 7,118 10,192 8,868 8,569 1,028 983 991 868 837 834	50,264 67,173 119,251 102,747 102,663 10,435 10,258 12,634 11,095	-43,690 -60,055 -109,059 -93,879 -94,094 -9,407 -9,275	10,251 9,880 13,179 12,494 11,541	57,323 75,803 135,367 121,923 115,748	-47,072 -65,923 -122,188 -109,429	-182,686 -262,898 -313,916 -302,470	682,138 695,797 781,918 729,100	911,896 1,024,618 1,218,022 1,140,999	-229,758 -328,821 -436,104 -411,899
1999 Total	7,118 10,192 8,868 8,569 1,028 983 991 868 837 834	67,173 119,251 102,747 102,663 10,435 10,258 12,634 11,095	-60,055 -109,059 -93,879 -94,094 -9,407 -9,275	9,880 13,179 12,494 11,541	75,803 135,367 121,923 115,748	-65,923 -122,188 -109,429	-262,898 -313,916 -302,470	695,797 781,918 729,100	1,024,618 1,218,022 1,140,999	-328,821 -436,104 -411,899
2000 Total         1           2001 Total         1           2002 Total         2           2003 January         February           March         April           May         June           July         August           September         October           November         December           Total         1           2004 January         February	10,192 8,868 8,569 1,028 983 991 868 837 834	119,251 102,747 102,663 10,435 10,258 12,634 11,095	-109,059 -93,879 -94,094 -9,407 -9,275	13,179 12,494 11,541 1,302	135,367 121,923 115,748	-122,188 -109,429	-313,916 -302,470	781,918 729,100	1,218,022 1,140,999	-436,104 -411,899
2001 Total         2002 Total         2003 January         February         March         April         May         June         July         August         September         October         November         December         Total         1         2004 January         February	8,868 8,569 1,028 983 991 868 837 834	102,747 102,663 10,435 10,258 12,634 11,095	-93,879 -94,094 -9,407 -9,275	12,494 11,541 1,302	121,923 115,748	-109,429	-302,470	729,100	1,140,999	-411,899
2002 Total         2003 January         February         March         April         May         June         July         August         September         October         November         December         Total         1         2004 January         February	8,569 1,028 983 991 868 837 834	102,663 10,435 10,258 12,634 11,095	<b>-94,094</b> -9,407 -9,275	<b>11,541</b> 1,302	115,748					
February	983 991 868 837 834	10,258 12,634 11,095	-9,275		12 129					
February	991 868 837 834	12,634 11,095			,	-10,827	-31,810	54,854	97,491	-42,637
March	868 837 834	11,095	-11.643	1,551	12,018	-10,687	-26,550	55,917	93,154	-37,237
April	837 834	,		1,467	15,086	-13,619	-28,699	63,524	105,842	-42,318
June	834	10.399	-10,227	1,111	12,796	-11,685	-33,022	59,162	103,869	-44,707
July			-9,562	1,072	12,030	-10,958	-31,127	59,983	102,068	-42,085
July		10,790	-9,956	1,163	12,460	-11,297	-31,090	61,570	103,958	-42,387
August	787	11,844	-11,057	1,060	13,732	-12,672	-37,889	57,070	107,631	-50,561
September	748	11,595	-10,847	969	13,300	-12,331	-31,365	58,611	102,307	-43,696
October	783	10,958	-10,175	1,049	12,506	-11,457	-36,626	60,239	108,322	-48,083
November  December	782	11,134	-10.352	1.048	12.655	-11.607	-39,162	66,389	117,158	-50,769
December	692	10,189	-9,497	930	11,630	-10,700	-30,875	64,492	106,066	-41,575
Total 1 2004 January February	876	11,102	-10,226	1,266	12,956	-11,690	-34,606	62,959	109,255	-46,296
February	10,209	132,433	-122,224	13,768	153,298	-139,530	-392,820	724,771	1,257,121	-532,350
	718	11,926	-11,208	1,097	14,339	-13,242	-31,668	59,083	103,993	-44,910
March	908	11,714	-10,806	1,286	13,928	-12,642	-28,804	63,418	104,864	-41,446
	1,079	13,953	-12,874	1,580	15,956	-14,376	-34,850	74,195	123,421	-49,226
April	989	13,046	-12,057	1,529	15,032	-13,503	-37,612	67,770	118,885	-51,115
May	1,143	14,246	-13,103	1,666	16,412	-14,746	-33,910	69,615	118,271	-48,656
June	1,014	15,573	-14,559	1,536	18,123	-16,587	-42,323	68,747	127,657	-58,910
July	1,070	14,857	-13,787	1,668	17,434	-15,766	-43,218	64,240	123,224	-58,984
August	1,200	16,863	-15,663	1,572	19,187	-17,615	-42,031	67,571	127,216	-59,646
September	1,108	14,986	-13,878	1,463	16,929	-15,466	-40,995	69,561	126,022	-56,461
	1,299	18,056	-16,757	1,752	20,078	-18,326	-43,000	73,490	134,816	-61,326
November	1,162	18,351	-17,189	1,507	21,049	-19,542	-45,564	69,613	134,719	-65,106
December	1,438	15,695	-14,257	1,988	18,194	-16,206	-38,938	71,473	126,617	-55,144
Total 1	13,130	179,266	-166,136	18,642	206,660	-188,018	-462,912	818,775	1,469,704	-650,930
	1,049	15,631	-14,582	1,804	18,430	-16,626	-39,912	66,237	122,775	-56,538
,	1,445	15,430	-13,985	1,860	18,247	-16,387	-37,956	68,238	122,580	-54,343
	1,731	18,360	-16,629	2,267	21,152	-18,885	-36,640	79,713	135,238	-55,525
	1,766	19,466	-17,700	2,415	22,134	-19,719	R -39,252	R 76,286	R 135,257	R -58,971
,	1,901	19,169	-17,268	2,656	21,284	-18,628	-40,798	76,116	135,542	-59,426
5-Month Total	7,892	88,056	-80,164	11,002	101,247	-90,245	-194,558	366,590	651,393	-284,802
	4,837 4,707	64,885 54,821	-60,048 -50,114	7,158 6,283	75,667 64,059	-68,509 -57,776	-166,844 -151,208	334,081 293,441	569,434 502,425	-235,353 -208,983

<sup>&</sup>lt;sup>a</sup> Crude oil, petroleum preparations, liquefied propane and butane, and other mineral fuels.

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: For annual data not displayed between 1975 and 1995, see http://www.eia.doe.gov/emeu/mer/overview.html.

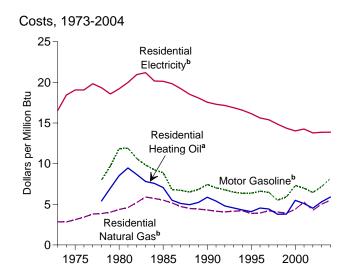
Source: U.S. Department of Commerce, Bureau of the Census, Foreign

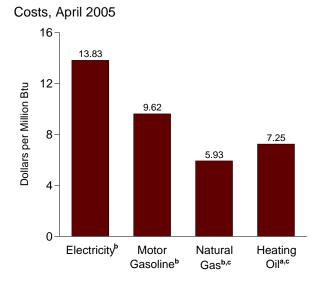
Trade Division. For details, see "Table 1.5 Sources" at the end of this section.

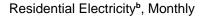
<sup>&</sup>lt;sup>b</sup> Petroleum, coal, natural gas, and electricity.

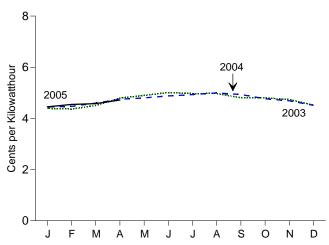
R=Revised.

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

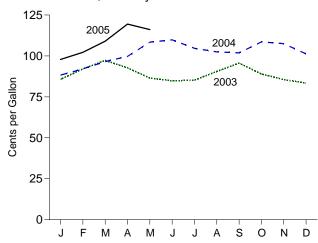




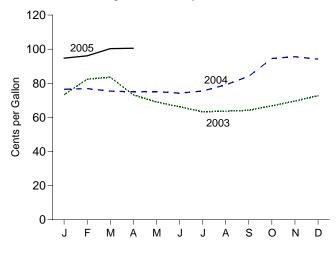




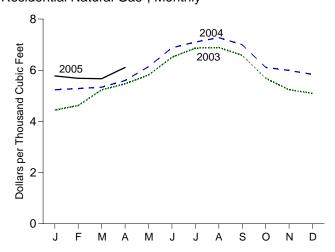




#### Residential Heating Oila, Monthly



#### Residential Natural Gasb, Monthly



<sup>a</sup>Excludes taxes.

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

bincludes taxes.

<sup>&</sup>lt;sup>c</sup>Residential.

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

	Consumer Price Index (Urban) <sup>a</sup>	Motor G	asoline <sup>b</sup>		lential ng Oil <sup>c</sup>		lential Il Gas <sup>b</sup>	Resid Electi	
	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
1975 Average	53.8	NA	NA	NA	NA	317.8	3.12	6.5	19.07
1980 Average	82.4	148.2	11.85	118.2	8.52	446.6	4.36	6.6	19.21
1985 Average	107.6	111.2	8.89	97.9	7.06	568.8	5.52	6.87	20.13
1990 Average	130.7	93.1	7.44	81.3	5.86	443.8	4.31	5.99	17.56
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 Average	179.9	80.1	6.46	62.8	4.52	438.6	4.26	4.70	13.78
2003 January	181.7	85.7	6.91	73.3	5.29	444.7	4.30	4.39	12.87
February	183.1	92.1	7.43	82.4	5.94	462.0	4.47	4.36	12.79
March	184.2	97.2	7.84	83.6	6.02	523.3	5.07	4.51	13.21
April	183.8	92.7	7.48	73.2	5.28	546.8	5.29	4.79	14.05
May	183.5	86.5	6.98	69.0	4.98	581.5	5.63	4.90	14.36
June	183.7	84.8	6.84	66.2	4.78	651.1	6.30	5.01	14.68
July	183.9	85.2	6.87	63.3	4.56	686.2	6.64	4.97	14.57
August	184.6	90.5	7.30	63.7	4.59	689.1	6.67	4.97	14.57
September	185.2	95.6	7.71	64.1	4.63	658.2	6.37	4.81	14.08
October	185.0	89.0	7.18	66.8	4.82	568.6	5.50	4.81	14.08
November	184.5	85.5	6.90	69.5	5.01	523.6	5.07	4.74	13.88
December	184.3	83.5	6.73	72.8	5.25	509.5	4.93	4.52	13.25
Average	184.0	89.0	7.18	73.6	5.31	517.4	5.01	4.73	13.86
2004 January	185.2	88.3	7.11	76.5	5.52	523.8	5.08	4.45	13.04
February	186.2	92.1	7.42	76.9	5.55	528.5	5.13	4.47	13.10
March	187.4	96.5	7.77	75.4	5.44	533.6	5.18	4.60	13.48
April	188.0	99.7	8.03	75.1	5.41	559.6	5.43	4.75	13.92
May	189.1	108.4	8.73	75.1	5.41	614.0	5.96	4.80	14.07
June	189.7	109.8	8.84	74.2	5.35	687.9	6.67	4.88	14.29
July	189.4	104.6	8.43	75.4	5.44	710.1	6.89	4.93	14.45
August	189.5	102.4	8.25	79.1	5.70	727.7	7.06	5.00	14.65
September	189.9	101.8	8.20	84.1	6.07	699.8	6.79	4.93	14.46
October	190.9	108.5	8.74	94.6	6.82	611.3	5.93	4.77	13.97
November	191.0	107.5	8.66	95.6	6.89	599.0	5.81	4.69	13.75
December	190.3	101.2	8.15	94.2	6.79 <b>5.00</b>	583.8	5.66 <b>5.6</b> 1	4.51	13.21
Average	188.9	101.8	8.20	81.8	5.90	568.6	5.51	4.73	13.87
2005 January	190.7	97.9	7.88	94.8	6.83	577.9	5.60	4.45	13.05
February	191.8	102.2	8.23	96.1	6.93	568.3	5.51	4.55	13.32
March	193.3	109.0	8.78	R 100.3	R 7.23	567.0	5.50	4.58	13.42
April	194.6	119.5	9.62	R 100.6	R 7.25	R 611.0	R 5.93	R 4.72	R 13.83
May	194.4	116.1	9.35	NA	NA	NA	NA	NA	NA

<sup>&</sup>lt;sup>a</sup> Consumer Price Index, All Urban Consumers, All Items, 1982-1984 = 100.0.

b Includes taxes.

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. Web Page: For annual data not displayed between 1973 and 1995, see 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: 1973-2002—Economic Report of the President.

February 2005, Table B-60. 2003 forward—Council of Economic Advisers, Economic Indicators, July 2005, "Consumer Prices - All Urban Consumers."

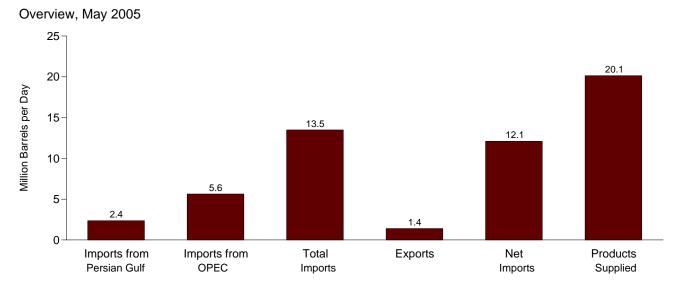
• Conversion Factors: Tables A1, A3, A4, and A6.

c Excludes taxes.

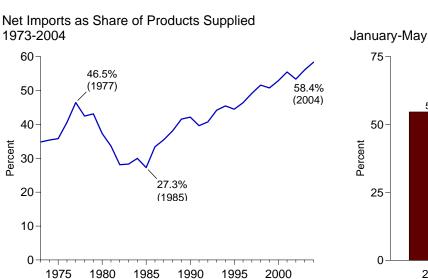
R=Revised. NA=Not available.

<sup>•</sup> Geographic coverage is the 50 States and the District of Columbia.

Figure 1.7 Overview of U.S. Petroleum Trade



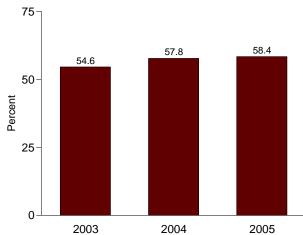
Imports from OPEC and the Persian Gulf as a Share of Total Imports 1973-2004 January-May 100 60 ■ OPEC ■ Persian Gulf 70.3% 80 (1977)43.3 42.8 41.8 40 60 Percent **OPEC** Percent 43.4% (2004)27.8% 23.5 40 (1977)20 18.1 19.0% 17.6 (2004)20 Persian Gulf 0 0



1990

1995

2000



2004

2005

2003

OPEC=Organization of the 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.

1975

1980

1985

Table 1.7 Overview of U.S. Petroleum Trade

									hare of s Supplied			are of mports
	Imports from Persian Gulf <sup>a</sup>	Imports from OPEC <sup>b</sup>	Imports	Exports	Net Imports	Products Supplied	Imports from Persian Gulf <sup>a</sup>	Imports from OPEC <sup>b</sup>	Imports	Net Imports	Imports from Persian Gulf <sup>a</sup>	Imports from OPEC <sup>b</sup>
			Thousand E	Barrels per	· Day				Per	cent		
1973 Average	848 1,165 1,519 311	2,993 3,601 4,300 1,830	6,256 6,056 6,909 5.067	231 209 544 781	6,025 5,846 6,365 4,286	17,308 16,322 17,056 15,726	4.9 7.1 8.9 2.0	17.3 22.1 25.2 11.6	36.1 37.1 40.5 32.2	34.8 35.8 37.3 27.3	13.6 19.2 22.0 6.1	47.8 59.5 62.2 36.1
1990 Average	1,966 1,573 1,604 1,755	4,296 4,002 4,211 4,569	8,018 8,835 9,478 10,162	857 949 981 1,003	7,161 7,886 8,498 9,158	16,988 17,725 18,309 18,620	11.6 8.9 8.8 9.4	25.3 22.6 23.0 24.5	47.2 49.8 51.8 54.6	42.2 44.5 46.4 49.2	24.5 17.8 16.9 17.3	53.6 45.3 44.4 45.0
1998 Average	2,464 2,488	4,905 4,953 5,203 5,528 4,605	10,708 10,852 11,459 11,871 11,530	945 940 1,040 971 984	9,764 9,912 10,419 10,900 10,546	18,917 19,519 19,701 19,649 19,761	11.3 12.6 12.6 14.1 11.5	25.9 25.4 26.4 28.1 23.3	56.6 55.6 58.2 60.4 58.3	51.6 50.8 52.9 55.5 53.4	19.9 22.7 21.7 23.3 19.7	45.8 45.6 45.4 46.6 39.9
2003 January	•	4,303	11,104	1,212	9.892	20,017	13.7	21.5	55.5	49.4	24.6	38.8
February March	2,676	4,052 5,433	10,921 12,044	1,067 1,051	9,854 10,993	20,375 19,708	13.1 14.3	19.9 27.6	53.6 61.1	48.4 55.8	24.5 23.4	37.1 45.1
April May	2,669	5,949 5,751	12,599 12,918	1,053 1,097	11,546 11,822	19,830 19,344	15.9 13.8	30.0 29.7	63.5 66.8	58.2 61.1	25.0 20.7	47.2 44.5
June July August	2,170	5,526 4,736 4,934	13,001 12,736 12,769	1,065 976 947	11,936 11,760 11,822	19,793 20,094 20,586	11.8 10.8 9.0	27.9 23.6 24.0	65.7 63.4 62.0	60.3 58.5 57.4	17.9 17.0 14.5	42.5 37.2 38.6
September	2,397 2,353	5,394 5,342	12,868 12,373	960 970	11,908 11,402	19,933 20,182	12.0 11.7	27.1 26.5	64.6 61.3	59.7 56.5	18.6 19.0	41.9 43.2
November December Average	2,312	5,237 5,225 <b>5,162</b>	11,712 12,033 <b>12,264</b>	933 990 <b>1,027</b>	10,780 11,043 <b>11,238</b>	19,873 20,679 <b>20,034</b>	13.0 11.2 <b>12.5</b>	26.4 25.3 <b>25.8</b>	58.9 58.2 <b>61.2</b>	54.2 53.4 <b>56.1</b>	22.1 19.2 <b>20.4</b>	44.7 43.4 <b>42.1</b>
February	R 2,108 R 2,407	R 5,244 R 5,286 R 5,833	R 12,014 R 12,658 R 13,349	748 1,046 1,024	R 11,266 R 11,612 R 12,325	R 20,479 R 20,872 R 20,453	11.3 R 10.1 11.8	R 25.6 R 25.3 R 28.5	<sup>R</sup> 58.7 <sup>R</sup> 60.6 <sup>R</sup> 65.3	<sup>R</sup> 55.0 <sup>R</sup> 55.6 <sup>R</sup> 60.3	<sup>R</sup> 19.2 <sup>R</sup> 16.6 <sup>R</sup> 18.0	R 43.6 R 41.8 R 43.7
April May June July	R 2,333 R 2,485 R 2,382	R 5,593 R 5,884 R 5,935 R 5,845	R 12,883 R 13,375 R 13,561 R 13,570	1,153 1,052 1,070 1,080	R 11,730 R 12,323 R 12,491 R 12,490	R 20,545 R 20,313 R 20,780 R 20,880	R 11.4 R 12.2 R 11.5 R 12.1	R 27.2 R 29.0 R 28.6 R 28.0	R 62.7 R 65.8 R 65.3 65.0	<sup>R</sup> 57.1 <sup>R</sup> 60.7 <sup>R</sup> 60.1 59.8	R 18.1 R 18.6 R 17.6 R 18.6	R 43.4 R 44.0 R 43.8 R 43.1
August September October	R 2,928 2,764 2,562	R 6,256 R 5,613 R 5,580	R 13,689 R 12,676 R 13,438	1,091 961 1,078	R 12,598 R 11,715 R 12,360	R 21,028 R 20,529 R 20,861	R 13.9 13.5 R 12.3	R 29.8 27.3 R 26.7	65.1 <sup>R</sup> 61.7 <sup>R</sup> 64.4	<sup>R</sup> 59.9 <sup>R</sup> 57.1 <sup>R</sup> 59.2	R 21.4 R 21.8 R 19.1	R 45.7 R 44.3 R 41.5
November December Average	2.402	<sup>R</sup> 5,783 <sup>R</sup> 5,533 <sup>R</sup> <b>5,701</b>	R 13,409 R 13,088 R <b>13,145</b>	992 1,284 <b>1,048</b>	R 12,417 R 11,804 R <b>12,097</b>	<sup>R</sup> 20,805 <sup>R</sup> 21,229 <sup>R</sup> <b>20,731</b>	R 12.9 R 11.3 R <b>12.0</b>	R 27.8 26.1 R <b>27.5</b>	<sup>R</sup> 64.4 <sup>R</sup> 61.7 <sup>R</sup> <b>63.4</b>	<sup>R</sup> 59.7 <sup>R</sup> 55.6 <sup>R</sup> <b>58.4</b>	20.0 R 18.4 R <b>19.0</b>	<sup>R</sup> 43.1 <sup>R</sup> 42.3 <sup>R</sup> <b>43.4</b>
2005 January February March	2,291 2,384	5,366 5,796 5,275	12,661 13,536 12,919	917 1,259 1,308	11,745 12,278 11,611	20,524 20,650 20,732	11.4 11.1 11.5	26.1 28.1 25.4	61.7 65.6 62.3	57.2 59.5 56.0	18.5 16.9 18.5	42.4 42.8 40.8
April May <b>5-Month Average</b>	2,209 2,355 <b>2,316</b>	5,532 5,637 <b>5,516</b>	13,376 13,495 <b>13,190</b>	1,382 1,401 <b>1,252</b>	11,994 12,094 <b>11,937</b>	20,179 20,139 <b>20,442</b>	10.9 11.7 <b>11.3</b>	27.4 28.0 <b>27.0</b>	66.3 67.0 <b>64.5</b>	59.4 60.1 <b>58.4</b>	16.5 17.5 <b>17.6</b>	41.4 41.8 <b>41.8</b>
2004 5-Month Average 2003 5-Month Average	2,331 2,810	5,572 5,113	12,858 11,933	1,003 1,097	11,855 10,836	20,528 19,844	11.4 14.2	27.1 25.8	62.6 60.1	57.8 54.6	18.1 23.5	43.3 42.8

<sup>&</sup>lt;sup>a</sup> Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.

b Organization of the Petroleum Exporting Countries. See Glossary. R=Revised.

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

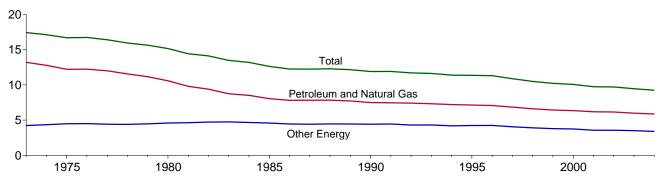
Beginning in October 1977, petroleum imported for the Strategic Petroleum Reserves is included.
 Annual averages may not equal average of months due to independent rounding.
 U.S. geographic coverage is the 50 States and the District of Columbia.
 U.S. exports include shipments to U.S. territories, and imports include receipts from U.S. territories.

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/overview.html.

Sources: • Columns 1-6: Tables 3.1a, 3.1b, 3.3b, and 3.3d. • Columns 7-12: Calculated by Energy Information Administration.

Figure 1.8 Energy Consumption per Dollar of Gross Domestic Product

(Thousand Btu per Chained (2000) Dollar)



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

Source: Table 1.8.

**Table 1.8 Energy Consumption per Dollar of Gross Domestic Product** 

	Ene	ergy Consumption	n		Energy Consumption per Dollar of GDP				
	Petroleum and Natural Gas <sup>a</sup>	Other Energy <sup>a ,b</sup>	Totala	Gross Domestic Product (GDP)	Petroleum and Natural Gas <sup>a</sup>	Other Energy <sup>a</sup> ,b	Totala		
		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		
974 Year	55.187	18.804	73.991	4,319.6	12.78	4.35	17.13		
975 Year	52.678	19.321	71.999	4,311.2	12.22	4.48	16.70		
976 Year	55.520	20.492	76.012	4,540.9	12.23	4.51	16.74		
977 Year	57.053	20.947	78.000	4,750.5	12.01	4.41	16.42		
978 Year	57.966	22.021	79.986	5,015.0	11.56	4.39	15.95		
979 Year	57.789	23.114	80.903	5.173.4	11.17	4.47	15.64		
980 Year	54.596	23.693	78.289	5.161.7	10.58	4.59	15.17		
981 Year	51.859	24.483	76.342	5.291.7	9.80	4.63	14.43		
982 Year	48.736	24.516	73.253	5,189.3	9.39	4.72	14.12		
983 Year	47.411	25.690	73,101	5.423.8	8.74	4.74	13.48		
984 Year	49.558	27.178	76.736	5,813.6	8.52	4.67	13.20		
985 Year	48.756	27.713	76.469	6,053.7	8.05	4.58	12.63		
986 Year	48.904	27.878	76.782	6,263.6	7.81	4.45	12.26		
987 Year	50.609	28.616	79.225	6,475.1	7.82	4.42	12.24		
988 Year	52.774	30.070	82.844	6,742.7	7.83	4.46	12.29		
989 Year	53.923	31.034	84.957	6,981.4	7.72	4.45	12.17		
990 Year	53.282	31.386	84.668	7,112.5	7.49	4.41	11.90		
991 Year	52.994	31.601	84.595	7,100.5	7.46	4.45	11.91		
992 Year	54.362	31.587	85.949	7,336.6	7.41	4.31	11.72		
993 Year	a 55.193	<sup>a</sup> 32.482	a 87.578	7,532.7	<sup>a</sup> 7.33	<sup>a</sup> 4.31	<sup>a</sup> 11.63		
994 Year	56.512	32.845	89.248	7,835.5	7.21	4.19	11.39		
995 Year	57.338	34.000	91.221	8,031.7	7.14	4.23	11.36		
996 Year	58.954	35.353	94.224	8,328.9	7.08	4.24	11.31		
997 Year	59.594	35.239	94.727	8,703.5	6.85	4.05	10.88		
998 Year	59.869	35.394	95.146	9,066.9	6.60	3.90	10.49		
999 Year	60.970	35.926	96.774	9,470.3	6.44	3.79	10.22		
000 Year	62.320	36.724	98.905	9,817.0	6.35	3.74	10.07		
001 Year	61.239	35.289	96.380	9,890.7	6.19	3.57	9.74		
002 Year	62.030	35.932	97.788	10,074.8	6.16	3.57	9.71		
2003 Year	62.116	36.347	98.223	10,381.3	5.98	3.50	9.46		
2004 Year	R 63.690	36.833	R 100.227	R 10,841.9	<sup>R</sup> 5.87	3.40	R 9.24		

<sup>&</sup>lt;sup>a</sup> 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

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.

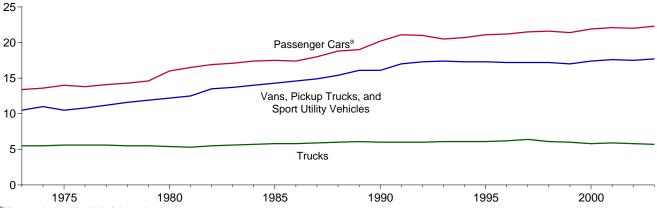
Sources: • Energy Consumption: Table 1.3. • Gross Domestic Product: 1973-2003—U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, August 2004, Table 2A. 2004—U.S. Department of Commerce, Bureau of Economic Analysis, BEA News Release, June 29, 2005, Table 3, which is available at website www.bea.doc.gov/bea/newsrel/gdpnewsrelease.htm.

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.

Figure 1.9 **Motor Vehicle Fuel Rates** 

(Miles per Gallon)



<sup>a</sup>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 <sup>a</sup>				ns, Pickup Truc Sport Utility Veh			Trucks <sup>c</sup>		All Motor Vehicles <sup>d</sup>		
	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	<sup>a</sup> 10,157	<sup>a</sup> 533	<sup>a</sup> 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	12,202	555	22.0	11,364	650	17.5	27,071	4,642	5.8	12,171	719	16.9
<b>2003</b> <sup>P</sup>	12,242	550	22.3	11,467	647	17.7	27,286	4,750	5.7	12,210	716	17.0

Through 1989, includes motorcycles.

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.

b Includes a small number of trucks with 2 axles and 4 tires, such as step vans.

Single-unit trucks with 2 axles and 6 or more tires, and combination trucks.

d Includes buses and motorcycles, which are not shown separately.

Table 1.10 Heating Degree-Days by Census Division

		June <sup>-</sup>	1 through J	une 30			July 1	Cumulative I through Ju		
				Percent	Change				Percent	Change
Census Divisions	Normala	2004	2005	Normal to 2005	2004 to 2005	Normala	2004	2005	Normal to 2005	2004 to 2005
New England Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	66	77	55	(°)	(°)	6,611	6,530	6,640	(s)	2
Middle Atlantic New Jersey, New York, Pennsylvania	39	26	11	(°)	(°)	5,911	5,677	5,772	-2	2
East North Central Illinois, Indiana, Michigan, Ohio, Wisconsin	50	47	13	(°)	(°)	6,497	6,024	6,033	-7	(s)
West North Central lowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	49	62	9	(°)	(°)	6,750	6,278	5,943	-12	-5
South Atlantic Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia,	7	4	3	(°)	(°)	2.052	2 774	2 000		
West Virginia  East South Central Alabama, Kentucky, Mississippi, Tennessee	7	1	2	(°)	(°)	2,853 3,604	2,771 3,405	2,690 3,156	-6 -12	-3 -7
West South Central Arkansas, Louisiana, Oklahoma, Texas	1	0	0	(°)	(°)	2,287	2,039	1,950	-15	-4
Mountain Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	82	67	75	(°)	(°)	5,209	4,731	4,814	-8	2
Pacific <sup>b</sup> California, Oregon, Washington	76	28	50	(°)	(°)	3,228	2,723	2,974	-8	9
U.S. Average <sup>b</sup>	39	28	20	(°)	(°)	4,524	4,214	4,215	-7	(s)

<sup>&</sup>lt;sup>a</sup> "Normal" is based on calculations of data from 1971 through 2000.

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.

b Excludes Alaska and Hawaii.

<sup>&</sup>lt;sup>c</sup> Percent change is not meaningful: normal is less than 100 or ratio is nealculable.

<sup>(</sup>s)=Less than 0.5 percent and greater than -0.5 percent.

Table 1.11 Cooling Degree-Days by Census Division

		June '	1 through J	une 30				Cumulative y 1 through		
				Percent	Change				Percent	Change
Census Divisions	Normala	2004	2005	Normal to 2005	2004 to 2005	Normala	2004	2005	Normal to 2005	2004 to 2005
New England Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont	63	56	129	(°)	(°)	69	62	129	(°)	(°)
Middle Atlantic New Jersey, New York, Pennsylvania	117	106	205	75	93	140	149	207	48	39
East North Central Illinois, Indiana, Michigan, Ohio, Wisconsin	147	111	249	69	124	198	175	260	31	49
West North Central lowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota	192	130	253	32	95	266	223	313	18	40
South Atlantic Delaware, Florida, Georgia, Maryland and the District of Columbia, North Carolina, South Carolina, Virginia, West Virginia	319	347	335	5	-3	679	789	660	-3	-16
East South Central Alabama, Kentucky, Mississippi, Tennessee	296	304	335	13	10	489	591	520	6	-12
West South Central Arkansas, Louisiana, Oklahoma, Texas	431	407	482	12	18	857	891	939	10	5
Mountain Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming	229	253	241	5	-5	374	456	413	10	-9
Pacific <sup>b</sup> California, Oregon, Washington	100	123	92	-8	-25	157	250	151	-4	-40
U.S. Average <sup>b</sup>	213	209	260	22	24	375	418	409	9	-2

<sup>&</sup>lt;sup>a</sup> "Normal" is based on calculations of data from 1971 through 2000.

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.

b Excludes Alaska and Hawaii.

<sup>&</sup>lt;sup>c</sup> Percent change is not meaningful: normal is less than 100 or ratio is incalculable.

### **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. hey reflect the total arrival from foreign countries of merchandise that immediately entered consumption channels, warehouses, the Foreign Trade Zones, or the Strategic Petroleum Reserve. They exclude shipments between the United States, Puerto Rico, and U.S. possessions, shipments to U.S. Armed Forces and diplomatic missions abroad for their own use, U.S. goods returned to the United States by its Armed Forces, and in-transit shipments.

#### **Table 1.5 Sources**

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

#### **Petroleum Exports**

1974-1987: "U.S. Exports," FT410, December issues. 1988 and 1989: "Report on U.S. Merchandise Trade," Final Revisions.

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

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

2004 and 2005: "U.S. International Trade in Goods and Services," FT-900, monthly.

#### **Petroleum Imports**

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

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

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

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

2004 and 2005: "U.S. International Trade in Goods and Services," FT-900, monthly.

#### **Energy Exports and Imports**

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

1988: January-July, monthly FT-900 supplement, 1989 issues. August-December, monthly FT-900, 1989 issues. 1989: Monthly FT-900, 1990 issues.

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

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

2004 and 2005: "U.S. International Trade in Goods and Services," FT-900, monthly.

#### Petroleum, Energy, and Non-Energy Balances

Calculated by the Energy Information Administration.

#### **Total Merchandise**

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

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

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

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

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

1992-2003: "U.S. International Trade in Goods and Services," Annual Revision.

2004 and 2005: "U.S. International Trade in Goods and Services," FT-900, monthly.

#### Tables 1.10 and 1.11 Sources

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

The State figures are then aggregated into Census Divisions and into the national average. The population weights currently used represent resident State population data estimated for the 2000 Census by the U.S. Department of Commerce, Bureau of the Census. The data provided here are available sooner than the Historical Climatology Series 5-1 (heating degree-days) and 5-2 (cooling degree-days) developed by the National Climatic Data Center, Asheville, NC, which compiles data from some 8,000 weather stations.

## **Section 2. Energy Consumption by Sector**

U.S. total energy consumption in April 2005 was 7.8 quadrillion Btu, 1 percent lower than in April 2004.

Residential sector total consumption was 1.5 quadrillion Btu in April 2005, 1 percent higher than the April 2004 level. The sector accounted for 19 percent of total energy consumption.

Commercial sector total consumption was 1.3 quadrillion Btu in April 2005, 1 percent higher than the April 2004 level. The sector accounted for 17 percent of total energy consumption.

Industrial sector total consumption was 2.7 quadrillion Btu in April 2005, 3 percent lower than the April 2004 level.

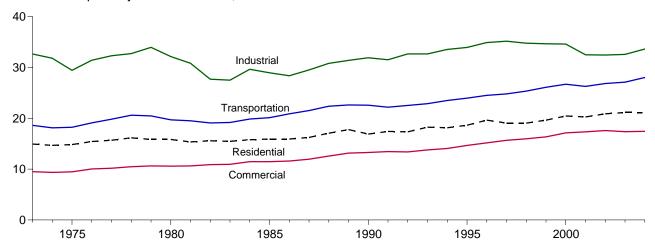
The sector accounted for 34 percent of total energy consumption.

Transportation sector total consumption was 2.3 quadrillion Btu in April 2005, 1 percent higher than the April 2004 level. The sector accounted for 30 percent of total energy consumption.

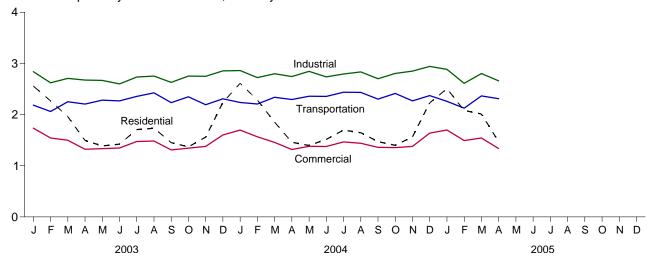
Electric power sector primary consumption was 2.8 quadrillion Btu in April 2005, 1 percent higher than the April 2004 level. Fossil fuels accounted for 68 percent of all primary energy consumed by the electric power sector; nuclear electric power 21 percent; and renewable energy 11 percent.

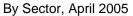
Figure 2.1 Energy Consumption by Sector (Quadrillion Btu)

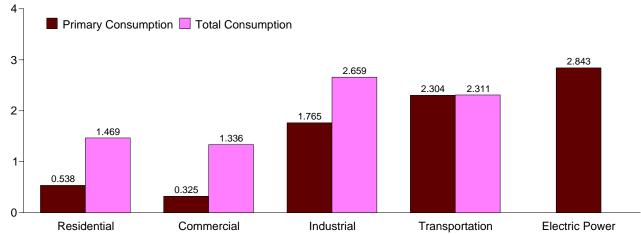
Total Consumption by End-Use Sector, 1973-2004



Total Consumption by End-Use Sector, Monthly







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

**Energy Consumption by Sector** Table 2.1

(Quadrillion Btu)

				End-Use	Sectors				Electric Power		
	Resid	lential	Comm	erciala	Indu	strialb	Transp	ortation	Sector <sup>c,d</sup>	Adjust-	
	Primary	Total	Primary	Total	Primary	Total	Primary	Total	Primary	mentse	Totalb
1973 Total	8.250	14.930	4.381	9.507	24.741	32.653	18.576	18.612	19.753	0.007	75.708
1975 Total	8.006	14.842	4.023	9.466	21.454	29.447	18.209	18.244	20.307	.001	71.999
1980 Total	7.504	15.848	4.097	10.594	22.673	32.152	19.658	19.696	24.359	001	78.289
1985 Total	6.992	15.928	3.708	11.465	19.540	28.958	20.075	20.122	26.158	004	76.469
1990 Total	6.460	16.900	3.810	13.281	21.235	31.918	22.535	22.589	30.647	020	84.668
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 7.147	19.634 20.453	3.984 4.192	16.347 17.129	22.826 22.740	34.679 34.616	26.050 26.645	26.108 26.705	37.097 38.180	.006 .002	96.774 98.905
2000 Total	6.909	20.453	4.192	17.129	21.796	32.501	26.215	26.705	36.160 37.411	.002	96.380
2001 Total 2002 Total	6.886	20.261	4.148	17.599	21.790	32.457	26.786	26.847	38.243	.005	97.788
2002 Total	0.000	20.019	4.140	17.555	21.720	32.437	20.700	20.047	30.243	.003	31.100
2003 January	1.196	2.557	.639	1.736	1.946	2.838	2.178	2.185	3.357	(s)	9.316
February	1.102	2.267	.592	1.542	1.794	2.621	2.054	2.060	2.949	004	8.487
March	.870	1.961	.484	1.499	1.829	2.708	2.246	2.252	2.991	004	8.416
April	.573	1.494	.338	1.322	1.774	2.675	2.200	2.206	2.813	004	7.693
May	.391	1.388	.247	1.335	1.717	2.669	2.277	2.283	3.044	001	7.674
June	.287	1.423	.197	1.347	1.631	2.600	2.261	2.268	3.262	.001	7.639
July	.264	1.706	.199	1.474	1.761	2.735	2.348	2.355	3.698	.005	8.275
August	.262	1.734	.202	1.484	1.756	2.754	2.417	2.424	3.758	.006	8.401
September	.279	1.452	.204	1.310	1.738	2.630	2.227	2.233	3.178	.002	7.627
October	.399	1.370	.259	1.345	<sup>R</sup> 1.813	<sup>R</sup> 2.754	R 2.342	R 2.348	3.003	001	7.815
November	.588	1.559	.341	1.379	1.825	2.749	2.187	2.193	2.940	002	7.879
December	.973	2.237	.507	1.602	1.941	2.855	2.303	2.309	3.280	001	9.001
Total	7.184	21.157	4.207	17.371	R 21.523	R 32.583	<sup>R</sup> 27.040	R 27.116	38.272	003	98.223
<b>2004</b> January	1.215 R 1.081	2.612 R 2.285	<sup>R</sup> .606 <sup>R</sup> .566	<sup>R</sup> 1.698 <sup>R</sup> 1.566	<sup>R</sup> 1.976 <sup>R</sup> 1.876	R 2.861 R 2.723	R 2.230 R 2.200	R 2.237 R 2.207	3.381 3.058	(s) 001	<sup>R</sup> 9.408 <sup>R</sup> 8.780
February March	R .789	1.851	R .436	R 1.457	R 1.904	R 2.799	R 2.333	R 2.339	2.985	001	R 8.443
April	.709	1.460	R .319	R 1.317	R 1.848	R 2.744	R 2.289	R 2.296	2.816	003	R 7.813
May	R .360	R 1.395	R .232	R 1.380	R 1.844	R 2.845	R 2.352	R 2.359	3.192	.003	<sup>R</sup> 7.981
June	R .286	R 1.516	R .196	R 1.377	R 1.782	R 2.738	R 2.350	R 2.356	3.374	.003	R 7.990
July	.270	R 1.698	.193	1.466	R 1.818	R 2.794	R 2.430	R 2.437	3.685	.006	R 8.401
August	.267	1.646	R .192	R 1.439	R 1.859	R 2.835	R 2.427	R 2.434	3.610	.005	R 8.360
September	.272	1.471	.195	1.360	R 1.784	R 2.701	R 2.296	R 2.302	3.288	.003	R 7.837
October	.387	1.400	.249	1.356	R 1.872	R 2.805	R 2.406	R 2.413	3.059	(s)	R 7.973
November	.583	1.564	.331	<sup>R</sup> 1.378	R 1.923	R 2.850	R 2.261	R 2.268	2.961	001	R 8.059
December	.954	R 2.229	.502	R 1.638	R 2.002	R 2.942	R 2.364	R 2.371	3.359	.001	<sup>R</sup> 9.181
Total	R 7.007	R 21.130	<sup>R</sup> 4.016	<sup>R</sup> 17.431	R 22.489	R 33.636	<sup>R</sup> 27.937	R 28.021	38.769	.009	R 100.227
2005 January	1.130	2.507	R .587	<sup>R</sup> 1.699	R 1.982	R 2.884	R 2.251	2.259	3.399	.002	<sup>R</sup> 9.351
February	.962	2.080	.519	1.493	R 1.773	R 2.611	2.119	2.127	2.938	(s)	R 8.310
March	.886	2.012	R .477	R 1.543	R 1.888	R 2.803	2.358	2.365	3.113	(s)	R 8.722
April <b>4-Month Total</b>	.538 <b>3.516</b>	1.469 <b>8.067</b>	.325 <b>1.908</b>	1.336 <b>6.070</b>	1.765 <b>7.407</b>	2.659 <b>10.957</b>	2.304 <b>9.031</b>	2.311 <b>9.061</b>	2.843 <b>12.292</b>	004 <b>002</b>	7.770 <b>34.153</b>
2004 4-Month Total 2003 4-Month Total	3.628 3.741	8.208 8.279	1.927 2.052	6.038 6.099	7.604 7.343	11.126 10.842	9.052 8.677	9.079 8.703	12.241 12.110	007 011	34.445 33.912

a Commercial sector fuel use, including that at commercial combined-heatand-power (CHP) and commercial electricity-only plants. See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of Section 7.

b Industrial sector fuel use, including that at industrial combined-heat-and-power (CHP) and industrial electricity-only plants. See Note, "Classification of Control of Power (CHP) and industrial electricity-only plants.

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 and greater 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: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/consump.html.

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

Power Plants Auto Energy-Use Sectors," at end of Section 7.

<sup>&</sup>lt;sup>c</sup> The electric power sector comprises electricity-only and combined-heat-andpower (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public.

d Through 1988, data are for consumption at electric utilities only. Beginning in

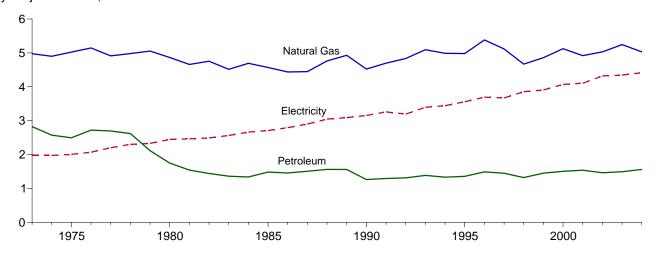
<sup>1989,</sup> data also include consumption at independent power producers.

<sup>e</sup> A balancing item. The sum of primary consumption in the five energy-use

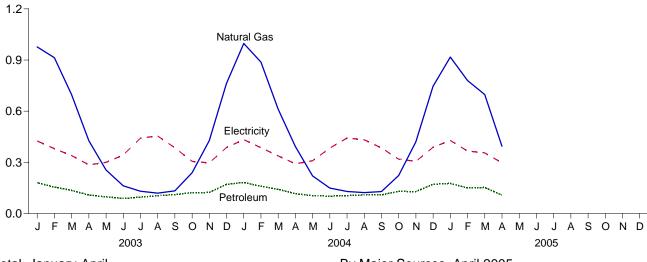
sectors equals the sum of total consumption in the four end-use sectors. However,

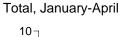
Figure 2.2 Residential Sector Energy Consumption (Quadrillion Btu)

By Major Sources, 1973-2004



By Major Sources, Monthly





8

6

4

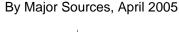
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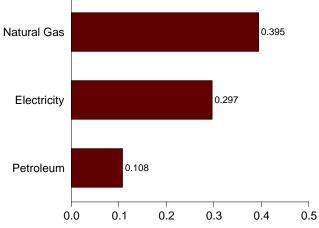
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8.279 8.208 8.067

2004

2005





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.

2003

**Table 2.2 Residential Sector Energy Consumption** 

(Quadrillion Btu)

				Prima	ry Consum	ption						
		Foss	sil Fuels			Renewable	Energya			Electricity	Electrical System	
	Coal	Natural Gas <sup>b</sup>	Petroleum	Total	Wood	Geo- thermal <sup>C</sup>	Solard	Total	Total Primary	Retail Sales <sup>e</sup>	Energy Losses <sup>f</sup>	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
1975 Total	.063	5.023	2.495	7.580	.425	NA	NA	.425	8.006	2.007	4.829	14.842
1980 Total	.031	4.866	1.748	6.645	.859	NA	NA	.859	7.504	2.448	5.897	15.848
1985 Total	.039	4.571	1.483	6.093	.899	NA	NA	.899	6.992	2.709	6.227	15.928
1990 Total	.031	4.523	1.263	5.817	.581	.006	.056	.642	6.460	3.153	7.287	16.900
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	9.248	20.261
2002 Total	.011	5.031	1.463	6.504	.313	.010	.059	.382	6.886	4.323	9.670	20.879
2003 January	.001	.977	.181	1.159	.030	.001	.005	.037	1.196	.425	.936	2.557
February	.001	.913	.155	1.069	.028	.001	.004	.033	1.102	.380	.784	2.267
March	.001	.697	.136	.833	.030	.001	.005	.037	.870	.340	.751	1.961
April	.001	.428	.109	.537	.030	.001	.005	.036	.573	.286	.635	1.494
May	.001	.256	.097	.354	.030	.001	.005	.037	.391	.300	.698	1.388
June	.001	.162	.088	.251	.030	.001	.005	.036	.287	.343	.793	1.423
July	.001	.131	.096	.227	.030	.001	.005	.037	.264	.442	1.000	1.706
August	.001	.120	.105	.225	.030	.001	.005	.037	.262	.455	1.017	1.734
September	.001	.133	.110	.244	.030	.001	.005	.036	.279	.385	.787	1.452
October	.001	.239	.123	.363	.030	.001	.005	.037	.399	.306	.665	1.370
November	.001	.427	.124	.552	.030	.001	.005	.036	.588	.297	.675	1.559
December	.002	.763	.171	.936	.030	.001	.005	.037	.973	.387	.877	2.237
Total	.010	5.246	1.494	6.750	.359	.017	.058	.434	7.184	4.345	9.627	21.157
2004 January	.001	.997	.182	<sup>R</sup> 1.180	.028	.002	.005	.035	1.215	.433	.964	2.612
February	.001	.888	R .160	R 1.049	.026	.001	.005	.032	R 1.081	.386	.818	R 2.285
March	.001	.612	R .142	.754	.028	.002	.005	.035	R .789	.338	.725	1.851
April	.001	.393	.116	.510	.027	.001	.005	.033	.544	.292	.625	1.460
May	.001	.220	R .104	R .325	.028	.002	.005	.035	R.360	.309	.726	R 1.395
June	.001	.149	R .102	R .252	.027	.001	.005	.033	R .286	.383	.847	R 1.516
July	.001	.129	.105	R .235	.028	.002	.005	.035	.270	.443	.986	R 1.698
August	.001	.123	.109	R .233	.028	.002	.005	.035	.267	.432	.947	1.646
September	.001	.129	R.110	.239	.027	.001	.005	.033	.272	.384	.815	1.471
October	.001	.223	.129	R .353	.028	.002	.005	.035	.387	.319	.694	1.400
November	.001	.420	.129	.550	.027	.001	.005	.033	.583	.306	.675	1.564
December	.002	.746	.172	.920	.028	.002	.005	.035	.954	.388	.887	R 2.229
Total	.011	5.030	<sup>R</sup> 1.559	<sup>R</sup> 6.599	.332	.018	.057	.408	<sup>R</sup> 7.007	4.413	9.710	R 21.130
2005 January	.001	.917	.177	1.096	.028	.002	.005	.035	1.130	.429	.948	2.507
February	.001	.780	.150	.931	.025	.001	.004	.031	.962	.366	.752	2.080
March	.001	.698	.153	.852	.028	.002	.005	.035	.886	.356	.770	2.012
April	.001	.395	.108	.504	.027	.001	.005	.034	.538	.297	.634	1.469
4-Month Total	.004	2.790	.588	3.382	.109	.006	.019	.134	3.516	1.447	3.104	8.067
2004 4-Month Total 2003 4-Month Total	.004 .004	2.890 3.015	.599 .580	3.493 3.598	.110 .118	.006 .006	.019 .019	.135 .143	3.628 3.741	1.448 1.431	3.131 3.107	8.208 8.279

<sup>&</sup>lt;sup>a</sup> 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.

<sup>&</sup>lt;sup>f</sup> See Note 12, "Electrical System Energy Losses," at end of section. R=Revised. NA=Not available.

Notes: 

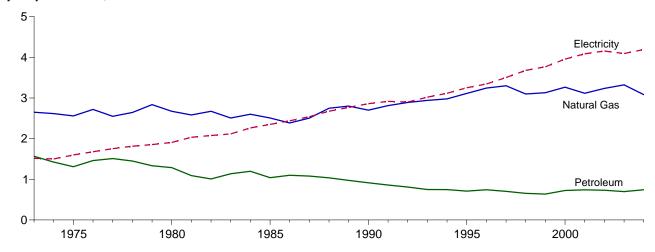
• Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/consump.html.

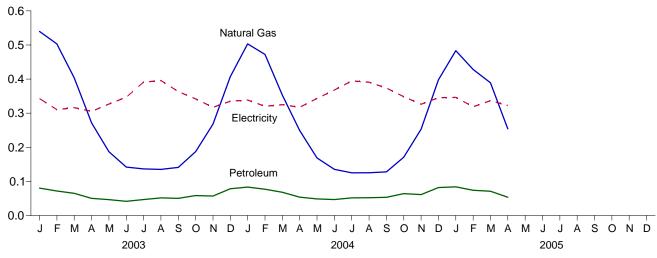
Additional Notes and Sources: See end of section.

Figure 2.3 Commercial Sector Energy Consumption (Quadrillion Btu)

By Major Sources, 1973-2004



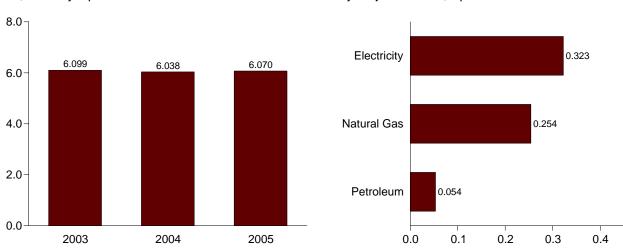
By Major Sources, Monthly



Total, January-April



0.5



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)

				Prim	ary Consum	ption						
		Foss	il Fuels			Renewak	ole Energy <sup>a</sup>				FI. dist	
	Coal	Natural Gas <sup>b</sup>	Petroleum	Total	Hydro- power <sup>c</sup>	Wood and Waste	Geo- thermal <sup>d</sup>	Total	Total Primary	Electricity Retail Sales <sup>e</sup>	Electrical System Energy Losses <sup>f</sup>	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
1975 Total	.147	2.558	1.310	4.015	NA	.008	NA	.008	4.023	1.598	3.845	9.466
1980 Total	.115	2.674	1.288	4.076	NA	.021	NA	.021	4.097	1.906	4.591	10.594
1985 Total	.137	2.508	1.039	3.684	NA	.024	NA	.024	3.708	2.351	5.405	11.465
1990 Total	.124	2.701	.913	3.739	.001	.067	.003	.071	3.810	2.860	6.611	13.281
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	9.208	17.337
2002 Total	.091	3.235	.732	4.058	(s)	.081	.009	.090	4.148	4.155	9.296	17.599
2002 Total	.031	3.233	.732	7.000	(3)	.001	.003	.000	7.170	4.133	3.230	17.555
2003 January	.010	.540	.080	.630	(s)	.007	.001	.009	.639	.343	.754	1.736
February	.009	.503	.072	.584	(s)	.007	.001	.008	.592	.310	.640	1.542
March	.006	.404	.065	.475	(s)	.007	.001	.009	.484	.316	.699	1.499
April	.007	.272	.050	.329	(s)	.007	.001	.008	.338	.305	.679	1.322
May	.005	.187	.047	.239	(s)	.007	.001	.009	.247	.327	.761	1.335
June	.004	.142	.042	.188	(s)	.007	.001	.009	.197	.347	.804	1.347
July	.006	.137	.047	.190	(s)	.008	.001	.009	.199	.391	.885	1.474
August	.006	.135	.052	.193	(s)	.008	.001	.009	.202	.396	.886	1.484
September	.004	.141	.050	.195	(s)	.007	.001	.008	.204	.364	.743	1.310
October	.005	.187	.058	.251	(s)	.007	.001	.009	.259	.342	.743	1.345
November	.008	.268	.057	.333	(s)	.007	.001	.008	.341	.317	.721	1.379
December	.012	.407	.078	.498	(s)	.008	.001	.009	.507	.335	.760	1.602
Total	.084	3.323	.698	4.105	.001	.087	.014	.102	4.207	4.093	9.070	17.371
<b>2004</b> January	.011	R .503	R .083	R .598	(s)	.007	.001	.009	R .606	.339	.753	<sup>R</sup> 1.698
February	.009	R .472	R .077	R .558	(s)	.007	.001	.008	R .566	.320	.679	R 1.566
March	.006	.353	R .068	R .427	(s)	.008	.001	.009	R .436	.325	.697	R 1.457
April	.007	.249	R .054	R .310	(s)	.007	.001	.009	R .319	.318	.680	R 1.317
May	.005	.169	R .049	R .223	(s)	.008	.001	.009	R .232	.343	.805	R 1.380
June	.005	.136	R .047	R .187	(s)	.008	.001	.009	R .196	.368	.813	R 1.377
July	.007	R .125	R .052	.184	(s)	.008	.001	.009	.193	.395	.879	1.466
August	.006	R .125	R .052	R .183	(s)	.008	.001	.009	R .192	.391	.856	R 1.439
September	.005	.128	.053	.186	(s)	.007	.001	.008	.195	.374	.792	1.360
October	.005	.171	.064	.240	(s)	.007	.001	.009	.249	.348	.759	1.356
November	.008	R .253	.061	R .322	(s)	.007	.001	.009	.331	.326	.721	R 1.378
December	.013	R .398	R .082	.493	(s)	.008	.001	.009	.502	.345	.790	R 1.638
Total	.087	R 3.082	R.743	R 3.911	.001	.089	.015	.106	R 4.016	4.192	9.223	R 17.431
2005 January	.010	R .483	.084	R .578	(s)	.008	.001	.009	R .587	.346	.766	R 1.699
February	.008	R .428	.074	R .510	(s)	.007	.001	.008	.519	.319	.655	1.493
March	.008	R .389	.071	R .468	(s)	.008	.001	.009	R .477	.337	.729	<sup>R</sup> 1.543
April	.008	.254	.054	.316	(s)	.008	.001	.009	.325	.323	.688	1.336
4-Month Total	.034	1.555	.283	1.872	(s)	.030	.005	.036	1.908	1.324	2.838	6.070
2004 4-Month Total 2003 4-Month Total	.033 .032	1.577 1.718	.282 .268	1.893 2.018	(s) (s)	.029 .029	.005 .005	.035 .034	1.927 2.052	1.301 1.275	2.809 2.772	6.038 6.099

<sup>&</sup>lt;sup>a</sup> All values are estimated; see Table 10.2a.

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

<sup>&</sup>lt;sup>c</sup> Conventional hydroelectric power.

d Geothermal heat pump and direct use energy.

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

f See Note 12, "Electrical System Energy Losses," at end of section.

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

Notes:

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

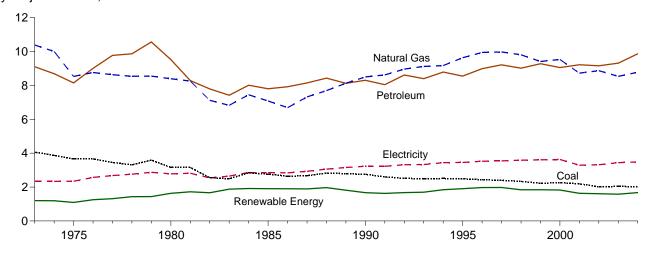
• Geographic coverage to the 50 States and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/consump.html.

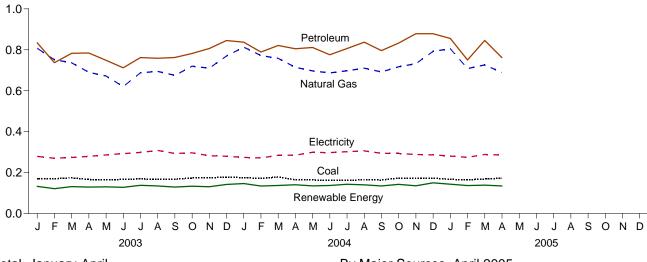
Additional Notes and Sources: See end of section.

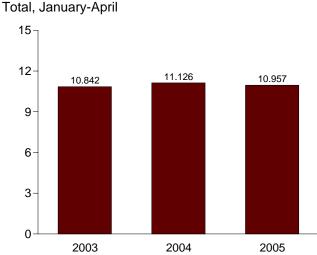
Figure 2.4 Industrial Sector Energy Consumption (Quadrillion Btu)

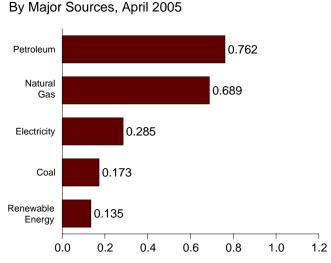
By Major Sources, 1973-2004



By Major Sources, Monthly







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

Source: Table 2.4.

**Table 2.4 Industrial Sector Energy Consumption** 

(Quadrillion Btu)

				Prim	ary Consum	ption						
		Foss	il Fuels			Renewab	le Energy <sup>a</sup>					
	Coal	Natural Gas <sup>b</sup>	Petroleum	Total <sup>c</sup>	Hydro- power <sup>d</sup>	Wood <sup>e</sup> and Waste <sup>f</sup>	Geo- thermal <sup>g</sup>	Total	Total Primary	Electricity Retail Sales <sup>h</sup>	Electrical System Energy Losses	Total <sup>c</sup>
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
1975 Total	3.667	8.532	8.146	20.359	.032	1.063	NA	1.096	21.454	2.346	5.647	29.447
1980 Total	3.155	8.395	9.525	21.040	.033	1.600	NA	1.633	22.673	2.781	6.698	32.152
1985 Total	2.760	7.080	7.805	17.632	.033	1.875	NA	1.908	19.540	2.855	6.563	28.958
1990 Total	2.756	8.502	8.305	19.568	.031	1.634	.002	1.667	21.235	3.226	7.457	31.918
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	21.032	.055	1.784	.003	1.841	23.067	3.587	8.124	34.777
1999 Total	2.333		9.284	20.983	.033	1.791	.003	1.843	22.826	3.611	8.242	34.679
	2.256	9.415 9.535	9.055	20.903	.049	1.781	.004	1.828	22.740	3.631	8.245	34.616
2000 Total	2.230		9.033			1.701	.004	1.630	21.796			
2001 Total		8.725		20.166	.033					3.290	7.415	32.501
2002 Total	2.019	8.870	9.162	20.112	.039	1.565	.005	1.608	21.720	3.317	7.420	32.457
2003 January	.170	.807	.835	1.813	.004	.129	(s)	.133	1.946	.279	.613	2.838
February	.170	.751	.737	1.672	.003	.118	(s)	.121	1.794	.270	.557	2.621
March	.175	.737	.783	1.698	.004	.127	(s)	.131	1.829	.274	.605	2.708
April	.166	.690	.785	1.645	.002	.126	(s)	.129	1.774	.279	.622	2.675
May	.164	.672	.749	1.587	.004	.126	(s)	.130	1.717	.286	.666	2.669
June	.167	.620	.712	1.503	.004	.124	(s)	.128	1.631	.292	.677	2.600
July	.169	.688	.762	1.624	.004	.133	(s)	.138	1.761	.299	.675	2.735
August	.167	.695	.758	1.621	.004	.130	(s)	.135	1.756	.308	.690	2.754
September	.168	.675	.763	1.609	.003	.125	(s)	.129	1.738	.293	.599	2.630
October	.174	.720	R .782	R 1.679	.003	.130	(s)	.133	R 1.813	.296	.644	R 2.754
November	.175	.710	.806	1.694	.004	.127	(s)	.131	1.825	.282	.641	2.749
December	.177	.770	.845	1.799	.005	.137	(s)	.142	1.941	.280	.635	2.855
Total	2.041	8.534	<sup>R</sup> 9.316	R 19.943	.043	1.533	.005	1.581	R 21.523	3.439	7.620	R <b>32.583</b>
2004 January	.175	R .813	R .837	<sup>R</sup> 1.829	.005	.141	(s)	.146	<sup>R</sup> 1.976	.274	.610	R 2.861
February	.171	R .772	R .789	R 1.741	.005	.129	(s)	.134	R 1.876	.272	.576	R 2.723
March	.179	.758	R .821	R 1.767	.004	.132	(s)	.137	R 1.904	.284	.610	R 2.799
April	.165	.714	R .805	R 1.708	.004	.137	(s)	.141	R 1.848	.285	.611	R 2.744
May	.164	R.697	R .811	R 1.709	.004	.131	(s)	.135	R 1.844	.299	.702	R 2.845
June	.163	R.687	R .776	R 1.645	.003	.133	(s)	.137	R 1.782	.298	.658	R 2.738
July	.162	R.698	R .806	R 1.676	.003	.139	(s)	.143	R 1.818	.302	.673	R 2.794
August	.165	.710	R .837	R 1.719	.004	.136	(s)	.140	R 1.859	.306	.670	R 2.835
September	.164	R .692	R .796	R 1.649	.005	.129	(s)	.135	R 1.784	.294	.623	R 2.701
October	.173	.717	R .833	R 1.730	.004	.138	(s)	.142	R 1.872	.293	.639	R 2.805
November	.171	.732	R .879	R 1.788	.005	.130	(s)	.135	R 1.923	.289	.638	R 2.850
December	.174	.792	R .879	R 1.852	.006	.144	(s)	.150	R 2.002	.286	.655	R 2.942
Total	2.025	R 8.782	R 9.869	R 20.814	.051	1.620	.005	1.676	R 22.489	3.483	7.664	R 33.636
2005 lonuor:	407	005	R .855	<sup>R</sup> 1.839	004	400	(2)	4.40	<sup>R</sup> 1.982	004	604	R 2.884
2005 January February	.167 .164	.805 R .708	**.855 R .750	R 1.636	.004 .003	.139 .133	(s) (s)	.143 .136	R 1.773	.281 .274	.621 .564	R 2.611
March	.169	.726	R .846	R 1.750	.003	.133	(s)	.138	R 1.888	.289	.625	R 2.803
April	.103	.689	.762	1.630	.004	.131	(s)	.135	1.765	.285	.609	2.659
4-Month Total	.673	2.929	3.213	6.854	.015	.536	.002	.553	7.407	1.130	2.420	10.957
2004 4-Month Total 2003 4-Month Total	.690 .681	3.057 2.985	3.252 3.139	7.046 6.828	.018 .013	.539 .500	.002 .001	.558 .515	7.604 7.343	1.115 1.102	2.407 2.397	11.126 10.842

<sup>&</sup>lt;sup>a</sup> All values are estimated; see Table 10.2b.

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

<sup>&</sup>lt;sup>c</sup> Includes coal coke net imports, which are not separately displayed. See Table

<sup>1.4.</sup>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.

<sup>&</sup>lt;sup>g</sup> Geothermal heat pump and direct use energy.

<sup>&</sup>lt;sup>h</sup> Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.

i See Note 12, "Electrical System Energy Losses," at end of section.

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

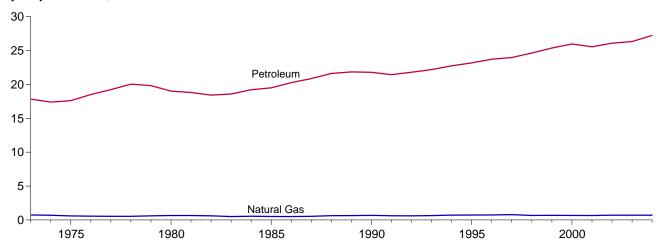
Notes: • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/consump.html.

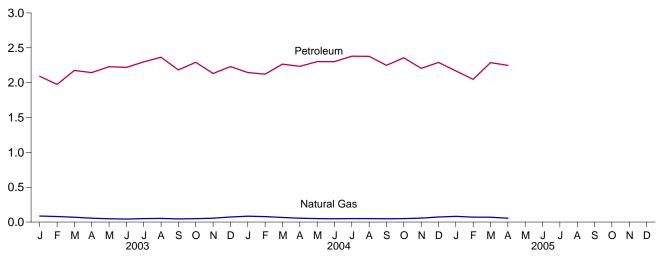
Additional Notes and Sources: See end of section.

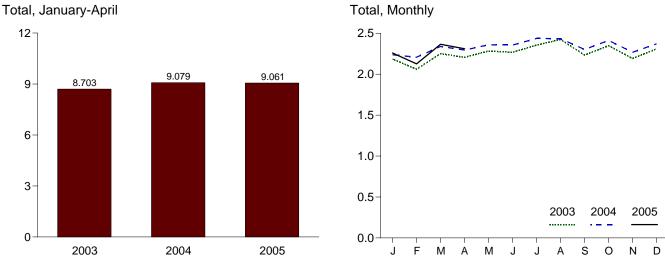
Figure 2.5 Transportation Sector Energy Consumption (Quadrillion Btu)

By Major Sources, 1973-2004



By Major Sources, Monthly





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 Co	nsumption					
		Foss	il Fuels		Renewable Energy <sup>a</sup>		Electricity	Electrical System	
	Coal	Natural Gas <sup>b</sup>	Petroleum <sup>c,d</sup>	Total	Alcohol Fuels <sup>d,e</sup>	Total Primary <sup>d</sup>	Retail Sales <sup>f</sup>	Energy Losses <sup>9</sup>	Total <sup>d</sup>
1973 Total	0.003	0.743	17.831	18.576	NA	18.576	0.011	0.025	18.612
1975 Total	.001	.595	17.614	18.209	NA	18.209	.010	.024	18.244
1980 Total	(h)	.650	19.008	19.658	NA	19.658	.011	.027	19.696
1985 Total	(h)	.519	19.504	20.023	.052	20.075	.014	.033	20.122
1990 Total	(h)	.680	21.792	22.472	.063	22.535	.016	.037	22.589
1995 Total	(h)	.724	23,181	23.905	.117	23.905	.017	.039	23.960
1996 Total	ìhί	.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	ìhί	.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 Total	(h)	.702	26.084	26.786	.174	26.786	.019	.042	26.847
2003 January	(	.086	2.092	2.178	.017	2.178	.002	.005	2.185
February	( , )	.080	1.974	2.054	.020	2.054	.002	.004	2.060
March	( h )	.070	2.176	2.246	.017	2.246	.002	.004	2.252
April	( h )	.055	2.145	2.200	.020	2.200	.002	.004	2.206
May	( h )	.048	2.229	2.277	.019	2.277	.002	.004	2.283
June	( h )	.043	2.219	2.261	.019	2.261	.002	.005	2.268
July	( h )	.050	2.298	2.348	.020	2.348	.002	.005	2.355
August	( h )	.052	2.365	2.417	.021	2.417	.002	.005	2.424
September	( h )	.045	2.182	2.227	.018	2.227	.002	.004	2.233
October	( h )	.049	R 2.293	R 2.342	.021	R 2.342	.002	.004	R 2.348
November	( h )	.056	2.131	2.187	.024	2.187	.002	.004	2.193
December	(h)	.072	2.230	2.303	.025	2.303	.002	.004	2.309
Total	(h)	.706	<sup>R</sup> 26.334	<sup>R</sup> 27.040	.239	<sup>R</sup> <b>27.040</b>	.024	.053	<sup>R</sup> 27.116
2004 January	( <sup>h</sup> )	.084	<sup>R</sup> 2.146	R 2.230	.024	R 2.230	.002	.005	R 2.237
February	(h)	.079	R 2.122	R 2.200	.022	R 2.200	.002	.005	R 2.207
March	(h)	.066	R 2.266	R 2.333	.024	R 2.333	.002	.004	R 2.339
April	(h)	.055	R 2.234	R 2.289	.024	R 2.289	.002	.004	R 2.296
May	(h)	.050	R 2.302	R 2.352	.025	R 2.352	.002	.005	R 2.359
June	(h)	.047	R 2.302	R 2.350	.025	R 2.350	.002	.005	R 2.356
July	(h)	.050	R 2.379	R 2.430	.025	R 2.430	.002	.005	R 2.437
August	(h)	.050	R 2.377	R 2.427	.024	R 2.427	.002	.005	R 2.434
September	(h)	.047	R 2.248	R 2.296	.026	R 2.296	.002	.005	R 2.302
October	(h)	.050	R 2.357	R 2.406	.025	R 2.406	.002	.005	R 2.413
November	ìhί	.056	R 2.205	R 2.261	.025	R 2.261	.002	.005	R 2.268
December	(h)	.073	R 2.291	R 2.364	.026	R 2.364	.002	.005	R 2.371
Total	( h )	.708	R 27.229	R 27.937	.296	R 27.937	.026	.058	R 28.021
<b>2005</b> January	( <sup>h</sup> )	.082	2.169	<sup>R</sup> 2.251	.026	<sup>R</sup> 2.251	.003	.006	2.259
February	(h)	.071	2.048	2.119	.028	2.119	.002	.005	2.127
March	įhj	.070	2.288	2.119	.033	2.358	.002	.005	2.365
April	( h )	.056	2.248	2.304	.034	2.304	.002	.005	2.311
4-Month Total	(h)	.278	8.753	9.031	.121	9.031	.010	.003	9.061
2004 4-Month Total	( h )	.284	8.768	9.052	.095	9.052	.009	.019	9.079
2003 4-Month Total	( h )	.204	8.386	9.052 8.677	.073	9.052 8.677	.008	.019	9.079 8.703

R=Revised. NA=Not available.

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

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/consump.html.

Additional Notes and Sources: See end of section.

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.

<sup>&</sup>lt;sup>c</sup> Beginning in 1993, includes ethanol blended into motor gasoline.

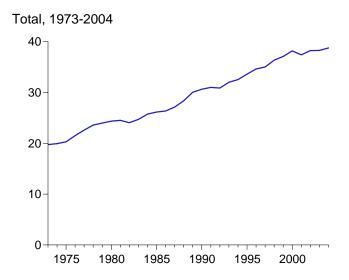
d Beginning in 1993, ethanol blended into motor gasoline is included in both "Petroleum" and "Alcohol Fuels," but is counted only once in both total primary consumption and total consumption.

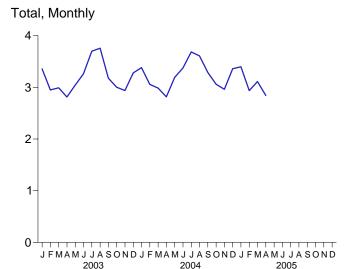
e "Alcohol Fuels" is ethanol blended into motor gasoline.

f Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.

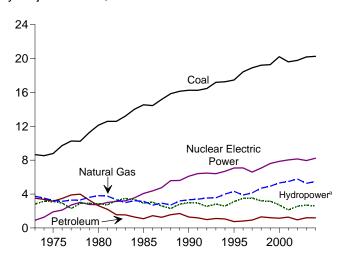
 $<sup>^{\</sup>rm g}$  See Note 12, "Electrical System Energy Losses," at end of section.  $^{\rm h}$  Since 1978, the small amounts of coal consumed for transportation are reported as industrial sector consumption.

Figure 2.6 Electric Power Sector Energy Consumption (Quadrillion Btu)

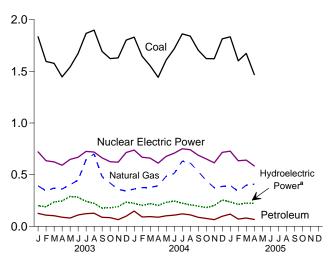




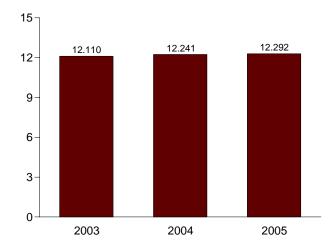
By Major Sources, 1973-2004



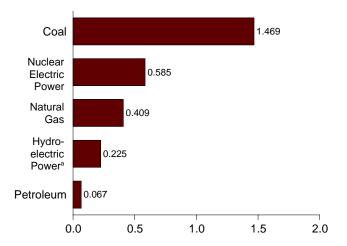
By Major Sources, Monthly



Total, January-April



By Major Sources, April 2005



<sup>a</sup>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)

						Prima	ry Consumptior	1					
		Foss	il Fuels			Ukadaa		Renewa	ble Energy	,			
	Coal	Natural Gas <sup>a</sup>	Petroleum	Total	Nuclear Electric Power	Hydro- electric Pumped Storage <sup>b</sup>	Conventional Hydroelectric Power	Wood <sup>c</sup> and Waste <sup>d</sup>	Geo- thermal <sup>e</sup>	Solar <sup>f</sup> and Wind <sup>g</sup>	Total	Electricity Net Imports	Total Primary
1973 Total	8.658	3.748	3.515	15.921	0.910	( <sup>h</sup> )	2.827	0.003	0.043	NA	2.873	0.049	19.753
1975 Total	8.786	3.240	3.166	15.191	1.900	(h)	3.122	.002	.070	NA	3.194	.021	20.307
1980 Total	12.123	3.810	2.634	18.567	2.739	(h)	2.867	.005	.110	NA	2.982	.071	24.359
1985 Total	14.542	3.160	1.090	18.792	4.076	(h)	2.937	.014	.198	(s)	3.150	.140	26.158
1990 Total <sup>i</sup>	16.261	3.332	1.289	20.883	6.104	036	3.014	.317	.326	.033	3.689	.008	30.647
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 2002 Total	19.614 19.783	5.481 5.785	1.277 .961	26.371 26.529	8.033 8.143	091 089	2.209 2.650	.450 516	.289 .305	.075 .111	3.023 3.581	.075 .078	37.411 38.243
2002 TOTAL	19.703	3.763	.901	20.329	0.143	009	2.030	.516	.303	.1111	3.301	.070	30.243
<b>2003</b> January	1.835	.392	.126	2.353	.721	008	.207	.045	.026	.007	.286	.005	3.357
February	1.595	.343	.109	2.047	.635	008	.199	.039	.024	.008	.270	.004	2.949
March	1.578	.370	.103	2.051	.625	008	.244	.044	.025	.011	.324	001	2.991
April	1.446	.361	.089	1.896	.592	006	.251	.041	.025	.012	.329	.003	2.813
May	1.542	.404	.081	2.026	.648	006	.297	.042	.025	.011	.374	.001	3.044
June	1.673 1.868	.446 .646	.111 .124	2.230 2.637	.669 .726	008 008	.289 .251	.043 .046	.026 .026	.012 .010	.370 .333	.001 .010	3.262 3.698
July August	1.899	.701	.124	2.727	.719	008	.231	.040	.026	.009	.313	.008	3.758
September	1.693	.480	.088	2.261	.663	008	.186	.043	.025	.010	.264	002	3.178
October	1.624	.419	.085	2.128	.625	006	.185	.042	.025	.010	.262	006	3.003
November	1.631	.357	.065	2.053	.621	007	.198	.043	.024	.010	.275	003	2.940
December	1.802	.344	.098	2.245	.715	007	.241	.046	.027	.011	.326	.001	3.280
Total	20.185	5.264	1.205	26.653	7.959	087	2.781	.522	.303	.120	3.725	.022	38.272
2004 January	1.831	.361	.148	2.340	.739	007	.230	.042	.026	.011	.309	(s)	3.381
February	1.646	.375	.091	2.112	.669	007	.209	.040	.025	.011	.284	.000	3.058
March	1.554	.377	.095	2.026	.660	006	.227	.042	.025	.014	.308	003	2.985
April	1.443	.393	.089	1.924	.612	006	.209	.040	.024	.014	.286	(s)	2.816
May	1.610	.485	.103	2.197	.678	007	.238	.042	.025	.018	.323	.001	3.192
June	1.717	.512	.108	2.338	.708	007	.252	.042	.025	.015	.333	.002	3.374
July	1.862	.631	.121	2.615	.751	007	.231	.046	.026	.012	.315	.010	3.685
August	1.841	.614 .532	.112	2.567 2.324	.742	008 007	.216	.045	.026 .024	.011	.297 .280	.012	3.610 3.288
September October	1.705 1.623	.532 .443	.088 .077	2.324	.688 .653	007	.203 .188	.041 .041	.024	.012 .011	.266	.003 .004	3.288
November	1.623	.375	.066	2.143	.615	007	.209	.041	.026	.010	.285	.004	2.961
December	1.815	.387	.000	2.300	.716	006	.261	.042	.025	.012	.344	.005	3.359
Total	20.268	5.486	1.195	26.948	8.232	082	2.673	.508	.302	.149	3.632	.039	38.769
<b>2005</b> January	1.834	.396	.119	2.349	.728	007	.243	.045	.025	.011	.325	.005	3.399
February	1.602	.339	.071	2.349	.635	007	.243 .217	.045	.023	.009	.289	.005	2.938
March	1.674	.399	.081	2.153	.641	005	.230	.041	.022	.014	.315	.008	3.113
April	1.469	.409	.067	1.945	.585	004	.229	.041	.025	.016	.310	.006	2.843
4-Month Total	6.578	1.543	.337	8.458	2.589	019	.919	.172	.098	.050	1.240	.025	12.292
2004 4-Month Total 2003 4-Month Total	6.474 6.454	1.506 1.466	.423 .427	8.402 8.347	2.681 2.573	027 030	.874 .902	.164 .169	.100 .100	.049 .037	1.188 1.209	003 .012	12.241 12.110

<sup>&</sup>lt;sup>a</sup> Natural gas, plus a small amount of supplemental gaseous fuels that cannot be identified separately.

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: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/consump.html.

Additional Notes and Sources: See end of section.

b Pumped storage facility production minus energy used for pumping.

<sup>&</sup>lt;sup>c</sup> Wood, black liquor, and other wood waste.

<sup>&</sup>lt;sup>d</sup> Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

<sup>&</sup>lt;sup>e</sup> Geothermal electricity net generation.

f Solar thermal and photovoltaic electricity net generation.

<sup>&</sup>lt;sup>g</sup> Wind electricity net generation.

h Included in conventional hydroelectric power.

<sup>&</sup>lt;sup>1</sup> Through 1988, data are for consumption at electric utilities only. Beginning in

<sup>1989,</sup> data also include consumption at independent power producers.

# **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 abovementioned commercial establishments. For further information, see:

http://www.eia.doe.gov/neic/datadefinitions/Guideforwebcom.htm.

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

http://www.eia.doe.gov/neic/data definitions/Guide for we bind. htm.

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

coverage. For further information see:

http://www.eia.doe.gov/neic/datadefinitons/Guideforwebtrans.htm.

**Electric Power Sector**—An energy-consuming sector that consists of electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public—i.e., North American Industry Classification System 22 plants.

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

Note 3. Conversion Factors: See Appendix A.

Note 4. Coal: See Tables 6.2 and A5.

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

Sources:

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

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

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

1982 forward: EIA, Quarterly Coal Report.

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

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

The sources for petroleum product supplied by product are:

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

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

1981-2003: EIA, Petroleum Supply Annual.

2004 forward: EIA, Petroleum Supply Monthly.

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

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

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

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

**Distillate Fuel Consumed by the Electric Power Sector, All Time Periods**—See Tables 7.3b and 7.4b. For 1973-1979, electric utility consumption of distillate fuel is assumed to be the amount of petroleum (minus small amounts of kerosene and kerosene-type jet fuel deliveries) consumed in gas turbine and internal combustion plants. For 1980-2000, electric utility consumption of distillate fuel is assumed to be the amount of light oil (fuel oil nos. 1 and 2, plus small amounts of kerosene and jet fuel) consumed.

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

Following are notes on the individual sector groupings:

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

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

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

industrial portion is added to oil company, off-highway diesel, and all other uses.

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

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

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

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

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

**Jet Fuel**—Through 1982, small amounts of kerosene-type jet fuel were consumed by the electric power sector. Kerosene-type jet fuel deliveries to the electric power sector as reported on the Form FERC-423 (formerly Form 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 and miscellaneous and unclassified uses.

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

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

**Petroleum Coke**—Portions of petroleum coke are consumed by the electric power sector (see Tables 7.3b and 7.4b) and the commercial sector (see sources for Table 7.4c). The remaining petroleum coke is assigned to the industrial sector.

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

**Residual Fuel Consumed by the Electric Power Sector, All Time Periods**—See Tables 7.3b and 7.4b. For 1973-1979, electric utility consumption of residual fuel is assumed to be the amount of petroleum consumed in steam-electric power plants. For 1980-2000, electric utility consumption of residual fuel is assumed to be the amount of heavy oil (fuel oil nos. 4, 5, and 6) consumed.

Residual Fuel Consumed by End-Use Sectors, Annually Through 2000—The aggregate end-use amount is total residual fuel supplied minus the amount consumed for electric power. The end-use total consumed annually is allocated into the individual end-use sectors (commercial, industrial, and transportation) in proportion to each sector's share of "adjusted sales" as reported in EIA's Fuel Oil and Kerosene

Sales (Sales) report series (DOE/EIA-535), which is based

primarily on data collected by Form EIA-821, previously Form EIA-172). "Adjusted sales" are sales that have been adjusted to equal EIA residual fuel product supplied.

Following are notes on the individual sector groupings:

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

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

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

Residual Fuel Consumed by End-Use Sectors, Monthly Through 2000—Commercial monthly consumption is estimated by allocating the annual estimates, which are described above, into the months in proportion to each month's share of the year's sales of No. 2 heating oil. The years' sales totals are from the following sources: for 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 the retail sales data in Table 7.6. Kilowatthours are converted to Btu at the rate of 3,412 Btu per kilowatthour.

Note 12. Electrical System Energy Losses: Electrical system energy losses are calculated as the difference between total primary consumption by the electric power sector (see Table 2.6) and the total energy content of electricity retail sales (see Tables 7.6 and A6). Most of these losses occur at steam-electric power plants (conventional and nuclear) in the conversion of heat energy into mechanical energy to turn electric generators. The loss is a thermodynamically necessary feature of the steam-electric cycle. Part of the energy input-to-output losses is a result of imputing fossil energy equivalent inputs for hydroelectric and other energy sources, since there is no generally accepted practice for measuring those thermal conversion rates. In addition to conversion losses, other losses include power plant use of electricity, transmission and distribution of electricity from power plants to end-use consumers (also called "line losses"), and unaccounted for electricity. Total losses are allocated to the end-use sectors in proportion to each sector's share of total electricity sales. Overall, approximately 67 percent of total energy input is lost in conversion; of electricity generated, approximately 5 percent is lost in plant use and 9 percent is lost in transmission and distribu-

# Section 3. Petroleum

Total petroleum imports<sup>1</sup> were an estimated 13.6 million barrels per day in June 2005, 1 percent higher than the previous month's rate and slightly higher than the June 2004 rate.

In June 2005, an estimated 20.8 million barrels per day of petroleum products were supplied for domestic use, slightly lower than the June 2004 rate. Motor gasoline accounted for 46 percent of the total; distillate fuel oil, 20 percent; and kerosene-type jet fuel, 8 percent.

Motor gasoline product supplied during June 2005 was an estimated 9.5 million barrels per day, 2 percent higher than both the previous month's rate and the June 2004 rate. Total motor gasoline stocks were an estimated 215 million barrels at the end of June 2005, 2 million barrels below the stock level

in the previous month but 7 million barrels above the level one year earlier.

Distillate fuel oil product supplied during June 2005 was an estimated 4.1 million barrels per day, 1 percent higher than the previous month's rate and 5 percent higher than the June 2004 rate. Distillate fuel oil ending stocks for June 2005 were an estimated 117 million barrels, 6 million barrels above the stock level in the previous month and 3 million barrels higher than the level 1 year earlier.

Kerosene-type jet fuel product supplied in June 2005 was an estimated 1.7 million barrels per day, 10 percent higher than the previous month's rate and 3 percent higher than the June 2004 rate. Kerosene-type jet fuel stocks were an estimated 41 million barrels at the end of June 2005, 2 million barrels higher than both the stock level in the previous month and the level 1 year earlier.

<sup>&</sup>lt;sup>1</sup>Total import data include imports into the Strategic Petroleum Reserve.

**Table 3.1a Petroleum Overview: Supply** 

				Sup	ply			
		Field Productiona		Refinery and		Imports		
	Crude Oil	Natural Gas Plant Liquids <sup>b</sup>	Total	Blender Net Production	Crude Oil <sup>c</sup>	Petroleum Products	Total	Adjust- ments <sup>d</sup>
				Thousand Bar	rrels per Day			•
1973 Average	9.208	1,738	10,946	13,854	3,244	3,012	6,256	18
1975 Average	8,375	1,633	10,007	13,685	4,105	1,951	6,056	41
1980 Average	8,597	1,573	10,170	14,622	5,263	1,646	6,909	64
1985 Average	8,971	1,609	10,581	13,750	3,201	1,866	5,067	200
1990 Average	7.355	1,559	8,914	15,272	5.894	2,123	8,018	338
1995 Average	6,560	1,762	8,322	15,994	7,230	1,605	8,835	496
1996 Average	6,465	1,830	8,295	16,324	7,508	1,971	9,478	528
1997 Average	6,452	1,817	8,269	16,759	8,225	1,936	10,162	487
1998 Average	6.252	1,759	8,011	17,030	8,706	2,002	10,708	495
1999 Average	5,881	1,850	7,731	16,989	8,731	2,122	10,852	567
2000 Average	5.822	1,911	7,733	17,243	9.071	2,389	11,459	532
2001 Average	5,801	1,868	7,733 7,670	17,245	9,328	2,543	11,871	501
2002 Average	5,746	1,880	7,626	17,273	9,140	2,390	11,530	527
<u>-</u>								0.45
<b>2003</b> January	5,785	1,758	7,543	16,405	8,633	2,471	11,104	245
February	5,791	1,812	7,603	16,363	8,474	2,447	10,921	427
March	5,817	1,729	7,545	16,914	9,226	2,819	12,044	656
April	5,774	1,701	7,475	17,601	9,928	2,671	12,599	592
May	5,733	1,564	7,297	18,146	10,153	2,765	12,918	458
June	5,701	1,582	7,283	17,739	10,038	2,962	13,001	485
July	5,526	1,649	7,175	17,811	10,034	2,702	12,736	568
August	5,595	1,703	7,299	18,053	10,023	2,746	12,769	505
September	5,683	1,761	7,445	17,650	10,287	2,581	12,868	431
October	5,635	1,818	7,453	17,461	10,063	2,310	12,373	526
November	5,560	1,839	7,399	17,660	9,351	2,361	11,712	581
December	5,579	1,723	7,302	17,957	9,684	2,349	12,033	257
Average	5,681	1,719	7,400	17,487	9,665	2,599	12,264	478
2004 January	R 5.570	R 1,802	R 7,373	R 16.773	R 9,347	R 2.667	R 12.014	R 435
February	<sup>R</sup> 5.556	R 1.799	<sup>R</sup> 7.355	R 16,692	<sup>R</sup> 9,317	<sup>R</sup> 3,341	R 12,658	R 892
March	R 5,607	R 1,828	R 7,435	R 17,178	R 10.088	R 3,260	R 13.349	R 131
April	R 5.527	R 1,783	R 7.309	R 18.043	R 10,115	R 2,768	R 12.883	<sup>R</sup> 754
May	R 5,548	R 1,780	R 7,328	R 18,366	R 10,452	R 2,923	R 13,375	R 571
June	<sup>R</sup> 5,398	R 1,738	R 7,136	R 18,320	R 10,533	R 3,028	R 13,561	R 841
	R 5,458	R 1,812	<sup>R</sup> 7,269	R 18.403	R 10,298	R 3,271	R 13.570	R 596
July August	R 5,333	R 1,863	<sup>R</sup> 7,196	R 18.502	R 10,460	R 3,229	R 13,689	R 412
September	R 5,062	1,797	R 6,859	R 17,303	R 9.697	R 2,979	R 12,676	R 543
	R 5,156	R 1,820	R 6.977	R 17,303	R 10,362	R 3,076	R 13,438	R 324
October	R 5,396	R 1,868	R 7,264	R 17,643	R 10,238	R 3,170		R 642
November	R 5,413	R 1,817	<sup>R</sup> 7,264	R 18.488	R 10,238	R 2,987	<sup>R</sup> 13,409 <sup>R</sup> 13.088	R 666
December Average	R <b>5.419</b>	R <b>1,817</b>	R <b>7,23</b> 1	R 17.814	R <b>10,088</b>	R <b>3,057</b>	R <b>13,</b> 145	R <b>564</b>
_	,	.,500	,	,•	. 5,500	2,301	. 5,140	
<b>2005</b> January	<sup>E</sup> 5,394	1,809	E 7,203	17,137	9,844	2,818	12,661	657
February	<sup>E</sup> 5,469	1,859	E 7,327	17,504	10,158	3,378	13,536	532
March	<sup>E</sup> 5,498	1,858	<sup>E</sup> 7,356	17,442	10,144	2,776	12,919	657
April	<sup>E</sup> 5,488	_ 1,830	E 7,318	_ 18,508	_ 10,314	3,062	13,376	_ 730
May	<sup>RE</sup> 5,494	<sup>R</sup> 1,842	<sup>RE</sup> 7,337	<sup>R</sup> 18,563	<sup>R</sup> 10,166	<sup>R</sup> 3,329	<sup>R</sup> 13,495	<sup>R</sup> 890
June	E 5,487	E 1,852	E 7,339	E 19,041	E 10,478	E 3,102	E 13,579	E 592
6-Month Average	<sup>E</sup> 5,471	E 1,841	E 7,313	E 18,033	E 10,182	E 3,072	E 13,254	<sup>E</sup> 679
2004 6-Month Average	5,535	1,788	7,323	17,565	9,979	2,995	12,974	599
2003 6-Month Average	5,767	1,690	7,456	17,203	9,418	2,692	12,110	477

<sup>&</sup>lt;sup>a</sup> Crude oil production on leases, and natural gas liquids (liquefied petroleum gases, pentanes plus, and a small amount of finished petroleum products) production at natural gas processing plants. Excludes what was previously classified as "Field Production" of finished motor gasoline, motor gasoline blending components, and other hydrocarbons and oxygenates; these are now included in "Adjustments."

R=Revised. E=Estimate.

Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2004: Petroleum Supply Annual, annual reports. • 2005: EIA, Petroleum Supply Monthly, monthly reports; and, for the current month, Weekly Petroleum Status Report data system and Monthly Energy Review data system calculations.

b See Note 6, "Data Discrepancies," at end of section.

<sup>&</sup>lt;sup>c</sup> Includes Strategic Petroleum Reserve imports. See Table 3.2a.

<sup>&</sup>lt;sup>d</sup> An adjustment for crude oil (see Tables 3.2a, 3.5, and 3.6), and for motor gasoline blending components and fuel ethanol (see Tables 3.4 and 3.10). Through 1988, also includes a small amount of distillate fuel oil production at natural gas processing plants (see Table 3.5).

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: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/petro.html.

Table 3.1b Petroleum Overview: Disposition and Stocks

	Stock Change <sup>b</sup> Exports							Stocksa			
		Stock Change	b	Refinery and		Exports		Petroleum			
	Crude Oil <sup>c,d</sup>	Petroleum Products <sup>d,e</sup>	Totald	Blender Net Inputs	Crude Oil	Petroleum Products <sup>f</sup>	Total <sup>f</sup>	Products Supplied	Crude Oil <sup>c,d</sup>	Petroleum Products <sup>d,e</sup>	Totald
				Thousand Barre	els per Da	у				Million Barrels	S
1973 Average	-11	146	135	13,401	2	229	231	17,308	242	766	1.008
1975 Average	17	d <b>15</b>	d <b>32</b>	13,225	6	204	209	16,322	271	862	1,133
1980 Average	98	42	140	14,025	287	258	544	17,056	466	d <b>926</b>	d1,392
1985 Average	50	-153	-103	13,192	204	577	781	15,726	814	705	1,519
1990 Average	-35	142	107	14,589	109	748	857	16,988	908	712	1,621
1995 Average	-93	-153	-246	15,220	95	855	949	17,725	895	668	1,563
1996 Average	-124	-133	-151	15,487	110	871	981	18,309	850	658	1,503
1997 Average	51	93	143	15,909	108	896	1,003	18,620	868	692	1,560
	74	165	239	16,144	110	835	945	18,917	895	752	
1998 Average1999 Average	-118	-304	-422	16,144	118	822	940	19,519	852	641	1,647 1,493
	-116 -70		-422 -69	16,103	50	990	1,040	19,701	826	641	1,493
2000 Average	-70 99	(s) 227	-69 325	16,295	20	990 951	971	19,701	862	724	1,468
2001 Average	40		-105		9	975	984			671	
2002 Average	40	-145	-105	16,316	9	975	904	19,761	877	6/1	1,548
2003 January	-110	-1,293	-1,403	15,472	10	1,202	1,212	20,017	873	631	1,504
February	-106	-1,464	-1,570	15,441	5	1,062	1,067	20,375	870	590	1,460
March	339	114	452	15,949	10	1,042	1,051	19,708	881	594	1,474
April	338	383	720	16,664	12	1,041	1,053	19,830	891	605	1,496
May	-75	1,263	1,188	17,190	15	1,082	1,097	19,344	889	644	1,533
June	150	745	895	16,755	45	1,020	1,065	19,793	893	667	1,560
July	135	209	344	16,876	7	969	976	20.094	897	673	1,570
August	15	35	50	17,044	4	943	947	20,586	898	674	1,572
September	441	426	867	16,635	3	956	960	19,933	911	687	1,598
October	468	-348	120	16.540	14	956	970	20.182	926	676	1,602
November	-356	241	-116	16,663	21	911	933	19,873	915	683	1,598
December	-244	-721	-965	16,845	4	986	990	20.679	907	661	1,568
Average	84	-28	56	16,513	12	1,014	1,027	20,034	907	661	1,568
2004 January	<sup>R</sup> 177	R -563	R -385	15,753	6	742	748	R 20.479	913	R 644	R 1,556
February	R 635	R -608	R 27	R 15.652	8	1,038	1,046	R 20.872	R 931	R 626	R 1,557
March	R 591	R -150	R 441	R 16,175	19	1,005	1,024	R 20,453	R 949	R 621	R 1,571
April	R 401	R -82	R 319	R 16,972	55	1.099	1,153	R 20.545	R 962	R 619	R 1.580
May	R 140	R 818	R 958	R 17,317	26	1,026	1,052	R 20,313	R 966	R 644	R 1,610
June	R 46	R 648	R 694	R 17,314	45	1,025	1,070	R 20.780	967	R 664	R 1,631
July	R -230	R 721	R 491	R 17,314	18	1.062	1.080	R 20.880	R 960	686	R 1,646
August	R -401	R 663	R 262	R 17,419	13	1.078	1,000	R 21.028	R 948	R 707	R 1.654
September	R -147	R -276	R -424	R 16.315	35	R 926	961	R 20.529	R 943	R 698	R 1,642
October	R 444	R -583	R -139	R 16,582	25	1,052	1,078	R 20,861	R 957	R 680	R 1,637
November	R 134	R 501	R 634	R 16,876	42	950	992	R 20,805	R 961	R 695	R 1,656
December	R 11	R -379	R -368	R 17.328	30	1,253	1.284	R 21,229	R 961	683	1,645
Average	R 148	61	R <b>209</b>	R 16,762	<b>27</b>	1,021	1,048	R 20,731	R 961	683	1,645
_						ŕ	·	ŕ			,
2005 January	207	-136	71	16,147	40	877	917	20,524	968	679	1,647
February	619	-98	521	16,470	22	1,237	1,259	20,650	986	676	1,661
March	686	-836	-150	16,485	36	1,272	1,308	20,732	1,007	650	1,657
April	518	393	912	17,459	97	1,285	1,382	20,179	1,022	662	1,684
May	R 132	R 1,169	R 1,301	R 17,443	<sup>R</sup> 76	R 1,325	R 1,401	R 20,139	R 1,027	R 698	R 1,724
June	E-140	E 788	E 648	F 17,979	E 17	E 1,135	E 1,153	E 20,771	E 1,021	E 691	E 1,712
6-Month Average	E 334	<sup>E</sup> 214	<sup>E</sup> 548	E 16,998	<sup>E</sup> 48	E 1,187	E 1,236	E 20,497	E 1,021	E 691	E 1,712
2004 6-Month Average	329	14	344	16,534	26	988	1,014	20,569	967	664	1,631
2003 6-Month Average	91	-25	65	16,254	16	1,075	1,092	19,836	893	667	1,560

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

Web Page: For annual data not displayed between 1973 and 1995, see

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2004: Petroleum Supply Annual, annual reports. • 2005: EIA, Petroleum Supply Monthly, monthly reports; and, for the current month, Weekly Petroleum Status Report data system, Short-Term Integrated Forecasting System, and Monthly Energy Review data system calculations

a Stocks are at end of period.
 b A negative value indicates a decrease in stocks and a positive value. indicates an increase. Current month stock change estimates are based on the change from the previous month's stocks estimates, rather than the actual stocks values shown in this table.

<sup>c</sup> Includes Strategic Petroleum Reserve stocks. See Table 3.2b.

d See Note 4, "New Stock Basis," at end of section.

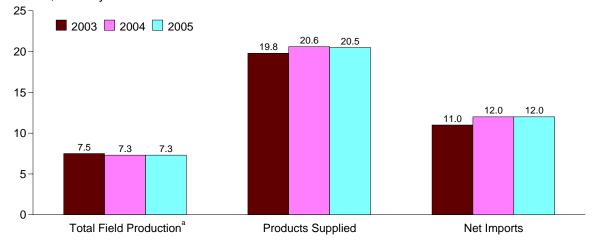
Does not include distillate stocks in the Northeast Heating Oil Reserve.

f See Note 6, "Data Discrepancies," at end of section.
R=Revised. E=Estimate. F=Forecast. (s)=Less than +500 barrels per day and greater than -500 barrels per day.

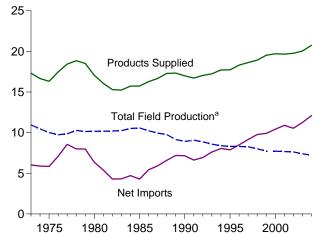
Notes: • Crude oil includes lease condensate. • Totals may not equal sum

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

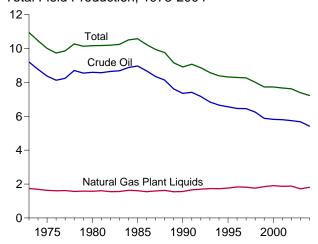




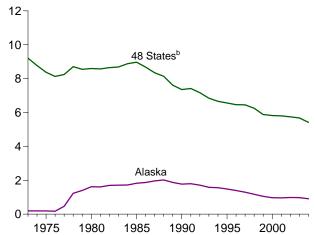
## Overview, 1973-2004



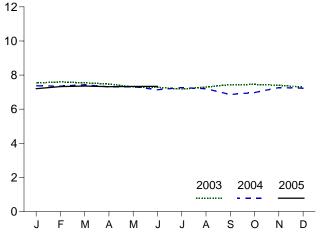
## Total Field Production, 1973-2004



Crude Oil Field Production, 1973-2004



Total Field Production<sup>a</sup>, Monthly



<sup>a</sup>Crude oil and natural gas plant liquids field production.

<sup>b</sup>United States excluding Alaska and Hawaii.

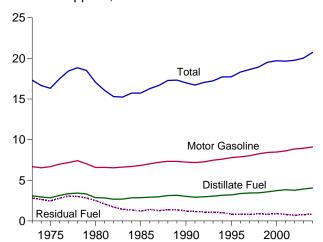
Note: Because vertical scales differ, graphs should not be compared.

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

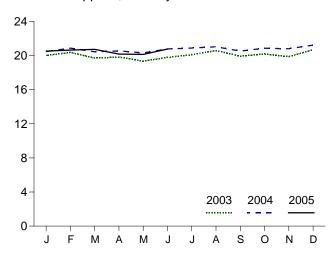
Figure 3.1b Petroleum Products Supplied, Imports, and Stocks

(Million Barrels per Day, Except as Noted)

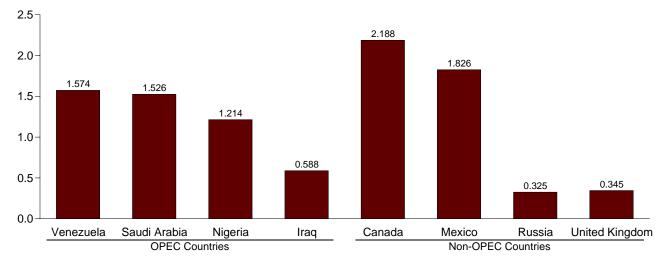
## Products Supplied, 1973-2004



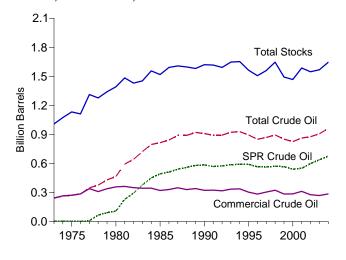
### Products Supplied, Monthly



## Imports from Selected Countries, May 2005

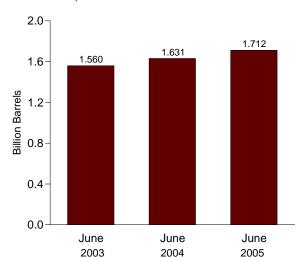


#### Stocks, End of Year, 1973-2004



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

#### Total Stocks, End of Month



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

Table 3.2a Crude Oil Overview: Supply

				Supply			
		Field Production			Imports		Adjust-
	48 States <sup>a</sup>	Alaska	Total	SPR <sup>b,c</sup>	Non-SPR <sup>d</sup>	Total	mentse
			The	ousand Barrels pe	r Day		
973 Average	9,010	198	9,208	_	3,244	3,244	-30
975 Average	8,183	191	8,375	_	4,105	4,105	-14
980 Average	6,980	1,617	8,597	44	5,219	5,263	6
985 Average	7,146	1,825	8,971	118	3,083	3,201	145
90 Average	5,582	1,773	7,355	27	5,867	5,894	257
95 Average	5,076	1,484	6,560	0	7,230	7,230	193
996 Average	5,071	1,393	6,465	Ó	7,508	7,508	215
97 Average	5.156	1,296	6,452	Ö	8,225	8,225	145
98 Average	5,077	1,175	6,252	Ō	8,706	8,706	115
99 Average	4,832	1,050	5,881	8	8,722	8,731	191
00 Average	4,851	970	5,822	8	9,062	9,071	155
01 Average	4,839	963	5,801	11	9,318	9,328	117
02 Average	4,761	984	5,746	16	9,124	9,140	110
03 January	4,801	984	5,785	0	8,633	8,633	-180
February	4,776	1,015	5,791	0	8,474	8,474	15
March	4,795	1,022	5,817	0	9,226	9,226	239
April	4.803	971	5,774	0	9,928	9,928	223
May	4,743	990	5,733	0	10,153	10,153	-36
June	4.710	991	5,701	0	10,038	10,038	76
July	4,600	927	5,526	Õ	10,034	10,034	128
August	4,650	945	5,595	0	10,023	10,023	94
September	4,720	964	5,683	0	10,287	10,287	-80
October	4,668	967	5,635	Õ	10,063	10,063	126
November	4,597	963	5,560	0	9.351	9,351	209
December	4,623	956	5,579	0	9,684	9,684	-159
Average	4,706	974	5,681	ŏ	9,665	9,665	54
<b>04</b> January	<sup>R</sup> 4,594	976	<sup>R</sup> 5,570	16	<sup>R</sup> 9,331	R 9,347	<sup>R</sup> 48
February	R 4,623	933	R 5,556	R 81	R 9,236	R 9.317	R 476
March	R 4,628	979	R 5,607	79	R 10.009	R 10,088	R -299
April	R 4,577	950	R 5,527	R 121	R 9,994	R 10,115	R 356
May	R 4,606	942	R 5,548	R 66	R 10,386	R 10,452	R 158
June	R 4.479	R 920	R 5.398	R 49	R 10,484	R 10.533	R 399
July	R 4,647	811	<sup>R</sup> 5,458	100	R 10,199	R 10,298	R 174
August	R 4.632	701	<sup>R</sup> 5,333	108	R 10.352	R 10,460	R-39
September	R 4,193	869	R 5,062	R 60	R 9,637	R 9.697	R 107
October	R 4,222	935	R 5,156	115	R 10,247	R 10,362	R -108
November	R 4,449	947	R 5.396	R 75	R 10,163	R 10,238	R 205
December	R 4.472	942	R 5.413	57	R 10.043	R 10,101	R 277
Average	R <b>4,510</b>	908	R <b>5,419</b>	R <b>77</b>	R 10,010	R <b>10,088</b>	R 143
<b>05</b> January	E 4,476	E 918	E 5.394	73	9,771	9,844	211
February	E 4.552	E 917	E 5.469	44	10,114	10,158	124
March	E 4,577	E 921	E 5,498	108	10,035	10,144	221
April	E 4.595	E 893	E 5.488	87	10,227	10,314	303
May	<sup>RE</sup> 4.601	RE 893	RE 5.494	R <sub>0</sub>	R 10,166	R 10,166	R 440
June	E 4.644	E 843	E 5.487	NA NA	NA	E 10,478	E 156
6-Month Average	E 4,574	E <b>898</b>	E <b>5,471</b>	NA NA	NA NA	E 10,478	E <b>244</b>
004 6-Month Average	4,585	950	5,535	68	9,911	9,979	185
03 6-Month Average	4,771	995	5,767	0	9,418	9,418	56

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

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: For annual data not displayed between 1973 and 1995, see

http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys,
Petroleum Statement, Annual, annual reports. • 1976-1980: Energy
Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2004: EIA, Petroleum Supply Annual, annual reports. • 2005: EIA, Petroleum Supply Monthly, monthly reports; and, for the current month, Weekly Petroleum Status Report data system, and Monthly Energy Review data system calculations.

 <sup>&</sup>lt;sup>a</sup> United States excluding Alaska and Hawaii.
 <sup>b</sup> "SPR" is the Strategic Petroleum Reserve. Through 2003, includes crude oil imports by SPR only; beginning in 2004, includes crude oil imports by SPR, and crude oil imports into SPR by others.

<sup>c</sup> See Note 6, "Data Discrepancies," at end of section.

<sup>d</sup> All crude oil imports other than those in "SPR."

<sup>&</sup>lt;sup>e</sup> An adjustment for crude oil. Through 1982, includes what was previously classified as "Crude Oil Used Directly" (as distillate and residual fuel oil). Through 2004, also includes what were previously classified as "Unaccounted-for Crude Oil" and "Crude Losses."

Table 3.2b Crude Oil Overview: Disposition and Stocks

			Disp	osition				Stocksa	
		Stock Changeb		Refinery		Product			
	SPR <sup>c</sup>	Non-SPR <sup>d,e,f</sup>	Total <sup>e,f</sup>	Inputs	Exports	Supplied	SPR <sup>c</sup>	Non-SPR <sup>d,e,f</sup>	Total <sup>e,f</sup>
			Thousand B	arrels per Day				Million Barrels	
1973 Average	_	-11	-11	12,431	2	0	_	242	242
1975 Average	_	17	17	12,442	6	0	_	271	271
1980 Average	45	52	98	13,481	287	0	108	<sup>e</sup> 358	<sup>e</sup> 466
1985 Average	117	-67	50	12,002	204	60	493	321	814
1990 Average	16	-51	-35	13,409	109	24	586	323	908
1995 Average	(s)	-93	-93	13,973	95	7	592	303	895
1996 Average	-71	-53	-124	14,195	110	6	566	284	850
1997 Average	-7	57	51	14,662	108	2	563	305	868
1998 Average	22	52	74	14,889	110	0	571	324	895
1999 Average	-11	-107	-118	14,804	118	0	567	284	852
2000 Average	-73	3	-70	15,067	50	0	541	286	826
2001 Average	26	73	99	15,128	20	0	550	312	862
2002 Average	134	-94	40	14,947	9	0	599	278	877
2003 January	5	-115	-110	14,338	10	0	599	274	873
February	0	-106	-106	14,381	5	0	599	271	870
March	0	339	339	14,933	10	0	599	282	881
April	11	326	338	15,575	12	0	600	291	891
May	114	-189	-75	15,910	15	0	603	286	889
June	181	-31	150	15,620	45	0	609	285	893
July	125	11	135	15,546	7	0	612	285	897
August	190	-175	15	15,693	4	0	618	279	898
September	202	239	441	15,446	3	0	624	287	911
October	210	258	468	15,342	14	0	631	295	926
November	91	-447	-356	15,455	21	0	634	281	915
December	154	-398	-244	15,345	4	0	638	269	907
Average	108	-24	84	15,304	12	0	638	269	907
2004 January	89	_ <sup>R</sup> 88	<sup>R</sup> 177	R 14,782	6	0	641	R 272	913
February	197	R 438	<sup>R</sup> 635	R 14,706	8	0	647	R 284	R 931
March	170	R 420	<sup>R</sup> 591	<sup>R</sup> 14,787	19	0	652	<sup>R</sup> 297	<sup>R</sup> 949
April	202	<sup>R</sup> 198	<sup>R</sup> 401	<sup>R</sup> 15,541	55	0	658	R 303	R 962
May	101	<sup>R</sup> 39	<sup>R</sup> 140	<sup>R</sup> 15,992	26	0	661	<sup>R</sup> 305	<sup>R</sup> 966
June	35	R 11	R 46	R 16,240	45	0	662	R 305	_ 967
July	106	<sup>R</sup> -336	R -230	<sup>R</sup> 16,142	18	0	666	<sup>R</sup> 294	<sup>R</sup> 960
August	108	<sup>R</sup> -509	<sup>R</sup> -401	16,142	13	0	669	<sup>R</sup> 279	<sup>R</sup> 948
September	42	<sup>R</sup> -190	<sup>R</sup> -147	14,980	35	0	670	R 273	R 943
October	2	<sup>R</sup> 442	R 444	<sup>R</sup> 14,941	25	0	670	<sup>R</sup> 287	<sup>R</sup> 957
November	81	<sup>R</sup> 52	<sup>R</sup> 134	R 15,664	42	0	673	R 288	<sup>R</sup> 961
December	91	<sup>R</sup> -81	<sup>R</sup> 11	<sup>R</sup> 15,750	30	0	676	286	<sup>R</sup> 961
Average	102	R <b>46</b>	R 148	<sup>R</sup> 15,475	27	0	676	286	<sup>R</sup> 961
2005 January	131	76	207	15,201	40	0	680	289	968
February	84	535	619	15,110	22	0	682	304	986
March	198	488	686	15,140	36	0	688	319	1,007
April	124	394	518	15,489	97	0	692	331	1,022
May	<sup>R</sup> 66	<sup>R</sup> 66	<sup>R</sup> 132	<sup>R</sup> 15,892	<sup>R</sup> 76	0	694	R 333	R 1,027
June	E 85	<sup>E</sup> -225	<sup>E</sup> -140	<sup>E</sup> 16,244	E 17	0	<sup>E</sup> 696	E 325	E 1,021
6-Month Average	E 115	E 219	<sup>E</sup> 334	E 15,516	E 48	0	<sup>E</sup> 696	E 325	E 1,021
2004 6-Month Average	132	198	329	15,342	26	0	662	305	967
2003 6-Month Average	52	39	91	15,133	16	0	609	285	893

<sup>&</sup>lt;sup>a</sup> Stocks are at end of period.

per day and greater than -500 barrels per day.

Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2004: EIA, Petroleum Supply Annual, annual reports. • 2005: EIA, Petroleum Supply Monthly, monthly reports; and, for the current month, Weekly Petroleum Status Report data system, and Monthly Energy Review data system calculations.

<sup>&</sup>lt;sup>b</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase. Current month stock change estimates are based on the change from the previous month's stocks estimates, rather than the actual stocks values shown in this table.

<sup>&</sup>lt;sup>c</sup> "SPR" is the Strategic Petroleum Reserve. Crude oil stocks in the SPR include non-U.S. stocks held under foreign or commercial storage agreements.

d All crude oil stocks other than those in "SPR."

<sup>&</sup>lt;sup>e</sup> Beginning in 1981, includes stocks of Alaskan crude oil in transit. See Note 5, "Stocks of Alaskan Crude Oil," at end of section.

See Note 4, "New Stock Basis," at end of section.

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

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: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/petro.html.

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

				Persian	Gulfa			
	Ва	hrain	lı	ran <sup>b</sup>	ı	raq	Ku	ıwait <sup>c</sup>
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1973 Average	11	0	223	216	4	4	47	42
1975 Average	16	Ö	280	278	2	2	16	4
1980 Average	(s)	Ō	9	8	28	28	27	27
1985 Average	4	Ŏ	27	27	46	46	21	4
1990 Average	1	Ŏ	0	0	518	514	86	79
1995 Average	i	ŏ	ŏ	ŏ	0.0	0.4	218	213
1996 Average	1	Õ	ő	Ö	1	1	236	235
1997 Average	ò	Ŏ	ŏ	ŏ	89	89	253	253
1998 Average	1	0	0	0	336	336	301	300
1999 Average	Ö	ő	Ö	ő	725	725	248	246
2000 Average	1	0	0	0	620	620	272	263
	-	0	0	0	795	795	250	237
2001 Average2002 Average	(s) 0	0	0	0	795 459	795 459	230 228	237 216
_		2	•	•	00.4	00.4	400	404
2003 January	4	0	0	0	634	634	166	134
February	11	0	0	0	963	963	241	223
March	0	0	0	0	681	681	251	220
April	0	0	0	0	739	739	301	294
May	0	0	0	0	128	128	217	200
June	0	0	0	0	0	0	292	274
July	0	0	0	0	67	67	169	169
August	0	0	0	0	125	125	189	183
September	0	0	0	0	362	362	250	248
October	0	0	0	0	735	735	168	168
November	0	0	0	0	706	706	182	176
December	0	0	0	0	678	678	217	211
Average	1	0	0	0	481	481	220	208
2004 January	0	0	0	0	578	578	244	238
February	0	0	0	0	646	646	92	80
March	0	0	0	0	<sup>R</sup> 655	<sup>R</sup> 655	220	214
April	0	0	0	0	769	755	328	322
May	7	0	0	0	674	674	278	273
June	0	0	0	0	636	636	224	224
July	0	0	0	0	593	593	277	268
August	13	ő	ő	Ŏ	R 800	R 800	197	191
September	0	0	0	0	623	623	365	327
October	13	0	0	0	647	647	229	229
November	10	0	0	0	R 629	R 629	324	324
December	0	0	0	0	626	626	324 219	324 205
Average	4	<b>0</b>	0	<b>0</b>	R <b>656</b>	R <b>655</b>	250	203 <b>241</b>
_		2	•	2			000	40-
2005 January	0	0	0	0	477	477	203	197
February	0	0	0	0	523	523	183	177
March	0	0	0	0	548	548	207	179
April	0	0	0	0	542	542	164	164
May	0	0	0	0	588	588	219	213
5-Month Average	0	0	0	0	536	536	196	186
2004 5-Month Average	1	0	0	0	664	661	234	226
2003 5-Month Average	3	0	0	0	622	622	235	214

<sup>&</sup>lt;sup>a</sup> 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 Fast crude oil

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: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/petro.html.

produced from Middle East crude oil.

<sup>b</sup> In January 1988, a small amount of Iranian crude oil entered the United States 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.

<sup>c</sup> Imports from the Neutral Zone are reported as originating in either Saudi

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

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

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

				Persian	Gulfa			
	Q	atar	Saudi	i Arabia <sup>b</sup>	United Ar	ab Emirates	To	otala
	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil	Total	Crude Oil
1973 Average	7	7	486	462	71	71	848	802
1975 Average	18	18	715	701	117	117	1,165	1,121
1980 Average	22	22	1,261	1,250	172	172	1,519	1,508
1985 Average	(s)	0	168	132	45	35	311	244
1990 Average	4	4	1.339	1.195	17	9	1.966	1.801
1995 Average	Ö	Ö	1,344	1,260	10	5	1,573	1,479
1996 Average	ő	ŏ	1,363	1,248	3	3	1,604	1,488
1997 Average	4	Ö	1,407	1,293	2	0	1,755	1,635
	4	1	1,491	1,404	3	3	2,136	2,044
1998 Average	-				2			
1999 Average	10	1	1,478	1,387		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 Average	15	9	1,552	1,519	15	10	2,269	2,213
2003 January	0	0	1,841	1,803	90	34	2,735	2,605
February	0	0	1,447	1,407	13	0	2,676	2,593
March	0	0	1,886	1,838	0	0	2,818	2,739
April	0	0	2,070	2.024	39	19	3,148	3,075
May	9	Ō	2,305	2.244	9	0	2.669	2.572
June	0	0	2.002	1.921	33	17	2.327	2.212
July	14	0	1,900	1,835	19	0	2,170	2,072
	0	0	1,535	1,475	0	0	1,849	1,783
August	3	0			33	33		
September	-	-	1,749	1,692			2,397	2,335
October	0	0	1,451	1,388	0	0	2,353	2,291
November	0	0	1,681	1,664	17	17	2,586	2,564
December	8	0	1,410	1,399	0	0	2,312	2,288
Average	3	0	1,774	1,726	21	10	2,501	2,425
2004 January	0	0	1,477	1,432	<sup>R</sup> 9	0	R 2,309	2,248
February	0	0	<sup>R</sup> 1,369	1,295	0	0	R 2,108	2,021
March	0	0	1,531	1,478	1	0	R 2,407	<sup>R</sup> 2,346
April	5	5	R 1,177	R 1,162	<sup>R</sup> 54	29	R 2,333	R 2,273
May	0	0	1,519	1,493	R 7	0	R 2,485	2,439
June	0	0	R 1,498	R 1,455	R 24	Ō	R 2,382	R 2,315
July	0	0	1,655	1.622	<sup>R</sup> 6	0	R 2.531	2.483
August	Õ	Õ	1.865	1.755	53	33	R 2,928	R 2,778
September	17	0	1,732	1,567	27	0	2,764	2,517
October	0	0	1,646	1,581	27 27	0	2,764	2,458
	-							
November	4	0	R 1,707	R 1,631	13	0	R 2,688	R 2,585
December	40	40	1,502	1,449	15	0	2,402	2,320
Average	5	4	<sup>R</sup> 1,558	<sup>R</sup> 1,495	R <b>20</b>	5	<sup>R</sup> <b>2,493</b>	<sup>R</sup> 2,400
2005 January	0	0	1,645	1,602	11	0	2,337	2,276
February	1	0	1,574	1,525	10	0	2,291	2,224
March	1	0	1,623	1,553	6	0	2,384	2,279
April	0	0	1,494	1,449	9	0	2,209	2,154
May	Ō	Ō	1,526	1,430	22	22	2,355	2,254
5-Month Average	(s)	Ö	1,573	1,512	12	5	2,316	2,238
2004 5-Month Average	1	1	1,417	1.374	14	6	2,331	2,269
2003 5-Month Average	2	Ö	1,918	1,871	31	11	2,810	2,717

<sup>&</sup>lt;sup>a</sup> 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.
<sup>b</sup> Imports from the Neutral Zone are reported as originating in either Saudi

rounding.  $\bullet\,$  U.S. geographic coverage is the 50 States and the District of Columbia.

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

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/petro.html.

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

					Other	OPECa,b				
	Al	geria	Ecu	ıador <sup>c</sup>	Ga	ıbon <sup>d</sup>	Indo	onesia	L	bya
	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
1975 Average	282	264	57	57	27	27	390	379	232	223
1980 Average	488	456	27	17	26	25	348	314	554	548
1985 Average	187	84	67	56	52	51	314	292	4	0
1990 Average	280	63	49	38	64	64	114	98	0	0
1995 Average	234	27	(°)	(°)	(d)	(d)	88	64	0	0
1996 Average	256	8	(°)	(°)	(d)	(d)	59	44	0	0
1997 Average	285	6	(°)	(c)	(d)	(d)	58	51 50	0	0
1998 Average	290	10 25	(°)		(d)	(4)	66	50 70	0	0
1999 Average	259 225	25 1	(°)	(°)	(d)	(d)	81 48	70 36	0	0 0
2000 Average	225 278	11	(°)	(°)	(d)	(4)	40 51	36 40	0	0
2001 Average2002 Average	264	30	(°)	(°)	(d)	(d)	53	50	0	0
2003 January	291	39	(°)	(°)	(d)	(d)	25	25	0	0
February	213	0	(°)	(c)	(d)	(dí	15	15	0	0
March	304	40	(°)	(c)	(dí	(d)	10	10	Ö	0
April	395	77	(°)	(°)	(dí	(d)	46	43	0	0
May	377	81	(°)	(c)	(dí	(d)	10	10	0	0
June	700	282	(°)	(°)	(dí	(d)	11	11	0	0
July	444	86	(°)	(c)	(dí	(d)	0	0	0	0
August	459	192	(°)	(°)	(d)	(d)	66	39	0	0
September	479	243	(°)	(°)	(d)	(d)	35	8	0	0
October	244	86	(°)	(°)	(d)	( d )	133	92	0	0
November	371	151	(°)	(°)	(d)	(d)	71	44	0	0
December	301	69	( c )	(c)	(d)	(d)	23	15	0	0
Average	382	112	(°)	(°)	(d)	(d)	37	26	0	0
<b>2004</b> January	345	123	(°)	(°)	( <sup>d</sup> )	( d )	17	14	0	0
February	R 400	92	(c)	( c )	(d)	(d)	47	44	0	0
March	496	253	(°)	(°)	(d)	(d)	36	32	0	0
April	R 488	R 268	(c)	(c)	(d)	(d)	74	74	0	0
May	R 495	234	(c)	(c)	(d)	(d)	39	39	0	0
June	464 R 504	216	(c)	(°)	(d)	(d)	72	51	34	34
July	R 581	297 352	(°)	(°)	(d)	(d)	104 45	72 9	32 34	32 34
August	536 385		(°)	(°)	(d)	(d)	45 41	9 41	33	33
September October	299	187 114	(c)	(c)	(d)	(d)	27	10	66	66
November	465	240	(c)	(c)	(d)	(d)	29	11	31	20
December	464	199	(c)	(c)	(d)	(d)	11	11	12	0
Average	R <b>452</b>	R <b>215</b>	(°)	(c)	(d)	(d)	45	34	20	18
2005 January	368	146	(°)	(°)	( <sup>d</sup> )	( <sup>d</sup> )	22	22	0	0
February	504	219	(°)	(°)	(d)	(d)	11	11	96	96
March	378	134	(°)	(°)	(d)	(d)	38	19	5	0
April	467	232	(°)	(°)	(d)	(d)	25	25	21	20
May	449	152	(°)	(c)	(d)	(d)	10	10	35	35
5-Month Average	431	175	(°)	(°)	(d)	(d)	21	17	30	29
2004 5-Month Average 2003 5-Month Average	445 317	195 48	(c)	(c)	(d)	(d)	42 21	40 21	0	0 0

<sup>&</sup>lt;sup>a</sup> Organization of the Petroleum Exporting Countries.

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: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/petro.html.

b 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.

<sup>&</sup>lt;sup>c</sup> Ecuador withdrew from OPEC on December 31, 1992. As of January 1993, imports from Ecuador appear on Table 3.3f under "Non-OPEC."

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

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

			Other	OPECa,b			Total	<b>OPEC</b> <sup>C</sup>
	Ni	geria	Ven	ezuela	т	otal		
	Total	Crude Oil						
1973 Average	459	448	1,135	344	2,156	1,293	2,993	2,095
1975 Average	762	746	702	395	2,452	2,091	3,601	3,211
1980 Average	857	841	481	156	2,781	2,356	4,300	3,864
1985 Average	293	280	605	306	1,522	1,069	1,830	1,312
1990 Average	800	784	1,025	666	2,332	1,713	4,296	3,514
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 Average	621	589	1,398	1,201	2,336	1,870	4,605	4,083
2003 January	831	804	426	399	1,573	1,267	4,303	3,873
February	547	505	613	559	1,388	1,079	4,052	3,672
	1,002	945	1,297			,		
March				1,149	2,614	2,144	5,433	4,883
April	733	697	1,626	1,387	2,801	2,204	5,949	5,279
May	958	907	1,737	1,491	3,082	2,488	5,751	5,060
June	866	836	1,622	1,381	3,199	2,510	5,526	4,722
July	843	804	1,279	1,150	2,566	2,040	4,736	4,112
August	995	988	1,564	1,345	3,085	2,564	4,934	4,347
September	936	905	1,547	1,307	2,997	2,463	5,394	4,798
October	1,049	990	1,564	1,295	2,989	2,463	5,342	4,754
November	646	622	1,562	1,352	2,651	2,170	5,237	4,733
December	959	938	1,631	1,340	2,913	2,362	5,225	4,650
Average	867	832	1,376	1,183	2,662	2,153	5,162	4,578
2004 January	<sup>R</sup> 1,011	<sup>R</sup> 927	R 1,563	1,298	R 2,935	R 2,362	<sup>R</sup> 5,244	R 4,610
February	<sup>R</sup> 1,166	<sup>R</sup> 1,047	<sup>R</sup> 1,565	1,294	R 3,179	<sup>R</sup> 2,477	<sup>R</sup> 5,286	<sup>R</sup> 4,498
March	<sup>R</sup> 1,284	<sup>R</sup> 1,207	<sup>R</sup> 1,609	1,343	R 3,425	<sup>R</sup> 2,835	<sup>R</sup> 5,833	<sup>R</sup> 5,181
April	R 1,101	R 1,063	<sup>R</sup> 1,599	1,372	R 3,261	R 2,777	R 5,593	R 5,050
May	R 1,270	R 1,189	R 1,603	1,371	R 3,406	R 2,832	R 5.884	<sup>R</sup> 5,272
June	R 1,260	R 1,208	R 1,723	1,439	R 3.553	R 2,948	R 5.935	R 5,263
July	1,102	1,020	R 1.495	1,228	R 3,314	2,650	<sup>R</sup> 5,845	5,132
August	R 1,252	R 1.184	R 1,474	1,194	R 3.341	R 2,772	R 6.256	5,550
September	1,076	1,012	<sup>R</sup> 1,314	1,070	R 2,849	2,344	<sup>R</sup> 5,613	4,860
October	R 1,079	R 1,041	R 1,561	1,330	R 3,030	R 2,561	R 5,580	R 5,018
November	R 1,050	R 1,032	1,532	1,237	R 3,106	R 2,539	<sup>R</sup> 5,783	<sup>R</sup> 5,124
December	1,027	1,006	R 1.616	R 1.379	R 3,131	R 2,595	R 5.533	R 4,915
Average	R 1,140	R 1,078	R <b>1,554</b>	R 1,297	R <b>3,211</b>	R <b>2,642</b>	R <b>5,701</b>	R <b>5,042</b>
2005 January	1.067	1.007	1,573	1,349	3,029	2,524	5,366	4,800
February	1,205	1,114	1,690	1,357	3,505	2,797	5,796	5,021
March	953	879	1,517	1,315	2,891	2,797	5,796	4,625
	1,243	1,130	1,517	1,391	3,323	2,799	5,532	4,023
April		,						
May 5-Month Average	1,214 <b>1,134</b>	1,111 <b>1,046</b>	1,574 <b>1,582</b>	1,273 <b>1,336</b>	3,282 <b>3,200</b>	2,580 <b>2,604</b>	5,637 <b>5,516</b>	4,834 <b>4,842</b>
-	,	·	•	•	ŕ	•	•	•
2004 5-Month Average 2003 5-Month Average	1,167 820	1,087 777	1,588 1,147	1,336 1,003	3,242 2,306	2,658 1,849	5,572 5,113	4,927 4,566

<sup>&</sup>lt;sup>a</sup> Organization of the Petroleum Exporting Countries.

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: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/petro.html.

b 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.

<sup>&</sup>lt;sup>c</sup> 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.

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

	Non-OPECa,b												
	Α	ngola	Au	ıstralia	Ва	hamas	В	srazil	Ca	anada	C	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	
1975 Average	75	71	5	0	152	0	5	0	846	600	Ò	0	
1980 Average	42	37	1	0	78	0	3	1	455	199	(s)	0	
1985 Average	110	104	37	21	40	0	61	0	770	468	59	36	
1990 Average	237	236	53	47	37	Ō	49	Ö	934	643	80	77	
1995 Average	367	360	16	16	2	0	8	0	1.332	1.040	53	53	
1996 Average	351	344	31	25	1	Ō	9	Ö	1,424	1,075	57	57	
1997 Average	427	425	48	31	1	Ō	5	Ō	1.563	1,198	49	48	
1998 Average	468	465	57	31	4	ŏ	26	ŏ	1,598	1,266	42	42	
1999 Average	361	357	42	31	3	Ö	26	ő	1.539	1,178	21	13	
2000 Average	301	295	56	49	ő	ŏ	51	5	1,807	1,348	44	33	
2001 Average	328	321	43	34	10	Ŏ	82	13	1.828	1,356	24	13	
2002 Average	332	321	57	51	34	ŏ	116	58	1,971	1,445	26	20	
2003 January	263	245	20	20	38	0	114	48	2.272	1.654	19	16	
February	265	251	23	23	27	0	119	36	1,997	1.447	15	14	
March	396	396	20	20	41	Ô	76	15	1.895	1.428	45	7	
April	494	482	24	24	35	0	75	17	1,779	1,287	21	6	
May	356	356	20	20	37	0	67	33	2,015	1,502	22	7	
June	403	390	44	22	67	0	84	60	1,956	1,517	32	6	
July	529	517	47	23	18	0	144	63	2.131	1.616	74	25	
August	483	471	62	41	37	Ő	198	82	2,132	1,586	21	13	
September	401	401	84	63	6	0	132	68	2.082	1,538	39	24	
October	385	373	45	45	25	0	95	32	2,179	1,700	6	5	
November	203	191	22	22	4	0	93	68	2,179	1,700	30	28	
December	269	269	0	0	22	0	99	77	2,100	1,663	0	0	
Average	371	363	34	<b>27</b>	30	0	108	50	2,072	1,563	27	13	
Average	371	303	34	21		U		30	2,012	•		13	
2004 January	277	277	20	20	R 20	0	<sup>R</sup> 158	103	R 2,204	<sup>R</sup> 1,638	<sup>R</sup> 13	7	
February	273	271	23	23	R 39	0	R 121	67	R 2,135	<sup>R</sup> 1,521	R 48	38	
March	347	336	22	22	<sup>R</sup> 35	0	<sup>R</sup> 123	42	R 2,118	<sup>R</sup> 1,610	<sup>R</sup> 15	6	
April	338	325	0	0	R 42	0	<sup>R</sup> 71	22	R 2,060	<sup>R</sup> 1,586	R g	7	
May	405	384	39	39	<sup>R</sup> 38	0	<sup>R</sup> 66	16	R 2,087	<sup>R</sup> 1,646	15	7	
June	139	127	21	0	R 36	0	<sup>R</sup> 146	91	R 2,240	R 1,724	<sup>R</sup> 15	7	
July	370	355	38	8	<sup>R</sup> 38	0	<sup>R</sup> 143	95	R 2,178	<sup>R</sup> 1,667	38	21	
August	354	341	21	21	60	0	R 84	50	R 2,012	R 1,503	R 8	7	
September	382	361	22	22	43	0	138	102	R 2,141	R 1,686	8	6	
October	197	185	19	19	34	0	R 93	26	R 2,225	R 1,692	38	24	
November	402	402	21	21	48	0	36	0	R 2,108	R 1,561	32	23	
December	306	306	82	62	24	0	<sup>R</sup> 70	0	R 2,152	R 1,556	29	22	
Average	316	306	27	21	R 38	0	R 104	51	R 2,138	R 1,616	22	14	
<b>2005</b> January	436	424	21	21	32	0	123	32	2,175	1,564	24	22	
February	394	369	11	11	43	0	153	52	2,073	1,513	29	23	
March	675	675	0	0	46	0	55	32	1,985	1,451	29	27	
April	365	365	0	0	32	0	49	36	2,190	1,676	31	21	
May	353	341	Ö	0	58	0	134	115	2,188	1,722	31	30	
5-Month Average	446	436	6	6	42	0	102	54	2,123	1,586	28	25	
2004 5-Month Average	329	319	21	21	35	0	108	50	2,121	1,601	20	13	
2003 5-Month Average	356	347	22	22	36	0	90	30	1,993	1,465	25	10	

<sup>&</sup>lt;sup>a</sup> Organization of the Petroleum Exporting Countries.

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: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/petro.html.

<sup>&</sup>lt;sup>b</sup> 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.

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

						Non-	OPECa,b					
	Co	lombia	Ec	uador <sup>c</sup>	G	abon <sup>d</sup>		Italy	Ма	ılaysia	М	exico
	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
1975 Average	9	0	_	_	-	_	27	0	8	5	71	70
1980 Average	4	0	_	_	_	_	4	0	70	61	533	507
1985 Average	23	0	_	_	_	_	60	(s)	3	1	816	715
1990 Average	182	140	_	_	_	_	58	2	41	40	755	689
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	Ō	37	15	1,440	1,394
2002 Average	260	235	110	100	143	143	34	Ō	16	9	1,547	1,500
2003 January	160	138	85	85	113	113	25	0	12	11	1,604	1,530
February	269	240	93	93	168	168	21	0	15	0	1,646	1,542
March	220	163	82	82	98	98	49	0	8	0	1,355	1,313
April	212	170	101	95	135	135	68	0	27	21	1,663	1,633
May	162	133	149	137	129	129	39	0	31	22	1,556	1,513
June	170	146	136	120	140	140	20	0	0	0	1,530	1,472
July	188	161	144	139	98	98	24	0	118	95	1.694	1.645
August	226	206	173	170	144	144	32	Ö	62	62	1,618	1,575
September	200	182	173	167	102	102	28	0	46	22	1,665	1,631
October	231	186	245	234	141	141	25	0	15	9	1,692	1.620
November	129	102	103	103	142	142	49	0	9	0	1,657	1,585
December	175	168	244	237	161	161	25	Ö	21	11	1,801	1,765
Average	195	166	145	139	131	131	34	Ö	31	21	1,623	1,569
2004 January	R 300	276	197	187	97	97	R 24	0	24	14	<sup>R</sup> 1,652	R 1.604
February	R 110	61	R 235	R 222	163	163	24	Ö	R 5	0	R 1,591	R 1,497
March	124	105	113	95	108	108	R 70	Ö	22	8	R 1,662	1,576
April	R 164	136	253	225	169	169	R 49	Ö	0	0	R 1,607	1,566
May	202	173	R 271	R 271	116	116	R 38	Ö	31	22	R 1,751	1.666
June	202	192	205	186	195	195	R 41	Ö	23	5	R 1,729	1,668
July	136	83	277	249	117	117	R 67	Ö	34	34	R 1,676	1,603
August	R 191	143	282	256	65	65	R 66	Ö	64	33	R 1,655	1,588
September	R 183	R 148	R 302	R 302	94	94	R 53	0	21	12	R 1,600	1,527
October	R 156	R 127	299	293	236	236	23	Ö	59	30	R 1,769	1,722
November	159	123	237	237	116	116	14	Ö	28	12	R 1,664	1,604
December	R 181	R 135	R 267	R 261	233	233	R 40	0	42	42	R 1,612	1,552
Average	R 176	R 142	R 245	R 232	142	142	R 43	ŏ	R 30	18	R 1,665	R <b>1,598</b>
<b>2005</b> January	150	122	315	309	145	145	24	0	64	40	1,501	1,420
February	110	99	356	356	140	140	14	0	17	0	1,585	1,488
March	126	108	305	305	196	196	18	Ö	0	Ō	1,648	1,590
April	237	183	261	240	64	64	21	Ö	11	0	1,632	1,541
May	176	116	238	238	109	109	49	Ö	27	13	1,826	1,748
5-Month Average	161	126	294	289	131	131	25	Ŏ	24	11	1,640	1,559
2004 5-Month Average	181	152	213	200	130	130	41	0	17	9	1,654	1,583
2003 5-Month Average	203	167	102	98	128	128	41	0	19	11	1,562	1,505

<sup>&</sup>lt;sup>a</sup> Organization of the Petroleum Exporting Countries.

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

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/petro.html.

b 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.

<sup>&</sup>lt;sup>c</sup> Through 1992, Ecuador was a member of OPEC. See Table 3.3c.

<sup>&</sup>lt;sup>d</sup> 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

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

						Non-O	PEC <sup>a,b</sup>					
	Neth	nerlands	Netherla	nds Antilles	N	orway	Pue	rto Rico	R	ussia <sup>c</sup>	8	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
1975 Average	19	4	332	0	17	12	90	0	14	0	1	0
1980 Average	2	(s)	225	0	144	144	88	0	1	0	1	0
1985 Average	58	0	40	0	32	31	28	0	8	(s)	29	1
1990 Average	55	0	31	0	102	96	32	0	45	` 1	47	0
1995 Average	15	0	52	0	273	258	15	0	25	14	16	1
1996 Average	19	0	64	0	313	293	20	0	25	18	29	1
1997 Average	25	0	74	0	309	288	16	0	13	3	21	0
1998 Average	31	0	82	0	236	221	15	0	24	9	18	0
1999 Average	27	0	65	0	304	263	13	0	89	21	10	0
2000 Average	30	1	90	0	343	302	15	0	72	7	25	0
2001 Average	43	0	81	0	341	281	4	0	90	0	31	0
2002 Average	66	0	81	0	393	348	(s)	0	210	85	17	0
<b>2003</b> January	123	0	49	0	210	139	0	0	181	99	30	0
February	62	0	129	0	280	236	0	0	271	121	26	0
March	108	0	64	0	242	181	0	0	257	16	16	0
April	89	0	83	0	282	182	0	0	132	19	17	0
May	76	0	143	0	303	190	0	0	208	142	49	0
June	97	0	49	0	375	244	0	0	527	441	44	0
July	100	0	59	0	265	162	0	0	550	479	16	0
August	91	0	27	0	352	192	0	0	411	288	7	0
September	102	0	46	0	288	214	0	0	275	142	11	0
October	79	0	42	0	296	190	0	0	93	34	10	0
November	93	0	78	0	188	129	0	0	71	0	41	0
December	19	0	71	0	162	116	0	0	72	21	19	0
Average	87	0	70	0	270	181	0	0	254	151	24	0
2004 January	R 34	0	R 80	0	241	149	0	0	<sup>R</sup> 136	8	0	0
February	R 131	Ö	153	0	R 263	168	Ö	Ō	184	11	R 11	R 0
March	R 173	0	0	0	287	217	0	0	R 194	42	R 42	0
April	111	Ö	28	Ō	R 208	131	Ö	Ō	R 372	R 228	53	Ö
May	95	0	5	0	R 298	R 206	0	0	R 226	142	35	0
June	R 135	0	1	0	209	R 155	0	0	R 432	321	8	0
July	110	0	2	0	318	<sup>R</sup> 193	0	0	R 397	206	8	0
August	97	0	<sup>R</sup> 13	0	R 321	163	Ō	0	R 256	R 126	17	0
September	50	0	R 25	0	148	59	0	0	R 234	R 68	0	0
October	132	0	R 15	0	223	<sup>R</sup> 107	0	0	R 295	<sup>R</sup> 156	20	0
November	R 58	0	30	0	245	105	Ō	0	490	402	45	0
December	R 85	0	4	0	R 165	63	0	0	365	196	53	0
Average	R 101	0	R <b>29</b>	0	R 244	R 143	0	0	R 298	R 158	24	R <b>0</b>
2005 January	70	18	9	0	259	162	1	0	318	176	7	0
February	110	0	21	0	114	50	0	Ō	458	288	20	0
March	73	0	25	0	269	165	Ō	0	485	295	9	0
April	113	0	10	0	250	137	0	Ö	645	464	34	0
May	178	Ö	23	Ö	229	117	Ö	Ö	325	185	40	Õ
5-Month Average	109	4	18	Ŏ	226	128	(s)	Ö	445	280	22	Ö
2004 5-Month Average	109	0	52	0	260	174	0	0	222	86	28	0
2003 5-Month Average	92	0	93	0	263	184	0	0	209	79	28	0

<sup>&</sup>lt;sup>a</sup> Organization of the Petroleum Exporting Countries.

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

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/petro.html.

b 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.

<sup>&</sup>lt;sup>c</sup> Imports from other republics in the former U.S.S.R. may be included in imports from Russia for the years 1973 through 1992.

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

					Non-0	OPEC <sup>a,b</sup>						
	Trinidad a	and Tobago	United	Kingdom	U.S. Vir	gin Islands	Other N	Ion-OPEC <sup>c</sup>	т	otald	Total	Imports
	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
1975 Average	242	115	14	(s)	406	0	120	14	2,454	893	6,056	4,105
1980 Average	176	115	176	173	388	0	219	162	2,609	1,399	6,909	5,263
1985 Average	113	98	310	278	247	0	394	137	3,237	1,888	5,067	3,201
1990 Average	96	76	189	155	282	0	417	180	3,721	2,381	8,018	5,894
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	Ö	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	Ò	618	214	6,257	4,526	11,459	9,071
2001 Average	72	51	324	244	268	Ö	702	244	6,343	4.480	11,433	9.328
2002 Average	80	68	478	405	236	Ö	720	270	6,925	5,058	11,530	9,140
2002 January	111	70	402	444	170	0	700	404	6.004	4.700	11 101	0.622
2003 January	111	73	493	411	179		700	181	6,801	4,760	11,104	8,633
February	78	44	463	407	253	0	649	179	6,869	4,802	10,921	8,474
March	105	78	389	299	328	0	818	245	6,612	4,342	12,044	9,226
April	110	82	407	308	245	0	651	189	6,650	4,649	12,599	9,928
May	97	82	557	470	258	0	894	358	7,167	5,093	12,918	10,153
June	50	44	512	373	278	0	959	340	7,475	5,316	13,001	10,038
July	128	98	512	454	351	0	809	348	8,000	5,922	12,736	10,034
August	58	36	381	319	345	0	974	490	7,836	5,676	12,769	10,023
September	124	87	558	487	326	0	786	359	7,474	5,489	12,868	10,287
October	91	60	319	285	307	0	711	396	7,031	5,309	12,373	10,063
November	112	68	300	234	291	0	676	307	6,475	4,618	11,712	9,351
December	112	56	390	261	287	0	634	228	6,808	5,034	12,033	9,684
Average	98	67	440	359	288	0	773	303	7,103	5,087	12,264	9,665
<b>2004</b> January	R 93	55	R 233	126	R 302	0	R 665	175	R 6,770	R 4.737	R 12.014	<sup>R</sup> 9,347
February	R 127	R 79	R 402	297	R 293	0	R 1,040	402	R 7,372	R 4,819	R 12,658	R 9,317
March	107	56	R 449	293	R 302	0	R 1,202	R 391	R 7,516	R 4,907	R 13,349	R 10.088
April	110	77	R 463	306	290	0	R 893	287	R 7.290	<sup>R</sup> 5.065	R 12,883	R 10,115
•			R 439	R 250			R 905			R 5,180		
May	100	41			R 328	0		R 201	R 7,491		R 13,375	R 10,452
June	59	34	R 427	304	R 378	0	R 983	261	R 7,626	R 5,270	R 13,561	R 10,533
July	108	54	R 417	R 264	379	0	R 875	217	R 7,725	<sup>R</sup> 5,166	R 13,570	R 10,298
August	101	56	R 283	174	355	0	R 1,129	383	<sup>R</sup> 7,432	R 4,910	R 13,689	R 10,460
September	<sup>R</sup> 64	38	192	94	342	0	R 1,021	319	<sup>R</sup> 7,063	R 4,837	R 12,676	R 9,697
October	57	48	R 487	292	352	0	R 1,129	388	R 7,858	R 5,344	R 13,438	R 10,362
November	63	32	290	_ 156	296	0	R 1,245	320	<sup>R</sup> 7,625	<sup>R</sup> 5,114	R 13,409	R 10,238
December	64	22	<sup>R</sup> 480	R 303	344	0	<sup>R</sup> 957	<sup>R</sup> 432	<sup>R</sup> 7,555	<sup>R</sup> 5,186	<sup>R</sup> 13,088	<sup>R</sup> 10,101
Average	R 88	49	R 380	R 238	R <b>330</b>	0	R 1,003	314	<sup>R</sup> <b>7,444</b>	<sup>R</sup> 5,046	R 13,145	R 10,088
2005 January	84	50	283	162	302	0	951	376	7,295	5,044	12,661	9,844
February	86	56	337	190	329	0	1,342	502	7,740	5,137	13,536	10,158
March	100	64	447	290	278	0	875	320	7,644	5,519	12,919	10,144
April	136	87	394	256	358	Õ	1,011	292	7,844	5,361	13,376	10,314
May	102	68	345	194	367	0	1,061	338	7,858	5,332	13,495	10,166
5-Month Average	102	65	361	219	327	Ŏ	1,042	363	7,674	5,281	13,190	10,123
2004 5-Month Average	107	61	397	254	303	0	940	290	7.287	4.942	12.858	9.869
2003 5-Month Average	107	72	462	379	253	0	745	232	6,820	4,729	11,933	9,295

<sup>&</sup>lt;sup>a</sup> Organization of the Petroleum Exporting Countries.

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

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/petro.html.

Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys,

b 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.

C Includes Bahrain, which is shown on Table 3.3a.

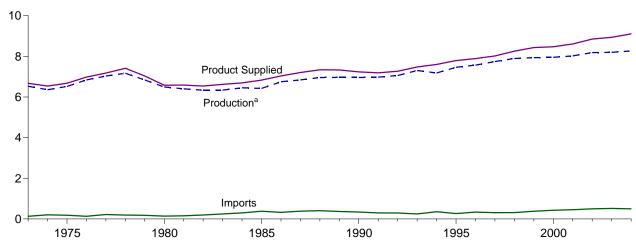
d As of January 1993, includes petroleum imported from Ecuador, which withdrew from OPEC on December 31, 1992. As of January 1995, includes petroleum imported from Gabon, which withdrew from OPEC on December 31, 1994.

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.

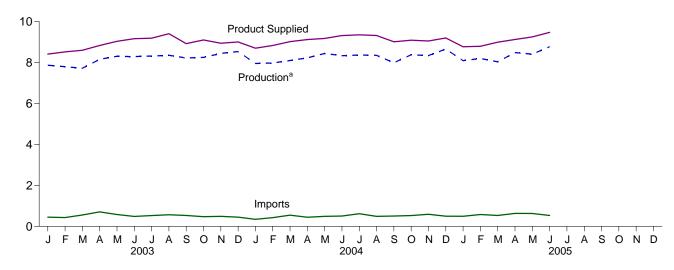
Figure 3.2 Finished Motor Gasoline

(Million Barrels per Day, Except as Noted)

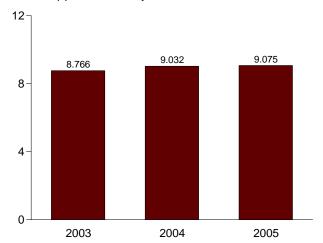
Overview, 1973-2004



### Overview, Monthly

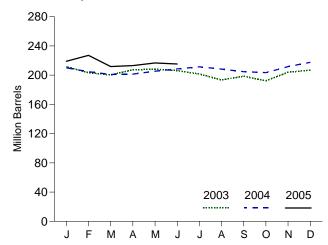






<sup>&</sup>lt;sup>a</sup>Refinery and blender net production. Note: Because vertical scales differ, graphs should not be compared.

Total Stocks, End of Month



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

Table 3.4 Finished Motor Gasoline Supply, Disposition, and Stocks

		Supply			Disposition			Stocksa	
	Refinery and Blender Net Production	Importsb	Adjust- ments <sup>c</sup>	Stock Change <sup>b,d,e</sup>	Evnorts	Product Supplied	Motor G	asoline Total <sup>e,f</sup>	Oxygenates <sup>g</sup>
	Production	imports			Exports	Supplied	rinished		1 , ,
			Thousand Ba	arrels per Day				Million Barre	IS
1973 Average	6,527	134	8	-9	4	6,674	NA	209	NA
1975 Average	6,518	184	3	e <b>28</b>	2	6,675	NA	235	NA
1980 Average	6,492	140	14	66	1	6,579	NA	<sup>e</sup> 261	NA
1985 Average	6,419	381	(s)	-41	10	6,831	190	223	NA
1990 Average	6,959	342	(s)	10	55	7,235	181	220	NA
1995 Average	7,459	265	130	-40	104	7,789	161	202	12
1996 Average	7,565	336	82	-12	104	7,891	157	195	13
1997 Average	7,743	309	127	26	137	8,017	166	210	12
1998 Average	7,892	311	190	15	125	8,253	172	216	14
1999 Average	7,934	382	177	-49	111	8,431	154	193	14
2000 Average	7,951	427	235	-3	144	8,472	153	196	12
2001 Average	8,022	454	290	23	133	8,610	161	210	13
2002 Average	8,183	498	292	1	124	8,848	162	209	12
2003 January	7,870	446	121	-151	175	8,414	157	211	13
February	7,800	427	223	-219	143	8,525	151	203	13
March	7,724	555	217	-207	102	8,602	145	200	14
April	8,161	704	309	225	111	8,838	151	207	13
May	8,311	575	391	122	113	9,042	155	208	15
June	8,293	482	430	-74	109	9,170	153	206	14
July	8,320	524	343	-95	90	9,192	150	202	13
August	8,355	565	419	-156	84	9,411	145	193	11
September	8,228	529	329	30	129	8,926	146	199	14
October	8,253	469	359	-185	159	9,108	140	192	13
November	8.450	489	321	196	118	8,946	146	204	12
December	8,540	446	216	19	172	9,011	147	207	11
Average	8,194	518	307	-41	125	8,935	147	207	11
2004 January	<sup>R</sup> 7.956	R 342	R 234	R -266	93	R 8,705	R 139	<sup>R</sup> 210	11
February	R 7.979	R 425	R 414	<sup>R</sup> -178	159	R 8.838	R 133	R 205	11
March	R 8.102	<sup>R</sup> 545	<sup>R</sup> 475	R -45	144	R 9.024	R 132	201	11
April	R 8,233	R 445	R 609	R 35	127	R 9.126	R 133	R 201	10
May	<sup>R</sup> 8,447	R 486	R 500	<sup>R</sup> 131	122	R 9,179	R 137	R 205	9
June	R 8.336	<sup>R</sup> 501	<sup>R</sup> 661	R 101	76	R 9.322	R 140	R 208	9
July	R 8,370	<sup>R</sup> 615	R 491	<sup>R</sup> 10	109	R 9,357	R 141	R 211	9
August	<sup>R</sup> 8,357	R 487	R 525	R -83	126	R 9,327	R 138	R 208	10
September	R 7,993	R 501	<sup>R</sup> 526	R -75	79	R 9,015	136	R 205	R 11
October	R 8,384	<sup>R</sup> 526	R 402	R 88	126	R 9.097	138	R 203	11
November	R 8,346	R 587	R 373	R 102	148	R 9,055	141	R 212	R 12
December	R 8.659	R 493	R 292	<sup>R</sup> 56	183	<sup>R</sup> 9,206	143	R 218	R 11
Average	R <b>8,265</b>	R <b>496</b>	R <b>458</b>	-10	124	R <b>9,105</b>	143	R 218	R 11
<b>2005</b> January	8.094	489	393	55	146	8.775	145	219	11
February	8,204	578	282	128	137	8,798	148	227	11
March	8,040	530	224	-344	142	8,996	138	212	11
April	8,488	630	254	127	114	9,130	142	213	10
May	R 8,411	R 628	R 377	R -20	R 178	R 9,257	R 141	R 216	R 11
June	E 8,780	E 528	E 230	E -69	E 127	E 9.480	E 141	E 215	NA
6-Month Average	E 8,335	E <b>563</b>	E <b>294</b>	E <b>-23</b>	E 141	E 9,075	E 141	E 215	NA NA
2004 6-Month Average	8,177	458	481	-37	120	9,032	140	208	9
2003 6-Month Average	8,028	532	282	-49	125	8,766	153	206	14

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

Notes: • See Note 2, "Motor Gasoline," at end of section. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see

http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys,
Petroleum Statement, Annual, annual reports. • 1976-1980: Energy
Information Administration (EIA), Petroleum Statement, Annual, annual reports. 1981-2004: EIA, Petroleum Supply Annual, annual reports. • 2005: EIA, Petroleum Supply Monthly, monthly reports; and, for the current month, Weekly Petroleum Status Report data system, and Monthly Energy Review data system

calculations.

a Stocks are at end of period.
 b Beginning in 1981, excludes motor gasoline blending components.

<sup>&</sup>lt;sup>c</sup> An adjustment for motor gasoline blending components and fuel ethanol. Through 2004, includes what was previously classified as "Field Production" of

finished motor gasoline.

<sup>d</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase. The current month stock change estimate is based on the change from the previous month's stocks estimate, rather than the actual stocks value shown in this table.

See Note 4, "New Stock Basis," at end of section.

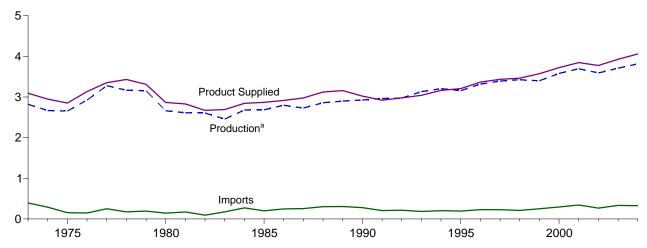
Includes motor gasoline blending components and gasohol, but excludes oxygenates, which are reported separately.

<sup>g</sup> See Note 1, "Survey Respondents," at end of section.

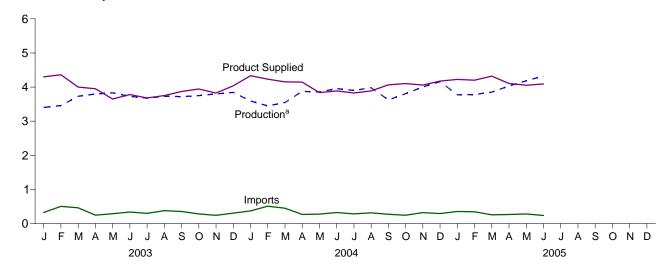
Figure 3.3 Distillate Fuel Oil

(Million Barrels per Day, Except as Noted)

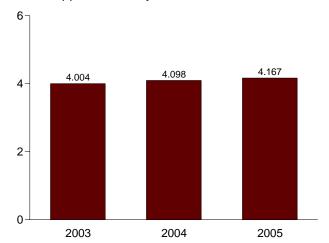
Overview, 1973-2004



### Overview, Monthly

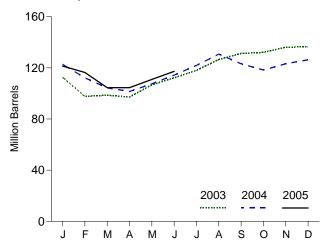






<sup>&</sup>lt;sup>a</sup>Refinery net production. Note: Because vertical scales differ, graphs should not be compared.

Total Stocks, End of Month



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

Table 3.5 Distillate Fuel Oil Supply, Disposition, and Stocks

		Supply		C	Disposition	l		Stock	<b>cs</b> a	
	Refinery							Sulfur Content <sup>b</sup>		
	Net Production	Imports	Adjust- ments <sup>c</sup>	Stock Change <sup>d,e,f</sup>	Exports	Product Supplied	<= 15 ppm	> 15 ppm and <= 500 ppm	> 500 ppm	Total <sup>f</sup>
			Thousand Ba	arrels per Day				Million B	arrels	
1973 Average	2,820	392	4	115	9	3,092	NA	NA	NA	196
1975 Average	2,653	155	2	e,f <b>-41</b>	1	2,851	NA	NA	NA	209
1980 Average	2,661	142	2	-64	3	2,866	NA	NA	NA	<sup>f</sup> 205
1985 Average	2,686	200	2	-48	67	2,868	NA	NA	NA	144
1990 Average	2,925	278	_	73	109	3,021	NA	NA	NA	132
1995 Average	3,155	193	_	-41	183	3,207	(g)	67	63	130
1996 Average	3,316	230	_	-10	190	3,365	(g)	68	58	127
1997 Average	3,392	228	_	32	152	3,435	(g)	68	70	138
1998 Average	3,424	210	_	48	124	3,461	(g)	77	79	156
1999 Average	3,399	250	_	-84	162	3,572	(g)	69	56	125
2000 Average	3,580	295	_	-20	173	3,722	(g)	72	46	118
2001 Average	3,695	344	_	73	119	3,847	(g)	82	62	145
2002 Average	3,592	267	-	-29	112	3,776	(g)	81	53	134
2003 January	3,403	325	_	-693	119	4,301	(9)	69	44	113
February	3,459	503	_	-532	132	4,362	(9)	61	37	98
March	3,732	460	_	30	161	4,001	(9)	63	35	99
April	3,796	246	_	-47	139	3,951	(9)	66	31	97
May	3,833	287	_	307	162	3,651	(9)	72	35	107
June	3,728	337	_	184	101	3,781	(g)	74	38	112
July	3,673	299	_	188	103	3,680	(g)	75	43	118
August	3,730	375	_	274	80	3,752	(g)	76	51	127
September	3,721	352	_	159	43	3,871	(g)	77	55	131
October	3,750	281	_	25	62	3,945	(9)	74	59	132
November	3,800	241	_	136	81	3,824	(9)	78	58	136
December	3,845	305	_	13	100	4,037	(g)	82	55	137
Average	3,707	333	-	7	107	3,927	(g)	82	55	137
2004 January	R 3,592	R 370	_	R -444	72	<sup>R</sup> 4,334	R 1	R 73	R 49	<sup>R</sup> 123
February	R 3.446	<sup>R</sup> 507	_	R -365	86	R 4,232	R <sub>1</sub>	<sup>R</sup> 67	R 44	R 112
March	R 3,550	R 449	_	R -252	99	R 4,152	R 1	<sup>R</sup> 64	R 39	104
April	R 3,874	R 267	_	<sup>R</sup> -96	92	R 4,145	R <sub>1</sub>	<sup>R</sup> 65	<sup>R</sup> 36	R 102
May	R 3,857	R 275	_	<sup>R</sup> 192	100	R 3,840	R 1	<sup>R</sup> 69	R 37	107
June	R 3,956	R 324	_	R 228	<sup>R</sup> 163	R 3,888	1	70	R 44	114
July	3,902	R 283	_	<sup>R</sup> 245	113	R 3,827	1	73	R 48	<sup>R</sup> 122
August	3,981	R 313	_	<sup>R</sup> 287	120	R 3,887	1	77	<sup>R</sup> 53	131
September	3,625	R 272	_	R -256	88	R 4,065	1	70	<sup>R</sup> 52	123
October	R 3,808	R 243	_	<sup>R</sup> -154	101	R 4,104	1	67	50	118
November	4,004	R 319	_	<sup>R</sup> 163	102	R 4,058	2	71	51	123
December	R 4,159	R 292	_	R 99	176	R 4,176	1	75	<sup>R</sup> 50	126
Average	R 3,814	R <b>325</b>	-	R -28	110	R 4,058	1	75	R <b>50</b>	126
2005 January	3,772	352	_	-151	49	4,226	1	74	46	121
February	3,783	344	_	-179	102	4,203	l i	72	43	116
March	3,852	253	_	-382	165	4,323	l i	67	36	104
April	4,033	264	_	-1	192	4,106	1	65	38	104
May	R 4,183	R 280	_	R 209	R 199	R 4,055	1	<sup>R</sup> 69	R 40	R 111
June	E 4,327	E 235	_	E 329	E 142	E 4,091	E 1	E 69	E 46	E 117
6-Month Average	E 3,993	E 287	-	<sup>E</sup> -29	E 142	E 4,167	E 1	<sup>E</sup> 69	E 46	E 117
2004 6-Month Average	3,713	364	_	-122	102	4,098	1	70	44	114
2003 6-Month Average	3,661	358	_	-121	136	4,004	(g)	74	38	112

Stocks are at end of period.

- Notes: See Note 3, "Distillate and Residual Fuel Oils," at end of section.
- Totals may not equal sum of components due to independent rounding.

Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2004: EIA, Petroleum Supply Annual, annual reports. • 2005: EIA, Petroleum Supply Monthly, monthly reports; and, for the current month, Weekly Petroleum Status Report data system, and Monthly Energy Review data system calculations.

b By weight; "ppm" is parts per million.

By Weignt; "ppm" is parts per minion.
 Through 1982, includes what was previously classified as "Crude Oil Used Directly" (as distillate fuel oil). Through 1988, also includes a small amount of distillate fuel oil production at natural gas processing plants.
 A negative number indicates a decrease in stocks and a positive number.

indicates an increase. The current month stock change estimate is based on the change from the previous month's stocks estimate, rather than the actual

stocks value shown in this table.

e See Note 6, "Data Discrepancies," at end of section.

f See Note 4, "New Stock Basis," at end of section.

g Included in "> 15 ppm and <= 500 ppm."

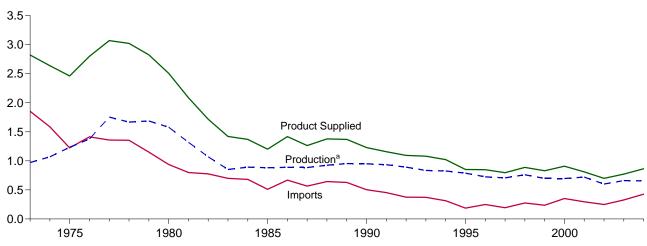
R=Revised. E=Estimate. NA=Not available. -=Not applicable.

<sup>•</sup> Geographic coverage is the 50 States and the District of Columbia. Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/petro.html.

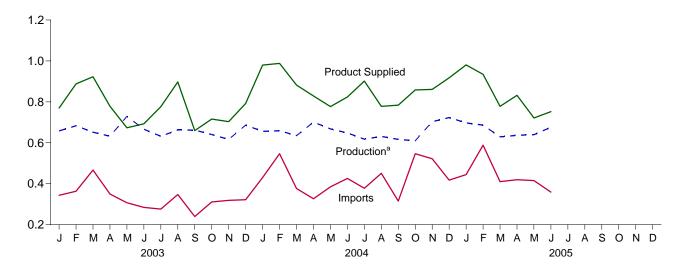
Figure 3.4 Residual Fuel Oil

(Million Barrels per Day, Except as Noted)

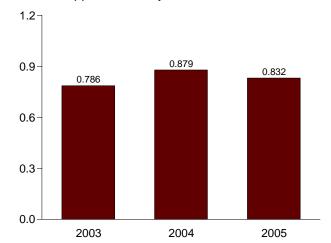
Overview, 1973-2004



Overview, Monthly

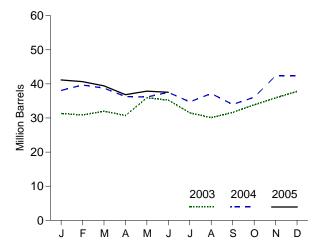






<sup>a</sup>Refinery net production. Note: Because vertical scales differ, graphs should not be compared.

Total Stocks, End of Month



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

Table 3.6 Residual Fuel Oil Supply, Disposition, and Stocks

		Supply			Disposition			Stock	: <b>s</b> a		
	Refinery							Sulfur Content <sup>b</sup>			
	Net Production	Imports	Adjust- ments <sup>c</sup>	Stock Change <sup>d,e</sup>	Exports	Product Supplied	< 0.31%	>= 0.31% and <= 1.00%	> 1.00%	Total <sup>€</sup>	
			Thousand Ba	arrels per Day			Million Barrels				
1973 Average	971	1,853	17	-5	23	2,822	NA	NA	NA	53	
975 Average		1,223	15	e-2	15	2,462	NA	NA	NA	74	
980 Average	1,580	939	12	-10	33	2,508	NA	NA	NA	e <b>92</b>	
985 Average	882	510	_	-7	197	1,202	NA	NA	NA	50	
990 Average	950	504	_	13	211	1,229	NA	NA	NA	49	
995 Average		187	_	-13	136	852	NA	NA	NA	37	
996 Average		248	_	24	102	848	NA	NA	NA	46	
997 Average		194	_	-15	120	797	NA	NA	NA	40	
998 Average		275	_	12	138	887	NA	NA	NA	45	
999 Average		237	_	-25	129	830	NA	NA	NA	36	
000 Average		352	_	1	139	909	NA	NA	NA	36	
001 Average		295	_	13	191	811	NA	NA	NA	41	
002 Average		249	-	-27	177	700	NA	NA	NA	31	
<b>003</b> January	658	343	_	(s)	231	770	4	10	18	31	
February		363	_	-15	173	888	3	8	20	31	
March		467	_	35	161	923	4	10	18	32	
April		349	_	-43	247	778	4	10	17	31	
		307	_	168	195	673	4	13	19	36	
May June		284	_	-22	280	693	5	13			
		276							18	35	
July			_	-121	252	777	5	10 9	16	32	
August		347	_	-45	158	897	4		17	30	
September		240	_	51	191	660	5	9	18	32	
October		311	_	72	164	716	5	11	18	34	
November		319	_	68	163	703	6	11	19	36	
December  Average		322 <b>327</b>	_	61 <b>18</b>	155 <b>197</b>	792 <b>772</b>	5 <b>5</b>	13 <b>13</b>	19 <b>19</b>	38 <b>38</b>	
Average		321	_	10	131	112		13	19	30	
<b>004</b> January		R 430	-	R g	97	R 980	4	13	21	38	
February		R 547	_	<sup>R</sup> 54 <sup>R</sup> -29	163	R 988	5	13	21	40	
March		R 376	_		158	R 882	6	14	19	39	
April		R 326	_	R -83	282	R 829	5	13	18	36	
May		R 385	_	R -4	280	R 777	5	12	19	36	
June	D	R 426	_	45	204	R 824	5	12	20	38	
July		R 378	_	-90	184	R 901	4	11	19	35	
August		R 451	_	78	225	R 778	5	13	19	37	
September		R 315	_	-106	254	R 784	4	12	17	34	
October		R 547	_	R 67	231	R 858	4	13	19	36	
November		522	_	R 210	154	R 861	4	15	23	42	
December		<sup>R</sup> 418	_	(s)	223	R 918	6	14	22	42	
Average	R <b>655</b>	R <b>426</b>	-	12	205	R <b>865</b>	6	14	22	42	
<b>005</b> January	697	445	_	-39	200	981	5	15	21	41	
February		588	_	-18	358	934	5	14	22	41	
March	629	410	_	-40	301	778	5	13	21	39	
April	636	420	_	-86	310	832	5	14	19	37	
May	<sup>R</sup> 639	R 415	_	R 33	R 300	R 721	R4	R 13	R 21	R 38	
June		E 359	_	E 25	E 259	E 752	NA.	NA	NA	E 38	
6-Month Average		E 437	-	E -21	E 287	E 832	NA	NA	NA	E 38	
004 6-Month Average	661	414	_	-2	197	879	5	12	20	38	
003 6-Month Average		353	_	22	215	786	5	13	18	35	
o monai Avelage	3,0	300			-10	. 00			10	3	

<sup>&</sup>lt;sup>a</sup> Stocks are at end of period.

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

Notes: • See Note 3, "Distillate and Residual Fuel Oils," at end of section.

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/petro.html.

Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2004: EIA, Petroleum Supply Annual, annual reports. • 2005: EIA, Petroleum Supply Monthly, monthly reports; and, for the current month, Weekly Petroleum Status Report data system, and Monthly Energy Review data system calculations.

<sup>&</sup>lt;sup>b</sup> By weight. Residual fuel oil stocks by sulfur content exclude pipeline stocks; therefore, the sum of stocks by sulfur content may not equal total stocks.

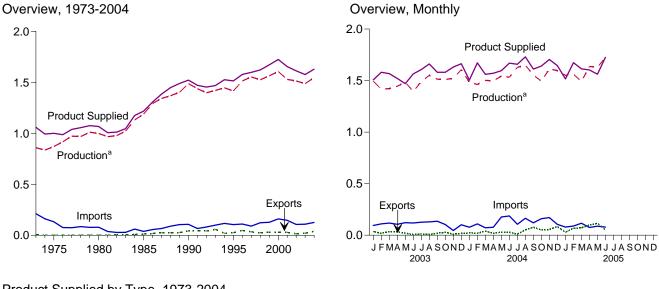
<sup>&</sup>lt;sup>c</sup> Through 1982, includes what was previously classified as "Crude Oil Used Directly" (as residual fuel oil).

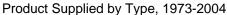
<sup>&</sup>lt;sup>d</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase. The current month stock change estimate is based on the change from the previous month's stocks estimate, rather than the actual stocks value shown in this table.

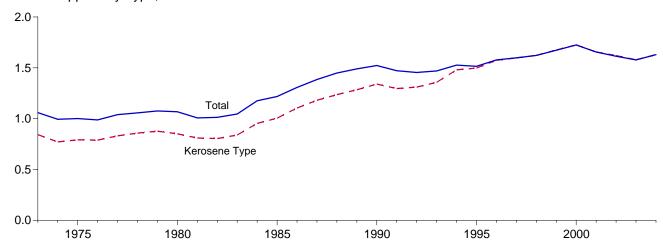
<sup>&</sup>lt;sup>e</sup> See Note 4, "New Stock Basis," at end of section.

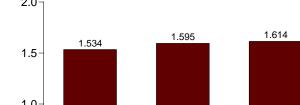
Geographic coverage is the 50 States and the District of Columbia.

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





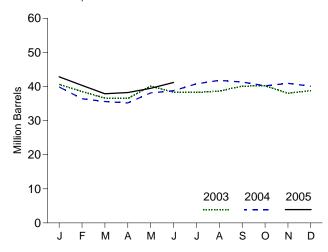




Product Supplied, January-June

# 2.0 1.0 0.5 0.0 2003 2004 2005

# Total Stocks, End of Month



<sup>a</sup>Refinery net production. Notes: • Through 2004, includes naphtha-type jet fuel. Beginning in 2005, naphtha-type jet fuel is included in "Other Petroleum Products" on Table

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

Table 3.7 Jet Fuel Supply, Disposition, and Stocks

		Supply			Dis	position		Stoc	ks <sup>a</sup>	
	Refinery Net P	roduction		Stock		Product Su	pplied	Kerosene		
	Kerosene Type	Total <sup>b</sup>	Imports <sup>b</sup>	Change <sup>b,c</sup>	Exportsb	Kerosene Type	Total <sup>b</sup>	Туре	Totalb	
			Thous	and Barrels pe	er Day			Million E	Million Barrels	
1973 Average	679	859	212	8	4	842	1.059	23	29	
1975 Average		871	133	d <b>2</b>	2	791	1,001	25	30	
1980 Average		999	80	10	1	851	1,068	d <b>36</b>	d <b>42</b>	
1985 Average		1,189	39	-4	13	1,005	1,218	34	40	
990 Average		1,488	108	31	43	1,340	1.522	46	52	
1995 Average	,-	1,416	106	-19	26	1,497	1,514	39	40	
996 Average	,	1,515	111	(s)	48	1,575	1,578	40	40	
997 Average		1,554	91	11	35	1,598	1,599	44	44	
998 Average		1,526	124	2	26	1,623	1,622	45	45	
999 Average	,	1,565	128	-11	32	1,675	1,673	40	41	
2000 Average		1,606	162	11	32	1,725	1,725	44	45	
	,	1,530	148	-7	29	1,656	1,655	42	42	
2001 Average	,	1,530	146	-7 -8	15	1,621	1,614	39	39	
2002 Average	1,514	1,514	107	-0	15	1,021	1,014	39	39	
2003 January	1,495	1,495	94	46	36	1,505	1,507	41	41	
February	1,416	1,416	109	-74	19	1,581	1,581	39	39	
March	1,430	1,422	117	-62	34	1,575	1,567	37	37	
April		1,445	106	-4	34	1,520	1,521	36	36	
May	,	1,484	122	117	19	1,470	1,470	40	40	
June	, -	1,393	119	-60	7	1,565	1,565	38	38	
July		1,491	126	-2	12	1,606	1,607	38	38	
August		1,551	129	12	7	1,661	1,661	39	39	
	,	1,551	136	49	20	1,581	1,581	40	40	
September		1,514	103	49	28	1,580		40	40	
October			46	-73			1,580	38		
November		1,522			10	1,631	1,631		38	
December		1,605	101	24	18	1,663	1,664	39	39	
Average	1,489	1,488	109	-1	20	1,578	1,578	39	39	
2004 January		R 1,485	77	R 35	22	R 1,505	R 1,505	40	40	
February	1,462	1,462	R 110	<sup>R</sup> -119	19	<sup>R</sup> 1,672	R 1,672	36	36	
March		<sup>R</sup> 1,501	<sup>R</sup> 72	R -26	39	1,560	1,560	36	36	
April		<sup>R</sup> 1,499	_ 77	R <sub>-</sub> -14	19	R 1,571	R 1,571	35	35	
May	1,543	1,543	<sup>R</sup> 177	<sup>R</sup> 94	30	<sup>R</sup> 1,596	<sup>R</sup> 1,596	38	38	
June	1,532	1,532	<sup>R</sup> 187	R 22	28	<sup>R</sup> 1,669	<sup>R</sup> 1,669	39	39	
July	1,628	1,628	<sup>R</sup> 106	<sup>R</sup> 66	10	<sup>R</sup> 1,658	<sup>R</sup> 1,658	41	41	
August	1,650	1,650	<sup>R</sup> 164	R 32	52	<sup>R</sup> 1,730	<sup>R</sup> 1,730	42	42	
September	1,553	1,553	<sup>R</sup> 120	<sup>R</sup> -16	77	<sup>R</sup> 1,611	R 1,611	41	41	
October		R 1,495	<sup>R</sup> 161	<sup>R</sup> -36	51	R 1,641	R 1,641	40	40	
November		R 1,613	R 170	24	55	R 1,704	R 1,704	41	41	
December		1,597	105	R -26	83	R 1,645	R 1,645	40	40	
Average		1,547	R <b>127</b>	4	40	R 1,630	R 1,630	40	40	
2005 January	1,551	1,551	79	86	28	1,516	1,516	43	43	
February		1,562	89	-90	67	1.673	1,673	40	40	
March		1,491	116	-80	72	1,614	1,614	38	38	
April	,	1,638	75	12	98	1,603	1,603	38	38	
May	- '	R 1,630	R 88	R 40	R 115	R 1,562	R 1,562	R 39	R 39	
June		E 1,724	E 79	E 26	E 51	E 1,726	E 1,726	E 41	E 41	
6-Month Average		E 1,599	E 88	(s)	E <b>72</b>	E 1,614	E 1,614	E 41	E 41	
2004 6-Month Average	1,504	1,504	117	(s)	26	1,594	1,595	39	39	
2003 6-Month Average		1,443	111	(s) -5	25	1,535	1,534	38	38	
	1,	1,443	111	-3	23	1,333	1,334	30	30	

Note: Geographic coverage is the 50 States and the District of Columbia. Web Page: For annual data not displayed between 1973 and 1995, see

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2004: EIA, Petroleum Supply Annual, annual reports. • 2005: EIA, Petroleum Supply Monthly, monthly reports; and, for the current month, Weekly Petroleum Status Report data system, and Monthly Energy Review data system calculations.

a Stocks are at end of period.
 b Through 2004, includes kerosene-type and naphtha-type jet fuel. Beginning in 2005, includes kerosene-type jet fuel only; naphtha-type jet fuel is included in "Other Petroleum Products" on Table 3.10.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number

indicates an increase. The current month stock change estimate is based on the change from the previous month's stocks estimate, rather than the actual

stocks value shown in this table.

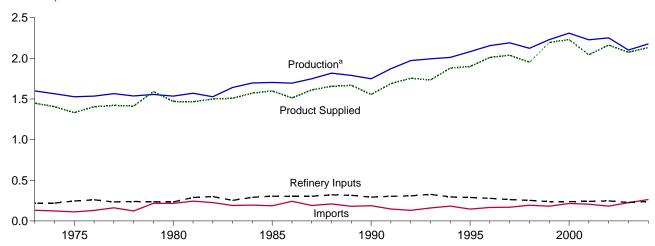
<sup>d</sup> See Note 4, "New Stock Basis," at end of section.

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

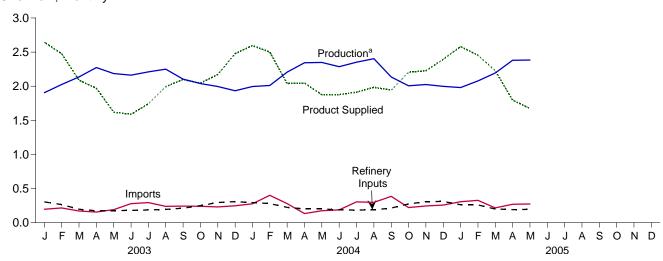
Figure 3.6 Liquefied Petroleum Gases

(Million Barrels per Day, Except as Noted)

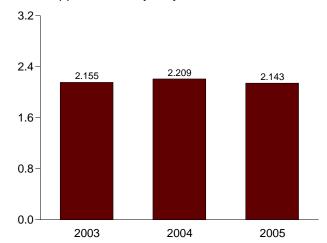
Overview, 1973-2004



# Overview, Monthly

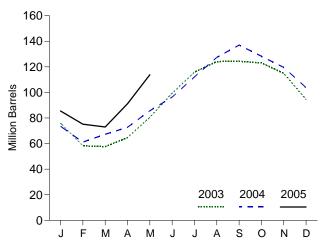






<sup>a</sup>Field production and refinery net production. Note: Because vertical scales differ, graphs should not be compared.

Stocks, End of Month



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

Table 3.8 Liquefied Petroleum Gases Supply, Disposition, and Stocks

1973 Average	Field Production <sup>a</sup> 1,225 1,217	Refinery Net Production	Imports	Stock Change <sup>b</sup>	Refinery		Product	
1975 Average 1980 Average 1985 Average 1990 Average 1995 Average			T1 -	1	Inputs	Exports	Supplied	Stocks <sup>c</sup>
1975 Average 1980 Average 1985 Average 1990 Average 1995 Average			Thou	ısand Barrels pe	r Day			Million Barrels
1975 Average 1980 Average 1985 Average 1990 Average 1995 Average		375	132	35	220	27	1,449	99
1980 Average 1985 Average 1990 Average 1995 Average		311	112	d <b>35</b>	246	26	1,333	125
1985 Average 1990 Average 1995 Average	1,205	330	216	27	233	21	1,469	d <b>120</b>
1990 Average1995 Average	1,313	391	187	-75	304	62	1,599	74
1995 Average	1,250	499	188	48	293	40	1,556	98
	1,428	654	146	-17	289	58	1,899	93
1996 Average	1,494	662	166	-19	278	51	2,012	86
1997 Average	1,499	691	169	9	263	50	2.038	89
1998 Average	1,450	674	194	70	253	42	1,952	115
1999 Average	1,547	684	182	-71	238	50	2,195	89
2000 Average	1,605	705	215	-71	238	74	2,133	83
	1,562	667	206	105	241	44	2,044	121
2001 Average	1,582	671	183	-42	247	67	2,163	106
2002 Average	1,561	6/1	103	-42	241	67	2,103	100
2003 January	1,493	412	197	-960	304	113	2,645	76
February	1,542	483	216	-632	265	130	2,478	58
March	1,457	679	171	-20	197	43	2,087	58
April	1,431	843	156	235	175	51	1,970	65
May	1,294	892	191	514	176	67	1,619	81
June	1,309	853	279	628	179	45	1,589	99
July	1,369	841	294	530	186	47	1,742	116
August	1,418	832	239	266	194	36	1,993	124
September	1,477	626	242	6	212	29	2,098	124
October	1,529	509	240	-41	249	25	2,045	123
November	1,562	434	231	-271	295	31	2,171	115
December	1,459	475	246	-660	307	56	2,477	94
Average	1,444	658	225	-31	228	56	2,074	94
2004 January	<sup>R</sup> 1,539	R 456	R 276	<sup>R</sup> -676	R 294	58	R 2,596	R 74
February	1,538	R 472	R 400	R -426	R 279	57	R 2,500	R 61
March	R 1,551	R 656	R 279	R 197	R 223	26	R 2,039	67
April	R 1,505	839	R 133	R 182	R 202	49	R 2.045	R 73
May	R 1,500	R 848	R 174	R 417	R 200	29	R 1,876	R 86
June	R 1,457	R 830	R 187	R 356	R 187	54	R 1,877	R 96
July	R 1,524	R 828	304	<sup>R</sup> 510	R 185	48	R 1.912	R 112
August	R 1,566	R 838	297	R 491	R 187	39	R 1,984	127
September	1,519	R 617	R 386	R 321	R 214	44	R 1.942	R 137
October	R 1,543	R 464	221	R -282	R 273	30	R 2.207	128
November	R 1,543	R 436	R 245	R -294	R 307	30	R 2.226	119
December	R 1,552	R 446	257	R -506	R 310	57	R 2,394	104
Average	R <b>1,532</b>	R <b>645</b>	R <b>263</b>	-500 <b>25</b>	R <b>238</b>	43	R <b>2,132</b>	104
_	4.550	400	000	500	200	00	0.504	0.5
2005 January	1,550	430	306	-589	262	33	2,581	85
February	1,600	478	327	-368	260	59	2,454	75
March	1,592	602	216	-70	200	51	2,228	73
April	1,559	821	270	606	191	58	1,796	91
May	1,558	826	273	730	196	58	1,674	114
5-Month Average	1,571	633	278	67	221	52	2,143	114
2004 5-Month Average 2003 5-Month Average	1,527 1,441	655 664	251 186	-58 -166	239 223	44 80	2,209 2,155	86 81

Note: Geographic coverage is the 50 States and the District of Columbia. Web Page: For annual data not displayed between 1973 and 1995, see

http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys,
Petroleum Statement, Annual, annual reports. • 1976-1980: Energy
Information Administration (EIA), Energy Data Reports, Petroleum
Statement, Annual, annual reports. • 1981-2004: EIA, Petroleum Supply
Annual, annual reports. • 2005: EIA, Petroleum Supply Monthly, monthly

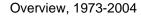
 $<sup>^{\</sup>rm a}$  Liquefied petroleum gases production at natural gas processing plants.  $^{\rm b}$  A negative number indicates a decrease in stocks and a positive number indicates an increase.

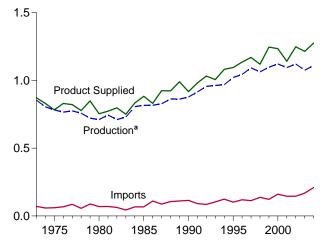
C Stocks are at end of period.

d See Note 4, "New Stock Basis," at end of section.
R=Revised.

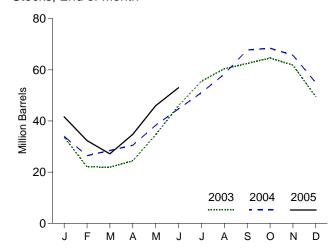
Figure 3.7 Propane and Propylene

(Million Barrels per Day, Except as Noted)

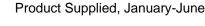


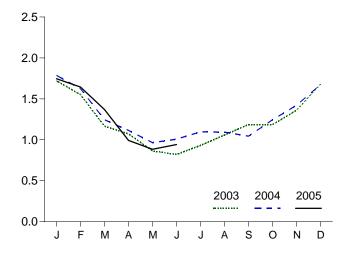


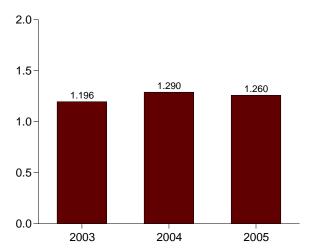
# Stocks, End of Month



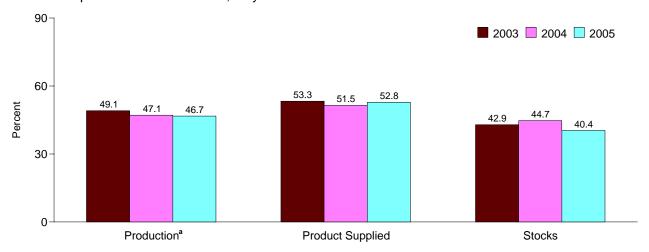
Product Supplied, Monthly







# Share of Liquefied Petroleum Gases, May



<sup>a</sup>Field production and refinery net production.

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

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

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

	Supply				Dispo	onion.		
	Field Production <sup>a</sup>	Refinery Net Production	Imports	Stock Change <sup>b,c</sup>	Refinery Inputs	Exports	Product Supplied	Stocks <sup>c,d</sup>
			Tho	usand Barrels per	r Day			Million Barrels
973 Average	583	271	71	30	8	15	872	65
	550	234	60	36	11	13	783	82
975 Average	442	269	69	4	12	10	754	°65
980 Average985 Average	521	295	67	-50	3	48	883	39
	474	404	115	-30 48	(s)	28	917	49
990 Average	519	503	102	-10	(s) 0	38	1,096	43
995 Average	525	503 520	119		0	28	1,136	43
996 Average				(s)	0			
997 Average	528	565	113	3	-	32	1,170	44
998 Average	513	550	137	56	0	25	1,120	65
999 Average	529	569	122	-59	0	33	1,246	43
000 Average	539	583	161	-5	0	53	1,235	41
001 Average	538	556	145	67	0	31	1,142	66
002 Average	549	572	145	-36	0	55	1,248	53
<b>003</b> January	528	517	165	-606	0	95	1,720	34
February	528	540	181	-417	0	116	1,551	22
March	506	554	133	-4	0	31	1,167	22
April	498	583	95	83	0	20	1,072	24
May	469	604	139	327	0	22	863	35
June	465	583	179	380	0	27	820	46
July	486	570	200	307	0	18	931	56
August	501	569	163	157	0	19	1,058	60
September	521	572	182	70	Õ	19	1,186	62
October	534	553	187	69	0	20	1,185	65
November	528	582	181	-92	0	24	1,360	62
	505	610	213	-399	0	46	1,681	50
December Average	<b>506</b>	<b>570</b>	168	-399 -8	0	37	1,215	<b>50</b>
<b>004</b> January	526	<sup>R</sup> 574	R 237	R -499	0	49	R 1,787	34
February	536	R 557	R 321	R -261	0	51	R 1.625	26
March	R 533	R 577	R 222	R 65	Õ	21	R 1.245	28
April	526	R 583	R 96	R 68	Ö	22	R 1.114	R 31
May	521	586	R 129	R 251	0	19	R 966	R 38
June	513	581	152	R 214	0	25	R 1.008	R 45
	527	581	R 215	R 204	0	22	R 1.097	51
July	R 537		R 216	R 233	0	26 26	R 1.093	
August		599						58
September	515 R 500	564 8 575	R 307	<sup>R</sup> 316	0	26	R 1,045	R 68
October	R 520	<sup>R</sup> 575	R 195	R 23	0	25	R 1,243	68
November	R 534	616	R 207	-92	0	26	1,422	66
December	R 522	613	R 221	R -346	0	29	R 1,673	55
Average	526	<sup>R</sup> <b>584</b>	R 209	15	0	28	<sup>R</sup> 1,276	55
005 January	524	562	258	-430	0	28	1,746	42
February	537	580	230	-331	0	35	1,644	32
March	536	550	150	-168	0	34	1,369	27
April	528	587	168	253	0	38	992	35
May	<sup>R</sup> 527	<sup>R</sup> 587	<sup>R</sup> 170	<sup>R</sup> 361	0	R 39	R 884	R 46
June	<sup>F</sup> 500	E 635	E 170	E 326	0	E 37	E 942	E 53
6-Month Average	E 525	E 583	E 191	E 4	0	E 35	E 1,260	<sup>E</sup> 53
004 6-Month Average	526 499	577 564	192 148	-26 -36	0	31 51	1,290 1,196	45 46

<sup>&</sup>lt;sup>a</sup> Propane and propylene production at natural gas processing plants.

R=Revised. E=Estimate. F=Forecast. (s)=Less than 500 barrels per day. Note: Geographic coverage is the 50 States and the District of Columbia. Web Page: For annual data not displayed between 1973 and 1995, see

http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys,
Petroleum Statement, Annual, annual reports. • 1976-1980: Energy
Information Administration (EIA), Energy Data Reports, Petroleum Statement,
Annual, annual reports. • 1981-2004: EIA, Petroleum Supply Annual,
annual reports. • 2005: EIA, Petroleum Supply Monthly, monthly reports;
and, for the current month, Weekly Petroleum Status Report data system,
Short-Term Integrated Forecasting System, and Monthly Energy Review data
system calculations. system calculations.

b A negative number indicates a decrease in stocks and a positive number indicates an increase. The current month stock change estimate is based on the change from the previous month's stocks estimate, rather than the actual stocks value shown in this table.

See Note 4, "New Stock Basis," at end of section.
 Stocks are at end of period.

Table 3.10 Other Petroleum Products Supply, Disposition, and Stocks

		Sup	ply			Dispos	sition		
	Field Production <sup>a</sup>	Refinery and Blender Net Production	Imports	Adjust- ments <sup>b</sup>	Stock Change <sup>c,d</sup>	Refinery and Blender Net Inputs	Exports	Products Supplied <sup>e</sup>	Stocks <sup>d,f</sup>
				Thousand Ba	arrels per Day			•	Million Barrels
1973 Average	513	2,301	290	19	1	750	162	2,211	179
1975 Average	416	2.097	144	35	d <b>-6</b>	537	158	2,001	188
1980 Average		2.559	130	30	15	310	197	2,566	d <b>205</b>
1985 Average	296	2,183	550	53	22	886	227	1,947	206
1990 Average	309	2,452	705	80	-32	887	289	2,402	201
1995 Average	335	2,522	708	174	-23	958	348	2,457	206
1996 Average	336	2.541	879	230	-11	1.014	376	2,608	202
1997 Average	318	2,671	945	215	30	985	402	2,733	213
1998 Average	309	2,753	888	190	18	1,002	380	2,741	219
1999 Average	303	2.709	943	199	-64	1.061	338	2,819	196
2000 Average	306	2,705	938	143	30	991	429	2,642	207
2001 Average	307	2,651	1,095	95	20	1,013	434	2,681	214
2002 Average	300	2,712	1,085	126	-42	1,123	479	2,662	199
2003 January	265	2,568	1,066	304	466	831	526	2,381	213
February	270	2,522	829	188	8	796	464	2,541	214
March	272	2,705	1,048	200	338	820	541	2,527	224
April	270	2,724	1,110	60	17	915	459	2,773	225
May		2,897	1,284	103	35	1,104	527	2,888	226
June	274	2,805	1,461	-21	89	955	479	2,996	228
July	280	2,853	1,183	97	-291	1,144	464	3,097	219
August	285	2,922	1,091	-8	-316	1,156	578	2,871	210
September	284	2,900	1,082	183	130	977	545	2,797	214
October	289	2,798	905	40	-223	949	518	2,789	207
November	278	2,838	1,037	50	184	913	508	2,598	212
December	264	2,806	929	200	-179	1,193	487	2,698	207
Average	275	2,780	1,087	116	21	981	509	2,747	207
<b>2004</b> January	263	R 2,628	R 1,171	R 152	R 778	R 677	400	R 2,360	R 231
February		R 2,674	R 1,352	R 2	R 425	R 667	554	R 2,642	R 243
March	277	R 2,733	R 1,539	R -45	R 6	1,165	538	R 2,795	R 243
April		R 2,897	R 1,520	R -211	R -105	R 1,229	531	R 2,829	R 240
May		R 3,003	R 1,427	R -87	R -13	R 1,125	465	R 3,045	R 240
June		R 3,017	R 1,404	R -219	R -104	R 888	499	R 3,200	R 237
July		R 3,058	R 1,585	R -69	R -20	R 1,061	597	R 3,225	R 236
August	R 298	R 3,044	R 1,516	R -73	R -143	R 1,089	516	R 3,322	232
September	278	R 2,899	R 1,386	R -91	R -145	R 1,121	385	R 3,111	R 227
October		R 2,883	R 1,378	R 31	R -267	R 1,368	514	R 2,954	R 219
November		R 2,892	R 1,328	R 64	R 296	R 904	462	R 2,901	R 228
December  Average		<sup>R</sup> 2,903 <sup>R</sup> <b>2,887</b>	<sup>R</sup> 1,422 <sup>R</sup> <b>1,419</b>	<sup>R</sup> 97 <sup>R</sup> <b>-37</b>	<sup>R</sup> -2 <b>58</b>	<sup>R</sup> 1,268 <sup>R</sup> <b>1,049</b>	531 <b>499</b>	<sup>R</sup> 2,891 <sup>R</sup> <b>2,940</b>	R 228 R <b>228</b>
_	259	•	,		E02	ŕ		•	
2005 January		2,593 2,792	1,146 1,452	53 127	502 428	684 1,100	420 514	2,445	243 255
February			1,452	213	428 80	1,100	514 540	2,587	255 257
March		2,828				,		2,793	
April		2,892	1,404	174	-266	1,780	514	2,713	249
May 5-Month Average	285 <b>268</b>	2,873 <b>2,795</b>	1,645 <b>1,378</b>	73 <b>128</b>	177 <b>182</b>	1,355 <b>1,211</b>	475 <b>492</b>	2,870 <b>2,683</b>	255 <b>255</b>
2004 5-Month Average	272	2,788	1,402	-37	218	975	497	2,735	240
2003 5-Month Average		2,686	1,072	172	177	895	504	2,623	226

<sup>&</sup>lt;sup>a</sup> Production at natural gas processing plants. Through 1988, includes pentanes plus and a small amount of finished petroleum products. Beginning in 1989, includes pentanes plus only.

R=Revised.

"Other Petroleum Products" include pentanes plus, other Notes:

hydrocarbons and oxygenates, 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 on, its death of the state of t

Web Page: For annual data not displayed between 1973 and 1995, see

http://www.eia.doe.gov/emeu/mer/petro.html.
Sources: • 1973-1975: Bureau of Mines, Mineral Industry Surveys,
Petroleum Statement, Annual, annual reports. • 1976-1980: Energy Information Administration (EIA), Energy Data Reports, Petroleum Statement, Annual, annual reports. • 1981-2004: EIA, Petroleum Supply Annual, annual reports. • 2005: EIA, Petroleum Supply Monthly, monthly reports.

<sup>&</sup>lt;sup>b</sup> An adjustment for motor gasoline blending components and fuel ethanol. Through 2004, includes what was previously classified as "Field Production" of

motor gasoline blending components and other hydrocarbons and oxygenates.

<sup>c</sup> A negative number indicates a decrease in stocks and a positive number indicates an increase.

<sup>&</sup>lt;sup>d</sup> See Note 4, "New Stock Basis," at end of section.

See Note 6, "Data Discrepancies," at end of section.

Stocks are at end of period.

# **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, distillate fuel oil end-of-month stocks are split into two sulfur categories to meet Environmental Protection Agency requirements effective October 1992. Beginning in January 2004, distillate fuel oil and residual fuel oil stocks are both split into three categories. 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	<i>MER</i> Data	PSA and PSM Data
3.1a	Natural Gas Plant Liquids Production	1976	1,604	1,603
3.1b	Exports, Total	1979	471	472
3.1b	Exports, Petroleum Products	1979	236	237
3.2a	Imports, SPR	1978	161	162
3.5	Stock Change	1974	10	9
3.5	Stock Change	1975	-41	-40
3.10	Products Supplied	1982	1,857	1,856

# Section 4. Natural Gas

Total dry natural gas production in the United States during April 2005 was estimated as 1.5 trillion cubic feet, 1 percent lower than production during April 2004.

Consumption of natural and supplemental gas in April 2005 was 1.8 trillion cubic feet, slightly lower than the level in April 2004.

Deliveries to residential consumers in April 2005 were 383 billion cubic feet, 1 percent higher than the previous April's deliveries. Total deliveries to industrial consumers during April 2005 were 668 billion cubic feet, 4 percent lower than the previous April's level. The electric power sector's use

of natural gas in April 2005 was 399 billion cubic feet, 4 percent higher than the rate in April 2004.

Net imports of natural gas in April 2005 were estimated as 283 billion cubic feet, 8 percent higher than net imports in the previous April.

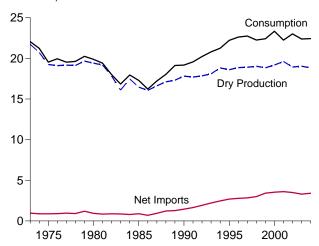
Stocks of working gas<sup>1</sup> in underground natural gas storage reservoirs at the end of April 2005 were 1,499 billion cubic feet, 20 percent higher than the level of stocks available 1 year earlier.

Net injections into underground storage during April 2005 were 216 billion cubic feet, 9 percent more than the amount of net injections during April 2004.

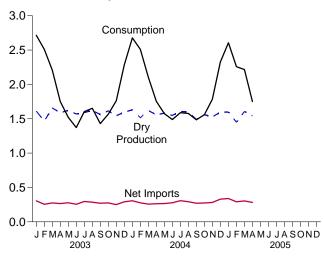
<sup>&</sup>lt;sup>1</sup>Gas available for withdrawal.

Figure 4.1 Natural Gas (Trillion Cubic Feet)

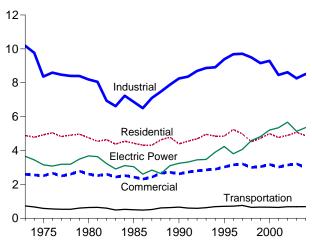
# Overview, 1973-2004



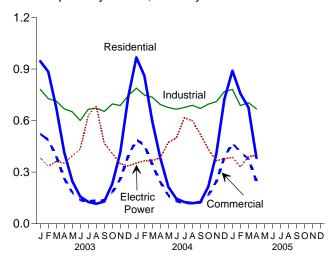
# Overview, Monthly



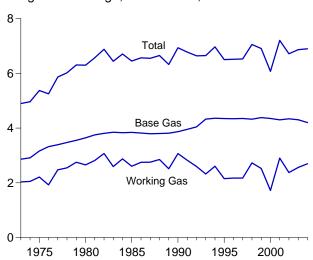
# Consumption by Sector, 1973-2004



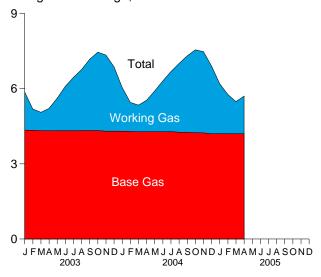
Consumption by Sector, Monthly



# Underground Storage, End of Year, 1973-2004



# 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

	Day Coo	Supplemental Gaseous		Trade		Net	Deleveine	
	Dry Gas Production <sup>a</sup>	Fuels <sup>b</sup>	Imports	Exports	Net Imports	Storage Withdrawals <sup>c</sup>	Balancing Item <sup>d</sup>	Consumptione
1973 Total	<sup>f</sup> 21,731	NA	1,033	77	956	-442	-196	22,049
1975 Total	<sup>f</sup> 19,236	NA	953	73	880	-344	-235	19,538
1980 Total	19,403	155	985	49	936	23	-640	19,877
1985 Total	16,454	126	950	55	894	235	-428	17,281
1990 Total	17,810	123	1,532	86	1,447	-513	307	9 <b>19,174</b>
995 Total	18,599	110	2.841	154	2.687	415	396	22.207
	18,854	109	2,937	153	2,784	2	860	22,610
996 Total	- /		,		, -	24		,
997 Total	18,902	103	2,994	157	2,837		871	22,737
998 Total	19,024	102	3,152	159	2,993	-530	657	22,246
999 Total	18,832	98	3,586	163	3,422	172	-119	22,405
000 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
002 Total	18,928	68	4,015	516	3,499	468	44	23,007
003 January	1,611	6	365	60	305	865	-72	2,716
February	1,465	6	314	59	255	698	87	2,511
March	1,658	5	329	55	275	139	130	2,207
April	1.587	5	317	52	266	-162	55	1,750
May	1,621	6	328	50	277	-424	40	1,520
June	1,569	5	310	54	256	-483	25	1,372
	,	6		50 50	296	-463 -372	25 84	
July	1,589		345					1,603
August	1,621	6	337	51	286	-319	60	1,653
September	1,562	5	326	55	271	-423	15	1,430
October	1,615	5	336	61	275	-292	-37	1,566
November	1,544	6	322	71	251	89	-128	1,763
December	1,594	7	367	76	291	489	-97	2,284
Total	19,036	68	3,996	692	3,305	-194	161	22,375
004 January	E 1,631	6	373	67	306	811	-76	2,677
February	E 1,515	6	346	70	276	600	114	2,510
March	E 1,618	5	349	91	258	103	117	2,103
April	E 1.558	5	325	62	263	-198	124	1,753
May	E 1,580	6	327	61	266	-379	103	1,575
June	E 1,549	1	342	64	278	-397	57	1,488
July	E 1.605	2	375	67	308	-366	39	1,588
August	E 1.601	5	360	67	293	-345	24	1,577
September	E 1,491	5	345	74	270	-325	44	1,485
	E 1.558	5	336	61	274	-248	-32	,
October								1,558
November	E 1,528	5	369	86	282	65	-97	1,784
December Total	E 1,596 E <b>18,830</b>	5 <b>55</b>	413 <b>4.259</b>	83 <b>854</b>	330 <b>3.404</b>	567 <b>-110</b>	-172 <b>245</b>	2,327 <b>22,424</b>
10tai	·		,		.,			,
005 January	RE 1,598	<sup>E</sup> 4 <sup>E</sup> 5	E 402 E 356	E 63 E 65	E 339 E 291	713	<sup>R</sup> -49 <sup>R</sup> 84	R 2,605
February	RE 1,449					429		R 2,258
March	E 1,606	<u> </u>	RE 377	E 72	RE 305	284	<sup>R</sup> 15	<sup>R</sup> 2,216
April	<sup>E</sup> 1,543	_ <sup>E</sup> 5	_ <sup>E</sup> 344	_ <sup>E</sup> 62	_ <sup>E</sup> 283	-216	136	1,751
4-Month Total	E 6,196	E 21	E 1,479	<sup>E</sup> 261	E 1,218	1,210	185	8,830
2004 4-Month Total	E 6,322	22	1,393	290	1,103	1,316	279	9,042
2003 4-Month Total	6,321	22	1,326	225	1,101	1,540	200	9,184

 $<sup>^{\</sup>rm a}$  Marketed production (wet) minus extraction loss. See Table 4.2.  $^{\rm b}$  See Note 1, "Supplemental Gaseous Fuels," at end of section.

<sup>&</sup>lt;sup>c</sup> Net withdrawals from underground storage. For 1980-2003, also includes net withdrawals of liquefied natural gas in above-ground tanks. See Note 2, "Storage," at end of section.

d See Note 3, "Balancing Item," at end of section. Since 1980, excludes transit

shipments that cross the U.S.-Canada border (i.e., natural gas delivered to its destination via the other country).

e See Note 4, "Consumption," 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, "Consumption, 1989-1992," at end of section.

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

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

Web Page: For annual data not displayed between 1973 and 1995, see

http://www.eia.doe.gov/emeu/mer/natgas.html. Sources: • Dry Gas Production: Table 4.2. • Supplemental Gaseous Fuels and **Net Storage Withdrawals:** 1973-1999—Energy Information Administration (EIA), *Natural Gas Annual*, annual reports. 2000 forward—EIA, *Natural Gas* 

Monthly, June 2005, Table 2. • Trade: Table 4.3. Consumption: Table 4.4. • Balancing Item: Calculated as consumption minus dry gas production, supplemental gaseous fuels, net imports, and net storage withdrawals.

**Table 4.2 Natural Gas Production** 

1973 Total	24,067 21,104 21,870 19,607 21,523 23,744 24,114 24,213 24,108 23,823 24,174 24,501 23,941	1,171 861 1,365 1,915 2,489 3,565 3,511 3,492 3,427 3,293 3,380 3,371 3,455	NA NA 199 326 289 388 518 599 617 615 505	248 134 125 95 150 284 272 256 103	22,648 20,109 20,180 17,270 18,594 19,506 19,812 19,866	917 872 777 816 784 908 958	21,731 19,236 19,403 16,454 17,810 18,599
1975 Total 1980 Total 1990 Total 1995 Total 1995 Total 1996 Total 1997 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 January February March	21,104 21,870 19,607 21,523 23,744 24,114 24,213 24,108 23,823 24,174 24,501 23,941	861 1,365 1,915 2,489 3,565 3,511 3,492 3,427 3,293 3,380 3,371	NA 199 326 289 388 518 599 617 615	134 125 95 150 284 272 256	20,109 20,180 17,270 18,594 19,506 19,812	872 777 816 784 908 958	19,236 19,403 16,454 17,810 18,599
1980 Total	21,870 19,607 21,523 23,744 24,114 24,213 24,108 23,823 24,174 24,501 23,941	1,365 1,915 2,489 3,565 3,511 3,492 3,427 3,293 3,380 3,371	199 326 289 388 518 599 617 615	125 95 150 284 272 256	20,180 17,270 18,594 19,506 19,812	777 816 784 908 958	19,403 16,454 17,810 18,599
1985 Total	19,607 21,523 23,744 24,114 24,213 24,108 23,823 24,174 24,501 23,941	1,915 2,489 3,565 3,511 3,492 3,427 3,293 3,380 3,371	326 289 388 518 599 617 615	95 150 284 272 256	17,270 18,594 19,506 19,812	816 784 908 958	16,454 17,810 18,599
1990 Total	21,523 23,744 24,114 24,213 24,108 23,823 24,174 24,501 23,941	2,489 3,565 3,511 3,492 3,427 3,293 3,380 3,371	289 388 518 599 617 615	150 284 272 256	18,594 19,506 19,812	784 908 958	17,810 18,599
1995 Total 1996 Total 1997 Total 1998 Total 1999 Total 2000 Total 2001 Total 2002 Total 2003 January February March	23,744 24,114 24,213 24,108 23,823 24,174 24,501 23,941	3,565 3,511 3,492 3,427 3,293 3,380 3,371	388 518 599 617 615	284 272 256	19,506 19,812	908 958	18,599
1996 Total	24,114 24,213 24,108 23,823 24,174 24,501 23,941	3,511 3,492 3,427 3,293 3,380 3,371	518 599 617 615	272 256	19,812	958	
1997 Total	24,213 24,108 23,823 24,174 24,501 23,941	3,492 3,427 3,293 3,380 3,371	599 617 615	256			18,854
1998 Total	24,108 23,823 24,174 24,501 23,941	3,427 3,293 3,380 3,371	617 615		19,000	964	18,902
1999 Total	23,823 24,174 24,501 23,941	3,293 3,380 3,371	615	เบง	19,961	938	19,024
2000 Total	24,174 24,501 23,941	3,380 3,371					
2001 Total	24,501 23,941	3,371	วบว	110	19,805	973	18,832
2002 Total 2003 January February March	23,941			91	20,198	1,016	19,182
2003 January February March	,	3,455	463	97	20,570	954	19,616
February March	2.051	2, 100	502	99	19,885	957	18,928
March	2,051	313	45	9	1,685	74	1,611
	1,876	295	41	8	1,532	67	1,465
April	2,099	312	44	9	1,734	76	1,658
	2,002	290	43	9	1,660	73	1,587
May	2,012	274	33	9	1,695	75	1,621
June	1,965	279	36	8	1,642	72	1,569
July	1,987	275	42	7	1,662	73	1,589
August	2,028	282	42	8	1,695	75	1,621
September	1,971	288	42	8	1,634	72	1,562
October	2.052	312	42	8	1.689	74	1.615
November	1,973	308	42	7	1,615	71	1,544
December	2.040	320	45	8	1.668	73	1,594
Total	24,056	3,548	499	98	19,912	876	19,036
2004 January	E 2,092	E 345	E 34	E 8	E 1,706	E 75	E 1,631
February	E 1.947	E 323	E 32	E 7	E 1.585	E 70	E 1.515
March	E 2,085	E 350	E 34	E 8	E 1,693	E 74	E 1,618
April	E 1,996	E 325	E 33	E 8	E 1.630	E 72	E 1,558
May	E 2.025	E 330	E 34	E 8	E 1.653	E 73	E 1.580
June	E 1,954	E 293	E 33	E 8	E 1,620	E 71	E 1.549
July	E 2,005	E 284	E 34	E g	E 1,679	E 74	E 1.605
August	2,005 RE 1,988	E 270	E 34	E 9	E 1.675	E 74	E 1.601
	E 1,891	E 292	E 32	- 9 E 8	E 1,559	E 69	E 1.491
September	E 1,997	E 326	E 33	- 8 E 8	E 1,629	- 69 E 72	E 1,491
October	E 1,997	E 334	E 33	- 8 E 8	E 1,629	= 72 = 70	E 1,558
November  December	E 2.060	E 348	E 35	- 8 E 8	E 1,669	= 70 E 73	E 1,528
Total	E <b>24,014</b>	E 3,820	E <b>401</b>	E <b>97</b>	E <b>19,696</b>	E <b>866</b>	E 18,830
		E 0.40	E 0.5		,	<sup>RE</sup> 74	·
2005 January	RE 2,058	E 343	E 35	E 8 RE 7	E 1,671		RE 1,598
February	RE 1,869	RE 314	E 32		RE 1,516	RE 67	RE 1,449
March	RE 2,070	RE 347	E 35	E 8	E 1,680	E 74	E 1,606
April	E 1,988	E 333	E 34	E 8	E 1,614	<sup>E</sup> 71	E 1,543
4-Month Total	<sup>E</sup> 7,985	E 1,337	<sup>E</sup> 135	E 32	<sup>E</sup> 6,481	E 285	<sup>E</sup> 6,196
2004 4-Month Total 2003 4-Month Total	<sup>E</sup> 8.121	<sup>E</sup> 1.343	<sup>E</sup> 133	<sup>E</sup> 31	<sup>E</sup> 6,613	<sup>E</sup> 291	<sup>E</sup> 6,322

<sup>&</sup>lt;sup>a</sup> Gas withdrawn from natural gas and crude oil wells; excludes lease

condensate.

b Natural gas injected into natural gas and crude oil formations to effect greater ultimate recovery.

<sup>c</sup> See Note 6, "Nonhydrocarbon Gases Removed," at end of section.

d Natural gas released in flares on the base site or at processing plants. See

Note 7, "Production," at end of section.

If Gross withdrawals minus repressuring, nonhydrocarbon gases removed, and vented and flared. See Note 7, "Production," at end of section.

See Note 8, "Extraction Loss," at end of section.

<sup>&</sup>lt;sup>h</sup> Marketed production (wet) minus extraction loss.

i May include unknown quantities of nonhydrocarbon gases.

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

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

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/natgas.html.

Sources: • 1973-1999: Energy Information Administration (EIA), *Natural Gas Annual 2000*, Table 93. • 2000 forward: EIA, *Natural Gas Monthly*, June

<sup>2005,</sup> Table 1.

**Table 4.3 Natural Gas Trade by Country** 

				Impo	orts					Exp	orts	
	Algeria <sup>a</sup>	Australia <sup>a</sup>	<b>Canada</b> b	<b>Mexico</b> b	Qatar <sup>a</sup>	Trinidad and Tobago <sup>a</sup>	Other <sup>c</sup>	Total	<b>Canada</b> <sup>b</sup>	Japan <sup>a</sup>	<b>Mexico</b> b	Total
1973 Total	3	0	1,028	2	0	0	0	1,033	15	48	14	77
1975 Total	5	0	948	0	0	0	0	953	10	53	9	73
1980 Total	86	0	797	102	0	0	0	985	(s)	45	4	49
1985 Total	24	0	926	0	0	0	0	950	(s)	53	2	55
1990 Total	84	0	1,448	0	0	0	0	1,532	17	53	16	86
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 Total	27	0	3,785	2	35	151	16	4,015	189	63	263	516
2003 January	0	0	342	0	0	23	0	365	27	4	28	60
February	0	0	293	0	0	21	0	314	28	6	25	59
March	3	0	298	0	2	26	0	329	32	6	17	55
April	11	0	285	0	0	19	3	317	26	6	20	52
May	4	0	282	0	0	30	11	328	18	4	29	50
June	3	0	262	0	0	34	11	310	20	3	30	54
July	5	0	288	0	3	44	5	345	16	7	27	50
August	3	0	288	0	0	35	11	337	16	5	30	51
September	8	0	272	0	6	29	11	326	21	5	28	55
October	11	0	279	0	3	38	6	336	20	8	33	61
November	3	0	275	0	0	40	4	322	32	6	33	71
December	3	0	327	0	0	37	0	367	38	6	32	76
Total	53	0	3,490	0	14	378	61	3,996	294	64	333	692
2004 January	7	0	320	0	0	43	3	373	31	5	31	67
February	8	0	297	0	0	41	0	346	38	5	27	70
March	11	0	300	0	0	38	0	349	56	6	30	91
April	8	0	279	0	3	35	0	325	33	6	24	62
May	5	3	273	0	3	36	6	327	27	2	32	61
June	16	3	285	0	0	34	4	342	24	4	36	64
July	11	6	300	0	3	38	17	375	23	6	38	67
August	22	0	301	0	0	38	0	360	23	6	39	67
September	7	0	288	0	0	41	9	345	30	7	37	74
October	8	0	288	0	3	36	0	336	22	5	34	61
November	3	0	328	0	0	38	0	369	46	6	35	86
December	14	3	349	0	0	44	3	413	43	6	34	83
Total	120	15	3,607	0	12	462	43	4,259	395	62	397	854
2005 January	6	0	E 344	0	0	44	8	E 402	E 25	6	E 32	E 63
February	11	0	E 303	0	3	39	0	E 356	E 27	6	E 32	E 65
March	3	0	RE 331	0	0	40	3	RE 377	<sup>E</sup> 34	6	E 32	E 72
April	9	0	E 297	0	0	36	3	E 344	E 24	6	E 32	E 62
4-Month Total	29	0	E 1,274	0	3	159	14	E 1,479	E 110	22	E 129	<sup>E</sup> 261
2004 4-Month Total	34	0	1,196	0	3	157	3	1,393	157	21	111	290
2003 4-Month Total	14	0	1,218	0	2	90	3	1,326	113	21	91	225

a As liquefied natural gas.

not equal sum of components due to independent rounding. • U.S. geographic

coverage is the 50 States and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see

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

Sources: • 1973-1987: Energy Information Administration (EIA), Form FPC-14, "Annual Report for Importers and Exporters of Natural Gas." • 1988-1999: EIA, Natural Gas Annual, annual reports. • 2000 forward: EIA, Natural Gas Monthly, June 2005, Tables 5 and 6; and Department of Energy, Office of Fossil Energy, "Natural Gas Imports and Exports."

As liquefied natural gas.
 By pipeline, except for very small amounts of liquefied natural gas imported from Canada in 1973, 1977, and 1981 and exported to Mexico beginning in 1998. See Note 9, "Imports and Exports," at end of section.
 Brunei in 2002; Indonesia in 1986 and 2000; Malaysia in 1999 and 2002

forward; Nigeria in 2000 forward; Oman in 2000 forward; and United Arab Emirates in 1996-2000

R=Revised. E=Estimate. (s)=Less than 500 million cubic feet.

Notes: • See Note 9, "Imports and Exports," at end of section. • Totals may

Table 4.4 Natural Gas Consumption by Sector

					End-Use	Sectors						
					Industrial			Trai	nsportatio	n		
	Resi-	Com-	Lease and		Other Industr	ial		Pipelines <sup>d</sup> and Dis-	Vehicle		Electric Power	
	dential	merciala	Plant Fuel	CHPb	Non-CHP <sup>c</sup>	Total	Total	tribution <sup>e</sup>	Fuel	Total	Sector <sup>f,g</sup>	Total
1973 Total	4,879	2,597	1,496	( <sup>h</sup> )	8,689	8,689	10,185	728	NA	728	3,660	22,049
1975 Total	4,924	2,508	1,396	(h)	6,968	6,968	8,365	583	NA	583	3,158	19,538
1980 Total		2,611	1,026	(h)	7,172	7,172	8,198	635	NA	635	3,682	19,877
1985 Total		2,432	966	( h )	5,901	5,901	6,867	504	NA	504	3,044	17,281
1990 Total	4,391	2,623	1,236	1,055	5,963	<sup>1</sup> 7,018	8,255	660	(s)	660	3,245	19,174
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		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		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 Total	4,889	3,144	1,113	1,240	6,267	7,507	8,620	667	15	682	5,672	23,007
<b>2003</b> January	946	522	96	106	580	686	782	82	E 2	84	382	2,716
February	884	487	87	91	549	640	727	76	E 1	77	335	2,511
March	675	391	98	94	522	615	713	66	E 2	68	361	2,207
April	414	263	93	91	484	574	668	52	E 2	53	352	1,750
May	248	181	94	94	462	556	651	45	E 2	46	394	1,520
June	157	138	92	94	414	508	600	40	E 2	42	436	1,372
July	126	132	93	99	474	573	666	47	E 2	49	630	1,603
August	116	131	95	102	475	577	672	49	E 2	50	684	1,653
September	129	137	92	95	466	561	653	42	E 2	43	469	1,430
October	232	181	96	95	506	601	697	46	E 2 E 2	48	409	1,566
November	414	260	92	90	506	596	687	52	E 2	54	348	1,763
December	739	394	95	93	557	650	745	68	E 18	70	336	2,284
Total	5,078	3,217	1,123	1,144	5,995	7,139	8,262	665	- 18	683	5,135	22,375
<b>2004</b> January	967	488	E 96	97	<sup>R</sup> 595	692	788	80	E 2	81	352	2,677
February	861	458	E 89	97	R 562	659	R 749	75	E 2	76	366	2,510
March	593	R 342	E 95	95	545	R 640	735	62	E 2	64	367	2,103
April	381	R 241	E 92	91	510	601 R 502	R 693	52	E 2	54	384	1,753
May	214	164 <sup>R</sup> 131	E 93 E 91	99	484	<sup>R</sup> 583 <sup>R</sup> 575	R 676	47	E 2 E 2	49	473	1,575
June	145 126	<sup>R</sup> 121	E 95	95 107	480 475	``575 582	666 <sup>R</sup> 677	44 47	E 2	46 49	500 616	1,488
July			E 94				R 689		E 2			1,588
August	119 125	122 <sup>R</sup> 124	E 88	104 98	490 <sup>R</sup> 485	594 583	* 689 R 671	47 44	E 2	49 46	599 519	1,577
September	216	166	E 92	98 92	511	R 604	R 696	44 46	E 2	46 48	432	1,485 1,558
October November	407	R 245	E 90	92	R 531	620	710	46 53	E 2	48 55	432 366	1,558
December	724	R 386	E 94	90 97	577	620 674	710 768	53 69	E 2	55 71	377	2,327
Total	4,878	R <b>2,989</b>	E 1,110	1,162	R <b>6,246</b>	R <b>7,407</b>	R <b>8,518</b>	<b>666</b>	E <b>20</b>	687	5,352	2,327 <b>22,424</b>
		R 469	E 94					77	E <sub>2</sub>	70	•	
2005 January	890 756	** 469 ** 415	RE 85	93 84	<sup>R</sup> 594 517	<sup>R</sup> 687 601	781 <sup>R</sup> 687	77 67	E 2	79 69	386 331	<sup>R</sup> 2,605 <sup>R</sup> 2,258
February		R 378	E 95	92			704	66	E 2		389	R 2,258
March	677 383	**378 247	E 91	92 89	517	610 577	704 668	52	E 2	68 54	389	1,751
April <b>4-Month Total</b>	2,706	1, <b>508</b>	E <b>365</b>	<b>358</b>	488 <b>2,117</b>	2,475	2,841	262	E <b>7</b>	54 <b>270</b>	1, <b>505</b>	8,830
2004 4-Month Total	2.803	1,530	<sup>E</sup> 373	380	2,212	2,593	2,965	269	E 7	275	1,469	9,042
2004 4-Month Total	,	1,664	374	380 382	2,212	2,593 2,516	2,965 2,890	269 276	E 6	275 282	1,469	9,042 9,184

<sup>&</sup>lt;sup>a</sup> All commercial sector fuel use, including that at commercial combined-heat-and-power (CHP) and commercial electricity-only plants. See

Table 7.4c for CHP fuel use.

b Industrial combined-heat-and-power (CHP) and a small number of industrial

electrity-only plants.  $^{\rm C}$  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 Natural gas used as fuel in the delivery of natural gas to consumers.

f 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.

 $<sup>^{\</sup>rm g}$  Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

h Included in "Non-CHP."

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

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

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/natgas.html.

Notes and Sources: See end of section.

Table 4.5 Natural Gas in Underground Storage

(Volumes in Billion Cubic Feet)

	U	Natural Gas in nderground Storag End of Period	θ,	Change in W From San Previou	ne Period	s	torage Activity	
	Base Gas	Working Gas	Totala	Volume	Percent	Withdrawals	Injections	Net <sup>b,c</sup>
1973 Total	2,864	2,034	4,898	305	17.6	1,533	1,974	-442
1975 Total	3,162	2,212	5,374	162	7.9	1,760	2,104	-344
1980 Total	3,642	2,655	6,297	-99	-3.6	1,910	1,896	14
1985 Total	3,842	2,607	6,448	-270	-9.4	2,359	2,128	231
1990 Total	3,868	3,068	6,936	555	22.1	1,934	2,433	-499
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 Total	4,340	2,375	6,715	-528	-18.2	3,138	2,670	468
2003 January	4,344	1,522	5,866	-822	-35.1	884	44	840
February	4,337	851	5,187	-987	-53.7	724	47	677
March	4,326	730	5,056	-788	-51.9	306	171	135
April	4,317	893	5,210	-765	-46.1	119	277	-158
May	4,324	1,298	5,622	-671	-34.1	41	453	-412
June	4,325	1,765	6,090	-543	-23.5	36	505	-469
July	4,325	2,126	6,451	-413	-16.3	64	426	-361
August	4,327	2,436	6,763	-338	-12.2	62	372	-310
September	4,328	2,845	7,173	-196	-6.5	31	442	-411
October	4,327	3,130	7,457	14	.5	59	343	-284
November	4,303	3,038	7,341	109	3.7	228	142	87
December	4,303	2,563	6,866	187	7.9	544	70	474
Total	4,303	2,563	6,866	187	7.9	3,099	3,292	-193
2004 January	4,301	1,751	6,052	217	14.1	869	59	811
February	4,297	1,156	5,452	292	33.8	646	47	600
March	4,283	1,058	5,342	328	45.0	269	165	103
April	4,283	1,252	5,535	357	39.8	95	293	-198
May	4,287	1,624	5,911	323	24.9	43	421	-379
June	4,284	2,023	6,307	255	14.4	31	428	-397
July	4,287	2,395	6,681	266	12.5	56	422	-366
August	4,262	2,743	7,005	307	12.6	57	402	-345
September	4,254	3,057	7,310	214	7.5	65	390	-325
October	4,246	3,302	7,548	172	5.5	60	307	-248
November	4,235	3,245	7,479	207	6.8	189	124	65
December	4,201	2,696	6,897	133	5.2	622	55	567
Total	4,201	2,696	6,897	133	5.2	3,003	3,113	-110
2005 January	4,205	1,994	6,199	243	13.9	772	59	713
February	4,204	1,564	5,769	409	35.4	488	59	429
March	4,200	1,284	5,484	226	21.3	385	101	284
April	4,200	1,499	5,699	246	19.7	72	288	-216
4-Month Total	<i>-</i>	· <del>-</del>	· <del>-</del>	_	-	1,716	506	1,210
2004 4-Month Total	_	_	_	_	_	1,880	564	1,316
2003 4-Month Total	_	_	_	_	_	2,034	540	1,494

<sup>&</sup>lt;sup>a</sup> For total underground storage capacity at the end of each calendar year, see Note 2, "Storage," at end of section.

<sup>b</sup> For 1980-2003, data differ from those shown on Table 4.1, which include

liquefied natural gas storage for that period.

<sup>C</sup> Positive numbers indicate that withdrawals are greater than injections.

Negative numbers indicate that injections are greater than withdrawals. Net withdrawals or injections may not equal the difference between applicable ending stocks. See Note 2, "Storage," at end of section.

<sup>- =</sup>Not applicable.

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

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/natgas.html.

Sources: See end of section.

# **Natural Gas**

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

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

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

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

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

<b>1975</b> 6,280	<b>1985</b> 8,087	<b>1995</b> 7,953
<b>1976</b> 6,544	<b>1986</b> 8,145	<b>1996</b> 7,980
<b>1977</b> 6,678	<b>1987</b> 8,124	<b>1997</b> 8,332
<b>1978</b> 6,890	<b>1988</b> 8,124	<b>1998</b> 8,179
<b>1979</b> 6,929	<b>1989</b> 8,124	<b>1999</b> 8,229
<b>1980</b> 7,434	<b>1990</b> 8,125	<b>2000</b> 8,241
<b>1981</b> 7,805	<b>1991</b> 7,993	<b>2001</b> 8,415
<b>1982</b> 7,915	<b>1992</b> 7,932	<b>2002</b> 8,207
<b>1983</b> 7,985	<b>1993</b> 7,989	<b>2003</b> 8,206
<b>1984</b> 8,043	<b>1994</b> 8,043	

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

The final monthly and annual storage and withdrawal data for 1980–2003 include both underground and liquefied natural gas (LNG) storage. Annual data on LNG additions and withdrawals are from Form EIA-176. Monthly data are estimated by computing the ratio of each month's underground storage additions and withdrawals to annual underground storage additions and withdrawals and applying the ratio to the annual LNG data.

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

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

**Note 4. Consumption:** Consumption includes use for lease and plant fuel, pipelines and distribution, vehicle fuel, and electric power plants, as well as deliveries to residential, commercial, and other industrial customers.

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

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

**Note 6. Nonhydrocarbon Gases Removed**: Annual data on nonhydrocarbon gases removed from marketed 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, Brunei, Indonesia, Malaysia, Nigeria, Oman, Qatar, Trinidad and Tobago, and the United Arab Emirates. In addition, very small amounts of LNG arrived from Canada in 1973 (667 million cubic feet), 1977 (572 million cubic feet), and 1981 (6 million cubic feet). The United States exports natural gas via pipeline to Canada and Mexico and exports LNG via tanker to Japan. Also, small amounts of LNG have gone to Mexico since 1998.

Annual and final monthly data are from the annual EIA Form FPC-14, "Annual Report for Importers and Exporters

of Natural Gas," which requires data to be reported by month for the calendar year.

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

# Table 4.4 Notes:

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

# Table 4.4 Sources:

# Residential, Commercial, Lease and Plant Fuel, Other Industrial Total, and Pipelines and Distribution

1973–1999: Energy Information Administration (EIA), *Natural Gas Annual (NGA)*, annual reports.

2000 forward: EIA, *Natural Gas Monthly (NGM)*, June 2005, Table 3.

#### **Industrial CHP**

Table 7.4c.

#### Vehicle Fuel:

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

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

2000 forward: EIA, NGM, June 2005, Table 3.

#### **Electric Power Sector**

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

All Other Data: Calculated.

#### Table 4.5 Sources:

# **Storage Activity**

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

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

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

1996–1999: EIA, *Natural Gas Monthly (NGM)*, monthly issues.

2000 forward: EIA, NGM, June 2005, Table 9.

# Other Data

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

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

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

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

1996–2002: EIA, NGM, monthly issues.

2003 forward: EIA, *NGM*, June 2005, Table 9.

# Section 5. Crude Oil and Natural Gas Resource Development

The June 2005 rotary rig count was 1,355, 3 percent higher than the count in May 2005 and 15 percent higher than the count in June 2004. Of the total number of rigs in operation, 1,259 were onshore and 96 were offshore. For June 2005, the number of onshore rigs was up 17 percent but the number of offshore rigs was the same as the June 2004 count. Rotary rigs drilling for natural gas as a share of total rigs stood at 89 percent in June 2005.

Total footage drilled in June 2005 was 18.5 million feet, 2 percent higher than the footage drilled in May 2005 and up 9 percent from that drilled in June 2004.

The number of exploratory and development crude oil and natural gas wells drilled during June 2005 was 2,846, 2 percent higher than the number drilled in May 2005 and up 17 percent from the number drilled in June 2004. The

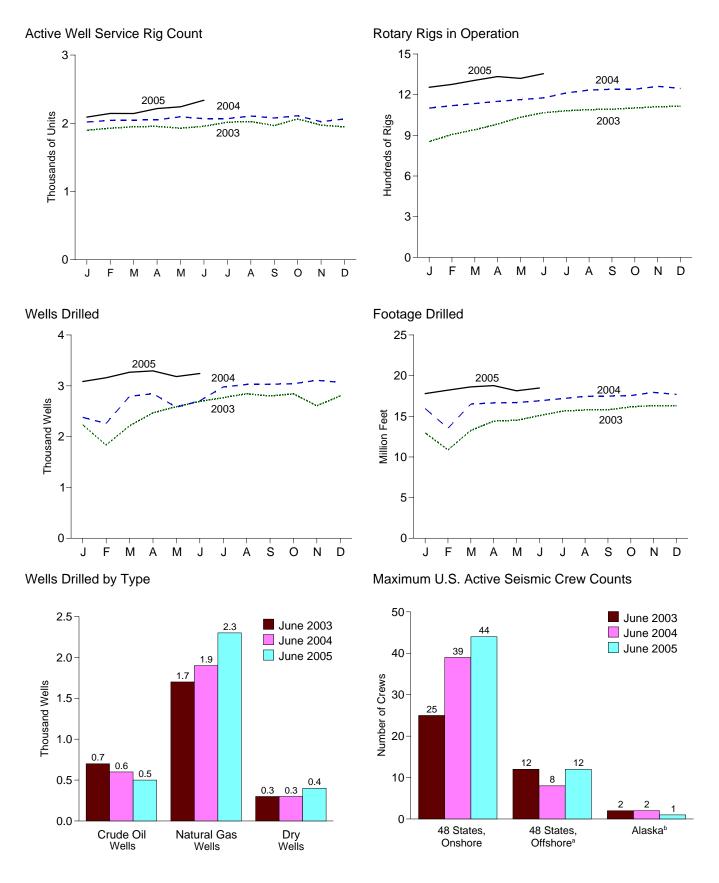
number of crude oil wells drilled was 535, and the number of natural gas wells was 2,311, 6 percent lower and 24 percent higher, respectively, than their June 2004 levels.

The number of dry holes drilled in June 2005 was 396, up 2 percent from the number drilled in May 2005 and up 46 percent from the number drilled in June 2004.

There were 2.3 thousand well service rigs active in June 2005, 4 percent higher than the previous month and 13 percent higher than the count a year ago.

The number of seismic crews active in the 48 States onshore in June 2005 was 44, 5 more than a year earlier. The number of crews active in the 48 States offshore was 12, 4 more than a year earlier. One crew was active in Alaska in June 2005, 1 less crew than a year earlier.

Figure 5.1 Crude Oil and Natural Gas Resource Development Indicators



<sup>&</sup>lt;sup>a</sup>Federal and State Jurisdiction waters of the Gulf of Mexico. <sup>b</sup>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

	Ву	Site	Ву	Туре		Total Footage	Active Well Service	
	Onshore	Offshore	Crude Oil	Natural Gas	Total <sup>b</sup>	Drilled <sup>c</sup>	Rig Count <sup>d</sup>	
			Thousand Feet	Number				
1973 Average	1,110	84	NA	NA	1,194	138,223	NA	
1975 Average	1,554	106	NA	NA	1,660	180,494	NA	
1980 Average	2,678	231	NA	NA	2,909	314,654	NA	
1985 Average	1,774	206	NA	NA	1,980	313,045	NA	
1990 Average	902	108	532	464	1,010	153,701	NA	
1995 Average	622	101	323	385	723	117,832	NA NA	
1996 Average	671	108	306	464	779	129,045	NA NA	
1997 Average	821	122	376	564	943	156,661	NA NA	
1998 Average	703	123	264	560	827	143,454	NA NA	
	703 519	106	128	496	625	99,410	NA NA	
1999 Average 2000 Average	778	140	197	720	918	141,392	NA NA	
2000 Average	1.003	153	217	939	1,156	187,616	NA NA	
2001 Average 2002 Average	717	113	137	691	830	138,310	1,830	
_	740	444	400	740	054	40.000	4.000	
2003 January	743	111	132	718	854	12,962	1,898	
February	797	110	153	750	907	10,866	1,928	
March	836	105	171	767	941	13,269	1,950	
April	877	106	185	795	983	14,409	1,954	
May	921	113	167	864	1,034	14,515	1,927	
June	958	109	152	910	1,067	15,080	1,957	
July	974	107	153	924	1,081	15,637	2,016	
August	979	111	153	932	1,090	15,776	2,026	
September	984	109	154	936	1,093	15,796	1,966	
October	997	105	158	941	1,102	16,156	2,064	
November	1,005	106	158	952	1,111	16,307	1,973	
December	1,010	104	153	959	1,114	16,301	1,946	
Average	924	108	157	872	1,032	177,074	1,967	
2004 January	1,001	100	143	955	1,101	15,957	2,019	
February	1,020	99	153	961	1,119	13,531	2,043	
March	1,041	94	164	968	1,135	16,508	2,047	
April	1,058	93	154	996	1,151	16,642	2,050	
May	1,068	96	156	1,007	1,164	16,687	2,095	
June	1,080	96	164	1,011	1,176	16,905	2,067	
July	1,116	97	170	1,041	1,213	17,174	2,068	
August	1,139	95	170	1,063	1,234	17,462	2,106	
September	1,148	92	166	1,073	1,240	17,485	2,078	
October	1,145	95	171	1,068	1,240	17,543	2,111	
November	1.160	102	183	1.077	1,262	17,936	2.024	
December	1.140	106	180	1.064	1,246	17.693	2.063	
Average	1,095	97	165	1,025	1,192	201,523	2,064	
2005 January	1.153	102	178	1.075	1,255	17,791	2.091	
February	1,170	106	192	1.083	1,276	18,218	2.144	
March	1,209	97	186	1,118	1,306	18,622	2,143	
April	1,241	93	171	1,163	1,334	18,776	2,143	
May	1,229	93 91	150	1,163	1,320	18.138	2,210	
June	1,259	96	146	1,170	1,355	18,480	2,338	
6-Month Average	1,239	9 <b>7</b>	170	1,206 1,137	1,309	110,025	2,336 <b>2,196</b>	
2004 6-Month Average	1,045	96	155	983	1,141	96,230	2,054	
2004 6-Month Average	854	109	159	800	963	81,101	2,054 1,936	
- voo v monin Average	334	103	133	300	303	01,101	1,330	

<sup>&</sup>lt;sup>a</sup> Rotary rigs in operation are reported weekly. 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

average, crewed and working every day of the month.

NA=Not available.

Note: Geographic coverage is the 50 States and the District of Columbia. Web Page: For annual data not displayed between 1973 and 1995, see 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.

<sup>&</sup>lt;sup>b</sup> 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.

 $<sup>^{\</sup>rm d}$  The number of rigs doing true workovers (where tubing is pulled from the well), or doing rod string and pump repair operations, and that are, on

Table 5.2 Crude Oil and Natural Gas Wells Drilled

(Number of Wells)

		Explo	ratory			Develo	pment		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
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
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
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
1990 Total	654	689	3,715	5,058	11,544	10,355	4,598	26,497	12,198	11,044	8,313	31,555
1995 Total	542	570	2,198	3,310	7,085	7,784	2,877	17,746	7,627	8,354	5,075	21,056
1996 Total	483	570	2,136	3,189	7,831	8,732	3,146	19,709	8,314	9,302	5,282	22,898
1997 Total	428	536	2,110	3,074	10,008	10,791	3,592	24,391	10,436	11,327	5,702	27,465
1998 Total	291	504	1,647	2,442	6,773	10,640	3,193	20,606	7,064	11,144	4,840	23,048
1999 Total	157	539	1,195	1,891	4,019	10,338	2,217	16,574	4,176	10,877	3,412	18,465
2000 Total	268	607	1,288	2,163	7,090	15,848	2,737	25,675	7,358	16,455	4,025	27,838
2001 Total	322	988	R 1,692	R 3,002	7,738	21,095	R 2,392	R 31,225	8,060	22,083	4,084	34,227
2002 Total	234	668	1,253	2,155	5,824	15,487	2,328	23,639	6,058	16,155	3,581	25,794
			•	-	·	-, -	•	•	•	.,	•	-
2003 January	23	49	106	178	528	1,326	202	2,056	551	1,375	308	2,234
February	27	35	68	130	434	1,113	157	1,704	461	1,148	225	1,834
March	22	46	86	154	493	1,423	142	2,058	515	1,469	228	2,212
April	21	65	92	178	621	1,458	211	2,290	642	1,523	303	2,468
May	22	53	91	166	627	1,601	197	2,425	649	1,654	288	2,591
June	35	53	98	186	632	1,690	184	2,506	667	1,743	282	2,692
July	32	76	133	241	637	1,694	195	2,526	669	1,770	328	2,767
August	32	77	112	221	635	1,708	279	2,622	667	1,785	391	2,843
September	26	95	97	218	658	1,698	227	2,583	684	1,793	324	2,801
October	28	95	132	255	622	1,707	258	2,587	650	1,802	390	2,842
November	28	92	134	254	448	1,731	174	2,353	476	1,823	308	2,607
December	17	95	134	246	636	1,742	178	2,556	653	1,837	312	2,802
Total	313	831	1,283	2,427	6,971	18,891	2,404	28,266	7,284	19,722	3,687	30,693
2004 January	26	71	115	212	R 560	1.439	168	R 2.167	R 586	1.510	283	R 2.379
February	22	94	66	182	512	1.423	142	2.077	534	1,517	208	2,259
March	24	84	119	227	550	1.786	230	2.566	574	1.870	349	2,793
April	32	74	90	196	605	1,850	194	2,649	637	1,924	284	2,845
May	31	75	102	208	599	1,577	196	2,372	630	1,652	298	2,580
June	24	75	96	195	547	1,787	175	2,509	571	1,862	271	2,704
July	25	77	127	229	570	1,934	245	2.749	595	2,011	372	2,978
August	25	79	129	233	570	1,975	249	2,794	595	2.054	378	3,027
September	24	79	129	232	556	1,994	249	2,799	580	2.073	378	3.031
October	25	79	130	234	572	1,985	250	2,807	597	2,064	380	3,041
November	26	80	133	239	613	2,001	256	2,870	639	2,004	389	3,109
December	26	79	131	236	603	1,976	252	2,831	629	2,055	383	3,067
Total	310	946	1,367	2,623	R 6,857	21,727	2,606	R 31,190	R 7,167	22,673	3,973	R 33,813
	00	0.0	100	000	50-	4.000	050	0.040	00:	0.076	00-	0.00.
2005 January	26 28	80 80	132 135	238 243	595 643	1,998 2,012	253 260	2,846 2,915	621 671	2,078 2,092	385 395	3,084 3,158
February	28 29	80 87	138	243 254	670	2,012	259	3,013	699		395	3,158
March	29 26	90	138	254 255	608	2,084	263	3,013	634	2,171 2,258	402	3,267 3,294
April	23	90	135	255 248	526	2,168	253 254	2,934	549	2,258 2,244	389	3,294 3,182
May	23 22	90		248 253					549 535		389 396	
June 6-Month Total	22 1 <b>54</b>	520	138 <b>817</b>	253 <b>1,491</b>	513 <b>3,555</b>	2,218 <b>12,634</b>	258 <b>1,547</b>	2,989 <b>17,736</b>	3, <b>709</b>	2,311 <b>13,154</b>	2,364	3,242 <b>19,227</b>
				•	,	•	•	*	,	,	,	•
2004 6-Month Total 2003 6-Month Total	159 150	473 301	588 541	1,220 992	3,373 3,335	9,862 8,611	1,105 1,093	14,340 13,039	3,532 3,485	10,335 8,912	1,693 1,634	15,560 14,031

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: For annual data not displayed between 1973 and 1995, see 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 <sup>a</sup>				Alaska <sup>b</sup>				
	Dimensions <sup>c</sup>			Dimensions <sup>c</sup>				Dimensions <sup>c</sup>					
	2	3	4	Totald	2	3	4	Totald	2	3	4	Totald	Total
<b>000</b> June	5	37	1	43	7	9	0	17	1	2	0	3	63
<b>001</b> June	6	35	1	42	9	7	0	16	1	1	Ö	2	60
<b>002</b> June	9	23	Ö	32	9	7	0	16	i	i	0	2	50
002 Julie	9	23	U	32	9	1	U	10			U	2	50
003 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	Ö	30	7	4	Ō	11	1	1	0	2	43
September	8	22	Ö	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	Ö	31	4	3	Ö	7	Ö	Ö	Ö	Ö	38
December	7	25	Ō	32	5	5	0	10	0	0	0	0	42
<b>004</b> January	8	25	0	33	5	5	0	10	0	0	0	0	43
February	8	27	Ö	35	5	5	Õ	10	0	Ö	Õ	0	45
March	8	27	Ö	35	5	5	Õ	10	0	Õ	Õ	0	45
April	9	27	Ö	36	5	4	0	9	0	0	0	0	45
May	9	26	Ö	35	5	4	Ö	9	Ö	Ö	Õ	Ö	44
June	9	30	0	39	4	4	0	8	0	2	0	2	49
July	8	30	0	38	4	4	0	8	0	2	0	2	48
August	8	31	0	39	4	4	0	8	0	2	0	2	49
September	8	32	0	40	4	2	0	6	0	2	0	2	48
October	8	34	0	42	2	2	0	4	0	2	0	2	48
November	9	33	0	42	1	4	0	5	0	2	0	2	49
December	9	32	0	41	3	4	0	7	0	2	0	2	50
December	9	32	U	41	3	4	U	,	U	2	U	2	30
005 January	8	33	0	41	5	4	0	9	0	2	0	2	52
February	8	34	0	42	5	4	0	9	Ō	2	0	2	53
March	6	33	Ö	39	6	6	Ö	12	Ö	0	Ö	ō	51
April	8	30	0	38	6	6	Õ	12	0	Õ	Õ	0	50
May	8	34	Ö	42	7	6	0	13	Ö	Ö	0	Ö	55
June	9	35	0	44	7	5	0	12	0	1	0	1	57

<sup>&</sup>lt;sup>a</sup> Federal and State Jurisdiction waters of the Gulf of Mexico.

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: For monthly data beginning March 2000, see http://www.eia.doe.gov/emeu/mer/resource.html.

Source: World Geophysical News, IHS Energy Group, Denver, CO, used

with permission.

<sup>&</sup>lt;sup>b</sup> All onshore.

<sup>&</sup>lt;sup>c</sup> 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

# Crude Oil and Natural Gas Resource Development

#### Table 5.2 Notes

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

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

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

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

# Section 6. Coal

Coal production in June 2005 totaled 94 million short tons, 2 percent lower than in June 2004.

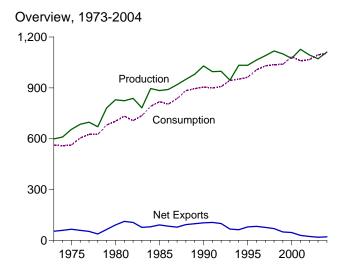
Coal consumed by the electric power sector in April 2005 was 74 million short tons, 2 percent higher than the level in April 2004.

Electric power sector coal stocks were 116 million short

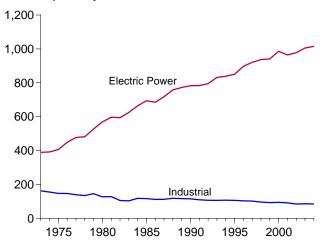
tons at the end of April 2005, 4 percent lower than the level a year earlier.

Coal exports in May 2005 totaled 5 million short tons, 2 percent higher than exports in May 2004. Coal imports in May 2005 totaled 2 million short tons, 8 percent higher than imports in May 2004.

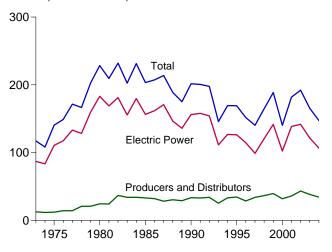
Figure 6.1 Coal (Million Short Tons)



# Consumption by Sector, 1973-2004

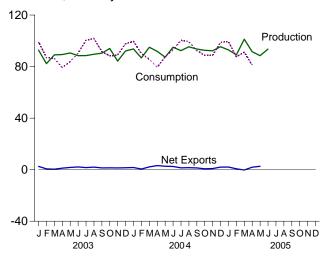


# Stocks, End of Year, 1973-2004

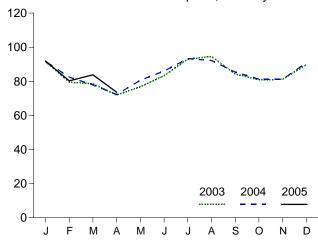


Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/coal.html. Sources: Tables 6.1, 6.2, and 6.3.

# Overview, Monthly



# Electric Power Sector Consumption, Monthly



# Electric Power Sector Stocks, End of Month

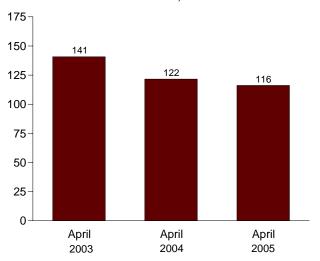


Table 6.1 Coal Overview

(Thousand Short Tons)

	Productiona	Waste Coal <sup>b,c</sup>	Imports	Exports	Stock Change <sup>d</sup>	Losses and Unaccounted fore	Consumption
					- 4 -		
973 Total	598,568	NA	127	53,587	( <sup>f</sup> )	g <b>-17,476</b>	562,584
975 Total	654,641	NA	940	66,309	32,154	-5,522	562,640
980 Total	829,700	NA	1,194	91,742	25,595	10,827	702,730
985 Total	883,638	NA	1,952	92,680	-27,934	2,796	818,049
990 Total	1,029,076	3,339	2,699	105,804	26,542	-1,730	904,498
995 Total	1,032,974	8,561	9,473	88,547	-275	632	962,104
996 Total	1,063,856	8,778	8,115	90,473	-17,456	1,411	1,006,321
997 Total	1,089,932	8,096	7,487	83,545	-11,253	3,678	1,029,544
998 Total	1,117,535	8,690	8,724	78,048	24,228	-4,430	1,037,103
999 Total	1,100,431	8.683	9,089	58,476	23,988	-2,906	1,038,647
000 Total	1,073,612	9,089	12,513	58,489	-48,309	938	1,084,095
001 Total	1,127,689	(°)	19,787	48,666	41,630	-2.966	1,060,146
002 Total	1,094,283	(°)	16,875	39,601	10,215	-5,012	1,066,355
003 January	92.804	(°)	1.134	3.680	-6.051	-2.718	99.026
February	82,264	(c)	1,804	2,428	-3,488	-1.904	87,032
March	89.134	(°)	2,017	2,420	4.064	-1,505	86,182
	, -	(°)		, -	,		
April	89,378	(°)	2,390	3,571	6,634	2,251	79,312
May	90,610	(°)	2,109	3,875	4,490	464	83,889
June	88,511	(°)	1,894	4,003	-2,803	-1,302	90,508
July	88,534	(°)	2,619	4,223	-11,519	-1,932	100,381
August	89,586	( )	2,133	4,164	-10,204	-4,113	101,872
September	90,444	(°)	2,300	3,707	-4,539	2,067	91,510
October	94,058	( ° )	2,545	3,997	2,134	2,078	88,395
November	84,266	( ° )	2,358	3,737	-433	-5,627	88,947
December	92,163	( c )	1,742	3,219	-4,945	-2,176	97,808
Total	1,071,753	(°)	25,044	43,014	-26,659	-14,419	1,094,861
<b>004</b> January	93,681	(°)	1,748	3,447	-13,475	5,855	99,602
February	86,767	( c )	1,789	2,276	-3,288	-537	90,105
March	95,023	(°)	1,788	3,965	6,336	891	85,620
April	91,850	(°)	2,157	5,359	9,357	-191	79,482
May	87,311	(°)	2,232	4,910	-263	-2,837	87,732
June	95.048	(°)	2.464	4.987	-2.508	1.976	93.058
July	92,401	(c)	2,531	3,957	-5,627	-3,816	100,418
August	95,354	(°)	2,494	4,067	-6,015	430	99,367
September	93,647	(°)	2,779	4,178	-5,072	4,867	92,453
October	92,635	(c)	2,678	3,358	7,162	-4,017	88,810
November	92,288	(c)	2,258	3.144	3,121	-527	88,809
December	95.472	(c)	2,361	4.350	-7.948	2.620	98.811
Total	1,111,479	(°)	27,280	47,998	-18,221	4,715	1,104,267
005 January	92,935	(°)	2,014	4,075	-9,585	1,071	99.389
February	89,166	(c)	2,315	3,008	2,227	-1,291	87,537
March	101,278	(c)	3,277	3.046	6,922	3,304	91.283
April	91,614	(c)	2,376	4,294	R 13,342	R -4,841	R 81,196
May	88,514	(c)	R 2,402	R 5.010	13,342 NA	-4,041 NA	NA
June	93.567	(°)	2,402 NA	NA	NA NA	NA NA	NA NA
6-Month Total	<b>557,074</b>	(°)	NA NA	NA NA	NA NA	NA NA	NA NA
004 6-Month Total 003 6-Month Total	549,681 532,701	(°)	12,179 11,347	24,943 19,968	-3,840 2,846	5,158 -4,715	535,599 525,949

<sup>&</sup>lt;sup>a</sup> Beginning in 2001, includes bituminous refuse.

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

f Included in "Losses and Unaccounted for."

Included in "Losses and Unaccounted for.

Includes stock change.

R=Revised. NA=Not available.

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

• For methodology used to calculate production, consumption, and stocks, see Notes 1.2 and 3 at end of section. Notes 1, 2, and 3 at end of section.

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/coal.html.

Sources: See end of section.

b Waste coal (including anthractie 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".

Counted as a энрру эле польтор по "Consumption."

<sup>©</sup> 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,

# Table 6.2 Coal Consumption by Sector

(Thousand Short Tons)

					End-Us	e Sectors						
			Commerci	al			Industrial					
	Resi-				Coke	Other Industrial		al		Trans-	Electric Power	
	dential	СНРа	Otherb	Total	Plants	CHPc	Non-CHP <sup>d</sup>	Total	Total	portation	Sector <sup>e,f</sup>	Total
1973 Total	4,113	( <sup>g</sup> )	7,004	7,004	94,101	( h )	68,038	68,038	162,139	116	389,212	562,584
1975 Total	2,823	( <sup>g</sup> )	6,587	6,587	83,598	(h)	63,646	63,646	147,244	24	405,962	562,640
1980 Total	1,355	(g)	5,097	5,097	66,657	(h)	60,347	60,347	127,004	( h )	569,274	702,730
1985 Total	1,711	( <sup>g</sup> )	6,068	6,068	41,056	(h)	75,372	75,372	116,429	(h)	693,841	818,049
1990 Total	1,345	1,191	4,189	5,379	38,877	27,781	48,549	76,330	115,207	( <sup>h</sup> )	782,567	904,498
1995 Total	755	1,419	3,633	5,052	33,011	29,363	43,693	73,055	106,067	(")	850,230	962,104
1996 Total	721	1,660	3,625	5,285	31,706	29,434	42,254	71,689	103,395	(h) (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	585 454	1,490	2,803	4,293	28,108	27,763	36,975	64,738	92,846	( '' ) ( h )	940,922	1,038,647
2000 Total	454 481	1,547	2,126	3,673	28,939	28,031	37,177 30,514	65,208	94,147	( '' ) ( h )	985,821	1,084,095
2002 Total	481 489	1,448 1,405	2,441 2,551	3,888 3,956	26,075 23,656	25,755 26,232	39,514 34,515	65,268 60,747	91,344 84,403	( h )	964,433 977,507	1,060,146 1,066,355
2002 Total	469	1,405	2,551	3,936	23,030	20,232	34,515	60,747	84,403	( )	977,507	1,000,333
<b>2003</b> January	57	171	290	461	1,941	2,286	2,919	5,206	7,147	(	91,361	99,026
February	48	152	234	386	1,958	2,010	3,182	5,192	7,150	( '' ) ( h )	79,447	87,032
March	35	155	129	284	2,105	2,072	3,130	5,202	7,307	( '' )	78,557	86,182
April	40	137	186	323	2,047	1,895	3,007	4,903	6,950	( '' )	72,000	79,312
May	28	137	93	230	1,964	2,029	2,866	4,895	6,859	( h )	76,772	83,889
June	25	144	58	202	2,059	1,998	2,911	4,909	6,968	( h )	83,313	90,508
July	35	159	127	287	2,079	2,183	2,802	4,985	7,064	( h )	92,994	100,381
August	35 23	164 146	121	285	2,007	2,200	2,780	4,980	6,987	( h )	94,565	101,872
September	23 28	140	36 83	183 224	2,024 2,001	1,957 2,008	3,029 3,277	4,986 5,285	7,010 7,286	(h)	84,294 80,857	91,510 88,395
October November	44	141	212	355	1,976	1,981	3,389	5,265	7,200	( h )	81,202	88.947
December	68	165	386	551	2.087	2.227	3,122	5,349	7,343	(h)	89.753	97.808
Total	466	1,816	1,954	3,770	24,248	24,846	36,415	61,261	85,509	(h)	1,005,116	1,094,861
<b>2004</b> January	60	165	319	484	1,996	2,779	2,587	5,365	7,361	(h)	91,698	99,602
February	48	152	237	389	1,829	2,320	3,079	5,399	7,228	ìhί	82,439	90,105
March	32	140	117	258	2,080	2,329	3,080	5,409	7,489	(h)	77,841	85,620
April	39	113	201	314	2,023	2,192	2,663	4,855	6,878	(h)	72,251	79,482
May	28	127	97	224	1,974	2,206	2,679	4,885	6,859	ìh;	80,621	87,732
June	27	126	90	216	1,934	2,291	2,590	4,881	6,815	(h)	86,001	93,058
July	36	128	167	295	1,918	2,439	2,447	4,886	6,804	(h)	93,283	100,418
August	31	128	125	253	1,996	2,386	2,505	4,891	6,888	(h)	92,195	99,367
September	25	116	90	206	1,979	2,207	2,654	4,861	6,840	(h)	85,382	92,453
October	27	107	111	218	2,002	2,248	3,020	5,269	7,270	(h)	81,294	88,810
November	44	130	223	353	1,937	2,154	3,103	5,257	7,194	( h )	81,218	88,809
December	69	139	420	559	2,003	2,444	2,833	5,276	7,279	(h)	90,903	98,811
Total	466	1,574	2,196	3,770	23,670	27,996	33,239	61,235	84,906	( h )	1,015,126	1,104,267
2005 January	55	196	252	448	1,865	2,177	2,973	5,151	7,016	( <sup>h</sup> )	91,869	99,389
February	43	172	176	348	1,778	2,060	3,088	5,148	6,926	( h )	80,221	87,537
March	41	178	157	335	1,941	2,147	2,993	5,140	7,081	įhj	83,825	91,283
April	F 44	138	<sup>F</sup> 214	<sup>F</sup> 352	F 2,101	1,977	<sup>F</sup> 3,161	F 5,138	F 7,239	(h)	73,562	81,196
4-Month Total	E 183	684	<sup>E</sup> 799	<sup>E</sup> 1,483	E 7,685	8,362	E 12,215	E 20,576	E 28,261	(h)	329,477	359,405
2004 4-Month Total	179	571	874	1,445	7,928	9,620	11,409	21,029	28,956	( h )	324,229	354,809
2003 4-Month Total	180	615	838	1,453	8,051	8,264	12,239	20,502	28,554	( h )	321,365	351,552

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.

<sup>b</sup> 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.

<sup>&</sup>lt;sup>d</sup> All industrial sector fuel use other than that in "Coke Plants" and "Industrial

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."

<sup>&</sup>quot;Included in "industrial Non-Crip.

E=Estimate. F=Forecast.

Notes: • CHP monthly data are from Table 7.4c; electric power sector monthly data are from Table 7.4b; all other monthly values are estimated. See Note 2 at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see 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

Table 6.3 Coal Stocks by Sector

(Thousand Short Tons)

	Producers	Residential		Industrial			Electric	
	and Distributors	and Commercial	Coke Plants	Othera	Total	Total	Power Sector <sup>b,c</sup>	Total
973 Year	12,530	290	6,998	10,370	17,368	17,658	86.967	117,155
975 Year	12,108	233	8,797	8,529	17,326	17,559	110,724	140,391
980 Year	24,379	NA	9,067	11,951	21,018	21,018	183,010	228,407
985 Year	33,133	NA NA	3,420	10,438	13,857	13.857	156,376	203,367
990 Year	33,418	NA NA	3,329	8,716	12,044	12,044	156,166	201,629
995 Year	34,444	NA NA	2,632	5,702	8,334	8,334	126,304	169,083
996 Year	28,648	NA NA	2,667	5,688	8,355	8,355	114,623	151,627
997 Year	33,973	NA NA	1,978	5,597	7,576	7,576	98,826	140,374
998 Year	36,530	NA NA	2,026	5,545	7,571	7,571	120,501	164,602
999 Year	39,475	NA NA	1,943	5,569	7,511	7,511	° 141.604	188,590
000 Year	31,905	NA NA	1,494	4,587	6,081	6,081	102,296	140,282
001 Year	35,900	NA NA	1,510	6,006	7,516	7,516	138,496	181,912
002 Year	43.257	NA NA	1,364	5.792	7,316 7,156	7,316 7.156	141.714	192,127
002 rear	43,237	NA	1,304	5,792	7,150	7,130	141,714	192,127
<b>003</b> January	44,648	NA	1,353	5,314	6,667	6,667	134,761	186,075
February	46,039	NA	1,341	4,837	6,177	6,177	130,372	182,588
March	47,429	NA	1,329	4,359	5,688	5,688	133,536	186,652
April	46,903	NA	1,377	4,297	5,674	5,674	140,709	193,286
May	46,012	NA	1,426	4,234	5,660	5,660	146,104	197,776
June	45,070	NA	1,474	4,172	5,646	5,646	144,257	194,973
July	42,735	NA	1,345	4,407	5,751	5,751	134,968	183,454
August	40,647	NA	1,215	4,642	5,857	5,857	126,747	173,251
September	38,231	NA	1,085	4,878	5,963	5,963	124,518	168,712
October	37,352	NA	1,025	4,824	5,849	5,849	127,645	170,846
November	37,984	NA	965	4,771	5,736	5,736	126,692	170,413
December	38,277	NA	905	4,718	5,623	5,623	121,567	165,468
<b>004</b> January	F 33,486	NA	1,020	4,458	5,478	5,478	113,029	151,993
February	<sup>F</sup> 34,947	NA	1,134	4,197	5,332	5,332	108,426	148,705
March	F 36,618	NA	1,249	3,937	5,186	5,186	113,237	155,041
April	F 37,489	NA	1,278	4,056	5,334	5,334	121,575	164,398
May	F 34,587	NA NA	1,307	4,175	5,482	5,482	124,066	164,136
June	F 35.299	NA.	1,336	4,294	5,630	5,630	120,698	161,627
July	F 38,147	NA NA	1,289	4,482	5,771	5,771	112,081	156,000
August	F 35,357	NA NA	1,242	4,671	5,913	5.913	108,714	149,984
September	F 31,939	NA NA	1,196	4,859	6,055	6.055	106,714	149,904
October	F 34,251	NA NA	1,245	4,853	6,098	6,098	111,725	152,075
November	F 35.752	NA NA	1,245	4,853 4.848	6,098	6,098	111,725	152,075
December	F <b>34,352</b>	NA NA	1,294 <b>1,344</b>	4,848 <b>4,842</b>	6,186	6,142 <b>6,186</b>	106,709	147,247
205 (	F 00, 400	NIA	4.540	4.707	0.040	0.040	07.000	407.000
005 January	F 33,486	NA	1,512	4,727	6,240	6,240	97,936	137,662
February	F 34,947	NA	1,681	4,612	6,293	6,293	98,648	139,888
March	F 34,863	NA	1,849	4,498	6,347	6,347	105,601	146,811
April	<sup>F</sup> 37,489	NA	<sup>F</sup> 1,845	<sup>F</sup> 4,700	<sup>F</sup> 6,545	<sup>F</sup> 6,545	116,118	160,153

<sup>&</sup>lt;sup>a</sup> 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.

NA=Not available. F=Forecast.

Notes: • Stocks are at end of period. • Producer and distributor monthly values

are estimates derived from collected annual data; end-use sector monthly values are estimates derived from collected quarterly data; and electric power sector monthly values are data from Table 7.5. See Note 3 at end of section.

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

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

Web Page: For annual data not displayed between 1973 and 1995, see 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.

plants only.

<sup>b</sup> 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.

<sup>&</sup>lt;sup>c</sup> Through 1998, data are for stocks at electric utilities only. Beginning in 1999, data also include stocks at independent power producers.

# 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. 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 2003 share is applied to 2004 and succeeding years, and the other missing years' shares are interpolated.

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

Industrial Other—Prior to 1978, monthly consumption data for the other industrial sector (all industrial users minus coke plants) were derived by using reported data to modify baseline consumption figures from the most recent Bureau of the Census Annual Survey of Manufactures or Census of Manufactures. For 1978 and 1979, monthly estimates were derived from data reported on Forms EIA-3 and EIA-6. From 1980-1987, monthly figures were estimated by proportioning quarterly data by using the ratios of monthlyto-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 Gover-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 (released in March, June, September, and December) or annual values. The estimates are revised as collected data become available from the data sources. Sector-specific information follows.

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

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

Industrial Coke Plants—Prior to 1980, monthly stocks at coke plants were taken directly from reported data. From 1980 forward, coke plant stocks are estimated by using 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.

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

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

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

# **Table 6.1 Sources**

#### **Production**

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

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

#### **Waste Coal**

EIA, Form EIA-860B, "Annual Electric Generator 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).

# **Stock Change**

Calculated from data in Table 6.3.

# Losses and Unaccounted for

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

# Consumption

Table 6.2.

#### Table 6.2 Sources

#### **Residential and Commercial**

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

January–September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers-Upper Lake Docks." October 1977–1979: Energy Information Administration (EIA), Form EIA-2, "Monthly Coal Report, Retail 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."

1980–1997: EIA, Form EIA-3, "Quarterly Coal Consumption Report-Manufacturing Plants," and Form EIA-6, "Coal Distribution Report," quarterly.

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

# **Transportation**

1973–1976: DOI, BOM, Minerals Yearbook.

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

#### **Electric Power**

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

# **Table 6.3 Sources**

# **Producers and Distributors**

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

1980–1997: Energy Information Administration (EIA), Form EIA-6, "Coal Distribution Report," quarterly."

1998 forward: EIA, Form EIA-6A, "Coal Distribution Report," annual.

# Residential and Commercial

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

January-September 1977: DOI, BOM, Form 6-1400, "Monthly Coal Report, Retail Dealers-Upper Lake Docks." October 1977–1979: EIA, Form EIA-2, "Monthly Coal Report, Retail Dealers-Upper Lake Docks."

#### **Industrial Coke Plants**

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

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

1981–1984: EIA, Form EIA 5/5A, "Coke Plant 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 7.5.

# Section 7. Electricity

**Overview.** In 2004, net generation of electricity totaled 4.0 trillion kilowatthours, up 2 percent compared with the total in 2003. Of the total generated, 96 percent came from the electric power sector; 4 percent was generated by combined-heat-and-power plants and electricity-only plants in the industrial and commercial sectors. The Nation imported 34 billion kilowatthours and exported 23 billion kilowatthours of electricity in 2004.

**Net Generation.** In April 2005, total net generation of electricity was 291 billion kilowatthours, slightly higher than April 2004.

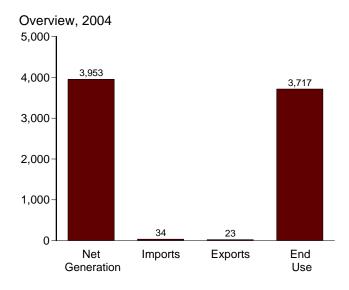
Consumption of Combustible Fuels. The consumption of coal for electricity generation and useful thermal output by all sectors was 76 million short tons in April 2005, 2 percent higher than in April 2004. Total petroleum consumption was 13 million barrels, 21 percent lower than a year earlier.

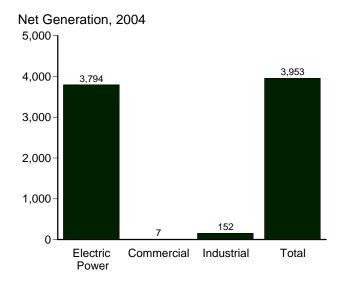
Natural gas consumption was 493 billion cubic feet, 3 percent higher than a year ago.

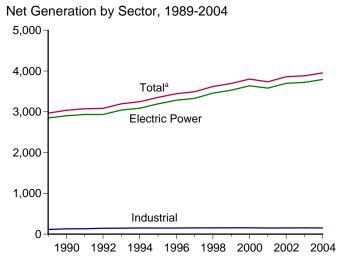
**Stocks of Coal and Petroleum.** Stocks of coal held by the electric power sector in April 2005 were 116 million short tons, 4 percent below the level held a year earlier. Total petroleum was 45 million barrels in April 2005, 5 percent lower than a year earlier.

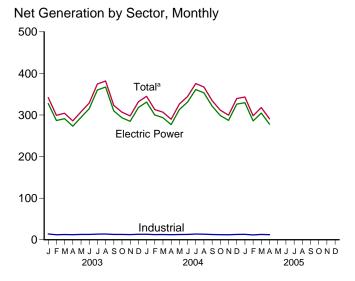
Retail Sales of Electricity. Total retail sales of electricity in April 2005 were 266 billion kilowatthours, 1 percent higher than sales in April 2004. Sales to residential users in April 2005 were 87 billion kilowatthours, 2 percent higher than a year ago; commercial sector sales were 95 billion kilowatthours, 2 percent higher than a year ago; and industrial sector sales were 84 billion kilowatthours, slightly higher than a year ago.

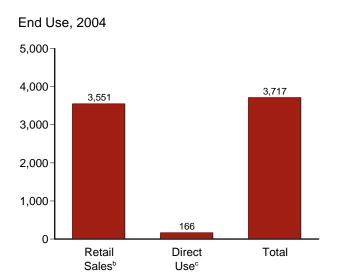
Figure 7.1 Electricity Overview (Billion Kilowatthours)

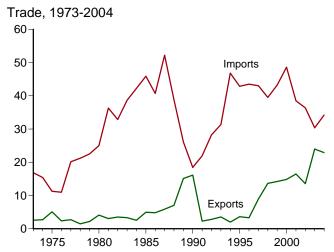












alncludes commercial sector.

<sup>b</sup>Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.

°See "Direct Use" in Glossary.

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 Gen	eration						End Use	
	Electric Power Sector <sup>a</sup>	Commercial Sector <sup>b</sup>	Industrial Sector <sup>c</sup>	Total	Importsd	Exportsd	T&D Losses <sup>e</sup> - and Unaccounted for <sup>f</sup>	Retail Sales	Direct Use <sup>h</sup>	Total
1973 Total	1,861	NA	3	1,864	17	3	165	1,713	NA	1,713
1975 Total	1,918	NA	3	1,921	11	5	180	1,747	NA	1,747
1980 Total	2,286	NA	3	2,290	25	4	216	2,094	NA	2,094
1985 Total	2,470	NA	3	2,473	46	5	190	2,324	NA	2,324
1990 Total	2.901	6	131	3.038	18	16	203	2.713	125	2.837
1995 Total	3,194	8	151	3,353	43	4	229	3,013	151	3,164
1996 Total	3.284	9	151	3,444	43	3	231	3,101	153	3,254
1997 Total	3,329	9	154	3,492	43	9	224	3,146	156	3,302
1998 Total	3,457	9	154	3,620	40	14	221	3,264	161	3,425
1999 Total	3,530	9	156	3,695	43	14	240	3,312	172	3,484
2000 Total	3,638	8	157	3,802	49	15	244	3,421	171	3,592
2001 Total	3,580	7	149	3,737	39	16	226	3,370	163	3,532
2002 Total	3,698	7	153	3,858	36	14	253	3,463	166	3,629
2002 Total	3,030	•	133	3,030	30		255	3,403	100	3,023
2003 January	327	1	14	342	3	1	21	307	<sup>E</sup> 15	323
February	287	1	12	299	3	2	5	282	<sup>E</sup> 13	295
March	291	1	13	304	3	3	17	273	E 14	287
April	273	1	12	286	3	2	18	256	E 13	269
May	294	1	13	308	3	2	26	268	E 14	282
June	315	1	13	329	3	2	27	288	E 14	302
July	360	1	14	374	4	1	30	332	E 15	347
August	367	1	14	382	4	1	29	340	E 15	355
September	310	1	13	323	2	2	3	306	E 14	320
October	293	1	13	307	1	3	14	277	E 14	291
November	285	1	12	298	1	2	20	263	E 13	277
December	318	1	13	332	2	2	24	203	E 14	308
Total	3,721	7	1 <b>55</b>	3,883	30	24	233	3,488	168	3,656
	•			•				,	-	•
<b>2004</b> January	331	1	13	345	2	2	24	307	E 14	322
February	300	1	12	313	2	2	12	287	<sup>E</sup> 13	301
March	293	1	13	307	2	3	14	278	<sup>E</sup> 14	292
April	277	1	12	290	2	2	14	263	E 13	276
May	313	1	13	326	2	2	33	280	<sup>E</sup> 14	293
June	331	1	13	344	3	2	23	308	E 14	322
July	361	1	14	376	4	1	29	335	<sup>E</sup> 15	350
August	353	1	13	367	5	1	25	332	<sup>E</sup> 15	346
September	321	1	13	335	3	2	13	309	<sup>E</sup> 14	323
October	299	1	12	311	3	2	17	282	E 13	295
November	287	1	12	300	3	2	18	270	E 13	283
December	326	1	13	340	3	2	28	300	E 14	313
Total	3,794	7	152	3,953	34	23	248	3,551	<sup>E</sup> 166	3,717
<b>2005</b> January	330	1	13	343	3	2	20	310	E 14	324
February	286	1	12	298	3	1	5	282	E 13	295
March	305	1	13	318	3	1	18	288	E 14	302
April	278	1	12	291	3	1	13	266	E 13	279
4-Month Total	1,198	3	50	1, <b>250</b>	13	5	<b>57</b>	∠00 1,146	E <b>54</b>	1, <b>200</b>
2004 4 Manth Tatal	4.000	•	<b>50</b>	4.055	•	•	64	4.405	Fee	4.400
2004 4-Month Total 2003 4-Month Total	1,202 1,178	2 2	50 51	1,255 1,231	8 11	9 8	64 61	1,135 1,118	E 55 E 55	1,190 1,174

<sup>&</sup>lt;sup>a</sup> Electricity-only and combined-heat-and-power (CHP) plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 1988, data are for electric utilities only; beginning in 1989, data

E=Estimate. NA=Not available.

Notes: • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/elect.html.

Sources: See end of section.

are for electric utilities and independent power producers

b Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

<sup>&</sup>lt;sup>c</sup> Industrial combined-heat-and-power (CHP) and industrial electricity-only plants. Through 1988, data are for industrial hydroelectric power only.

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

e Transmission and distribution losses (electricity losses that occur between the point of generation and delivery to the customer). See Note 12, "Electrical System Energy Losses," at end of Section 2.

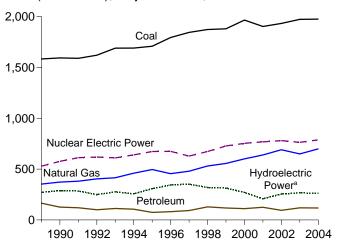
Data collection frame differences and nonsampling error.

<sup>&</sup>lt;sup>9</sup> Electricity retail sales to ultimate customers by electric utilities and, beginning in 1996, other energy service providers.

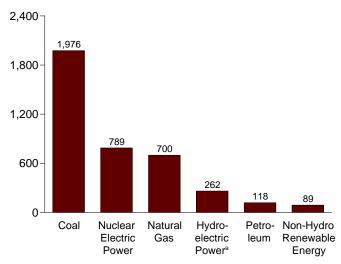
h Use of electricity that is 1) self-generated, 2) produced by either the same entity that consumes the power or an affiliate, and 3) used in direct support of a service or industrial process located within the same facility or group of facilities that house the generating equipment. Direct use is exclusive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

Figure 7.2 Electricity Net Generation (Billion Kilowatthours)

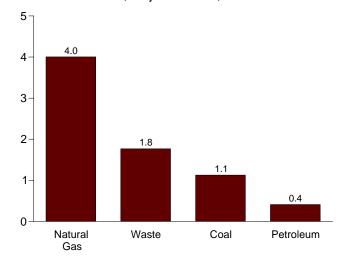
Total (All Sectors), Major Sources, 1989-2004



Total (All Sectors), Major Sources, 2004

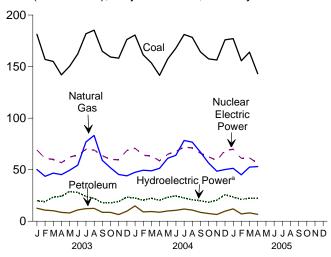


Commercial Sector, Major Sources, 2004

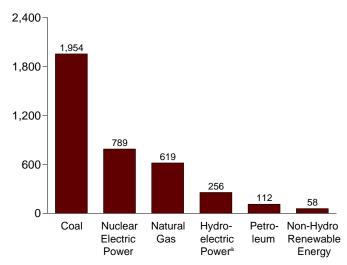


<sup>&</sup>lt;sup>a</sup>Conventional and pumped storage hydroelectric power.

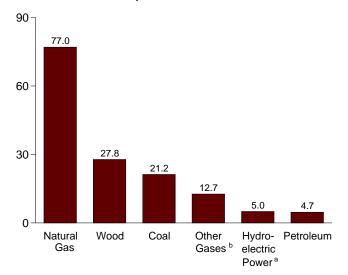
Total (All Sectors), Major Sources, Monthly



Electric Power Sector, Major Sources, 2004



Industrial Sector, Major Sources, 2004



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

<sup>&</sup>lt;sup>b</sup>Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

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

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

	Fossil Fuels								Renewable	Energy			
	<b>Coal</b> <sup>a</sup>	Petro- leum <sup>b</sup>	Natural Gas <sup>c</sup>	Other Gases <sup>d</sup>	Nuclear Electric Power	Hydro- electric Pumped Storage <sup>e</sup>	Conven- tional Hydro- electric Power	Wood <sup>f</sup>	<b>Waste</b> <sup>9</sup>	Geo- thermal	Solar <sup>h</sup>	Wind	Total <sup>i</sup>
						, is							
1973 Total	847,651	314,343	340,858	NA	83,479	(¹)	275,431	130	198	1,966	NA	NA	1,864,057
1975 Total	852,786	289,095	299,778	NA	172,505	(¹)	303,153	18	174	3,246	NA	NA	1,920,755
1980 Total		245,994	346,240	NA	251,116	(¹)	279,182	275	158	5,073	NA	NA	2,289,600
1985 Total		100,202	291,946	NA 40.000	383,691	(1)	284,311	743	640	9,325	11	6	2,473,002
1990 Total <sup>k</sup>		126,621	372,765	10,383	576,862	-3,508	292,866	32,522	13,260	15,434	367	2,789	3,037,988
1995 Total		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		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		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	, ,	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 Total	1,933,130	94,567	691,006	11,463	780,064	-8,743	264,329	38,665	22,857	14,491	555	10,354	3,858,452
2003 January	181,313	12,642	50,176	1,283	69,211	-802	20,600	3,269	1,981	1,258	13	632	341,989
February	156,982	10,770	43,547	1,132	60,942	-759	19,780	2,905	1,713	1,130	18	745	299,249
March	155,002	10,222	46,699	1,267	59,933	-778	24,202	3,080	1,993	1,213	50	1,036	304,317
April	141,960	8,581	45,195	1,305	56,776	-546	24,759	3,036	1,988	1,166	60	1,093	285,756
May	150,263	8,053	49,373	1,310	62,202	-597	29,395	2,928	1,992	1,169	68	1,006	307,545
June	162,285	11,000	54,453	1,235	64,181	-762	28,586	3,028	1,960	1,223	91	1,047	328,694
July	181,852	12,201	76,938	1,292	69,653	-745	24,843	3,361	2,105	1,228	62	953	374,396
August	185,332	12,478	83,250	1,284	69,024	-806	22,972	3,310	2,075	1,219	62	815	381,816
September	164,910	8,664	59,090	1,309	63,584	-769	18,480	3,079	1,956	1,203	56	895	323,136
October	159,323	8,610	51,824	1,291	60.016	-615	18,428	3,139	1,920	1,195	35	897	306,741
November	158,223	6,480	45,328	1,451	59,600	-695	19,715	3,119	1,937	1,151	14	961	297,867
December	176,291	9.705	44.035	1,441	68,612	-661	24.044	3.275	2,115	1,268	4	1.105	331,680
Total	1,973,737	119,406	649,908	15,600	763,733	-8,535	275,806	37,529	23,736	14,424	534	11,187	3,883,185
2004 January	180,624	14,840	47,485	1,170	70,806	-740	23,248	3,221	1,878	1,254	12	1,045	345,094
February	161,497	9,008	49,456	1,198	64,102	-657	21,117	3,001	1,703	1,177	18	1,063	313,087
March	153,572	9,419	48,947	1,276	63,263	-616	22,905	3,064	1,870	1,199	53	1,305	306,712
April	141,503	8,754	51,367	1,234	58,620	-636	21,012	3,032	1,891	1,119	57	1,300	289,775
May	157,397	9,986	61,075	1,253	64.917	-657	23.949	2.950	2.014	1.172	81	1.701	326,403
June	167,918	10,578	63,973	1,332	67,787	-690	25,248	3,040	1,961	1,190	88	1,360	344,290
July	181,196	11,811	78,379	1,321	71,975	-668	23,225	3,338	2,030	1,241	82	1,096	375,574
August	178,424	10,795	76,750	1,286	71,064	-792	21,730	3,205	2,010	1,219	73	992	367,307
September	164,251	8,579	67,021	1,332	65,932	-739	20,591	3,032	1,789	1,151	60	1,085	334,524
October	157,544	7,527	56,431	1,258	62,530	-667	19,077	3,196	1,842	1,240	33	1,028	311,486
November	156,427	6,554	48,559	1,178	58,941	-623	21,106	3,001	1,821	1,177	15	963	299,606
December	175,978	9,739	50,168	1,153	68,617	-607	26,429	3,215	1,937	1,216	8	1,215	339,548
Total	1,976,333	117,591	699,610	14,990	788,556	-8,092	269,637	37,295	22,747	14,356	579	14,153	3,953,407
2005 January	177 177	12.026	E1 277	1 210	60.000	600	24 207	2 222	1 000	1 212	0	1.024	242.060
2005 January	177,177 155,676	12,026	51,377	1,318 1.197	69,828 60.947	-699 -353	24,207	3,232 2.940	1,922 1,716	1,212 1.065	8 12	1,021	343,262
February	155,676	7,105 8,100	45,065 52,529	1,197	61,539	-353 -477	21,542 22,850	3,121	1,716	1,065	37	856 1,360	298,148 318,001
March	164,003	,	53,056	1,346	,	-344	22,685	2,930	1,885	,	57 57	1,482	,
April <b>4-Month Total</b>	143,154 <b>640,010</b>	6,731 <b>33,961</b>	202,027	5,257	56,137 <b>248,451</b>	-344 <b>-1,873</b>	22,685 <b>91,285</b>	2,930 <b>12,221</b>	7,885	1,193 <b>4,682</b>	115	4,720	290,710 <b>1,250,121</b>
	•	•	•	,	•	,	,	,	,	•		,	
2004 4-Month Total 2003 4-Month Total	637,197 635,257	42,021 42,216	197,255 185,617	4,878 4,986	256,792 246,862	-2,649 -2,884	88,281 89,341	12,317 12,290	7,342 7,675	4,749 4,767	139 141	4,714 3,507	1,254,668 1,231,311

<sup>&</sup>lt;sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

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.

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

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

<sup>&</sup>lt;sup>c</sup> Natural gas, plus a small amount of supplemental gaseous fuels that cannot

be identified separately.

<sup>d</sup> 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.

<sup>&</sup>lt;sup>g</sup> Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

h Solar thermal and photovoltaic energy.

<sup>&</sup>lt;sup>i</sup> 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, all data except hydroelectric are for electric utilities only; hydroelectric data through 1988 include industrial plants as well as electric utilities. Beginning in 1989, data are for electric utilities, independent power producers, commercial plants, and industrial plants.

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/elect.html.

Table 7.2b Electricity Net Generation: Electric Power Sector

(Subset of Table 7.2a; Million Kilowatthours)

		Fossil F	uels						Renewable	Energy			
	<b>Coal</b> <sup>a</sup>	Petro- leum <sup>b</sup>	Natural Gas <sup>c</sup>	Other Gases <sup>d</sup>	Nuclear Electric Power	Hydro- electric Pumped Storage <sup>e</sup>	Conven- tional Hydro- electric Power	Wood <sup>f</sup>	<b>W</b> aste <sup>g</sup>	Geo- thermal	Solar <sup>h</sup>	Wind	Total <sup>i</sup>
1973 Total	, ,	314,343	340,858	NA	83,479	( <sup>j</sup> )	272,083	130	198	1,966	NA	NA	1,860,710
1975 Total		289,095	299,778	NA	172,505	( <sup>j</sup> )	300,047	18	174	3,246	NA	NA	1,917,649
1980 Total		245,994	346,240	NA	251,116	( <sup>j</sup> )	276,021	275	158	5,073	NA	NA	2,286,439
1985 Total 1990 Total <sup>k</sup> 1995 Total	1,572,109	100,202 118,864 68,146	291,946 309,486 419,179	NA 621 1,927	383,691 576,862 673,402	-3,508 -2,725	281,149 289,753 305,410	743 7,032 7,597	640 11,500 17,986	9,325 15,434 13,378	11 367 497	2,789 3,164	2,469,841 2,901,322 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
	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 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 JanuaryFebruary	179,356	12,090	42,546	266	69,211	-802	20,239	863	1,745	1,258	13	632	327,446
	155,283	10,313	37,041	237	60,942	-759	19,474	763	1,504	1,130	18	745	286,699
March	153,323	9,747	39,959	229	59,933	-778	23,830	784	1,742	1,213	50	1,036	291,086
April	140,369	8,152	38,725	243	56,776	-546	24,512	730	1,728	1,166	60	1,093	273,016
May	148,574	7,603	42,536	251	62,202	-597	29,003	669	1,756	1,169	68	1,006	294,241
June	160,559	10,513	47,554	205	64,181	-762	28,217	743	1,727	1,223	91	1,047	315,306
July	180.006	11.682	69.623	212	69.653	-745	24,472	883	1.846	1,228	62	953	360.116
August	183,469	11,985	75,773	203	69,024	-806	22,597	888	1,821	1,219	62	815	367,420
September	163,243	8,222	52,178	205	63,584	-769	18,144	800	1,717	1,203	56	895	309,751
October	157,578	8,119	45,022	181	60,016	-615	18,093	788	1,678	1,195	35	897	293,289
November	156,536	6,080	38,942	210	59,600	-695	19,363	794	1,715	1,151	14	961	284,902
December	174,418	9,193	37,403	205	68,612	-661	23,568	822	1,864	1,268	534	1,105	317,887
Total	<b>1,952,714</b>	<b>113,697</b>	<b>567,303</b>	<b>2,647</b>	<b>763,733</b>	<b>-8,535</b>	<b>271,512</b>	<b>9,528</b>	<b>20,842</b>	<b>14,424</b>		<b>11,187</b>	<b>3,721,159</b>
2004 January	178,601	14,218	40,679	138	70,806	-740	22,720	814	1,651	1,254	12	1,045	331,253
February	159,669	8,568	42,909	171	64,102	-657	20,662	788	1,495	1,177	18	1,063	300,155
March	151,700	8,982	42,242	183	63,263	-616	22,483	788	1,636	1,199	53	1,305	293,443
April	139,746	8,345	44,979	190	58,620	-636	20,640	710	1,634	1,119	57	1,300	276,991
May	155,583	9,592	54,182	187	64,917	-657	23,568	717	1,747	1,172	81	1,701	313,106
June July	166,043 179,187	10,159 11,334	57,202 70,930	192 233	67,787 71,975	-690 -668	24,903 22,885	725 881	1,704 1,763	1,172 1,190 1,241	88 82	1,360 1,096	330,929 361,222
August	176,480	10,373	69,445	214	71,064	-792	21,368	853	1,740	1,219	73	992	353,336
September	162,478	8,204	60,073	250	65,932	-739	20,119	784	1,566	1,151	60	1,085	321,192
October	155,736	7,183	50,109	192	62,530	-667	18,650	804	1,612	1,240	33	1,028	298,677
November	154,688	6,200	42,302	193	58,941	-623	20,632	771	1,600	1,177	15	963	287,098
December	174,056	9,324	43,544	176	68,617	-607	25,866	852	1,712	1,216	8	1,215	326,196
Total	1,953,968	112,482	618,597	2,320	788,556	-8,092	264,497	9,489	19,859	14,356	579	14,153	3,793,599
February  March	175,400	11,323	44,795	198	69,828	-699	23,775	838	1,675	1,212	8	1,021	329,572
	154,004	6,653	38,884	204	60,947	-353	21,194	770	1,500	1,065	12	856	285,803
	162,202	7,646	45,787	290	61,539	-477	22,476	832	1,709	1,211	37	1,360	304,628
April	141,481	6,277	46,658	264	56,137	-344	22,339	672	1,650	1,193	57	1,482	277,944
4-Month Total	<b>633,086</b>	<b>31,898</b>	<b>176,125</b>	<b>956</b>	<b>248,451</b>	- <b>1,873</b>	<b>89,785</b>	<b>3,113</b>	<b>6,535</b>	<b>4,682</b>	<b>115</b>	<b>4,720</b>	<b>1,197,946</b>
2004 4-Month Total	629,716	40,114	170,809	682	256,792	-2,649	86,506	3,101	6,415	4,749	139	4,714	1,201,842
2003 4-Month Total	628,331	40,302	158,271	975	246,862	-2,884	88,055	3,140	6,720	4,767	141	3,507	1,178,247

<sup>&</sup>lt;sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

miscellaneous technologies, which are not separately displayed.

NA=Not available.

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: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/elect.html.

Sources: See end of section.

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

<sup>&</sup>lt;sup>c</sup> Natural gas, plus a small amount of supplemental gaseous fuels that cannot

be identified separately. Blast furnace gas, propane gas, and other manufactured and waste gases

derived from fossil fuels. Pumped storage facility production minus energy used for pumping.

Wood, black liquor, and other wood waste.

<sup>&</sup>lt;sup>9</sup> Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

Solar thermal and photovoltaic energy.

Includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and

J Included in "Conventional Hydroelectric Power.

<sup>&</sup>lt;sup>k</sup> Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

Table 7.2c Electricity Net Generation: Commercial and Industrial Sectors

(Subset of Table 7.2a; Million Kilowatthours)

		Com	mercial Se	ectora					Industria	I Sectorb			
	Coalc	Petro- leum <sup>d</sup>	Natural Gas <sup>e</sup>	Waste <sup>f</sup>	<b>Total</b> <sup>9</sup>	Coal <sup>c</sup>	Petro- leum <sup>d</sup>	Natural Gas <sup>e</sup>	Other Gases <sup>h</sup>	Hydro- power <sup>i</sup>	Wood <sup>j</sup>	Wastef	Total <sup>k</sup>
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
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 Total	992	431	4,310	1,572	7,415	21,525	4,403	79,013	9,493	3,825	29,643	1,104	152,580
2003 January	103	39	325	143	617	1,854	513	7,305	1,017	356	2,405	92	13,926
February	99	33	289	123	550	1,601	425	6,217	894	301	2,141	86	11,999
March	102	31	291	162	594	1,577	444	6,449	1,038	366	2,295	88	12,637
April	96	20	293	165	581	1,495	409	6,178	1,061	240	2,305	95	12,159
May	91	30	307	162	598	1,598	420	6,529	1,059	386	2,258	75	12,706
June	97	37	319	164	624	1,628	450	6,580	1,031	363	2,284	70	12,763
July	112	43	373	174	709	1,734	477	6,942	1,080	364	2,477	85	13,571
August	115	44	387	165	718	1,748	449	7,090	1,081	369	2,421	90	13,678
September	100	36	343	155	640	1,567	406	6,570	1,105	332	2,278	85	12,744
October	93	33	340	164	636	1,652	459	6,462	1,110	330	2,350	78	12,816
November	94	34	313	140	588	1,593	366	6,072	1,242	346	2,324	82	12,377
December	103	44	320	164	640	1,770	469	6,312	1,236	470	2,451	87	13,154
Total	1,206	423	3,899	1,881	7,496	19,817	5,285	78,705	12,953	4,222	27,988	1,012	154,530
2004 January	99	63	320	137	626	1,924	559	6,486	1,032	522	2,405	89	13,215
February	100	42	316	123	590	1,728	398	6,231	1,027	446	2,211	85	12,342
March	91	39	304	140	587	1,781	397	6,400	1,093	409	2,275	95	12,681
April	72	36	286	149	556	1.685	373	6.102	1.044	360	2,321	109	12,229
May	91	29	337	162	633	1,723	365	6,556	1,065	368	2,232	105	12,664
June	98	30	343	159	641	1.777	390	6,428	1,139	334	2,314	98	12,720
July	105	35	379	161	686	1,904	442	7,069	1,088	335	2,456	106	13,666
August	109	32	378	157	681	1.835	390	6.927	1.072	358	2.352	113	13.291
September	93	25	369	143	636	1,679	350	6,579	1,082	467	2,247	80	12,696
October	81	19	338	145	593	1,728	324	5.983	1.066	420	2.391	85	12.216
November	89	22	305	143	568	1,650	332	5,952	985	467	2,229	79	11,939
December	98	37	330	147	626	1,824	378	6.294	976	551	2,223	78	12,727
Total	1,126	410	4,005	1,766	7,423	21,239	4,699	77,008	12,669	5,036	27,793	1,122	152,385
2005 January	129	51	355	156	704	1.649	651	6,226	1,120	422	2,392	90	12,986
February	125	34	312	142	625	1,548	418	5.869	993	338	2,332	74	11,720
March	125	29	354	156	673	1,676	425	6.388	1.105	366	2,100	82	12.700
April	103	20	344	158	637	1,570	435	6,053	1,103	334	2,257	77	12,700
4-Month Total	482	134	1,366	<b>612</b>	2,640	<b>6,443</b>	1,929	<b>24,536</b>	4,301	1,459	9,105	324	49,535
2004 4-Month Total	361	180	1,226	549	2,359	7,119	1,727	25,219	4,196	1,737	9,212	378	50,467
2003 4-Month Total	400	123	1,198	594	2,343	6,527	1,791	26,148	4,010	1,262	9,146	361	50,721

<sup>&</sup>lt;sup>a</sup> Commercial combined-heat-and-power (CHP) and commercial

electricity-only plants.

b Industrial combined-heat-and-power (CHP) and industrial electricity-only

plants.  $^{\rm c}$  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.

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

<sup>g</sup> Includes a small amount of other gases, wood, and other, which are not

separately displayed.

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

Conventional hydroelectric power.

Wood, black liquor, and other wood waste.

Includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur,

and miscellaneous technologies, which are not separately displayed.

Notes:

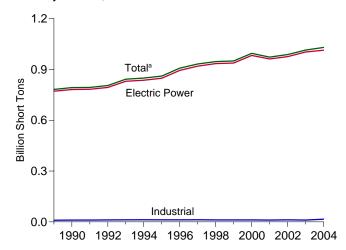
See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 states and the District

Web Page: For annual data not displayed between 1990 and 1995, see http://www.eia.doe.gov/emeu/mer/elect.html.

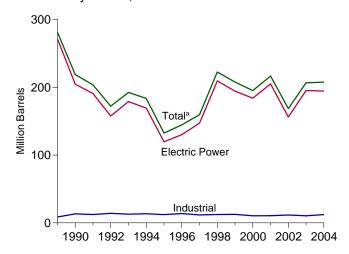
Sources: • 1989-1997: Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • 1998-2000: EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • 2001-2003: EIA, Form EIA-906, "Power Plant Report." • 2004 forward: EIA, Form EIA-906, "Power Plant Report" and Form EIA-920, "Combined Heat and Power Plant Report."

Figure 7.3 Consumption of Selected Combustible Fuels for Electricity Generation

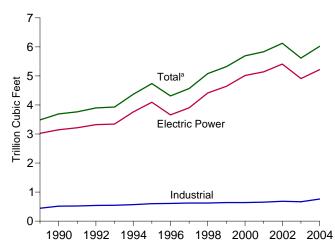




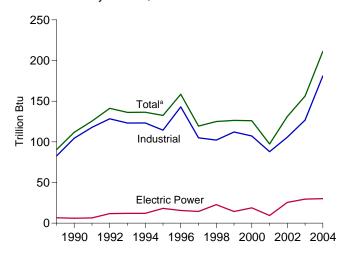
#### Petroleum by Sector, 1989-2004



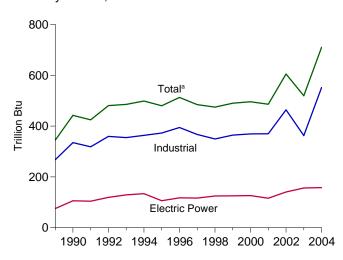
### Natural Gas by Sector, 1989-2004



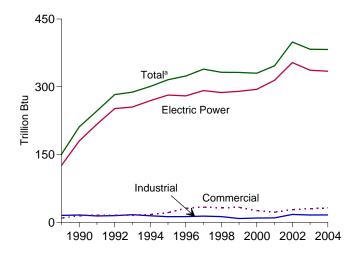
Other Gases<sup>b</sup> by Sector, 1989-2004



#### Wood by Sector, 1989-2004



#### Waste by Sector, 1989-2004



<sup>a</sup>Includes commercial sector.

<sup>b</sup>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: Total (All Sectors)

(Sum of Tables 7.3b and 7.3c)

				Petroleum							
	Coala	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>C</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Totale	Natural Gas <sup>f</sup>	Other Gases <sup>9</sup>	Woodh	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	TI	nousand Barre	els	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trill	ion Btu	
1072 Total	389,212	47.058	513,190	NA	507	562,781	3,660	NA	1	2	NA
1973 Total 1975 Total	405,962	38,907	467,221	NA NA	70	506,479	3,158	NA NA	(s)	2	NA NA
1980 Total	569.274	29.051	391.163	NA NA	179	421,110	3,682	NA	(3)	2	NA
1985 Total	693,841	14,635	158,779	NA	231	174,571	3,044	NA	8	7	NA
1990 Total k	792,457	18,143	190,849	437	1,914	218,997	3,692	112	442	211	36
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 Total	987,583	23,286	109,235	1,894	6,836	168,597	6,126	131	605	399	49
2003 January	92,161	4,699	14,553	485	423	21,850	427	14	46	32	4
February	80,128	4,006	12,425	371	391	18,756	373	12	39	28	3
March	79,207	2,949	12,701	331	342	17,692	400	12	43	32	4
April	72,672	1,646	10,940	161	479	15,144	389	13	41	32	3
May	77,559	2,688	8,808	134	455	13,906	437	12	39	33	4
June	84,060	3,071	12,875	203	541	18,852	479	13	43	32	4
July	93,797	2,545	15,033	261	623	20,956	672	14	46	34	6
August	95,352	2,196	15,995	358	613	21,612	728	14	46	34	8
September	85,003	1,362	10,443	188	596	14,976	509	13	43	32	7
October	81,618	1,428	10,090	166	612	14,745	448	13	43	31	7
November	81,941	1,271	6,917	132	602	11,329	384	13	42	30	5
December  Total	90,560 <b>1,014,058</b>	1,811 <b>29,672</b>	11,737 <b>142,518</b>	155 <b>2,947</b>	627 <b>6,303</b>	16,836 <b>206,653</b>	370 <b>5,616</b>	12 <b>156</b>	48 <b>519</b>	33 <b>383</b>	4 <b>59</b>
10141	1,014,000	20,0.2	1-12,010	2,041	0,000	200,000	0,010		0.0	000	
2004 January	92,995	4,169	17,830	854	700	26,353	412	18	64	31	1
February	83,637	1,371	11,396	153	587	15,858	426	17	59	29	1
March	79,093	1,339	12,007	178	596	16,502	424	19	62	32	2
April	73,420	1,230	11,059	158	614	15,518	433	18	60	32	2
May	81,761 87,100	1,721	12,691	179	627 568	17,726	528 552	19 18	55 57	33 33	2
June July	87,190 94,566	1,583 1,394	13,969 16,016	132 188	568 611	18,525 20,655	552 676	18	57 62	33 34	1 2
August	94,566	1,394	14,305	114	685	20,655 19,168	659	19	62 59	34 34	1
September	86,515	1,594	10,355	144	626	15,225	575	18	56	31	1
October	82,477	1,089	8,829	108	661	13,329	485	18	59	31	1
November	82,326	1,007	7,764	212	545	11,711	418	16	56	31	1
December	92,131	1,867	11,663	251	675	17,158	433	15	60	33	2
Total	1,029,564	19,690	147,885	2,671	7,497	207,729	6,020	211	710	383	18
2005 January	92,772	3,555	13,707	753	706	21,546	438	15	58	33	6
2005 January	92,772 81,107	3,555 949	8,306	753 89	634	12,514	436 378	18	58 53	33 29	3
March	84,740	1,098	9,596	106	673	14,164	440	20	52	33	3
April	74,430	1,116	7,516	219	620	11,953	446	16	47	32	4
4-Month Total	333,049	6,718	39,125	1,167	2,634	60,177	1,702	69	210	128	17
2004 4-Month Total	329,145	9 100	52 202	1 2/12	2 407	74,231	1,695	72	246	124	6
2004 4-Month Total	329,145 324,168	8,109 13,300	52,292 50,619	1,343 1,347	2,497 1,635	74,231 73,442	1,695	72 52	246 169	124	14
2003 <del>1-</del> MOHUI 10tai	327,100	13,300	50,013	1,341	1,033	13,442	1,509	32	109	144	14

<sup>&</sup>lt;sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and

and other biomass.

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

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

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/elect.html.

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

synthetic coal.

b Fuel oil nos. 1, 2, and 4. For 1973-1979, data are for gas turbine and internal combustion plant use of petroleum. For 1980-2000, electric utility data also include small amounts of kerosene and jet fuel.

<sup>&</sup>lt;sup>c</sup> Fuel oil nos. 5 and 6. For 1973-1979, data are for steam plant use of petroleum. For 1980-2000, electric utility data also include a small amount of fuel oil no. 4.

<sup>&</sup>lt;sup>d</sup> Jet fuel, kerosene, other petroleum liquids, and waste oil.

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

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.

Wood, black liquor, and other wood waste.

Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts,

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

Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities, independent power producers, commercial plants, and industrial plants.

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

				Petroleum							
	Coala	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Totale	Natural Gas <sup>f</sup>	Other Gases <sup>g</sup>	Woodh	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	Tł	nousand Barre	ls	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	n Btu	
1973 Total 1975 Total	389,212 405,962	47,058 38,907	513,190 467,221	NA NA	507 70	562,781 506,479	3,660 3,158	NA NA	1 (s)	2 2	NA NA
1980 Total	569,274	29,051	391,163	NA	179	421,110	3,682	NA	3	2	NA
1985 Total		14,635	158,779	NA_	231	174,571	3,044	NA_	8	7	NA_
1990 Total <sup>k</sup> 1995 Total	781,301 847,854	16,394 18,066	183,285 88,895	25 441	1,008 2,452	204,745 119,663	3,147 4,094	6 18	106 106	180 282	(s) 2
1996 Total	894.400	18,472	98,795	567	2,452 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 Total	975,251	21,810	104,577	1,243	5,705	156,154	5,408	25	141	353	7
2003 January	91,151	4,421	13,978	434	375	20,709	361	3	15	28	(s)
February	79,250	3,787	11,975	322	347	17,819	317	3	12	24	(s)
March	78,361	2,840	12,258	230	285	16,754	343	2	13	28	(s)
April	71,836	1,536	10,517	83	434	14,307	334	3	11	28	(s)
May	76,608	2,470	8,432	78	408	13,021	379	2	11	29	(s)
June	83,153	2,824	12,499	96	492	17,876	419	2	12	29	(s)
July	92,825	2,356	14,610	128	569	19,936	612	2	14	30	2
August September	94,394 84,141	2,034 1,197	15,578 10,094	189 90	564 547	20,621 14,114	664 450	2 2	15 13	30 28	4
October	80,707	1,197	9,654	90 85	558	13,749	389	2	13	27	3
November	81,040	1,098	6,534	87	568	10,556	329	2	13	27	2
December	89,570	1,660	11,234	116	573	15,873	313	2	14	29	1
Total	1,003,036	27,441	137,361	1,937	5,719	195,336	4,909	30	156	337	16
2004 January	91,530	3,839	16,934	795	635	24,741	341	2	14	27	(s)
February	82,278	1,254	10,729	105	532	14,745	355	3	13	25	(s)
March	77,692	1,205	11,357	119	543	15,394	357	3	13	28	(s)
April	72,121	1,082	10,492	87	542	14,370	372	3	12	28	(s)
May	80,453	1,620	12,149	122	566	16,718	460	3	12	29	(s)
June	85,838	1,487	13,390	81	513	17,525	487	3	12	29	(s)
July	93,126	1,294	15,417	91	546	19,531	603	3	15	29	(s)
August	92,050	1,238	13,720	56 90	615	18,087	587 508	2	14 13	29	(s)
September October	85,243 81,149	1,500 1,006	9,812 8,308	90 50	565 603	14,228 12,381	508 422	3	13	27 27	(s) (s)
November	81,077	935	7,262	156	482	10,762	356	2	13	27	(s)
December	90,728	1,765	10,989	216	610	16,020	367	2	14	29	(s)
Total	1,013,284	18,226	140,557	1,967	6,750	194,502	5,217	30	158	334	1
<b>2005</b> January	91,689	3,089	12,961	662	633	19,876	374	3	14	29	2
February	80,072	871	7,663	39	579	11,466	318	5	13	25	1
March	83,663	1,008	8,982	51	603	13,056	376	6	14	29	(s)
April	73,435	1,010	7,038	114	555	10,938	385	2	11	28	1
4-Month Total	328,859	5,977	36,643	867	2,370	55,336	1,453	16	53	111	4
2004 4-Month Total 2003 4-Month Total	323,620 320,597	7,381 12,584	49,512 48,727	1,105 1,070	2,250 1,442	69,250 69,589	1,425 1,354	10 11	52 51	108 108	(s) 1

 $<sup>^{\</sup>rm a}$  Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

derived from fossil fuels.

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

Notes and Sources: See end of section.

<sup>&</sup>lt;sup>b</sup> Fuel oil nos. 1, 2, and 4. For 1973-1979, data are for gas turbine and internal combustion plant use of petroleum. For 1980-2000, electric utility data also include small amounts of kerosene and jet fuel.

<sup>&</sup>lt;sup>c</sup> Fuel oil nos. 5 and 6. For 1973-1979, data are for steam plant use of petroleum. For 1980-2000, electric utility data also include a small amount of fuel oil no. 4.

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

<sup>&</sup>lt;sup>e</sup> 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.

<sup>&</sup>lt;sup>g</sup> Blast furnace gas, propane gas, and other manufactured and waste gases

h Wood, black liquor, and other wood waste.

<sup>&</sup>lt;sup>i</sup> Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

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

<sup>&</sup>lt;sup>k</sup> Through 1988, data are for electric utilities only. Beginning in 1989, data are for electric utilities and independent power producers.

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/elect.html.

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

		Commerci	ial Sectora				Indu	strial Sector	b		
	Coal <sup>c</sup>	Petroleum <sup>d</sup>	Natural Gas <sup>e</sup>	Waste <sup>f</sup>	Coal <sup>c</sup>	Petroleum <sup>d</sup>	Natural Gas <sup>e</sup>	Other Gases <sup>g</sup>	Wood <sup>h</sup>	Waste <sup>f</sup>	Other <sup>i</sup>
	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	n 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
1995 Total	569	649	43	21	12,171	12,265	601	114	373	13	40
1996 Total	656	645	43 42	31	12,171	13,813	610	143	373	13	35
	630	790	39	34		,	623	105	367	13	36
1997 Total	440	790 802	39 41	34 32	12,311	11,723					35
1998 Total					11,728	12,392	625	102	349	13	
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 Total	477	834	33	28	11,855	11,608	685	106	464	18	41
2003 January	54	99	3	2	956	1,042	63	11	31	1	3
February	43	87	3	2	835	850	53	9	27	1	3
March	47	62	3	2	799	876	55	10	30	1	4
April	43	42	3	3	794	795	52	10	30	2	3
May	46	53	3	3	904	831	55	10	28	1	4
June	49	70	3	2	858	906	57	11	30	1	4
July	54	95	4	3	918	925	57	12	32	1	4
August	55	89	4	3	903	902	60	11	31	1	4
September	50	65	3	2	812	797	56	11	30	1	4
October	44	63	3	3	866	932	55	11	30	1	4
November	43	66	3	2	858	707	52	11	29	1	3
December	53	103	3	3	937	860	54	10	33	1	3
Total	582	894	38	30	10,440	10,424	668	127	362	16	43
<b>2004</b> January	57	188	4	2	1,409	1,424	67	15	51	2	1
February	54	114	3	2	1,305	999	68	15	46	1	1
March	51	105	3	3	1.351	1.003	64	16	48	1	2
April	39	88	3	3	1,260	1,061	58	15	48	1	2
May	46	73	4	3	1,262	935	64	16	43	1	2
•	52	76	3	3	1,300	925	61	16	46	1	1
June	52 54	76 89	3 4	3			68	15	46 47	2	2
July	54 57	79	4	3	1,387	1,036			47 45	2	1
August		79 57	4	3 2	1,345	1,002 939	68 64	16 15		1	1
September	47		4		1,225		64	15	43	-	-
October	45	42 50		3	1,283	906	58 50	15	46	1	1
November	52	50	3	3	1,197	900	59	13	43	1	1
December Total	50 <b>605</b>	98 <b>1,059</b>	3 <b>41</b>	3 <b>32</b>	1,353 <b>15,676</b>	1,040 <b>12,168</b>	63 <b>762</b>	13 <b>181</b>	45 <b>551</b>	1 <b>16</b>	2 <b>17</b>
		•				,					
<b>2005</b> January	74	124	4	3	1,009	1,547	60	13	44	2	4
February	70	80	3	3	965	968	57	13	40	1	3
March	71	74	4	3	1,006	1,034	60	14	38	1	3
April	60	49	4	3	934	966	58	14	36	1	3
4-Month Total	275	327	14	11	3,914	4,515	235	53	158	5	13
2004 4-Month Total	201	494	13	10	5,325	4,487	257	62	193	6	6
2003 4-Month Total	187	289	12	10	3,384	3,563	223	41	119	6	14

<sup>&</sup>lt;sup>a</sup> Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

b Industrial combined-heat-and-power (CHP) and industrial electricity-only

plants.

<sup>&</sup>lt;sup>c</sup> 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.

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

<sup>&</sup>lt;sup>9</sup> Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

h Wood, black liquor, and other wood waste.

<sup>&</sup>lt;sup>i</sup> Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

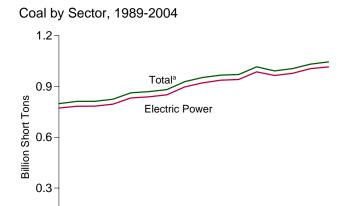
Notes: • Data are for fuels consumed to produce electricity. • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section.

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

Web Page: For annual data not displayed between 1990 and 1995, see http://www.eia.doe.gov/emeu/mer/elect.html.

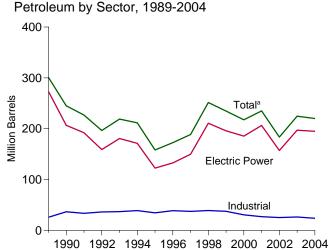
Sources: • 1989-1997: Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • 1998-2000: EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • 2001-2003: EIA, Form EIA-906, "Power Plant Report." • 2004 forward: EIA, Form EIA-906, "Power Plant Report" and Form EIA-920, "Combined Heat and Power Plant Report."

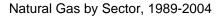
Figure 7.4 Consumption of Selected Combustible Fuels for Electricity Generation and Useful Thermal Output



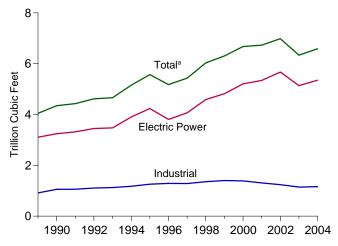
Industrial

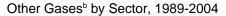
1990 1992 1994 1996 1998 2000 2002 2004

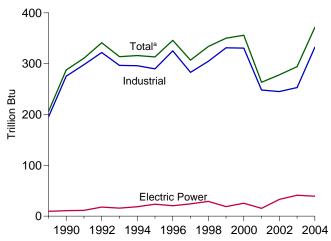




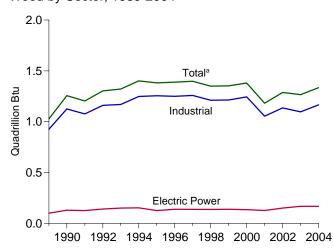
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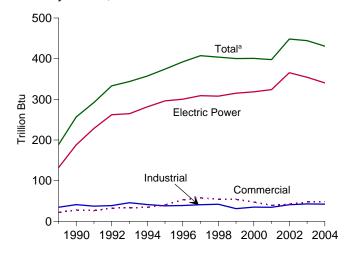




#### Wood by Sector, 1989-2004



Waste by Sector, 1989-2004



<sup>a</sup>Includes commercial sector.

<sup>b</sup>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 7.4a, 7.4b, and 7.4c.

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

				Petroleum							
	Coal <sup>a</sup>	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Total <sup>e</sup>	Natural Gas <sup>f</sup>	Other Gases <sup>g</sup>	Wood <sup>h</sup>	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	TI	nousand Barre	els	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	on 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	200,211	1,332	2,832	244,998	4,346	288	1,256	257	86
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 Total	1,005,144	24,749	118,637	3,257	7,353	183,409	6,986	278	1,287	448	93
2003 January	93,819	4,930	15,531	649	486	23,538	494	25	107	38	8
February	81,610	4,167	13,369	512	444	20,267	430	23	97	33	7
March	80,783	3,091	13,578	537	392	19,168	459	25	104	38	9
April	74,032	1,790	11,773	270	543	16,547	447	24	102	37	8
May	78,939	2,890	9,627	230	526	15,376	493	25	101	37	8
June	85,455	3,307	13,662	345	611	20,368	534	25	102	37	8
July	95,337	2,699	15,906	439	696	22,523	734	26	112	39	10
August	96,929	2,336	16,889	528	678	23,143	792	26	109	39	13
September	86,398	1,543	11,215	288	663	16,361	569	24	104	36	11
October	83,006	1,670	10,842	263	682	16,184	509	24	107	36	11
November	83,326	1,452	7,710	245	648	12,648	443	24	106	36	10
December	92,144	1,949	12,756	270	699	18,469	434	25	115	39	8
Total	1,031,778	31,825	152,859	4,576	7,067	224,593	6,337	294	1,266	444	110
<b>2004</b> January	94,641	4,441	18,978	945	725	27,990	456	31	117	35	3
February	84,911	1,496	12,240	217	609	16,997	469	29	107	33	4
March	80,311	1,418	12,768	212	618	17,489	468	34	109	35	4
April	74,556	1,280	11,768	174 202	625 647	16,346	480 578	33	112 104	35 39	3
May	82,954	1,788 1.656	13,317 14.685	153	588	18,540 19.433	601	33 32	104	39 38	3
June July	88,418 95,850	1,470	16,738	201	645	21,637	729	32 31	107	38	3
August	94,710	1,470	14,946	121	704	19,956	729	33	117	38	3
September	87,706	1,669	10,946	153	644	15,986	624	32	106	36 34	2
October	83,649	1,154	9,432	143	694	14,196	531	31	114	35	2
November	83,502	1,067	9,432	240	565	13,165	461	28	108	35	3
December	93,486	1,956	12,558	300	698	18,302	481	26	121	37	4
Total	1,044,696	20,767	157,410	3,059	7,760	220,037	6,588	371	1,335	431	38
<b>2005</b> January	94,243	3,925	14,675	953	757	23,338	485	26	115	38	9
February	82,452	996	8,990	120	664	13,427	420	33	112	34	5
March	86,151	1,163	10,411	142	718	15,305	487	37	111	38	5
April	75,677	1,156	8,228	278	655	12,936	493	29	106	36	6
4-Month Total	338,523	7,240	42,305	1,493	2,794	65,007	1,885	124	444	146	25
2004 4-Month Total	334,420	8,635	55,753	1,548	2,577	78,823	1,873	127	445	138	14
2003 4-Month Total	330,244	13,979	54,251	1,968	1,864	79,519	1,830	97	410	146	31

<sup>&</sup>lt;sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

Sources: See sources for Tables 7.4b and 7.4c.

<sup>&</sup>lt;sup>b</sup> Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.

<sup>&</sup>lt;sup>c</sup> Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small amount of fuel oil no. 4.

<sup>&</sup>lt;sup>d</sup> 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.

<sup>&</sup>lt;sup>i</sup> Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

 $<sup>^{\</sup>rm j}$  Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

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

Web Page: For annual data not displayed between 1990 and 1995, see http://www.eia.doe.gov/emeu/mer/elect.html.

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

				Petroleum							
	Coal <sup>a</sup>	Distillate Fuel Oil <sup>b</sup>	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Total <sup>e</sup>	Natural Gas <sup>f</sup>	Other Gases <sup>g</sup>	Wood <sup>h</sup>	Waste <sup>i</sup>	Other <sup>j</sup>
	Thousand Short Tons	Т	nousand Barre	els	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillio	n 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)
1995 Total	850,230	18,553	90,023	499	2,674	122,447	4,237	24	125	296	(3)
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
	940,922	24,058	152,493	544	,	•	,	19	138	315	1
1999 Total	985.821	30.016	138,513	454	3,735 3,275	195,769 185,358	4,820 5,206	25	134	318	1
2000 Total	964,433	,	159,504	377	3,427	206,291	5,200 5,342	15	126	324	0
2001 Total		29,274									7
2002 Total	977,507	21,876	104,773	1,267	5,816	156,996	5,672	33	150	365	,
2003 January	91,361	4,490	14,063	477	383	20,947	382	4	16	30	(s)
February	79,447	3,833	12,056	348	353	18,004	335	4	13	26	(s)
March	78,557	2,862	12,310	238	296	16,887	361	4	14	30	(s)
April	72,000	1,539	10,574	85	439	14,396	352	4	12	29	(s)
May	76,772	2,473	8,524	80	416	13,157	394	4	12	30	(s)
June	83,313	2,829	12,589	98	499	18,011	436	3	13	30	(s)
July	92,994	2,360	14,704	130	575	20,068	630	3	15	31	2
August	94,565	2,038	15,673	190	570	20,753	684	3	16	31	4
September	84,294	1,200	10,184	90	554	14,246	469	3	14	29	3
October	80,857	1,222	9,656	85	566	13,794	409	3	14	28	3
November	81,202	1,112	6,622	87	570	10,672	348	3	14	29	2
December	89.753	1.673	11.325	118	576	15.998	336	3	15	31	1
Total	1,005,116	27,632	138,279	2,026	5,799	196,932	5,135	41	167	354	16
2004 January	91,698	3,891	16,938	796	635	24,801	352	3	15	28	(s)
February	82,439	1,272	10,333	105	532	14,769	366	3	14	26	(s)
March	77,841	1,212	11,361	119	543	15,408	367	3	14	28	(s)
	72,251	1,212	10.497	88	542	14,381	384	3	12	28	
April	80,621	1,623	12,153	122	566	16,728	473	3	13	30	(s)
May	,	,	,			,		3			(s)
June	86,001	1,491	13,395	82 92	514 546	17,537	500 616	3 4	13 16	29 30	(s)
July	93,283	1,297	15,422			19,541		3		30	(s)
August	92,195	1,241	13,725	56	615 566	18,097	599		15		(s)
September	85,382	1,503	9,817	91	566	14,240	519	3	14	27	(s)
October	81,294	1,008	8,313	51	615	12,446	432	3	14	27	(s)
November	81,218	937	7,265	157	482	10,768	366	3	14	28	(s)
December Total	90,903 <b>1,015,126</b>	1,770 <b>18,331</b>	10,993 <b>140,611</b>	216 <b>1,976</b>	610 <b>6,765</b>	16,031 <b>194,745</b>	377 <b>5,352</b>	3 <b>39</b>	15 <b>168</b>	30 <b>340</b>	(s) 1
	.,0.0,120	10,001	1-10,011	.,510	5,7 00	10-1,1-10	0,002		100	340	
2005 January	91,869	3,117	12,963	669	633	19,914	386	4	15	30	2
February	80,221	873	7,663	40	579	11,472	331	11	14	26	1
March	83,825	1,011	8,985	53	604	13,069	389	13	15	30	(s)
April	73,562	1,015	7,042	122	556	10,960	399	5	12	29	` í
4-Month Total	329,477	6,016	36,653	884	2,372	55,415	1,505	32	56	116	4
2004 4-Month Total	324,229	7,461	49,529	1,109	2,252	69,358	1,469	12	55	110	(s)
2003 4-Month Total	321,365	12,724	49,003	1,148	1,472	70,234	1,431	15	55	114	1

<sup>&</sup>lt;sup>a</sup> Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

(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: For annual data not displayed between 1990 and 1995, see http://www.eia.doe.gov/emeu/mer/elect.html.

Sources: • 1989-1997: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report" and Form EIA-867, "Annual Nonutility Power Producer Report." • 1998-2000: EIA, Form EIA-759, "Monthly Power Plant Report" and Form EIA-860B, "Annual Electric Generator Report—Nonutility." • 2001-2003: Form EIA-906, "Power Plant Report." • 2004 forward: EIA, Form EIA-906, "Power Plant Report" and Form EIA-920, "Combined Heat and Power Plant Report."

<sup>&</sup>lt;sup>b</sup> Fuel oil nos. 1, 2, and 4. Through 2000, electric utility data also include small amounts of kerosene and jet fuel.

<sup>&</sup>lt;sup>c</sup> Fuel oil nos. 5 and 6. Through 2000, electric utility data also include a small amount of fuel oil no. 4.

<sup>&</sup>lt;sup>d</sup> Jet fuel, kerosene, other petroleum liquids, and waste oil.

<sup>&</sup>lt;sup>e</sup> Petroleum coke is converted from short tons to barrels by multiplying by 5.

<sup>&</sup>lt;sup>f</sup> 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.

<sup>&</sup>lt;sup>i</sup> Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

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

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

		Commerci	ial Sectora				Indu	strial Sector	b		
	Coal <sup>c</sup>	Petroleum <sup>d</sup>	Natural Gas <sup>e</sup>	Waste <sup>f</sup>	Coal <sup>c</sup>	Petroleum <sup>d</sup>	Natural Gas <sup>e</sup>	Other Gases <sup>g</sup>	Woodh	Waste <sup>f</sup>	Other <sup>i</sup>
	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet	Trillion Btu	Thousand Short Tons	Thousand Barrels	Billion Cubic Feet		Trillion	n Btu	
1989 Total	1.125	1.967	30	22	24.867	25.685	914	195	926	35	85
1990 Total	1,123	2,056	46	28	27,781	36,392	1,055	275	1,125	41	86
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	1,233	42	93
1999 Total	1,443	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	1,213	35	108
2001 Total	1,448	1,832	79	39	25,755	26,817	1,310	248	1,054	35	94
	,	,	79	42		,	,	245	,	41	94 85
2002 Total	1,405	1,250	74	42	26,232	25,163	1,240	245	1,136	41	00
2003 January	171	154	5	4	2,286	2,437	106	21	91	4	7
February	152	140	4	3	2,010	2,122	91	19	84	4	7
March	155	114	4	4	2,072	2,167	94	21	90	4	8
April	137	80	4	4	1,895	2,071	91	20	90	4	7
May	137	89	5	4	2,029	2,130	94	21	90	3	8
June	144	113	5	4	1,998	2,244	94	21	89	3	8
July	159	147	5	4	2,183	2,309	99	23	97	3	8
August	164	143	6	4	2,200	2,247	102	23	94	4	g
September	146	108	5	4	1,957	2,008	95	21	90	3	8
October	141	101	5	4	2,008	2,289	95	21	93	4	8
November	143	105	5	4	1,981	1,871	90	20	91	3	7
December	165	155	5	4	2,227	2,317	93	22	100	4	7
Total	1,816	1,449	58	47	24,846	26,212	1,144	253	1,097	43	94
2004 January	165	346	6	4	2.779	2.843	97	29	102	3	3
February	152	206	6	3	2,320	2.022	97	26	93	3	4
March	140	172	6	4	2,329	1,909	95	31	94	3	4
April	113	115	6	4	2.192	1,850	91	29	99	3	3
May	127	100	6	4	2,206	1,713	99	29	91	5	3
June	126	101	6	4	2,291	1.796	95	28	95	5	3
July	128	127	7	4	2,439	1,968	107	27	101	3	3
August	128	105	7	4	2,386	1,754	104	29	98	3	3
September	116	75	7	4	2,207	1,672	98	29	93	3	2
October	107	74	6	4	2,248	1,676	92	27	100	3	2
November	130	82	6	4	2,154	2,315	90	24	93	3	3
December	139	153	6	4	2,134	2,118	97	23	106	3	4
Total	1,574	1,656	7 <b>5</b>	48	27,996	23,636	1,162	332	1,166	42	37
10tal	1,574	1,030	75	40	27,990	23,030	1,102	332	1,100	42	31
2005 January	196	205	6	4	2,177	3,220	93	22	100	3	7
February	172	141	5	4	2,060	1,814	84	22	98	3	4
March	178	117	6	4	2,147	2,119	92	25	96	3	5
April	138	64	5	4	1,977	1,912	89	23	94	3	5
4-Month Total	684	527	22	17	8,362	9,065	358	92	388	13	21
2004 4-Month Total	571	840	24	15	9,620	8,625	380	115	390	13	13
2003 4-Month Total	615	489	18	15	8,264	8,797	382	81	355	16	30

a Commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

Notes: • Data are for fuels consumed to produce electricity and useful thermal output. • See Note, "Classification of Power Plants Into Energy-Use Sectors," at end of section. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: For annual data not displayed between 1990 and 1995, see http://www.eia.doe.gov/emeu/mer/elect.html.

Sources: • 1989-1997: Energy Information Administration (EIA), Form EIA-867, "Annual Nonutility Power Producer Report." • 1998-2000: EIA, Form EIA-860B, "Annual Electric Generator Report—Nonutility." • 2001-2003: EIA, Form EIA-906, "Power Plant Report." • 2004 forward: EIA, Form EIA-906, "Power Plant Report" and Form EIA-920, "Combined Heat and Power Plant Report."

plants.  $$^{\rm b}$$  Industrial combined-heat-and-power (CHP) and industrial electricity-only plants.

plants.  $^{\rm C}$  Anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

synthetic coal.

<sup>d</sup> 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, caricultural hypodicate.

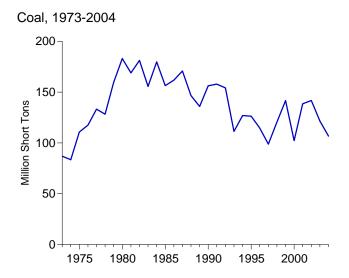
f Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass

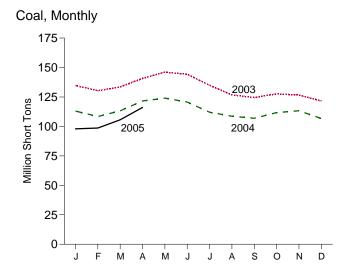
g Blast furnace gas, propane gas, and other manufactured and waste gases derived from fossil fuels.

h Wood, black liquor, and other wood waste.

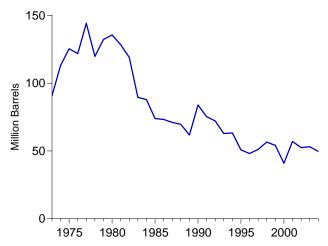
<sup>&</sup>lt;sup>i</sup> Batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

Figure 7.5 Stocks of Coal and Petroleum: Electric Power Sector

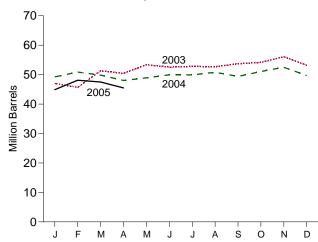




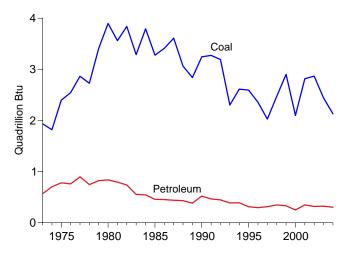




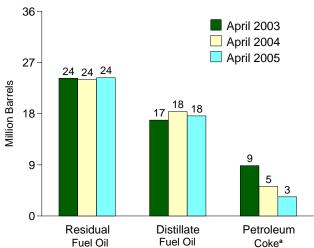
Total Petroleum, Monthly



Coal and Petroleum Stocks, 1973-2004



Petroleum by Type, End of Month



<sup>a</sup>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 7.5, A1, and A5 (column 5).

Table 7.5 Stocks of Coal and Petroleum: Electric Power Sector

				Petroleum		
	Coal <sup>a</sup>	Distillate Fuel Oilb	Residual Fuel Oil <sup>c</sup>	Other Liquids <sup>d</sup>	Petroleum Coke <sup>e</sup>	Totale
	Thousand Short Tons		Thousand Barrels		Thousand Short Tons	Thousand Barrels
973 Total	86,967	10.095	79,121	NA	312	90,776
975 Total	110,724	16,432	108,825	NA	31	125,413
980 Total	183,010	30.023	105,351	NA	52	135,635
985 Total	156,376	16.386	57,304	NA NA	49	73.933
990 Total	156,166	16,471	67,030	NA	94	83,970
995 Total	126,304	15,392	35,102	NA	65	50,821
996 Total	114,623	15,216	32,473	NA NA	91	48,146
997 Total	98.826	15.456	33,336	NA NA	469	51.138
998 Total		16.343	37,451	NA NA	559	56,591
999 Total f	141,604	17,995	34,256	NA NA	372	54,109
000 Total	102,296	15,127	24,748	NA NA	211	40,932
001 Total	138,496	20,486	34,594	NA NA	390	57,031
002 Total	141,714	17,413	25,723	800	1,711	52,490
002 TOtal	171,717	17,413	25,725	000	1,711	32,430
003 January	134,761	16,898	21,318	727	1,612	47,002
February	130,372	15,956	21,327	570	1,562	45,666
March	133,536	21,302	22,024	476	1,499	51,296
April	140,709	16,883	24,251	445	1,773	50,442
May	146,104	16,685	27,506	570	1,722	53,371
June	144,257	17,362	26,122	589	1,693	52,540
July	134,968	17,840	25,897	698	1,673	52,800
August	126,747	17,935	25,729	701	1,665	52,688
September	124,518	18,521	26,249	732	1,636	53,684
October	127,645	19,000	26,721	721	1,544	54,162
November	126.692	18.716	28,552	755	1,613	56,086
December	121,567	19,153	25,820	779	1,484	53,170
<b>004</b> January	113,029	18.690	23.667	351	1.306	49.239
February	108.426	19.047	25,246	287	1.255	50.857
March	113,237	18,725	24,332	409	1,275	49,841
April	121,575	18,382	23,995	411	1,046	48,018
May	124.066	18.879	24.608	411	1.000	48.897
June	120,698	18,217	25,670	475	1.116	49,942
July	112,081	18,349	25,618	493	1,087	49.896
August	108,714	18,328	26,329	488	1,129	50,792
September	106,919	18,134	25,284	486	1,097	49,390
October	111,725	18,224	27,193	483	1,029	51,046
November	113.301	18.312	28.908	487	958	52.499
December	106,709	18,322	<b>26,250</b>	554	914	49,695
OOF January	97,936	16,913	23,746	503	747	44,899
005 January		,				,
February	98,648	17,595	26,019	553	786	48,096
March	105,601	17,737	25,807	563	680	47,504
April	116,118	17,620	24,339	146	674	45,474

<sup>&</sup>lt;sup>a</sup> Anthracite, bituminous coal, subbituminous coal, and lignite.

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.

Web Page: For annual data not displayed between 1973 and 1995, see 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." • 2001-2003: Form EIA-906, "Power Plant Report." • 2004 forward: EIA, Form EIA-906, "Power Plant Report."

<sup>&</sup>lt;sup>b</sup> Fuel oil nos. 1, 2 and 4. For 1973-1979, data are for gas turbine and internal combustion plant stocks of petroleum. For 1980-2000, electric utility data also include small amounts of kerosene and jet fuel.

 $<sup>^{\</sup>rm C}$  Fuel oil nos. 5 and 6. For 1973-1979, data are for steam plant stocks of petroleum. For 1980-2000, electric utility data also include a small amount of fuel oil no. 4.

oil no. 4.

d Jet fuel and kerosene. Through 2003, data also include a small amount of

waste oil.

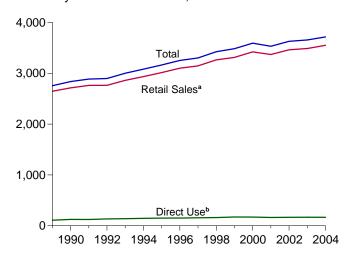
<sup>e</sup> Petroleum coke is converted from short tons to barrels by multiplying by 5.

<sup>&</sup>lt;sup>f</sup> Through 1998, data are for electric utilities only. Beginning in 1999, data are for electric utilities and independent power producers.

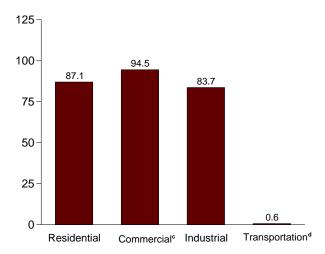
<sup>•</sup> Stocks are at end of year. • Totals may not equal sum of components due to independent rounding. • Geographic coverage is the 50 States and the District of Columbia.

Figure 7.6 Electricity End Use (Billion Kilowatthours)

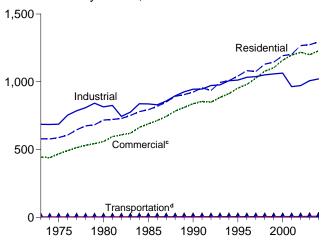
#### Electricity End Use Overview, 1989-2004



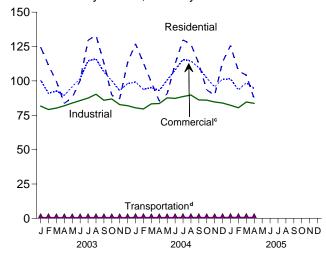
#### Retail Sales<sup>a</sup> by Sector, April 2005



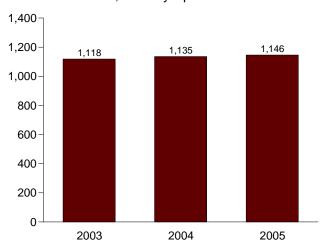
#### Retail Sales<sup>a</sup> by Sector, 1973-2004



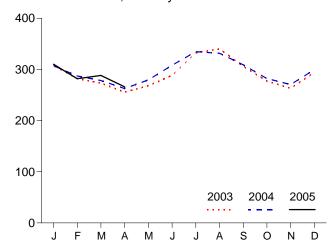
Retail Sales<sup>a</sup> by Sector, Monthly



#### Retail Sales<sup>a</sup> Total, January-April



#### Retail Sales<sup>a</sup> Total, Monthly



<sup>&</sup>lt;sup>a</sup>Electricity retail sales to ultimate customers reported by electric utilities and other energy service providers.

<sup>&</sup>lt;sup>b</sup>See "Direct Use" in Glossary.

<sup>&</sup>lt;sup>C</sup>Commercial sector, including public street and highway lighting, interdepartmental sales, and other sales to public authorities.

<sup>&</sup>lt;sup>d</sup>Transportation sector, including sales to railroads and railways. Note: Because vertical scales differ, graphs should not be compared. Web Page: http://www.eia.doe.gov/emeu/mer/elect.html. Source: Table 7.6.

Table 7.6 Electricity End Use

(Million Kilowatthours)

				Retail Sales <sup>a</sup>					
	Residential	Commercial <sup>b</sup>	Industrial <sup>c</sup>	Transpor- tation <sup>d</sup>	Totale	Commercial (Old) <sup>f</sup>	Other (Old) <sup>9</sup>	Direct Use <sup>h</sup>	Total <sup>i</sup>
1973 Total	579,231	444,505	686,085	3,087	1,712,909	388,266	59,326	NA	1,712,909
1975 Total	588,140	468,296	687,680	2,974	1.747.091	403.049	68.222	NA NA	1,747,091
1980 Total	717,495	558,643	815,067	3,244	2,094,449	488,155	73,732	NA NA	2,094,449
1985 Total	793.934	689,121	836,772	4,147	2,323,974	605,989	87,279	NA NA	2,323,974
1990 Total		838,263	945,522	4,751	2,712,555	751,027	91,988	124,529	2,837,084
1995 Total		953,117	1,012,693	4,975	3,013,287	862,685	95,407	150,677	3,163,963
1996 Total		980,061	1,033,631	4,923	3,101,127	887,445	97,539	152,638	3,253,765
1997 Total	, ,	1.026.626	1.038.197	4,907	3,145,610	928.633	102,901	156,239	3,301,849
1998 Total	1,130,109	1,077,957	1,051,203	4,962	3,264,231	979,401	102,501	160,866	3,425,097
1999 Total		1,103,821	1,058,217	5,126		1,001,996	106,952	171,629	3,483,716
					3,312,087				
2000 Total		1,159,347	1,064,239	5,382	3,421,414	1,055,232	109,496	170,943	3,592,357
2001 Total 2002 Total	1,202,647 1,266,959	1,197,426 1,217,864	964,224 972,168	5,484 5,530	3,369,781 3,462,521	1,089,154 1,116,248	113,756 107,146	162,649 166,184	3,532,429 3,628,705
2002 10101	1,200,000	1,211,004	072,100	0,000	0,402,021	1,110,240	101,140	<u> </u>	0,020,100
<b>2003</b> January		100,449	81,699	624	307,451	_	_	E 15,106	322,557
February		90,988	79,208	615	282,271	_	-	E 13,035	295,306
March	99,652	92,700	80,238	560	273,150	_	_	E 13,743	286,893
April	83,680	89,471	81,913	564	255,628	_	_	E 13,232	268,860
May	87,897	95,818	83,879	557	268,151	_	_	E 13,819	281,969
June	100,405	101,735	85,710	574	288,425	_	_	E 13,905	302,330
July	129,601	114,651	87,507	616	332,375	_	_	E 14,833	347,208
August	133,217	115,998	90,315	611	340,141	_	_	E 14,953	355,094
September	112,937	106,554	85,944	598	306,034	_	_	E 13,902	319,936
October	89,593	100,219	86,871	583	277,266	_	_	E 13,973	291,239
November	87,035	92,957	82,739	548	263,279	_	_	E 13,466	276,745
December	113.331	98.177	81.964	548	294.021	_	_	E 14.328	308.349
Total	- ,	1,199,718	1,007,988	6,999	3,488,192	_	_	168,295	3,656,487
			00.40=	.=.				E	
2004 January	126,964	99,211	80,407	676	307,257	_	_	E 14,376	321,634
February	113,075	93,848	79,598	666	287,187	_	_	E 13,432	300,619
March	99,047	95,223	83,353	606	278,229	_	_	E 13,782	292,011
April	85,440	93,076	83,529	610	262,655	_	_	E 13,279	275,934
May	90,660	100,600	87,704	603	279,567	_	_	E 13,811	293,378
June	112,373	107,855	87,272	621	308,121	_	_	E 13,878	321,999
July	129,753	115,638	88,628	667	334,685	_	_	E 14,907	349,592
August	126,724	114,569	89,703	662	331,658	_	_	E 14,512	346,170
September		109,512	86,172	648	309,019	_	_	E 13,848	322,867
October	93,451	102,102	85,992	631	282,176	_	_	E 13,304	295,481
November		95,617	84,637	601	270,392	_	_	E 12,992	283,383
December	113,737	101,255	83,890	684	299,565	_	_	E 13,869	313,434
Total	1,293,449	1,228,505	1,020,883	7,674	3,550,512	_	-	E 165,991	3,716,503
2005 January	125,614	101,472	82,301	755	310,142	_	_	E 14,220	324,362
February	107,250	93,455	80.444	733 719	281,869	_	_	E 12,823	294.692
March	104,233	98,653	84,662	719	288,250		_	E 13.890	302,140
April	87.057	94,543	83.665	649	265,914	_	_	E 13,260	279.175
4-Month Total	424,154	388,123	331,074	<b>2,825</b>	200,914 <b>1,146,176</b>	_	_	E <b>54,193</b>	1,200,369
	•	•	•	•	, ,			<u> </u>	
2004 4-Month Total	424,526	381,357	326,887	2,558	1,135,328	_	-	E 54,870 E 55,117	1,190,198
2003 4-Month Total	419,470	373,609	323,058	2,363	1,118,500	_	_	- 55,117	1,173,616

<sup>&</sup>lt;sup>a</sup> Electricity retail sales to ultimate customers reported by electric utilities and, beginning in 1996, other energy service providers.

<sup>b</sup> Commercial sector, including public street and highway lighting

agriculture and irrigation, and transportation including railroads and railways.

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/elect.html.

Sources: See end of section.

<sup>&</sup>lt;sup>b</sup> Commercial sector, including public street and highway lighting, interdepartmental sales, and other sales to public authorities.

<sup>&</sup>lt;sup>c</sup> Industrial sector. Through 2002, excludes agriculture and irrigation; beginning in 2003, includes agriculture and irrigation.

d Transportation sector, including sales to railroads and railways.

e The sum of "Residential," "Commercial," "Industrial," and "Transportation."

f "Commercial (Old)" is a discontinued series—data are for the commercial sector, excluding public street and highway lighting, interdepartmental sales, and other sales to public authorities.

<sup>9 &</sup>quot;Other (Old)" is a discontinued series—data are for public street and highway lighting, interdepartmental sales, other sales to public authorities,

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

<sup>&</sup>lt;sup>i</sup> The sum of "Total Retail Sales" and "Direct Use."

E=Estimate. NA=Not available. -=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.

### **Electricity**

### Note. Classification of Power Plants Into Energy-Use Sectors

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

http://www.eia.doe.gov/cneaf/electricity/forms/eia860/eia860.doc.

#### **Table 7.1 Sources:**

**Net Generation, Electric Power Sector:** Table 7.2b.

Net Generation, Commercial Sector: Table 7.2c.

#### **Net Generation, Industrial Sector:**

1973–September 1977: Federal Power Commission (FPC), Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and FPC, Form FPC-12C, "Industrial Electric Generating Capacity," for all other plants.

October 1977–1978: Federal Energy Regulatory Commission (FERC), Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and FERC, Form FPC-12C, "Industrial Electric Generating Capacity," for all other plants.

1979: FERC, Form FPC-4, "Monthly Power Plant Report," for plants with generating capacity exceeding 10 megawatts, and EIA estimates for all other plants.

1980–1988: Estimated by EIA as the average generation over the 6-year period of 1974–1979.

1989 forward: Table 7.2c.

# Imports and Exports, Electricity Trade With Canada and Mexico, 1973-1989:

1973–September 1977: Unpublished Federal Power Commission data.

October 1977–1980: Unpublished Economic Regulatory Administration (ERA) data.

1981: Department of Energy (DOE), Office of Energy Emergency Operations, "Report on Electric Energy Exchanges with Canada and Mexico for Calendar Year 1981," April 1982 (revised June 1982).

1982 and 1983: DOE, ERA, Electricity Exchanges Across International Borders.

1984–1986: DOE, ERA, Electricity Transactions Across International Borders.

1987 and 1988: DOE, ERA, Form ERA-781R, "Annual Report of International Electrical Export/Import Data." 1989: DOE, Fossil Energy, Form FE-781R, "Annual Report

of International Electrical Export/Import Data."

## Imports and Exports, Electricity Trade with Canada, 1990 Forward:

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

## Imports and Exports, Electricity Trade with Mexico, 1990 Forward:

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

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

End Use: Table 7.6.

#### **Table 7.2b Sources:**

1973–September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."

October 1977–1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."

1982–1988: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."

1989–1997: EIA, Form EIA-759, "Monthly Power Plant Report" and Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-759, "Monthly Power Plant Report" and Form EIA-860B, "Annual Electric Generator Report–Nonutility."

2001–2003: EIA, Form EIA-906, "Power Plant Report." 2004 and 2005: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

#### Table 7.3b Notes:

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

#### **Table 7.3b Sources:**

1973-September 1977: Federal Power Commission, Form FPC-4, "Monthly Power Plant Report."

October 1977-1981: Federal Energy Regulatory Commission, Form FPC-4, "Monthly Power Plant Report."

1982-1988: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report."

1989-1997: EIA, Form EIA-759, "Monthly Power Plant Report" and Form EIA-867, "Annual Nonutility Power Producer Report."

1998–2000: EIA, Form EIA-759, "Monthly Power Plant Report" and Form EIA-860B, "Annual Electric Generator Report–Nonutility."

2001–2003: EIA, Form EIA-906, "Power Plant Report." 2004 and 2005: EIA, Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."

#### **Table 7.6 Sources:**

#### **Retail Sales:**

#### Residential and Industrial

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

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

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

1983: Energy Information Administration (EIA), Form EIA-826, "Electric Utility Company Monthly Statement." 1984-1990: EIA, Form EIA-861, "Annual Electric Utility

Report."

1991 forward: EIA, *Electric Power Monthly*, July 2005, Table 5.1.

#### **Commercial:**

1973-2002: Estimated by EIA as the sum of "Commercial (Old)" and the non-transportation portion of "Other (Old)." See estimation methodology at http://www.eia.doe.gov/emeu/states/sep\_use/notes/use\_elec.pdf. 2003 forward: EIA, *Electric Power Monthly*, July 2005, Table 5.1

#### **Transportation:**

1973-2002: Estimated by EIA as the transportation portion of "Other (Old)." See estimation methodology at http://www.eia.doe.gov/emeu/states/sep\_use/notes/use\_elec.pdf. 2003 forward: EIA, *Electric Power Monthly*, July 2005, Table 5.1.

#### Commercial (Old) and Other (Old):

1973-2002: See sources for "Residential" and "Industrial."

#### **Direct Use, Annual:**

1989-1991: EIA, Form EIA-867, "Annual Nonutility Power Producer Report."

1992-2003: EIA, *Electric Power Annual 2003*, December 2004, Table 7.2.

2004: Sum of the monthly data.

**Direct Use, Monthly**: Annual shares are calculated as annual direct use divided by annual commercial and industrial net generation (on Table 7.1). Then monthly direct use estimates are calculated as the annual share multiplied by the monthly commercial and industrial net generation values. For 2004 and 2005, the 2003 annual share is used.

## **Section 8. Nuclear Energy**

U.S. nuclear electricity net generation during April 2005 was 56 net terawatthours (billion kilowatthours) of electricity, 4 percent lower than the level in April 2004.

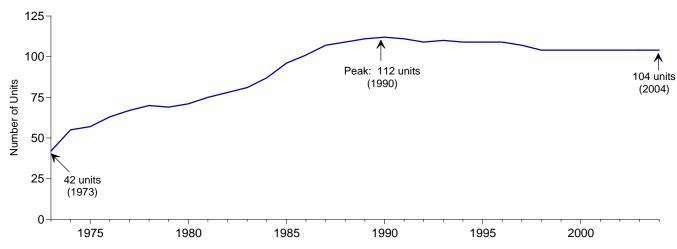
Nuclear units generated at an average capacity factor of 78.3 percent in April 2005, 3.4 percentage points lower than the capacity factor in April 2004.

The nuclear share of total electricity net generation in April 2005 was 19.3 percent, compared with 20.2 percent 1 year earlier.

On April 30, 2005, there were 104 operable nuclear generating units in the United States, with a collective net summer capacity of 99.6 million kilowatts of electricity.

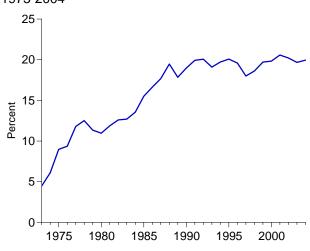
Figure 8.1 Nuclear Energy Overview

Operable Units, End of Year, 1973-2004

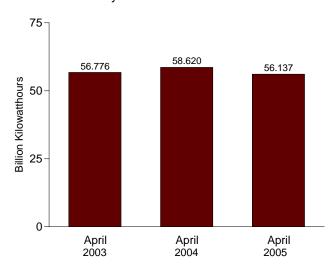


Electricity Net Generation, 1973-2004

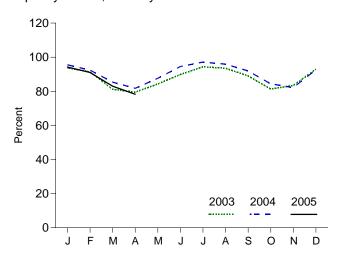
Nuclear Share of Electricity Net Generation, 1973-2004



**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 <sup>a,b</sup>	Net Summer Capacity of Operable Units <sup>b,c</sup>	Nuclear Electricity Net Generation	Nuclear Share of Electricity Net Generation	Capacity Factor <sup>d</sup>
	Number	Million Kilowatts	Million Kilowatthours	Pel	cent
973 Year	42	22.683	83,479	4.5	53.5
975 Year	57	37.267	172,505	9.0	55.9
980 Year	71	51.810	251,116	11.0	56.3
985 Year	96	79.397	383.691	15.5	58.0
990 Year	112	99.624	576.862	19.0	66.0
995 Year	109	99.515	673,402	20.1	77.4
996 Year	109		•	19.6	76.2
		100.784	674,729		
997 Year	107	99.716	628,644	18.0	71.1
998 Year	104	97.070	673,702	18.6	78.2
999 Year	104	97.411	728,254	19.7	85.3
000 Year	104	97.860	753,893	19.8	88.1
001 Year	104	98.159	768,826	20.6	89.4
002 Total	104	98.657	780,064	20.2	90.3
<b>003</b> January	104	99.209	69,211	20.2	93.8
February	104	99.209	60,942	20.4	91.4
March	104	99.209	59,933	19.7	81.2
April	104	99.209	56,776	19.9	79.5
May	104	99.209	62,202	20.2	84.3
June	104	99.209	64,181	19.5	89.9
July	104	99.209	69,653	18.6	94.4
August	104	99.209	69,024	18.1	93.5
September	104	99.209	63,584	19.7	89.0
October	104	99.209	60,016	19.6	81.3
November	104	99.209	59,600	20.0	83.4
December	104	99.209	68,612	20.7	93.0
Total	104	99.209	763,733	19.7	87.9
<b>004</b> January	104	99.615	70,806	20.5	95.5
February	104	99.615	64,102	20.5	92.5
March	104	99.615	63,263	20.6	85.4
April	104	99.615	58,620	20.2	81.7
May	104	99.615	64,917	19.9	87.6
June	104	99.615	67.787	19.7	94.5
July	104	99.615	71.975	19.2	97.1
August	104	99.615	71,973	19.3	95.9
September	104	99.615	65,932	19.7	91.9
October	104	99.615	62,530	20.1	84.4
November	104	99.615	58,941	19.7	82.2
December	104	99.615	68,617	20.2	92.6
Total	104	99.615	<b>788,556</b>	19.9	90.1
005 January	104	99.615	69,828	20.3	94.2
005 January February	104	99.615	60,947	20.3	94.2 91.0
				20.4 19.4	91.0 83.0
March	104	99.615	61,539		
April	104	99.615	56,137	19.3	78.3
4-Month Total	104	99.615	248,451	19.9	86.6
004 4-Month Total	104	99.615	256,792	20.5	88.8
003 4-Month Total	104	99.209	246,862	20.0	86.4

<sup>&</sup>lt;sup>a</sup> Total of nuclear generating units holding full-power licenses, or equivalent permission to operate, at the end of the period—see Note 1 at end of section. Although Browns Ferry 1 was shut down in 1985, the unit has remained fully licensed and thus has continued to be counted as operable during the shutdown; in May 2002, the Tennessee Valley Authority announced its intenton to have the unit resume operation in 2007—see Note 1(a) at end of section. For additional information on nuclear generating units, see *Annual Energy Review 2003*, September 2004, Table 9.1.

At end of period.

Sources: See end of section.

<sup>&</sup>lt;sup>c</sup> For the definition of "Net Summer Capacity," see Note 2(a) at end of section.

 $<sup>^{\</sup>rm d}\,$  For an explanation of the method of calculating the capacity factor, see Note 2 at end of section.

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

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/nuclear.html.

### **Nuclear Energy**

- **Note 1.** A reactor is generally defined as operable while it possessed a full-power license from the Nuclear Regulatory Commission or its predecessor the Atomic Energy Commission, or equivalent permission to operate, at the end of the year or month shown. The definition is liberal in that it does not exclude units retaining full-power licenses during long, non-routine shutdowns that for a time rendered them unable to generate electricity. Examples are:
- (a) In 1985 the five then-active Tennessee Valley Authority (TVA) units (Browns Ferry 1, 2, and 3 and Sequoyah 1 and 2) were shut down under a regulatory forced outage. Browns Ferry 1 remains shut down and has been defueled, while the other units were idle for several years, restarting in 1991, 1995, 1988, and 1988, respectively. All five units are counted as operable during the shutdowns. Browns Ferry 1 is the only one of the five TVA plants that has not returned to service. Because it is still fully licensed to operate, it continues to meet the definition of operable.
- (b) Shippingport was shut down from 1974 through 1976 for conversion to a light-water breeder reactor, but is counted as operable from 1957 until its retirement in 1982.
- (c) Calvert Cliffs 2 was shut down in 1989 and 1990 for replacement of pressurizer heater sleeves but is counted as operable during those years.

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

- **Note 2.** Capacity: Nuclear generating units may have more than one type of net capacity rating, including the following:
- (a) Net Summer Capacity—The steady hourly output that generating equipment is expected to supply to system load, exclusive of auxiliary power, as demonstrated by test at the time of summer peak demand. Auxiliary power of a typical nuclear power plant is about 5 percent of gross generation.
- b) Net Design Capacity or Net Design Electrical Rating (DER)—The nominal net electrical output of a unit, specified by the utility and used for plant design.

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

#### **Table 8.1 Sources**

# **Total Operable Units** and **Net Summer Capacity of Operable Units**:

1973-1982: Compiled from various sources, primarily DOE, Office of Nuclear Reactor Programs, "U.S. Central Station Nuclear Electric Generating Units: Significant Milestones." 1983 forward: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report," and monthly updates as appropriate. For a list of currently operable units, see:

http://eia.doe.gov/cneaf/nuclear/page/nuc\_reactors/operational.xls.

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

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

## **Section 9. Energy Prices**

**Crude Oil**. The average price of domestic crude oil at the wellhead was \$46.93 per barrel in April 2005, 41 percent above the level of April 2004. The refiner acquisition cost of imported crude oil in April 2005 was \$45.18 per barrel, 39 percent higher than the April 2004 level. The average cost of domestic crude oil in April 2005 was \$49.54, 41 percent more than the April 2004 average.

**Motor Gasoline**. The national city average retail price of unleaded regular gasoline at all types of stations was \$2.18 per gallon in June 2005, 7 percent higher than the price in June 2004. The price of unleaded premium gasoline averaged \$2.37 in June 2005, 6 percent higher than the price in June 2004.

**Residual Fuel Oil.** The average price, excluding taxes, of residual fuel oil sold to end users in April 2005 was 97 cents per gallon, 9 percent higher than the previous month's price and 41 percent higher than the April 2004 average. The average resale price, excluding taxes, of residual fuel oil in April 2005 was 88 cents, 10 percent higher than the March 2005 price and 36 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 April 2005 was \$1.67 per gallon, 6 percent higher than the previous month's average price and 57 percent more than the April 2004 average price.

**No. 2 Distillate Fuel Oil.** The April 2005 national average price, excluding taxes, of heating oil sold to residential customers was \$1.96 per gallon, 1 percent higher than the March 2005 price and 39 percent higher than the April 2004 price. The average price of No. 2 fuel oil sold to all end

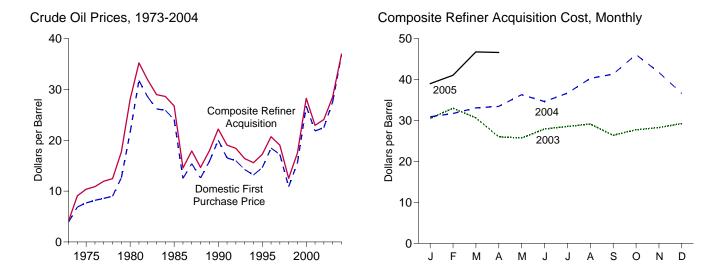
users was \$1.61 per gallon in April 2005, 1 percent higher than the March 2005 price and 58 percent higher than the price 1 year earlier.

Electricity. The average retail price of electricity sold to all ultimate consumers in the United States in April 2005 was 7.57 cents per kilowatthour, 4 percent higher than the average price in April 2004. The price of electricity sold to residential consumers in April 2005 averaged 9.18 cents per kilowatthour, 3 percent higher than the April 2004 price. The price of electricity sold to commercial consumers averaged 8.20 cents per kilowatthour in April 2005, 4 percent higher than the April 2004 price. The price of electricity sold to transportation users in April 2005 averaged 7.23 cents per kilowatthour, 15 percent higher than the April 2004 price. The price of electricity sold to industrial users in April 2005 averaged 5.19 cents per kilowatthour, 5 percent higher than the price 1 year earlier.

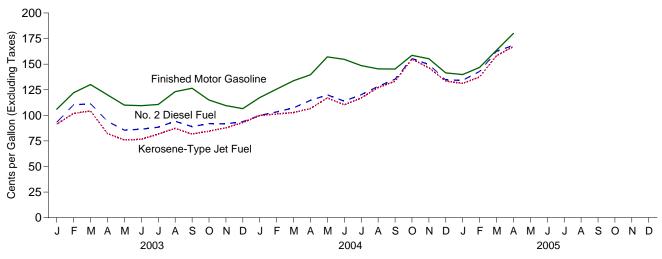
**Natural Gas.** The average wellhead price of natural gas for April 2005 was estimated as \$6.44 per thousand cubic feet, 24 percent higher than the April 2004 price.

The average price of natural gas delivered to the electric power sector in March 2005 was \$6.82 per thousand cubic feet, 24 percent higher than the March 2004 price. The average price of natural gas used by residential consumers in April 2005 was \$11.89 per thousand cubic feet, 13 percent higher than the April 2004 price. The average price of natural gas used by commercial consumers in April 2005 was \$10.20 per thousand cubic feet, 15 percent higher than the April 2004 price. The average price of natural gas used by industrial consumers in April 2005 was \$7.54 per thousand cubic feet, 26 percent above the April 2004 price.

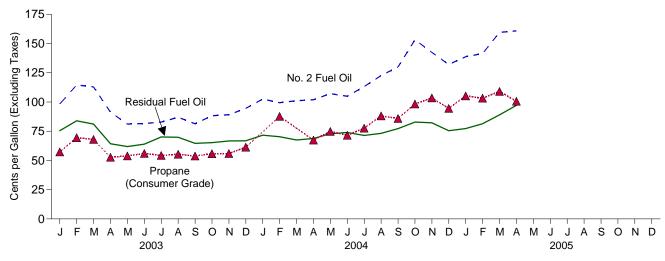
Figure 9.1 Petroleum Prices



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)

				Re	efiner Acquisition Co	sta
	Domestic First Purchase Price <sup>b</sup>	F.O.B. Cost of Imports <sup>c</sup>	Landed Cost of Imports <sup>d</sup>	Domestic	Imported	Composite
1973 Average	3.89	5.21	e <b>6.4</b> 1	<sup>E</sup> 4.17	<sup>E</sup> 4.08	<sup>E</sup> 4.15
1975 Average	7.67	11.18	12.70	8.39	13.93	10.38
1980 Average	21.59	32.37	33.67	24.23	33.89	28.07
985 Average	24.09	25.84	26.67	26.66	26.99	26.75
990 Average	20.03	20.37	21.13	22.59	21.76	22.22
995 Average	14.62	15.69	16.78	17.33	17.14	17.23
996 Average	18.46	19.32	20.31	20.77	20.64	20.71
997 Average	17.23	16.94	18.11	19.61	18.53	19.04
	10.87	10.76	11.84	13.18	12.04	12.52
998 Average	15.56	16.47	17.23	17.90	17.26	17.51
999 Average						
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 Average	22.51	22.63	23.91	24.65	23.71	24.10
2003 January	28.42	29.15	30.34	30.82	30.30	30.52
February	31.85	29.78	31.34	34.05	32.23	33.00
March	30.10	26.32	28.86	32.70	29.23	30.65
April	25.45	22.74	25.20	28.55	24.48	26.02
May	24.95	23.48	25.40	26.75	25.15	25.74
June	26.84	25.34	27.36	29.07	27.22	27.92
July	27.52	26.10	27.72	29.54	27.95	28.55
August	27.94	26.87	28.01	30.28	28.50	29.15
September	25.23	24.07	25.91	27.75	25.66	26.39
October	26.53	26.06	27.37	28.43	27.32	27.75
November	27.21	26.03	27.68	29.55	27.47	28.28
December	28.53	26.77	28.80	30.27	28.63	29.28
Average	<b>27.56</b>	25.86	27.69	29.82	27.71	28.53
Average	21.50	25.00	21.00	23.02	21.71	20.33
<b>004</b> January	30.35	28.16	30.76	32.01	30.24	30.92
February	31.21	28.50	31.14	33.19	30.77	31.72
March	32.86	30.02	32.30	34.53	32.25	33.09
April	33.23	30.98	32.88	35.25	32.42	33.46
May	36.07	33.81	35.09	37.23	35.82	36.31
June	34.53	32.20	34.37	36.57	33.58	34.65
July	36.54	34.92	36.82	37.90	35.98	36.67
August	40.10	37.33	39.56	41.54	39.57	40.29
September	40.62	38.82	41.09	42.77	40.51	41.34
October	46.28	42.23	44.12	47.22	45.53	46.12
November	42.81	36.01	39.06	44.79	39.89	41.76
December	38.22	31.67	35.34	40.74	34.17	36.61
Average	36.77	33.74	36.07	38.65	36.00	36.97
2005 January	40.18	35.65	38.46	41.82	37.55	39.01
		R 39.07	R 40.70			
February	42.06	`` 39.07 R 44.24		43.80	39.72	41.05
March	47.39	R 44.34	R 45.99	48.87	45.71 45.40	46.77
April	46.93	43.58	44.87	49.54	45.18	46.63

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

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

Sources: See end of section.

a See Note 4 at end of section.
b See Note 1 at end of section.

<sup>&</sup>lt;sup>c</sup> 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.

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: For annual data not displayed between 1973 and 1995, see

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

(Dollars per Barrel)

			s	elected Cou	ntries					
	Angola	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela	Persian Gulf Nations <sup>a</sup>	Total OPEC <sup>b</sup>	Total Non-OPEC
1973 Average <sup>c</sup>	w	w	(d)	7.81	3.25	(d)	5.39	3.68	5.43	4.80
1975 Average	10.97	(d)	11.44	11.82	10.87	(d)	11.04	10.88	11.34	10.62
1980 Average	33.45	`w′	31.06	35.93	28.17	34.36	24.81	28.92	32.21	32.85
1985 Average	26.30	(d)	25.33	28.04	22.04	27.64	23.64	23.31	25.67	25.96
1990 Average	20.23	20.75	19.26	22.46	20.36	23.43	19.55	18.54	20.40	20.32
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 Average	24.09	24.64	21.60	25.38	23.92	24.50	20.13	23.38	22.18	22.93
2003 January	31.59	32.94	28.32	31.76	27.79	31.66	W	27.83	29.05	29.21
February	33.49	35.25	28.43	33.64	26.67	32.97	28.50	27.17	28.65	30.52
March	29.34	31.28	24.97	30.82	24.87	28.78	22.83	25.09	25.39	26.99
April	24.81	24.85	21.53	25.27	20.97	W	21.00	21.08	21.83	23.40
May	25.63	25.13	22.56	27.03	22.52	25.28	21.61	22.57	22.78	23.99
June	26.66	27.63	24.39	27.79	26.45	W	22.98	26.37	24.88	25.67
July	27.83	W	25.60	29.14	25.54	W	24.51	25.58	25.63	26.41
August	28.76	28.97	25.88	30.08	26.22	29.42	24.87	25.99	26.33	27.20
September	26.13	27.44	23.33	27.28	23.82	W	22.76	23.80	23.78	24.32
October	29.47	28.91	23.77	30.02	W	W	23.77	26.29	25.84	26.21
November	28.94	W	24.92	29.78	27.70	29.32	23.75	26.88	26.09	25.99
December	29.58	30.02	25.56	30.60	27.70	W	25.71	27.32	27.05	26.56
Average	28.22	28.89	24.83	29.40	25.03	28.76	23.81	25.17	25.36	26.21
<b>2004</b> January	W	33.14	26.65	31.25	W	W	25.94	27.98	27.88	28.40
February	30.06	W	26.24	32.03	W	W	26.70	28.05	28.70	28.33
March	W	33.17	28.26	33.80	W	33.72	28.15	29.76	30.08	29.97
April	32.43	34.47	29.46	34.21	W	W	31.23	29.89	31.54	30.47
May	W	36.46	32.40	38.16	W	W	33.18	32.49	34.50	33.25
June	36.57	35.10	30.33	35.63	32.91	W	30.92	32.31	32.46	32.01
July	36.95	39.28	32.56	39.80	35.17	(d)	32.46	34.90	35.28	34.58
August	42.75	W	34.24	43.18	W	41.89	33.93	37.71	37.57	37.14
September	41.03	41.80	35.27	44.82	38.41	W	38.72	39.12	40.58	37.45
October	47.64	45.74	40.46	49.15	W	W	39.55	37.35	41.33	42.92
November	40.43	W	33.09	43.14	W	W	32.23	34.05	35.50	36.43
December Average	36.01 <b>37.11</b>	W 37.73	29.49 <b>31.54</b>	40.22 <b>38.67</b>	W <b>34.08</b>	₩ <b>37.30</b>	30.11 <b>31.78</b>	30.64 <b>33.09</b>	32.52 <b>33.96</b>	31.10 <b>33.56</b>
_										
2005 January	38.20	W	31.51	44.43	38.52 R 40.44	W 42.50	34.35	36.03	37.51	34.13
February	42.77 R 47.05	W R 47.05	33.21 R 20.54	48.24	R 40.11	42.58	37.82	R 39.37	R 41.07	R 37.31
March	R 47.95	R 47.05	R 39.51	R 53.76	R 42.67	R 53.98	R 42.94	R 43.00	R 45.71	R 43.03
April	47.81	W	40.40	51.69	42.71	W	43.42	42.36	44.32	42.85

<sup>&</sup>lt;sup>a</sup> Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab

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. geographic coverage is the 50 States and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/prices.html.

Sources: See end of section.

Emirates.

<sup>b</sup> Current members are Algeria, Indonesia, Iran, Iraq, Kuwait, Libya,

Libitad Arab Emirates and Venezuela. Ecuador Nigeria, Qatar, Saudi Arabia, United Arab Emirates, and Venezuela. Ecuador is included in the data through 1992 and Gabon through 1995.

<sup>c</sup> Based on October, November, and December data only.

d No data reported.

R=Revised. W=Value withheld to avoid disclosure of individual company

Table 9.3 Landed Costs of Crude Oil Imports From Selected Countries

(Dollars per Barrel)

				Selected	Countries						
	Angola	Canada	Colombia	Mexico	Nigeria	Saudi Arabia	United Kingdom	Venezuela	Persian Gulf Nations <sup>a</sup>	Total OPEC <sup>b</sup>	Total Non-OPEC
1973 Average <sup>c</sup>	w	5.33	w	( <sup>d</sup> )	9.08	5.37	( <sup>d</sup> )	5.99	5.91	6.85	5.64
1975 Average	11.81	12.84	( <sup>d</sup> )	12.61	12.70	12.50	(d)	12.36	12.64	12.70	12.70
1980 Average	34.76	30.11	w	31.77	37.15	29.80	35.68	25.92	30.59	33.56	33.99
1985 Average	27.39	25.71	( <sup>d</sup> )	25.63	28.96	24.72	28.36	24.43	25.50	26.86	26.53
1990 Average	21.51	20.48	22.34	19.64	23.33	21.82	22.65	20.31	20.55	21.23	20.98
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 Average	25.43	22.98	25.28	22.09	26.45	24.77	26.35	21.93	24.13	23.83	23.97
2003 January	33.28	27.91	34.11	28.71	33.40	30.55	32.89	29.38	30.22	30.79	29.99
February	36.01	30.10	36.79	29.28	35.65	29.25	34.74	30.80	29.85	30.73	31.94
March	32.00	29.93	32.73	26.18	34.29	26.23	31.32	26.51	27.01	28.24	29.52
April	27.77	26.06	26.15	22.24	29.54	24.46	28.23	23.33	24.26	24.86	25.62
May	27.39	24.98	26.85	23.12	28.33	25.40	26.75	23.42	25.15	25.30	25.50
June	28.52	26.91	29.35	25.09	29.49	28.22	29.58	25.06	28.11	27.38	27.33
July	29.60	26.88	30.17	26.05	30.40	27.54	29.83	26.11	27.50	27.58	27.84
August	30.04	27.48	30.24	26.37	31.10	27.08	30.52	26.23	26.93	27.70	28.27
September	27.91	25.17	28.13	23.76	29.12	25.81	28.95	24.09	25.88	25.99	25.84
October	31.07	25.57	29.88	24.37	30.38	28.23	31.14	25.48	28.01	27.76	26.97
November	30.57	25.06	30.38	25.54	31.45	29.13	31.60	25.85	28.61	28.36	26.95
December	31.60	26.16	32.63	26.27	32.51	30.56	31.46	27.70	30.17	29.84	27.79
Average	30.14	26.76	30.55	25.48	31.07	27.50	30.62	25.70	27.54	27.70	27.68
2004 January	34.03	29.37	34.85	27.81	33.63	31.73	32.89	28.79	31.43	31.20	30.32
February	34.44	30.21	35.99	27.10	35.09	31.98	33.30	28.98	31.70	31.86	30.35
March	35.00	30.95	35.34	28.92	36.06	33.11	36.41	30.00	32.89	32.92	31.60
April	35.29	31.20	35.30	29.82	36.65	33.37	35.11	32.39	33.21	33.69	31.97
May	37.90	32.70	37.78	32.84	39.33	34.89	38.14	34.16	34.68	35.70	34.45
June	38.44	33.05	36.19	30.89	38.05	36.14	36.50	32.29	35.43	35.21	33.55
July	39.19	35.00	38.49	32.84	41.00	38.68	40.93	33.78	38.32	37.85	35.65
August	44.92	38.28	42.30	34.66	44.74	42.21	42.51	36.03	41.14	40.65	38.38
September	43.84	39.07	43.03	35.64	46.53	42.52	43.49	40.28	42.32	42.84	39.37
October	48.47	42.93	47.35	41.14	51.85	42.87	49.78	41.92	42.15	44.21	44.04
November	44.16	39.46	42.52	33.78	47.64	39.12	47.41	34.76	37.95	39.15	38.97
December	40.48	31.86	39.39	30.31	43.88	37.46	39.80	33.00	36.65	37.18	33.67
Average	39.52	34.51	39.03	32.24	40.93	37.11	39.25	33.79	36.53	36.84	35.28
2005 January		33.78	44.23	32.37	46.53	40.60	42.86	36.55	39.38	40.48	36.22
February		R 36.08	W	33.52	49.98	R 43.46	44.50	R 39.05	R 42.92	R 43.30	R 38.09
March	R 50.96	<sup>R</sup> 41.29	R 48.78	R 39.78	R 55.46	R 46.60	<sup>R</sup> 53.98	R 44.60	R 46.24	<sup>R</sup> 47.81	<sup>R</sup> 44.19
April	50.23	40.69	48.98	40.69	53.70	46.39	51.71	44.27	45.59	46.46	43.52

<sup>&</sup>lt;sup>a</sup> Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and United Arab Emirates.

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.

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/prices.html.

Sources: • October 1973-September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report." • October 1977-December 1977: Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report." • 1978 forward: EIA, Petroleum Marketing Monthly, July 2005, Table 25.

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.

<sup>C</sup> Based on October, November, and December data only.

d No data reported.

R=Revised. W=Value withheld to avoid disclosure of individual company data.

Cargoes that are purchased on a "netback" basis, or under similar contractual arrangements whereby the actual purchase price is not established at the  $\bar{\text{time}}$  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.

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

	Leaded Regular	Unleaded Regular	Unleaded Premium <sup>a</sup>	All Types <sup>b</sup>
072 Averene	20.0	NA	NA	NA
973 Average	38.8	NA	NA NA	NA
975 Average	56.7	NA 101.	NA NA	NA
980 Average	119.1	124.5	NA	122.1
985 Average	111.5	120.2	134.0	119.6
990 Average	114.9	116.4	134.9	121.7
995 Average	NA	114.7	133.6	120.5
996 Average	NA	123.1	141.3	128.8
997 Average	NA	123.4	141.6	129.1
998 Average	NA	105.9	125.0	111.5
999 Average	NA	116.5	135.7	122.1
000 Average	NA	151.0	169.3	156.3
001 Average	NA	146.1	165.7	153.1
002 Average	NA	135.8	155.6	144.1
003 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
		151.4	171.0	156.7
July	NA			
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
<b>004</b> January	NA	159.2	177.9	163.5
February	NA	167.2	185.8	171.5
March	NA NA	176.6	194.9	180.9
April	NA NA	183.3	201.2	187.5
•				
May	NA NA	200.9	218.6	205.0
June	NA	204.1	222.5	208.3
July	NA	193.9	213.0	198.2
August	NA	189.8	209.1	194.1
September	NA	189.1	208.2	193.4
October	NA	202.9	221.5	207.2
November	NA	201.0	220.3	205.3
December	NA	188.2	208.0	192.6
Average	NA	188.0	206.8	192.3
005	NIA.	400.0	0017	400.0
<b>005</b> January	NA	182.3	201.7	186.6
February	NA	191.8	210.5	196.0
March	NA	206.5	225.1	210.7
April	NA	228.3	246.8	232.5
May	NA	221.6	240.3	225.7
June	NA	217.6	236.5	221.8

<sup>&</sup>lt;sup>a</sup> The 1981 average (available in Web file) is based on September through December data only.

coverage for 1978 forward is 85 urban areas.

<sup>&</sup>lt;sup>b</sup> Also includes types of motor gasoline not shown separately. NA=Not available.

Notes: • See Note 5 at end of section. • 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.

<sup>•</sup> Geographic coverage for 1973-1977 is 56 urban areas. Geographic

Web Page: For annual data not displayed between 1973 and 1995, see 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

	Sulfur Co	l Fuel Oil ntent Less al to 1 Percent	Sulfur	l Fuel Oil Content an 1 Percent	Ave	erage
	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users	Sales for Resale	Sales to End Users
978 Average	29.3	31.4	24.5	27.5	26.3	29.8
980 Average	60.8	67.5	47.9	52.3	52.8	60.7
985 Average	61.0	64.4	56.0	58.2	57.7	61.0
990 Average	47.2	50.5	37.2	40.0	41.3	44.4
995 Average	38.3	43.6	33.8	37.7	36.3	39.2
996 Average	45.6	52.6	38.9	43.3	42.0	45.5
997 Average	41.5	48.8	36.6	40.3	38.7	42.3
998 Average	29.9	35.4	26.9	28.7	28.0	30.5
999 Average	38.2	40.5	32.9	36.2	35.4	37.4
000 Average	62.7	70.8	51.2	56.6	56.6	60.2
000 Average	52.3	64.2	42.8	49.2	47.6	53.1
•	54.6	64.0	50.8	54.4	53.0	56.9
002 Average	54.0	04.0	30.0	34.4	55.0	30.9
003 January	79.7	86.6	NA	71.2	73.1	75.4
February	94.4	97.2	76.0	77.1	87.3	83.9
March	88.1	98.1	62.4	72.1	77.4	81.1
April	60.3	77.3	51.9	59.5	56.9	64.3
May	62.8	74.9	53.2	58.8	57.2	61.9
June	62.6	71.9	54.1	60.0	58.0	63.9
July	64.9	74.5	58.9	67.8	61.7	70.1
August	67.2	75.4	60.7	67.2	63.4	69.8
September	62.6	72.0	56.1	61.2	58.6	64.6
October	65.2	70.7	56.6	62.8	60.1	65.2
November	67.3	76.7	58.7	62.2	62.7	66.7
December	66.7	79.3	54.5	60.7	62.3	66.8
Average	72.8	80.4	58.8	65.1	66.1	69.8
<b>004</b> January	75.3	84.4	57.6	64.9	69.0	71.6
February	76.3	80.7	59.3	64.0	69.7	70.3
March	67.3	76.3	57.1	62.5	62.8	67.5
April	69.9	75.8	58.4	64.8	64.4	68.8
May	76.4	79.1	62.9	69.8	68.9	72.8
June	75.7	78.7	62.7	71.6	69.6	73.9
July	72.2	76.7 76.3	60.4	69.3	66.4	71.4
August	75.2	70.3 79.8	60.8	70.1	67.8	73.2
September	74.6	88.3	61.3	70.1	67.2	73.2 77.2
October	85.7	88.3	68.9	81.0	77.1	82.8
November	86.7	93.8	59.1	75.2	77.1 71.1	82.2
December	75.9	95.6 85.0	54.2	66.6	62.3	62.2 75.4
Average	75.9 <b>75.6</b>	82.4	60.0	69.2	67.9	73.4 73.8
		<del></del>		<del></del>	<del></del>	
<b>005</b> January	79.5	84.6	60.4	71.2	70.7	77.3
February	85.7	88.1	63.9	75.9	74.7	81.4
March	93.4	95.1	66.1	82.8	79.8	89.0
April	99.9	103.4	78.6	93.3	87.5	97.1

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: For annual data not displayed between 1978 and 1995, see http://www.eia.doe.gov/emeu/mer/prices.html.

Source: EIA, Petroleum Marketing Monthly, July 2005, Table 19.

Table 9.6 Refiner Prices of Petroleum Products for Resale

	Finished Motor Gasoline <sup>a</sup>	Finished Aviation Gasoline	Kerosene- Type Jet Fuel	Kerosene	No. 2 Fuel Oil	No. 2 Diesel Fuel	Propane (Consume Grade)
1978 Average	43.4	53.7	38.6	40.4	36.9	36.5	23.7
1980 Average	94.1	112.8	86.8	86.4	80.3	80.1	41.5
985 Average	83.5	113.0	79.4	87.4	77.6	77.2	39.8
990 Average	78.6	106.3	77.3	83.9	69.7	69.4	38.6
995 Average	62.6	97.5	53.9	58.0	51.1	53.8	34.4
996 Average	71.3	105.5	64.6	71.4	63.9	65.9	46.1
_	71.3 70.0	106.5	61.3	65.3	59.0	60.6	41.6
997 Average	70.0 52.6	91.2	45.0		42.2	44.4	28.8
998 Average				46.5			
999 Average	64.5	100.7	53.3	55.0	49.3	54.6	34.2
000 Average	96.3	133.0	88.0	96.9	88.6	89.8	59.5
001 Average	88.6	125.6	76.3	82.1	75.6	78.4	54.0
002 Average	82.8	114.6	71.6	75.2	69.4	72.4	43.1
<b>003</b> January	94.7	122.4	89.8	98.8	90.0	89.2	60.5
February	110.0	130.1	103.1	118.4	108.6	107.8	72.7
March	112.9	135.0	102.4	116.6	105.3	102.5	69.2
April	99.7	125.8	82.3	86.1	83.0	86.4	53.8
May	93.6	122.6	75.1	75.4	75.8	79.2	54.3
June	95.6	NA	76.9	77.4	76.9	81.0	57.1
July	98.2	129.5	81.3	82.8	78.9	83.7	55.9
August	110.2	139.7	86.2	88.2	83.6	88.8	58.6
September	102.5	134.9	80.8	82.7	77.3	80.7	56.7
October	98.2	131.3	83.7	91.6	84.2	87.0	59.7
November	94.3	124.4	86.5	89.5	84.2	86.5	58.7
December	93.9	124.4	90.7	97.0	88.6	89.2	64.8
Average	100.2	128.8	87.1	95.5	88.1	88.3	60.7
<b>004</b> January	105.0	135.3	99.7	110.9	97.0	96.2	71.7
February	112.7	143.6	100.0	114.6	93.0	96.8	70.1
March	119.9	148.9	101.4	104.3	93.6	101.0	61.9
April	125.4	155.7	103.3	104.3	95.5	107.6	60.4
May	143.5	172.8	115.1	119.4	102.9	112.4	65.6
June	133.5	174.0	108.5	108.0	101.9	107.2	66.1
July	134.1	174.0	115.6	118.8	101.9	115.6	72.1
-	131.0	168.1	126.9	127.9	118.8	124.4	83.0
August	132.8	165.8	132.5	140.1	126.8	133.1	80.4
September October	145.9	174.5	152.5	163.2	147.7	153.1	88.6
November	138.2 119.5	168.6	145.3 132.6	147.9	139.3 129.8	142.4	88.3 83.4
December  Average	119.5 <b>128.8</b>	157.3 <b>162.5</b>	132.6 <b>121.0</b>	138.1 <b>126.2</b>	129.8 <b>112.6</b>	127.5 <b>118.9</b>	83.4 <b>75.1</b>
•	400.5	450.5	404.7	445.0	404.4	404.0	70.5
<b>005</b> January	128.5	159.5	131.7	145.6	131.1	131.0	79.5
February	134.5	170.0	137.9	145.1	134.1	139.3	79.0
March	R 153.3	183.8	R 157.8	163.0	153.7	159.1	86.2
April	164.5	202.9	165.4	163.7	155.4	164.0	85.3

<sup>&</sup>lt;sup>a</sup> See Note 5 at end of section.

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: For annual data not displayed between 1978 and 1995, see http://www.eia.doe.gov/emeu/mer/prices.html.

Source: EIA, Petroleum Marketing Monthly, July 2005, Table 4.

NA=Not available. R=Revised.

Table 9.7 Refiner Prices of Petroleum Products to End Users

	Finished Motor Gasoline <sup>a</sup>	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
1980 Average	103.5	108.4	86.8	90.2	78.8	81.8	48.2
1985 Average	91.2	120.1	79.6	103.0	84.9	78.9	71.7
1990 Average	88.3	112.0	76.6	92.3	73.4	72.5	74.5
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
•	78.1	105.9	54.3	60.5	55.8	58.4	45.8
1999 Average	110.6	130.6	89.9	112.3	92.7	93.5	45.6 60.3
2000 Average	10.6	132.3	77.5	104.5	92.7 82.9	93.5 84.2	50.6
2001 Average	94.7			99.0			
2002 Average	94.7	128.8	72.1	99.0	73.7	76.2	41.9
2003 January	106.0	139.7	91.4	121.0	98.3	93.2	57.3
February	122.1	W	101.8	137.2	114.5	110.3	69.5
March	130.1	W	104.3	138.6	112.9	111.3	68.0
April	120.0	W	82.1	127.7	91.2	94.2	52.7
May	110.0	139.8	75.9	NA	81.1	85.5	53.9
June	109.4	145.7	76.6	90.8	81.6	86.4	56.0
July	110.6	151.9	81.7	89.8	82.8	88.4	54.3
August	123.1	162.2	87.2	100.7	86.9	94.2	55.3
September	126.5	158.9	81.7	NA	81.4	88.9	53.8
October	115.0	150.8	84.5	117.2	88.2	91.9	55.8
November	109.5	W	87.8	120.9	89.1	91.7	55.9
December	106.5	146.6	92.9	NA	94.5	93.8	61.3
Average	115.6	149.3	87.2	122.4	93.3	94.4	57.7
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	101.9	114.6	67.4
May	157.1	194.9	117.0	111.7	107.2	120.0	74.8
June	154.7	193.2	110.3	105.2	104.9	113.9	71.5
July	148.6	187.0	116.9	W	113.2	120.1	77.6
August	145.4	185.8	127.2	125.8	122.6	128.3	88.1
September	145.2	189.2	133.3	W	129.9	135.3	85.9
October	158.6	W	155.0	169.5	153.2	155.5	98.3
November	155.3	W	146.5	154.3	142.4	149.7	103.5
December	141.5	W	133.4	145.2	132.1	134.5	94.5
Average	143.7	182.3	120.7	116.7	116.9	124.2	83.3
2005 January	139.8	W	121.2	152.2	120 7	124.2	105.0
2005 January			131.2	153.2	138.7	134.2	105.2
February	146.8	W 201.6	137.5	152.7	141.4	142.9	103.3
March	R 163.6	201.6	158.3	166.3	159.5	162.6	109.0
April	180.0	222.2	167.3	NA	160.8	168.4	100.6

<sup>&</sup>lt;sup>a</sup> See Note 5 at end of section.

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.

Source: EIA, Petroleum Marketing Monthly, July 2005, Table 2.

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

Web Page: For annual data not displayed between 1978 and 1995, see http://www.eia.doe.gov/emeu/mer/prices.html.

Table 9.8a No. 2 Distillate Prices to Residences: Northeastern States

	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
1980 Average	96.3	100.4	101.5	97.8	101.1	98.3	98.2	97.9	96.4
985 Average	99.7	102.4	107.7	107.0	106.7	108.0	111.3	105.9	102.3
990 Average	98.9	102.8	107.0	108.4	108.6	109.8	112.5	108.7	102.6
995 Average	78.7	77.9	85.3	84.4	87.4	86.4	95.5	88.8	82.6
996 Average	97.2	94.0	96.9	97.6	98.6	98.6	106.3	102.4	95.3
997 Average	94.2	94.2	98.7	96.0	98.9	96.3	106.5	103.3	95.0
998 Average	78.8	78.8	87.3	81.8	86.8	83.1	94.8	89.2	81.4
999 Average	81.3	77.0	85.4	83.6	85.8	85.2	96.9	91.3	81.5
000 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
002 Average	112.9	111.9	117.2	114.1	112.4	111.8	121.8	122.0	106.4
003 January	128.0	127.2	126.4	135.0	132.3	130.9	139.2	145.8	127.4
February	142.5	145.0	138.9	152.4	151.8	149.6	156.1	166.6	147.7
March	147.0	148.4	144.0	153.9	151.4	152.2	160.0	170.5	153.7
April	130.1	132.6	131.9	136.0	131.5	133.5	141.6	146.1	132.8
May	125.2	126.4	125.8	132.7	123.9	127.8	137.8	135.9	124.0
June	124.5	121.4	122.3	129.5	119.9	124.6	130.0	133.9	NA
July	121.3	118.7	120.3	127.1	117.3	120.6	128.4	128.5	105.6
August	120.6	119.1	121.0	127.4	NA	120.8	124.9	NA	108.8
September	121.5	119.4	121.3	125.9	120.6	122.6	128.9	126.1	110.7
October	122.8	120.4	126.0	126.0	121.1	124.4	131.8	133.3	116.3
November	124.3	121.8	126.9	129.8	127.3	129.8	137.5	136.5	121.4
December	129.4	126.1	129.0	134.9	133.1	133.6	142.4	144.7	128.4
Average	131.4	131.2	130.9	138.6	134.4	135.5	143.6	148.9	130.4
2004 January	135.4	136.4	135.6	143.1	143.4	140.8	148.9	152.1	138.0
February	138.3	139.8	137.3	144.3	141.7	139.8	150.9	155.5	138.6
March	137.0	135.2	137.9	142.9	137.0	138.7	147.2	153.9	136.9
April	136.9	133.6	138.9	142.0	137.4	137.7	146.8	151.1	135.6
May	138.6	133.7	138.8	145.1	141.1	139.7	148.4	152.3	136.1
June	141.6	135.8	144.0	144.6	137.8	143.3	148.5	151.9	134.8
July	145.1	138.8	150.6	149.4	140.1	146.9	151.8	151.8	133.2
August	153.2	146.5	155.1	156.4	148.3	152.1	155.5	158.6	142.1
September	161.4	153.5	160.0	165.5	155.7	162.4	162.9	164.2	153.1
October	178.7	173.3	176.7	182.7	177.8	178.0	184.2	192.3	171.0
November	178.1	174.7	174.1	183.1	176.4	180.8	188.9	195.9	174.0
December	176.5	175.4	172.2	180.7	175.8	178.2	185.7	193.4	171.0
Average	151.0	150.4	150.5	155.8	151.1	150.9	162.1	165.2	148.6
2005 January	174.8	173.6	172.9	182.2	175.8	178.9	187.8	194.2	173.7
February	180.2	177.0	174.3	186.2	177.2	180.7	190.5	197.1	176.5
March	<sup>R</sup> 186.7	<sup>R</sup> 183.8	<sup>R</sup> 183.5	<sup>R</sup> 196.3	<sup>R</sup> 185.4	<sup>R</sup> 187.9	R 200.4	R 209.2	<sup>R</sup> 185.4
April	190.5	186.5	186.4	201.2	185.6	186.1	202.0	210.1	187.1

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.

See Note 6 at end of section.

Web Page: For annual data not displayed between 1978 and 1995, see http://www.eia.doe.gov/emeu/mer/prices.html.

Source: EIA, Petroleum Marketing Monthly, July 2005, Table 18.

<sup>•</sup> Prices prior to 1983 are Energy Information Administration (EIA) estimates.

Table 9.8b No. 2 Distillate Prices to Residences: Selected South Atlantic and Midwestern States

	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
1980 Average	95.4	102.6	97.9	98.5	92.2	91.9	97.8	99.6	95.8	91.5	99.9
1985 Average	104.6	114.3	108.8	106.3	98.0	99.7	102.1	99.1	97.5	98.3	101.9
1990 Average	105.8	107.8	111.9	110.6	99.1	98.1	100.9	99.3	96.1	94.2	101.4
1995 Average	87.0	101.0	93.6	84.4	81.5	80.8	86.0	81.6	78.5	81.2	80.1
996 Average	98.4	117.8	106.3	95.2	96.0	92.1	97.7	91.2	89.3	89.9	90.9
997 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	120.3	113.9	116.0	NA	113.3	112.1	118.0	112.2
2002 Average	116.4	W	120.1	105.7	105.4	105.8	110.9	102.5	97.5	107.3	105.1
2003 January	138.4	W	141.4	130.9	131.7	129.4	130.5	130.3	116.6	127.1	120.5
February	161.4	W	158.2	147.2	155.5	144.8	148.5	146.7	130.5	138.5	135.3
March	168.5	W	165.5	143.4	155.9	141.3	148.8	142.4	131.8	140.2	133.7
April	142.2	NA	145.2	127.7	130.9	126.0	130.5	W	112.5	125.4	119.6
May	130.0	NA	135.7	119.3	116.5	115.4	120.9	W	108.1	117.9	113.4
June	125.5	127.6	128.4	120.3	113.2	113.4	114.0	W	106.1	113.6	114.6
July	119.7	W	124.4	118.5	109.5	111.5	113.5	W	NA	112.1	113.8
August	117.2	W	125.6	120.4	113.8	113.9	119.6	106.0	114.9	114.1	115.4
September	121.7	128.6	126.9	121.1	112.3	114.1	119.8	W	114.0	117.5	113.3
October	125.6	W	133.8	122.7	117.2	120.5	122.1	W	116.5	121.9	119.6
November	130.0	W	136.5	123.8	119.3	122.3	125.9	112.8	117.7	122.7	118.3
December	139.8	W	143.0	129.0	128.9	125.3	126.5	123.0	119.9	123.8	119.1
Average	143.3	W	145.5	131.1	130.4	128.4	132.1	120.2	119.8	126.9	121.8
004 January	147.3	NA	152.2	135.6	137.6	132.4	133.2	130.1	125.4	132.6	125.4
February	150.6	W	155.9	134.7	140.4	134.9	137.8	133.3	126.6	132.0	126.5
March	148.6	W	153.6	134.2	137.2	137.6	140.4	134.0	132.6	132.3	127.9
April	148.6	W	153.1	130.0	136.3	140.3	139.8	W	134.2	134.1	133.0
May	146.7	160.4	150.1	NA	140.3	137.7	141.0	W	136.2	NA	134.9
June	140.2	154.7	145.9	125.8	NA	134.9	138.1	W	134.5	136.2	135.1
July	140.8	W	150.3	134.3	137.2	141.4	143.2	W	139.8	141.8	139.4
August	147.5	W	156.6	141.7	147.3	147.4	150.0	W	144.9	148.6	150.2
September	156.9	W	166.6	152.8	154.0	153.8	162.5	W	NA	157.3	160.0
October	179.3	W	185.1	177.7	176.9	178.0	180.5	181.0	177.1	174.1	176.0
November	187.2	W	190.7	181.0	183.4	170.8	179.7	181.1	175.1	176.2	176.0
December	185.7	W	188.5	178.3	175.2	166.5	174.0	171.3	169.1	168.8	164.4
Average	156.3	W	163.2	145.6	149.7	147.2	153.5	153.2	140.5	146.5	143.1
<b>005</b> January	185.1	W	189.6	179.4	181.3	169.7	174.5	172.0	167.3	166.9	162.9
February	187.2	_ W	190.5	181.5	181.9	176.4	181.8	175.7	171.7	172.4	168.1
March	194.2	<sup>R</sup> W	R 200.0	<sup>R</sup> 190.8	R 192.7	<sup>R</sup> 189.5	191.5	<sup>R</sup> 187.9	<sup>R</sup> 189.1	<sup>R</sup> 186.7	<sup>R</sup> 179.7
April	196.5	W	204.1	189.5	190.8	190.5	194.4	191.3	NA	187.2	184.1

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

See Note 6 at end of section.

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.

Web Page: For annual data not displayed between 1978 and 1995, see http://www.eia.doe.gov/emeu/mer/prices.html.

Source: EIA, Petroleum Marketing Monthly, July 2005, Table 18.

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

	Idaho	Washington	Oregon	Alaska	U.S. Average
	luario	wasnington	Oregon	AldSKd	Average
978 Average	43.6	48.6	45.8	53.2	49.0
980 Average	91.6	100.8	97.3	97.8	97.4
985 Average	97.2	101.1	97.1	108.3	105.3
990 Average	97.4	102.9	97.0	110.1	106.3
995 Average	83.9	96.2	89.4	83.4	86.7
996 Average	93.3	108.0	98.9	90.9	98.9
997 Average	95.3	113.9	103.1	97.3	98.4
998 Average	78.4	97.8	86.1	85.2	85.2
999 Average	76.2	106.5	93.8	96.6	87.6
000 Average	117.0	144.5	136.8	133.7	131.1
	103.8	133.6	121.1	137.7	125.0
001 Average 002 Average	91.9	120.4	106.0	108.7	112.9
JUZ Average	91.9	120.4	100.0	100.7	112.9
<b>003</b> January	107.6	137.9	124.4	115.7	133.2
February	120.5	155.4	144.6	121.1	150.8
March	133.9	179.5	158.6	137.4	153.9
April	121.1	154.8	130.6	129.9	134.6
May	111.4	143.0	120.6	122.2	126.7
June	NA	143.3	125.3	122.6	121.7
July	107.4	141.0	131.1	NA	116.4
August	114.3	145.4	130.3	127.2	117.6
September	114.0	137.0	119.1	NA	118.8
October	NA	135.1	116.8	NA	123.6
November	122.4	141.8	123.5	126.6	128.3
December	120.7	146.2	125.6	127.3	134.1
Average	118.8	148.7	130.3	124.3	135.5
<b>004</b> January	122.6	147.7	129.0	129.1	141.7
February	124.1	157.7	140.3	130.8	143.2
March	134.2	166.4	144.6	136.8	141.3
April	144.3	178.7	159.3	143.5	141.1
May	162.5	191.5	177.0	155.3	142.0
June	148.9	185.5	163.5	159.2	140.8
July	142.7	182.2	171.8	165.4	142.9
August	155.2	180.9	164.2	163.3	149.8
September	161.8	187.2	175.7	162.4	159.8
October	193.2	208.8	192.2	177.1	180.5
November	188.4	204.4	180.3	174.7	182.6
December	157.7	188.3	163.5	170.0	179.2
Average	149.3	174.9	159.2	152.9	154.5
OOF January	454.5	404.4	460.0	460.0	400 7
005 January	151.5	191.1	168.6	168.3	180.7
February	188.7	223.8 R 242.2	197.6	176.7	184.3
March	204.6	R 243.2	R 212.2	R 192.4	R 193.9
April	204.8	246.3	219.9	204.3	195.7

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.

See Note 6 at end of section.

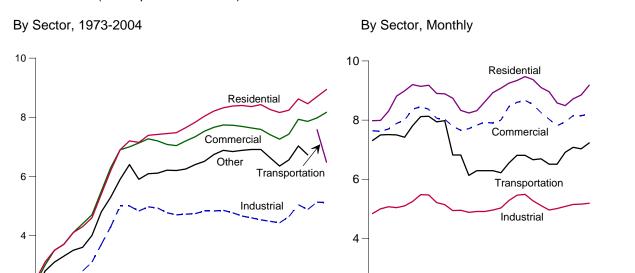
Web Page: For annual data not displayed between 1978 and 1995, see http://www.eia.doe.gov/emeu/mer/prices.html.

Source: EIA, Petroleum Marketing Monthly, July 2005, Table 18.

<sup>•</sup> Prices prior to 1983 are Energy Information Administration (EIA) estimates.

Figure 9.2 Average Retail Prices of Electricity

(Cents per Kilowatthour)



2

J FMAMJ J A SOND J FMAMJ J A SOND J FMAMJ J A SOND 2003 2004 2005

Note: Includes taxes.

1980

1975

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

1985

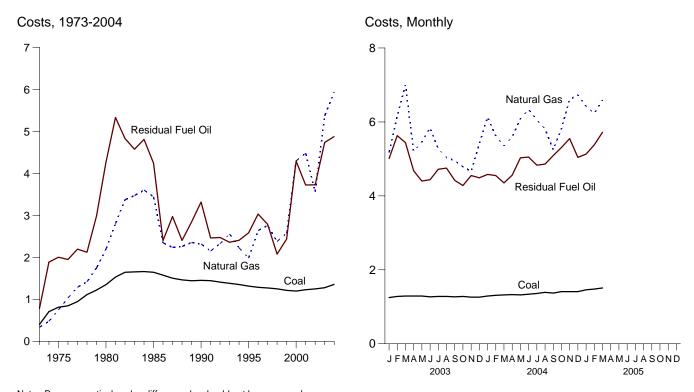
1990

Source: Table 9.9.

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

1995

2000



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, Including Taxes)

	Residential	Commerciala	Industrial <sup>b</sup>	Transportation <sup>c</sup>	Otherd	Total
1072 Average	2.5	2.4	1.3	NA	2.1	2.0
1973 Average	3.5			NA NA	3.1	2.0
975 Average	5.4	3.5 5.5	2.1 3.7	NA NA	4.8	2.9 4.7
980 Average						
985 Average	7.39	7.27	4.97	NA	6.09	6.44
990 Average	7.83	7.34	4.74	NA	6.40	6.57
995 Average	8.40	7.69	4.66	NA	6.88	6.89
996 Average	8.36	7.64	4.60	NA	6.91	6.86
997 Average	8.43	7.59	4.53	NA	6.91	6.85
998 Average	8.26	7.41	4.48	NA	6.63	6.74
999 Average	8.16	7.26	4.43	NA	6.35	6.64
000 Average	8.24	7.43	4.64	NA	6.56	6.81
001 Average	8.62	7.93	5.04	NA	7.03	7.32
002 Average	8.46	7.86	4.88	NA	6.73	7.21
003 January	7.98	7.64	4.84	7.31	_	7.03
February	7.99	7.62	5.00	7.50	_	7.03
March	8.30	7.70	5.07	7.51	_	7.15
April	8.81	7.89	5.04	7.50	_	7.28
May	8.99	8.00	5.10	7.42	_	7.42
June	9.20	8.37	5.25	7.81	_	7.73
July	9.14	8.45	5.48	8.12	_	7.94
August	9.18	8.37	5.47	8.13	_	7.92
September	8.90	8.06	5.21	7.94	_	7.57
October	8.89	8.03	5.14	7.98	_	7.40
November	8.74	7.79	4.94	6.82	_	7.21
December	8.33	7.66	4.95	6.82	_	7.16
	8.70	7.98	5.13	7.58	_	7.10 <b>7.42</b>
Average	6.70	7.90	5.13	7.30	_	7.42
<b>004</b> January	8.24	7.71	4.88	6.13	-	7.18
February	8.32	7.83	4.91	6.29	-	7.21
March	8.62	7.93	4.91	6.29	-	7.27
April	8.93	7.90	4.96	6.29	-	7.29
May	9.08	8.00	5.03	6.22	-	7.41
June	9.25	8.46	5.28	6.55	-	7.85
July	9.34	8.60	5.46	6.81	-	8.05
August	9.47	8.67	5.49	6.81	-	8.11
September	9.37	8.53	5.27	6.66	_	7.92
October	9.10	8.25	5.11	6.69	_	7.57
November	8.96	8.03	4.96	6.51	_	7.37
December	8.58	7.81	5.01	6.51	_	7.32
Average	8.94	8.17	5.11	6.48	-	7.57
005 January	8.49	7.94	5.08	6.91	_	7.40
February	8.72	8.15	5.15	7.08	_	7.51
March	8.85	8.15	5.16	7.03	_	7.52
April	9.18	8.20	5.19	7.23	_	7.57
4-Month Average	8.78	8.11	5.14	7.06	-	7.50
004 4-Month Average	8.49	7.84	4.92	6.25	_	7.24
003 4-Month Average	8.22	7.71	4.99	7.45	_	7.12
2003 4-WOILLI Average	0.22	1.11	4.33	1.45	-	1.12

a Commercial sector. For 1973-2002, prices exclude public street and highway lighting, interdepartmental sales, and other sales to public authorities.

NA=Not available. – =Not applicable.

Notes: • Beginning in 2003, the category "Other" has been replaced by "Transportation," and the categories "Commercial" and "Industrial" have been redefined. • Prices are calculated by dividing revenue by sales. Revenue may not correspond to sales for a particular month because of energy service provider billing and accounting procedures. That lack of correspondence could result in uncharacteristic increases or decreases in the monthly prices. • Prices include State and local taxes, energy or demand charges, customer service charges, environmental surcharges, franchise fees, fuel adjustments, and other miscellaneous charges applied to end-use customers during normal

billing operations. Prices do not include deferred charges, credits, or other adjustments, such as fuel or revenue from purchased power, from previous reporting periods. • See Note 7 at end of section for plant coverage, and for information on preliminary and final values. • Geographic coverage is the 50 States and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see 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."
• 1984-1990: EIA, Form EIA-861, "Annual Electric Utility Report."
• 1991 forward: EIA, Electric Power Monthly, July 2005, Table 5.3.

Industrial sector. For 1973-2002, prices exclude agriculture and irrigation.

<sup>&</sup>lt;sup>c</sup> Transportation sector, including railroads and railways.

<sup>&</sup>lt;sup>d</sup> Public street and highway lighting, interdepartmental sales, other sales to public authorities, agriculture and irrigation, and transportation including railroads and railways.

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

(Dollars per Million Btu, Including Taxes)

			Petroleu	m			
	Coal	Residual Fuel Oila	Distillate Fuel Oilb	Petroleum Coke	Total <sup>c</sup>	Natural Gas <sup>d</sup>	All Fossil Fuelse
1973 Average	0.41	0.79	NA	NA	0.80	0.34	0.48
1975 Average	.81	2.01	NA NA	NA	2.02	.75	1.04
1980 Average	1.35	4.27	NA	NA	4.35	2.20	1.93
1985 Average	1.65	4.24	NA	NA.	4.32	3.44	2.09
1990 Average	1.45	3.32	5.38	.80	3.35	2.32	1.69
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
	1.20	0.70	0.50		0.00	7.73	1.70
2002 Average <sup>f</sup>	1.25	3.73	5.34	0.78	3.34	3.56	1.52
2003 January	1.25	5.01	6.68	.72	4.63	5.17	2.14
February	1.28	5.63	7.78	.68	5.55	6.16	2.39
March	1.29	5.44	9.14	.79	5.72	7.00	2.55
April	1.29	4.68	6.64	.66	4.43	5.21	2.14
May	1.29	4.40	6.09	.69	4.17	5.46	2.23
June	1.27	4.44	5.83	.67	4.17	5.84	2.34
July	1.28	4.72	6.02	.80	4.39	5.27	2.47
August	1.28	4.75	6.65	.71	4.29	5.04	2.42
September	1.27	4.42	6.46	.75	3.93	4.95	2.18
October	1.28	4.28	6.51	.71	3.92	4.79	2.06
November	1.26	4.55	6.79	.70	3.86	4.66	1.96
December	1.26	4.49	6.58	.74	4.12	5.41	2.10
Average	1.28	4.74	6.90	.72	4.45	5.37	2.25
2004 January	1.29	4.58	7.45	.72	4.43	6.13	2.37
February	1.31	4.55	7.43	.74	4.25	5.62	2.32
March	1.32	4.35	7.72	.80	3.97	5.35	2.19
April	1.33	4.56	7.61	.72	4.17	5.59	2.33
May	1.32	5.03	7.65	.73	4.44	6.09	2.53
June	1.34	5.05	8.78	.78	4.57	6.34	2.67
July	1.36	4.83	8.11	.80	4.45	6.06	2.78
August	1.39	4.86	8.47	.72	4.38	5.81	2.64
September	1.37	5.09	9.01	.76	4.45	5.25	2.42
October	1.41	5.31	9.89	.82	4.76	5.82	2.47
November	1.41	5.55	9.18	1.00	5.11	6.61	2.49
December	1.41	5.04	8.99	.97	4.55	6.73	2.55
Average	1.36	4.88	8.32	.80	4.45	5.94	2.49
2005 January	1.46	5.13	9.57	1.09	5.02	6.42	2.60
February	1.48	5.38	9.89	1.13	4.91	6.23	2.48
March	1.51	5.72	11.17	1.07	5.26	6.59	2.59
3-Month Average	1.49	5.39	10.07	1.10	5.05	6.42	2.56
2004 3-Month Average	1.31	4.50	7.52	.75	4.23	5.70	2.29
2003 3-Month Average	1.27	5.37	8.01	.73	5.33	6.09	2.36

<sup>&</sup>lt;sup>a</sup> 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).

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: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/prices.html.

Sources: See end of section.

<sup>&</sup>lt;sup>c</sup> 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.

<sup>d</sup> Natural gas, plus a small amount of supplemental gaseous fuels that cannot

be identified separately. For 1973-2000, data also include a small amount of blast furnace gas and other gases derived from fossil fuels.

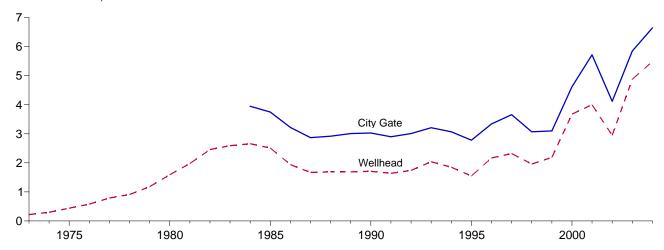
<sup>&</sup>lt;sup>e</sup> Weighted average of costs shown under "Coal," "Petroleum," and "Natural

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.

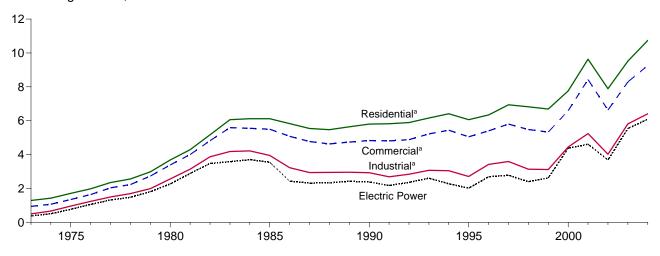
Figure 9.4 Natural Gas Prices

(Dollars per Thousand Cubic Feet)

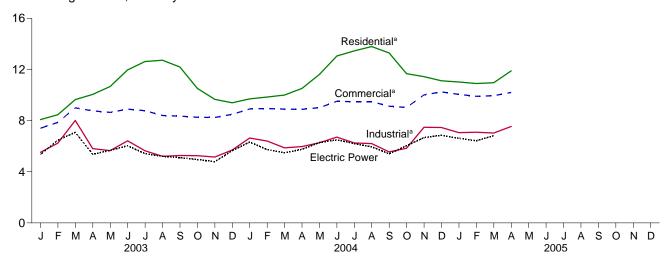
Selected Prices, 1973-2004



Consuming Sectors, 1973-2004



### Consuming Sectors, Monthly



<sup>a</sup>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)

						Consuming	g Sectors <sup>a</sup>			
		City	Res	idential	Com	mercial <sup>b</sup>	Indu	ustrial <sup>c</sup>	Electr	ic Power <sup>d</sup>
	Wellhead Price	Gate Price	Pricee	Percentage of Sector <sup>f</sup>	Price <sup>e</sup>	Percentage of Sector <sup>f</sup>	Price <sup>e</sup>	Percentage of Sector <sup>f</sup>	Pricee	Percentage of Sector <sup>f</sup>
1973 Average	0.22	NA	1.29	NA	0.94	NA	0.50	NA	0.38	92.1
1975 Average	.44	NA	1.71	NA	1.35	NA	.96	NA	.77	96.1
1980 Average	1.59	NA	3.68	NA	3.39	NA	2.56	NA	2.27	96.9
1985 Average	2.51	3.75	6.12	NA	5.50	NA	3.95	68.8	3.55	94.0
1990 Average	1.71	3.03	5.80	99.3	4.83	86.6	2.93	35.2	2.38	76.8
1995 Average	1.55	2.78	6.06	99.1	5.05	76.7	2.71	24.5	2.02	71.4
1996 Average	2.17	3.34	6.34	99.1	5.40	77.6	3.42	19.4	2.69	68.4
1997 Average	2.32	3.66	6.94	98.8	5.80	70.8	3.59	18.1	2.78	68.0
1998 Average	1.96	3.07	6.82	97.7	5.48	67.0	3.14	16.1	2.40	63.7
1999 Average	2.19	3.10	6.69	95.2	5.33	66.1	3.12	18.8	2.62	58.3
2000 Average	3.68	4.62	7.76	92.6	6.59	63.9	4.45	19.8	4.38	50.5
2001 Average	4.00	5.72	9.63	92.4	8.43	66.0	5.24	20.8	4.61	40.2
2002 Average	2.95	4.12	7.89	97.9	6.63	77.4	4.02	22.7	d <b>3.68</b>	83.9
2003 January	4.43	5.28	8.08	NA	7.40	79.1	5.52	22.2	5.36	88.6
February	5.05	5.83	8.46	NA	7.86	79.8	6.24	23.0	6.47	89.5
March	6.96	7.63	9.64	NA	9.00	80.1	8.01	22.0	7.08	87.8
April	4.47	5.60	10.05	NA	8.76	76.7	5.81	21.7	5.37	91.1
May	4.77	5.69	10.67	NA	8.64	73.5	5.65	21.0	5.67	93.4
June	5.41	6.40	11.96	NA	8.90	72.4	6.42	19.8	6.03	91.9
July	5.08	5.83	12.62	NA	8.77	71.0	5.64	25.2	5.42	92.0
August	4.46	5.48	12.72	NA	8.40	73.3	5.21	23.4	5.21	90.2
September	4.59	5.58	12.19	NA	8.35	72.2	5.27	23.4	5.10	91.1
October	4.32	5.33	10.52	NA	8.26	72.7	5.26	24.6	4.96	91.3
November	4.26	5.54	9.66	NA	8.24	77.6	5.15	23.0	4.79	90.4
December	4.76	5.89	9.39	NA	8.49	80.2	5.70	24.5	5.65	90.6
Average	4.88	5.85	9.52	97.6	8.29	77.3	5.81	22.9	5.54	90.7
2004 January	<sup>E</sup> 5.53	6.39	9.70	NA	8.91	80.4	6.64	22.3	6.32	96.9
February	E 5.15	6.37	9.84	NA	8.94	80.6	6.40	23.0	5.74	92.7
March	E 4.97	6.24	10.00	NA	8.90	78.2	5.87	22.2	5.48	94.4
April	E 5.20	6.32	10.52	NA	8.88	76.2	5.97	R 22.6	5.76	97.0
May	E 5.63	6.48	11.61	NA	9.01	R 72.6	6.27	22.4	6.28	95.3
June	E 5.85	6.92	13.05	NA	R 9.51	R 71.0	6.71	24.1	6.49	95.4
July	E 5.60	6.68	13.45	NA	R 9.47	R 70.4	6.25	24.3	6.21	96.0
August	E 5.36	6.50	13.79	NA	R 9.48	69.6	6.20	23.6	5.95	95.5
September	E 4.86 E 5.45	6.07	13.29	NA NA	9.12 R 9.03	<sup>R</sup> 69.8 <sup>R</sup> 72.6	5.55	22.3 R 22.4	5.40	93.5
October	E 6.07	6.30	11.67	NA			5.84		6.04	96.8
November	E 6.07	7.49 7.51	11.44 11.11	NA NA	10.01 <sup>R</sup> 10.24	77.9 <sup>R</sup> 79.6	7.48 7.46	23.0 23.6	6.67 6.85	92.4 93.3
Average	E <b>5.49</b>	6.65	10.74	E <b>96.0</b>	9.26	79.6 77.0	6.41	23.6 <b>23.0</b>	6.85 <b>6.09</b>	93.3 <b>95.0</b>
2005 January	E 5.52	7.06	11.02	NA	R 10.05	R 83.2	7.06	21.3	6.62	96.4
2005 January	E 5.59	7.06	10.90	NA NA	9.90	83.3	7.06	21.3	6.42	96.4 95.6
March	E 5.98	7.13	10.96	NA NA	9.95	R 82.9	7.03	22.2	R 6.82	R 95.3
April	E 6.44	7.21	11.89	NA NA	10.20	80.8	7.54	21.5	NA	NA NA
4-Month Average	E 5.88	7.79 7.23	11.09	NA NA	10.20	<b>82.8</b>	7.17	21.7	NA NA	NA NA
2004 4-Month Average	5.21	6.34	9.92	NA	8.91	79.3	6.23	22.5	5.82	95.2
2003 4-Month Average	5.23	6.00	8.84	NA	8.12	79.1	6.38	22.2	6.05	89.2

<sup>&</sup>lt;sup>a</sup> See Note 9 at end of section.

are available.

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

Notes: • Prices are for natural gas, plus a small amount of supplemental Notes: • Prices are no natural gas, plus a small amount or 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: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/prices.html.

Sources: See end of section.

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. utilities only; beginning in 2002, data also include independent power producers.

See Note 8 at end of section for plant coverage.

<sup>e</sup> Includes taxes.

The percentage of the sector's consumption in Table 4.4 for which price data

# **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 by Paula Weir, printed in the December [3] *Petroleum Marketing Monthly*, published by FIA

**Note 7**. Average annual retail prices of electricity have the following plant coverage: Through 1979, annual data are for Classes A and B privately owned electric utilities only. For 1980-1982, annual data are for selected Class A utilities whose electric operating revenues were \$100 million or more during the previous year. For 1983, annual data are for a selected sample of electric utilities. Beginning in 1984, data are for a census of electric utilities. Beginning in 1996, annual data also include energy service providers selling to retail customers.

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

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

Note 8. Data for 1973–1982 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units combined totaled 25 megawatts or greater. From 1974-1982, peaking units were included in the data and counted towards the 25-megawatt-or-greater total. Data for 1983-1990 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units combined totaled 50 megawatts or greater. Data for 1991-2001 cover all regulated electric generating plants at which the generator nameplate capacity of all steam-electric units and combined-cycle units together totaled 50 megawatts or greater. Data for 2002 forward cover the aforementioned regulated generating plants plus unregulated generating plants (independent power producers,

as well as combined-heat-and-power generating plants and electricity-only plants in the commercial and industrial sector) whose total facility fossil-fueled nameplate generating capacity is 50 or more megawatts, regardless of unit type.

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

#### **Table 9.1 Sources**

#### **Domestic First Purchase Price**

1973–1976: U.S. Department of the Interior (DOI), Bureau of Mines (BOM), *Minerals Yearbook*, "Crude Petroleum and Petroleum Products" chapter.

1977: Federal Energy Administration (FEA), based on Form FEA-P124, "Domestic Crude Oil Purchaser's Monthly Report."

1978 forward: Energy Information Administration (EIA), *Petroleum Marketing Monthly*, July 2005, Table 1.

#### F.O.B. and Landed Cost of Imports

October 1973–September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report."

October–December 1977: EIA, Form FEA-F701-M-0, "Transfer Pricing Report."

1978 forward: EIA, *Petroleum Marketing Monthly*, July 2005, Table 1.

## **Refiner Acquisition Cost**

1973: EIA estimates. The domestic price was derived by adding estimated transportation costs to the reported domestic first purchase price. The imported price was derived by adding an estimated ocean transport cost to the average "Free Alongside Ship" value published by the U.S. Bureau of the Census.

1974–1976: DOI, BOM, *Minerals Yearbook*, "Crude Petroleum and Petroleum Products" chapter.

1977: January–September, FEA, based on Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report." October–December, EIA, based on Form FEA-P110-M-1, "Refiners' Monthly Cost Allocation Report."

1978 forward: EIA, *Petroleum Marketing Monthly*, July 2005, Table 1.

### **Table 9.2 Sources**

October 1973–September 1977: Federal Energy Administration, Form FEA-F701-M-0, "Transfer Pricing Report." October 1977–December 1977: Energy Information Administration (EIA), Form FEA-F701-M-0, "Transfer Pricing Report."

1978 forward: EIA, *Petroleum Marketing Monthly*, July 2005, Table 24.

#### **Table 9.10 Sources**

1973–September 1977: Federal Power Commission, Form FPC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants."

October 1977–December 1977: Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants."

1978 and 1979: Energy Information Administration (EIA), Form FERC-423, "Monthly Report of 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*, July 2005, Table 4.1; Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report of 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**

#### **All Prices Except Electric Power:**

1973–1999: Energy Information Administration (EIA), *Natural Gas Annual*, annual reports.

2000 forward: EIA, *Natural Gas Monthly*, June 2005, Table

#### **Electric Power Sector Price:**

1973–1998: EIA, *Natural Gas Annual* 2000, Table 96. 1999–2002: EIA, *Natural Gas Monthly*, October 2004,

Table 4.

2003: Federal Energy Regulatory Commission, Form FERC-423, "Monthly Report of Cost and Quality of Fuels for Electric Utility Plants," and EIA, Form EIA-423 "Monthly Cost and Quality of Fuels for Electric Plants Report."

2004 forward: EIA, *Natural Gas Monthly*, June 2005, Table 4

#### Percentage of Residential Sector:

1989-2001: EIA, *Natural Gas Annual* (*NGA*), annual reports, Table 1. Calculated as the total amount of natural gas delivered to residential consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to residential consumers.

2002 and 2003: EIA, *NGA*, annual reports, Table 23. 2004: EIA estimate.

#### **Percentage of Commercial and Industrial Sectors:**

1989-1999: EIA, *Natural Gas Annual*, annual reports. Calculated as the total amount of natural gas delivered to commercial (or industrial) consumers minus the amount delivered for the account of others, and then divided by the total amount delivered to commercial (or industrial) consumers. 2000 forward: EIA, *Natural Gas Monthly*, June 2005, Table 4.

#### **Percentage of Electric Power Sector:**

1973-2001: Calculated by EIA as the quantity of natural gas receipts by electric utilities reported on Form FERC-423, "Monthly Report of Cost and Quantity of Fuels for Electric Utility Plants" (and predecessor forms) divided by the quantity of natural gas consumed by the electric power sector (for 1973-1988, see *Monthly Energy Review*, Table 7.3b; for 1989-2001, see *Monthly Energy Review*, Table 7.4b).

2002 forward: Calculated by EIA as the quantity of natural gas receipts by electric utilities and independent power producers reported on Form FERC-423, "Monthly Report of Cost and Quantity of Fuels for Electric Utility Plants," and EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report," divided by the quantity of natural gas consumed by the electric power sector (see *Monthly Energy Review*, Table 7.4b).

# Section 10. Renewable Energy

**Sources**. The Nation consumed 6.1 quadrillion Btu of renewable energy in 2004, accounting for 6.1 percent<sup>1</sup> of total energy consumption during the year. At 2.7 quadrillion Btu, conventional hydroelectric power was the largest component of the renewable energy total, measuring 45 percent of the total. Wood was the next largest component at 2.0 quadrillion Btu and 33 percent of the total. Waste, the third largest component of the renewable energy total, contributed 0.6 quadrillion Btu in 2004, a 9-percent share of the total.

**Electric Power Sector**. In 2004, the electric power sector consumed 3.6 quadrillion Btu of renewable energy resources, 59 percent of all renewable energy consumed. Conventional hydroelectric power recorded 2.7 quadrillion Btu in 2004, 74 percent of the electric power sector total.

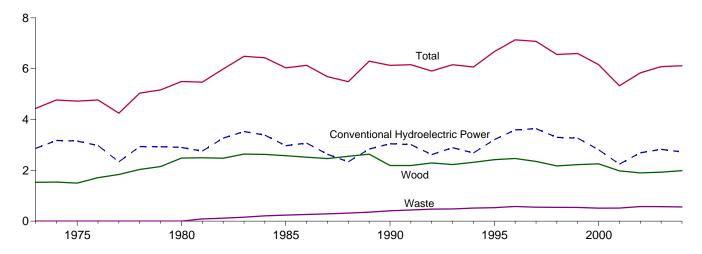
Waste, at 0.3 quadrillion Btu, was the second largest renewable source consumed for electricity generation, followed by geothermal, wood, wind, and solar.

End-Use Sectors. The industrial sector was the largest end-use consumer of renewable energy in 2004. Industrial facilities used 1.7 quadrillion Btu of renewable energy in 2004, 86 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---81 percent in the form of wood, 14 percent solar, and 4 percent geothermal. The transportation sector consumed renewable energy in the form of alcohol fuels used in the blending of motor gasoline; in 2004, alcohol fuel use was 0.3 quadrillion Btu. The commercial sector used 0.1 quadrillion Btu in 2004, 45 percent of it as waste and 39 percent as wood.

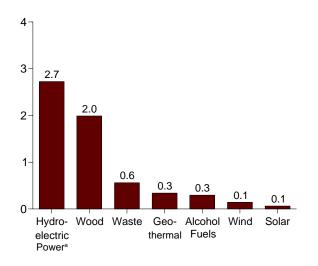
<sup>&</sup>lt;sup>1</sup>A small amount of alcohol fuel (ethanol blended into motor gasoline) is both fossil fuel (as petroleum) and renewable energy and is counted in both those subtotals but counted only once in total energy consumption.

Figure 10.1 Renewable Energy Consumption (Quadrillion Btu)

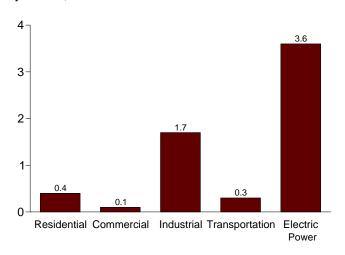
Total and Major Sources, 1973-2004



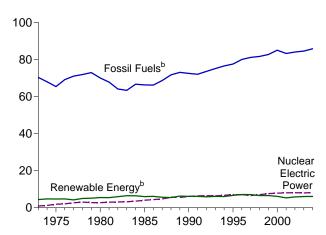
By Source, 2004



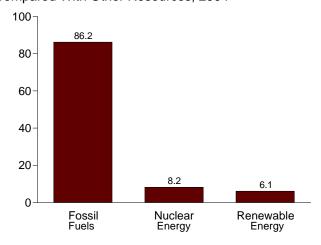
By Sector, 2004



# Compared With Other Resources, 1973-2004



### Compared With Other Resources, 2004



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

<sup>&</sup>lt;sup>a</sup>Conventional hydroelectric power.

<sup>&</sup>lt;sup>b</sup>A small amount of alcohol (ethanol blended into motor gasoline) is both fossil fuel (as petroleum) and renewable energy and is counted in both

**Table 10.1 Renewable Energy Consumption by Source** 

	Conventional Hydroelectric Power <sup>a</sup>	Wood <sup>b</sup>	Waste <sup>c</sup>	Alcohol Fuels <sup>d</sup>	Geothermal <sup>e</sup>	Solar <sup>f</sup>	Wind <sup>g</sup>	Total
973 Total	2,861	1,527	2	NA	43	NA	NA	4,433
975 Total	3,155	1,497	2	NA	70	NA	NA	4,723
980 Total	2,900	2,483	2	NA	110	NA	NA	5,494
985 Total	2,970	2,576	236	52	198	(s)	(s)	6,033
990 Total	3.046	2.191	408	63	336	60	<u>29</u>	6,133
995 Total	3,205	2,420	531	117	294	70	33	6,669
996 Total	3,590	2,467	577	84	316	71	33	7,137
997 Total	3,640	2,350	551	106	325	70	34	7.075
998 Total	3,297	2,175	542	117	328	70	31	6,561
999 Total	3,268	2.224	540	122	331	69	46	6,599
000 Total	2.811	2,257	511	139	317	66	57	6,158
2001 Total	2.242	1.980	514	147	311	65	70	5.328
002 Total	2,689	1,899	576	174	328	64	105	5,835
002 10tal	2,009	1,099	576	174	320	04	105	3,633
003 January	211	163	49	17	29	5	6	481
February	203	148	43	20	27	5	8	452
March	248	160	49	17	29	5	11	518
April	254	157	47	20	27	5	11	521
May	301	158	48	19	28	6	10	569
June	293	157	47	19	29	6	11	560
July	254	168	50	20	29	6	10	536
August	235	166	49	21	29	6	8	514
September	189	158	47	18	28	5	9	455
October	189	163	47	21	28	5	9	462
November	202	160	46	24	27	5	10	474
December	246	171	50	25	30	5	11	539
Total	2,825	1,929	<b>571</b>	<b>239</b>	<b>339</b>	64	115	6,082
1004	005	470	40	0.4	22	_	4.4	500
2004 January	235	173	46	24	30	5	11	523
February	213	159	43	22	28	5	11	481
March	231	164	46	24	28	5	13	513
April	212	166	46	24	27	5	13	493
May	242	159	50	25	28	6	17	527
June	255	161	49	25	28	6	14	537
July	235	173	49	25	29	6	11	527
August	220	168	49	24	29	6	10	505
September	208	160	45	26	27	5	11	482
October	193	169	45	25	29	5	10	477
November	213	161	45	25	28	5	10	488
December	267	177	48	26	29	5	12	564
Total	2,725	1,989	560	296	340	63	143	6,116
OOE January	249	171	40	26	29	5	10	539
2005 January	248	171	49	26			10	
February	221	162	43	28	25	5	9	493
March	234	166	49	33	29	5	14	530
April <b>4-Month Total</b>	232 <b>935</b>	159 <b>660</b>	47 <b>189</b>	34 <b>121</b>	28 <b>111</b>	5 <b>20</b>	15 <b>48</b>	522 <b>2,084</b>
+-INIOTILIT TOLAT	<b>333</b>	900	109	121	111	20	40	2,004
004 4-Month Total	892	661	181	95	112	20	48	2,010
003 4-Month Total	915	629	187	73	112	21	36	1,973

<sup>&</sup>lt;sup>a</sup> Hydroelectricity generated by pumped storage is not included in renewable

Sources: Tables 10.2a, 10.2b, and 10.2c.

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.

<sup>g</sup> Wind electricity net generation.

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: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/renew.html.

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

		Residentia	al Sector		Commercial Sector <sup>a</sup>						
	Woodb	Geothermal <sup>c</sup>	Solard	Total	Hydropowere	Woodb	Waste <sup>f</sup>	Geothermal <sup>c</sup>	Total		
1973 Total	354	NA	NA	354	NA	7	NA	NA	7		
975 Total	425	NA	NA	425	NA.	8	NA	NA	8		
980 Total	859	NA	NA NA	859	NA NA	21	NA NA	NA	21		
985 Total	899	NA NA	NA NA	899	NA NA	24	NA NA	NA NA	24		
990 Total	581	<u>6</u>	56	642	1	39	28	3	71		
995 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 Total	313	10	59	382	(s)	39	42	9	90		
2003 January	30	1	5	37	(s)	3	4	1	9		
February	28	1	4	33	(s)	3	3	1	8		
March	30	1	5	37	(s)	3	4	1	9		
April	30	1	5	36	(s)	3	4	1	8		
May	30	1	5	37	(s)	3	4	1	9		
June	30	1	5	36	(s)	3	4	1	9		
July	30	1	5	37	(s)	3	4	1	9		
•	30	1	5	37	\ '	3	4	1	9		
August		1	5		(s)		4	1	-		
September	30	•		36	(s)	3	•		8		
October	30	1	5	37	(s)	3	4	1	9		
November	30	1	5	36	(s)	3	4	1	8		
December	30	1	5	37	(s)	3	4	1	9		
Total	359	17	58	434	1	40	47	14	102		
2004 January	28	2	5	35	(s)	4	4	1	9		
February	26	1	5	32	(s)	3	3	1	8		
March	28	2	5	35	(s)	3	4	1	9		
April	27	1	5	33	(s)	3	4	1	9		
May	28	2	5	35	(s)	3	4	1	9		
June	27	1	5	33	(s)	3	4	1	9		
July	28	2	5	35	(s)	3	4	1	9		
August	28	2	5	35	(s)	3	4	1	9		
September	27	1	5	33	(s)	3	4	1	8		
October	28	2	5	35	(s)	4	4	1	9		
November	27	1	5	33	1 ' '	3	4	1	9		
	28	2	5	35	(s)	4	4	1	9		
December					(s)	•	4 48	15	-		
Total	332	18	57	408	1	41	48	15	106		
2005 January	28	2	5	35	(s)	4	4	1	9		
February	25	1	4	31	(s)	3	4	1	8		
March	28	2	5	35	(s)	4	4	1	9		
April	27	1	5	34	(s)	3	4	1_	9		
4-Month Total	109	6	19	134	(s)	14	17	5	36		
2004 4-Month Total	110	6	19	135	(s)	14	15	5	35		
2003 4-Month Total	118	6	19	143	(s)	13	15	5	34		

<sup>&</sup>lt;sup>a</sup> 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.

Section 7.

b Wood, black liquor, and other wood waste.

<sup>&</sup>lt;sup>c</sup> Geothermal heat pump and direct use energy.

<sup>&</sup>lt;sup>d</sup> 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.

 $<sup>^{\</sup>rm f}$  Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

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: For annual data not displayed between 1973 and 1995, see 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** 

			Industrial Sectora			Transportation Sect
	Hydropowerb	Woodc	Wasted	Geothermal <sup>e</sup>	Total	Alcohol Fuels <sup>f</sup>
973 Total	35	1,165	NA	NA	1,200	NA
975 Total	32	1,063	NA	NA NA	1,096	NA NA
980 Total	33	1,600	NA NA	NA.	1,633	NA NA
985 Total	33	1,645	230	NA NA	1,908	52
990 Total	31	1,442	192	2	1,667	63
995 Total	55	1,652	195	3	1,905	117
996 Total	61	1,684	224	3	1,971	84
97 Total	58	1,731	184	3	1,976	106
	55 55	, -	180	3	,	117
998 Total		1,603		3 4	1,841	
999 Total	49	1,620	171		1,843	122
000 Total	42	1,636	145	4	1,828	139
001 Total	33	1,443	150	5	1,630	147
002 Total	39	1,396	168	5	1,608	174
<b>003</b> January	4	114	15	(s)	133	17
February	3	104	14	(s)	121	20
March	4	113	15	(s)	131	17
April	2	112	14	(s)	129	20
May	4	112	14	(s)	130	19
June	4	111	13	(s)	128	19
July	4	119	14	(s)	138	20
August	4	116	14	(s)	135	21
September	3	112	14	(s)	129	18
October	3	115	14	(s)	133	21
November	4	113	14	(s)	131	24
December	5	122	15	(s)	142	25
Total	43	1,363	17 <b>0</b>	5	1,581	239
004 January	<b>F</b>	100	4.4	(a)	146	24
004 January	5	126	14	(s)	146	
February	5	116	14	(s)	134	22
March	4	118	14	(s)	137	24
April	4	123	14	(s)	141	24
May	4	115	16	(s)	135	25
June	3	118	15	(s)	137	25
July	3	125	14	(s)	143	25
August	4	122	14	(s)	140	24
September	5	116	14	(s)	135	26
October	4	124	14	(s)	142	25
November	5	117	14	(s)	135	25
December	6	130	14	(s)	150	26
Total	51	1,448	172	5	1,676	296
<b>005</b> January	4	124	14	(s)	143	26
February	3	120	13	(s)	136	28
March	4	120	14	(s)	138	33
	3	117	14	` '		33
April <b>4-Month Total</b>	1 <b>5</b>	481	56	(s) <b>2</b>	135 <b>553</b>	121
004 4-Month Total	18	483	56	2	558	95
				2		
003 4-Month Total	13	442	58	1	515	73

<sup>&</sup>lt;sup>a</sup> Industrial sector fuel use, including combined-heat-and-power (CHP) and industrial electricity-only plants. See note at end of Section 7.

b Conventional hydroelectric power.

Sources: See end of section.

C Wood, black liquor, and other wood waste.
 Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.
 Geothermal heat pump and direct use energy.

<sup>&</sup>lt;sup>f</sup> Ethanol blended into motor gasoline.

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: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/renew.html.

Table 10.2c Renewable Energy Consumption: Electric Power Sector

	Hydropower <sup>a</sup>	Woodb	Waste <sup>c</sup>	Geothermald	Solare	Wind <sup>f</sup>	Total
973 Total	2,827	1	2	43	NA	NA	2,873
975 Total	3,122	(s)	2	70	NA	NA	3,194
980 Total	2,867	3	2	110	NA NA	NA NA	2,982
985 Total		8	7	198	(s)	(s)	3.150
990 Total g	3,014	129	188	326	4	29	3,689
	3,149	125	296	280	5	33	,
995 Total	3,149 3,528	138	300	300	5	33	3,889 4,305
	,				5 5		,
997 Total	3,581	137	309	309	5 5	34	4,375
998 Total	3,241	137	308	311		31	4,032
999 Total	3,218	138	315	312	5	46	4,034
000 Total	2,768	134	318	296	5	57	3,579
001 Total	2,209	126	324	289	6	70	3,023
002 Total	2,650	150	365	305	6	105	3,581
<b>003</b> January	207	16	30	26	(s)	6	286
February	199	13	26	24	(s)	8	270
March	244	14	30	25	1	11	324
April	251	12	29	25	1	11	329
May	297	12	30	25	1	10	374
June	289	13	30	26	1	11	370
July	251	15	31	26	1	10	333
August	231	16	31	26	1	8	313
September	186	14	29	25	1	9	264
October	185	14	28	25	(s)	9	262
November	198	14	29	24	(s)	10	275
December	241	15	31	27	(s)	11	326
Total	2,781	167	354	303	5	115	3,725
<b>004</b> January	230	15	28	26	(s)	11	309
February	209	14	26	25	(s)	11	284
March	227	14	28	25	1	13	308
April	209	12	28	24	1	13	286
	238	13	30	25 25	1	17	323
May				25 25	1	14	
June	252 231	13 16	29 30	25 26	1		333 315
July						11	
August	216	15	30	26	1	10	297
September	203	14	27	24	1	11	280
October	188	14	27	26	(s)	10	266
November	209	14	28	25	(s)	10	285
December	261	15	30	26	(s)	12	344
Total	2,673	168	340	302	6	143	3,632
<b>005</b> January	243	15	30	25	(s)	10	325
February	217	14	26	22	(s)	9	289
March	230	15	30	25	(s)	14	315
April	229	12	29	25	1	15	310
4-Month Total	919	56	116	98	1	48	1,240
004 4-Month Total	874	55	110	100	1	48	1,188
003 4-Month Total	902	55	114	100	1	36	1,209

<sup>&</sup>lt;sup>a</sup> Conventional hydroelectric power.

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.

Wood and Waste: 1973-1988—Table 7.3b. forward—Table 7.4b. • Hydropower, Geothermal, Solar, and Wind: Tables 7.2b and A6.

<sup>&</sup>lt;sup>b</sup> Wood, black liquor, and other wood waste.

<sup>&</sup>lt;sup>c</sup> Municipal solid waste, landfill gas, sludge waste, tires, agricultural byproducts, and other biomass.

Geothermal electricity net generation.

e Solar thermal and photovoltaic electricity net generation.

Wind electricity net generation.

<sup>&</sup>lt;sup>g</sup> Through 1988, data are for consumption at electric utilities only. Beginning in 1989, data also include consumption at independent power producers. NA=Not available. (s)=Less than 0.5 trillion Btu.

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

<sup>•</sup> Geographic coverage is the 50 states and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/renew.html.

# **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 I.

1985 and 1986: Values interpolated.

1987: EIA, Estimates of Biofuels Consumption in the United States During 1987, Table 2.

1988: Value interpolated.

1989–2002: EIA, *Renewable Energy Annual 2003* (August 2004), Table B1.

2003 forward: Annual estimates are from EIA, Office of Coal, Nuclear, Electric and Alternate Fuels (CNEAF). Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

#### Wood, Commercial

1973–1979: EIA, Estimates of U.S. Wood Energy Consumption from 1949 to 1981, Table A2.

1980–1983: EIA, Estimates of U.S. Wood Energy Consumption 1980–1983, Table ES1.

1984: EIA, CNEAF, estimate.

1985-1988: Values interpolated.

1989–2002: EIA, *Renewable Energy Annual 2003* (August 2004), Table B1.

2003 forward: Annual estimates are created by adding annual values for wood consumption at commercial combined heat-and-power (CHP) plants (see sources for Table 7.4c) and annual CNEAF estimates for wood consumption at other commercial plants. Monthly estimates are created by adding monthly values for wood consumption at commercial CHP plants (see sources for Table 7.4c) and monthly estimates for wood consumption at other commercial plants. (For other commercial plants, monthly estimates are created by dividing the annual CNEAF estimate by the number of days in the year and then multiplying by the number of days in the month.)

#### Wood, Industrial

1973–1979: EIA, Estimates of U.S. Wood Energy Consumption from 1949 to 1981, Table A2.

1980–1983: EIA, Estimates of U.S. Wood Energy Consumption 1980–1983, Table ES1.

1984: EIA, Estimates of U.S. Biofuels Consumption 1990,

1985 and 1986: Values interpolated.

1987: EIA, Estimates of Biofuels Consumption in the

United States During 1987, Table 2.

1988: Value interpolated.

1989–2002: EIA, *Renewable Energy Annual 2003* (August 2004), Table B1.

2003 forward: Annual estimates are created by adding annual values for wood consumption at industrial CHP plants (see Table 7.4c) and annual CNEAF estimates for wood consumption at other industrial plants. Monthly estimates are created by adding monthly values for wood consumption at industrial CHP plants (see Table 7.4c) and monthly estimates for wood consumption at other industrial plants. (For wood consumption at other industrial plants, monthly estimates are created by dividing the annual CNEAF estimate by the number of days in the year and then multiplying by the number of days in the month.)

#### Waste, Commercial

Table 7.4c

#### Waste, Industrial

1981: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8, total waste consumption, minus electric utilities' use of waste to produce electricity (see Table 10.3a).

1982 and 1983: EIA, CNEAF, estimates for total waste consumption, minus electric utilities' use of waste to produce electricity (see Table 10.3a).

1984: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8, total waste consumption, minus electric utilities' use of waste to produce electricity (see Table 10.3a).

1985 and 1986: Values interpolated.

1987: EIA, *Estimates of U.S. Biofuels Consumption 1990*, Table 8, total waste consumption, minus electric utilities' use of waste to produce electricity (see Table 10.3a).

1988: Value interpolated.

1989–2002: EIA, Renewable Energy Annual 2003 (August 2004), Table B1.

2003 forward: Annual estimates are created by adding annual values for waste consumption at industrial CHP plants (see Table 7.4c) and annual CNEAF estimates for waste consumption at other industrial plants. Monthly estimates are created by adding monthly values for waste consumption at industrial CHP plants (see Table 7.4c) and monthly estimates for waste consumption at other industrial plants. (For waste consumption at other industrial plants, monthly estimates are created by dividing the annual CNEAF estimate by the number of days in the year and then multiplying by the number of days in the month.)

#### Hydroelectric, Commercial

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

#### Hydroelectric, Industrial

1973-1988: Tables 7.1 and A6. 1989 forward: Tables 7.2c and A6.

#### **Alcohol Fuels**

1981: EIA, Estimates of U.S. Biofuels Consumption 1990, Table 10

1982 and 1983: EIA, CNEAF, estimates.

1984: EIA, Estimates of U.S. Biofuels Consumption 1990, Table 10.

1985 and 1986: Values interpolated.

1987: EIA, Estimates of U.S. Biofuels Consumption 1990, Table 10.

1988: Value interpolated.

1989: EIA, Estimates of U.S. Biofuels Consumption 1990, Table 10.

1990: EIA, Estimates of U.S. Biomass Energy Consumption 1992, Table D1.

1991: Value interpolated.

1992: EIA, Estimates of U.S. Biomass Energy Consumption 1992, Table D1.

1993–2004: EIA, *Petroleum Supply Monthly (PSM)*, Tables 2 and 28, and *Monthly Energy Review (MER)* Table A1.

percent of the "Field Production" of "Oxygenated Finished Motor Gasoline" from *PSM* Table 2 is added to the "Refinery Input of Fuel Ethanol" from *PSM* Table 28. The sum is multiplied by the conversion factor of 3.539 million Btu per barrel for fuel ethanol as shown in the *MER* Table A1.

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

#### Geothermal and Solar

1989–2002: EIA *Renewable Energy Annual 2003* (August 2004), Table B1.

2003 forward: Annual estimates are from CNEAF. Monthly estimates are created by dividing the annual estimates by the number of days in the year and then multiplying by the number of days in the month.

## Section 11. International Petroleum

**Crude Oil Production**. World crude oil production during April 2005 was 74 million barrels per day, up 0.1 million barrels per day from the level in the previous month.

Organization of the Petroleum Exporting Countries (OPEC) production during April 2005 averaged 31 million barrels per day, up 0.1 million barrels per day from the level in the previous month. During April 2005, production increased in Saudi Arabia by 100 thousand barrels per day; Nigeria by 60 thousand barrels per day; the United Arab Emirates by 50 thousand barrels per day; Iran by 10 thousand barrels per day; and Libya by 5 thousand barrels per day. Production decreased in Venezuela by 100 thousand barrels per day and Indonesia by 16 thousand barrels per day. Production remained unchanged in Kuwait, Iraq, Algeria, and Qatar.

Among the non-OPEC nations, production during April 2005 increased in Mexico by 157 thousand barrels per day. Production decreased in Canada by 70 thousand barrels per day; Russia by 37 thousand barrels per day; the United Kingdom by 27 thousand barrels per day; the United States and China, each by 10 thousand barrels per day; and Norway

and Egypt, each by 3 thousand barrels per day.

**Petroleum Consumption**. In March 2005, consumption in all Organization for Economic Cooperation and Development (OECD) countries was 51 million barrels per day, 1 percent<sup>1</sup> higher than the March 2004 rate. Comparing March rates in 2005 and 2004, consumption was higher in 2005 in South Korea (+8 percent); Japan (+3 percent); Canada and France (each +2 percent); and the United States (+1 percent). The March 2005 consumption rate was lower in Germany (-10 percent); the United Kingdom (-9 percent); and Italy (-2 percent), compared with the rate 1 year earlier.

**Petroleum Stocks**. For all OECD countries, petroleum stocks at the end of March 2005 totaled 4.0 billion barrels, 3 percent¹ higher than the ending stock level in March 2004. Stock levels were higher in March 2005 in France (+6 percent); the United States (+5 percent); Germany (+4 percent); the United Kingdom (+2 percent); and Canada (+1 percent). Stock levels were lower in South Korea (-4 percent); Japan (-2 percent); and Italy (-1 percent), compared with levels 1 year earlier.

<sup>&</sup>lt;sup>1</sup>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 <sup>a</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>a</sup>	United Arab Emirates	Venezuela	OPECb,c
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
1975 Average	983	1,307	5,350	2,262	2,084	1,480	1,783	438	7,075	1,664	2,346	26,771
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
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
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
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 Average	1,306	1,267	3,444	2,023	1,894	1,319	2,118	679	7,634	2,082	2,604	26,370
2003 January	1,490	1,230	3,660	2,555	1,990	1,375	2,310	760	8,570	2,200	630	26,769
February	1,495	1,225	3,735	2,490	2,050	1,400	2,360	785	8,870	2,250	1,450	28,110
March	1,555	1,200	3,760	1,373	2,300	1,405	2,030	785	9,460	2,450	2,390	28,708
April	1,645	1,180	3,755	53	2,400	1,430	1,965	785	9,600	2,450	2,555	27,818
May	1,645	1,170	3,755	293	2,285	1,435	2,050	785	9,400	2,400	2,665	27,883
June	1,625	1,165	3,755	453	2,100	1,430	2,150	735	8,700	2,350	2,640	27,103
July	1,645	1,165	3,785	573	2,100	1,430	2,185	735	8,610	2,350	2,640	27,218
August	1,645	1,150	3,785	1,053	2,100	1,425	2,260	735	8,610	2,340	2,640	27,743
September	1,645	1,150	3,785	1,403	2,100	1,425	2,360	735	8,550	2,300	2,640	28,093
October	1,645	1,145	3,785	1,753	2,200	1,420	2,360	735	8,650	2,330	2,640	28,663
November	1,645	1,140	3,835	1,853	2,200	1,420	2,410	785	8,500	2,350	2,540	28,678
December	1,645	1,140	3,950	1,953	2,300	1,450	2,460	785	8,660	2,400	2,540	29,283
Average	1,611	1,171	3,779	1,312	2,178	1,421	2,241	762	8,848	2,348	2,335	28,006
2004 January	1,645	1,130	3,950	2,103	2,300	1,450	2,530	785	8,700	2,400	2,540	29,533
February	1,645	1,130	3,950	2,003	2,300	1,450	2,530	795	8,700	2,420	2,540	29,463
March	1,645	1,120	3,960	2,203	2,355	1,450	2,530	795	8,400	2,370	2,540	29,368
April	1,645	1,120	3,970	2,303	2,350	1,450	2,530	795	8,400	2,220	2,540	29,323
May	1,645	1,115	3,980	1,903	2,400	1,450	2,530	795	8,500	2,280	2,540	29,138
June	1,665	1,110	3,990	1,703	2,400	1,500	2,580	835	9,500	2,510	2,540	30,333
July	1,695	1,110	4,010	2,003	2,400	1,550	2,580	835	9,500	2,530	2,540	30,753
August	1,695	1,110	4,030	1,803	2,400	1,560	2,480	835	9,500	2,600	2,540	30,553
September	1,695	1,110	4,030	2,303	2,400	1,560	2,480	835	9,500	2,600	2,540	31,053
October	1,695	1,110	4,035	2,203	2,400	1,560	2,480	835	9,500	2,602	2,640	31,060
November	1,725	1,089	4,050	1,703	2,400	1,600	2,480	835	9,500	2,602	2,540	30,524
December	1,725	1,108	4,060	1,903	2,400	1,600	2,380	835	9,500	2,602	2,640	30,753
Average	1,677	1,113	4,001	2,011	2,376	1,515	2,509	818	9,101	2,478	2,557	30,157
2005 January	1,750	1,093	4,060	1,903	2,450	1,600	2,430	835	9,500	2,502	2,640	30,763
February	1,755	1,083	4,080	1,903	2,500	1,600	2,480	835	9,500	2,502	2,640	30,878
March	1,775	1,076	4,080	1,903	2,500	1,620	2,580	835	9,500	2,552	2,640	31,061
April	1,775	1,060	4,090	1,903	2,500	1,625	2,640	835	9,600	2,602	2,540	31,170
4-Mo. Avg	1,764	1,078	4,077	1,903	2,487	1,611	2,533	835	9,525	2,540	2,615	30,969
2004 4-Mo. Avg 2003 4-Mo. Avg	1,645 1,547	1,125 1,209	3,958 3,727	2,154 1,609	2,326 2,186	1,450 1,402	2,530 2,163	792 779	8,549 9,127	2,352 2,339	2,540 1,757	29,422 27,845

<sup>&</sup>lt;sup>a</sup> 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 April 2005, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 600 thousand barrels per day.

b Organization of the Petroleum Exporting Countries.

respectively, are excluded from all OPEC totals.

Sources: See end of section.

<sup>&</sup>lt;sup>c</sup> 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,

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: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/inter.html.

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

(Thousand Barrels per Day)

					Selecte	d Non-OP	ECa Produ	cers				
	Persian Gulf Nations <sup>b</sup>	Canada	China	Egypt	Mexico	Norway	Former U.S.S.R.	Russia	United Kingdom	United States	Total Non- OPEC	World
1973 Average	20,668	1,798	1,090	165	465	32	8,324	NA	2	9,208	25,050	55,679
1975 Average	18,934	1,430	1,490	235	705	189	9,523	NA	12	8,375	26,058	52,828
1980 Average	17,961	1,435	2,114	595	1,936	528	11,706	NA	1.622	8,597	32,994	59,600
1985 Average	9,630	1,471	2,505	887	2,745	788	11,585	NA	2,530	8,971	37,801	53,982
1990 Average	15,278	1,553	2,774	873	2,553	1,704	10,975	NA	1,820	7,355	37,371	60,566
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 Average	17,792	2,171	3,390	631	3,177	2,990	-	7,408	2,292	5,746	40,472	66,842
2003 January	19,769	2,220	3,354	630	3,330	2,935	_	7,678	2,256	5,785	40,693	67,462
February	20,215	2,215	3,375	630	3,325	3,015	_	7,789	2,275	5,791	40,930	69,040
March	20,163	2,235	3,385	625	3,317	2,965	_	7,836	2,250	5,817	40,872	69,580
April	19,078	2,185	3,445	625	3,282	2,860	_	7,873	2,145	5,774	40,693	68,511
May	18,953	2,190	3,430	625	3,320	2,845	_	7,991	2,005	5,733	40,638	68,521
June	18,128	2,250	3,450	620	3,396	2,576	_	8,106	1,950	5,701	40,611	67,714
July	18,188	2,405	3,405	610	3,400	2,840	_	8,238	1,988	5,526	41,107	68,325
August	18,658	2,365	3,425	605	3,426	2,699	_	8,291	1,892	5,595	41,043	68,786
September	18,908	2,350	3,371	614	3,417	2,689	_	8,426	2,047	5,683	41,398	69,491
October	19,488	2,325	3,401	615	3,398	2,816	_	8,448	2,171	5,635	41,703	70,366
November	19,558	2,440	3,426	610	3,380	2.941	_	8.445	1,956	5.560	41,901	70,579
December	20,083	2,480	3,438	610	3,455	2,978	_	8,444	2,192	5,579	42,571	71,854
Average	19,262	2,306	3,409	618	3,371	2,846	_	8,132	2,093	5,681	41,182	69,188
<b>2004</b> January	20,273	2,414	3,440	610	3,417	3,143	_	8,457	2,021	R 5,570	42,326	R 71,785
February	20,203	2,470	3,474	607	3,360	3,179	_	8,503	1,897	R 5,556	42,308	R 71,743
March	20.118	2.440	3.393	590	3,368	3.089	_	8.562	2.026	R 5.607	42.344	R 71.697
April	20,073	2,363	3,435	580	3,439	3,064	_	8,639	1,966	R 5.527	42,337	R 71,619
May	19,893	2,384	3,420	591	3,394	3,028	_	8,708	1,800	<sup>R</sup> 5,548	42,257	R 71,331
June	20,973	2,430	3,460	585	3,436	3,068	_	8,883	1,926	<sup>R</sup> 5,398	42,638	R 72,967
July	21,313	2,410	3,486	595	3,363	3,079	_	8,924	1,876	<sup>R</sup> 5,458	42,533	R 73,339
August	21,203	2,370	3,500	596	3,354	2,625	_	9,013	1,648	R 5,333	41,811	R 72,417
September	21,703	2,407	3,574	605	3,431	2,735	_	9,042	1,578	R 5,062	42,042	R 73,066
October	21,610	2,369	3,544	604	3,451	2,983	_	9,006	1,701	R 5,156	42,471	R 73,575
November	21,125	2.435	3,533	599	3,364	2.962	_	8.995	1,825	R 5.396	42,690	R 73.213
December	21,335	2,295	3,566	571	3,222	2,737	_	8,916	1,880	R 5,413	42,100	R 72,819
Average	20,820	2,398	3,485	594	3,383	2,973	_	8,805	1,845	R 5,419	42,320	R <b>72,465</b>
<b>2005</b> January	21,285	2,370	3,561	654	3,351	2,720	_	8,870	1,766	<sup>E</sup> 5,394	R 42,158	<sup>R</sup> 72,921
February		2,490	3,570	654	3,349	2,809	_	8,920	R 1,763	E 5,469	R 42,445	R 73,323
March	21,405	2,540	3,594	662	3,252	2,867	_	8,925	R 1,787	E 5.498	R 42,679	R 73,740
April	21,565	2,470	3,584	659	3,409	2,864	_	8,888	1,760	E 5,488	42,706	73,876
4-Mo. Avg	21,402	2,467	3,577	657	3,339	2,815	_	8,900	1,769	<sup>E</sup> 5,462	42,496	73,465
2004 4-Mo. Avg	20,167	2,421	3,435	597	3,396	3,118	-	8,540	1,979	5,566	42,329	71,711
2003 4-Mo. Avg	19,802	2,214	3,390	627	3,313	2,943	_	7,793	2,231	5,792	40,795	68,640

<sup>&</sup>lt;sup>a</sup> Organization of the Petroleum Exporting Countries.

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: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/inter.html.

Sources: See end of section.

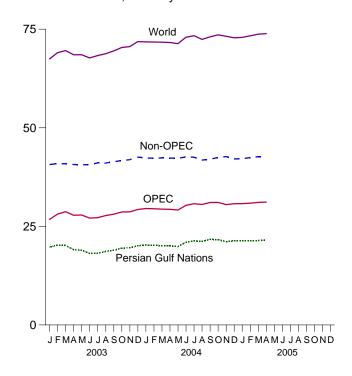
b The Persian Gulf Nations are Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. Production from the Neutral Zone between Kuwait and Saudi Arabia is included in "Persian Gulf Nations."

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

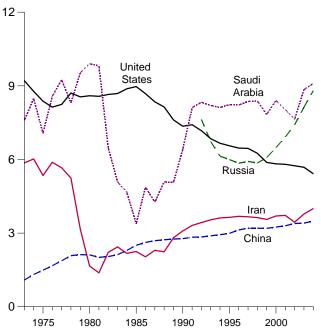
World Production, 1973-2004

# 75 World 50 Non-OPEC 25 **OPEC** Persian Gulf Nations 1975 2000 1980 1985 1990 1995

World Production, Monthly

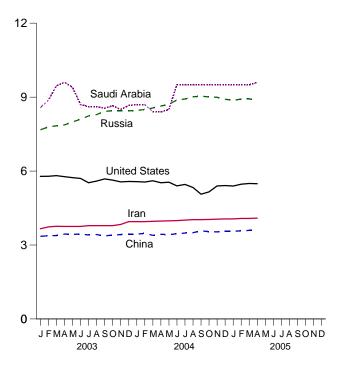


Selected Producers, 1973-2004



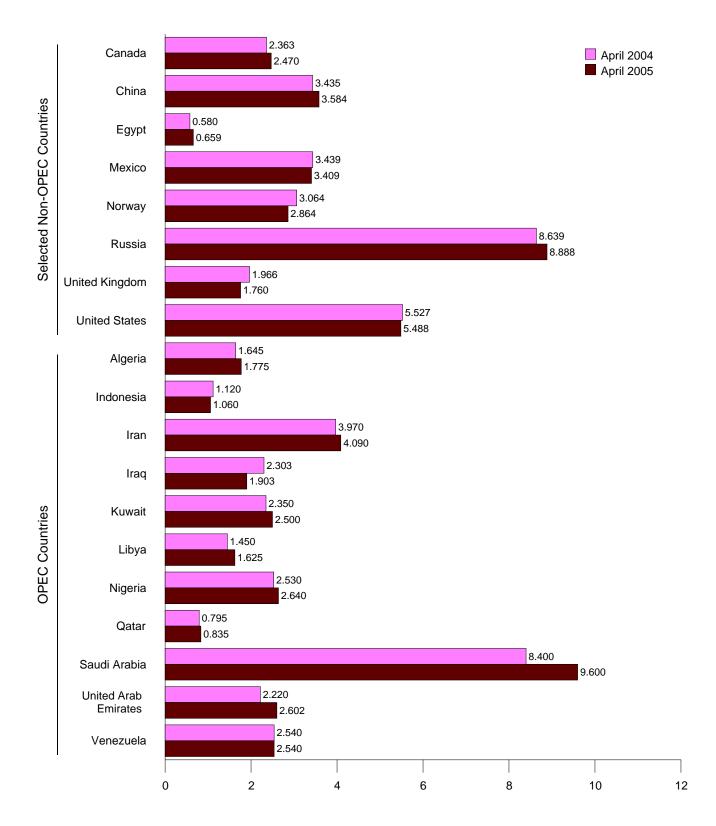
Notes: • OPEC is the Organization of the Petroleum Exporting Countries. • Because vertical scales differ, graphs should not be compared.

Selected Producers, Monthly



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

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

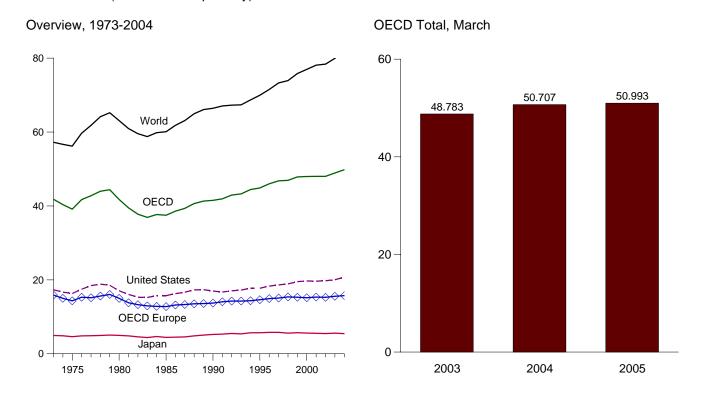


Note: OPEC is the Organization of the Petroleum Exporting Countries.

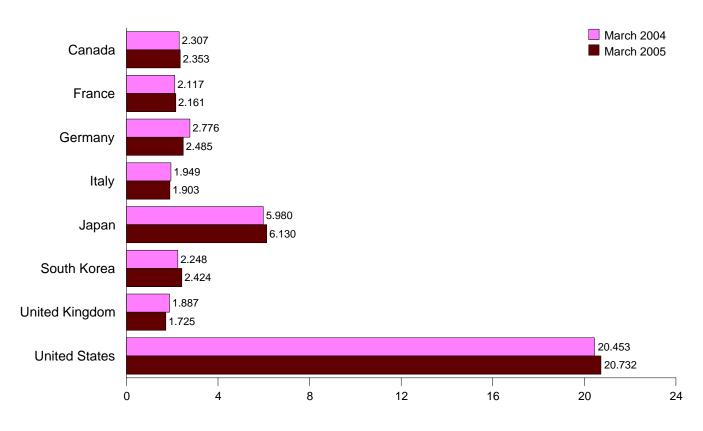
Web Page: http://www.eia.doe.gov/emeu/mer/inter.html.

Sources: Tables 11.1a and 11.1b.

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



## 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)

			eis pei Di				T	T	T	1		1
	Canada	France	Germanya	Italy	Japan	South Korea	United Kingdom	United States	OECD Europe <sup>b</sup>	Other OECD <sup>c</sup>	<b>OECD</b> d	World
1973 Average	1,729	2,601	3,324	2,068	4,949	281	2,341	17,308	15,879	1,658	41,804	57,237
1975 Average	1,779	2,252	2,957	1,855	4,621	311	1,911	16,322	14,314	1,794	39,141	56,198
1980 Average	1,873	2,256	3,082	1,934	4,960	537	1,725	17,056	14,995	2,342	41,763	63,108
1985 Average	1,526	1,753	2,651	1,705	4,436	552	1,617	15,726	12,774	2,469	37,483	60,087
1990 Average	1,746	1,826	2,682	1,874	5,218	1,048	1,776	16,988	13,711	2,804	41,515	66,443
1995 Average	1,819	1,919	2,882	1,942	5,676	2,008	1,815	17,725	14,636	3,005	44,868	69,955
1996 Average	1,870	1,949	2,922	1,920	5,785	2,101	1,851	18,309	14,939	2,996	46,000	71,522
1997 Average	1,956	1,969	2,917	1,934	5,797	2,255	1,803	18,620	15,075	3,091	46,795	73,292
1998 Average	1,942	2,040	2,923	1,941	5,577	1,917	1,791	18,917	15,384	3,191	46,928	73,932
1999 Average	2,027	2,029	2,838	1,891	5,698	2,084	1,794	19,519	15,288	3,236	47,853	75,826
2000 Average	2,027	2,001	2,772	1,854	5,607	2,135	1,758	19,701	15,175	3,325	47,970	76,954
2001 Average	2,043	2,051	2,815	1,837	5,530	2,132	_ 1,724	19,649	_ 15,331	3,326	48,010	_ 78,105
2002 Average	2,079	1,983	2,721	1,870	5,465	2,149	<sup>R</sup> 1,725	19,761	<sup>R</sup> 15,275	3,280	R 48,009	<sup>R</sup> 78,396
2003 January	2,125	2,173	2,432	1,796	6,224	2,520	R 1,708	20,017	<sup>R</sup> 15,311	3,280	R 49,477	NA
February	2,267	2,244	2,751	2,047	6,665	2,408	<sup>R</sup> 1,871	20,375	<sup>R</sup> 16,294	3,400	<sup>R</sup> 51,410	NA
March	2,113	1,927	2,586	1,821	6,241	2,206	R 1,885	19,708	<sup>R</sup> 15,168	3,347	R 48,783	NA
April	2,166	1,972	2,784	1,834	5,302	1,970	<sup>R</sup> 1,731	19,830	<sup>R</sup> 15,382	3,413	R 48,063	NA
May	2,189	1,885	2,809	1,808	5,073	1,991	<sup>R</sup> 1,716	19,344	<sup>R</sup> 15,152	3,425	<sup>R</sup> 47,173	NA
June	2,111	2,026	2,715	1,870	5,127	2,051	R 1,763	19,793	<sup>R</sup> 15,294	3,356	R 47,733	NA
July	2,190	2,141	2,676	1,918	4,994	1,920	<sup>R</sup> 1,778	20,094	<sup>R</sup> 15,693	3,483	R 48,373	NA
August	2,246	1,887	2,484	1,762	5,012	1,951	R 1,685	20,586	R 14,822	3,322	R 47,938	NA
September	2,168	2,188	2,893	1,945	5,108	1,991	R 1,865	19,933	R 16,256	3,468	R 48,923	NA
October	2,275	2,193	2,781	1,924	5,377	2,203	<sup>R</sup> 1,683	20,182	<sup>R</sup> 16,090	3,401	R 49,527	NA
November	2,219	1,928	2,645	1,808	5,510	2,331	R 1,823	19,873	<sup>R</sup> 15,347	3,344	R 48,622	NA
December	2,287	2,168	2,590	1,976	6,372	2,489	R 1,762	20,679	<sup>R</sup> 15,885	3,597	<sup>R</sup> 51,308	NA
Average	2,196	2,060	2,677	1,874	5,578	2,168	<sup>R</sup> 1,771	20,034	R 15,552	3,403	<sup>R</sup> 48,931	<sup>R</sup> 79,941
2004 January	R 2,264	2,122	2,434	1,796	6,002	2,376	1,797	R 20,479	15,178	3,391	R 49,690	NA
February	R 2,315	2,159	2,650	1,903	6,203	2,247	1,866	R 20,872	15,928	3,518	R 51,083	NA
March	2,307	2,117	2,776	1,949	5,980	2,248	1,887	R 20,453	16,211	3,508	R 50,707	NA
April	2,246	2,094	2,635	1,831	5,184	2,041	1,993	R 20,545	15,885	3,381	R 49,282	NA
May	2,188	1,778	2,299	1,787	4,803	1,972	1,794	R 20,313	14,538	3,442	R 47,257	NA
June	2,324	2,009	2,598	1,929	4,868	2,033	1,858	R 20,780	15,593	3,469	R 49,068	NA
July	2,266	2,020	2,660	1,965	5,201	1,897	1,844	R 20,880	15,707	3,492	<sup>R</sup> 49,444	NA
August	2,299	1,859	2,628	1,745	5,360	2,030	1,800	R 21,028	15,091	3,375	R 49,183	NA
September	2,324	2,136	2,799	1,948	5,045	2,059	1,850	R 20,529	16,255	3,446	R 49,659	NA
October	2,266	2,050	2,631	1,927	5,219	2,136	1,843	R 20,861	15,935	3,339	R 49,756	NA
November	2,367	2,024	2,799	1,863	5,310	2,231	1,932	R 20,805	R 16,227	3,601	R 50,541	NA
December	2,422	2,098	2,777	1,948	6,063	2,428	1,865	R 21,229	16,354	3,641	<sup>R</sup> 52,137	NA
Average	<sup>R</sup> 2,299	2,038	2,640	1,882	5,436	2,141	1,860	<sup>R</sup> 20,731	15,738	3,467	R 49,812	<sup>R</sup> <b>82,674</b>
2005 January	R 2,364	2,006	2,427	1,760	5,930	2,429	1,695	20,524	R 14,957	3,468	R 49,671	NA
February	R 2,466	2,255	2,655	1,932	6,364	2,312	1,814	20,650	R 16,102	3,530	R 51,424	NA
March	2,353	2,161	2,485	1,903	6,130	2,424	1,725	20,732	15,806	3,549	50,993	NA
3-Mo. Avg	2,392	2,137	2,518	1,863	6,134	2,391	1,742	20,635	15,605	3,515	50,672	NA
2004 3-Mo. Avg 2003 3-Mo. Avg	2,295 2,165	2,132 2,110	2,619 2,584	1,882 1,883	6,058 6,367	2,291 2,377	1,850 1,820	20,595 20,022	15,769 15,567	3,472 3,341	50,480 49,839	NA NA

<sup>&</sup>lt;sup>a</sup> Data are for unified Germany, i.e., the former East Germany and West

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/inter.html.
Sources: • United States: Tab

Table 3.1b. 1983-2004—Energy Information Administration, (EIA), International Energy Database. • East Germany, Former Czechoslavakia, Hungary, Mexico, Poland, South Korea, Non-OECD Countries, and World: 1973-1979—EIA. International Energy Database. 1980-1983—EIA, International Energy Annual 2002, May 2004, Table 1.2. • Non-OECD Countries: 1984-2002—EIA, International Energy Annual 2002, May 2004, Table 1.2. 2003—EIA, Short Term Energy Outlook, December 2004, Table 3 (adjusted to remove Slovakia). • World: 1984-2004—Sum of OECD and Non-OECD Countries. • All Other Data: 1973-1981—International Energy Agency (IEA), Quarterly Oil Statistics and Energy Balances in OECD Countries, various issues. 1982-1983—IEA, Monthly Oil and Gas Statistics Database. 1984-2005—IEA, Monthly Oil Data Service, June 10, 2005.

Germany.

b "OECD Europe" consists of Austria, Belgium, Czech Republic (beginning in 1984), Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Poland, Portugal, Slovakia, (beginning in 1984) Spain, Sweden, Switzerland, Turkey, and the United

Kingdom.

<sup>c</sup> "Other OECD" consists of Australia, Mexico, New Zealand, and the U.S.

Territories.

d The Organization for Economic Cooperation and Development (OECD)

The Organization for Economic Cooperation and Development (OECD)

The Organization for Economic Cooperation and Development (OECD)

The Organization for Economic Cooperation and Development (OECD) and "Other OECD."

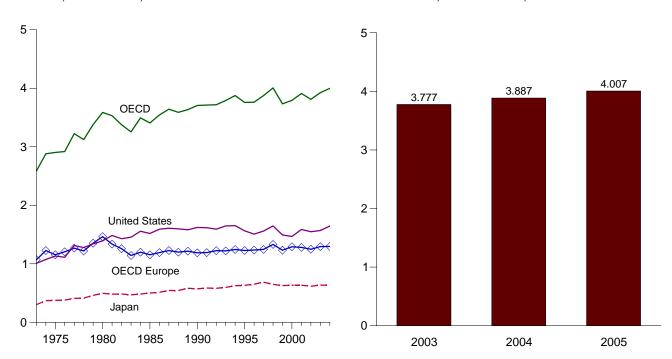
R=Revised. NA=Not available.

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

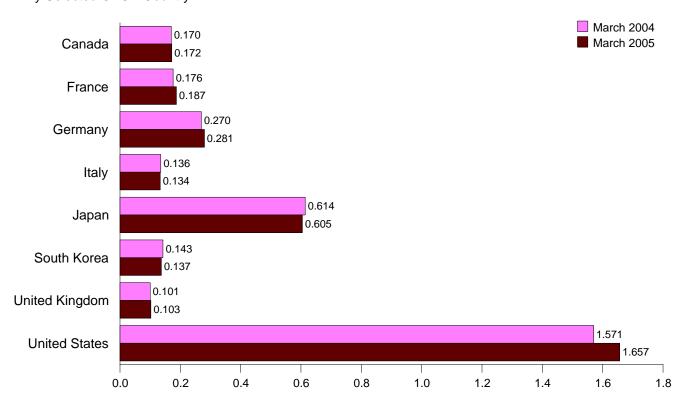
Figure 11.3 Petroleum Stocks in OECD Countries (Billion Barrels)

Overview, End of Year, 1973-2004

OECD Stocks, End of Month, March



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 <sup>a</sup>	Italy	Japan	South Korea	United Kingdom	United States	OECD Europe <sup>b</sup>	Other OECD <sup>C</sup>	<b>OECD</b> d
1973 Year	140	201	181	152	303	NA	156	1,008	1,070	67	2,588
1975 Year	174	225	187	143	375	NA	165	1,133	1,154	67	2,903
1980 Year	164	243	319	170	495	NA	168	1,392	1,464	72	3,587
1985 Year	112	139	277	156	500	13	131	1,519	1,154	110	3,408
1990 Year	143	143	280	143	572	64	103	1,621	1,188	117	3,705
1995 Year	132	155	302	141	631	92	101	1,563	1,228	113	3,758
1996 Year	127	154	303	135	651	123	103	1,507	1,235	118	3,761
1997 Year	144	161	299	129	685	124	100	1,560	1,246	115	3,874
1998 Year	139	169	323	135	649	129	104	1,647	1,331	111	4,006
1999 Year	142	160	290	130	629	132	101	1,493	1,233	105	3,733
2000 Year	144	170	272	140	634	140	100	1,468	1,291	117	3,793
2001 Year	156	165	273	134	634	143	<sup>R</sup> 113	1,586	R 1,278	112	<sup>R</sup> 3,909
2002 Year	155	175	253	138	615	140	R <b>104</b>	1,548	R 1,249	103	R 3,811
2003 January	155	170	265	140	618	140	<sup>R</sup> 106	1,504	<sup>R</sup> 1,257	106	R 3,779
February	150	162	260	128	614	140	<sup>R</sup> 104	1,460	R 1,228	108	R 3,701
March	154	175	266	136	619	137	<sup>R</sup> 107	1,474	<sup>R</sup> 1,279	113	R 3,777
April	161	174	266	139	619	141	<sup>R</sup> 107	1,496	<sup>R</sup> 1,283	102	R 3,802
May	163	180	267	137	632	142	<sup>R</sup> 109	1,533	<sup>R</sup> 1,275	109	<sup>R</sup> 3,854
June	168	173	268	135	647	152	<sup>R</sup> 102	1,560	<sup>R</sup> 1,272	107	<sup>R</sup> 3,905
July	176	174	270	136	650	158	<sup>R</sup> 104	1,570	<sup>R</sup> 1,280	103	<sup>R</sup> 3,938
August	176	184	276	140	651	150	100	1,572	<sup>R</sup> 1,305	101	3,954
September	179	179	266	141	654	155	<sup>R</sup> 99	1,598	<sup>R</sup> 1,287	103	<sup>R</sup> 3,974
October	179	176	271	139	642	148	<sup>R</sup> 101	1,602	<sup>R</sup> 1,285	99	<sup>R</sup> 3,955
November	177	183	272	139	636	149	<sup>R</sup> 107	1,598	<sup>R</sup> 1,302	107	<sup>R</sup> 3,968
December	176	185	273	135	636	155	102	1,568	1,295	96	3,925
2004 January	173	183	277	132	631	143	105	<sup>R</sup> 1,556	1,315	98	<sup>R</sup> 3,916
February	<sup>R</sup> 174	178	275	132	625	151	102	<sup>R</sup> 1,557	1,289	100	<sup>R</sup> 3,896
March	170	176	270	136	614	143	101	<sup>R</sup> 1,571	1,291	97	<sup>R</sup> 3,887
April		181	268	134	612	148	98	R 1,580	1,277	107	R 3,894
May	170	186	272	131	625	146	98	<sup>R</sup> 1,610	1,291	102	R 3,945
June	169	184	267	135	622	153	98	<sup>R</sup> 1,631	1,293	99	R 3,966
July	173	184	269	133	630	154	102	<sup>R</sup> 1,646	1,296	99	R 3,999
August	173	185	271	137	627	150	93	R 1,654	1,316	99	R 4,019
September	179	189	264	139	632	152	98	R 1,642	1,307	99	<sup>R</sup> 4,011
October	172	188	270	131	642	148	94	R 1,637	1,308	105	R 4,012
November	167	192	267	137	656	163	100	<sup>R</sup> 1,656	1,313	106	R 4,062
December	<sup>R</sup> 173	186	267	136	635	149	97	1,645	1,297	99	R 3,998
2005 January	<sup>R</sup> 171	187	276	139	642	147	102	1,647	R 1,324	107	R 4,037
February	<sup>R</sup> 175	188	273	136	617	143	104	1,661	<sup>R</sup> 1,316	<sup>R</sup> 106	R 4,019
March	172	187	281	134	605	137	103	1,657	1,333	103	4,007

<sup>&</sup>lt;sup>a</sup> Through December 1983, the data for Germany are for the former West Germany only. Beginning with January 1984, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

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. • In the United States in January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys, thereby affecting subsequent stocks reported. New-basis end-of-year U.S. stocks, in million barrels, would have been 1,121 in 1974, 1,425 in 1980, and 1,461 in 1982. • Totals may not equal sum of components due to independent rounding. • U.S. geographic coverage is the 50 States and the District of Columbia.

Web Page: For annual data not displayed between 1973 and 1995, see http://www.eia.doe.gov/emeu/mer/inter.html.

Sources: • United States: Table 3.1b. • U.S. Territories: 1983-2004—Energy Information Administration, International Energy Database.
• All Other Data: 1973-1982—International Energy Agency (IEA), Quarterly Oil Statistics and Energy Balances, various issues. 1983—IEA, Monthly Oil and Gas Statistics Database. 1984-2005—IEA, Monthly Oil Data Service, June 10, 2005.

unified Germany, i.e., the former East Germany and West Germany.

b "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom, and, for 1984 forward, Czech Republic, Hungary, Poland, and Slovakia.

 <sup>1984</sup> forward, Czech Republic, Hungary, Poland, and Slovakia.
 C "Other OECD" consists of Australia, New Zealand, and the U.S. Territories, and, for 1984 forward, Mexico.
 d The Organization for Economic Cooperation and Development (OECD)

<sup>&</sup>lt;sup>d</sup> The Organization for Economic Cooperation and Development (OECD) consists of Canada, Japan, South Korea, the United States, "OECD Europe" and "Other OECD."

# **International Petroleum**

#### Tables 11.1a and 11.1b Sources

United States: See Table 3.1a.

#### All Other Countries: Monthly Data

2003 forward: Energy Information Administration (EIA),

International Petroleum Monthly.

# All Other Countries: Annual Data

1973–1979: Energy Information Administration (EIA), *International Energy Annual 1981*, Table 8.

1980–2003: Office of Energy Markets and End Use, International Energy Database, February 2005.

2004: Average of monthly data.

#### World: Monthly Data

2003 forward: EIA, *International Petroleum Monthly*, sum of all countries' monthly data.

#### **World: Annual Data**

1973–1979: EIA, International Energy Annual 1981, Table

1980–2003: Office of Energy Markets and End Use, International Energy Database, February 2005.

2004: Average of monthly data.

# **Appendix A. Thermal Conversion Factors**

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

The heat content rates (i.e., thermal conversion factors) provided in this section represent the gross (or higher 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 <sup>a</sup>	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 <sup>b</sup>	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 <sup>c</sup>	5.253	Unfinished Oils	5.825
Reformulated <sup>c</sup>	5.150	Unfractionated Stream	5.418
Oxygenated <sup>c</sup>	5.150	Waxes	5.537
Fuel Ethanold	3.539	Miscellaneous	5.796

<sup>&</sup>lt;sup>a</sup> 60 percent butane and 40 percent propane

Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

<sup>&</sup>lt;sup>b</sup> 70 percent ethane and 30 percent propane

<sup>°</sup> See Table A3 for motor gasoline annual weighted averages beginning in 1994.

<sup>&</sup>lt;sup>d</sup> 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.

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
974	5.800	4.011	5.827	5.959	5.884	5.800	5.773	5.774
975	5.800	3.984	5.821	5.935	5.858	5.800	5.747	5.748
976	5.800	3.964	5.808	5.980	5.856	5.800	5.743	5.745
977	5.800	3.941	5.810	5.908	5.834	5.800	5.796	5.797
978	5.800	3.925	5.802	5.955	5.839	5.800	5.814	5.808
979	5.800	3.955	5.810	5.811	5.810	5.800	5.864	5.832
980	5.800	3.914	5.812	5.748	5.796	5.800	5.841	5.820
981	5.800	3.930	5.818	5.659	5.775	5.800	5.837	5.821
982	5.800	3.872	5.826	5.664	5.775	5.800	5.829	5.820
983	5.800	3.839	5.825	5.677	5.774	5.800	5.800	5.800
984	5.800	3.812	5.823	5.613	5.745	5.800	5.867	5.850
985	5.800	3.815	5.832	5.572	5.736	5.800	5.819	5.814
986	5.800	3.797	5.903	5.624	5.808	5.800	5.839	5.832
987	5.800	3.804	5.901	5.599	5.820	5.800	5.860	5.858
988	5.800	3.800	5.900	5.618	5.820	5.800	5.842	5.840
989	5.800	3.826	5.906	5.641	5.833	5.800	5.869	5.857
990	5.800	3.822	5.934	5.614	5.849	5.800	5.838	5.833
991	5.800	3.807	5.948	5.636	5.873	5.800	5.827	5.823
992	5.800	3.804	5.953	5.623	5.877	5.800	5.774	5.777
993	5.800	3.801	5.954	5.620	5.883	5.800	5.777	5.779
994	5.800	3.794	5.950	5.534	5.861	5.800	5.777	5.779
995	5.800	3.796	5.938	5.483	5.855	5.800	5.740	5.746
996	5.800	3.777	5.947	5.468	5.847	5.800	5.728	5.736
997	5.800	3.762	5.954	5.469	5.862	5.800	5.726	5.734
998	5.800	3.769	5.953	5.462	5.861	5.800	5.710	5.720
999	5.800	3.744	5.942	5.421	5.840	5.800	5.684	5.699
000	5.800	3.733	5.959	5.432	5.849	5.800	5.651	5.658
001	5.800	3.735	5.976	5.443	5.862	5.800	5.751	5.752
002	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	5.800	3.724	R 5.981	R 5.475	5.863	5.800	5.753	5.754
005 <sup>E</sup>	5.800	3.724	R 5.981	R 5.475	5.863	5.800	5.753	5.754

R=Revised. 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 <sup>a</sup>						
		End-Use	Sectors		Electric Power		Liquefied Petroleum	Motor
	Residential	Commercial	Industrial	Transportation	Sectorb	Total	Gases	Gasoline
1973	5.205	5.749	<sup>R</sup> 5.569	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	<sup>R</sup> 5.527	5.392	6.250	5.494	3.715	5.253
1976	5.215	5.726	R 5.536	5.395	6.251	5.504	3.711	5.253
1977	5.213	5.733	<sup>R</sup> 5.554	5.400	6.249	5.518	3.677	5.253
1978	5.213	5.716	R 5.554	5.404	6.251	5.519	3.669	5.253
1979	5.298	5.769	<sup>R</sup> 5.419	5.428	6.258	5.494	3.680	5.253
1980	5.245	5.803	R 5.374	5.440	6.254	5.479	3.674	5.253
1981	5.191	5.751	<sup>R</sup> 5.312	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	<sup>R</sup> 5.275	5.415	6.255	5.406	3.614	5.253
1984	5.129	5.700	R 5.222	5.422	6.251	5.395	3.599	5.253
1985	5.115	5.660	R 5.220	5.423	6.247	5.387	3.603	5.253
1986	5.130	5.691	<sup>R</sup> 5.285	5.427	6.257	5.418	3.640	5.253
1987	5.095	5.659	R 5.254	5.430	6.249	5.403	3.659	5.253
1988	5.118	5.657	<sup>R</sup> 5.247	5.434	6.250	5.410	3.652	5.253
1989	5.057	5.619	5.234	5.440	<sup>b</sup> 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	<sup>c</sup> 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	R 5.442	5.149	5.414	6.210	5.349	3.614	5.212
1999	4.749	R 5.353	5.105	5.415	6.205	5.328	3.616	5.211
2000	R 4.728	R 5.377	R 5.077	R 5.424	6.189	5.326	3.607	5.210
2001	R 4.796	R 5.403	<sup>R</sup> 5.164	R 5.412	6.199	5.345	3.614	5.210
2002	R 4.742	R 5.419	R 5.111	R 5.410	6.173	5.324	3.613	5.208
2003	RE4.801	RE5.392	RE5.151	RE5.410	6.182	5.340	3.629	5.207
2004	RE4.807	RE5.410	RE5.166	E5.421	P6.197	R 5.350	R 3.618	5.215
2005	RE4.807	RE5.410	RE5.166	E5.421	E6.197	RE5.350	RE3.618	E5.215

<sup>&</sup>lt;sup>a</sup> Petroleum products supplied, including natural gas plant liquids and crude oil burned directly as fuel.

R=Revised. P=Preliminary. E=Estimate.

Note: Weighted averages of the products included in each category are calculated by using heat content values shown in Table A1.

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

Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

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.

<sup>&</sup>lt;sup>c</sup> 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.

Table A4. Approximate Heat Content of Natural Gas

(Btu per Cubic Foot)

	Production			Consumption <sup>a</sup>			
	Marketed	Dry	End-Use Sectors	Electric Power Sector <sup>b</sup>	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	<sup>b</sup> 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	1,106	1,027	1,029	1,020	1,027	1,022	1,008
2003	1,106	1,031	1,033	1,025	1,031	1,025	1,009
2004	E1,106	E1,030	E1,031	P1,025	E1,030	E1,023	E1,009
2005	E1,106	E1,030	E1,031	E1,025	E1,030	E1,023	E1,009

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

Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

 <sup>&</sup>lt;sup>a</sup> Consumption factors are for natural gas, plus a small amount of supplemental gaseous fuels that cannot be identified separately.
 <sup>b</sup> 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.

Table A5. Approximate Heat Content of Coal and Coal Coke

(Million Btu per Short Ton)

				Co	al				Coal Coke
			(	Consumption					
		ı	End-Use Sectors				]		
		Residential and	Indus	trial	Electric Power				Imports and
	Production	Commercial	Coke Plants	Other <sup>a</sup>	Sector b,c	Total	Imports	Exports	Exports
1973	23.376	22.831	26.780	22.586	22.246	23.057	25.000	26.596	24.800
974	23.072	22.479	26.778	22.419	21.781	22.677	25.000	26.700	24.800
975	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
977	22.597	22.919	26.787	22.322	21.508	22.265	25.000	26.548	24.800
978	22.248	22.466	26.789	22.207	21.275	22.017	25.000	26.478	24.800
979	22.454	22.242	26.788	22.452	21.364	22.100	25.000	26.548	24.800
	22.415	22.543	26.790	22.690	21.295	21.947	25.000	26.384	24.800
980									
981	22.308	22.474	26.794	22.585	21.085	21.713	25.000	26.160	24.800
982	22.239	22.695	26.797	22.712	21.194	21.674	25.000	26.223	24.800
983	22.052	22.775	26.798	22.691	21.133	21.576	25.000	26.291	24.800
984	22.010	22.844	26.799	22.543	21.101	21.573	25.000	26.402	24.800
985	21.870	22.646	26.798	22.020	20.959	21.366	25.000	26.307	24.800
986	21.913	22.947	26.798	22.198	21.084	21.462	25.000	26.292	24.800
987	21.922	23.404	26.799	22.381	21.136	21.517	25.000	26.291	24.800
988	21.823	23.571	26.799	22.360	20.900	21.328	25.000	26.299	24.800
989	21.765	23.650	26.800	22.347	<sup>b</sup> 20.898	21.307	25.000	26.160	24.800
990	21.822	23.137	26.799	22.457	20.779	21.197	25.000	26.202	24.800
991	21.681	23.114	26.799	22.460	20.730	21.120	25.000	26.188	24.800
992	21.682	23.105	26.799	22.250	20.709	21.068	25.000	26.161	24.800
993	21.418	22.994	26.800	22.123	20.677	21.010	25.000	26.335	24.800
994	21.394	23.112	26.800	22.068	20.589	20.929	25.000	26.329	24.800
995	21.326	23.118	26.800	21.950	20.543	20.880	25.000	26.180	24.800
996	21.322	23.011	26.800	22.105	20.547	20.870	25.000	26.174	24.800
997	21.296	22.494	26.800	22.172	20.518	20.830	25.000	26.251	24.800
998	21.418	21.620	27.426	23.164	20.516	20.881	25.000	26.800	24.800
999	21.070	23.880	27.426	22.489	20.490	20.818	25.000	26.081	24.800
000	21.072	25.020	27.426	22.433	20.511	20.828	25.000	26.117	24.800
001	20.830	24.909	27.426	22.622	20.337	20.671	25.000	25.998	24.800
002	20.673	22.962	27.426	22.562	20.238	20.541	25.000	26.062	24.800
003	20.499	22.242	27.425	22.468	20.082	20.387	25.000	25.972	24.800
2004 <sup>P</sup>	20.411	22.948	27.426	22.473	19.966	20.276	25.000	26.108	24.800
2005 <sup>E</sup>	20.411	22.948	27.426	22.473	19.966	20.276	25.000	26.108	24.800

<sup>&</sup>lt;sup>a</sup> Includes transportation. Excludes synfuel plants

Web Page: http://www.eia.doe.gov/emeu/mer/append.html.
Sources: See "Thermal Conversion Factor Source Documentation," which follows Table A6.

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.

<sup>c</sup> Electric power sector factors are for anthracite, bituminous coal, subbituminous coal, lignite, waste coal, and synthetic coal.

P=Preliminary. E=Estimate.

Table A6. Approximate Heat Rates for Electricity

(Btu per Kilowatthour)

	Fossil-Fueled Plants <sup>a,b</sup>	Nuclear Plants <sup>c</sup>	Geothermal Energy Plants <sup>d</sup>	Electricity Consumption
973	10.389	10.903	21,674	3,412
974	10.442	11.161	21.674	3,412
975	10,406	11,013	21,611	3,412
976	10,373	11,047	21,611	3,412
977	10.435	10.769	21.611	3,412
978	10,361	10.941	21,611	3,412
978	10,353	10,879	21,545	3,412
980	10,388	10,679	21,545	3,412
981	10,453	11,030	21,639	3,412
982	10,454	11,073	21,629	3,412
983	10,520	10,905	21,290	3,412
984	10,440	10,843	21,303	3,412
985	10,447	10,643	21,303	3,412
986	10,447	10,622	21,263	3,412
987	-, -	10,379	21,263	- /
	10,419 10,324	- /	21,263	3,412
988	•	10,602	,	3,412
989	10,432	10,583	21,096	3,412
990	10,402	10,582	21,096	3,412
991	10,436	10,484	20,997	3,412
992	10,342	10,471	20,914	3,412
993	10,309	10,504	20,914	3,412
994	10,316	10,452	20,914	3,412
995	10,312	10,507	20,914	3,412
996	10,340	10,503	20,960	3,412
997	10,213	10,494	20,960	3,412
998	10,197	10,491	21,017	3,412
999	10,226	10,450	21,017	3,412
000	10,201	10,429	21,017	3,412
001	10,333	10,448	21,017	3,412
002	10,173	10,439	21,017	3,412
003	_ 10,241	_ 10,421	_ 21,017	3,412
004	E 10,107	<sup>E</sup> 10,439	<sup>E</sup> 21,017	3,412
005	<sup>E</sup> 10,241	E 10,421	<sup>E</sup> 21,017	3,412

a Through 2000, used as the thermal conversion factor for wood and waste electricity net generation at electric utilities. For all years, used as the thermal conversion factor for hydro, solar, and wind electricity net generation.

b Through 2000, heat rates are for fossil-fueled steam-electric plants at electric utilities. Beginning in 2001, heat rates are for all fossil-fueled plants at electric

E=Estimate.

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

Sources: See "Thermal Conversion Factor Source Documentation," which follows this table.

utilities and independent power producers.

<sup>c</sup> 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.

# Thermal Conversion Factor Source Documentation

# **Approximate Heat Content of Petro- leum and Natural Gas Plant Liquids**

**Asphalt**. The Energy Information Administration (EIA) adopted the thermal conversion factor of 6.636 million British thermal units (Btu) per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement*, *Annual*, 1956.

**Aviation Gasoline**. EIA adopted the thermal conversion factor of 5.048 million Btu per barrel as adopted by the Bureau of Mines from the Texas Eastern Transmission Corporation publication *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

**Butane**. EIA adopted the Bureau of Mines thermal conversion factor of 4.326 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Butane-Propane Mixture**. EIA adopted the Bureau of Mines calculation of 4.130 million Btu per barrel based on an assumed mixture of 60 percent butane and 40 percent propane. See **Butane** and **Propane**.

**Crude Oil Exports**. Assumed by EIA to be 5.800 million Btu per barrel or equal to the thermal conversion factor for crude oil produced in the United States. See **Crude Oil Production**.

Crude Oil Imports. Calculated annually by EIA as the average of the thermal conversion factors for each type of crude oil imported weighted by the quantities imported. Thermal conversion factors for each type were calculated on a foreign country basis, by determining the average American Petroleum Institute (API) gravity of crude oil imported from each foreign country from Form ERA-60 in 1977 and converting average API gravity to average Btu content by using National Bureau of Standards, Miscellaneous Publication No. 97, Thermal Properties of Petroleum Products. 1933.

**Crude Oil Production**. EIA adopted the thermal conversion factor of 5.800 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

**Distillate Fuel Oil.** EIA adopted the Bureau of Mines thermal conversion factor of 5.825 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

**Ethane**. EIA adopted the Bureau of Mines thermal conversion factor of 3.082 million Btu per barrel as published in

the California Oil World and Petroleum Industry, First Issue, April 1942.

**Ethane-Propane Mixture.** EIA calculation of 3.308 million Btu per barrel based on an assumed mixture of 70 percent ethane and 30 percent propane. See **Ethane** and **Propane**.

Fuel Ethanol (Blended Into Motor Gasoline). EIA adopted the thermal conversion factor of 3.539 million Btu per barrel published in "Oxygenate Flexibility for Future Fuels," a paper presented by William J. Piel of the ARCO Chemical Company at the National Conference on Reformulated Gasolines and Clean Air Act Implementation, Washington, D.C., October 1991.

**Isobutane**. EIA adopted the Bureau of Mines thermal conversion factor of 3.974 million Btu per barrel as published in the *California Oil World and Petroleum Industry*, First Issue, April 1942.

**Jet Fuel, Kerosene-Type**. EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel for "Jet Fuel, Commercial" as published by the Texas Eastern Transmission Corporation in the report *Competition and Growth in American Energy Markets* 1947-1985, a 1968 release of historical and projected statistics.

**Jet Fuel, Naphtha-Type.** EIA adopted the Bureau of Mines thermal conversion factor of 5.355 million Btu per barrel for "Jet Fuel, Military" as published by the Texas Eastern Transmission Corporation in the report *Competition and Growth in American Energy Markets 1947-1985*, a 1968 release of historical and projected statistics.

**Kerosene**. EIA adopted the Bureau of Mines thermal conversion factor of 5.670 million Btu per barrel as reported in a Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

Liquefied Petroleum Gases Consumption. Calculated annually by EIA as the average of the thermal conversion factors for all liquefied petroleum gases consumed (see Table A1) weighted by the quantities consumed. The component products of liquefied petroleum gases are ethane (including ethylene), propane (including propylene), normal butane (including butylene), butane-propane mixtures, ethane-propane mixtures, and isobutane. For 1973-1980, quantities consumed are from EIA, Energy Data Reports, "Petroleum Statement, Annual," Table 1. For 1981 forward, quantities consumed are from EIA, Petroleum Supply Annual, Table 2.

**Lubricants**. EIA adopted the thermal conversion factor of 6.065 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement*, *Annual*, 1956.

**Miscellaneous Products**. EIA adopted the thermal conversion factor of 5.796 million Btu per barrel as estimated by

the Bureau of Mines and first published in the *Petroleum Statement*, *Annual*, 1956.

Motor Gasoline Consumption. 1973–1993: EIA adopted the Bureau of Mines thermal conversion factor of 5.253 million Btu per barrel for "Gasoline, Motor Fuel" as published by the Texas Eastern Transmission Corporation in Appendix V of Competition and Growth in American Energy Markets 1947-1985, a 1968 release of historical and projected statistics. 1994 forward: EIA calculated national annual quantity-weighted average conversion factors for conventional, reformulated, and oxygenated motor gasolines (see Table A3). The factor for conventional motor gasoline is 5.253 million Btu per barrel, as used for previous years. The factors for reformulated and oxygenated gasolines, both currently 5.150 million Btu per barrel, are based on data published in Environmental Protection Agency, Office of Mobile Sources, National Vehicle and Fuel Emissions Laboratory report EPA 420-F-95-003, "Fuel Economy Impact Analysis of Reformulated Gasoline." See Fuel Ethanol (Blended Into Motor Gasoline).

**Natural Gas Plant Liquids Production**. Calculated annually by EIA as the average of the thermal conversion factors for each natural gas plant liquid produced weighted by the quantities produced.

**Natural Gasoline**. EIA adopted the thermal conversion factor of 4.620 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement*, *Annual*, 1956.

**Pentanes Plus.** EIA assumed the thermal conversion factor to be 4.620 million Btu or equal to that for natural gasoline. See **Natural Gasoline**.

**Petrochemical Feedstocks, Naphtha less than 401° F.** Assumed by EIA to be 5.248 million Btu per barrel, equal to the thermal conversion factor for special naphthas. See **Special Naphthas**.

**Petrochemical Feedstocks, Other Oils equal to or greater than 401° F.** Assumed by EIA to be 5.825 million Btu per barrel, equal to the thermal conversion factor for distillate fuel oil. See **Distillate Fuel Oil**.

**Petrochemical Feedstocks, Still Gas.** Assumed by EIA to be 6.000 million Btu per barrel, equal to the thermal conversion factor for still gas. See **Still Gas**.

**Petroleum Coke**. EIA adopted the thermal conversion factor of 6.024 million Btu per barrel as reported in Btu per short ton in the Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950." The Bureau of Mines calculated this factor by dividing 30.120 million Btu per short ton, as given in the referenced Bureau of Mines internal memorandum, by 5.0 barrels per short ton, as given in the Bureau of Mines Form 6-1300-M and successor EIA forms.

**Petroleum Consumption, Commercial Sector**. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the

commercial sector weighted by the estimated quantities consumed by the commercial sector. The quantities of petroleum products consumed by the commercial sector are estimated in the State Energy Data System—see documentation at

http://www.eia.doe.gov/emeu/states/sep\_use/notes/use\_petrol.pdf.

**Petroleum Consumption, Electric Power Sector**. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the electric power sector weighted by the quantities consumed by the electric power sector. Data are from Form EIA-860, "Annual Electric Generator Report"; Form EIA-906, "Power Plant Report"; and predecessor forms.

**Petroleum Consumption, Industrial Sector**. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the industrial sector weighted by the estimated quantities consumed by the industrial sector. The quantities of petroleum products consumed by the industrial sector are estimated in the State Energy Data System—see documentation at http://www.eia.doe.gov/emeu/states/sep\_use/notes/use\_petrol.pdf.

Petroleum Consumption, Residential Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the residential sector weighted by the estimated quantities consumed by the residential sector. The quantities of petroleum products consumed by the residential sector are estimated in the State Energy Data System—see documentation at http://www.eia.doe.gov/emeu/states/sep\_use/notes/use\_petrol.pdf.

**Petroleum Consumption, Total.** Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed weighted by the quantities consumed.

Petroleum Consumption, Transportation Sector. Calculated annually by EIA as the average of the thermal conversion factors for all petroleum products consumed by the transportation sector weighted by the estimated quantities consumed by the transportation sector. The quantities of petroleum products consumed by the transportation sector are estimated in the State Energy Data System—see documentation at

http://www.eia.doe.gov/emeu/states/sep\_use/notes/use\_petrol.pdf.

**Petroleum Products Exports.** Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product exported weighted by the quantities exported.

**Petroleum Products Imports.** Calculated annually by EIA as the average of the thermal conversion factors for each petroleum product imported weighted by the quantities imported.

**Plant Condensate**. Estimated to be 5.418 million Btu per barrel by EIA from data provided by McClanahan Consultants, Inc., Houston, Texas.

**Propane**. EIA adopted the Bureau of Mines thermal conversion factor of 3.836 million Btu per barrel as published in the

California Oil World and Petroleum Industry, First Issue, April 1942.

**Residual Fuel Oil**. EIA adopted the thermal conversion factor of 6.287 million Btu per barrel as reported in the Bureau of Mines internal memorandum, "Bureau of Mines Standard Average Heating Values of Various Fuels, Adopted January 3, 1950."

**Road Oil.** EIA adopted the Bureau of Mines thermal conversion factor of 6.636 million Btu per barrel, which was assumed to be equal to that of asphalt (see **Asphalt**) and was first published by the Bureau of Mines in the *Petroleum Statement*, *Annual*, 1970.

**Special Naphthas**. EIA adopted the Bureau of Mines thermal conversion factor of 5.248 million Btu per barrel, which was assumed to be equal to that of the total gasoline (aviation and motor) factor and was first published in the *Petroleum Statement*, *Annual*, 1970.

**Still Gas.** EIA adopted the Bureau of Mines estimated thermal conversion factor of 6.000 million Btu per barrel, first published in the *Petroleum Statement*, *Annual*, 1970.

**Total Petroleum Exports**. Calculated annually by EIA as the average of the thermal conversion factors for crude oil and each petroleum product exported weighted by the quantities exported. See **Crude Oil Exports** and **Petroleum Products Exports**.

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

**Unfinished Oils.** EIA assumed the thermal conversion factor to be 5.825 million Btu per barrel or equal to that for distillate fuel oil (see **Distillate Fuel Oil**) and first published it in EIA's *Annual Report to Congress, Volume 3,* 1977

**Unfractionated Stream**. EIA assumed the thermal conversion factor to be 5.418 million Btu per barrel or equal to that for plant condensate (see **Plant Condensate**) and first published it in EIA's *Annual Report to Congress, Volume 2, 1981* 

**Waxes**. EIA adopted the thermal conversion factor of 5.537 million Btu per barrel as estimated by the Bureau of Mines and first published in the *Petroleum Statement*, *Annual*, 1956.

# Approximate Heat Content of Natural Gas

**Natural Gas Consumption, Electric Power Sector.** Calculated annually by EIA by dividing the heat content of natural gas consumed by the electric power sector by the quantity consumed. Data are from Form EIA-860,

"Annual Electric Generator Report"; Form EIA-906, "Power Plant Report"; and predecessor forms.

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

**Natural Gas Consumption, Total**. 1973–1979: EIA adopted the thermal conversion factor calculated annually by the American Gas Association (AGA) and published in *Gas Facts*, an AGA annual publication. 1980 forward: Calculated annually by EIA by dividing the total heat content of natural gas consumed by the total quantity consumed.

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

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

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

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

# Approximate Heat Content of Coal and Coal Coke

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

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

**Coal Consumption, End-Use Sectors**. Calculated annually by EIA by dividing the heat content of coal consumed by the end-use sectors (residential, commercial, industrial, and transportation) by the quantity consumed.

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

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

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

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

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

**Coal Imports**. Assumed by EIA to be 25.000 million Btu per short ton.

**Coal Production.** Calculated annually by EIA to balance the heat content of coal supply (production and imports) and the heat content of coal disposition (exports, stock change, and consumption).

# **Approximate Heat Rates for Electricity**

**Electricity Net Generation, Fossil-Fueled Plants**. There is no generally accepted practice for measuring the thermal

conversion rates for power plants that generate electricity from hydro, wind, photovoltaic, or solar thermal energy sources. Therefore, EIA calculates a rate factor that is equal to the prevailing annual average heat rate factor for fossilfueled power plants in the United States. By using that factor, it is possible to evaluate fossil fuel requirements for replacing those sources during periods of interruption, such as droughts. The heat content of a kilowatthour of electricity produced, regardless of the generation process, is 3,412 Btu. 1973-1988: The weighted annual average heat rate for fossil-fueled steam-electric power plants in the United States, as published in EIA, Electric Plant Cost and Power Production Expenses 1991, Table 9. 1989 forward: Calculated annually by EIA by using the heat rate reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms); and the generation on Form EIA-906, "Power Plant Report."

Electricity Net Generation, Geothermal Energy Plants. 1973–1981: Calculated annually by EIA by weighting the annual average heat rates of operating geothermal units by the installed nameplate capacities as reported on Form FPC-12, "Power System Statement." 1982 forward: Estimated annually by EIA on the basis of an informal survey of relevant plants.

Electricity Net Generation, Nuclear Plants. 1973–1984: Calculated annually by dividing the total heat content consumed in nuclear generating units by the total (net) electricity generated by nuclear generating units. The heat content and electricity generation were reported on Form FERC-1, "Annual Report of Major Electric Utilities, Licensees, and Others"; Form EIA-412, "Annual Report of Public Electric Utilities"; and predecessor forms. For 1982, the factors were published in EIA, Historical Plant Cost and Annual Production Expenses for Selected Electric Plants 1982, page 215. For 1983 and 1984, the factors were published in EIA, Electric Plant Cost and Power Production Expenses 1991, Table 13. 1985 forward: Calculated annually by EIA by using the heat rate reported on Form EIA-860, "Annual Electric Generator Report" (and predecessor forms); and the generation reported on Form EIA-906, "Power Plant Report."

# **Appendix B. Metric and Other Physical Conversion Factors**

Data presented in the *Monthly Energy Review* and in other Energy Information Administration publications are expressed predominately in units that historically have been used in the United States, such as British thermal units, barrels, cubic feet, and short tons. However, because U.S. commerce involves other nations, most of which use metric units of measure, the U.S. Government is committed to the transition to the metric system, as stated in the Metric Conversion Act of 1975 (Public Law 94–168), amended by the Omnibus Trade and Competitiveness Act of 1988 (Public Law 100–418), and Executive Order 12770 of July 25, 1991.

The metric conversion factors presented in Table B1 can be used to calculate the metric-unit equivalents of values expressed in U.S. Customary units. For example, 500 short

tons are the equivalent of 453.6 metric tons (500 short tons  $\times$  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 37ª	kilograms (kg)
	1 pound uranium oxide (lb U <sub>3</sub> O <sub>8</sub> )	=	0.384 647 <sup>b</sup>	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 (m³)
	1 cubic yard (yd³)	=	0.764 555	cubic meters (m³)
	1 cubic foot (ft <sup>3</sup> )	=	0.028 316 85	cubic meters (m³)
	1 U.S. gallon (gal)	=	3.785 412	liters (L)
	1 ounce, fluid (fl oz)	=	29.573 53	milliliters (mL)
	1 cubic inch (in³)	=	16.387 06	milliliters (mL)
Length	1 mile (mi)	=	1.609 344ª	kilometers (km)
	1 yard (yd)	=	0.914 4 <sup>a</sup>	meters (m)
	1 foot (ft)	=	0.304 8 <sup>a</sup>	meters (m)
	1 inch (in)	=	2.54ª	centimeters (cm)
Area	1 acre	=	0.404 69	hectares (ha)
	1 square mile (mi <sup>2</sup> )	=	2.589 988	square kilometers (km²)
	1 square yard (yd²)	=	0.836 127 4	square meters (m²)
	1 square foot (ft²)	=	0.092 903 04 <sup>a</sup>	square meters (m²)
	1 square inch (in²)	=	6.451 6ª	square centimeters (cm <sup>2</sup> )
Energy	1 British thermal unit (Btu)°	=	1,055.055 852 62ª	joules (J)
	1 calorie (cal)	=	4.186 8 <sup>a</sup>	joules (J)
	1 kilowatthour (kWh)	=	3.6ª	megajoules (MJ)
Temperature <sup>d</sup>	32 degrees Fahrenheit (°F)	=	O <sup>a</sup>	degrees Celsius (°C)
-	212 degrees Fahrenheit (°F)	=	100 <sup>a</sup>	degrees Celsius (°C)

<sup>&</sup>lt;sup>a</sup>Exact conversion.

<sup>&</sup>lt;sup>b</sup>Calculated by the Energy Information Administration.

<sup>&</sup>lt;sup>c</sup>The Btu used in this table is the International Table Btu adopted by the Fifth International Conference on Properties of Steam, London, 1956. <sup>d</sup>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 <sup>1</sup>	deka	da	10 <sup>-1</sup>	deci	d
10 <sup>2</sup>	hecto	h	10 <sup>-2</sup>	centi	С
10 <sup>3</sup>	kilo	k	10 <sup>-3</sup>	milli	m
10 <sup>6</sup>	mega	M	10 <sup>-6</sup>	micro	μ
10 <sup>9</sup>	giga	G	10 <sup>-9</sup>	nano	n
10 <sup>12</sup>	tera	Т	10 <sup>-12</sup>	pico	р
10 <sup>15</sup>	peta	Р	10 <sup>-15</sup>	femto	f
10 <sup>18</sup>	exa	Е	10 <sup>-18</sup>	atto	а
10 <sup>21</sup>	zetta	Z	10 <sup>-21</sup>	zepto	Z
10 <sup>24</sup>	yotta	Υ	10 <sup>-24</sup>	yocto	у

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)	=	42ª	U.S. gallons (gal)		
Coal	1 short ton	=	2,000ª	pounds (lb)		
	1 long ton	=	2,240 <sup>a</sup>	pounds (lb)		
	1 metric ton (t)	=	1,000 <sup>a</sup>	kilograms (kg)		
Wood	1 cord (cd)	=	1.25 <sup>b</sup>	shorts tons		
	1 cord (cd)	=	128ª	cubic feet (ft³)		

<sup>&</sup>lt;sup>a</sup>Exact conversion.

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.

<sup>&</sup>lt;sup>b</sup>Calculated by the Energy Information Administration.

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

## **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	<b>Cover Date</b>
2005 Financial News for Independent Energy Companies	February 2005 February 2005
Analysis of Alternative Mercury Control Strategies	. April 2005 . May 2005
Annual Energy Outlook 2004.  Natural Gas Annual 2002.  Analysis of Restricted Natural Gas Supply Cases.  Performance Profiles of Major Energy Producers 2002.  International Energy Outlook 2004.  Biodiesel Performance, Costs, and Use.  State Renewable Energy Requirements and Goals.  Annual Energy Review 2003.  U.S. Natural Gas Pipeline and Underground Storage Expansions in 2003.  Oil Market Basics.  Unique Reactors.  Green Pricing and Net Metering Programs 2003.	. February 2004 . March 2004 . March 2004 . April 2004 . August 2004 . September 2004 . October 2004 . October 2004 . November 2004 . December 2004
Annual Energy Outlook 2003. Performance Profiles of Major Energy Producers 2001. Voluntary Reporting of Greenhouse Gases 2001. Electric Power Annual 2001. International Energy Outlook 2003. Uranium Industry Annual 2002. Residential Energy Consumption Special Topics. New Reactor Designs. Foreign Direct Investment in U.S. Energy in 2001. Annual Energy Review 2002. Annual Coal Report 2002. Renewable Energy Annual 2002.	<ul> <li>February 2003</li> <li>March 2003</li> <li>April 2003</li> <li>May 2003</li> <li>June 2003</li> <li>July 2003</li> <li>August 2003</li> <li>September 2003</li> <li>October 2003</li> <li>November 2003</li> </ul>
2002 Performance Profiles of Major Energy Producers 2000. Voluntary Reporting of Greenhouse Gases 2000. Analysis of Corporate Average Fuel Economy Standards for Light Trucks and Increased Alternative Fuel Use. Summer 2002 Motor Gasoline Outlook. International Energy Outlook 2002.	February 2002 March 2002 . April 2002

#### 2002 (Continued) Weekly Natural Gas Storage Report. May 2002 International Energy Annual 2000. May 2002 Uranium Industry Annual 2001. June 2002 Biomass for Electricity Generation. July 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 Performance Profiles of Major Energy Producers 1999. February 2001 Summer 2001 Motor Gasoline Outlook. April 2001 International Energy Outlook 2001. April 2001 Energy Market Maps. June 2001 Coal Industry Annual 1999. July 2001 Annual Energy Review 2000. 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 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

### **Glossary**

**Asphalt**: A dark-brown-to-black cement-like material containing bitumens as the predominant constituents obtained by petroleum processing. The definition includes crude asphalt as well as the following finished products: cements, fluxes, the asphalt content of emulsions (exclusive of water), and petroleum distillates blended with asphalt to make cutback asphalts.

**ASTM**: The American Society for Testing and Materials.

**Aviation Gasoline Blending Components**: Naphthas that will be used for blending or compounding into finished aviation gasoline (e.g., straight run gasoline, alkylate, reformate, benzene, toluene, and xylene). Excludes oxygenates (alcohols, ethers), butane, and pentanes plus.

**Aviation Gasoline, Finished**: A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in aviation reciprocating engines. Fuel specifications are provided in ASTM Specification D 910 and Military Specification MIL-G-5572. *Note:* Data on blending components are not counted in data on finished aviation gasoline.

**Barrel** (**Petroleum**): A unit of volume equal to 42 U.S. gallons.

**Base Gas**: The volume of gas needed as a permanent inventory to maintain adequate underground storage reservoir pressures and deliverability rates throughout the withdrawal season. All native gas is included in the base gas volume.

**Black Liquor**: A byproduct of the paper production process, alkaline spent liquor, that can be used as a source of energy. Alkaline spent liquor is removed from the digesters in the process of chemically pulping wood. After evaporation, the residual "black" liquor is burned as a fuel in a recovery furnace that permits the recovery of certain basic chemicals.

British Thermal Unit (Btu): The quantity of heat required to raise the temperature of 1 pound of liquid water by 1 degree Fahrenheit at the temperature at which water has its greatest density (approximately 39 degrees Fahrenheit). See Heat Content of a Quantity of Fuel, Gross and Heat Content of a Quantity of Fuel, Net.

**Butane**: A normally gaseous straight-chain or branched-chain hydrocarbon ( $C_4H_{10}$ ). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

*Isobutane*: A normally gaseous branched-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams.

*Normal Butane*: A normally gaseous straight-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 31.1° F. It is extracted from natural gas or refinery gas streams.

**Butylene**: An olefinic hydrocarbon ( $C_4H_8$ ) recovered from refinery processes.

**Capacity Factor**: The ratio of the electrical energy produced by a generating unit for a given period of time to the electrical energy that could have been produced at continuous full-power operation during the same period.

Chained Dollars: A measure used to express real prices. Real prices are those that have been adjusted to remove the effect of changes in the purchasing power of the dollar; they usually reflect buying power relative to a reference year. Prior to 1996, real prices were expressed in constant dollars, a measure based on the weights of goods and services in a single year, usually a recent year. In 1996, the U.S. Department of Commerce introduced the chained-dollar measure. The new measure is based on the average weights of goods and services in successive pairs of years. It is "chained" because the second year in each pair, with its weights, becomes the first year of the next pair. The advantage of using the chained-dollar measure is that it is more closely related to any given period and is therefore subject to less distortion over time.

CIF: See Cost, Insurance, Freight.

**City Gate**: A point or measuring station at which a distribution gas utility receives gas from a natural gas pipeline company or transmission system.

Coal: A readily combustible black or brownish-black rock whose composition, including inherent moisture, consists of more than 50 percent by weight and more than 70 percent by volume of carbonaceous material. It is formed from plant remains that have been compacted, hardened, chemically altered, and metamorphosed by heat and pressure over geologic time.

Coal Coke: See Coke, Coal.

Coal Stocks: Coal quantities that are held in storage for future use and disposition. Note: When coal data are collected for a particular reporting period (month, quarter, or year), coal stocks are commonly measured as of the last day of the period.

**Coke, Coal**: A solid carbonaceous residue derived from low-ash, low-sulfur bituminous coal from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000° F so that the fixed carbon and residual ash are fused together. Coke is used as a fuel and as a reducing agent in smelting iron ore in a blast furnace. Coke (coal) has a heating value of 24.8 million Btu per ton.

**Coke, Petroleum:** A residue high in carbon content and low in hydrogen that is the final product of thermal decomposition in the condensation process in cracking. This product is reported as marketable coke or catalyst coke. The conversion is 5 barrels (42 U.S. gallons each) per short ton. Coke (petroleum) has a heating value of 6.024 million Btu per barrel.

Coking Coal: Bituminous coal suitable for making coke. See Coke. Coal.

Combined-Heat-and-Power (CHP) Plant: A plant designed to produce both heat and electricity from a single heat source. Note: This term is being used in place of the term "cogenerator" that was used by EIA in the past. CHP better describes the facilities because some of the plants included do not produce heat and power in a sequential fashion and, as a result, do not meet the legal definition of cogeneration specified in the Public Utility Regulatory Policies Act (PURPA).

Commercial Sector: An energy-consuming sector that consists of service-providing facilities and equipment of: businesses; Federal, State, and local governments; and other private and public organizations, such as religious, social, or fraternal groups. The commercial sector includes institutional living quarters. It also includes sewage treatment facilities. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a wide variety of other equipment. Note: This sector includes generators that produce electricity and/or useful thermal output primarily to support the activities of the above-mentioned commercial establishments. Various EIA programs differ in sectoral coverage—for more information see http://www.eia.doe.gov/neic/datadefinitions/Guideforwebcom.htm. See End-Use Sectors and Energy-Use Sectors.

**Completion**: The installation of permanent equipment for the production of oil or gas. If a well is equipped to produce only oil or gas from one zone or reservoir, the definition of a well (classified as an oil well or gas well) and the definition of a completion are identical. However, if a well is equipped to produce oil and/or gas separately from more than one reservoir, a well is not synonymous with a completion.

Constant Dollars: See Chained Dollars.

**Conventional Gasoline**: Finished motor gasoline not included in the oxygenated or reformulated gasoline categories. *Note*: This category excludes reformulated gasoline

blendstock for oxygenate blending (RBOB) as well as other blendstock.

**Conventional Hydroelectric Power**: Hydroelectric power generated from flowing water that is not created by **hydroelectric pumped storage**.

**Conversion Factor:** A number that translates units of one system into corresponding values of another system. Conversion factors can be used to translate physical units of measure for various fuels into Btu equivalents. See **British Thermal Unit**.

**Cost, Insurance, Freight (CIF)**: A sales transaction in which the seller pays for the transportation and insurance of the goods to the port of destination specified by the buyer.

Crude Oil: A mixture of hydrocarbons that exists in liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Depending upon the characteristics of the crude stream, it may also include: 1) small amounts of hydrocarbons that exist in gaseous phase in natural underground reservoirs but are liquid at atmospheric pressure after being recovered from oil well (casinghead) gas in lease separators and are subsequently commingled with the crude stream without being separately measured. Lease condensate recovered as a liquid from natural gas wells in lease or field separation facilities and later mixed into the crude stream is also included; 2) small amounts of nonhydrocarbons produced with the oil, such as sulfur and various metals; and 3) drip gases, and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale.

Liquids produced at natural gas processing plants are excluded. Crude oil is refined to produce a wide array of petroleum products, including heating oils; gasoline, diesel and jet fuels; lubricants; asphalt; ethane, propane, and butane; and many other products used for their energy or chemical content.

**Crude Oil F.O.B. Price**: The crude oil price actually charged at the oil-producing country's port of loading. Includes deductions for any rebates and discounts or additions of premiums, where applicable. It is the actual price paid with no adjustment for credit terms.

Crude Oil (Including Lease Condensate): A mixture of hydrocarbons that exists in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. Included are lease condensate and liquid hydrocarbons produced from tar sands, gilsonite, and oil shale. Drip gases are also included, but topped crude oil (residual oil) and other unfinished oils are excluded. Where identifiable, liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded.

**Crude Oil Landed Cost**: The price of crude oil at the port of discharge, including charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. The cost does not include charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage).

**Crude Oil Refinery Input**: The total crude oil put into processing units at refineries.

**Crude Oil Stocks**: Stocks of crude oil and lease condensate held at refineries, in pipelines, at pipeline terminals, and on leases.

**Crude Oil Used Directly**: Crude oil consumed as fuel by crude oil pipelines and on crude oil leases.

**Crude Oil Well**: A well completed for the production of crude oil from one or more oil zones or reservoirs. Wells producing both crude oil and natural gas are classified as oil wells.

**Cubic Foot** (**Natural Gas**): A unit of volume equal to 1 cubic foot at a pressure base of 14.73 pounds standard per square inch absolute and a temperature base of 60° 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.

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

**Distillate Fuel Oil:** A general classification for one of the petroleum fractions produced in conventional distillation operations. It includes diesel fuels and fuel oils. Products known as No. 1, No. 2, and No. 4 diesel fuel are used in on-highway diesel engines, such as those in trucks and automobiles, as well as off-highway engines, such as those in railroad locomotives and agricultural machinery. Products known as No. 1, No. 2, and No. 4 fuel oils are used primarily for space heating and electric power generation.

**Dry Hole**: An exploratory or development well found to be incapable of producing either oil or gas in sufficient quantities to justify completion as an oil or gas well.

**Dry Natural Gas Production**: See Natural Gas (Dry) **Production**.

**Electrical System Energy Losses**: The amount of energy lost during generation, transmission, and distribution of electricity, including plant and 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 **station use** (the **electric energy** consumed at the generating station(s) for station service or auxiliaries). *Note*: Electricity required for pumping at **hydroelectric pumped-storage** plants is regarded as electricity for station service and is deducted from gross generation.

**Electricity-Only Plant**: A plant designed to produce electricity only. See also **Combined-Heat-and-Power (CHP) Plant**.

**Electricity Retail Sales**: The amount of electricity sold to customers purchasing electricity for their own use and not for resale.

**Electric Power Plant**: A station containing prime movers, electric generators, and auxiliary equipment for converting mechanical, chemical, and/or fission energy into electric energy.

Electric Power Sector: An energy-consuming sector that consists of electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public—i.e., North American Industry Classification System 22 plants. See also Combined-Heat-and-Power (CHP) Plant, 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<sub>2</sub>H<sub>6</sub>). It is a colorless, paraffinic gas that boils at a temperature of -127.48° F. It is extracted from natural gas and refinery gas streams.

**Ethanol**: An anhydrous denatured aliphatic alcohol intended for gasoline blending. See Oxygenates.

**Ethylene**: An olefinic hydrocarbon (C2H4) recovered from refinery processes or petrochemical processes.

**Exploratory Well**: A well drilled to find and produce oil or gas in an area previously considered an unproductive area, to find a new reservoir in a known field (i.e., one previously found to be producing oil or gas in another reservoir), or to extend the limit of a known oil or gas reservoir.

**Exports**: Shipments of goods from within the 50 States and the District of Columbia to U.S. possessions and territories or to foreign countries.

**Extraction Loss**: The reduction in volume of natural gas due to the removal of natural gas liquid constituents, such as ethane, propane, and butane, at natural gas processing plants.

**Federal Energy Administration (FEA)**: A predecessor of the Energy Information Administration.

**Federal Energy Regulatory Commission (FERC)**: The Federal agency with jurisdiction over interstate electricity sales, wholesale electric rates, hydroelectric licensing, natural gas pricing, oil pipeline rates, and gas pipeline certification. FERC is an independent regulatory agency within the Department of Energy and is the successor to the Federal Power Commission.

**Federal Power Commission** (**FPC**): The predecessor agency of the Federal Energy Regulatory Commission. The Federal Power Commission was created by an Act of Congress under the Federal Water Power Act on June 10, 1920. It was charged originally with regulating the electric power and natural gas industries. It was abolished on

September 30, 1977, when the Department of Energy was created. Its functions were divided between the Department of Energy and the Federal Energy Regulatory Commission, an independent regulatory agency.

**First Purchase Price**: The marketed first sales price of domestic crude oil, consistent with the removal price defined by the provisions of the Windfall Profits Tax on Domestic Crude Oil (Public Law 96-223, Sec. 4998 (c)).

**Flared Natural Gas**: Natural gas burned in flares on the base site or at gas processing plants.

**F.O.B.** (**Free on Board**): A sales transaction in which the seller makes the product available for pick up at a specified port or terminal at a specified price and the buyer pays for the subsequent transportation and insurance.

Footage Drilled: Total footage for wells in various categories, as reported for any specified period, includes (1) the deepest total depth (length of well bores) of all wells drilled from the surface, (2) the total of all bypassed footage drilled in connection with reported wells, and (3) all new footage drilled for directional sidetrack wells. Footage reported for directional sidetrack wells does not include footage in the common bore, which is reported as footage for the original well. In the case of old wells drilled deeper, the reported footage is that which was drilled below the total depth of the old well.

Former U.S.S.R.: See U.S.S.R.

**Fossil Fuel**: An energy source formed in the Earth's crust from decayed organic material, such as **petroleum**, **coal**, and **natural gas**.

**Fossil-Fueled Steam-Electric Power Plant**: An electricity generation plant in which the prime mover is a turbine rotated by high-pressure steam produced in a boiler by heat from burning fossil fuels.

**Fuel Ethanol**: An anhydrous, denatured aliphatic alcohol  $(C_2H_5OH)$  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 offpeak periods when excess generating capacity is available to do so. When additional generating capacity is needed, the water can be released from the reservoir through a conduit to turbine generators located in a power plant at a lower level.

**Imports**: Receipts of goods into the 50 States and the District of Columbia from U.S. possessions and territories or from foreign countries.

**Independent Power Producer**: A corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities for the generation of electricity for use primarily by the public, and that is not an **electric utility**.

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

http://www.eia.doe.gov/neic/datadefinitions/Guideforwebind.htm. See **End-Use Sectors** and **Energy-Use Sectors**.

**Injections** (Natural Gas): Natural gas injected into storage reservoirs.

**Isobutane**: A normally gaseous branch-chain hydrocarbon. It is a colorless paraffinic gas that boils at a temperature of 10.9° F. It is extracted from natural gas or refinery gas streams. See **Butane**.

**Isobutylene**: An olefinic hydrocarbon recovered from refinery processes or petrochemical processes.

**Isopentane**: A saturated branched-chain hydrocarbon obtained by fractionation of natural gasoline or isomerization of normal pentane.

**Jet Fuel**: A refined petroleum product used in jet aircraft engines. It includes kerosene-type jet fuel and naphtha-type jet fuel.

**Jet Fuel, Kerosene-Type**: A kerosene-based product with a maximum distillation temperature of 400° F at the 10-percent recovery point and a final maximum boiling point of 572° F. Fuel specifications are provided in ASTM Specification D 1655 and Military Specifications MIL-T-5624P and MIL-T-83133D (Grades JP-5 and JP-8). It is used primarily for commercial turbojet and turboprop aircraft engines.

**Jet Fuel, Naphtha-Type**: A fuel in the heavy naphtha boiling range, with an average gravity of 52.8 degrees API, 20

to 90 percent distillation temperatures of 290° to 470° F and meeting Military Specification MIL-T-5624L (Grade JP-4). It is used by the military for turbojet and turboprop engines.

**Kerosene**: A petroleum distillate having a maximum distillation temperature of 401° F at the 10-percent recovery point, a final boiling point of 572° F, and a minimum flash point of 100° F. Included are the two grades designated in ASTM D3699 (No. 1-K and No. 2-K) and all grades of kerosene called range or stove oil. Kerosene is used in space heaters, cook stoves, and water heaters; it is suitable for use as an illuminant when burned in wick lamps.

**Kilowatt**: A unit of electrical power equal to 1,000 watts.

**Kilowatthour (kWh)**: A measure of electricity defined as a unit of work or energy, measured as 1 **kilowatt** (1,000 **watts**) of power expended for 1 hour. One kilowatthour is equivalent to 3,412 Btu. See **Watthour**.

**Landed Costs**: The dollar-per-barrel price of crude oil at the port of discharge. Included are the charges associated with the purchase, transporting, and insuring of a cargo from the purchase point to the port of discharge. Not included are charges incurred at the discharge port (e.g., import tariffs or fees, wharfage charges, and demurrage charges).

**Lease and Plant Fuel**: Natural gas used in well, field, and lease operations (such as gas used in drilling operations, heaters, dehydrators, and field compressors) and used as fuel in natural gas processing plants.

**Lease Condensate**: A mixture consisting primarily of pentanes and heavier hydrocarbons, which is recovered as a liquid from natural gas in lease or field separation facilities. Note: This category excludes natural gas liquids, such as butane and propane, which are recovered at natural gas processing plants or facilities.

**Light Oil**: Lighter fuel oils distilled off during the refining process. Virtually all petroleum used in internal combustion and gas-turbine engines is light oil.

**Lignite**: The lowest rank of coal. Often referred to as brown coal, it is used almost exclusively as fuel for steam-electric power generation. It is brownish-black and has a high inherent moisture content, sometimes as high as 45 percent. The heat content of lignite ranges from 9 to 17 million Btu per ton on a moist, mineral-matter-free basis. The heat content of lignite consumed in the United States averages 14 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

**Liquefied Natural Gas (LNG)**: Natural gas (primarily methane) that has been liquefied by reducing its temperature to -260° F at atmospheric pressure.

**Liquefied Petroleum Gases** (**LPG**): Ethane, ethylene, propane, propylene, normal butane, butylene, and isobutane

produced at refineries or natural gas processing plants, including plants that fractionate new natural gas plant liquids.

**Low-Power Testing**: The period of time between a nuclear generating unit's initial fuel loading date and the issuance of its operating (full-power) license. The maximum level of operation during that period is 5 percent of the unit's design thermal rating.

Lubricants: Substances used to reduce friction between bearing surfaces or as process materials either incorporated into other materials used as processing aids in the manufacturing of other products or as carriers of other materials. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. Excluded are byproducts of lubricating oil refining, such as aromatic extracts derived from solvent extraction or tars derived from deasphalting. Included are all grades of lubricating oils from spindle oil to cylinder oil and those used in greases. Lubricant categories are paraffinic and naphthenic.

Marketed Production (Natural Gas): Gross withdrawals less gas used for repressuring, quantities vented and flared, and nonhydrocarbon gases removed in treating or processing operations. Includes all quantities of gas used in field and processing operations.

**Methane**: A colorless, flammable, odorless, hydrocarbon gas (CH<sub>4</sub>) that is the principal constituent of natural gas. It is also an important source of hydrogen in various industrial processes.

**Methyl Tertiary Butyl Ether (MTBE)**: An ether,  $(CH_3)_3COCH_3$ , intended for motor gasoline blending. See **Oxygenates**.

**Methanol**: A light, volatile alcohol (CH<sub>3</sub>OH) eligible for motor gasoline blending. See **Oxygenates**.

**Miscellaneous Petroleum Products**: All finished petroleum products not classified elsewhere—for example, petrolatum, lube refining byproducts (aromatic extracts and tars), absorption oils, ram-jet fuel, petroleum rocket fuels, synthetic natural gas feedstocks, and specialty oils.

Motor Gasoline Blending: Mechanical mixing of motor gasoline blending components and oxygenates as required, to produce finished motor gasoline. Finished motor gasoline may be further mixed with other motor gasoline blending components or oxygenates, resulting in increased volumes of finished motor gasoline and/or changes in the formulation of finished motor gasoline (e.g., conventional motor gasoline mixed with MTBE to produce oxygenated motor gasoline).

Motor Gasoline Blending Components: Naphtha (e.g., straight-run gasoline, alkylate, reformate, benzene, toluene,

xylene) used for blending or compounding into finished motor gasoline. These components include reformulated gasoline blendstock (RBOB) but exclude oxygenates (alcohols, ethers), butane, and pentanes plus. Note: oxygenates are reported as individual components and are included in the total for other hydrocarbons, hydrogens, and oxygenates.

Motor Gasoline, Finished: A complex mixture of relatively volatile hydrocarbons with or without small quantities of additives, blended to form a fuel suitable for use in sparkignition. Motor gasoline, as defined in ASTM Specification D-4814 or Federal Specification VV-G-1690C, is characterized as having a boiling range of 122°F to 158°F at the 10-percent recovery point to 365°F to 374°F at the 90-percent recovery point. "Motor gasoline" includes conventional gasoline, all types of oxygenated gasoline including gasohol, and reformulated gasoline, but excludes aviation gasoline. Note: Volumetric data on blending components, as well as oxygenates, are not counted in data on finished motor gasoline until the blending components are blended into the gasoline.

Motor Gasoline Grades: The classification of gasoline by octane ratings. Each type of gasoline (conventional, oxygenated, and reformulated) is classified by three grades: regular, midgrade, and premium. Note: Gasoline sales are reported by grade in accordance with their classification at the time of sale. In general, automotive octane requirements are lower at high altitudes. Therefore, in some areas of the United States, such as the Rocky Mountain States, the octane ratings for the gasoline grades may be 2 or more octane points lower.

Regular Gasoline: Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 85 and less than 88. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

*Midgrade Gasoline*: Gasoline having an antiknock index, i.e., octane rating, greater than or equal to 88 and less than or equal to 90. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

*Premium Gasoline*: Gasoline having an antiknock index, i.e., octane rating, greater than 90. Note: Octane requirements may vary by altitude. See **Motor Gasoline Grades**.

Motor Gasoline, Oxygenated: Finished motor gasoline, other than reformulated gasoline, having an oxygen content of 2.7 percent or higher by weight and required by the U.S. Environmental Protection Agency (EPA) to be sold in areas designated by EPA as carbon monoxide (CO) nonattainment areas. Note: Oxygenated gasoline excludes oxygenated fuels program reformulated gasoline (OPRG) and reformulated gasoline blendstock for oxygenate blending (RBOB). Data on gasohol that has at least 2.7 percent oxygen, by weight, and is intended for sale inside CO nonattainment areas are included in data on oxygenated gasoline. Other data on gasohol are included in data on conventional gasoline.

Motor Gasoline, Reformulated: Finished motor gasoline formulated for use in motor vehicles, the composition and properties of which meet the requirements of the reformulated gasoline regulations promulgated by the U.S. Environmental Protection Agency under Section 211(k) of the Clean Air Act. Note: This category includes oxygenated fuels program reformulated gasoline (OPRG) but excludes reformulated gasoline blendstock for oxygenate blending (RBOB).

Motor Gasoline Retail Prices: Motor gasoline prices calculated each month by the Bureau of Labor Statistics (BLS) in conjunction with the construction of the Consumer Price Index (CPI). Those prices are collected in 85 urban areas selected to represent all urban consumers—about 80 percent of the total U.S. population. The service stations are selected initially, and on a replacement basis, in such a way that they represent the purchasing habits of the CPI population. Service stations in the current sample include those providing all types of service (i.e., full-, mini-, and self-service.

Motor Gasoline (Total): For stock level data, a sum including finished motor gasoline stocks plus stocks of motor gasoline blending components but excluding stocks of oxygenates.

MTBE: See Methyl Tertiary Butyl Ether.

NAICS (North American Industry Classification System) A coding system developed jointly by the United States, Canada, and Mexico to classify businesses and industries according to the type of economic activity in which they are engaged. NAICS replaces the Standard Industrial Classification (SIC) codes. For additional information on NAICS, go to http://www.census.gov/epcd/www/naics.html.

**Naphtha**: A generic term applied to a petroleum fraction with an approximate boiling range between 122 and 400° F.

**Natural Gas**: A gaseous mixture of hydrocarbon compounds, primarily methane, used as a fuel for electricity generation and in a variety of ways in buildings, and as raw material input and fuel for industrial processes.

**Natural Gas, Dry**: Natural gas which remains after: 1) the liquefiable hydrocarbon portion has been removed from the gas stream (i.e., gas after lease, field, and/or plant separation); and 2) any volumes of nonhydrocarbon gases have been removed where they occur in sufficient quantity to render the gas unmarketable. Note: Dry natural gas is also known as consumer-grade natural gas. The parameters for measurement are cubic feet at 60 degrees Fahrenheit and 14.73 pounds per square inch absolute.

Natural Gas (Dry) Production: The process of producing consumer-grade natural gas. Natural gas withdrawn from reservoirs is reduced by volumes used at the production (lease) site and by processing losses. Volumes used at the

production site include 1) the volume returned to reservoirs in cycling, repressuring of oil reservoirs, and conservation operations; and 2) gas vented and flared. Processing losses include 1) nonhydrocarbon gases (e.g., water vapor, carbon dioxide, helium, hydrogen sulfide, and nitrogen) removed from the gas stream; and 2) gas converted to liquid form, such as lease condensate and plant liquids. Volumes of dry gas withdrawn from gas storage reservoirs are not considered part of production. Dry natural gas production equals marketed production less extraction loss.

**Natural Gas Marketed Production**: Gross withdrawals of natural gas from production reservoirs, less gas used for reservoir repressuring; nonhydrocarbon gases removed in treating and processing operations; and quantities vented and flared.

Natural Gas Plant Liquids (NGPL): Natural gas liquids recovered from natural gas in processing plants and, in some situations, from natural gas field facilities, as well as those extracted by fractionators. Natural gas plant liquids are defined according to the published specifications of the Gas Processors Association and the American Society for Testing and Material as follows: ethane, propane, normal butane, isobutane, pentanes plus, and other products from natural gas processing plants (i.e., products meeting the standards for finished petroleum products produced at natural gas processing plants, such as finished motor gasoline, finished aviation gasoline, special naphthas, kerosene, distillate fuel oil, and miscellaneous products).

Natural Gas Wellhead Price: The wellhead price of natural gas is calculated by dividing the total reported value at the wellhead by the total quantity produced as reported by the appropriate agencies of individual producing States and the U.S. Minerals Management Service. The price includes all costs prior to shipment from the lease, including gathering and compression costs, in addition to State production, severance, and similar charges.

**Natural Gasoline**: A mixture of hydrocarbons (mostly pentanes and heavier) extracted from natural gas that meets vapor pressure, end-point, and other specifications for natural gasoline set by the Gas Processors Association. Includes isopentane, which is a saturated branch-chain hydrocarbon obtained by fractionation of natural gasoline or isomerization of normal pentane.

**Net Summer Capacity**: The maximum output, commonly expressed in **kilowatts** (kW) or megawatts (MW), that generating equipment can supply to system load, as demonstrated by a multi-hour test, at the time of summer peak demand. This output reflects a reduction in capacity due to electricity use for station service or auxiliaries.

**Neutral Zone**: A 6,200 square-mile area shared equally between Kuwait and Saudi Arabia under a 1992 agreement. The Neutral Zone contains an estimated 5 billion barrels of oil and 8 trillion cubic feet of natural gas.

**Nonhydrocarbon Gases**: Typical nonhydrocarbon gases that may be present in reservoir natural gas are carbon dioxide, helium, hydrogen sulfide, and nitrogen.

**Nuclear Electric Power (Nuclear Power)**: Electricity generated by the use of the thermal energy released from the fission of nuclear fuel in a reactor.

**Nuclear Electric Power Plant**: A single-unit or multiunit facility in which heat produced in one or more reactors by the fissioning of nuclear fuel is used to drive one or more steam turbines.

**Nuclear Reactor**: An apparatus in which a nuclear fission chain reaction can be initiated, controlled, and sustained at a specific rate. A reactor includes fuel (fissionable material), moderating material to control the rate of fission, a heavy-walled pressure vessel to house reactor components, shielding to protect personnel, a system to conduct heat away from the reactor, and instrumentation for monitoring and controlling the reactor's systems.

**Offshore**: That geographic area that lies seaward of the coastline. In general, the coastline is the line of ordinary low water along with that portion of the coast that is in direct contact with the open sea or the line marking the seaward limit of inland water.

Oil: See Crude Oil.

**Operable Unit (Nuclear):** In the United States, a nuclear generating unit that has completed low-power testing and been issued a full-power operating license by the Nuclear Regulatory Commission, or equivalent permission to operate.

Organization for Economic Cooperation and Development (OECD): Members are Australia, Austria, Belgium, Canada, Denmark, Faeroe Islands, Finland, France, Germany, Greece, Greenland, Hawaiian Trade Zone, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States and its territories (Guam, Puerto Rico, and the Virgin Islands). In addition, Czech Republic, Hungary, Poland, and South Korea joined the OECD in 1996.

Organization of the 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. Etha-

nol, 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 -43.67° F. It is extracted from natural gas or refinery gas streams. It includes all products designated in ASTM Specification D1835 and Gas Processors Association Specifications for commercial propane and HD-5 propane.

**Propylene**: An olefinic hydrocarbon (C<sub>3</sub>H<sub>6</sub>) recovered from refinery or petrochemical processes.

**Refiner Acquisition Cost of Crude Oil:** The cost of crude oil to the refiner, including transportation and fees. The composite cost is the weighted average of domestic and imported crude oil costs.

**Refinery** (**Petroleum**): An installation that manufactures finished petroleum products from crude oil, unfinished oils, natural gas liquids, other hydrocarbons, and alcohol.

**Renewable Energy**: Energy obtained from sources that are essentially inexhaustible (unlike, for example, the **fossil fuels**, of which there is a finite supply). Renewable sources

of energy include conventional hydrolectric power, wood, waste, alcohol fuels, geothermal, solar, and wind.

**Repressuring**: The injection of a pressurized fluid (such as air, gas, or water) into oil and gas reservoir formations to effect greater ultimate recovery.

Residential Sector: An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters. *Note:* Various EIA programs differ in sectoral coverage—for more information see http://www.eia.doe.gov/neic/datadefinitions/Guideforwebres.htm. See End–Use Sectors and Energy–Use Sectors.

**Residual Fuel Oil:** The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations and that conform to ASTM Specifications D396 and 975. Included are No. 5, a residual fuel oil of medium viscosity; Navy Special, for use in steampowered vessels in government service and in shore power plants; and No. 6, which includes Bunker C fuel oil and is used for commercial and industrial heating, for electricity generation, and to power ships. Imports of residual fuel oil include imported crude oil burned as fuel.

**Road Oil**: Any heavy petroleum oil, including residual asphaltic oil used as a dust palliative and surface treatment on roads and highways. It is generally produced in six grades, from 0, the most liquid, to 5, the most viscous.

**Rotary Rig:** A machine used for drilling wells that employs a rotating tube attached to a bit for boring holes through rock.

**Short Ton (Coal)**: A unit of weight equal to 2,000 pounds.

SIC (Standard Industrial Classification): A set of codes developed by the U.S. Office of Management and Budget which categorizes industries into groups with similar economic activities. Replaced by NAICS (North American Industry Classification System).

Solar Energy: See Solar Thermal Energy and Photovoltaic Energy.

**Solar Thermal Energy**: The radiant energy of the sun that can be converted into other forms of energy, such as heat or **electricity**.

**Special Naphthas**: All finished products within the naphtha boiling ranges that are used as paint thinner, cleaners or solvents. Those products are refined to a specified flash point. Special naphthas include all commercial hexane and

cleaning solvents conforming to ASTM Specifications D1836 and D484, respectively. Naphthas to be blended or

marketed as motor gasoline or aviation gasoline, or that are to be used as petrochemical and synthetic natural gas (SNG) feedstocks, are excluded.

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

Steam Coal: All nonmetallurgical coal.

**Steam-Electric Power Plant**: A plant in which the prime mover is a steam turbine. The steam used to drive the turbine is produced in a boiler where fossil fuels are burned.

**Still Gas (Refinery Gas)**: Any form or mixture of gas produced in refineries by distillation, cracking, reforming, and other processes. The principal constituents are methane, ethane, ethylene, normal butane, butylene, propane, and propylene. It is used primarily as refinery fuel and, petrochemical feedstock.

**Stocks**: See Coal Stocks, Crude Oil Stocks, or Petroleum Stocks, Primary.

**Strategic Petroleum Reserve (SPR)**: Petroleum stocks maintained by the Federal Government for use during periods of major supply interruption.

**Supplemental Gaseous Fuels**: Synthetic natural gas, propane-air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

Synthetic Natural Gas (SNG): (Also referred to as substitute natural gas) A manufactured product, chemically similar in most respects to natural gas, resulting from the conversion or reforming of petroleum hydrocarbons that may easily be substituted for or interchanged with pipelinequality natural gas.

Thermal Conversion Factor: See Conversion Factor.

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

http://www.eia.doe.gov/neic/datadefinitions/Guideforwebtrans.htm. See End–Use Sectors and Energy–Use Sectors

**Unaccounted-for Crude Oil**: Represents the arithmetic difference between the calculated supply and the calculated disposition of crude oil. The calculated supply is the sum of **crude oil** production plus imports minus changes in crude oil stocks. The calculated disposition of crude oil is the sum of crude oil input to refineries, crude oil exports, crude oil burned as fuel, and crude oil losses.

**Unfinished Oils**: All oils requiring further refinery processing except those requiring only mechanical blending. Includes naphthas and lighter oils, kerosene and light gas oils, heavy gas oils, and residuum.

**Unfractionated Stream**: Mixtures of unsegregated natural gas liquid components, excluding those in plant condensate. This product is extracted from natural gas.

**Underground Storage**: The storage of natural gas in underground reservoirs at a different location from which it was produced.

United States: The 50 States and the District of Columbia. Note: The United States has varying degrees of jurisdiction over a number of territories and other political entities outside the 50 States and the District of Columbia, including Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Johnston Atoll, Midway Islands, Wake Island, and the Northern Mariana Islands. EIA data programs may include data from some or all of these areas in U.S. totals. For these programs, data products will contain notes explaining the extent of geographic coverage included under the term "United States."

**Useful Thermal Output:** The thermal energy made available in a combined-heat-and-power system for use in any industrial or commercial process, heating or cooling application, or delivered to other end users, i.e., total thermal energy made available for processes and applications other than electrical generation.

**U.S.S.R.**: The Union of Soviet Socialist Republics consisted of 15 constituent republics: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. As a political entity, the U.S.S.R. ceased to exist as of December 31, 1991.

**Vented Natural Gas**: Gas released into the air on the production site or at processing plants.

**Vessel Bunkering**: Includes sales for the fueling of commercial or private boats, such as pleasure craft, fishing boats, tugboats, and ocean-going vessels, including vessels operated by oil companies. Excluded are volumes sold to the U.S. Armed Forces.

Waste Energy: Municipal solid waste, landfill gas, methane, digester gas, liquid acetonitrile waste, tall oil, waste alcohol, medical waste, paper pellets, sludge waste, solid byproducts, tires, agricultural byproducts, closed loop biomass, fish oil, and straw used as fuel.

**Watt** (**W**): The unit of electrical power equal to one ampere under a pressure of one volt. A watt is equal to 1/746 horsepower.

Watthour (Wh): The electrical energy unit of measure equal to one watt of power supplied to, or taken from, an electric circuit steadily for one hour.

**Waxes**: Solid or semisolid material derived from petroleum distillates or residues. Waxes are light-colored, more or less translucent crystalline masses, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Included are all marketable

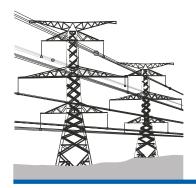
waxes, whether crude scale or fully refined. Waxes are used primarily as industrial coating for surface protection.

Wellhead Price: The value of crude oil or natural gas at the mouth of the well.

**Wind Energy**: Kinetic energy present in wind motion that can be converted to mechanical energy for driving pumps, mills, and electric power generators.

**Wood Energy**: Wood and wood products used as fuel, including round wood (cord wood), limb wood, wood chips, bark, sawdust, forest residues, charcoal, pulp waste, and spent pulping liquor.

**Working Gas**: The volume of gas in a reservoir that is in addition to the base gas. It may or may not be completely withdrawn during any particular withdrawal season. Conditions permitting, the total working capacity could be used more than once during any season.



# **Electricity Publications and Resources**

...from the Energy Information Administration

The items listed below are available on EIA's Web site; under "By Fuel" select "Electricity" and then "Electricity Publications." Some items are also available in hard copy. For more information on these and other EIA products, contact the National Energy Information Center at 202–586–8800 or infoctr@eia.doe.gov.

#### **Electric Power Monthly**

Monthly statistics at the State, Census division, and U.S. levels for net generation, fossil fuel consumption and stocks, quantity and quality of fossil fuels, cost of fossil fuels, electricity retail sales, associated revenue, and average revenue per kilowatthour of electricity sold. Some data are also displayed for North American Electric Reliability Council (NERC) regions.

#### **Electric Power Annual 2002**

Overview of the electric power industry in the United States, including generation; capacity; demand, capacity resources, and capacity margins; emissions; trade; retail customers, sales, and revenues; revenue and expense statistics; and demand-side management.

# Inventory of Electric Utility Power Plants in the United States Inventory of Nonutility Electric Power Plants in the United States

Annual statistics on electric utility and nonutility generating units; includes outlook for generating unit additions and retirements through 2007.

#### **State Electricity Profiles 2002**

Statistics from 1993, 1997, and 2002 for each State, including data for generating capability, electricity generation, fuel use, retail sales, nuclear power, capacity factor, and pollutant emissions.

#### Electric Sales and Revenue 2002

Information on electricity sales, associated revenue, average revenue per kilowatthour sold, and number of consumers at the national, Census division, State, and electric utility levels.

#### Cost and Quality of Fuels for Electric Utility Plants

Comprehensive information concerning the quality, quantity, and cost of fossil fuels used to produce electricity in the United States. Data files are available through 2002.

#### Summary Impacts of Modeled Provisions of the 2003 Conference Energy Bill

Analysis of energy production, consumption, price, and import impacts that would result from the Conference Energy Bill. The focus is on provisions that can be modeled using EIA's National Energy Modeling System.

#### Analyses of Selected Provisions of Proposed Energy Legislation: 2003

Quantitative analysis of energy savings and import reductions that would result from various provisions of Senate and House energy bills H.R.6.EAS and H.R.6.EH. Topics areas include end-use energy demand, oil and gas supply, electricity supply, and provisions relating to ethanol, biodiesel, and renewable fuels.

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

Special report prepared at the request of the Secretary of Energy on the nature and use of derivative contracts in the petroleum, natural gas, and electricity industries.