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Preface

The *International Energy Annual* presents an overview of key international energy trends for production, consumption, imports, and exports of primary energy commodities in over 220 countries, dependencies, and areas of special sovereignty. Also included are population and gross domestic product data, as well as prices for crude oil and petroleum products in selected countries. Renewable energy reported in the *International Energy Annual* includes hydroelectric power, geothermal, solar, and wind electric power, biofuels energy for the United States, and biofuels electric power for Brazil. **New in the 1996 edition are estimates of carbon dioxide emissions from the consumption of petroleum and coal, and the consumption and flaring of natural gas (Appendix H).**

This report is published to keep the public and other interested parties fully informed of primary energy supplies on a global basis. The data presented have been largely derived from published sources. The data have been converted to units of measurement and thermal values (Appendices E and F) familiar to the American public.

Although the Energy Information Administration (EIA) has mandatory data collection authority for collecting energy information within the United States, it has no authority to require reporting of data from foreign countries. Data for the *International Energy Annual* must be researched and collected from the most authoritative available sources outside EIA. Because EIA does not have access to the statistical surveys in other countries, it is not able to develop error estimates or revision errors such as might be developed in EIA's domestic surveys.

EIA attempts to identify and collect the best data available for foreign countries. The most authoritative sources are usually the official national statistical reports of a country. However, data from official sources are not always available. Therefore, EIA also uses data from reputable secondary sources such as the international organizations—the United Nations, the International Energy Agency, the World Bank, and others. In addition, EIA uses industry reports, academic studies, trade publications, and other sources. Typically these sources are less timely and complete than mandatory survey data for the United States collected by EIA. As a result, it usually takes EIA about two years to prepare complete energy information for all foreign countries.

Many factors beyond EIA's control affect the reliability and integrity of foreign country data. These include a country's level of economic development, commitment to statistical programs, openness with information, and other considerations.

Publication of this report is in keeping with responsibilities given the Energy Information Administration (EIA) in Public Law 95-91/Section 205(a) that states:

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....

Electronic Access and Related International Energy Web Page

The *International Energy Annual 1996 (IEA96)* is also available on the EIA Home Page on the Internet at (<http://www.eia.doe.gov/emeu/iea/contents.html>). The *IEA96* on the EIA Home Page includes text and tables in HTML format and most of the tables are also available there to be downloaded as XLS and WK1 spreadsheets, many with data for all countries for all of the years 1980-1996. The entire *IEA96* publication is also available in PDF format at the EIA FTP site (<ftp://ftp.eia.doe.gov/pub/pdf/international/021996.pdf>). The *IEA96* will also be available on the EIA CD-ROM, *Energy InfoDisc*.

Important Note: All of the data contained in the *IEA96*, as well as additional data, forecasts, and reports on international energy, are available on the new **International Energy Web Page** on the EIA Home Page at (<http://www.eia.doe.gov/emeu/international/contents.html>).

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WORLD ENERGY OVERVIEW

The *International Energy Annual* presents information and trends on world energy production and consumption for petroleum, natural gas, coal, and electricity. Production and consumption data are reported in standard units as well as British thermal units (Btu). Trade and reserves are shown for petroleum, natural gas, and coal. Data are provided on crude oil refining capacity and electricity installed capacity by type. Prices are included for selected crude oils and for refined petroleum products in selected countries. Population and Gross Domestic Product data are also provided. **New in the 1996 edition are estimates of carbon dioxide emissions from the consumption of petroleum and coal, and the consumption and flaring of natural gas (Appendix H).**

(Note: In the discussion that follows, data for geothermal, solar, and wind electricity, in both kilowatthours and British thermal units (Btu), include biofuels electric power for the United States and Brazil. The 1990-1996 data for total energy production and total energy consumption also include about 0.7 quadrillion Btu of biofuels used by the residential, commercial, and transportation sectors in the United States.)

World Primary Energy Production Trends

Between 1987 and 1996, the world's total output of primary energy--petroleum, natural gas, coal, and electric power (hydro, nuclear, geothermal, solar, and wind)--increased at an average annual rate of 1.8 percent (Table 2.9). World production increased from 320 quadrillion Btu in 1987 to 375 quadrillion Btu in 1996.

In 1996, petroleum (crude oil and natural gas plant liquids) continued to be the world's primary energy source, accounting for 38.8 percent, or 146 quadrillion Btu, of world primary energy production (Table 2.9). Between 1987 and 1996, petroleum production increased by 8.7 million barrels per day, or 14.3 percent, rising from 60.9 to 69.6 million barrels per day (Tables 2.2 and 2.3). The Middle East had the largest production gain, followed by Western Europe, and Central and South America. Their combined gains over the period from 1987 to 1996 were 11.4 million barrels per day. In North America, and in the Eastern Europe and Former U.S.S.R.

region, average daily production fell by 0.7 and 5.6 million barrels per day, respectively.

Coal ranked second as a primary energy source in 1996, accounting for 24.9 percent of world primary energy production (Table 2.9). World coal production totaled 5.2 billion short tons--93 quadrillion Btu--in 1996, but it was up only 1.1 percent from the 1987 level of 5.1 billion short tons (Tables 2.1 and 2.9).

Dry natural gas ranked third as a primary energy source, accounting for 21.8 percent of world primary energy production in 1996 (Table 2.9). Production of dry natural gas was 82 trillion cubic feet, or 81.9 quadrillion Btu, in 1996 (Tables 2.1 and 2.9). Production increased by 15.4 trillion cubic feet from 66.5 trillion cubic feet in 1987, a gain of 23.2 percent.

Hydro, nuclear, and other (geothermal, solar, and wind) electric power generation ranked fourth, fifth, and sixth, respectively, as primary energy sources in 1996, accounting for 7.0, 6.4, and 0.9 percent, respectively, of world primary energy production (Table 2.9). Together they accounted for a combined total of 5.1 trillion kilowatthours--54 quadrillion Btu--in 1996 (Tables 2.1 and 2.9). Nuclear electric power generation increased significantly between 1987 and 1996, rising from 1.7 trillion kilowatthours to 2.3 trillion kilowatthours, a 37.8-percent increase. Geothermal, solar, and wind electric power generation also increased significantly over the same period, rising from 34 billion kilowatthours to 282 billion kilowatthours, a 731-percent increase. (Note: Part of this increase is a result of a discontinuity in the geothermal, solar, and wind electric power time series between 1988 and 1990 due to the expanded coverage of non-utility use of renewable energy beginning in 1989 and biofuels electric power beginning in 1990 in the United States.) Hydroelectric power continued to represent the largest share of primary electric power generation contributing 2.5 trillion kilowatthours in 1996, up 24.8 percent from 2.0 trillion kilowatthours in 1987.

In 1996, the 0.7 quadrillion Btu of biofuels used by the residential, commercial, and transportation sectors in the United States accounted for about 0.2 percent of world primary energy production.

Major Energy Producers and Consumers

In 1996, three countries--the United States, Russia, and China--were the leading producers and consumers of world energy (Tables F1 and E1). These three countries produced 40 percent and consumed 42 percent of the world's total energy.

The United States, Russia, China, Saudi Arabia, and Canada were the world's five largest producers of energy in 1996, supplying 49.9 percent of the world's total energy (Table F1). The next five leading producers of primary energy were the United Kingdom, Iran, India, Norway, and Venezuela, and together they supplied an additional 12.9 percent of the world's total energy. The United States supplied 72.6 quadrillion Btu of primary energy, significantly more than the 39.7 quadrillion Btu produced by Russia or the 37.4 quadrillion Btu produced by China.

The United States, China, Russia, Japan, and Germany were the world's five largest consumers of primary energy in 1996, accounting for 51.3 percent of world energy consumption (Table E1). They were followed by Canada, India, the United Kingdom, France, and Italy, which together accounted for an additional 13.7 percent of world energy consumption. The United States consumed 93.4 quadrillion Btu, more than two and one half times the 37 quadrillion Btu consumed by China, while Russia consumed 26 quadrillion Btu.

Regional Energy Production and Consumption

Comparisons of energy production and consumption by region help to highlight key energy trends since 1987. In North America, the overall production of energy rose by 13.6 quadrillion Btu between 1987 and 1996 (Table F1). The supply of natural gas, coal, nuclear electric power generation and, geothermal, solar, and wind electric power generation increased significantly, by 5.4, 2.9, 2.49, and 2.45 quadrillion Btu, respectively, more than offsetting a 2.6 quadrillion Btu decrease in crude oil production (Tables F4, F5, F7, F8, and F2). Energy consumption in North America increased by 19.6 quadrillion Btu between 1987 and 1996, the second largest increase for any region (Table E1). The largest North American increases occurred in the consumption of natural gas, 6 quadrillion Btu, petroleum, 4 quadrillion Btu, and coal, 2.6 quadrillion Btu (Tables E3, E2, and E4).

Overall production of energy in the Central and South America region increased by 8.8 quadrillion Btu between 1987 and 1996, led by increases in crude oil production, 5.1 quadrillion Btu, and hydroelectric power generation, 1.8 quadrillion Btu (Tables F1, F2, and F6). Energy consumption in the Central and South America region increased by 5 quadrillion Btu over the same period (Table E1). The largest increases occurred in the consumption of hydroelectric power, 1.8 quadrillion Btu, petroleum, 1.4 quadrillion Btu, and natural gas, 1.3 quadrillion Btu (Tables E5, E2, and E3).

Energy production in Western Europe, which had fluctuated in a narrow range between 1987 and 1992, finally began to grow in 1993 (Table F1). In 1996, the level was 5.2 quadrillion Btu higher than in 1987. Gains between 1987 and 1996 were greatest for crude oil, 4.7 quadrillion Btu, natural gas, 2.9 quadrillion Btu, and nuclear electric power generation, 2.1 quadrillion Btu (Tables F2, F4, and F7). These increases more than offset a decrease of 5.1 quadrillion Btu in coal production (Table F5). Western European energy consumption increased by 5.8 quadrillion Btu between 1987 and 1996 (Table E1). The increase was led by natural gas, 4.6 quadrillion Btu, petroleum, 3.1 quadrillion Btu, and nuclear electric power, 2.1 quadrillion Btu, which together more than offset a sharp, 4.3-quadrillion-Btu drop in coal consumption (Tables E3, E2, E6, and E4).

Between 1987 and 1996, both energy production and energy consumption in the Eastern Europe and Former U.S.S.R. region declined by 21 quadrillion Btu or more (Tables F1 and E1). As a result, this was the only region to experience declines in either total energy production or consumption over the period. The decline in energy production was concentrated in crude oil, 11.7 quadrillion Btu, and coal, 8.2 quadrillion Btu, but even natural gas production decreased by 1.2 quadrillion Btu (Tables F2, F5, and F4). The decline in energy consumption was largest in petroleum, 10.5 quadrillion Btu, and coal, 8.3 quadrillion Btu, and natural gas consumption decreased by 2.7 quadrillion Btu (Tables E2, E4, and E3).

Since 1987, energy production in the Middle East increased by 16.8 quadrillion Btu, the second largest increase for any region (Table F1). The increase was concentrated in crude oil, 13.6 quadrillion Btu, and natural gas, 2.5 quadrillion Btu (Tables F2 and F4). The increase in energy consumption in the Middle East between 1987 and 1996 was much smaller, only 4.9 quadrillion Btu (Table E1). The largest consumption increases were in petroleum and natural gas, each of which experienced increases of about 2.4 quadrillion Btu (Tables E2 and E3).

Energy production in Africa increased by 6.7 quadrillion Btu between 1987 and 1996, led by increases in the production of crude oil, 4.4 quadrillion Btu, and natural gas, 1.4 quadrillion Btu (Tables F1, F2, and F4). Energy consumption in Africa grew more slowly over the same period, rising by only 2.3 quadrillion Btu, with petroleum consumption accounting for 1.3 quadrillion Btu of the increase and natural gas for 0.7 quadrillion Btu (Tables E1, E2, and E3).

The largest regional increase in primary energy production between 1987 and 1996 occurred in the Far East and Oceania region, where production increased by 24.8 quadrillion Btu (Table F1). Over 59 percent of this increase, 14.7 quadrillion Btu, was accounted for by coal production, with smaller contributions from natural gas, 4.1 quadrillion Btu, and crude oil, 2.7 quadrillion Btu (Tables F5, F4, and F2). Consumption in this region increased by 36.5 quadrillion Btu over the same period, also the largest increase for any region (Table E1). Almost 80 percent of this increase occurred in the consumption of petroleum, 15 quadrillion Btu, and coal 14 quadrillion Btu (Tables E4 and E2).

Petroleum

Global production of petroleum (crude oil and natural gas plant liquids) increased by 8.7 million barrels per day between 1987 and 1996, an average annual rate of growth of 1.5 percent (Tables 2.2 and 2.3). Saudi Arabia, the United States, and Russia were the three largest producers of petroleum in 1996. Together, they produced 33.4 percent of the world's petroleum. Production from Iran and Mexico accounted for an additional 10.1 percent.

In 1996, the United States consumed 18.3 million barrels per day of petroleum--almost 26 percent of world consumption (Table 1.2). Japan ranked a distant second in consumption, with 5.9 million barrels per day, followed by China, Germany, and Russia.

Natural Gas

World production of dry natural gas increased by 15.4 trillion cubic feet, or at an average annual rate of 2.3 percent, over the period from 1987 to 1996 (Table 2.4). Russia was the leading producer in 1996 at 21.2 trillion cubic feet, followed by the United States at 19.0 trillion cubic feet. Together these two countries produced 49 percent of the world total. Canada ranked a distant third in production at 5.9 trillion cubic feet, followed by the Netherlands and the United Kingdom, with 3.4 and 3.2

trillion cubic feet, respectively. These three countries accounted for 15 percent of the world total.

In 1996, the United States, which was the leading consumer of dry natural gas at 21.9 trillion cubic feet, and Russia, which ranked second at 14.5 trillion cubic feet, together accounted for 44 percent of world consumption (Table 1.3). Germany ranked a distant third in consumption, with 3.7 trillion cubic feet, followed by the United Kingdom and Canada, at 3.2 and 3.1 trillion cubic feet, respectively.

Coal

Coal production experienced the lowest average annual rate of growth of any primary energy source between 1987 and 1996 (Table 2.5). Production only increased by 55 million short tons, or at an average annual rate of 0.1 percent, over the period. China was the leading producer in 1996 at 1.550 billion short tons--equivalent to 27.9 quadrillion Btu (Tables 2.5 and F5). The United States was the second leading producer in 1996 with 1.064 billion short tons--equivalent to 22.6 quadrillion Btu. India ranked a distant third at 311 million short tons--equivalent to 6.2 quadrillion Btu, followed by Russia, at 302 million short tons--equivalent to 4.7 quadrillion Btu, and Australia at 274 million short tons--equivalent to 5.1 quadrillion Btu. Together, these five countries accounted for 67.5 percent of world coal production in 1996 (Table 2.5).

China was also the largest consumer of coal in 1996, using 1.5 billion short tons, followed by the United States, which consumed 983 million short tons, India, Germany, and Russia (Table 1.4). These five countries together accounted for 65.5 percent of world coal consumption.

Hydroelectric Power

The generation of hydroelectric power increased by 502 billion kilowatthours between 1987 and 1996, or at an average annual rate of 2.5 percent (Table 2.6). Canada, the United States, Brazil, China, and Russia, were the five largest producers of hydroelectric power in 1996. Their combined hydroelectric power generation accounted for 51 percent of the world total. Canada led the world with 349 billion kilowatthours or 3.63 quadrillion Btu (Tables 2.6 and F6). The United States was a very close second with 348 billion kilowatthours or 3.59 quadrillion Btu. Brazil ranked third with 263 billion kilowatthours or 2.7 quadrillion Btu. China was fourth with 181 billion kilowatthours or 1.9 quadrillion Btu, followed by Russia with 153 billion kilowatthours or 1.6 quadrillion Btu.

Nuclear Electric Power

The generation of nuclear electric power increased by 626 billion kilowatthours between 1987 and 1996, or at an average annual rate of 3.6 percent (Table 2.7). The United States led the world in nuclear electric power generation in 1996 with 675 billion kilowatthours or 7.2 quadrillion Btu (Tables 2.7 and F7). France was second with 376 billion kilowatthours or 3.9 quadrillion Btu and Japan ranked third with 283 billion kilowatthours or 2.9 quadrillion Btu. In 1996, these three countries generated almost 59 percent of the world's nuclear electric power (Table 2.7).

Geothermal, Solar, and Wind Electric Power

The generation of geothermal, solar, and wind electric power increased by 248 billion kilowatthours between 1987 and 1996, or at an average annual rate of 27 percent (Table 2.8). (Note: Part of this increase is a result of a discontinuity in the geothermal, solar, and wind electric power time series between 1988 and 1990 due to the expanded coverage of non-utility use of renewable energy beginning in 1989 and biofuels electric power beginning in 1990 in the United States. Data for Brazil are for biofuels electric power generation.) The United States led the world in geothermal, solar, and wind electric power generation in 1996 with 243.5 billion kilowatthours. Brazil was second with 7.8 billion kilowatthours, followed by the Philippines with 5.7 billion kilowatthours, Mexico with 5.4 billion kilowatthours, and Italy with 3.9 billion kilowatthours. These five countries accounted for 94 percent of the world's geothermal, solar, and wind electric power generation in 1996.

Carbon Dioxide Emissions from the Consumption and Flaring of Fossil Fuels

Total world carbon dioxide emissions from the consumption of petroleum, natural gas, and coal, and the flaring of natural gas increased from 5.570 billion metric tons of carbon in 1986 to 6.036 billion metric tons in 1996, or by 8.4 percent (Table H1). (Note: Carbon dioxide emissions are measured here in metric tons of carbon. Tons of carbon can be converted to tons of carbon dioxide gas by multiplying by 3.667. One ton of carbon equals 3.667 tons of carbon dioxide gas.) The United States, China, Russia, Japan, and Germany were the world's five largest sources of carbon dioxide

emissions from the consumption and flaring of fossil fuels in 1996, producing 53 percent of the world total. The next five leading producers of carbon dioxide emissions from the consumption and flaring of fossil fuels were India, the United Kingdom, Canada, Italy and South Korea (listed as Korea, South in Table H1), and together they produced an additional 13 percent of the world total. The United States produced 1.466 billion metric tons of carbon, significantly more than the 805 million metric tons produced by China, and almost three and two thirds times as much as the 401 million metric tons produced by Russia.

In 1996, the consumption of petroleum was the world's primary source of carbon dioxide emissions from the consumption and flaring of fossil fuels, accounting for 41.2 percent of the total (Tables H2 and H1). Between 1987 and 1996 emissions from the consumption of petroleum increased by 90 million metric tons, or 3.8 percent, rising from 2.395 to 2.485 billion metric tons. The United States was the largest producer of carbon dioxide from the consumption of petroleum in 1996 and accounted for 25 percent of the world total. Japan was the second largest producer, followed by China, Germany, and Russia and together these four countries accounted for an additional 20 percent.

Coal ranked second as a source of carbon dioxide emissions from the consumption and flaring of fossil fuels in 1996, accounting for 38.9 percent of the total (Tables H4 and H1). World carbon dioxide emissions from the consumption of coal totaled 2.345 billion metric tons of carbon in 1996, up 5.4 percent from the 1987 level of 2.225 billion metric tons. China and the United States were the two largest producers of carbon dioxide from the consumption of coal in 1996 and together they accounted for 51 percent of the world total. India, Russia, and Germany accounted for an additional 15 percent.

Carbon dioxide emissions from the consumption and flaring of natural gas accounted for the remaining 20 percent of carbon dioxide emissions from the consumption and flaring of fossil fuels in 1996 (Tables H3 and H1). Emissions from the consumption and flaring of natural gas increased from 950 million metric tons of carbon in 1987 to 1.206 billion metric tons in 1996, or by 26.9 percent. The United States and Russia were the two largest producers of carbon dioxide gas from the consumption and flaring of natural gas in 1996 and together they accounted for 42 percent of the world total. The United Kingdom, Germany, and Canada accounted for an additional 12 percent.

Section 1

World Energy Consumption, 1987-1996

Table 1.1 World Consumption of Primary Energy by Selected Country Groups, 1987 - 1996

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Petroleum (thousand barrels per day)										
World Total.....	62,999	64,819	65,917	65,985	66,577	66,742	67,043	68,313	69,926	71,524
OECD ²	38,957	40,238	40,881	40,917	41,400	42,414	43,054	44,197	45,072	46,147
Non OECD.....	24,042	24,581	25,036	25,068	25,177	24,327	23,989	24,116	24,855	25,376
Other Groups:.....										
OECD Europe.....	13,142	13,291	13,359	13,368	13,827	14,073	14,140	14,226	14,757	14,928
OPEC ³	3,901	4,034	4,210	4,391	4,480	4,633	4,909	5,051	5,227	5,394
EU ⁴	11,664	11,841	11,928	11,957	12,443	12,631	12,481	12,577	13,052	13,129
IEA ⁵	36,241	37,402	37,860	37,744	38,054	38,756	38,952	39,875	40,538	41,418
Natural Gas (trillion cubic feet)										
World Total.....	66.28	69.57	72.52	72.96	74.52	74.44	76.69	76.37	78.29	82.17
OECD ²	33.19	34.24	35.87	35.88	37.23	37.91	39.65	40.55	42.67	45.00
Non OECD.....	33.09	35.33	36.65	37.08	37.30	36.53	37.04	35.82	35.62	37.17
Other Groups:.....										
OECD Europe.....	10.76	10.52	11.06	11.08	11.92	11.77	12.76	12.79	13.81	15.26
OPEC ³	4.76	5.15	5.56	5.48	5.58	6.09	6.43	6.88	7.31	7.91
EU ⁴	9.74	9.49	9.91	10.00	10.85	10.70	11.39	11.44	12.26	13.58
IEA ⁵	31.45	32.37	33.94	34.01	35.33	36.03	37.49	38.34	40.22	42.33
Coal (million short tons)										
World Total.....	5,134	5,283	5,281	5,263	5,006	5,017	4,995	5,063	5,120	5,167
OECD ²	2,432	2,468	2,490	2,415	2,296	2,229	2,280	2,279	2,268	2,320
Non OECD.....	2,701	2,815	2,791	2,848	2,710	2,788	2,716	2,784	2,852	2,848
Other Groups:.....										
OECD Europe.....	1,274	1,243	1,254	1,183	1,061	985	1,003	983	947	940
OPEC ³	8	8	10	9	10	11	12	13	15	17
EU ⁴	930	909	925	895	772	706	655	634	604	598
IEA ⁵	2,087	2,128	2,168	2,141	2,019	1,966	1,940	1,938	1,930	1,979
Hydroelectric Power (billion kilowatthours)										
World Total.....	2,074.2	2,138.1	2,096.3	2,182.6	2,232.6	2,238.9	2,373.1	2,376.7	2,512.7	2,561.5
OECD ²	1,190.8	1,199.8	1,144.2	1,186.8	1,209.8	1,201.9	1,274.1	1,226.7	1,310.3	1,348.6
Non OECD.....	883.5	938.4	952.2	995.8	1,022.8	1,037.0	1,099.0	1,150.1	1,202.4	1,212.9
Other Groups:.....										
OECD Europe.....	445.0	487.2	421.0	437.3	435.2	463.6	482.0	481.4	485.3	462.5
OPEC ³	48.8	53.4	54.4	57.9	67.4	75.6	75.1	75.5	79.0	81.7
EU ⁴	282.0	306.9	248.5	257.3	264.2	281.4	285.5	292.2	284.6	280.3
IEA ⁵	1,159.1	1,166.7	1,107.2	1,149.7	1,175.4	1,163.3	1,232.7	1,192.9	1,267.0	1,301.7
Nuclear Electric Power (billion kilowatthours)										
World Total.....	1,654.0	1,794.8	1,843.4	1,905.1	1,992.0	2,011.8	2,073.7	2,117.8	2,203.0	2,280.0
OECD ²	1,390.6	1,499.8	1,540.2	1,607.6	1,694.1	1,718.5	1,791.1	1,851.6	1,925.1	1,972.8
Non OECD.....	263.4	295.1	303.3	297.6	297.9	293.3	282.7	266.2	277.8	307.2
Other Groups:.....										
OECD Europe.....	636.8	682.9	715.9	716.1	740.4	753.6	793.9	793.3	810.4	849.3
OPEC ³	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EU ⁴	605.9	648.8	681.3	680.7	705.7	718.1	746.6	744.5	761.8	799.9
IEA ⁵	1,343.2	1,449.3	1,482.1	1,541.5	1,623.5	1,647.8	1,706.0	1,766.2	1,828.5	1,869.4

See footnotes at end of table.

Table 1.1 World Consumption of Primary Energy by Selected Country Groups, 1987 - 1996 (Continued)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Geothermal, Solar, and Wind Electric Power (billion kilowatthours) ⁶										
World Total.....	34.0	34.8	79.4	234.5	235.7	249.9	257.0	265.3	268.9	282.4
OECD ²	23.0	23.3	67.7	221.8	222.3	235.8	241.9	248.8	251.7	264.2
Non OECD.....	11.0	11.5	11.6	12.6	13.4	14.2	15.1	16.5	17.2	18.2
Other Groups:.....										
OECD Europe.....	3.9	4.1	4.3	4.7	5.0	5.9	6.9	8.2	9.2	9.7
OPEC ³	0.7	1.0	1.0	1.1	1.0	1.0	1.0	1.5	1.7	1.8
EU ⁴	3.6	3.8	4.0	4.3	4.6	5.7	6.6	7.9	8.8	9.3
IEA ⁵	18.4	18.4	62.8	216.7	216.9	230.0	236.1	243.2	246.0	258.4

¹ Preliminary.

² The Organization for Economic Cooperation and Development (OECD) includes Australia, Austria, Belgium, Canada, Czech Republic, Denmark (including data for Faroe Islands and Greenland), Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, South, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States (including data for Guam, Hawaiian Trade Zone, Puerto Rico, and Virgin Islands, U.S.). Refer to Appendix A for a listing of OECD Europe.

³ The Organization of Petroleum Exporting Countries (OPEC) includes Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

⁴ European Union (EU) includes Austria, Belgium, Denmark (including data for Faroe Islands), Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and United Kingdom.

⁵ International Energy Agency (IEA) includes Australia, Austria, Belgium, Canada, Denmark (including data for Faroe Islands and Greenland), Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States (including data for Guam, Hawaiian Trade Zone, Puerto Rico, and Virgin Islands, U.S.).

⁶ Includes the consumption of biofuels electric power for the United States and Brazil.

Notes: For consistency data reflect 1996 membership (as of December 31, 1996) for all years. The country groups OECD, OECD Europe, EU, and IEA include unified Germany. Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Sections 3, 4, 5, and 6.

Table 1.2 World Petroleum Consumption, 1987 - 1996
(Thousand Barrels per Day)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	1,548	1,693	1,733	1,690	1,622	1,643	1,688	1,727	1,755	1,799
Mexico.....	1,520	1,550	1,640	1,679	1,695	1,723	1,781	1,822	1,855	1,895
United States.....	16,665	17,283	17,325	16,988	16,714	17,033	17,237	17,718	17,725	18,309
Other.....	6	7	8	6	6	5	4	4	4	5
Total.....	19,739	20,532	20,706	20,364	20,036	20,404	20,710	21,272	21,339	22,007
Central & South America										
Argentina.....	479	475	434	413	424	445	468	478	474	485
Bolivia.....	21	23	24	25	26	26	27	30	33	33
Brazil.....	1,263	1,300	1,317	1,339	1,346	1,369	1,399	1,451	1,491	1,530
Chile.....	103	111	126	134	144	151	168	179	191	196
Colombia.....	185	198	209	197	205	230	240	244	251	258
Costa Rica.....	16	18	20	19	20	25	27	28	31	32
Cuba.....	219	221	225	220	204	180	179	183	187	185
Dominican Republic.....	53	58	58	64	62	64	59	68	72	72
Ecuador.....	90	93	90	97	104	119	112	120	123	127
El Salvador.....	15	16	16	16	19	22	22	25	31	30
Guatemala.....	23	25	26	27	26	31	34	38	41	42
Honduras.....	12	13	16	18	17	18	18	20	23	23
Jamaica.....	33	38	43	46	47	51	52	55	60	61
Netherlands Antilles.....	70	65	69	71	64	63	71	77	69	70
Panama.....	30	26	24	27	33	41	40	44	43	45
Peru.....	138	141	121	121	113	119	126	132	143	153
Puerto Rico.....	162	147	143	140	176	152	159	167	154	157
Trinidad and Tobago.....	21	18	21	20	21	22	21	25	22	23
Uruguay.....	27	33	32	31	30	32	35	33	31	32
Venezuela.....	404	397	388	396	405	414	427	440	448	455
Virgin Islands, U.S.....	55	39	60	55	56	51	58	60	74	75
Other.....	101	106	116	118	113	115	124	129	142	147
Total.....	3,518	3,565	3,576	3,595	3,654	3,740	3,866	4,027	4,135	4,231
Western Europe										
Austria.....	217	212	213	217	235	228	231	235	234	232
Belgium.....	452	469	461	461	499	511	499	510	499	564
Denmark.....	215	205	195	191	194	193	198	210	225	238
Finland.....	226	228	226	225	227	222	212	220	175	193
France.....	1,789	1,797	1,857	1,818	1,935	1,926	1,875	1,833	1,896	1,935
Germany.....	--	--	--	--	2,828	2,843	2,900	2,879	2,875	2,911
Germany, East.....	342	322	300	282	--	--	--	--	--	--
Germany, West.....	2,424	2,422	2,280	2,382	--	--	--	--	--	--
Greece.....	267	285	291	315	320	331	339	349	350	368
Ireland.....	81	78	82	92	99	104	104	113	126	126
Italy.....	1,855	1,836	1,930	1,872	1,863	1,937	1,852	1,841	2,048	2,058
Luxembourg.....	27	28	30	33	39	39	39	39	37	38
Netherlands.....	686	716	709	735	756	766	760	760	790	771
Norway.....	209	187	193	191	184	183	186	183	196	216
Portugal.....	209	206	249	250	253	277	268	270	290	277
Spain.....	898	980	1,030	1,011	1,072	1,109	1,056	1,127	1,256	1,175
Sweden.....	370	359	336	321	323	342	332	353	406	398
Switzerland.....	262	261	260	274	284	287	277	281	257	275
Turkey.....	450	447	440	476	468	492	564	540	601	633
United Kingdom.....	1,603	1,697	1,738	1,752	1,801	1,803	1,815	1,837	1,845	1,845
Former Yugoslavia.....	314	316	310	317	251	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	35	23	20	19	20
Croatia.....	--	--	--	--	--	65	63	79	88	85
Macedonia, TFYR.....	--	--	--	--	--	19	21	18	18	20
Serbia and Montenegro.....	--	--	--	--	--	56	33	32	27	30
Slovenia.....	--	--	--	--	--	35	41	42	47	46
Other.....	29	31	29	32	31	38	41	42	42	44
Total.....	12,927	13,084	13,159	13,246	13,660	13,841	13,731	13,815	14,347	14,498

See footnotes at end of table.

Table 1.2 World Petroleum Consumption, 1987 - 1996 (Continued)
(Thousand Barrels per Day)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	34	32	27	20	18	21	17	13	15	16
Bulgaria.....	275	277	235	193	121	130	117	126	131	136
Former Czechoslovakia.....	320	312	315	281	232	213	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	147	152	159	163
Slovakia.....	--	--	--	--	--	--	61	63	65	69
Hungary.....	203	193	181	179	161	171	166	168	160	165
Poland.....	341	350	346	278	275	297	304	309	318	331
Romania.....	340	330	345	382	277	250	248	221	244	240
Former U.S.S.R.....	8,995	8,890	8,740	8,392	8,350	--	--	--	--	--
Armenia.....	--	--	--	--	--	32	14	7	23	27
Azerbaijan.....	--	--	--	--	--	203	194	187	179	185
Belarus.....	--	--	--	--	--	375	289	260	228	225
Estonia.....	--	--	--	--	--	25	28	25	26	30
Georgia.....	--	--	--	--	--	27	16	6	17	20
Kazakhstan.....	--	--	--	--	--	404	341	304	281	288
Kyrgyzstan.....	--	--	--	--	--	33	19	7	12	14
Latvia.....	--	--	--	--	--	52	41	40	42	44
Lithuania.....	--	--	--	--	--	84	76	78	73	78
Moldova.....	--	--	--	--	--	57	40	22	22	22
Russia.....	--	--	--	--	--	4,423	3,750	3,179	2,976	2,731
Tajikistan.....	--	--	--	--	--	20	17	7	10	10
Turkmenistan.....	--	--	--	--	--	76	66	63	64	62
Ukraine.....	--	--	--	--	--	813	570	495	484	468
Uzbekistan.....	--	--	--	--	--	190	177	168	180	175
Total.....	10,508	10,383	10,190	9,725	9,434	7,894	6,699	5,900	5,709	5,499
Middle East										
Bahrain.....	19	20	23	25	27	28	29	30	21	22
Cyprus.....	24	25	30	32	32	38	38	43	43	45
Iran.....	865	870	965	1,003	1,075	1,083	1,108	1,130	1,140	1,175
Iraq.....	285	320	350	400	263	341	409	457	474	500
Israel.....	141	157	163	165	173	201	198	200	210	222
Jordan.....	66	62	62	66	63	73	72	82	85	88
Kuwait.....	115	120	125	85	45	79	111	132	140	150
Lebanon.....	48	43	35	33	53	55	67	76	82	83
Oman.....	27	26	32	39	39	40	39	40	42	44
Qatar.....	32	28	35	37	43	42	40	40	42	44
Saudi Arabia.....	975	990	950	977	1,019	1,039	1,088	1,109	1,168	1,195
Syria.....	180	192	198	205	178	185	209	224	226	230
United Arab Emirates.....	211	237	242	243	302	305	310	318	316	322
Yemen.....	66	64	74	76	78	83	69	66	72	75
Total.....	3,055	3,154	3,283	3,385	3,390	3,591	3,787	3,948	4,063	4,195

See footnotes at end of table.

Table 1.2 World Petroleum Consumption, 1987 - 1996 (Continued)
(Thousand Barrels per Day)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Africa										
Algeria.....	167	172	182	194	208	214	222	230	228	235
Angola.....	24	25	25	24	25	26	25	25	27	26
Cameroon.....	21	20	24	24	25	25	21	24	27	27
Congo (Brazzaville).....	6	6	7	7	6	6	6	7	7	7
Congo (Kinshasa).....	19	23	22	20	22	24	25	26	20	20
Cote d'Ivoire (Ivory Coast).....	35	37	40	38	39	40	45	55	52	56
Egypt.....	442	437	443	465	456	444	450	448	460	470
Ethiopia.....	19	18	20	20	16	23	22	14	15	15
Gabon.....	10	12	16	15	16	16	15	18	19	20
Ghana.....	18	21	24	20	20	22	23	26	27	28
Kenya.....	35	38	42	42	37	41	42	44	46	48
Libya.....	134	142	147	155	166	145	160	166	172	178
Morocco.....	92	99	111	117	117	130	133	153	142	145
Nigeria.....	218	234	244	251	259	265	271	252	284	295
Senegal.....	19	16	17	17	16	19	19	23	25	25
South Africa.....	345	342	348	375	403	412	402	410	459	480
Sudan.....	27	30	28	25	36	33	32	28	26	28
Tunisia.....	52	61	64	63	72	71	74	80	70	72
Zimbabwe.....	17	17	19	21	23	21	22	23	25	26
Other.....	143	155	164	182	172	192	195	204	209	213
Total.....	1,844	1,905	1,985	2,076	2,135	2,169	2,205	2,254	2,339	2,414
Far East & Oceania										
Australia.....	643	652	687	711	706	712	756	790	834	801
Bangladesh.....	34	36	38	36	38	37	40	46	51	53
Brunei.....	6	6	7	7	10	7	9	11	11	11
Burma.....	17	17	17	15	16	16	17	17	18	19
China.....	2,120	2,275	2,380	2,296	2,499	2,662	2,959	3,141	3,331	3,548
Guam.....	5	6	5	13	14	15	23	30	26	24
Hong Kong.....	116	121	124	127	133	152	158	180	186	195
India.....	988	1,084	1,150	1,168	1,190	1,275	1,311	1,413	1,575	1,661
Indonesia.....	493	524	583	651	695	707	765	778	814	845
Japan.....	4,484	4,752	4,983	5,140	5,284	5,446	5,401	5,674	5,711	5,867
Korea, North.....	69	65	64	73	76	74	72	70	63	60
Korea, South.....	639	731	843	1,025	1,202	1,456	1,690	1,856	2,027	2,159
Malaysia.....	197	202	220	266	282	302	336	378	399	415
Mongolia.....	17	17	17	16	15	13	13	13	11	12
New Zealand.....	94	95	103	109	105	111	123	128	154	134
Pakistan.....	180	194	206	220	221	227	256	282	298	308
Papua New Guinea.....	16	15	15	16	15	15	15	15	15	16
Philippines.....	188	196	229	236	235	260	285	303	328	340
Singapore.....	285	304	329	363	389	420	469	516	512	527
Sri Lanka.....	36	34	31	35	34	37	41	45	48	49
Taiwan.....	420	483	521	542	545	557	616	659	737	789
Thailand.....	259	283	349	407	437	476	545	603	679	683
Vietnam.....	35	40	46	53	56	61	77	85	94	93
Other.....	67	66	70	71	71	66	67	68	69	71
Total.....	11,408	12,196	13,017	13,595	14,269	15,103	16,044	17,097	17,993	18,680
World Total.....	62,999	64,819	65,917	65,985	66,577	66,742	67,043	68,313	69,926	71,524

¹ Preliminary.

-- Not applicable.

(s) = Value less than 500 barrels per day.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Section 3.

Table 1.3 World Dry Natural Gas Consumption, 1987 - 1996
(Billion Cubic Feet)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	2,112	2,331	2,498	2,378	2,400	2,596	2,713	2,823	2,867	3,065
Mexico.....	865	926	943	946	994	1,015	936	953	994	1,008
United States.....	17,211	18,030	18,801	18,716	19,035	19,544	20,279	20,708	21,581	21,929
Total.....	20,188	21,287	22,242	22,040	22,429	23,155	23,928	24,484	25,442	26,002
Central & South America										
Argentina.....	605	713	801	717	781	787	833	856	953	1,094
Barbados.....	(s)	1	1	1	1	1	1	1	1	1
Bolivia.....	14	19	26	30	26	32	30	35	43	37
Brazil.....	105	97	123	97	119	130	146	152	159	205
Chile.....	26	35	57	66	52	54	62	69	67	64
Colombia.....	140	146	146	151	155	151	157	162	161	181
Cuba.....	1	1	1	1	1	1	1	1	1	1
Ecuador.....	2	3	3	4	3	4	4	4	4	4
Peru.....	47	44	41	19	18	18	34	35	33	34
Trinidad and Tobago.....	143	154	162	177	201	194	218	250	268	303
Venezuela.....	657	656	769	761	793	763	815	876	890	962
Total.....	1,740	1,870	2,129	2,024	2,151	2,136	2,301	2,440	2,581	2,886
Western Europe										
Austria.....	191	183	195	215	228	224	244	242	262	282
Belgium.....	343	337	375	341	362	374	392	401	443	492
Denmark.....	52	56	68	73	82	86	103	110	126	165
Finland.....	55	58	78	95	100	104	108	119	123	129
France.....	1,057	961	991	1,022	1,143	1,139	1,172	1,134	1,183	1,325
Germany.....	--	--	--	--	2,883	2,858	3,042	3,088	3,364	3,666
Germany, East.....	555	602	588	357	--	--	--	--	--	--
Germany, West.....	2,178	2,114	2,247	2,312	--	--	--	--	--	--
Greece.....	3	4	4	5	4	4	2	1	1	1
Ireland.....	59	71	80	83	84	83	94	96	102	113
Italy.....	1,371	1,460	1,578	1,672	1,773	1,757	1,801	1,748	1,921	1,981
Luxembourg.....	14	15	17	17	18	19	24	20	22	25
Netherlands.....	1,672	1,513	1,550	1,538	1,715	1,669	1,696	1,648	1,694	1,862
Norway.....	73	71	73	80	78	131	90	93	101	102
Spain.....	100	129	172	192	216	228	238	265	298	324
Sweden.....	10	13	18	23	23	26	30	28	28	32
Switzerland.....	63	63	69	66	75	78	82	81	89	97
Turkey.....	26	43	114	122	150	159	184	193	249	277
United Kingdom.....	2,079	1,972	1,951	2,059	2,218	2,127	2,440	2,542	2,690	3,185
Former Yugoslavia.....	263	258	287	248	247	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	18	15	15	87	115
Croatia.....	--	--	--	--	--	96	104	91	82	88
Macedonia, TFYR.....	--	--	--	--	--	10	10	0	0	0
Serbia and Montenegro.....	--	--	--	--	--	72	34	58	39	98
Slovenia.....	--	--	--	--	--	24	30	29	35	45
Total.....	10,163	9,923	10,455	10,520	11,398	11,286	11,936	12,002	12,938	14,404

See footnotes at end of table.

Table 1.3 World Dry Natural Gas Consumption, 1987 - 1996 (Continued)
(Billion Cubic Feet)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	16	25	25	9	5	4	1	1	1	1
Bulgaria.....	223	221	223	241	200	186	172	168	208	219
Former Czechoslovakia.....	444	416	451	532	504	411	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	257	238	285	324
Slovakia.....	--	--	--	--	--	--	175	205	273	265
Hungary.....	395	407	428	396	391	349	376	356	407	451
Poland.....	461	447	465	413	379	357	383	382	426	424
Romania.....	1,405	1,306	1,384	1,261	1,040	936	908	851	901	894
Former U.S.S.R.....	22,462	24,092	24,529	24,961	25,014	--	--	--	--	--
Armenia.....	--	--	--	--	--	66	49	57	57	64
Azerbaijan.....	--	--	--	--	--	523	388	332	318	328
Belarus.....	--	--	--	--	--	646	600	498	452	452
Estonia.....	--	--	--	--	--	53	21	23	26	29
Georgia.....	--	--	--	--	--	177	85	57	74	64
Kazakhstan.....	--	--	--	--	--	710	523	530	443	510
Kyrgyzstan.....	--	--	--	--	--	85	78	64	31	31
Latvia.....	--	--	--	--	--	57	28	25	39	35
Lithuania.....	--	--	--	--	--	141	85	81	99	92
Moldova.....	--	--	--	--	--	78	64	49	49	71
Russia.....	--	--	--	--	--	16,482	16,185	15,214	14,507	14,504
Tajikistan.....	--	--	--	--	--	67	49	57	29	32
Turkmenistan.....	--	--	--	--	--	141	145	148	170	170
Ukraine.....	--	--	--	--	--	3,503	3,871	3,327	2,970	2,935
Uzbekistan.....	--	--	--	--	--	1,095	1,541	1,229	1,349	1,434
Total.....	25,407	26,914	27,505	27,813	27,533	26,064	25,985	23,889	23,113	23,326
Middle East										
Bahrain.....	217	182	186	205	233	188	234	229	229	239
Iran.....	565	706	784	837	811	883	938	1,123	1,243	1,374
Iraq.....	35	88	88	77	39	101	90	112	112	114
Israel.....	2	1	1	1	1	1	1	1	1	1
Jordan.....	0	0	3	5	5	5	7	10	10	10
Kuwait.....	284	351	415	256	18	93	191	211	211	211
Oman.....	80	73	99	99	124	117	140	147	130	131
Qatar.....	198	207	215	276	328	401	477	477	477	484
Saudi Arabia.....	946	1,028	1,052	1,077	1,130	1,201	1,268	1,331	1,343	1,459
Syria.....	22	18	35	103	124	127	131	134	104	104
United Arab Emirates.....	580	621	702	663	790	902	798	765	875	1,042
Total.....	2,929	3,276	3,581	3,599	3,603	4,018	4,274	4,540	4,735	5,169
Africa										
Algeria.....	656	712	660	681	775	730	655	690	742	757
Angola.....	16	18	15	19	20	20	20	18	20	20
Congo (Brazzaville).....	2	0	0	0	0	0	0	0	0	0
Cote d'Ivoire (Ivory Coast).....	0	0	0	0	0	0	0	0	1	1
Egypt.....	222	244	273	286	321	349	399	423	439	473
Gabon.....	4	4	3	3	4	4	4	4	4	4
Libya.....	161	157	165	175	175	174	168	173	171	184
Morocco.....	2	2	2	2	1	1	1	1	1	1
Nigeria.....	131	133	166	131	168	173	178	161	183	186
Senegal.....	0	0	0	0	0	0	1	1	2	2
South Africa.....	0	0	0	0	0	1	64	69	69	69
Tunisia.....	45	39	55	54	41	31	53	69	58	75
Total.....	1,238	1,309	1,340	1,351	1,505	1,483	1,542	1,610	1,689	1,772

See footnotes at end of table.

Table 1.3 World Dry Natural Gas Consumption, 1987 - 1996 (Continued)
(Billion Cubic Feet)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Far East & Oceania										
Afghanistan.....	22	70	68	67	11	11	11	11	7	7
Australia.....	532	555	570	625	584	603	630	647	706	703
Bangladesh.....	131	150	164	162	173	206	216	235	260	268
Brunei.....	57	48	57	46	15	35	29	25	34	33
Burma.....	40	37	38	38	37	36	39	51	58	57
China.....	494	503	505	508	526	533	558	589	601	663
Hong Kong.....	0	0	0	0	0	0	0	0	0	8
India.....	227	310	315	399	449	477	532	594	628	696
Indonesia.....	542	492	546	547	557	673	850	965	1,061	1,137
Japan.....	1,543	1,618	1,731	1,851	1,976	2,023	1,949	2,180	2,207	2,390
Korea, South.....	18	94	94	116	133	162	205	279	337	457
Malaysia.....	265	289	297	315	383	388	458	482	485	628
New Zealand.....	152	166	172	170	183	197	175	171	162	189
Pakistan.....	419	445	475	482	534	551	583	627	646	696
Papua New Guinea.....	0	0	0	0	0	2	3	2	4	5
Philippines.....	0	0	0	0	0	0	0	0	(s)	(s)
Singapore.....	0	0	0	0	0	39	53	53	53	53
Taiwan.....	43	24	50	80	105	110	111	141	151	158
Thailand.....	132	193	182	208	236	249	310	342	368	428
Vietnam.....	1	1	1	1	2	7	9	9	25	29
Total.....	4,618	4,995	5,267	5,615	5,904	6,302	6,720	7,400	7,792	8,606
World Total.....	66,283	69,573	72,518	72,961	74,523	74,443	76,686	76,365	78,290	82,166

¹ Preliminary.

-- Not applicable.

(s) = Value less than 5 billion cubic feet.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Section 4.

Table 1.4 World Coal Consumption, 1987 - 1996
(Million Short Tons)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	55.33	60.19	60.12	54.95	55.66	56.76	54.19	57.96	58.76	59.63
Mexico.....	8.55	8.09	8.92	6.79	6.60	8.72	10.02	10.81	13.03	13.98
United States... ²	838.29	884.72	890.59	895.67	887.79	893.74	927.06	931.68	941.34	982.77
Total.....	902.17	953.00	959.63	957.41	950.05	959.22	991.27	1,000.45	1,013.13	1,056.38
Central & South America										
Argentina.....	1.79	1.82	1.81	1.39	1.34	1.73	1.12	1.84	1.85	1.47
Brazil.....	19.32	19.20	19.31	16.97	19.58	18.76	18.98	18.93	19.42	27.31
Chile.....	2.07	2.88	3.86	4.19	3.34	3.00	2.92	3.58	3.89	4.08
Colombia.....	4.32	5.56	5.17	6.19	7.12	7.27	5.71	4.94	4.78	5.77
Costa Rica.....	(s)	(s)	(s)	(s)	(s)	0.00	0.00	0.00	0.00	0.00
Cuba.....	0.20	0.20	0.25	0.22	0.17	0.21	0.20	0.20	0.21	0.21
Dominican Republic.....	0.26	0.11	0.29	0.01	0.06	0.15	0.13	0.11	0.12	0.14
Haiti.....	0.02	0.03	0.01	0.01	0.03	0.03	0.01	0.00	0.00	0.00
Jamaica.....	0.00	0.00	0.04	0.06	0.02	0.07	0.08	0.06	0.06	0.07
Panama.....	0.04	0.03	0.01	0.04	0.05	0.08	0.06	0.06	0.06	0.06
Paraguay.....	0.04	0.02	0.02	0.04	0.05	0.07	0.06	0.06	0.06	0.06
Peru.....	0.26	0.42	0.36	0.19	0.40	0.48	0.65	0.81	0.84	0.61
Puerto Rico.....	0.32	0.39	0.33	0.23	0.21	0.17	0.18	0.19	0.19	0.19
Uruguay.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Venezuela.....	0.45	0.42	0.69	0.42	0.67	0.75	0.43	0.51	0.72	0.70
Virgin Islands, U.S.....	0.00	0.00	0.00	0.08	0.14	0.23	0.25	0.27	0.28	0.29
Other.....	(s)	(s)	(s)	(s)	0.01	(s)	(s)	(s)	(s)	(s)
Total.....	29.08	31.09	32.15	30.05	33.17	32.99	30.78	31.57	32.48	40.97
Western Europe										
Austria.....	8.95	7.56	7.39	8.45	7.77	7.01	6.14	5.81	6.27	5.91
Belgium.....	17.24	13.96	16.23	18.17	16.91	15.77	13.82	15.05	14.66	13.15
Denmark.....	13.20	12.43	10.09	10.73	14.95	12.22	13.16	14.47	12.08	16.65
Finland.....	7.50	7.28	7.19	7.09	6.98	6.08	7.20	8.68	7.51	7.43
France.....	33.56	24.95	33.45	35.85	36.81	32.62	25.67	25.08	25.64	25.94
Germany.....	--	--	--	--	406.17	358.99	334.86	314.28	297.52	289.82
Germany, East.....	350.09	348.64	340.32	315.20	--	--	--	--	--	--
Germany, West.....	214.72	212.85	212.88	212.42	--	--	--	--	--	--
Greece.....	49.02	56.22	58.64	58.95	58.55	62.20	62.47	65.58	64.51	65.77
Iceland.....	0.10	0.10	0.11	0.10	0.11	0.07	0.07	0.11	0.09	0.11
Ireland.....	3.59	3.63	3.64	3.66	3.58	3.25	3.26	3.03	3.02	2.88
Italy.....	24.71	23.37	23.09	24.77	23.41	20.26	17.73	18.71	20.20	18.86
Luxembourg.....	1.66	1.76	1.80	1.82	1.68	1.62	1.67	1.45	0.82	0.77
Malta.....	0.20	0.27	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.34
Netherlands.....	11.53	12.77	12.82	14.94	13.61	13.36	13.79	15.12	14.85	14.68
Norway.....	1.57	1.61	1.59	1.41	1.28	1.25	1.39	1.61	1.67	1.58
Portugal.....	3.09	3.71	4.53	4.84	4.83	5.13	5.49	5.81	6.41	6.09
Spain.....	58.08	52.25	61.90	52.58	52.27	51.61	48.73	47.30	47.73	44.64
Sweden.....	4.93	4.94	4.75	4.46	4.18	3.87	3.96	3.09	4.20	4.44
Switzerland.....	0.64	0.55	0.57	0.53	0.46	0.32	0.26	0.28	0.31	0.23
Turkey.....	53.53	50.82	60.20	59.98	63.55	64.66	60.46	65.57	67.14	71.57
United Kingdom.....	128.54	122.84	125.93	121.30	119.98	112.04	97.14	90.54	78.85	80.61
Former Yugoslavia.....	82.71	84.51	85.31	83.16	81.07	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	6.92	5.54	3.24	3.13	2.61
Croatia.....	--	--	--	--	--	0.81	0.81	0.56	0.75	0.76
Macedonia, TFYR.....	--	--	--	--	--	7.16	7.62	7.98	3.22	3.13
Serbia and Montenegro.....	--	--	--	--	--	47.06	41.21	40.91	44.90	43.27
Slovenia.....	--	--	--	--	--	6.51	6.18	5.59	5.84	5.76
Total.....	1,069.16	1,047.03	1,072.75	1,040.74	918.46	841.13	778.94	760.17	731.64	726.99

See footnotes at end of table.

Table 1.4 World Coal Consumption, 1987 - 1996 (Continued)

(Million Short Tons)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	2.68	2.79	2.46	2.34	1.31	0.37	0.20	0.19	0.13	0.13
Bulgaria.....	48.85	44.87	45.55	41.38	36.65	37.49	35.96	34.44	33.41	34.41
Former Czechoslovakia.....	139.47	136.98	129.97	119.08	110.84	102.22	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	72.07	78.42	73.48	71.12
Slovakia.....	--	--	--	--	--	--	14.12	12.94	12.84	5.06
Hungary.....	29.12	26.98	24.96	22.95	22.34	20.13	19.44	18.04	17.15	18.59
Poland.....	258.26	253.41	242.35	202.44	202.06	192.11	194.07	184.99	182.50	179.21
Romania.....	67.08	76.17	79.88	51.97	43.32	47.65	47.84	49.99	48.43	49.09
Former U.S.S.R.....	806.94	821.18	777.31	848.47	672.44	--	--	--	--	--
Armenia.....	--	--	--	--	--	0.16	(s)	0.04	0.01	0.01
Azerbaijan.....	--	--	--	--	--	0.03	0.01	0.02	0.02	0.01
Belarus.....	--	--	--	--	--	2.05	1.77	1.32	1.24	1.41
Estonia.....	--	--	--	--	--	22.86	18.27	18.03	17.07	14.71
Georgia.....	--	--	--	--	--	0.68	0.25	0.31	0.29	0.26
Kazakhstan.....	--	--	--	--	--	97.39	89.10	82.46	79.62	74.54
Kyrgyzstan.....	--	--	--	--	--	4.41	3.97	3.42	2.76	2.76
Latvia.....	--	--	--	--	--	0.74	0.67	0.47	0.24	0.13
Lithuania.....	--	--	--	--	--	0.72	0.73	0.53	0.41	0.57
Moldova.....	--	--	--	--	--	2.96	2.57	2.52	1.49	1.16
Russia.....	--	--	--	--	--	400.40	361.09	323.42	303.04	289.42
Tajikistan.....	--	--	--	--	--	0.30	0.20	0.23	0.10	0.10
Turkmenistan.....	--	--	--	--	--	0.55	0.44	0.44	0.22	0.11
Ukraine.....	--	--	--	--	--	154.28	132.41	106.89	94.58	80.38
Uzbekistan.....	--	--	--	--	--	8.80	8.23	8.31	6.72	6.50
Total.....	1,352.40	1,362.39	1,302.48	1,288.63	1,088.95	1,096.29	1,003.41	927.44	875.73	829.69
Middle East										
Cyprus.....	0.17	0.10	0.08	0.12	0.02	0.03	0.03	0.03	0.02	0.03
Iran.....	1.59	1.61	1.63	1.78	1.72	1.45	1.35	1.41	1.46	1.49
Israel.....	3.60	3.59	3.83	4.08	4.46	5.45	6.23	6.64	6.75	6.86
Lebanon.....	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.12	0.21	0.23
Other.....	(s)	(s)	(s)	(s)	0.01	(s)	(s)	(s)	(s)	(s)
Total.....	5.36	5.30	5.54	5.99	6.21	6.94	7.75	8.21	8.43	8.60
Africa										
Algeria.....	1.22	1.22	1.23	1.25	1.25	1.35	1.48	1.41	0.98	0.98
Botswana.....	0.64	0.67	0.74	0.90	0.90	0.90	0.89	0.93	0.97	0.96
Cameroon.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Congo (Kinshasa).....	0.28	0.32	0.28	0.24	0.25	0.26	0.26	0.24	0.27	0.27
Egypt.....	1.39	1.23	1.37	1.60	1.29	1.25	1.63	1.72	1.18	1.22
Ghana.....	(s)	(s)	(s)	(s)	0.09	(s)	(s)	(s)	(s)	(s)
Kenya.....	0.10	0.13	0.15	0.17	0.15	0.18	0.15	0.12	0.10	0.10
Libya.....	(s)	(s)	(s)	0.01	0.01	0.01	(s)	0.01	0.01	0.01
Madagascar.....	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
Malawi.....	0.05	0.05	0.05	0.06	0.07	0.07	0.07	0.08	0.08	0.08
Mauritania.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Mauritius.....	0.04	0.05	0.08	0.08	0.07	0.07	0.06	0.04	0.07	0.07
Morocco.....	1.88	1.84	1.99	1.95	2.25	1.93	2.21	2.42	2.60	2.67
Mozambique.....	0.07	0.07	0.07	0.06	0.07	0.07	0.07	0.07	0.06	0.06
Niger.....	0.18	0.17	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Nigeria.....	0.09	0.07	0.06	0.05	0.12	0.10	0.05	0.06	0.06	0.06
South Africa.....	148.04	151.32	140.49	139.08	143.64	149.07	152.79	160.47	162.27	164.69
Swaziland.....	0.18	0.18	0.18	0.18	0.14	0.11	0.06	0.06	0.06	0.06
Tanzania.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.01	0.01
Tunisia.....	0.11	0.14	0.14	0.12	0.12	0.13	0.13	0.12	0.11	0.11
Zambia.....	0.50	0.68	0.43	0.41	0.41	0.43	0.44	0.45	0.39	0.41
Zimbabwe.....	5.41	5.57	5.66	5.45	5.74	6.09	5.64	6.06	2.40	2.49
Other.....	0.00	0.00	0.00	0.00	(s)	(s)	0.00	0.00	0.00	0.00
Total.....	160.23	163.73	153.13	151.84	156.79	162.22	166.15	174.48	171.84	174.44

See footnotes at end of table.

Table 1.4 World Coal Consumption, 1987 - 1996 (Continued)
(Million Short Tons)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Far East & Oceania										
Afghanistan.....	0.18	0.15	0.14	0.12	0.10	0.01	0.01	0.01	0.01	0.01
Australia.....	93.29	95.83	104.34	105.09	107.94	113.51	109.25	110.36	113.20	117.03
Bangladesh.....	0.26	0.22	0.06	0.62	0.20	0.19	0.07	0.00	0.00	0.00
Bhutan.....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03
Burma.....	0.08	0.07	0.10	0.09	0.10	0.10	0.09	0.09	0.10	0.10
China.....	1,027.10	1,097.73	1,113.36	1,124.12	1,164.88	1,199.48	1,275.60	1,389.84	1,489.39	1,500.06
Fiji.....	0.01	0.01	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02
Hong Kong.....	8.88	10.80	11.63	10.53	9.27	11.54	13.33	9.60	10.33	7.46
India.....	206.31	215.09	226.03	241.80	252.17	273.67	286.12	303.14	311.53	321.30
Indonesia.....	4.26	4.88	6.10	5.93	6.12	7.70	8.50	10.04	11.36	13.50
Japan.....	111.07	122.58	122.69	124.95	128.24	126.17	128.81	133.47	140.05	144.23
Korea, North.....	65.26	68.78	71.76	73.97	75.32	76.45	80.19	80.14	80.46	83.37
Korea, South.....	49.42	51.36	45.93	41.88	45.42	41.82	44.53	48.70	51.26	57.58
Laos.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Macau.....	0.00	0.00	0.00	(s)	0.00	0.00	0.00	0.00	0.00	0.00
Malaysia.....	0.64	0.68	2.09	2.50	2.55	2.65	2.25	2.62	2.76	2.44
Mongolia.....	9.09	9.93	8.94	8.96	9.33	8.08	8.02	8.21	8.24	8.61
Nepal.....	0.10	0.11	0.10	0.07	0.09	0.11	0.12	0.14	0.14	0.14
New Caledonia.....	0.17	0.19	0.23	0.18	0.19	0.19	0.19	0.18	0.18	0.18
New Zealand.....	2.51	2.42	2.65	2.51	2.46	2.91	2.69	2.60	2.90	3.98
Pakistan.....	3.38	3.91	3.87	4.25	4.25	4.57	4.48	4.75	4.53	5.01
Papua New Guinea.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Philippines.....	2.32	2.93	2.39	2.73	3.03	3.00	3.15	3.26	3.48	3.56
Singapore.....	0.02	0.02	0.02	0.04	0.02	0.03	0.03	0.05	0.05	0.05
Sri Lanka.....	0.15	0.01	0.01	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Taiwan.....	16.21	18.58	19.60	18.88	20.62	24.12	26.65	28.14	28.83	32.87
Thailand.....	7.87	8.36	9.98	14.11	16.51	17.73	18.54	20.51	23.05	23.91
Vietnam.....	6.69	5.81	3.57	4.60	3.78	3.79	4.39	4.81	4.71	4.79
Total.....	1,615.29	1,720.47	1,755.63	1,787.98	1,852.63	1,917.86	2,017.07	2,160.71	2,286.60	2,330.23
World Total.....	5,133.69	5,283.01	5,281.31	5,262.64	5,006.26	5,016.65	4,995.36	5,063.03	5,119.85	5,167.31

¹ Preliminary.

² United States apparent coal consumption is calculated as: production+imports-exports-stock builds. A different methodology for deriving coal consumption is used in the Monthly Energy Review.

--= Not applicable.

(s) = Value less than 5 thousand short tons.

Notes: Sum of components may not equal total due to independent rounding.

See Glossary for definition of apparent coal consumption.

Sources: See sources at the end of Section 5.

Table 1.5 World Net Hydroelectric Power Consumption, 1987 - 1996

(Billion Kilowatthours)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	313.2	303.5	287.6	293.9	305.3	313.2	320.3	324.7	330.7	349.2
Mexico.....	18.2	21.0	24.4	23.2	21.6	25.9	26.0	19.8	27.3	31.1
United States. ²	299.2	257.8	279.2	300.3	307.4	276.8	305.3	288.0	337.0	379.7
Total.....	630.6	582.3	591.3	617.4	634.3	615.9	651.6	632.6	694.9	760.0
Central & South America										
Argentina.....	29.7	21.8	15.2	20.3	19.1	23.2	28.9	33.3	33.4	28.6
Bolivia.....	1.1	1.2	1.2	1.2	1.4	1.3	1.4	1.4	1.7	1.8
Brazil.....	183.7	197.1	202.6	204.6	215.6	221.1	232.7	240.3	251.4	263.1
Chile.....	12.0	11.4	9.5	11.9	13.0	16.6	17.4	16.8	18.2	20.8
Colombia.....	21.3	24.3	26.4	27.2	27.2	22.2	27.7	32.0	33.9	43.4
Costa Rica.....	3.0	3.0	3.3	3.5	3.6	3.5	3.9	3.5	3.6	3.6
Dominican Republic.....	0.9	0.8	0.6	0.4	0.6	2.2	1.8	1.9	2.0	2.0
Ecuador.....	4.5	4.7	4.9	4.9	5.0	4.9	5.8	6.3	6.7	7.0
El Salvador.....	1.1	1.3	1.4	1.7	1.3	1.4	1.8	1.9	2.0	2.2
Guatemala.....	1.7	1.8	2.1	2.1	2.1	2.1	1.9	2.0	2.1	2.2
Haiti.....	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Honduras.....	1.1	1.7	1.8	2.1	2.1	2.1	2.2	2.3	2.4	2.4
Jamaica.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nicaragua.....	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.4
Panama.....	2.0	2.2	2.2	2.2	2.0	1.9	2.3	2.4	2.4	2.5
Paraguay.....	18.4	19.9	24.2	26.9	29.1	26.8	31.1	36.0	41.2	45.0
Peru.....	10.8	10.3	10.3	10.4	11.4	9.7	11.7	12.6	13.6	13.1
Puerto Rico.....	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Suriname.....	0.3	0.5	1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.3
Uruguay.....	7.2	5.4	3.9	6.9	6.1	7.8	7.2	7.4	7.4	7.5
Venezuela.....	30.5	33.9	34.3	36.6	44.0	46.6	47.0	50.9	55.0	58.0
Other.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Total.....	330.8	342.6	346.3	365.2	385.9	395.8	427.1	453.2	479.5	505.6
Western Europe										
Austria.....	25.4	35.2	34.6	31.2	31.1	34.5	36.3	35.3	36.7	34.1
Belgium.....	0.4	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2
Finland.....	13.7	13.2	12.9	10.8	13.1	15.0	13.3	11.7	12.8	11.7
France.....	68.6	74.0	45.7	52.8	56.3	67.2	63.1	76.5	70.6	62.1
Germany.....	--	--	--	--	14.5	17.1	17.5	18.3	19.6	18.0
Germany, East.....	1.7	1.7	1.6	1.4	--	--	--	--	--	--
Germany, West.....	18.4	18.1	16.5	15.8	--	--	--	--	--	--
Greece.....	2.8	2.4	1.9	1.8	3.1	2.2	2.3	2.6	3.5	4.3
Iceland.....	3.9	4.2	4.2	4.2	4.2	4.3	4.4	4.5	4.6	4.7
Ireland.....	0.7	0.9	0.7	0.7	0.7	0.8	0.8	0.9	0.7	0.7
Italy.....	39.1	40.2	33.6	31.3	41.8	41.8	41.0	44.2	37.4	41.4
Luxembourg.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	(s)
Norway.....	102.3	107.9	117.4	119.9	109.0	115.5	118.0	110.4	120.1	102.6
Portugal.....	9.0	12.0	5.7	9.1	9.0	4.6	8.5	10.6	8.3	13.7
Spain.....	27.0	34.8	19.0	25.2	27.0	18.7	24.1	27.9	22.9	39.1
Sweden.....	71.0	69.0	70.9	71.8	62.6	73.6	73.9	58.5	66.3	50.7
Switzerland.....	34.3	35.4	29.5	29.5	31.8	32.4	35.4	38.7	34.8	28.9
Turkey.....	18.3	28.4	17.6	22.9	22.5	26.3	33.6	30.3	35.2	40.0
United Kingdom.....	4.1	4.9	4.7	5.1	4.5	5.3	4.2	5.0	5.2	4.0
Former Yugoslavia.....	26.0	25.6	23.3	19.6	18.9	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	3.0	2.0	1.2	1.4	1.5
Croatia.....	--	--	--	--	--	4.3	4.3	4.9	5.2	7.6
Macedonia, TFYR.....	--	--	--	--	--	0.8	0.5	0.7	0.8	1.2
Serbia and Montenegro.....	--	--	--	--	--	11.2	10.0	11.0	11.1	13.2
Slovenia.....	--	--	--	--	--	3.4	3.0	3.4	3.2	3.5
Other.....	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total.....	466.8	508.5	440.4	453.4	450.5	482.6	496.8	497.2	501.0	483.5

See footnotes at end of table.

Table 1.5 World Net Hydroelectric Power Consumption, 1987 - 1996 (Continued)
(Billion Kilowatthours)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	4.1	3.7	3.8	2.8	3.5	3.2	3.3	3.7	4.2	4.9
Bulgaria.....	2.5	2.6	2.7	1.9	2.4	2.0	1.9	1.5	2.3	2.5
Former Czechoslovakia.....	4.9	4.4	4.2	3.9	3.1	3.6	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	1.4	1.4	2.0	1.8
Slovakia.....	--	--	--	--	--	--	3.9	4.6	4.6	5.4
Hungary.....	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Poland.....	4.0	4.2	3.7	3.3	3.4	3.5	3.5	3.7	3.8	3.9
Romania.....	11.1	13.5	12.5	10.9	14.1	11.6	12.6	12.9	16.5	15.6
Former U.S.S.R.....	217.5	228.5	221.0	230.7	232.7	--	--	--	--	--
Armenia.....	--	--	--	--	--	3.0	4.2	3.5	1.9	2.0
Azerbaijan.....	--	--	--	--	--	1.7	2.4	1.8	1.5	1.5
Georgia.....	--	--	--	--	--	6.5	7.0	4.7	4.7	4.8
Kazakhstan.....	--	--	--	--	--	6.8	7.6	9.1	8.2	7.5
Kyrgyzstan.....	--	--	--	--	--	9.2	9.0	11.6	11.0	12.2
Latvia.....	--	--	--	--	--	2.5	2.8	3.3	2.9	2.3
Lithuania.....	--	--	--	--	--	0.3	0.4	0.4	0.4	0.4
Moldova.....	--	--	--	--	--	0.3	0.4	0.3	0.3	0.3
Russia.....	--	--	--	--	--	170.9	172.1	174.2	174.5	153.1
Tajikistan.....	--	--	--	--	--	15.8	16.9	16.2	14.5	13.0
Ukraine.....	--	--	--	--	--	8.0	11.1	12.2	10.1	9.4
Uzbekistan.....	--	--	--	--	--	6.2	7.3	7.1	7.0	6.8
Other.....	0.0	0.0	0.0	0.0	0.0	(s)	(s)	(s)	(s)	(s)
Total.....	244.2	257.0	248.1	253.6	259.3	255.3	267.9	272.4	270.5	247.8
Middle East										
Iran.....	6.3	6.4	6.6	6.0	7.0	9.4	9.7	7.4	7.5	7.5
Iraq.....	0.6	0.7	0.6	0.6	0.3	0.7	0.6	0.6	0.6	0.6
Israel.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Jordan.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Lebanon.....	0.6	0.6	0.5	0.3	0.5	0.5	0.9	1.0	0.7	0.7
Syria.....	2.0	4.8	4.7	5.6	6.2	7.3	6.6	6.7	6.9	7.0
Total.....	9.6	12.5	12.4	12.5	14.0	18.0	17.9	15.7	15.7	15.9
Africa										
Algeria.....	0.5	0.2	0.3	0.1	0.3	0.2	0.3	0.2	0.2	0.2
Angola.....	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4
Cameroon.....	2.3	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.7
Congo (Brazzaville).....	0.3	0.3	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4
Congo (Kinshasa).....	5.2	5.2	6.8	5.6	5.2	6.0	5.7	5.4	5.9	6.0
Cote d'Ivoire (Ivory Coast).....	1.2	1.2	1.6	1.3	1.2	1.0	1.1	1.1	1.1	1.1
Egypt.....	8.2	7.8	7.9	9.9	8.5	8.5	10.4	10.6	10.7	11.0
Ethiopia.....	0.9	1.0	1.0	1.1	1.1	1.1	1.2	1.1	1.1	1.2
Gabon.....	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Ghana.....	4.6	4.8	5.2	5.7	6.0	6.0	6.1	6.1	6.1	6.1
Kenya.....	1.8	2.3	2.4	2.5	2.7	2.8	3.0	3.0	3.1	3.1
Madagascar.....	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
Malawi.....	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8
Mali.....	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Morocco.....	0.8	0.9	1.1	1.2	1.2	1.0	0.4	0.8	0.6	0.5
Nigeria.....	3.3	4.0	4.1	4.3	5.9	6.0	5.5	5.5	5.4	5.4
Reunion.....	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
South Africa.....	1.6	3.2	2.8	1.0	2.0	0.8	0.1	1.1	0.5	1.3
Sudan.....	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0
Tanzania.....	1.2	1.2	1.4	1.5	1.7	1.8	1.9	1.5	1.5	1.6
Uganda.....	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Zambia.....	8.4	8.3	6.7	7.7	7.7	7.7	7.7	7.7	7.8	7.8
Zimbabwe.....	2.5	2.7	2.7	3.5	3.2	3.2	1.7	2.4	2.4	2.4
Other.....	1.3	1.3	1.3	1.1	1.2	1.2	1.2	1.2	1.3	1.3
Total.....	49.0	51.7	53.5	55.3	56.6	55.8	55.0	56.4	56.4	57.7

See footnotes at end of table.

Table 1.5 World Net Hydroelectric Power Consumption, 1987 - 1996 (Continued)

(Billion Kilowatthours)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Far East & Oceania										
Afghanistan.....	0.8	0.7	0.8	0.8	0.7	0.5	0.5	0.5	0.4	0.4
Australia.....	13.5	13.4	14.3	14.0	15.7	15.2	16.5	16.2	15.7	14.7
Bangladesh.....	0.5	0.7	0.9	0.9	0.8	0.8	0.6	0.8	0.4	0.3
Bhutan.....	1.2	1.5	1.5	1.5	1.6	1.6	1.6	1.7	1.7	1.7
Burma.....	1.0	0.9	1.1	1.2	1.2	1.5	1.7	1.6	1.5	1.5
Cambodia.....	(s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China.....	99.2	108.0	117.2	125.1	123.8	130.2	149.2	165.1	184.9	181.3
Fiji.....	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
French Polynesia.....	(s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
India.....	47.0	57.3	61.5	70.9	72.0	69.2	69.8	70.4	70.9	72.0
Indonesia.....	7.6	8.3	8.5	10.1	10.0	12.6	12.0	11.1	10.3	10.0
Japan.....	74.0	89.9	90.8	88.4	96.5	81.7	94.6	66.6	81.4	79.0
Korea, North.....	28.8	31.2	31.4	31.4	31.4	23.8	23.8	23.3	22.8	22.0
Korea, South.....	5.3	3.5	4.5	6.3	5.0	4.8	5.9	4.1	5.4	5.1
Laos.....	0.5	0.5	0.7	0.8	0.9	0.9	0.8	0.9	0.9	0.9
Malaysia.....	4.9	5.6	5.2	3.9	4.4	4.3	4.9	6.5	7.4	8.0
Nepal.....	0.5	0.6	0.5	0.7	0.9	0.9	0.8	0.9	1.0	1.0
New Caledonia.....	0.3	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3
New Zealand.....	22.1	23.1	21.9	23.1	22.9	20.4	23.1	25.6	27.3	26.9
Pakistan.....	15.1	16.5	16.8	16.8	18.1	18.5	20.9	19.2	22.6	25.0
Papua New Guinea.....	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Philippines.....	5.2	6.2	6.4	6.0	6.0	6.1	6.2	6.4	6.5	6.5
Samoa.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Sri Lanka.....	2.2	2.6	2.8	3.1	3.1	2.9	3.8	4.0	4.5	4.8
Taiwan.....	7.1	6.1	6.7	8.2	5.5	8.3	6.8	8.8	8.8	8.9
Thailand.....	4.0	3.7	5.5	4.9	4.5	4.2	3.7	4.5	6.6	7.0
U.S. Pacific Islands.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Vietnam.....	1.7	1.8	3.8	5.3	5.6	5.8	8.2	10.1	12.2	12.5
Total.....	343.3	383.6	404.3	425.1	432.0	415.5	456.7	449.3	494.7	491.0
World Total.....	2,074.2	2,138.1	2,096.3	2,182.6	2,232.6	2,238.9	2,373.1	2,376.7	2,512.6	2,561.5

¹ Preliminary.

² There is a discontinuity in this time series between 1988 and 1989; beginning in 1989, pumped storage is removed, and expanded coverage of industrial use of hydroelectric power is included.

-- Not applicable.

(s) = Value less than 50 million kilowatthours.

Notes: Sum of components may not equal total due to independent rounding.

Consumption does not account for thermal equivalent conversion losses.

Data are reported as net consumption as opposed to gross. Net consumption excludes the energy consumed by the generating units.

Sources: See sources at the end of Section 6.

Table 1.6 World Net Nuclear Electric Power Consumption, 1987 - 1996

(Billion Kilowatthours)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	72.9	78.2	75.4	69.2	80.7	76.6	90.1	102.4	93.0	88.1
Mexico.....	0.0	0.0	0.0	2.8	4.0	3.7	4.7	4.0	8.0	7.5
United States.....	455.3	527.0	529.4	577.0	612.6	618.8	610.4	640.5	673.4	674.7
Total.....	528.2	605.1	604.8	649.0	697.4	699.1	705.1	747.0	774.4	770.3
Central & South America										
Argentina.....	6.1	4.8	4.8	7.0	7.7	6.7	7.3	7.8	7.1	6.9
Brazil.....	0.9	0.3	1.5	1.9	1.4	1.7	0.4	0.1	2.4	2.3
Total.....	7.1	5.2	6.3	9.0	9.1	8.4	7.7	7.9	9.5	9.2
Western Europe										
Belgium.....	39.8	40.9	39.1	40.6	40.7	41.3	39.8	38.6	39.3	41.2
Finland.....	18.5	18.4	18.0	18.3	18.5	18.3	18.9	18.5	18.3	18.8
France.....	249.3	260.3	288.7	298.4	314.8	321.5	349.8	342.0	358.4	376.2
Germany.....	--	--	--	--	140.1	150.9	145.8	143.6	146.4	153.5
Germany, East.....	10.7	11.1	11.1	5.3	--	--	--	--	--	--
Germany, West.....	130.5	145.1	140.4	139.8	--	--	--	--	--	--
Italy.....	(s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands.....	3.4	3.5	3.8	3.3	3.2	3.6	3.8	3.8	3.8	4.0
Spain.....	41.3	48.3	53.7	51.6	52.8	53.0	53.3	52.5	52.7	53.5
Sweden.....	64.3	65.6	62.8	64.8	72.9	60.4	58.3	69.5	66.4	71.1
Switzerland.....	20.5	21.5	21.5	22.4	21.7	22.3	22.2	23.1	23.7	23.7
United Kingdom.....	48.2	55.6	63.6	58.7	62.8	69.1	76.9	76.0	76.6	81.5
Former Yugoslavia.....	4.2	3.9	4.5	4.4	4.2	--	--	--	--	--
Slovenia.....	--	--	--	--	--	3.8	3.8	4.3	4.5	4.4
Total.....	630.6	674.2	707.3	707.5	731.6	744.1	772.6	771.9	789.9	828.0
Eastern Europe & Former U.S.S.R.										
Bulgaria.....	11.7	15.1	14.6	13.5	12.4	11.0	13.3	14.6	16.4	17.8
Former Czechoslovakia.....	20.9	21.9	23.2	23.4	22.5	23.3	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	12.0	12.3	11.6	12.2
Slovakia.....	--	--	--	--	--	--	11.6	11.5	10.9	11.3
Hungary.....	10.4	12.7	13.1	13.0	13.0	13.3	13.1	13.3	13.3	13.5
Romania.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Former U.S.S.R.....	176.3	203.7	212.7	201.3	201.5	--	--	--	--	--
Armenia.....	--	--	--	--	--	0.0	0.0	0.0	0.0	2.1
Kazakhstan.....	--	--	--	--	--	0.5	0.4	0.4	0.1	0.1
Lithuania.....	--	--	--	--	--	13.9	12.3	7.3	10.6	12.7
Russia.....	--	--	--	--	--	113.6	113.2	92.9	94.3	103.3
Ukraine.....	--	--	--	--	--	70.1	71.4	65.4	67.0	76.0
Total.....	219.3	253.4	263.5	251.3	249.5	245.6	247.3	217.7	224.3	249.8
Africa										
South Africa.....	6.2	10.5	11.1	8.4	9.1	9.3	7.3	9.7	11.3	11.8
Total.....	6.2	10.5	11.1	8.4	9.1	9.3	7.3	9.7	11.3	11.8
Far East & Oceania										
China.....	0.0	0.0	0.0	0.0	0.0	0.5	2.5	13.5	12.4	13.6
India.....	4.7	5.2	3.8	5.6	5.2	6.0	5.9	4.7	6.5	7.4
Japan.....	188.6	173.9	174.5	192.2	202.8	212.1	236.8	255.7	276.7	283.0
Korea, South.....	37.1	37.8	45.0	50.2	53.5	53.7	55.2	55.7	63.7	70.2
Pakistan.....	0.5	0.2	0.1	0.4	0.4	0.5	0.4	0.6	0.5	0.3
Taiwan.....	31.8	29.4	27.1	31.6	33.5	32.5	33.0	33.5	33.9	36.3
Total.....	262.7	246.5	250.5	279.9	295.4	305.3	333.8	363.6	393.6	410.9
World Total.....	1,654.0	1,794.8	1,843.4	1,905.1	1,992.0	2,011.8	2,073.7	2,117.8	2,203.0	2,280.0

¹ Preliminary.

-- Not applicable.

(s) = Value less than 50 million kilowatthours.

Notes: Sum of components may not equal total due to independent rounding.

Consumption does not account for thermal equivalent conversion losses.

Data are reported as net consumption as opposed to gross. Net consumption excludes the energy consumed by the generating units.

No consumption is reported for Middle East.

Sources: See sources at the end of Section 6.

Table 1.7 World Net Geothermal, Solar, and Wind Electric Power Consumption, 1987 - 1996

(Billion Kilowatthours)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	(s)	(s)	(s)	(s)	(s)	(s)	0.1	0.1	0.1	0.1
Mexico.....	4.3	4.7	4.7	4.9	5.2	5.5	5.6	5.3	5.4	5.4
United States.. ²	12.3	12.0	55.6	208.5	208.4	220.4	225.6	231.1	231.9	243.5
Total.....	16.6	16.7	60.3	213.4	213.6	225.9	231.2	236.5	237.4	249.0
Central & South America										
Brazil..... ³	4.8	4.8	4.4	5.2	5.6	6.6	6.7	7.2	7.4	7.8
Costa Rica.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.5
El Salvador.....	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6
Nicaragua.....	0.2	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Total.....	5.4	5.4	5.2	5.9	6.5	7.4	7.6	8.5	8.8	9.4
Western Europe										
Belgium.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Denmark.....	0.2	0.3	0.4	0.6	0.7	0.9	1.0	1.1	1.1	1.2
France.....	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.6
Germany.....	--	--	--	--	0.2	0.3	0.6	1.7	2.4	2.4
Germany, West.....	0.0	(s)	(s)	(s)	--	--	--	--	--	--
Greece.....	(s)	(s)	0.0	(s)	0.0	(s)	(s)	(s)	(s)	(s)
Iceland.....	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3
Ireland.....	0.0	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Italy.....	2.8	2.9	3.0	3.1	3.0	3.6	3.8	3.6	3.6	3.9
Netherlands.....	(s)	(s)	(s)	(s)	0.1	0.1	0.2	0.2	0.3	0.3
Norway.....	0.0	0.0	0.0	0.0	0.0	(s)	(s)	(s)	(s)	(s)
Portugal.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.1	0.1
Spain.....	0.0	0.0	0.0	(s)	(s)	(s)	0.1	0.2	0.3	0.3
Sweden.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.1	0.1	0.1
Switzerland.....	0.0	0.0	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)
Turkey.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
United Kingdom.....	0.0	(s)	(s)	(s)	(s)	(s)	0.2	0.3	0.3	0.3
Total.....	3.9	4.1	4.3	4.7	5.0	5.9	6.9	8.2	9.2	9.7
Eastern Europe & Former U.S.S.R.										
Romania.....	(s)	(s)	(s)	(s)	0.0	0.0	0.0	0.0	0.0	0.0
Former U.S.S.R.....	0.0	0.0	(s)	(s)	(s)	--	--	--	--	--
Russia.....	--	--	--	--	--	(s)	(s)	(s)	(s)	0.3
Total.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.3
Middle East										
Jordan.....	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Total.....	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Africa										
Ethiopia.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Kenya.....	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3
Total.....	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4
Far East & Oceania										
Australia.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(s)	(s)	(s)
India.....	(s)	(s)	(s)	(s)	(s)	(s)	0.1	0.1	0.1	0.1
Indonesia.....	0.7	1.0	1.0	1.1	1.0	1.0	1.0	1.5	1.7	1.8
Japan.....	1.3	1.3	1.3	1.7	1.7	1.7	1.7	2.0	3.0	3.4
New Zealand.....	1.1	1.2	1.8	2.1	2.1	2.2	2.1	2.1	2.0	2.0
Philippines.....	4.3	4.6	5.1	5.2	5.5	5.4	5.5	5.6	5.7	5.7
Vietnam.....	0.2	0.2	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6
Total.....	7.6	8.3	9.1	10.0	10.3	10.3	10.9	11.8	13.1	13.6
World Total.....	34.0	34.8	79.4	234.5	235.7	249.9	257.0	265.3	268.9	282.4

¹ Preliminary.

² There is a discontinuity in this time series between 1988 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1989 and biofuels electric power beginning in 1990.

³ Data are for consumption of biofuels electric power.

-- Not applicable.

(s) = Value less than 50 million kilowatthours.

Notes: Sum of components may not equal total due to independent rounding.

Consumption does not account for thermal equivalent conversion losses.

Data are reported as net consumption as opposed to gross. Net consumption excludes the energy consumed by the generating units.

Sources: See sources at the end of Section 6.

Table 1.8 World Consumption of Primary Energy by Selected Country Groups (Btu), 1987 - 1996
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Petroleum										
World Total.....	128.95	132.96	134.82	134.89	136.13	136.40	136.45	138.95	142.47	145.71
OECD ²	78.75	81.61	82.63	82.70	83.63	85.70	86.70	89.02	90.62	92.78
Non OECD.....	50.21	51.35	52.19	52.19	52.50	50.69	49.75	49.92	51.85	52.93
Other Groups:.....										
OECD Europe.....	27.22	27.58	27.66	27.66	28.66	29.16	29.21	29.36	30.45	30.79
OPEC ³	8.09	8.38	8.74	9.11	9.31	9.55	10.09	10.30	10.87	11.22
EU ⁴	24.16	24.58	24.71	24.75	25.80	26.18	25.79	25.96	26.95	27.11
IEA ⁵	73.04	75.64	76.38	76.13	76.71	78.18	78.26	80.08	81.36	83.11
Natural Gas										
World Total.....	65.62	68.87	71.90	72.02	73.26	73.60	75.78	75.77	78.15	82.22
OECD ²	33.45	34.56	36.26	36.42	37.93	38.78	40.36	41.38	43.40	45.89
Non OECD.....	32.18	34.31	35.65	35.60	35.33	34.82	35.42	34.39	34.75	36.32
Other Groups:.....										
OECD Europe.....	10.26	10.07	10.61	10.76	11.57	11.54	12.43	12.44	13.48	15.04
OPEC ³	5.08	5.50	5.94	5.84	5.95	6.48	6.83	7.31	7.95	8.51
EU ⁴	9.17	8.97	9.38	9.78	10.59	10.53	11.14	11.21	12.02	13.44
IEA ⁵	31.64	32.61	34.25	34.64	35.92	36.76	38.10	39.08	40.93	43.17
Coal										
World Total.....	88.13	90.72	90.39	90.55	87.20	88.16	88.65	89.30	91.56	92.76
OECD ²	41.89	42.63	42.81	41.87	40.79	39.45	41.49	41.22	41.20	42.30
Non OECD.....	46.24	48.10	47.58	48.68	46.41	48.71	47.15	48.08	50.37	50.47
Other Groups:.....										
OECD Europe.....	17.77	17.14	17.26	16.35	15.39	13.87	15.15	14.74	14.28	14.16
OPEC ³	0.18	0.20	0.23	0.23	0.24	0.28	0.30	0.34	0.37	0.42
EU ⁴	12.87	12.32	12.65	12.45	11.40	10.04	9.76	9.39	9.04	9.00
IEA ⁵	36.46	37.28	37.73	37.68	36.51	35.28	35.56	35.23	35.19	36.24
Hydroelectric Power										
World Total.....	21.60	22.24	21.80	22.70	23.20	23.26	24.64	24.68	26.10	26.60
OECD ²	12.41	12.48	11.90	12.35	12.57	12.47	13.21	12.72	13.59	13.99
Non OECD.....	9.19	9.76	9.90	10.36	10.64	10.78	11.43	11.96	12.50	12.61
Other Groups:.....										
OECD Europe.....	4.65	5.09	4.40	4.57	4.53	4.82	5.01	5.01	5.05	4.81
OPEC ³	0.51	0.55	0.57	0.60	0.70	0.79	0.78	0.79	0.82	0.85
EU ⁴	2.96	3.22	2.61	2.70	2.75	2.93	2.97	3.04	2.96	2.91
IEA ⁵	12.08	12.14	11.52	11.96	12.21	12.07	12.78	12.37	13.14	13.50
Nuclear Electric Power										
World Total.....	17.80	19.30	19.82	20.37	21.29	21.36	22.02	22.46	23.31	24.10
OECD ²	14.80	15.96	16.38	16.99	17.93	18.15	18.94	19.57	20.31	20.77
Non OECD.....	3.00	3.34	3.44	3.38	3.36	3.21	3.08	2.89	3.01	3.33
Other Groups:.....										
OECD Europe.....	6.66	7.15	7.50	7.53	7.76	7.91	8.37	8.35	8.52	8.93
OPEC ³	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EU ⁴	6.32	6.78	7.12	7.14	7.40	7.55	7.86	7.82	8.00	8.40
IEA ⁵	14.29	15.42	15.76	16.31	17.22	17.44	18.06	18.69	19.31	19.71

See footnotes at end of table.

Table 1.8 World Consumption of Primary Energy by Selected Country Groups (Btu), 1987 - 1996 (Continued)
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Geothermal, Solar, and Wind Electric Power⁶										
World Total.....	0.65	0.66	1.17	2.79	2.82	2.97	3.05	3.14	3.18	3.35
OECD ²	0.46	0.47	0.97	2.58	2.60	2.74	2.81	2.87	2.90	3.05
Non OECD.....	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.27	0.28	0.30
Other Groups.....										
OECD Europe.....	0.07	0.08	0.08	0.09	0.09	0.10	0.11	0.12	0.14	0.15
OPEC ³	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.04
EU ⁴	0.07	0.07	0.07	0.08	0.08	0.09	0.11	0.12	0.13	0.14
IEA ⁵	0.37	0.36	0.87	2.48	2.48	2.62	2.69	2.76	2.78	2.93
Total Energy⁷										
World Total.....	322.27	334.42	339.78	343.97	344.34	346.04	350.85	354.41	365.13	375.07
OECD ²	181.50	187.64	191.07	193.72	196.03	197.77	203.95	207.04	212.40	219.17
Non OECD.....	140.77	146.78	148.71	150.26	148.31	148.27	146.90	147.37	152.72	155.90
Other Groups.....										
OECD Europe.....	66.85	67.38	67.76	67.11	68.13	67.44	70.33	70.07	71.95	73.93
OPEC ³	13.87	14.65	15.49	15.80	16.22	17.10	18.00	18.76	20.04	21.03
EU ⁴	55.74	56.20	56.83	57.16	58.17	57.51	57.85	57.73	59.28	60.97
IEA ⁵	167.52	173.24	176.51	179.91	181.61	182.84	185.92	188.48	193.11	199.04

¹ Preliminary.

² The Organization for Economic Cooperation and Development (OECD) includes Australia, Austria, Belgium, Canada, Czech Republic, Denmark (including data for Faroe Islands and Greenland), Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, South, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States (including data for Guam, Hawaiian Trade Zone, Puerto Rico, and Virgin Islands, U.S.). Refer to Appendix A for a listing of OECD Europe.

³ The Organization of Petroleum Exporting Countries (OPEC) includes Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

⁴ European Union (EU) includes Austria, Belgium, Denmark (including data for Faroe Islands), Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and United Kingdom.

⁵ International Energy Agency (IEA) includes Australia, Austria, Belgium, Canada, Denmark (including data for Faroe Islands and Greenland), Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States (including data for Guam, Hawaiian Trade Zone, Puerto Rico, and Virgin Islands, U.S.).

⁶ Includes the consumption of biofuels electric power for the United States and Brazil.

⁷ Total energy consumption, as reported here, includes electricity imports and excludes electricity exports. It also includes biofuels used by the residential, commercial, and transportation sectors in the United States beginning in 1990. The consumption of electric power by type, as reported in this table, is not adjusted for electricity imports and exports, except for hydroelectric power in the United States. As a result, total energy consumption may not be equal to the sum of the individual fuel types reported in this table.

(s) = Value less than 5 trillion Btu.

Notes: For consistency data reflect 1996 membership (as of December 31, 1996) for all years. The country groups OECD, OECD Europe, EU, and IEA include unified Germany. Sum of components may not equal total due to independent rounding.

Primary energy consumption includes petroleum, natural gas, coal, and net hydroelectric, nuclear, geothermal, solar, and wind electric power. Data for United States include biofuels energy consumption and data for Brazil include consumption of biofuels electric power. United States apparent coal consumption is calculated as: production+imports-exports-stock builds. A different methodology for deriving coal consumption is used in the Monthly Energy Review.

Sources: See sources at the end of Sections 3, 4, 5, and 6.

Section 2

World Energy Production, 1987-1996

Table 2.1 World Production of Primary Energy by Selected Country Groups, 1987 - 1996

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Petroleum (thousand barrels per day)²										
World Total.....	62,427	64,705	65,892	66,754	66,632	66,960	67,361	68,250	69,860	71,764
OECD ³	20,793	20,727	20,019	20,142	20,710	21,060	21,217	21,894	22,354	23,102
Non OECD.....	41,633	43,978	45,873	46,611	45,922	45,901	46,145	46,356	47,506	48,663
Other Groups.....										
OECD Europe.....	4,539	4,553	4,480	4,645	4,874	5,272	5,486	6,214	6,630	7,056
OPEC ⁴	19,589	21,465	23,323	24,536	24,625	25,818	26,610	27,031	27,566	28,321
EU ⁵	3,342	3,196	2,734	2,725	2,744	2,806	2,900	3,453	3,597	3,687
IEA ⁶	17,815	17,748	17,030	17,073	17,492	17,856	18,001	18,660	19,205	19,741
Natural Gas (trillion cubic feet)										
World Total.....	66.54	69.81	72.25	73.61	74.81	74.87	76.30	76.80	77.92	81.96
OECD ³	29.14	29.78	30.47	31.03	31.77	32.49	33.60	34.82	35.42	37.49
Non OECD.....	37.41	40.03	41.78	42.58	43.04	42.38	42.69	41.98	42.50	44.47
Other Groups.....										
OECD Europe.....	7.79	7.38	7.62	7.46	8.07	8.11	8.59	8.65	8.97	10.31
OPEC ⁴	6.50	6.99	7.65	7.73	8.20	8.64	9.01	9.44	10.08	10.88
EU ⁵	6.30	5.90	6.12	6.17	6.77	6.75	7.24	7.26	7.54	8.52
IEA ⁶	27.85	28.43	29.13	29.77	30.51	31.24	32.33	33.56	34.13	36.17
Coal (million short tons)										
World Total.....	5,130	5,235	5,324	5,356	5,033	5,052	4,930	5,033	5,144	5,185
OECD ³	2,417	2,425	2,457	2,418	2,257	2,200	2,167	2,225	2,218	2,254
Non OECD.....	2,713	2,811	2,867	2,938	2,776	2,852	2,762	2,808	2,926	2,931
Other Groups.....										
OECD Europe.....	1,169	1,149	1,135	1,048	912	849	869	833	809	806
OPEC ⁴	5	7	13	16	19	30	37	39	52	58
EU ⁵	798	788	780	739	610	556	503	454	433	431
IEA ⁶	2,062	2,073	2,129	2,136	1,985	1,944	1,837	1,888	1,887	1,926
Hydroelectric Power (billion kilowatthours)										
World Total.....	2,027.9	2,106.4	2,089.6	2,173.6	2,213.2	2,215.2	2,348.4	2,348.9	2,486.7	2,530.2
OECD ³	1,144.4	1,168.0	1,137.4	1,177.8	1,190.4	1,178.2	1,249.4	1,198.9	1,284.3	1,317.2
Non OECD.....	883.5	938.4	952.2	995.8	1,022.8	1,037.0	1,099.0	1,150.1	1,202.4	1,212.9
Other Groups.....										
OECD Europe.....	445.0	487.2	421.0	437.3	435.2	463.6	482.0	481.4	485.3	462.5
OPEC ⁴	48.8	53.4	54.4	57.9	67.4	75.6	75.1	75.5	79.0	81.7
EU ⁵	282.0	306.9	248.5	257.3	264.2	281.4	285.5	292.2	284.6	280.3
IEA ⁶	1,112.8	1,135.0	1,100.4	1,140.7	1,156.1	1,139.5	1,208.0	1,165.1	1,241.1	1,270.3
Nuclear Electric Power (billion kilowatthours)										
World Total.....	1,654.0	1,794.8	1,843.4	1,905.1	1,992.0	2,011.8	2,073.7	2,117.8	2,203.0	2,280.0
OECD ³	1,390.6	1,499.8	1,540.2	1,607.6	1,694.1	1,718.5	1,791.1	1,851.6	1,925.1	1,972.8
Non OECD.....	263.4	295.1	303.3	297.6	297.9	293.3	282.7	266.2	277.8	307.2
Other Groups.....										
OECD Europe.....	636.8	682.9	715.9	716.1	740.4	753.6	793.9	793.3	810.4	849.3
OPEC ⁴	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EU ⁵	605.9	648.8	681.3	680.7	705.7	718.1	746.6	744.5	761.8	799.9
IEA ⁶	1,343.2	1,449.3	1,482.1	1,541.5	1,623.5	1,647.8	1,706.0	1,766.2	1,828.5	1,869.4

See footnotes at end of table.

Table 2.1 World Production of Primary Energy by Selected Country Groups, 1987 - 1996 (Continued)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Geothermal, Solar, and Wind Electric Power (billion kilowatthours) ⁷										
World Total.....	34.0	34.8	79.4	234.5	235.7	249.9	257.0	265.3	268.9	282.4
OECD ³	23.0	23.3	67.7	221.8	222.3	235.8	241.9	248.8	251.7	264.2
Non OECD.....	11.0	11.5	11.6	12.6	13.4	14.2	15.1	16.5	17.2	18.2
Other Groups:										
OECD Europe.....	3.9	4.1	4.3	4.7	5.0	5.9	6.9	8.2	9.2	9.7
OPEC ⁴	0.7	1.0	1.0	1.1	1.0	1.0	1.0	1.5	1.7	1.8
EU ⁵	3.6	3.8	4.0	4.3	4.6	5.7	6.6	7.9	8.8	9.3
IEA ⁶	18.4	18.4	62.8	216.7	216.9	230.0	236.1	243.2	246.0	258.4

¹ Preliminary.

² Data include the production of crude oil, natural gas plant liquids, refinery gain, and other liquid fuels.

³ The Organization for Economic Cooperation and Development (OECD) includes Australia, Austria, Belgium, Canada, Czech Republic, Denmark (including data for Faroe Islands and Greenland), Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, South, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States (including data for Guam, Hawaiian Trade Zone, Puerto Rico, and Virgin Islands, U.S.). Refer to Appendix A for a listing of OECD Europe.

⁴ The Organization of Petroleum Exporting Countries (OPEC) includes Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

⁵ European Union (EU) includes Austria, Belgium, Denmark (including data for Faroe Islands), Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and United Kingdom.

⁶ International Energy Agency (IEA) includes Australia, Austria, Belgium, Canada, Denmark (including data for Faroe Islands and Greenland), Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States (including data for Guam, Hawaiian Trade Zone, Puerto Rico, and Virgin Islands, U.S.).

⁷ Includes biofuels electric power generation for United States and Brazil.

Notes: For consistency data reflect 1996 membership (as of December 31, 1996) for all years. The country groups OECD, OECD Europe, EU, and IEA include unified Germany. Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Sections 3, 4, 5, and 6.

Table 2.2 World Crude Oil Production, 1987 - 1996
(Thousand Barrels per Day)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada ²	1,535	1,616	1,560	1,553	1,548	1,605	1,679	1,746	1,805	1,837
Mexico	2,548	2,512	2,520	2,553	2,680	2,669	2,673	2,685	2,618	2,855
United States	8,349	8,140	7,613	7,355	7,417	7,171	6,847	6,662	6,560	6,465
Total	12,432	12,268	11,693	11,461	11,644	11,446	11,199	11,093	10,982	11,156
Central & South America										
Argentina	428	449	460	483	485	553	594	650	715	756
Bolivia	19	19	20	21	21	21	22	23	28	30
Brazil	566	554	596	631	630	626	643	671	695	795
Chile	30	24	22	20	17	15	14	12	11	9
Colombia	385	378	403	440	419	433	456	450	585	623
Cuba	18	15	15	14	14	16	20	24	26	30
Ecuador	174	302	279	285	299	321	344	365	392	396
Peru	164	141	130	129	115	116	126	128	130	120
Trinidad and Tobago	157	157	154	150	151	137	135	132	131	130
Venezuela	1,752	1,903	1,907	2,137	2,375	2,371	2,450	2,588	2,750	3,053
Other	7	7	9	9	9	11	13	16	18	21
Total	3,700	3,950	3,995	4,318	4,535	4,621	4,817	5,059	5,481	5,963
Western Europe										
Austria	21	23	23	22	26	23	22	21	23	21
Denmark	97	99	117	121	143	163	174	185	186	208
France	65	67	65	61	59	58	55	56	50	43
Germany	--	--	--	--	71	63	61	58	59	60
Germany, East	1	1	1	1	--	--	--	--	--	--
Germany, West	74	78	75	71	--	--	--	--	--	--
Greece	24	21	17	15	16	13	11	10	9	8
Italy	67	90	82	87	80	83	83	86	93	101
Netherlands	87	77	64	70	74	53	50	78	66	56
Norway	1,022	1,158	1,554	1,704	1,890	2,229	2,350	2,521	2,768	3,104
Spain	34	30	21	16	22	22	18	17	13	15
Sweden	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Turkey	51	50	56	73	88	84	76	72	67	67
United Kingdom	2,406	2,232	1,802	1,820	1,797	1,825	1,915	2,375	2,489	2,568
Former Yugoslavia	79	75	70	64	60	--	--	--	--	--
Croatia	--	--	--	--	--	36	36	39	32	30
Serbia and Montenegro	--	--	--	--	--	23	23	24	22	22
Slovenia	--	--	--	--	--	0	(s)	(s)	(s)	(s)
Total	4,028	4,001	3,947	4,125	4,326	4,676	4,873	5,543	5,878	6,304
Eastern Europe & Former U.S.S.R.										
Albania	54	44	47	30	19	11	11	12	10	10
Bulgaria	6	4	5	4	1	1	1	1	1	1
Former Czechoslovakia	3	3	3	2	3	2	--	--	--	--
Czech Republic	--	--	--	--	--	--	2	2	3	4
Slovakia	--	--	--	--	--	--	1	1	1	2
Hungary	35	39	36	40	34	33	34	39	35	32
Poland	3	3	3	2	3	3	5	5	5	5
Romania	215	193	180	163	140	136	133	138	135	135
Former U.S.S.R.	12,050	12,053	11,715	10,975	9,992	--	--	--	--	--
Azerbaijan	--	--	--	--	--	213	200	184	175	176
Belarus	--	--	--	--	--	40	40	40	38	36
Georgia	--	--	--	--	--	3	2	2	1	1
Kazakhstan	--	--	--	--	--	444	408	352	362	403
Kyrgyzstan	--	--	--	--	--	2	2	2	2	2
Lithuania	--	--	--	--	--	0	2	3	3	3
Russia	--	--	--	--	--	7,632	6,730	6,135	5,995	5,850
Tajikistan	--	--	--	--	--	1	1	(s)	1	2
Turkmenistan	--	--	--	--	--	98	79	77	70	76
Ukraine	--	--	--	--	--	72	66	64	65	66
Uzbekistan	--	--	--	--	--	36	47	75	115	115
Total	12,366	12,339	11,989	11,216	10,191	8,727	7,764	7,131	7,018	6,918

See footnotes at end of table.

Table 2.2 World Crude Oil Production, 1987 - 1996 (Continued)

(Thousand Barrels per Day)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Middle East										
Bahrain.....	42	43	43	42	38	37	41	41	41	35
Iran.....	2,298	2,240	2,810	3,088	3,312	3,429	3,540	3,618	3,643	3,686
Iraq.....	2,079	2,685	2,897	2,040	305	425	512	553	560	579
Israel.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Jordan.....	1	1	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Kuwait.....	1,585	1,492	1,783	1,175	190	1,058	1,852	2,025	2,057	2,062
Oman.....	582	617	641	685	700	740	776	810	851	883
Qatar.....	293	346	380	406	395	423	413	415	442	510
Saudi Arabia.....	4,265	5,086	5,064	6,410	8,115	8,332	8,198	8,120	8,231	8,218
Syria.....	230	265	340	388	492	481	554	560	575	604
United Arab Emirates.....	1,541	1,565	1,860	2,117	2,386	2,266	2,159	2,193	2,233	2,278
Yemen.....	20	173	194	193	197	182	220	335	345	340
Total.....	12,936	14,513	16,013	16,545	16,130	17,373	18,265	18,669	18,979	19,195
Africa										
Algeria.....	1,048	1,040	1,095	1,175	1,230	1,214	1,162	1,180	1,202	1,242
Angola.....	360	452	455	475	500	526	509	536	646	709
Benin.....	7	5	4	4	4	6	6	6	3	2
Cameroon.....	174	163	170	161	153	140	127	108	100	93
Congo (Brazzaville).....	123	144	164	165	156	174	181	180	188	210
Congo (Kinshasa).....	32	30	28	29	28	26	25	26	30	30
Cote d'Ivoire (Ivory Coast).....	18	12	2	2	2	2	1	7	8	16
Egypt.....	896	848	865	873	874	881	890	896	920	922
Equatorial Guinea.....	0	0	0	0	(s)	2	5	5	5	20
Gabon.....	155	159	208	270	294	298	313	329	365	368
Ghana.....	0	0	0	0	0	1	2	1	4	6
Libya.....	972	1,175	1,150	1,375	1,483	1,433	1,361	1,378	1,390	1,401
Morocco.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Nigeria.....	1,341	1,450	1,716	1,810	1,892	1,943	1,960	1,931	1,993	2,188
Sudan.....	0	0	0	0	0	(s)	(s)	(s)	(s)	12
Tunisia.....	106	103	105	93	104	109	98	92	89	87
Total.....	5,232	5,581	5,962	6,432	6,721	6,755	6,638	6,674	6,943	7,305
Far East & Oceania										
Australia.....	547	538	490	575	545	535	503	536	562	570
Bangladesh.....	1	1	1	1	1	1	1	1	1	1
Brunei.....	139	137	132	150	161	165	165	167	163	155
Burma.....	17	13	15	13	15	14	15	15	16	15
China.....	2,690	2,730	2,757	2,774	2,835	2,845	2,890	2,939	2,990	3,131
India.....	609	635	700	660	615	561	534	590	703	651
Indonesia.....	1,343	1,342	1,409	1,462	1,592	1,504	1,511	1,510	1,503	1,547
Japan.....	12	12	11	11	15	17	12	11	11	12
Malaysia.....	497	540	585	619	646	653	640	645	682	695
New Zealand.....	28	33	38	40	41	38	41	39	32	37
Pakistan.....	42	45	48	62	62	61	60	55	57	55
Papua New Guinea.....	0	0	0	0	(s)	53	126	110	100	103
Philippines.....	6	6	5	5	3	8	9	6	3	2
Taiwan.....	3	2	2	3	2	2	1	1	1	1
Thailand.....	33	36	40	44	46	51	52	56	51	61
Vietnam.....	5	15	32	50	80	106	120	141	173	175
Total.....	5,972	6,085	6,264	6,468	6,660	6,614	6,682	6,824	7,050	7,212
World Total.....	56,666	58,737	59,863	60,566	60,207	60,212	60,238	60,992	62,331	64,054

¹ Preliminary.

² Includes oil processed from Athabasca Tar Sands.

-- Not applicable.

(s) = Value less than 500 barrels per day.

Notes: Sum of components may not equal total due to independent rounding. Crude oil includes lease condensate.

Sources: See sources at the end of Section 3.

Table 2.3 World Natural Gas Plant Liquids Production, 1987 - 1996
(Thousand Barrels per Day)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	367	381	410	426	431	460	506	529	581	596
Mexico.....	338	370	384	428	457	454	459	461	447	423
United States.....	1,595	1,625	1,546	1,559	1,659	1,697	1,736	1,727	1,762	1,830
Total.....	2,300	2,376	2,340	2,413	2,548	2,611	2,701	2,717	2,789	2,849
Central & South America										
Argentina.....	36	35	27	27	30	30	35	44	42	44
Bolivia.....	4	5	5	5	5	7	7	7	6	7
Brazil.....	25	25	22	20	22	25	25	35	40	35
Chile.....	10	10	10	12	11	11	12	12	13	12
Colombia.....	6	4	8	8	6	6	5	5	8	8
Cuba.....	2	2	2	2	2	2	2	2	2	2
Ecuador.....	2	2	2	2	2	3	9	9	9	9
Peru.....	1	1	(s)	1	1	1	1	1	1	1
Trinidad and Tobago.....	0	0	0	0	3	5	(s)	(s)	(s)	(s)
Venezuela.....	94	98	108	114	117	113	143	146	149	150
Total.....	180	182	184	191	199	203	239	262	270	268
Western Europe										
Austria.....	1	1	1	1	1	1	1	1	1	1
France.....	12	12	12	11	10	13	13	13	12	12
Greece.....	2	2	2	2	1	1	1	1	1	1
Italy.....	1	1	1	1	1	1	1	1	1	1
Netherlands.....	11	11	13	14	10	13	16	25	21	25
Norway.....	55	75	74	78	94	95	100	103	137	138
Spain.....	6	7	9	11	11	9	6	4	4	5
United Kingdom.....	162	159	140	108	141	160	169	218	267	259
Former Yugoslavia.....	11	11	8	10	8	--	--	--	--	--
Croatia.....	--	--	--	--	--	6	7	7	8	6
Total.....	260	279	260	236	277	299	313	373	450	448
Eastern Europe & Former U.S.S.R.										
Former Czechoslovakia.....	(s)	(s)	(s)	(s)	(s)	(s)	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	(s)	(s)	(s)	(s)
Hungary.....	22	23	15	15	13	13	11	11	11	10
Poland.....	1	1	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Romania.....	15	13	13	8	8	7	4	4	6	7
Former U.S.S.R.....	430	450	425	425	420	--	--	--	--	--
Azerbaijan.....	--	--	--	--	--	9	8	8	7	6
Kazakhstan.....	--	--	--	--	--	86	82	63	52	54
Kyrgyzstan.....	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Russia.....	--	--	--	--	--	230	220	200	180	185
Tajikistan.....	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Turkmenistan.....	--	--	--	--	--	12	11	8	11	12
Ukraine.....	--	--	--	--	--	23	21	21	20	15
Uzbekistan.....	--	--	--	--	--	30	38	40	45	50
Total.....	468	487	453	448	441	411	395	355	332	339
Middle East										
Bahrain.....	9	9	8	5	5	7	12	13	10	10
Iran.....	20	20	27	35	50	50	55	55	60	60
Iraq.....	10	20	54	30	0	(s)	15	20	25	20
Kuwait.....	95	100	105	65	0	34	53	85	95	85
Oman.....	6	6	10	10	8	6	5	6	10	10
Qatar.....	24	30	24	40	50	55	55	50	55	50
Saudi Arabia.....	418	499	503	620	680	713	704	698	701	697
Syria.....	1	1	2	2	2	2	8	8	9	8
United Arab Emirates.....	145	130	130	135	146	144	146	150	160	160
Total.....	728	815	863	942	941	1,011	1,053	1,085	1,125	1,100

See footnotes at end of table.

Table 2.3 World Natural Gas Plant Liquids Production, 1987 - 1996 (Continued)
(Thousand Barrels per Day)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Africa										
Algeria.....	140	120	130	130	140	140	145	140	145	150
Egypt.....	25	35	45	40	45	45	55	58	60	65
Libya.....	30	30	35	35	40	40	41	41	40	49
South Africa.....	0	0	0	0	0	2	11	11	11	11
Tunisia.....	3	5	5	5	5	5	4	4	1	1
Total.....	198	190	215	210	230	232	256	254	257	276
Far East & Oceania ²										
Australia.....	65	67	65	63	61	56	55	56	52	62
Bangladesh.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Brunei.....	11	11	10	10	10	12	13	13	13	11
Burma.....	0	1	1	1	1	1	1	1	1	1
India.....	7	9	10	10	10	28	30	45	47	80
Indonesia.....	30	30	72	77	76	75	78	80	76	80
Japan.....	(s)	(s)	(s)	(s)	(s)	(s)	4	4	4	4
Malaysia.....	11	11	11	12	12	13	17	17	20	20
New Zealand.....	3	4	4	4	5	5	5	5	5	5
Pakistan.....	(s)	(s)	(s)	(s)	2	3	2	3	5	3
Taiwan.....	2	2	2	1	1	1	1	1	1	1
Thailand.....	14	16	11	13	13	14	15	22	37	35
Total.....	144	152	187	192	192	209	222	247	262	302
World Total.....	4,279	4,481	4,502	4,632	4,827	4,975	5,181	5,293	5,485	5,582

¹ Preliminary.

² Does not include China for which data are unavailable.

-- Not applicable.

(s) = Value less than 500 barrels per day.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Section 3.

Table 2.4 World Dry Natural Gas Production, 1987 - 1996
(Trillion Cubic Feet)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	3.10	3.57	3.80	3.85	4.06	4.52	4.91	5.26	5.64	5.85
Mexico.....	0.86	0.92	0.93	0.94	0.94	0.92	0.90	0.91	0.94	0.99
United States.....	16.62	17.10	17.31	17.81	17.70	17.84	18.10	18.82	18.60	19.02
Total.....	20.59	21.60	22.03	22.60	22.69	23.28	23.90	25.00	25.18	25.86
Central & South America										
Argentina.....	0.53	0.63	0.72	0.63	0.70	0.71	0.76	0.79	0.88	1.02
Barbados.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Bolivia.....	0.09	0.10	0.11	0.11	0.10	0.11	0.10	0.10	0.11	0.11
Brazil.....	0.10	0.10	0.12	0.10	0.12	0.13	0.15	0.15	0.16	0.20
Chile.....	0.03	0.04	0.06	0.07	0.05	0.06	0.06	0.07	0.07	0.06
Colombia.....	0.14	0.15	0.15	0.15	0.16	0.15	0.16	0.16	0.16	0.18
Cuba.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Ecuador.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Peru.....	0.05	0.04	0.04	0.02	0.02	0.02	0.03	0.03	0.03	0.03
Trinidad and Tobago.....	0.14	0.15	0.16	0.18	0.20	0.19	0.22	0.25	0.27	0.30
Venezuela.....	0.66	0.66	0.77	0.76	0.79	0.76	0.81	0.88	0.89	0.96
Total.....	1.74	1.87	2.13	2.01	2.15	2.14	2.30	2.44	2.58	2.89
Western Europe										
Austria.....	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Belgium.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.00	(s)
Denmark.....	0.09	0.09	0.11	0.11	0.14	0.15	0.16	0.17	0.19	0.23
France.....	0.13	0.11	0.11	0.10	0.11	0.11	0.12	0.12	0.12	0.09
Germany.....	--	--	--	--	0.67	0.68	0.68	0.67	0.71	0.78
Germany, East.....	0.29	0.31	0.28	0.14	--	--	--	--	--	--
Germany, West.....	0.63	0.59	0.58	0.58	--	--	--	--	--	--
Greece.....	(s)	(s)	(s)	0.01	(s)	(s)	(s)	(s)	(s)	(s)
Ireland.....	0.06	0.07	0.08	0.08	0.08	0.08	0.09	0.10	0.10	0.10
Italy.....	0.58	0.59	0.60	0.61	0.61	0.64	0.69	0.73	0.72	0.71
Netherlands.....	2.77	2.45	2.67	2.69	3.04	3.06	3.11	2.95	2.97	3.37
Norway.....	1.06	1.05	1.09	0.98	0.97	1.04	0.97	1.04	1.08	1.45
Spain.....	0.03	0.03	0.06	0.05	0.05	0.04	0.02	0.01	0.01	0.02
Switzerland.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.00	0.00
Turkey.....	0.01	(s)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
United Kingdom.....	1.68	1.62	1.58	1.75	2.01	1.93	2.31	2.47	2.67	3.17
Former Yugoslavia.....	0.08	0.11	0.10	0.09	0.09	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	(s)	0.00	0.00	0.03	0.03
Croatia.....	--	--	--	--	--	0.06	0.07	0.06	0.07	0.06
Serbia and Montenegro.....	--	--	--	--	--	0.03	0.03	0.03	0.03	0.02
Slovenia.....	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Total.....	7.44	7.07	7.32	7.24	7.83	7.89	8.32	8.40	8.75	10.08

See footnotes at end of table.

Table 2.4 World Dry Natural Gas Production, 1987 - 1996 (Continued)
(Trillion Cubic Feet)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	0.02	0.02	0.02	0.01	0.01	(s)	(s)	(s)	(s)	(s)
Bulgaria.....	(s)	(s)	(s)	0.00	0.00	(s)	(s)	(s)	(s)	(s)
Former Czechoslovakia.....	0.02	0.03	0.03	0.03	0.02	0.01	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	0.01	0.01	0.01	0.01
Slovakia.....	--	--	--	--	--	--	0.01	0.01	0.01	0.01
Hungary.....	0.22	0.22	0.22	0.17	0.18	0.18	0.19	0.17	0.17	0.16
Poland.....	0.20	0.20	0.19	0.14	0.15	0.14	0.18	0.16	0.17	0.17
Romania.....	1.32	1.28	1.13	1.00	0.88	0.78	0.75	0.69	0.68	0.63
Former U.S.S.R.....	25.36	27.19	28.11	28.78	28.62	--	--	--	--	--
Azerbaijan.....	--	--	--	--	--	0.28	0.24	0.23	0.23	0.24
Belarus.....	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01
Georgia.....	--	--	--	--	--	(s)	0.00	0.00	0.00	0.00
Kazakhstan.....	--	--	--	--	--	0.29	0.24	0.16	0.17	0.15
Kyrgyzstan.....	--	--	--	--	--	(s)	0.00	(s)	(s)	(s)
Russia.....	--	--	--	--	--	22.62	21.81	21.45	21.01	21.23
Tajikistan.....	--	--	--	--	--	(s)	0.00	(s)	(s)	(s)
Turkmenistan.....	--	--	--	--	--	2.02	2.29	1.26	1.14	1.31
Ukraine.....	--	--	--	--	--	0.74	0.68	0.64	0.62	0.64
Uzbekistan.....	--	--	--	--	--	1.51	1.59	1.67	1.70	1.70
Total.....	27.14	28.95	29.70	30.13	29.85	28.58	27.99	26.47	25.93	26.27
Middle East										
Bahrain.....	0.22	0.18	0.19	0.21	0.23	0.19	0.23	0.23	0.23	0.24
Iran.....	0.56	0.71	0.78	0.84	0.92	0.88	0.96	1.12	1.25	1.38
Iraq.....	0.13	0.20	0.22	0.15	0.04	0.10	0.09	0.11	0.11	0.11
Israel.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Jordan.....	0.00	0.00	(s)	(s)	(s)	0.01	0.01	0.01	0.01	0.01
Kuwait.....	0.19	0.23	0.29	0.19	0.02	0.09	0.19	0.21	0.21	0.21
Oman.....	0.08	0.07	0.10	0.10	0.12	0.12	0.14	0.15	0.15	0.15
Qatar.....	0.20	0.21	0.22	0.28	0.33	0.40	0.48	0.48	0.48	0.48
Saudi Arabia.....	0.95	1.03	1.05	1.08	1.13	1.20	1.27	1.33	1.34	1.46
Syria.....	0.02	0.02	0.04	0.10	0.12	0.13	0.13	0.13	0.10	0.10
United Arab Emirates.....	0.68	0.66	0.81	0.78	0.92	1.02	0.94	0.91	1.11	1.28
Total.....	3.03	3.31	3.69	3.72	3.84	4.14	4.43	4.69	4.99	5.43
Africa										
Algeria.....	1.52	1.63	1.71	1.79	1.93	1.97	1.90	1.81	2.05	2.19
Angola.....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Congo (Brazzaville).....	(s)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cote d'Ivoire (Ivory Coast).....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(s)	0.01
Egypt.....	0.22	0.24	0.27	0.29	0.32	0.35	0.40	0.42	0.44	0.47
Gabon.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Libya.....	0.19	0.19	0.21	0.22	0.23	0.24	0.22	0.23	0.22	0.23
Morocco.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Nigeria.....	0.13	0.13	0.17	0.13	0.17	0.17	0.18	0.16	0.18	0.19
Senegal.....	0.00	0.00	0.00	0.00	0.00	0.00	(s)	(s)	(s)	(s)
South Africa.....	0.00	0.00	0.00	0.00	0.00	(s)	0.06	0.07	0.07	0.07
Tunisia.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.03
Total.....	2.10	2.24	2.39	2.46	2.69	2.77	2.81	2.72	3.01	3.21

See footnotes at end of table.

Table 2.4 World Dry Natural Gas Production, 1987 - 1996 (Continued)
(Trillion Cubic Feet)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Far East & Oceania										
Afghanistan.....	0.10	0.11	0.10	0.10	0.01	0.01	0.01	0.01	0.01	0.01
Australia.....	0.53	0.56	0.57	0.72	0.75	0.82	0.86	0.92	1.03	1.06
Bangladesh.....	0.13	0.15	0.16	0.16	0.17	0.21	0.22	0.23	0.26	0.27
Brunei.....	0.31	0.30	0.31	0.32	0.28	0.29	0.29	0.30	0.33	0.33
Burma.....	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.06	0.06
China.....	0.49	0.49	0.51	0.51	0.53	0.53	0.56	0.59	0.60	0.67
India.....	0.23	0.31	0.32	0.40	0.45	0.48	0.53	0.59	0.63	0.70
Indonesia.....	1.29	1.34	1.42	1.53	1.72	1.79	1.97	2.21	2.24	2.38
Japan.....	0.08	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08
Malaysia.....	0.55	0.58	0.61	0.65	0.75	0.80	0.88	0.92	1.02	1.30
New Zealand.....	0.15	0.17	0.17	0.17	0.19	0.20	0.18	0.17	0.16	0.19
Pakistan.....	0.42	0.44	0.47	0.48	0.53	0.55	0.58	0.63	0.65	0.70
Papua New Guinea.....	0.00	0.00	0.00	0.00	0.00	(s)	(s)	(s)	(s)	(s)
Philippines.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(s)	(s)
Taiwan.....	0.04	0.02	0.05	0.08	0.03	0.03	0.03	0.03	0.03	0.03
Thailand.....	0.13	0.19	0.18	0.21	0.24	0.25	0.31	0.34	0.37	0.43
Vietnam.....	(s)	(s)	(s)	(s)	(s)	0.01	0.01	0.01	0.03	0.03
Total.....	4.50	4.78	4.98	5.44	5.76	6.07	6.55	7.09	7.49	8.22
World Total.....	66.54	69.81	72.25	73.61	74.81	74.87	76.30	76.80	77.92	81.96

¹ Preliminary.

-- Not applicable.

(s) = Value less than 5 billion cubic feet.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Section 4.

Table 2.5 World Coal Production, 1987 - 1996

(Million Short Tons)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	67.47	77.87	77.73	75.35	78.41	72.32	76.09	80.27	82.71	83.57
Mexico.....	8.85	7.90	8.49	6.66	6.06	6.73	7.84	9.81	9.80	10.10
United States.....	918.76	950.26	980.73	1,029.08	995.98	997.54	945.42	1,033.50	1,032.97	1,063.86
Total.....	995.09	1,036.04	1,066.95	1,111.09	1,080.45	1,076.60	1,029.35	1,123.59	1,125.48	1,157.52
Central & South America										
Argentina.....	0.41	0.56	0.57	0.30	0.32	0.24	0.18	0.38	0.34	0.34
Brazil.....	7.59	8.08	7.35	5.07	5.72	5.22	5.07	4.91	4.58	4.73
Chile.....	1.77	2.16	2.19	2.45	2.48	1.86	1.54	1.35	1.15	1.23
Colombia.....	14.84	16.61	20.21	22.56	26.01	26.21	23.93	24.83	28.68	33.14
Peru.....	0.11	0.20	0.20	0.11	0.07	0.10	0.11	0.14	0.16	0.18
Venezuela.....	0.26	1.18	2.35	2.41	2.82	3.39	4.29	5.23	5.11	3.84
Total.....	24.98	28.80	32.87	32.90	37.42	37.00	35.12	36.84	40.02	43.47
Western Europe										
Austria.....	3.07	2.35	2.28	2.70	2.29	1.95	1.86	1.53	1.23	1.22
Belgium.....	7.39	3.54	2.80	2.69	2.32	1.32	1.07	0.83	0.70	0.63
France.....	20.23	16.03	15.94	15.47	14.45	13.26	11.95	10.48	9.24	9.54
Germany.....	--	--	--	--	388.37	346.09	315.23	291.78	274.15	264.25
Germany, East.....	340.59	342.06	331.86	308.65	--	--	--	--	--	--
Germany, West.....	213.56	209.85	208.86	205.06	--	--	--	--	--	--
Greece.....	49.18	53.27	57.17	57.21	58.09	60.68	60.44	62.55	63.66	65.58
Ireland.....	0.05	0.05	0.05	0.03	(s)	(s)	(s)	(s)	(s)	(s)
Italy.....	1.07	1.15	1.18	1.12	1.06	0.80	0.69	0.30	0.42	0.34
Norway.....	0.44	0.29	0.40	0.33	0.36	0.40	0.30	0.33	0.32	0.27
Portugal.....	0.29	0.25	0.28	0.31	0.30	0.24	0.22	0.16	0.16	0.15
Spain.....	47.31	45.07	48.43	39.63	37.00	36.90	34.81	32.67	31.28	33.07
Sweden.....	0.03	0.03	0.02	0.01	0.03	0.04	(s)	(s)	0.00	0.00
Turkey.....	51.61	43.20	57.57	52.28	50.83	56.69	53.53	59.93	60.63	62.50
United Kingdom.....	115.08	114.75	111.44	105.98	106.57	94.88	76.30	53.99	52.36	55.88
Former Yugoslavia.....	78.77	80.00	82.23	83.61	78.04	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	6.92	5.54	3.24	3.13	2.61
Croatia.....	--	--	--	--	--	0.15	0.24	0.22	0.20	0.15
Macedonia, TFYR.....	--	--	--	--	--	7.14	7.63	7.56	3.02	2.97
Serbia and Montenegro.....	--	--	--	--	--	46.64	40.65	40.30	44.17	42.50
Slovenia.....	--	--	--	--	--	6.12	5.64	5.35	5.38	5.31
Total.....	928.67	911.89	920.53	875.08	739.71	680.23	616.13	571.23	550.05	546.97
Eastern Europe & Former U.S.S.R.										
Albania.....	2.35	2.41	2.42	2.28	1.20	0.40	0.24	0.19	0.13	0.13
Bulgaria.....	40.59	37.64	37.81	34.92	31.36	33.44	32.00	31.73	31.19	31.78
Former Czechoslovakia.....	140.84	138.31	131.86	117.49	109.27	101.90	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	77.17	82.14	78.61	76.78
Slovakia.....	--	--	--	--	--	--	3.57	3.26	2.94	2.80
Hungary.....	25.18	23.01	22.08	19.38	18.71	17.45	16.10	15.54	15.20	16.60
Poland.....	293.44	293.77	274.97	237.35	231.25	218.78	218.90	221.24	221.25	219.48
Romania.....	56.81	64.81	68.55	42.09	35.72	42.18	42.80	45.33	43.92	45.06
Former U.S.S.R.....	837.58	851.31	816.07	881.84	701.66	--	--	--	--	--
Estonia.....	--	--	--	--	--	20.78	16.44	16.02	14.67	12.22
Georgia.....	--	--	--	--	--	0.42	0.03	0.05	0.06	0.09
Kazakhstan.....	--	--	--	--	--	139.50	123.67	115.08	91.71	84.38
Kyrgyzstan.....	--	--	--	--	--	3.53	3.09	2.65	1.76	1.43
Moldova.....	--	--	--	--	--	0.29	0.20	0.12	0.04	0.04
Russia.....	--	--	--	--	--	405.85	364.03	320.34	310.03	301.97
Tajikistan.....	--	--	--	--	--	0.29	0.20	0.12	0.04	0.03
Ukraine.....	--	--	--	--	--	147.25	127.55	104.17	92.15	77.41
Uzbekistan.....	--	--	--	--	--	5.19	4.19	4.23	3.41	3.41
Total.....	1,396.79	1,411.25	1,353.75	1,335.34	1,129.16	1,137.25	1,030.18	962.21	907.10	873.60

See footnotes at end of table.

Table 2.5 World Coal Production, 1987 - 1996 (Continued)

(Million Short Tons)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Middle East										
Iran.....	1.37	1.39	1.32	1.21	1.09	1.07	1.07	1.08	1.10	1.10
Total.....	1.37	1.39	1.32	1.21	1.09	1.07	1.07	1.08	1.10	1.10
Africa										
Algeria.....	0.01	0.01	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02
Botswana.....	0.64	0.67	0.70	0.88	0.88	0.89	0.88	0.92	0.96	0.94
Cameroon.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Congo (Kinshasa).....	0.13	0.17	0.12	0.09	0.09	0.09	0.10	0.11	0.10	0.10
Malawi.....	0.02	0.03	0.04	0.04	0.06	0.05	0.06	0.06	0.06	0.06
Morocco.....	0.70	0.70	0.56	0.58	0.61	0.63	0.67	0.69	0.72	0.72
Mozambique.....	0.05	0.05	0.05	0.04	0.05	0.04	0.04	0.04	0.04	0.04
Niger.....	0.18	0.17	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Nigeria.....	0.13	0.09	0.09	0.08	0.15	0.10	0.05	0.06	0.06	0.05
South Africa.....	194.62	199.92	194.47	193.18	196.43	202.88	207.47	215.84	227.31	227.48
Swaziland.....	0.18	0.18	0.18	0.18	0.14	0.11	0.06	0.06	0.06	0.06
Tanzania.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.01	0.01
Zambia.....	0.51	0.69	0.44	0.42	0.42	0.44	0.44	0.46	0.40	0.41
Zimbabwe.....	5.34	5.58	5.63	5.47	6.17	6.11	5.80	6.08	2.34	2.42
Total.....	202.51	208.27	202.48	201.16	205.20	211.56	215.78	224.53	232.26	232.50
Far East & Oceania										
Afghanistan.....	0.18	0.15	0.14	0.12	0.10	0.01	0.01	0.01	0.01	0.01
Australia.....	208.91	196.44	216.13	225.78	235.93	248.96	247.58	248.46	266.55	274.01
Bhutan.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Burma.....	0.08	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09
China.....	1,022.90	1,080.12	1,161.95	1,190.36	1,198.66	1,228.58	1,303.53	1,403.50	1,536.97	1,549.77
India.....	208.63	214.51	221.44	233.39	252.74	270.25	281.23	291.41	301.30	310.85
Indonesia.....	3.55	4.64	9.25	11.87	15.12	25.40	31.95	32.67	45.36	53.34
Japan.....	14.53	13.78	12.55	11.33	9.59	8.64	7.95	8.11	7.12	7.36
Korea, North.....	62.28	66.14	69.11	71.32	72.75	73.85	77.71	77.71	78.07	80.95
Korea, South.....	26.76	26.78	22.91	18.98	16.60	13.19	10.41	8.20	6.31	5.46
Laos.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Malaysia.....	0.10	0.10	0.12	0.12	0.20	0.08	0.42	0.15	0.12	0.13
Mongolia.....	9.36	10.38	9.69	9.51	9.37	8.31	8.18	8.38	8.42	8.80
Nepal.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
New Zealand.....	2.84	2.82	3.18	2.95	3.09	3.44	3.59	3.46	3.66	3.50
Pakistan.....	2.38	3.01	2.89	3.03	3.18	3.39	3.39	3.54	3.32	3.80
Philippines.....	1.32	1.48	1.36	1.37	1.39	1.83	1.85	1.89	1.90	1.97
Taiwan.....	1.65	1.35	0.86	0.52	0.44	0.37	0.36	0.31	0.26	0.16
Thailand.....	7.61	8.02	9.82	13.71	16.22	16.93	17.14	18.84	20.31	21.06
Vietnam.....	7.52	7.67	4.22	5.10	4.77	5.28	6.50	6.65	8.21	8.52
Total.....	1,580.62	1,637.46	1,745.72	1,799.56	1,840.27	1,908.61	2,001.90	2,113.41	2,287.97	2,329.79
World Total.....	5,130.02	5,235.10	5,323.62	5,356.34	5,033.29	5,052.32	4,929.53	5,032.89	5,143.98	5,184.95

¹ Preliminary.

-- Not applicable.

(s) = Value less than 5 thousand short tons.

Notes: Sum of components may not equal total due to independent rounding.

Coal includes anthracite, subanthracite, bituminous, subbituminous, lignite, and brown coal.

Sources: See sources at the end of Section 5.

Table 2.6 World Net Hydroelectric Power Generation, 1987 - 1996
(Billion Kilowatthours)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	313.2	303.5	287.6	293.9	305.3	313.2	320.3	324.7	330.7	349.2
Mexico.....	18.2	21.0	24.4	23.2	21.6	25.9	26.0	19.8	27.3	31.1
United States. ²	252.9	226.1	272.5	291.3	288.0	253.1	280.5	260.2	311.0	348.3
Total.....	584.3	550.5	584.5	608.4	614.9	592.2	626.8	604.8	668.9	728.7
Central & South America										
Argentina.....	29.7	21.8	15.2	20.3	19.1	23.2	28.9	33.3	33.4	28.6
Bolivia.....	1.1	1.2	1.2	1.2	1.4	1.3	1.4	1.4	1.7	1.8
Brazil.....	183.7	197.1	202.6	204.6	215.6	221.1	232.7	240.3	251.4	263.1
Chile.....	12.0	11.4	9.5	11.9	13.0	16.6	17.4	16.8	18.2	20.8
Colombia.....	21.3	24.3	26.4	27.2	27.2	22.2	27.7	32.0	33.9	43.4
Costa Rica.....	3.0	3.0	3.3	3.5	3.6	3.5	3.9	3.5	3.6	3.6
Dominican Republic.....	0.9	0.8	0.6	0.4	0.6	2.2	1.8	1.9	2.0	2.0
Ecuador.....	4.5	4.7	4.9	4.9	5.0	4.9	5.8	6.3	6.7	7.0
El Salvador.....	1.1	1.3	1.4	1.7	1.3	1.4	1.8	1.9	2.0	2.2
Guatemala.....	1.7	1.8	2.1	2.1	2.1	2.1	1.9	2.0	2.1	2.2
Haiti.....	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Honduras.....	1.1	1.7	1.8	2.1	2.1	2.1	2.2	2.3	2.4	2.4
Jamaica.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Nicaragua.....	0.4	0.4	0.5	0.4	0.3	0.3	0.3	0.3	0.3	0.4
Panama.....	2.0	2.2	2.2	2.2	2.0	1.9	2.3	2.4	2.4	2.5
Paraguay.....	18.4	19.9	24.2	26.9	29.1	26.8	31.1	36.0	41.2	45.0
Peru.....	10.8	10.3	10.3	10.4	11.4	9.7	11.7	12.6	13.6	13.1
Puerto Rico.....	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Suriname.....	0.3	0.5	1.1	1.2	1.2	1.3	1.3	1.3	1.3	1.3
Uruguay.....	7.2	5.4	3.9	6.9	6.1	7.8	7.2	7.4	7.4	7.5
Venezuela.....	30.5	33.9	34.3	36.6	44.0	46.6	47.0	50.9	55.0	58.0
Other.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
Total.....	330.8	342.6	346.3	365.2	385.9	395.8	427.1	453.2	479.5	505.6
Western Europe										
Austria.....	25.4	35.2	34.6	31.2	31.1	34.5	36.3	35.3	36.7	34.1
Belgium.....	0.4	0.4	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.2
Finland.....	13.7	13.2	12.9	10.8	13.1	15.0	13.3	11.7	12.8	11.7
France.....	68.6	74.0	45.7	52.8	56.3	67.2	63.1	76.5	70.6	62.1
Germany.....	--	--	--	--	14.5	17.1	17.5	18.3	19.6	18.0
Germany, East.....	1.7	1.7	1.6	1.4	--	--	--	--	--	--
Germany, West.....	18.4	18.1	16.5	15.8	--	--	--	--	--	--
Greece.....	2.8	2.4	1.9	1.8	3.1	2.2	2.3	2.6	3.5	4.3
Iceland.....	3.9	4.2	4.2	4.2	4.2	4.3	4.4	4.5	4.6	4.7
Ireland.....	0.7	0.9	0.7	0.7	0.7	0.8	0.8	0.9	0.7	0.7
Italy.....	39.1	40.2	33.6	31.3	41.8	41.8	41.0	44.2	37.4	41.4
Luxembourg.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	(s)
Norway.....	102.3	107.9	117.4	119.9	109.0	115.5	118.0	110.4	120.1	102.6
Portugal.....	9.0	12.0	5.7	9.1	9.0	4.6	8.5	10.6	8.3	13.7
Spain.....	27.0	34.8	19.0	25.2	27.0	18.7	24.1	27.9	22.9	39.1
Sweden.....	71.0	69.0	70.9	71.8	62.6	73.6	73.9	58.5	66.3	50.7
Switzerland.....	34.3	35.4	29.5	29.5	31.8	32.4	35.4	38.7	34.8	28.9
Turkey.....	18.3	28.4	17.6	22.9	22.5	26.3	33.6	30.3	35.2	40.0
United Kingdom.....	4.1	4.9	4.7	5.1	4.5	5.3	4.2	5.0	5.2	4.0
Former Yugoslavia.....	26.0	25.6	23.3	19.6	18.9	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	3.0	2.0	1.2	1.4	1.5
Croatia.....	--	--	--	--	--	4.3	4.3	4.9	5.2	7.6
Macedonia, TFYR.....	--	--	--	--	--	0.8	0.5	0.7	0.8	1.2
Serbia and Montenegro.....	--	--	--	--	--	11.2	10.0	11.0	11.1	13.2
Slovenia.....	--	--	--	--	--	3.4	3.0	3.4	3.2	3.5
Other.....	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Total.....	466.8	508.5	440.4	453.4	450.5	482.6	496.8	497.2	501.0	483.5

See footnotes at end of table.

Table 2.6 World Net Hydroelectric Power Generation, 1987 - 1996 (Continued)
(Billion Kilowatthours)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	4.1	3.7	3.8	2.8	3.5	3.2	3.3	3.7	4.2	4.9
Bulgaria.....	2.5	2.6	2.7	1.9	2.4	2.0	1.9	1.5	2.3	2.5
Former Czechoslovakia.....	4.9	4.4	4.2	3.9	3.1	3.6	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	1.4	1.4	2.0	1.8
Slovakia.....	--	--	--	--	--	--	3.9	4.6	4.6	5.4
Hungary.....	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Poland.....	4.0	4.2	3.7	3.3	3.4	3.5	3.5	3.7	3.8	3.9
Romania.....	11.1	13.5	12.5	10.9	14.1	11.6	12.6	12.9	16.5	15.6
Former U.S.S.R.....	217.5	228.5	221.0	230.7	232.7	--	--	--	--	--
Armenia.....	--	--	--	--	--	3.0	4.2	3.5	1.9	2.0
Azerbaijan.....	--	--	--	--	--	1.7	2.4	1.8	1.5	1.5
Georgia.....	--	--	--	--	--	6.5	7.0	4.7	4.7	4.8
Kazakhstan.....	--	--	--	--	--	6.8	7.6	9.1	8.2	7.5
Kyrgyzstan.....	--	--	--	--	--	9.2	9.0	11.6	11.0	12.2
Latvia.....	--	--	--	--	--	2.5	2.8	3.3	2.9	2.3
Lithuania.....	--	--	--	--	--	0.3	0.4	0.4	0.4	0.4
Moldova.....	--	--	--	--	--	0.3	0.4	0.3	0.3	0.3
Russia.....	--	--	--	--	--	170.9	172.1	174.2	174.5	153.1
Tajikistan.....	--	--	--	--	--	15.8	16.9	16.2	14.5	13.0
Ukraine.....	--	--	--	--	--	8.0	11.1	12.2	10.1	9.4
Uzbekistan.....	--	--	--	--	--	6.2	7.3	7.1	7.0	6.8
Other.....	0.0	0.0	0.0	0.0	0.0	(s)	(s)	(s)	(s)	(s)
Total.....	244.2	257.0	248.1	253.6	259.3	255.3	267.9	272.4	270.5	247.8
Middle East										
Iran.....	6.3	6.4	6.6	6.0	7.0	9.4	9.7	7.4	7.5	7.5
Iraq.....	0.6	0.7	0.6	0.6	0.3	0.7	0.6	0.6	0.6	0.6
Israel.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Jordan.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Lebanon.....	0.6	0.6	0.5	0.3	0.5	0.5	0.9	1.0	0.7	0.7
Syria.....	2.0	4.8	4.7	5.6	6.2	7.3	6.6	6.7	6.9	7.0
Total.....	9.6	12.5	12.4	12.5	14.0	18.0	17.9	15.7	15.7	15.9
Africa										
Algeria.....	0.5	0.2	0.3	0.1	0.3	0.2	0.3	0.2	0.2	0.2
Angola.....	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4
Cameroon.....	2.3	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.7
Congo (Brazzaville).....	0.3	0.3	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.4
Congo (Kinshasa).....	5.2	5.2	6.8	5.6	5.2	6.0	5.7	5.4	5.9	6.0
Cote d'Ivoire (Ivory Coast).....	1.2	1.2	1.6	1.3	1.2	1.0	1.1	1.1	1.1	1.1
Egypt.....	8.2	7.8	7.9	9.9	8.5	8.5	10.4	10.6	10.7	11.0
Ethiopia.....	0.9	1.0	1.0	1.1	1.1	1.1	1.2	1.1	1.1	1.2
Gabon.....	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Ghana.....	4.6	4.8	5.2	5.7	6.0	6.0	6.1	6.1	6.1	6.1
Kenya.....	1.8	2.3	2.4	2.5	2.7	2.8	3.0	3.0	3.1	3.1
Madagascar.....	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
Malawi.....	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8
Mali.....	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Morocco.....	0.8	0.9	1.1	1.2	1.2	1.0	0.4	0.8	0.6	0.5
Nigeria.....	3.3	4.0	4.1	4.3	5.9	6.0	5.5	5.5	5.4	5.4
Reunion.....	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
South Africa.....	1.6	3.2	2.8	1.0	2.0	0.8	0.1	1.1	0.5	1.3
Sudan.....	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0
Tanzania.....	1.2	1.2	1.4	1.5	1.7	1.8	1.9	1.5	1.5	1.6
Uganda.....	0.6	0.6	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Zambia.....	8.4	8.3	6.7	7.7	7.7	7.7	7.7	7.7	7.8	7.8
Zimbabwe.....	2.5	2.7	2.7	3.5	3.2	3.2	1.7	2.4	2.4	2.4
Other.....	1.3	1.3	1.3	1.1	1.2	1.2	1.2	1.2	1.3	1.3
Total.....	49.0	51.7	53.5	55.3	56.6	55.8	55.0	56.4	56.4	57.7

See footnotes at end of table.

Table 2.6 World Net Hydroelectric Power Generation, 1987 - 1996 (Continued)
(Billion Kilowatthours)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Far East & Oceania										
Afghanistan.....	0.8	0.7	0.8	0.8	0.7	0.5	0.5	0.5	0.4	0.4
Australia.....	13.5	13.4	14.3	14.0	15.7	15.2	16.5	16.2	15.7	14.7
Bangladesh.....	0.5	0.7	0.9	0.9	0.8	0.8	0.6	0.8	0.4	0.3
Bhutan.....	1.2	1.5	1.5	1.5	1.6	1.6	1.6	1.7	1.7	1.7
Burma.....	1.0	0.9	1.1	1.2	1.2	1.5	1.7	1.6	1.5	1.5
Cambodia.....	(s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China.....	99.2	108.0	117.2	125.1	123.8	130.2	149.2	165.1	184.9	181.3
Fiji.....	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
French Polynesia.....	(s)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
India.....	47.0	57.3	61.5	70.9	72.0	69.2	69.8	70.4	70.9	72.0
Indonesia.....	7.6	8.3	8.5	10.1	10.0	12.6	12.0	11.1	10.3	10.0
Japan.....	74.0	89.9	90.8	88.4	96.5	81.7	94.6	66.6	81.4	79.0
Korea, North.....	28.8	31.2	31.4	31.4	31.4	23.8	23.8	23.3	22.8	22.0
Korea, South.....	5.3	3.5	4.5	6.3	5.0	4.8	5.9	4.1	5.4	5.1
Laos.....	0.5	0.5	0.7	0.8	0.9	0.9	0.8	0.9	0.9	0.9
Malaysia.....	4.9	5.6	5.2	3.9	4.4	4.3	4.9	6.5	7.4	8.0
Nepal.....	0.5	0.6	0.5	0.7	0.9	0.9	0.8	0.9	1.0	1.0
New Caledonia.....	0.3	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.3	0.3
New Zealand.....	22.1	23.1	21.9	23.1	22.9	20.4	23.1	25.6	27.3	26.9
Pakistan.....	15.1	16.5	16.8	16.8	18.1	18.5	20.9	19.2	22.6	25.0
Papua New Guinea.....	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Philippines.....	5.2	6.2	6.4	6.0	6.0	6.1	6.2	6.4	6.5	6.5
Samoa.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Sri Lanka.....	2.2	2.6	2.8	3.1	3.1	2.9	3.8	4.0	4.5	4.8
Taiwan.....	7.1	6.1	6.7	8.2	5.5	8.3	6.8	8.8	8.8	8.9
Thailand.....	4.0	3.7	5.5	4.9	4.5	4.2	3.7	4.5	6.6	7.0
U.S. Pacific Islands.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Vietnam.....	1.7	1.8	3.8	5.3	5.6	5.8	8.2	10.1	12.2	12.5
Total.....	343.3	383.6	404.3	425.1	432.0	415.5	456.7	449.3	494.7	491.0
World Total.....	2,027.9	2,106.4	2,089.6	2,173.6	2,213.2	2,215.2	2,348.4	2,348.9	2,486.7	2,530.2

¹ Preliminary.

² There is a discontinuity in this time series between 1988 and 1989; beginning in 1989, pumped storage is removed, and expanded coverage of industrial use of hydroelectric power is included.

--- Not applicable.

(s) = Value less than 50 million kilowatthours.

Notes: Sum of components may not equal total due to independent rounding.

Generation data consist of both utility and nonutility sources. Data are reported as net generation as opposed to gross. Net generation excludes the energy consumed by the generating unit and excludes generation from pumped storage.

Sources: See sources at the end of Section 6.

Table 2.7 World Net Nuclear Electric Power Generation, 1987 - 1996
(Billion Kilowatthours)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	72.9	78.2	75.4	69.2	80.7	76.6	90.1	102.4	93.0	88.1
Mexico.....	0.0	0.0	0.0	2.8	4.0	3.7	4.7	4.0	8.0	7.5
United States.....	455.3	527.0	529.4	577.0	612.6	618.8	610.4	640.5	673.4	674.7
Total.....	528.2	605.1	604.8	649.0	697.4	699.1	705.1	747.0	774.4	770.3
Central & South America										
Argentina.....	6.1	4.8	4.8	7.0	7.7	6.7	7.3	7.8	7.1	6.9
Brazil.....	0.9	0.3	1.5	1.9	1.4	1.7	0.4	0.1	2.4	2.3
Total.....	7.1	5.2	6.3	9.0	9.1	8.4	7.7	7.9	9.5	9.2
Western Europe										
Belgium.....	39.8	40.9	39.1	40.6	40.7	41.3	39.8	38.6	39.3	41.2
Finland.....	18.5	18.4	18.0	18.3	18.5	18.3	18.9	18.5	18.3	18.8
France.....	249.3	260.3	288.7	298.4	314.8	321.5	349.8	342.0	358.4	376.2
Germany.....	--	--	--	--	140.1	150.9	145.8	143.6	146.4	153.5
Germany, East.....	10.7	11.1	11.1	5.3	--	--	--	--	--	--
Germany, West.....	130.5	145.1	140.4	139.8	--	--	--	--	--	--
Italy.....	(s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands.....	3.4	3.5	3.8	3.3	3.2	3.6	3.8	3.8	3.8	4.0
Spain.....	41.3	48.3	53.7	51.6	52.8	53.0	53.3	52.5	52.7	53.5
Sweden.....	64.3	65.6	62.8	64.8	72.9	60.4	58.3	69.5	66.4	71.1
Switzerland.....	20.5	21.5	21.5	22.4	21.7	22.3	22.2	23.1	23.7	23.7
United Kingdom.....	48.2	55.6	63.6	58.7	62.8	69.1	76.9	76.0	76.6	81.5
Former Yugoslavia.....	4.2	3.9	4.5	4.4	4.2	--	--	--	--	--
Slovenia.....	--	--	--	--	--	3.8	3.8	4.3	4.5	4.4
Total.....	630.6	674.2	707.3	707.5	731.6	744.1	772.6	771.9	789.9	828.0
Eastern Europe & Former U.S.S.R.										
Bulgaria.....	11.7	15.1	14.6	13.5	12.4	11.0	13.3	14.6	16.4	17.8
Former Czechoslovakia.....	20.9	21.9	23.2	23.4	22.5	23.3	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	12.0	12.3	11.6	12.2
Slovakia.....	--	--	--	--	--	--	11.6	11.5	10.9	11.3
Hungary.....	10.4	12.7	13.1	13.0	13.0	13.3	13.1	13.3	13.3	13.5
Romania.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9
Former U.S.S.R.....	176.3	203.7	212.7	201.3	201.5	--	--	--	--	--
Armenia.....	--	--	--	--	--	0.0	0.0	0.0	0.0	2.1
Kazakhstan.....	--	--	--	--	--	0.5	0.4	0.4	0.1	0.1
Lithuania.....	--	--	--	--	--	13.9	12.3	7.3	10.6	12.7
Russia.....	--	--	--	--	--	113.6	113.2	92.9	94.3	103.3
Ukraine.....	--	--	--	--	--	70.1	71.4	65.4	67.0	76.0
Total.....	219.3	253.4	263.5	251.3	249.5	245.6	247.3	217.7	224.3	249.8
Africa										
South Africa.....	6.2	10.5	11.1	8.4	9.1	9.3	7.3	9.7	11.3	11.8
Total.....	6.2	10.5	11.1	8.4	9.1	9.3	7.3	9.7	11.3	11.8
Far East & Oceania										
China.....	0.0	0.0	0.0	0.0	0.0	0.5	2.5	13.5	12.4	13.6
India.....	4.7	5.2	3.8	5.6	5.2	6.0	5.9	4.7	6.5	7.4
Japan.....	188.6	173.9	174.5	192.2	202.8	212.1	236.8	255.7	276.7	283.0
Korea, South.....	37.1	37.8	45.0	50.2	53.5	53.7	55.2	55.7	63.7	70.2
Pakistan.....	0.5	0.2	0.1	0.4	0.4	0.5	0.4	0.6	0.5	0.3
Taiwan.....	31.8	29.4	27.1	31.6	33.5	32.5	33.0	33.5	33.9	36.3
Total.....	262.7	246.5	250.5	279.9	295.4	305.3	333.8	363.6	393.6	410.9
World Total.....	1,654.0	1,794.8	1,843.4	1,905.1	1,992.0	2,011.8	2,073.7	2,117.8	2,203.0	2,280.0

¹ Preliminary.

-- Not applicable.

(s) = Value less than 50 million kilowatthours.

Notes: Sum of components may not equal total due to independent rounding.

Generation data consist of both utility and nonutility sources. Data are reported as net generation as opposed to gross. Net generation excludes the energy consumed by the generating unit.

No generation is reported for Middle East.

Sources: See sources at the end of Section 6.

Table 2.8 World Net Geothermal, Solar, and Wind Electric Power Generation, 1987 - 1996

(Billion Kilowatthours)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	(s)	(s)	(s)	(s)	(s)	(s)	0.1	0.1	0.1	0.1
Mexico.....	4.3	4.7	4.7	4.9	5.2	5.5	5.6	5.3	5.4	5.4
United States ²	12.3	12.0	55.6	208.5	208.4	220.4	225.6	231.1	231.9	243.5
Total.....	16.6	16.7	60.3	213.4	213.6	225.9	231.2	236.5	237.4	249.0
Central & South America										
Brazil..... ³	4.8	4.8	4.4	5.2	5.6	6.6	6.7	7.2	7.4	7.8
Costa Rica.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	0.5
El Salvador.....	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.6
Nicaragua.....	0.2	0.2	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Total.....	5.4	5.4	5.2	5.9	6.5	7.4	7.6	8.5	8.8	9.4
Western Europe										
Belgium.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Denmark.....	0.2	0.3	0.4	0.6	0.7	0.9	1.0	1.1	1.1	1.2
France.....	0.6	0.6	0.6	0.5	0.6	0.5	0.5	0.5	0.5	0.6
Germany.....	--	--	--	--	0.2	0.3	0.6	1.7	2.4	2.4
Germany, West.....	0.0	(s)	(s)	(s)	--	--	--	--	--	--
Greece.....	(s)	(s)	0.0	(s)	0.0	(s)	(s)	(s)	(s)	(s)
Iceland.....	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3
Ireland.....	0.0	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Italy.....	2.8	2.9	3.0	3.1	3.0	3.6	3.8	3.6	3.6	3.9
Netherlands.....	(s)	(s)	(s)	(s)	0.1	0.1	0.2	0.2	0.3	0.3
Norway.....	0.0	0.0	0.0	0.0	0.0	(s)	(s)	(s)	(s)	(s)
Portugal.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.1	0.1
Spain.....	0.0	0.0	0.0	(s)	(s)	(s)	0.1	0.2	0.3	0.3
Sweden.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.1	0.1	0.1
Switzerland.....	0.0	0.0	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)
Turkey.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
United Kingdom.....	0.0	(s)	(s)	(s)	(s)	(s)	0.2	0.3	0.3	0.3
Total.....	3.9	4.1	4.3	4.7	5.0	5.9	6.9	8.2	9.2	9.7
Eastern Europe & Former U.S.S.R.										
Romania.....	(s)	(s)	(s)	(s)	0.0	0.0	0.0	0.0	0.0	0.0
Former U.S.S.R.....	0.0	0.0	(s)	(s)	(s)	--	--	--	--	--
Russia.....	--	--	--	--	--	(s)	(s)	(s)	(s)	0.3
Total.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.3
Middle East										
Jordan.....	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Total.....	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Africa										
Ethiopia.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Kenya.....	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3
Total.....	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.4
Far East & Oceania										
Australia.....	0.0	0.0	0.0	0.0	0.0	0.0	0.0	(s)	(s)	(s)
India.....	(s)	(s)	(s)	(s)	(s)	(s)	0.1	0.1	0.1	0.1
Indonesia.....	0.7	1.0	1.0	1.1	1.0	1.0	1.0	1.5	1.7	1.8
Japan.....	1.3	1.3	1.3	1.7	1.7	1.7	1.7	2.0	3.0	3.4
New Zealand.....	1.1	1.2	1.8	2.1	2.1	2.2	2.1	2.1	2.0	2.0
Philippines.....	4.3	4.6	5.1	5.2	5.5	5.4	5.5	5.6	5.7	5.7
Vietnam.....	0.2	0.2	0.0	0.0	0.0	0.0	0.6	0.6	0.6	0.6
Total.....	7.6	8.3	9.1	10.0	10.3	10.3	10.9	11.8	13.1	13.6
World Total.....	34.0	34.8	79.4	234.5	235.7	249.9	257.0	265.3	268.9	282.4

¹ Preliminary.

² There is a discontinuity in this time series between 1988 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1989 and biofuels electric power beginning in 1990.

³ Data are for biofuels electric power generation.

-- Not applicable.

(s) = Value less than 50 million kilowatthours.

Notes: Sum of components may not equal total due to independent rounding.

Generation data consist of both utility and nonutility sources. Data are reported as net generation as opposed to gross. Net generation excludes the energy consumed by the generating unit.

Sources: See sources at the end of Section 6.

Table 2.9 World Production of Primary Energy by Selected Country Groups (Btu), 1987 - 1996
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Petroleum²										
World Total.....	127.48	132.57	134.66	136.35	135.90	136.50	136.53	138.30	141.46	145.69
OECD ³	39.87	39.71	38.07	38.20	39.20	39.70	39.57	40.94	41.66	43.16
Non OECD.....	87.61	92.86	96.58	98.15	96.70	96.80	96.96	97.37	99.80	102.53
Other Groups:										
OECD Europe.....	8.85	8.86	8.65	9.00	9.47	10.26	10.67	12.18	13.00	13.92
OPEC ⁴	41.26	45.36	49.14	51.71	51.95	54.64	56.17	57.07	58.21	60.01
EU ⁵	6.43	6.11	5.11	5.10	5.15	5.23	5.41	6.56	6.85	7.06
IEA ⁶	33.71	33.56	31.92	31.91	32.61	33.12	32.99	34.31	35.21	36.21
Natural Gas										
World Total.....	65.50	68.67	71.12	72.53	73.29	73.70	75.17	76.01	77.77	81.90
OECD ³	29.34	30.01	30.73	31.52	32.31	33.15	34.22	35.63	36.08	38.21
Non OECD.....	36.16	38.66	40.39	41.01	40.98	40.55	40.96	40.38	41.69	43.70
Other Groups:										
OECD Europe.....	7.38	7.01	7.25	7.29	7.76	7.90	8.36	8.47	8.83	10.21
OPEC ⁴	7.00	7.52	8.23	8.16	8.65	9.11	9.50	9.94	11.09	11.87
EU ⁵	5.86	5.50	5.71	5.95	6.42	6.47	6.96	7.01	7.32	8.30
IEA ⁶	28.10	28.71	29.44	30.29	30.88	31.74	32.79	34.22	34.75	36.83
Coal										
World Total.....	87.89	89.62	91.08	92.38	87.76	88.70	86.85	88.87	92.41	93.33
OECD ³	41.53	41.71	42.16	42.05	40.01	39.18	38.74	40.30	40.40	41.11
Non OECD.....	46.35	47.91	48.92	50.33	47.76	49.53	48.11	48.57	52.01	52.22
Other Groups:										
OECD Europe.....	15.23	14.90	14.46	13.19	11.85	10.99	11.84	11.32	11.08	11.01
OPEC ⁴	0.13	0.18	0.32	0.38	0.47	0.74	0.94	0.98	1.30	1.47
EU ⁵	9.73	9.48	9.29	8.79	7.63	6.78	6.07	5.36	5.17	5.18
IEA ⁶	35.89	36.10	36.96	37.68	35.84	35.11	33.12	34.53	34.67	35.48
Hydroelectric Power										
World Total.....	21.12	21.92	21.73	22.61	23.00	23.01	24.39	24.39	25.83	26.28
OECD ³	11.93	12.16	11.83	12.26	12.37	12.23	12.96	12.43	13.33	13.66
Non OECD.....	9.19	9.76	9.90	10.36	10.64	10.78	11.43	11.96	12.50	12.61
Other Groups:										
OECD Europe.....	4.65	5.09	4.40	4.57	4.53	4.82	5.01	5.01	5.05	4.81
OPEC ⁴	0.51	0.55	0.57	0.60	0.70	0.79	0.78	0.79	0.82	0.85
EU ⁵	2.96	3.22	2.61	2.70	2.75	2.93	2.97	3.04	2.96	2.91
IEA ⁶	11.60	11.81	11.45	11.87	12.01	11.83	12.53	12.08	12.88	13.18
Nuclear Electric Power										
World Total.....	17.80	19.30	19.82	20.37	21.29	21.36	22.02	22.46	23.31	24.10
OECD ³	14.80	15.96	16.38	16.99	17.93	18.15	18.94	19.57	20.31	20.77
Non OECD.....	3.00	3.34	3.44	3.38	3.36	3.21	3.08	2.89	3.01	3.33
Other Groups:										
OECD Europe.....	6.66	7.15	7.50	7.53	7.76	7.91	8.37	8.35	8.52	8.93
OPEC ⁴	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EU ⁵	6.32	6.78	7.12	7.14	7.40	7.55	7.86	7.82	8.00	8.40
IEA ⁶	14.29	15.42	15.76	16.31	17.22	17.44	18.06	18.69	19.31	19.71

See footnotes at end of table.

Table 2.9 World Production of Primary Energy by Selected Country Groups (Btu), 1987 - 1996 (Continued)

(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Geothermal, Solar, and Wind Electric Power⁷										
World Total.....	0.65	0.66	1.17	2.79	2.82	2.97	3.05	3.14	3.18	3.35
OECD ³	0.46	0.47	0.97	2.58	2.60	2.74	2.81	2.87	2.90	3.05
Non OECD.....	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.27	0.28	0.30
Other Groups:.....										
OECD Europe.....	0.07	0.08	0.08	0.09	0.09	0.10	0.11	0.12	0.14	0.15
OPEC ⁴	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.04
EU ⁵	0.07	0.07	0.07	0.08	0.08	0.09	0.11	0.12	0.13	0.14
IEA ⁶	0.37	0.36	0.87	2.48	2.48	2.62	2.69	2.76	2.78	2.93
Total Energy⁸										
World Total.....	320.42	332.74	339.58	347.71	344.74	346.97	348.69	353.85	364.71	375.37
OECD ³	137.93	140.01	140.14	144.27	145.08	145.87	147.92	152.42	155.42	160.68
Non OECD.....	182.50	192.73	199.43	203.43	199.65	201.10	200.77	201.43	209.30	214.69
Other Groups:.....										
OECD Europe.....	42.85	43.08	42.35	41.66	41.46	41.98	44.36	45.45	46.61	49.02
OPEC ⁴	48.91	53.63	58.27	60.88	61.80	65.29	67.41	68.81	71.46	74.24
EU ⁵	31.37	31.16	29.92	29.76	29.43	29.05	29.36	29.91	30.42	31.98
IEA ⁶	123.96	125.96	126.40	131.20	131.73	132.58	132.85	137.27	140.35	145.05

¹ Preliminary.

² Data include the production of crude oil and natural gas plant liquids.

³ The Organization for Economic Cooperation and Development (OECD) includes Australia, Austria, Belgium, Canada, Czech Republic, Denmark (including data for Faroe Islands and Greenland), Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, South, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States (including data for Guam, Hawaiian Trade Zone, Puerto Rico, and Virgin Islands, U.S.). Refer to Appendix A for a listing of OECD Europe.

⁴ The Organization of Petroleum Exporting Countries (OPEC) includes Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

⁵ European Union (EU) includes Austria, Belgium, Denmark (including data for Faroe Islands), Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, and United Kingdom.

⁶ International Energy Agency (IEA) includes Australia, Austria, Belgium, Canada, Denmark (including data for Faroe Islands and Greenland), Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States (including data for Guam, Hawaiian Trade Zone, Puerto Rico, and Virgin Islands, U.S.).

⁷ Includes biofuels electric power generation for United States and Brazil.

⁸ Includes biofuels used by the residential, commercial, and transportation sectors in the United States beginning in 1990.

Notes: For consistency data reflect 1996 membership (as of December 31, 1996) for all years. The country groups OECD, OECD Europe, EU, and IEA include unified Germany. Sum of components may not equal total due to independent rounding.

Primary energy production includes petroleum, natural gas, coal, and net hydroelectric, nuclear, geothermal, solar, and wind electric power. Data for United States include biofuels energy production and data for Brazil include biofuels electric power generation.

Sources: See sources at the end of Sections 3, 4, 5, and 6.

Section 3

Petroleum

Table 3.1 World Petroleum Supply and Disposition, 1995
(Thousand Barrels per Day)

Region Country	Primary Supply			Disposition			Bunkers	
	Oil Production ¹	Crude Oil Imports	Total Imports of Refined Petroleum Products	Crude Oil Exports	Total Exports of Refined Petroleum Products	Apparent ² Consumption (Including Bunkers)	Residual Fuel Oil	Distillate Fuel Oil and Other Products
North America								
Canada.....	2,448	603	155	920	595	1,755	10	2
Mexico.....	3,092	0	138	1,243	140	1,855	1	1
United States.....	9,400	7,230	1,605	95	855	17,725	420	129
Other.....	0	0	4	0	0	4	0	(s)
Total.....	14,940	7,833	1,903	2,258	1,589	21,339	430	133
Central & South America								
Argentina.....	762	14	56	306	67	474	4	2
Bahamas, The.....	0	0	58	0	39	20	3	1
Bolivia.....	34	0	(s)	0	1	33	0	0
Brazil.....	903	503	234	5	96	1,491	19	17
Chile.....	24	142	30	0	1	191	7	0
Colombia.....	595	(s)	31	331	54	251	(s)	2
Costa Rica.....	0	12	20	0	1	31	1	(s)
Cuba.....	28	100	69	0	4	187	0	1
Dominican Republic.....	1	41	29	0	0	72	0	0
Ecuador.....	402	0	18	250	41	123	6	1
El Salvador.....	0	14	17	0	(s)	31	0	0
Guatemala.....	10	17	22	5	(s)	41	0	3
Honduras.....	0	0	23	0	0	23	0	0
Jamaica.....	0	19	40	0	1	60	0	1
Netherlands Antilles.....	6	275	32	10	229	69	28	6
Nicaragua.....	0	12	6	0	(s)	17	0	0
Panama.....	1	21	25	0	5	43	14	7
Paraguay.....	0	4	18	0	0	23	0	(s)
Peru.....	133	14	31	0	29	143	(s)	1
Puerto Rico.....	0	75	89	0	17	154	2	1
Trinidad and Tobago.....	134	26	3	59	84	22	2	3
Uruguay.....	0	30	12	0	9	31	2	2
Venezuela.....	2,916	0	11	1,819	661	448	14	13
Virgin Islands, U.S.....	(s)	351	2	0	276	74	1	2
Other.....	8	20	65	7	5	82	(s)	8
Total.....	5,958	1,690	940	2,793	1,621	4,135	104	71
Western Europe								
Austria.....	26	152	71	1	27	234	0	0
Belgium.....	12	542	332	0	380	499	58	15
Bosnia and Herzegovina.....	0	0	19	0	0	19	0	0
Croatia.....	40	102	5	5	50	88	(s)	(s)
Denmark.....	190	118	108	105	82	225	17	13
Finland.....	0	132	84	(s)	72	175	3	2
France.....	105	1,582	452	0	314	1,896	38	6
Germany.....	134	2,086	926	15	297	2,875	28	11
Greece.....	13	311	119	13	74	350	47	20
Iceland.....	0	0	15	0	0	15	0	0
Ireland.....	1	48	86	0	18	126	1	2
Italy.....	158	1,501	667	3	344	2,048	34	13
Luxembourg.....	0	0	36	0	0	37	0	0
Macedonia, TFYR.....	0	3	17	0	1	18	0	0
Netherlands.....	121	1,121	815	22	1,213	790	162	50
Norway.....	2,908	28	67	2,631	258	196	6	6
Portugal.....	2	262	102	0	73	290	4	2
Serbia and Montenegro.....	22	4	2	0	0	27	0	0
Slovenia.....	(s)	8	39	0	2	47	0	0
Spain.....	31	1,114	257	0	169	1,256	44	16
Sweden.....	4	383	160	2	184	406	15	4
Switzerland.....	1	94	162	0	9	257	0	(s)
Turkey.....	71	480	120	0	30	601	1	3
United Kingdom.....	2,801	828	346	1,566	578	1,845	24	23
Other.....	0	0	27	0	(s)	27	14	4
Total.....	6,639	10,900	5,034	4,363	4,175	14,347	497	191

See footnotes at end of table.

Table 3.1 World Petroleum Supply and Disposition, 1995 (Continued)
(Thousand Barrels per Day)

Region Country	Primary Supply			Disposition			Bunkers	
	Oil Production ¹	Crude Oil Imports	Total Imports of Refined Petroleum Products	Crude Oil Exports	Total Exports of Refined Petroleum Products	Apparent ² Consumption (Including Bunkers)	Residual Fuel Oil	Distillate Fuel Oil and Other Products
Eastern Europe & Former U.S.S.R.								
Albania.....	10	(s)	6	0	1	15	0	0
Bulgaria.....	1	159	11	0	38	131	4	1
Czech Republic.....	3	139	40	6	20	159	0	0
Hungary.....	46	117	34	0	44	160	0	0
Poland.....	5	260	59	(s)	20	318	3	12
Romania.....	141	168	46	0	101	244	0	0
Slovakia.....	1	108	1	0	42	65	0	0
Armenia.....	0	0	23	0	0	23	0	0
Azerbaijan.....	182	56	1	2	50	179	0	0
Belarus.....	38	227	7	4	49	228	0	0
Estonia.....	0	0	32	0	7	26	2	1
Georgia.....	1	4	12	0	0	17	0	0
Kazakhstan.....	414	133	36	260	29	281	0	0
Kyrgyzstan.....	2	0	12	2	0	12	0	0
Latvia.....	0	0	43	0	1	42	0	0
Lithuania.....	3	64	43	(s)	37	73	0	0
Moldova.....	0	0	22	0	0	22	0	0
Russia.....	6,175	169	61	2,504	1,006	2,976	230	0
Tajikistan.....	2	0	10	1	0	10	0	0
Turkmenistan.....	81	9	1	1	29	64	0	0
Ukraine.....	85	263	150	0	24	484	0	0
Uzbekistan.....	160	6	21	9	3	180	0	0
Total.....	7,350	1,882	670	2,789	1,500	5,709	238	14
Middle East								
Bahrain.....	52	209	0	0	241	21	2	3
Cyprus.....	0	16	26	0	0	43	1	6
Iran.....	3,715	0	136	2,621	96	1,140	8	2
Iraq.....	586	0	0	64	48	474	0	0
Israel.....	(s)	242	23	0	65	210	2	10
Jordan.....	(s)	65	18	0	0	85	0	5
Kuwait.....	2,156	0	(s)	1,186	758	140	3	9
Lebanon.....	0	0	82	0	0	82	0	4
Oman.....	861	0	4	780	37	42	2	4
Qatar.....	498	0	0	381	56	42	0	2
Saudi Arabia.....	8,948	0	0	6,795	892	1,168	93	139
Syria.....	584	0	11	341	28	226	0	2
United Arab Emirates.....	2,396	0	212	1,998	217	316	152	7
Yemen.....	345	38	4	293	25	72	1	2
Total.....	20,141	571	517	14,458	2,463	4,063	264	194

See footnotes at end of table.

Table 3.1 World Petroleum Supply and Disposition, 1995 (Continued)
(Thousand Barrels per Day)

Region Country	Primary Supply			Disposition			Bunkers	
	Oil Production ¹	Crude Oil Imports	Total Imports of Refined Petroleum Products	Crude Oil Exports	Total Exports of Refined Petroleum Products	Apparent ² Consumption (Including Bunkers)	Residual Fuel Oil	Distillate Fuel Oil and Other Products
Africa								
Algeria.....	1,348	0	4	722	399	228	1	8
Angola.....	646	0	(s)	587	3	27	8	8
Cameroon.....	100	0	3	75	(s)	27	0	(s)
Congo (Brazzaville).....	188	0	(s)	176	5	7	(s)	0
Congo (Kinshasa).....	30	1	12	23	1	20	1	3
Cote d'Ivoire (Ivory Coast).....	9	39	8	0	6	52	0	2
Egypt.....	981	0	7	397	113	460	22	9
Ethiopia.....	0	0	15	0	0	15	0	(s)
Gabon.....	366	0	1	350	1	19	1	2
Ghana.....	4	19	6	0	1	27	0	1
Kenya.....	1	40	16	0	9	46	1	(s)
Libya.....	1,430	0	1	1,103	146	172	2	3
Morocco.....	1	128	25	0	8	142	0	2
Nigeria.....	1,998	0	49	1,695	14	284	5	9
Senegal.....	0	17	8	0	1	25	1	4
South Africa.....	192	314	7	2	66	459	48	9
Sudan.....	(s)	21	5	0	(s)	26	0	1
Tunisia.....	90	17	41	73	10	70	0	4
Zimbabwe.....	0	0	25	0	0	25	0	0
Other.....	8	67	147	8	7	209	7	20
Total.....	7,392	663	381	5,210	789	2,339	98	86
Far East & Oceania								
Australia.....	627	285	157	188	92	834	13	3
Bangladesh.....	1	27	23	0	1	51	0	(s)
Brunei.....	176	0	(s)	174	(s)	11	0	0
Burma.....	17	1	(s)	(s)	(s)	18	0	(s)
China.....	2,990	349	424	346	113	3,331	55	14
Guam.....	0	0	26	0	0	26	1	1
Hong Kong.....	0	0	342	0	161	186	30	72
India.....	754	547	424	0	81	1,575	2	14
Indonesia.....	1,576	186	135	816	255	814	3	13
Japan.....	81	4,591	1,299	0	173	5,711	109	6
Korea, North.....	0	44	22	0	(s)	63	0	0
Korea, South.....	3	1,712	615	0	336	2,027	72	30
Malaysia.....	703	25	174	401	84	399	4	1
Mongolia.....	0	0	11	0	0	11	0	0
New Zealand.....	72	77	21	21	1	154	4	3
Pakistan.....	63	77	172	6	5	298	(s)	3
Papua New Guinea.....	100	0	14	100	(s)	15	0	(s)
Philippines.....	4	319	40	4	15	328	1	12
Singapore.....	4	1,136	450	1	1,097	512	173	38
Sri Lanka.....	0	37	14	0	4	48	5	3
Taiwan.....	4	601	191	0	31	737	42	3
Thailand.....	90	458	182	16	11	679	4	15
Vietnam.....	173	0	93	173	0	94	0	0
Other.....	0	0	72	0	3	69	(s)	13
Total.....	7,440	10,474	4,902	2,246	2,463	17,993	520	245
World Total.....	69,860	34,012	14,347	34,117	14,600	69,926	2,152	934

¹ Oil production includes crude oil, natural gas plant liquids, other liquids, and refinery processing gains.

² Apparent consumption includes internal consumption, refinery fuel and loss, and bunkering. Also included, where available, are liquefied petroleum gases sold directly from natural gas processing plants for fuel or chemical uses.

(s)=Value less than 500 barrels per day.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

Table 3.2 World Output of Refined Petroleum Products, 1995

(Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Output of Refined Petroleum Products	Refinery ³ Fuel and Loss
North America									
Canada.....	644	76	52	472	108	76	370	1,800	103
Mexico.....	497	67	22	255	482	364	169	1,856	71
United States.....	7,588	1,416	53	3,155	788	654	2,470	16,124	926
Other.....	0	0	0	0	0	0	0	0	0
Total.....	8,730	1,559	127	3,883	1,378	1,094	3,009	19,780	1,100
Central & South America									
Argentina.....	123	21	7	172	49	29	78	478	18
Bahamas, The.....	0	0	0	0	0	0	0	0	0
Bolivia.....	8	2	1	7	1	5	9	33	1
Brazil.....	298	49	3	433	248	121	212	1,363	52
Chile.....	41	8	6	58	40	15	4	172	7
Colombia.....	81	11	7	56	62	28	28	273	10
Costa Rica.....	2	1	(s)	3	6	(s)	(s)	12	(s)
Cuba.....	18	2	11	15	46	3	23	119	12
Dominican Republic.....	7	(s)	5	9	19	1	1	42	2
Ecuador.....	29	4	2	57	30	7	13	142	5
El Salvador.....	4	1	(s)	4	5	1	(s)	15	1
Guatemala.....	3	1	(s)	5	6	1	6	21	1
Honduras.....	0	0	0	0	0	0	0	0	0
Jamaica.....	3	1	1	4	9	(s)	(s)	19	1
Netherlands Antilles.....	42	18	1	45	95	2	64	267	10
Nicaragua.....	2	(s)	(s)	4	4	(s)	1	12	(s)
Panama.....	3	1	1	4	5	(s)	11	26	1
Paraguay.....	1	(s)	(s)	2	1	(s)	(s)	5	(s)
Peru.....	20	7	15	34	54	4	14	147	6
Puerto Rico.....	17	9	1	10	14	(s)	26	77	3
Trinidad and Tobago.....	19	8	2	20	44	2	4	99	4
Uruguay.....	6	0	1	8	9	1	1	26	1
Venezuela.....	376	0	76	258	307	9	64	1,090	42
Virgin Islands, U.S.....	134	41	1	83	62	3	24	348	14
Other.....	5	0	3	4	8	1	1	21	1
Total.....	1,240	186	144	1,297	1,125	231	586	4,808	193
Western Europe									
Austria.....	53	9	(s)	70	26	2	25	184	12
Belgium.....	122	27	2	225	87	15	124	601	25
Bosnia and Herzegovina.....	0	0	0	0	0	0	0	0	0
Croatia.....	29	2	(s)	37	35	6	23	133	5
Denmark.....	49	6	0	87	42	5	12	202	8
Finland.....	104	7	1	95	22	5	35	269	5
France.....	409	122	1	630	188	79	302	1,732	101
Germany.....	599	66	1	926	243	104	497	2,437	129
Greece.....	82	37	(s)	81	107	15	39	363	14
Iceland.....	0	0	0	0	0	0	0	0	0
Ireland.....	9	1	2	17	14	1	2	45	1
Italy.....	434	55	34	640	352	69	257	1,841	108
Luxembourg.....	0	0	0	0	0	0	0	0	0
Macedonia, TFYR.....	1	0	0	1	1	(s)	(s)	3	(s)
Netherlands.....	344	129	5	419	228	101	481	1,706	84
Norway.....	64	19	3	122	28	10	31	279	13
Portugal.....	65	22	(s)	81	66	13	37	285	16
Serbia and Montenegro.....	3	1	(s)	6	7	(s)	7	25	1
Slovenia.....	3	0	0	1	3	(s)	3	10	(s)
Spain.....	224	87	3	340	244	58	201	1,157	71
Sweden.....	95	4	(s)	136	97	7	54	394	9
Switzerland.....	24	7	(s)	41	14	5	6	98	5
Turkey.....	92	25	2	159	166	25	78	546	32
United Kingdom.....	631	169	63	556	235	67	245	1,965	145
Other.....	0	0	0	0	0	0	0	0	0
Total.....	3,436	798	117	4,671	2,204	587	2,460	14,273	785

See footnotes at end of table.

Table 3.2 World Output of Refined Petroleum Products, 1995 (Continued)
(Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Output of Refined Petroleum Products	Refinery ³ Fuel and Loss
Eastern Europe & Former U.S.S.R.									
Albania.....	1	(s)	1	2	3	(s)	3	10	(s)
Bulgaria.....	35	5	5	52	40	3	19	158	6
Czech Republic.....	26	2	3	39	27	2	39	138	5
Hungary.....	33	4	2	52	30	3	46	170	7
Poland.....	84	5	1	104	63	7	26	290	11
Romania.....	81	4	1	96	58	9	50	299	12
Slovakia.....	18	0	2	28	34	1	23	106	4
Armenia.....	0	0	0	0	0	0	0	0	0
Azerbaijan.....	21	11	12	80	81	10	11	225	9
Belarus.....	43	17	3	71	105	7	23	270	10
Estonia.....	0	0	0	0	0	0	0	0	0
Georgia.....	1	(s)	(s)	2	2	(s)	(s)	5	(s)
Kazakhstan.....	51	5	5	73	83	19	36	274	11
Kyrgyzstan.....	0	0	0	0	0	0	0	0	0
Latvia.....	0	0	0	0	0	0	0	0	0
Lithuania.....	20	4	4	17	18	5	2	71	3
Moldova.....	0	0	0	0	0	0	0	0	0
Russia.....	659	196	3	1,280	1,156	180	467	3,940	152
Tajikistan.....	0	0	0	0	0	0	0	0	0
Turkmenistan.....	19	4	2	25	25	14	2	91	4
Ukraine.....	59	19	17	87	127	7	42	359	14
Uzbekistan.....	38	4	10	47	38	(s)	25	163	6
Total.....	1,187	281	70	2,055	1,890	269	816	6,569	253
Middle East									
Bahrain.....	22	18	32	84	55	2	49	262	10
Cyprus.....	2	(s)	(s)	6	6	1	1	17	1
Iran.....	147	27	97	297	271	126	92	1,057	41
Iraq.....	70	24	24	141	171	20	72	522	20
Israel.....	60	15	11	64	67	14	22	251	10
Jordan.....	11	5	5	18	19	4	5	68	3
Kuwait.....	44	171	30	252	196	111	90	894	34
Lebanon.....	0	0	0	0	0	0	0	0	0
Oman.....	13	3	4	15	39	1	2	77	3
Qatar.....	13	9	(s)	16	19	3	1	61	2
Saudi Arabia.....	233	60	101	472	458	31	201	1,556	60
Syria.....	31	5	2	84	94	5	22	243	9
United Arab Emirates.....	35	56	3	69	39	13	26	241	9
Yemen.....	23	8	5	26	25	3	3	94	4
Total.....	705	401	315	1,542	1,458	334	587	5,343	205

See footnotes at end of table.

Table 3.2 World Output of Refined Petroleum Products, 1995 (Continued)

(Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Output of Refined Petroleum Products	Refinery ³ Fuel and Loss
Africa									
Algeria.....	60	17	5	147	109	163	121	623	24
Angola.....	3	3	1	6	14	1	1	29	1
Cameroon.....	7	(s)	5	6	3	1	2	24	1
Congo (Brazzaville).....	1	(s)	1	2	5	(s)	3	12	(s)
Congo (Kinshasa).....	1	(s)	1	2	3	(s)	1	8	(s)
Cote d'Ivoire (Ivory Coast).....	11	1	10	14	9	1	3	50	2
Egypt.....	106	19	25	118	227	15	55	565	22
Ethiopia.....	0	0	0	0	0	0	0	0	0
Gabon.....	1	2	2	6	6	(s)	3	19	1
Ghana.....	5	1	3	4	5	1	3	22	1
Kenya.....	7	6	2	10	10	1	3	40	2
Libya.....	44	33	6	86	97	18	34	317	12
Morocco.....	9	5	1	41	44	8	17	125	5
Nigeria.....	68	1	39	63	64	5	42	282	11
Senegal.....	3	2	(s)	6	4	(s)	3	19	1
South Africa.....	202	24	20	137	63	9	28	482	19
Sudan.....	2	2	1	7	6	(s)	3	21	1
Tunisia.....	7	0	3	11	12	4	3	39	2
Zimbabwe.....	0	0	0	0	0	0	0	0	0
Other.....	15	3	4	17	21	2	6	69	3
Total.....	552	120	129	682	703	228	332	2,746	106
Far East & Oceania									
Australia.....	309	81	5	203	46	21	86	751	41
Bangladesh.....	2	(s)	6	6	6	1	8	29	1
Brunei.....	4	1	(s)	3	1	(s)	1	11	(s)
Burma.....	5	1	(s)	8	2	(s)	1	18	1
China.....	708	97	30	796	579	176	635	3,020	116
Guam.....	0	0	0	0	0	0	0	0	0
Hong Kong.....	0	0	0	0	0	0	0	0	0
India.....	104	46	112	450	191	105	241	1,249	48
Indonesia.....	115	18	131	272	224	95	79	934	36
Japan.....	876	133	472	1,280	809	156	675	4,401	209
Korea, North.....	17	0	3	13	7	(s)	1	42	2
Korea, South.....	166	96	115	496	597	46	318	1,833	71
Malaysia.....	52	21	12	119	46	11	21	282	11
Mongolia.....	0	0	0	0	0	0	0	0	0
New Zealand.....	37	16	0	32	7	0	8	101	5
Pakistan.....	23	14	10	34	34	1	15	131	5
Papua New Guinea.....	0	(s)	0	1	(s)	(s)	(s)	1	(s)
Philippines.....	42	14	14	86	80	10	28	274	11
Singapore.....	115	150	63	380	293	20	194	1,214	47
Sri Lanka.....	4	1	4	12	11	(s)	5	38	1
Taiwan.....	94	26	8	109	246	24	97	603	39
Thailand.....	96	54	2	173	110	23	16	474	18
Vietnam.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	1	(s)
Other.....	0	0	0	0	0	0	0	0	0
Total.....	2,769	771	986	4,473	3,288	689	2,430	15,406	661
World Total.....	18,618	4,115	1,888	18,603	12,047	3,433	10,221	68,925	3,303

¹ Jet Fuel includes naphtha-type jet fuel and kerosene-type jet fuel.

² Includes asphalt, coke, aviation gasoline, naphthas, paraffin wax, petrochemical feedstocks, unfinished oils, white spirits, and blending components.

³ Refinery fuel and loss reported in this column as a memo item has been included in the output of the individual petroleum products and should not be added to "Total Output of Refined Petroleum Products".

(s)=Value less than 500 barrels per day.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

Table 3.3 World Imports of Refined Petroleum Products, 1995

(Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Imports of Refined Petroleum Products
North America								
Canada.....	26	11	4	14	43	11	47	155
Mexico.....	61	(s)	0	3	37	36	(s)	138
United States.....	265	106	1	193	187	192	661	1,605
Other.....	1	(s)	(s)	2	(s)	(s)	(s)	4
Total.....	353	117	5	213	267	240	709	1,903
Central & South America								
Argentina.....	15	1	0	27	5	6	2	56
Bahamas, The.....	4	(s)	0	5	49	(s)	(s)	58
Bolivia.....	0	0	0	(s)	0	0	0	(s)
Brazil.....	83	0	10	71	14	50	6	234
Chile.....	2	1	1	8	9	9	0	30
Colombia.....	28	(s)	(s)	(s)	2	(s)	0	31
Costa Rica.....	7	1	0	11	(s)	1	0	20
Cuba.....	2	2	1	21	43	(s)	0	69
Dominican Republic.....	5	0	1	10	6	6	0	29
Ecuador.....	0	0	0	7	0	11	(s)	18
El Salvador.....	2	(s)	0	11	2	2	0	17
Guatemala.....	6	0	1	9	3	3	0	22
Honduras.....	5	1	1	12	3	1	0	23
Jamaica.....	4	3	(s)	5	26	1	(s)	40
Netherlands Antilles.....	7	1	0	6	13	1	3	32
Nicaragua.....	(s)	0	(s)	2	3	(s)	0	6
Panama.....	2	0	3	11	7	2	0	25
Paraguay.....	3	(s)	(s)	12	1	2	0	18
Peru.....	1	0	1	26	0	3	0	31
Puerto Rico.....	20	(s)	(s)	21	23	(s)	25	89
Trinidad and Tobago.....	(s)	0	(s)	2	1	0	0	3
Uruguay.....	2	0	(s)	7	2	1	0	12
Venezuela.....	0	0	0	0	0	0	11	11
Virgin Islands, U.S.....	0	0	(s)	1	1	(s)	(s)	2
Other.....	13	9	3	20	15	3	2	65
Total.....	212	21	24	305	228	101	49	940
Western Europe								
Austria.....	16	1	(s)	22	11	4	17	71
Belgium.....	42	11	2	101	49	17	110	332
Bosnia and Herzegovina.....	6	(s)	1	6	5	0	2	19
Croatia.....	0	(s)	0	1	4	(s)	0	5
Denmark.....	18	12	0	33	14	(s)	31	108
Finland.....	4	(s)	(s)	27	25	17	11	84
France.....	46	14	(s)	190	9	54	140	452
Germany.....	207	62	1	375	73	31	176	926
Greece.....	5	4	0	47	13	(s)	50	119
Iceland.....	3	2	0	6	2	0	2	15
Ireland.....	15	7	5	30	25	3	1	86
Italy.....	36	(s)	(s)	35	295	58	241	667
Luxembourg.....	12	4	0	18	2	(s)	(s)	36
Macedonia, TFYR.....	4	(s)	0	4	6	1	1	17
Netherlands.....	80	6	6	104	138	223	259	815
Norway.....	16	2	(s)	13	12	7	17	67
Portugal.....	1	0	0	6	33	20	42	102
Serbia and Montenegro.....	0	0	0	0	2	0	0	2
Slovenia.....	16	(s)	0	17	2	1	2	39
Spain.....	19	1	(s)	68	28	31	111	257
Sweden.....	35	13	13	21	20	26	32	160
Switzerland.....	59	21	(s)	72	(s)	1	9	162
Turkey.....	9	(s)	0	15	8	81	7	120
United Kingdom.....	30	18	(s)	25	65	16	191	346
Other.....	2	1	(s)	5	19	(s)	1	27
Total.....	682	180	29	1,243	856	591	1,453	5,034

See footnotes at end of table.

Table 3.3 World Imports of Refined Petroleum Products, 1995 (Continued)
(Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Imports of Refined Petroleum Products
Eastern Europe & Former U.S.S.R.								
Albania.....	3	0	(s)	(s)	0	0	3	6
Bulgaria.....	(s)	3	0	2	5	(s)	1	11
Czech Republic.....	11	0	1	13	13	1	1	40
Hungary.....	8	1	(s)	9	12	(s)	4	34
Poland.....	27	6	(s)	12	(s)	12	2	59
Romania.....	10	2	0	3	29	0	1	46
Slovakia.....	0	0	0	1	0	0	0	1
Armenia.....	7	(s)	1	6	8	(s)	(s)	23
Azerbaijan.....	0	0	0	0	1	0	(s)	1
Belarus.....	1	0	0	(s)	1	5	(s)	7
Estonia.....	10	(s)	1	9	10	(s)	1	32
Georgia.....	4	0	0	4	4	0	0	12
Kazakhstan.....	4	2	(s)	23	3	2	2	36
Kyrgyzstan.....	5	1	0	3	2	(s)	1	12
Latvia.....	11	1	(s)	10	19	1	1	43
Lithuania.....	8	0	(s)	4	29	1	(s)	43
Moldova.....	6	(s)	(s)	8	7	1	(s)	22
Russia.....	8	8	0	26	4	0	15	61
Tajikistan.....	2	0	0	4	4	0	0	10
Turkmenistan.....	0	0	0	0	0	0	1	1
Ukraine.....	32	0	0	33	51	34	0	150
Uzbekistan.....	5	0	0	12	4	0	0	21
Total.....	163	25	4	182	206	57	34	670
Middle East								
Bahrain.....	0	0	0	0	0	0	0	0
Cyprus.....	2	9	(s)	2	10	1	3	26
Iran.....	6	2	2	87	0	0	39	136
Iraq.....	0	0	0	0	0	0	0	0
Israel.....	0	4	0	1	16	0	2	23
Jordan.....	0	0	0	4	12	3	0	18
Kuwait.....	0	0	0	0	0	0	(s)	(s)
Lebanon.....	30	4	2	20	21	6	0	82
Oman.....	0	0	0	0	0	0	4	4
Qatar.....	0	0	0	0	0	0	0	0
Saudi Arabia.....	0	0	0	0	0	0	0	0
Syria.....	0	0	1	5	0	4	1	11
United Arab Emirates.....	0	0	0	2	210	0	0	212
Yemen.....	4	0	1	0	0	0	(s)	4
Total.....	41	19	6	120	269	13	49	517

See footnotes at end of table.

Table 3.3 World Imports of Refined Petroleum Products, 1995 (Continued)
(Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Imports of Refined Petroleum Products
Africa								
Algeria.....	0	0	0	0	0	0	4	4
Angola.....	(s)	0	0	(s)	0	(s)	0	(s)
Cameroon.....	1	0	(s)	0	(s)	0	2	3
Congo (Brazzaville).....	(s)	0	0	0	(s)	0	(s)	(s)
Congo (Kinshasa).....	3	3	(s)	4	(s)	(s)	1	12
Cote d'Ivoire (Ivory Coast).....	4	(s)	(s)	2	0	(s)	1	8
Egypt.....	0	0	0	6	(s)	1	1	7
Ethiopia.....	1	3	0	6	4	(s)	1	15
Gabon.....	(s)	0	(s)	(s)	0	0	1	1
Ghana.....	3	0	(s)	2	1	(s)	(s)	6
Kenya.....	3	3	3	6	(s)	0	1	16
Libya.....	0	0	0	0	0	0	1	1
Morocco.....	0	0	0	3	0	21	1	25
Nigeria.....	33	8	7	(s)	0	(s)	(s)	49
Senegal.....	2	1	0	1	1	1	1	8
South Africa.....	2	0	0	1	2	0	2	7
Sudan.....	2	1	1	1	0	(s)	(s)	5
Tunisia.....	0	6	1	14	10	6	5	41
Zimbabwe.....	7	3	(s)	14	0	(s)	(s)	25
Other.....	33	13	10	51	24	4	12	147
Total.....	95	40	24	112	43	34	34	381
Far East & Oceania								
Australia.....	9	5	0	15	12	5	111	157
Bangladesh.....	1	2	2	18	0	0	0	23
Brunei.....	0	0	0	0	0	0	(s)	(s)
Burma.....	0	0	0	(s)	0	0	0	(s)
China.....	27	15	2	122	113	32	114	424
Guam.....	5	10	0	11	(s)	(s)	0	26
Hong Kong.....	12	61	2	191	67	5	4	342
India.....	0	2	85	283	22	22	11	424
Indonesia.....	0	30	4	72	16	0	13	135
Japan.....	25	55	33	42	57	549	537	1,299
Korea, North.....	9	0	1	6	6	0	0	22
Korea, South.....	0	0	64	88	68	145	249	615
Malaysia.....	44	3	(s)	36	48	11	30	174
Mongolia.....	4	0	1	5	1	0	(s)	11
New Zealand.....	13	1	0	2	(s)	0	4	21
Pakistan.....	4	0	3	92	71	3	(s)	172
Papua New Guinea.....	2	1	(s)	6	5	(s)	(s)	14
Philippines.....	0	0	0	15	16	8	(s)	40
Singapore.....	27	15	6	95	266	(s)	40	450
Sri Lanka.....	(s)	2	1	8	1	2	(s)	14
Taiwan.....	39	11	(s)	0	72	24	45	191
Thailand.....	11	3	0	100	65	(s)	2	182
Vietnam.....	23	4	7	41	17	0	2	93
Other.....	11	15	6	23	13	2	2	72
Total.....	268	236	217	1,272	935	810	1,165	4,902
World Total.....	1,813	636	310	3,446	2,804	1,845	3,492	14,347

¹ Jet fuel includes naphtha-type jet fuel and kerosene-type jet fuel.

² Includes asphalt, coke, aviation gasoline, naphthas, paraffin wax, petrochemical feedstocks, unfinished oils, white spirits, and blending components.

(s)=Value less than 500 barrels per day.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

Table 3.4 World Exports of Refined Petroleum Products, 1995
(Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Exports of Refined Petroleum ³ Products
North America								
Canada.....	82	2	1	103	26	290	90	595
Mexico.....	33	21	0	21	21	26	18	140
United States.....	104	26	2	183	136	59	345	855
Other.....	0	0	0	0	0	0	0	0
Total.....	220	48	3	307	183	375	453	1,589
Central & South America								
Argentina.....	25	1	0	13	17	12	(s)	67
Bahamas, The.....	0	0	0	(s)	38	0	0	39
Bolivia.....	0	0	0	0	0	0	1	1
Brazil.....	23	0	14	11	37	0	11	96
Chile.....	0	0	(s)	0	0	1	0	1
Colombia.....	0	(s)	(s)	8	46	0	0	54
Costa Rica.....	0	0	0	(s)	1	0	0	1
Cuba.....	0	0	0	0	1	0	2	4
Dominican Republic.....	0	0	0	0	0	0	0	0
Ecuador.....	0	0	0	0	41	0	0	41
El Salvador.....	0	0	(s)	0	(s)	0	0	(s)
Guatemala.....	0	0	0	0	0	0	(s)	(s)
Honduras.....	0	0	0	0	0	0	0	0
Jamaica.....	0	0	0	(s)	1	0	0	1
Netherlands Antilles.....	47	18	0	45	70	1	48	229
Nicaragua.....	(s)	0	0	(s)	0	0	(s)	(s)
Panama.....	0	0	2	(s)	3	0	0	5
Paraguay.....	0	0	0	0	0	0	0	0
Peru.....	2	0	(s)	1	26	0	0	29
Puerto Rico.....	(s)	(s)	0	2	(s)	1	13	17
Trinidad and Tobago.....	17	8	2	18	38	1	0	84
Uruguay.....	1	0	(s)	2	5	0	0	9
Venezuela.....	165	0	62	163	246	25	0	661
Virgin Islands, U.S.....	128	33	0	64	35	0	16	276
Other.....	1	0	1	1	1	(s)	0	5
Total.....	408	60	82	330	607	39	93	1,621
Western Europe								
Austria.....	14	0	(s)	2	1	(s)	11	27
Belgium.....	99	18	(s)	120	32	11	99	380
Bosnia and Herzegovina..	0	0	0	0	0	0	0	0
Croatia.....	13	(s)	(s)	10	10	5	12	50
Denmark.....	22	1	0	27	24	2	5	82
Finland.....	43	5	(s)	20	(s)	(s)	3	72
France.....	82	31	0	56	39	38	67	314
Germany.....	81	2	(s)	70	70	21	52	297
Greece.....	20	16	0	7	11	2	17	74
Iceland.....	0	0	0	0	0	0	0	0
Ireland.....	(s)	(s)	(s)	2	14	(s)	2	18
Italy.....	62	14	5	154	69	7	35	344
Luxembourg.....	0	0	0	0	0	0	0	0
Macedonia, TFYR.....	(s)	(s)	0	(s)	(s)	0	(s)	1
Netherlands.....	228	79	3	382	159	45	317	1,213
Norway.....	32	7	0	73	23	93	30	258
Portugal.....	21	10	0	21	15	(s)	6	73
Serbia and Montenegro....	0	0	0	0	0	0	0	0
Slovenia.....	(s)	(s)	0	(s)	(s)	0	2	2
Spain.....	33	16	0	17	56	4	43	169
Sweden.....	40	1	(s)	71	47	4	21	184
Switzerland.....	0	0	0	0	7	1	(s)	9
Turkey.....	(s)	1	0	(s)	26	0	4	30
United Kingdom.....	162	19	5	120	75	124	72	578
Other.....	0	0	0	0	0	0	(s)	(s)
Total.....	953	220	14	1,153	680	357	799	4,175

See footnotes at end of table.

Table 3.4 World Exports of Refined Petroleum Products, 1995 (Continued)
(Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Exports of Refined Petroleum ³ Products
Eastern Europe & Former U.S.S.R.								
Albania.....	(s)	0	(s)	0	0	0	1	1
Bulgaria.....	8	1	0	24	4	(s)	1	38
Czech Republic.....	1	0	2	7	7	(s)	2	20
Hungary.....	10	1	0	22	0	1	11	44
Poland.....	0	(s)	0	(s)	16	0	4	20
Romania.....	53	(s)	(s)	41	0	(s)	6	101
Slovakia.....	5	0	1	12	18	0	6	42
Armenia.....	0	0	0	0	0	0	0	0
Azerbaijan.....	7	0	2	22	16	0	2	50
Belarus.....	13	8	0	24	4	0	1	49
Estonia.....	0	0	1	2	4	0	0	7
Georgia.....	0	0	0	0	0	0	0	0
Kazakhstan.....	3	(s)	0	10	6	(s)	10	29
Kyrgyzstan.....	0	0	0	0	0	0	0	0
Latvia.....	1	(s)	0	(s)	(s)	0	(s)	1
Lithuania.....	13	0	4	12	5	3	(s)	37
Moldova.....	0	0	0	0	0	0	0	0
Russia.....	47	10	0	399	413	28	109	1,006
Tajikistan.....	0	0	0	0	0	0	0	0
Turkmenistan.....	9	0	0	10	9	0	0	29
Ukraine.....	(s)	0	0	0	24	0	0	24
Uzbekistan.....	0	0	0	2	1	0	0	3
Total.....	168	21	10	588	527	33	153	1,500
Middle East								
Bahrain.....	17	17	32	83	51	1	39	241
Cyprus.....	0	0	0	0	0	0	0	0
Iran.....	12	0	0	0	23	58	4	96
Iraq.....	0	0	(s)	3	15	0	30	48
Israel.....	13	9	2	31	3	2	5	65
Jordan.....	0	0	0	0	0	0	0	0
Kuwait.....	10	163	30	241	137	102	76	758
Lebanon.....	0	0	0	0	0	0	0	0
Oman.....	0	(s)	0	0	35	1	1	37
Qatar.....	3	7	0	9	18	19	0	56
Saudi Arabia.....	4	0	94	43	247	504	0	892
Syria.....	8	0	(s)	0	20	0	0	28
United Arab Emirates.....	8	51	1	9	(s)	131	16	217
Yemen.....	0	1	0	0	5	0	19	25
Total.....	74	248	160	419	553	818	191	2,463

See footnotes at end of table.

Table 3.4 World Exports of Refined Petroleum Products, 1995 (Continued)
(Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Exports of Refined Petroleum ³ Products
Africa								
Algeria.....	11	9	(s)	77	99	108	94	399
Angola.....	1	0	0	(s)	2	0	0	3
Cameroon.....	(s)	0	(s)	0	(s)	0	(s)	(s)
Congo (Brazzaville).....	(s)	(s)	0	(s)	4	0	0	5
Congo (Kinshasa).....	0	0	0	0	1	0	0	1
Cote d'Ivoire (Ivory Coast)	1	(s)	(s)	3	1	(s)	0	6
Egypt.....	61	4	0	0	48	0	(s)	113
Ethiopia.....	0	0	0	0	0	0	0	0
Gabon.....	(s)	0	(s)	1	(s)	(s)	(s)	1
Ghana.....	0	0	0	0	1	0	0	1
Kenya.....	2	1	1	2	2	(s)	2	9
Libya.....	6	12	1	38	49	15	25	146
Morocco.....	0	0	0	0	0	0	8	8
Nigeria.....	(s)	(s)	(s)	3	10	0	0	14
Senegal.....	1	0	(s)	(s)	0	0	(s)	1
South Africa.....	16	0	5	34	6	0	5	66
Sudan.....	(s)	0	0	0	0	0	0	(s)
Tunisia.....	0	0	0	0	8	(s)	1	10
Zimbabwe.....	0	0	0	0	0	0	0	0
Other.....	1	(s)	(s)	2	4	0	(s)	7
Total.....	100	27	8	160	235	124	135	789
Far East & Oceania								
Australia.....	16	6	1	15	16	20	19	92
Bangladesh.....	0	0	0	0	0	0	1	1
Brunei.....	0	(s)	0	0	0	0	0	(s)
Burma.....	0	0	0	0	0	0	(s)	(s)
China.....	55	5	4	30	2	(s)	18	113
Guam.....	0	0	0	0	0	0	0	0
Hong Kong.....	3	4	0	110	40	1	3	161
India.....	0	0	0	4	13	1	63	81
Indonesia.....	0	0	0	0	136	79	39	255
Japan.....	20	2	7	64	58	(s)	21	173
Korea, North.....	0	0	0	0	(s)	0	0	(s)
Korea, South.....	1	37	2	116	110	8	62	336
Malaysia.....	0	2	11	18	34	8	10	84
Mongolia.....	0	0	0	0	0	0	0	0
New Zealand.....	(s)	0	0	0	0	(s)	0	1
Pakistan.....	0	0	0	0	0	0	5	5
Papua New Guinea.....	0	0	0	(s)	0	0	0	(s)
Philippines.....	2	0	0	0	2	0	12	15
Singapore.....	147	136	11	331	283	17	172	1,097
Sri Lanka.....	0	0	0	0	2	0	2	4
Taiwan.....	0	0	(s)	5	17	(s)	9	31
Thailand.....	5	(s)	(s)	2	1	3	0	11
Vietnam.....	0	0	0	0	0	0	0	0
Other.....	1	1	1	1	0	0	(s)	3
Total.....	249	193	37	697	713	138	435	2,463
World Total.....	2,173	816	315	3,653	3,498	1,885	2,259	14,600

¹ Jet Fuel includes naphtha-type jet fuel and kerosene-type jet fuel.

² Includes asphalt, coke, aviation gasoline, naphthas, paraffin wax, petrochemical feedstocks, unfinished oils, white spirits, and blending components.

³ Exports of refined products do not include bunker fuels where identifiable.

(s)=Value less than 500 barrels per day.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

Table 3.5 World Apparent Consumption of Refined Petroleum Products, 1995
(Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Apparent ³ Consumption
North America								
Canada.....	584	83	52	399	123	242	271	1,755
Mexico.....	526	47	22	236	499	374	152	1,855
United States.....	7,789	1,514	54	3,207	852	2,100	2,209	17,725
Other.....	1	(s)	(s)	2	(s)	(s)	(s)	4
Total.....	8,899	1,645	129	3,844	1,474	2,716	2,633	21,339
Central & South America								
Argentina.....	120	21	7	186	36	58	46	474
Bolivia.....	8	2	1	11	(s)	5	5	33
Brazil.....	359	49	3	496	226	180	177	1,491
Chile.....	45	8	7	64	43	20	4	191
Colombia.....	114	10	7	55	14	14	38	251
Costa Rica.....	8	0	3	14	5	1	(s)	31
Cuba.....	20	4	12	36	88	3	24	187
Dominican Republic.....	12	(s)	6	19	26	7	1	72
Ecuador.....	29	4	2	37	27	18	6	123
El Salvador.....	6	1	(s)	15	7	2	(s)	31
Guatemala.....	9	1	1	14	8	3	5	41
Honduras.....	5	1	1	13	3	1	0	23
Jamaica.....	7	4	2	10	35	1	1	60
Netherlands Antilles.....	2	1	1	10	38	2	16	69
Panama.....	6	1	(s)	15	7	2	11	43
Paraguay.....	5	(s)	(s)	14	2	1	(s)	23
Peru.....	27	9	14	47	30	9	7	143
Puerto Rico.....	40	10	1	29	41	(s)	32	154
Trinidad and Tobago.....	5	1	1	4	6	2	2	22
Uruguay.....	7	0	1	12	7	2	1	31
Venezuela.....	188	0	15	67	59	66	53	448
Virgin Islands, U.S.....	6	8	1	19	28	3	8	74
Other.....	23	9	5	34	39	4	4	119
Total.....	1,053	146	91	1,222	775	405	444	4,135
Western Europe								
Austria.....	55	10	0	86	37	5	41	234
Belgium.....	66	20	3	212	103	18	77	499
Bosnia and Herzegovina.....	6	(s)	1	6	5	0	2	19
Croatia.....	16	2	(s)	29	28	1	12	88
Denmark.....	44	17	0	96	33	3	32	225
Finland.....	31	9	0	83	19	9	24	175
France.....	324	99	(s)	832	149	120	372	1,896
Germany.....	698	125	1	1,257	195	117	483	2,875
Greece.....	64	21	(s)	123	103	13	25	350
Iceland.....	3	2	0	6	2	0	2	15
Ireland.....	24	15	6	46	24	5	6	126
Italy.....	427	57	20	528	579	125	313	2,048
Luxembourg.....	12	4	0	19	2	1	(s)	37
Macedonia, TFYR.....	5	(s)	0	5	7	1	(s)	18
Netherlands.....	93	55	2	169	183	62	226	790
Norway.....	38	12	3	72	14	30	26	196
Portugal.....	44	13	(s)	68	74	34	58	290
Serbia and Montenegro.....	3	1	(s)	6	9	(s)	7	27
Slovenia.....	19	(s)	0	19	5	1	3	47
Spain.....	202	71	3	383	215	91	292	1,256
Sweden.....	98	17	(s)	112	67	14	97	406
Switzerland.....	83	27	(s)	120	9	5	13	257
Turkey.....	100	24	2	173	145	75	82	601
United Kingdom.....	518	169	60	461	159	173	304	1,845
Other.....	2	1	(s)	5	19	(s)	(s)	27
Total.....	2,975	771	103	4,914	2,183	903	2,498	14,347

See footnotes at end of table.

Table 3.5 World Apparent Consumption of Refined Petroleum Products, 1995 (Continued)
(Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Apparent ³ Consumption
Eastern Europe & Former U.S.S.R.								
Albania.....	4	(s)	1	2	3	(s)	5	15
Bulgaria.....	27	6	5	30	41	2	19	131
Czech Republic.....	36	2	1	45	33	3	38	159
Hungary.....	31	4	2	39	42	2	39	160
Poland.....	111	11	1	103	45	16	32	318
Romania.....	38	5	1	58	88	9	45	244
Slovakia.....	11	0	1	15	18	1	20	65
Armenia.....	7	(s)	1	6	8	(s)	(s)	23
Azerbaijan.....	16	11	10	57	65	10	9	179
Belarus.....	32	10	3	48	102	11	22	228
Estonia.....	10	(s)	1	7	6	(s)	1	26
Georgia.....	5	(s)	(s)	6	6	(s)	(s)	17
Kazakhstan.....	52	7	5	86	80	21	29	281
Kyrgyzstan.....	5	1	0	3	2	(s)	1	12
Latvia.....	10	1	(s)	10	19	1	(s)	42
Lithuania.....	15	3	1	9	41	3	2	73
Moldova.....	6	(s)	(s)	8	7	1	(s)	22
Russia.....	609	201	5	716	894	139	411	2,976
Tajikistan.....	2	0	0	4	4	0	0	10
Turkmenistan.....	9	4	2	14	16	14	3	64
Ukraine.....	91	19	17	120	154	41	42	484
Uzbekistan.....	43	4	10	57	40	(s)	25	180
Total.....	1,170	292	66	1,445	1,714	276	745	5,709
Middle East								
Bahrain.....	5	1	1	(s)	4	1	9	21
Cyprus.....	4	10	(s)	8	16	2	4	43
Iran.....	178	13	178	388	271	57	55	1,140
Iraq.....	70	24	24	138	156	20	42	474
Israel.....	47	9	9	33	80	12	19	210
Jordan.....	11	5	5	21	31	7	5	85
Kuwait.....	34	8	1	14	55	4	24	140
Lebanon.....	30	4	2	20	21	6	0	82
Oman.....	14	3	0	3	15	1	5	42
Qatar.....	10	2	(s)	7	1	21	1	42
Saudi Arabia.....	229	60	6	429	212	31	201	1,168
Syria.....	23	5	3	89	74	9	23	226
United Arab Emirates.....	27	5	2	62	194	16	10	316
Yemen.....	23	4	6	20	14	3	3	72
Total.....	707	154	235	1,233	1,143	189	402	4,063

See footnotes at end of table.

Table 3.5 World Apparent Consumption of Refined Petroleum Products, 1995 (Continued)
(Thousand Barrels per Day)

Region Country	Motor Gasoline	Jet Fuel ¹	Kerosene	Distillate Fuel Oil	Residual Fuel Oil	Liquefied Petroleum Gases	Other ²	Total Apparent ³ Consumption
Africa								
Algeria.....	49	8	5	70	10	55	31	228
Angola.....	2	3	1	6	12	1	1	27
Cameroon.....	8	(s)	5	6	3	1	4	27
Congo (Brazzaville).....	1	(s)	1	2	(s)	(s)	3	7
Congo (Kinshasa).....	5	3	1	6	3	(s)	2	20
Cote d'Ivoire (Ivory Coast).....	13	1	11	13	8	1	5	52
Egypt.....	45	15	25	124	179	16	56	460
Ethiopia.....	1	3	0	6	4	(s)	1	15
Gabon.....	1	2	2	5	5	(s)	4	19
Ghana.....	8	1	3	6	5	1	3	27
Kenya.....	8	7	5	14	8	1	3	46
Libya.....	37	22	4	48	49	2	10	172
Morocco.....	9	5	1	44	44	29	10	142
Nigeria.....	99	0	37	66	29	5	46	284
Senegal.....	4	3	(s)	7	6	1	4	25
South Africa.....	188	24	15	103	63	9	57	459
Sudan.....	5	3	1	7	6	(s)	4	26
Tunisia.....	8	6	4	25	15	10	4	70
Zimbabwe.....	7	3	(s)	14	0	(s)	(s)	25
Other.....	48	16	14	67	41	6	18	209
Total.....	545	125	135	640	491	139	265	2,339
Far East & Oceania								
Australia.....	303	78	2	200	45	82	124	834
Bangladesh.....	3	2	9	24	6	1	7	51
Brunei.....	4	1	(s)	3	1	(s)	2	11
Burma.....	5	1	(s)	9	2	(s)	1	18
China.....	680	106	28	888	690	207	731	3,331
Guam.....	5	10	0	11	(s)	(s)	0	26
Hong Kong.....	9	57	2	76	28	4	10	186
India.....	109	45	198	686	211	124	201	1,575
Indonesia.....	115	48	135	344	103	15	53	814
Japan.....	765	197	504	1,276	810	684	1,474	5,711
Korea, North.....	26	0	4	19	13	(s)	1	63
Korea, South.....	163	59	172	475	541	185	433	2,027
Malaysia.....	98	22	4	139	73	20	43	399
Mongolia.....	4	0	1	5	1	0	(s)	11
New Zealand.....	47	16	(s)	34	7	8	43	154
Pakistan.....	27	14	13	126	105	4	10	298
Papua New Guinea.....	2	1	(s)	6	5	(s)	(s)	15
Philippines.....	42	14	14	107	105	21	24	328
Singapore.....	15	73	1	44	290	6	82	512
Sri Lanka.....	4	4	5	20	10	3	3	48
Taiwan.....	137	38	2	111	297	47	105	737
Thailand.....	108	55	2	269	181	47	17	679
Vietnam.....	24	4	7	41	18	(s)	2	94
Other.....	10	14	5	22	13	2	2	69
Total.....	2,707	859	1,107	4,935	3,556	1,461	3,368	17,993
World Total.....	18,056	3,992	1,867	18,233	11,336	6,088	10,355	69,926

¹ Jet Fuel includes naphtha-type jet fuel and kerosene-type jet fuel.

² Includes asphalt, coke, aviation gasoline, naphthas, paraffin wax, petrochemical feedstocks, unfinished oils, white spirits, and blending components.

³ Apparent consumption includes internal consumption, refinery fuel and loss, and bunkering. Also included, where available, are liquefied petroleum gases sold directly from natural gas processing plants for fuel or chemical uses.

(s)=Value less than 500 barrels per day.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

Table 3.6 World Crude Oil Refining Capacity, January 1, 1997

Region Country	Number of Refineries	Thousand Barrels per Day ¹			
		Crude Oil Distillation	Catalytic Cracking	Thermal Cracking	Reforming
North America					
Canada.....	22	1,852	387	128	349
Mexico.....	6	1,520	343	100	228
United States, ²	164	15,452	5,452	1,947	3,540
Total.....	192	18,824	6,182	2,175	4,117
Central & South America					
Argentina.....	12	665	182	46	59
Barbados.....	1	4	0	0	0
Bolivia.....	3	48	0	0	13
Brazil.....	14	1,256	334	9	3
Chile.....	3	192	46	20	16
Colombia.....	5	249	90	52	0
Costa Rica.....	1	15	0	7	1
Cuba.....	4	301	15	0	20
Dominican Republic.....	2	50	0	0	10
Ecuador.....	4	148	0	25	3
El Salvador.....	1	21	0	0	0
Guatemala.....	2	20	0	0	3
Honduras.....	1	14	0	0	2
Jamaica.....	1	36	0	0	4
Martinique.....	1	16	0	0	3
Netherlands Antilles.....	2	490	49	113	20
Nicaragua.....	1	17	4	0	0
Panama.....	1	60	11	27	0
Paraguay.....	1	8	0	0	0
Peru.....	5	182	23	0	0
Puerto Rico.....	2	134	14	0	26
Trinidad and Tobago.....	2	245	25	10	31
Uruguay.....	1	40	9	7	3
Venezuela.....	6	1,177	235	82	47
Virgin Islands, U.S.....	1	545	110	80	125
Total.....	77	5,932	1,146	478	389
Western Europe					
Austria.....	1	210	26	18	34
Belgium.....	4	630	111	61	98
Croatia.....	3	294	32	11	37
Denmark.....	3	189	0	74	32
Finland.....	2	200	45	35	43
France.....	14	1,786	356	148	245
Germany.....	18	2,108	276	289	399
Greece.....	4	396	66	46	52
Ireland.....	1	65	0	0	12
Italy.....	17	2,262	298	416	287
Macedonia, TFYR.....	1	51	0	0	11
Netherlands.....	6	1,187	137	121	169
Norway.....	3	307	48	48	49
Portugal.....	2	304	32	23	50
Serbia and Montenegro.....	2	167	21	0	22
Slovenia.....	1	12	0	0	0
Spain.....	10	1,296	178	145	194
Sweden.....	5	427	30	63	70
Switzerland.....	2	132	0	20	26
Turkey.....	5	683	38	24	65
United Kingdom.....	15	1,941	485	95	334
Total.....	119	14,646	2,179	1,638	2,228

See footnotes at end of table.

Table 3.6 World Crude Oil Refining Capacity, January 1, 1997 (Continued)

Region Country	Number of Refineries	Thousand Barrels per Day ¹			
		Crude Oil Distillation	Catalytic Cracking	Thermal Cracking	Reforming
Eastern Europe & Former U.S.S.R.					
Albania.....	3	40	0	0	0
Bulgaria.....	3	300	0	0	0
Czech Republic.....	4	187	0	0	25
Hungary.....	3	232	24	14	30
Poland.....	7	352	46	0	39
Romania.....	10	559	108	37	76
Slovakia.....	1	115	0	0	22
Azerbaijan.....	2	442	71	0	24
Belarus.....	2	725	0	0	98
Georgia.....	1	106	0	0	10
Kazakhstan.....	3	427	38	30	59
Kyrgyzstan.....	1	10	0	0	0
Lithuania.....	1	240	41	31	24
Russia.....	38	6,733	380	391	848
Turkmenistan.....	2	237	15	0	33
Ukraine.....	6	1,246	60	17	100
Uzbekistan.....	2	175	0	10	23
Total.....	89	12,125	784	530	1,413
Middle East					
Bahrain.....	1	249	41	19	15
Cyprus.....	1	26	0	0	5
Iran.....	8	1,242	30	126	125
Iraq.....	8	348	0	0	44
Israel.....	2	220	50	66	27
Jordan.....	1	100	4	0	9
Kuwait.....	3	824	28	0	48
Lebanon.....	2	38	7	0	7
Oman.....	1	85	0	0	16
Qatar.....	1	58	0	0	12
Saudi Arabia.....	8	1,656	104	78	193
Syria.....	2	246	0	25	29
United Arab Emirates.....	2	213	0	0	30
Yemen.....	2	120	0	0	9
Total.....	42	5,423	264	314	567

See footnotes at end of table.

Table 3.6 World Crude Oil Refining Capacity, January 1, 1997 (Continued)

Region Country	Number of Refineries	Thousand Barrels per Day ¹			
		Crude Oil Distillation	Catalytic Cracking	Thermal Cracking	Reforming
Africa					
Algeria.....	5	465	0	0	59
Angola.....	1	32	0	0	2
Cameroon.....	1	42	0	0	7
Congo (Brazzaville).....	1	21	0	0	2
Congo (Kinshasa).....	1	17	0	0	4
Cote d'Ivoire (Ivory Coast).....	2	64	0	0	9
Egypt.....	8	546	0	0	34
Eritrea.....	1	18	0	0	2
Gabon.....	1	17	0	7	1
Ghana.....	1	27	0	0	6
Kenya.....	1	86	0	0	9
Liberia.....	1	15	0	0	2
Libya.....	3	348	0	0	14
Madagascar.....	1	15	0	6	2
Morocco.....	2	156	5	0	27
Nigeria.....	4	433	83	0	70
Senegal.....	1	17	0	0	2
Sierra Leone.....	1	10	0	0	0
Somalia.....	1	10	0	0	0
South Africa.....	4	414	87	47	73
Sudan.....	1	22	0	0	2
Tanzania.....	1	16	0	0	9
Tunisia.....	1	34	0	0	3
Zambia.....	1	25	0	0	6
Total.....	45	2,849	175	60	344
Far East & Oceania					
Australia.....	10	771	220	0	192
Bangladesh.....	1	31	0	10	2
Brunei.....	1	9	0	0	6
Burma.....	2	32	0	0	0
China.....	34	2,867	855	0	142
India.....	12	1,086	138	65	29
Indonesia.....	7	805	18	59	93
Japan.....	40	4,989	758	18	705
Korea, North.....	2	71	0	0	7
Korea, South.....	6	2,211	108	0	166
Malaysia.....	4	330	0	0	53
New Zealand.....	1	91	0	0	23
Pakistan.....	3	137	0	0	7
Philippines.....	4	323	26	20	43
Singapore.....	4	1,157	60	191	128
Sri Lanka.....	1	48	0	11	3
Taiwan.....	2	770	50	0	140
Thailand.....	4	558	72	17	68
Total.....	138	16,287	2,305	393	1,806
World Total.....	702	76,085	13,034	5,588	10,863

¹ Calendar day basis.

² Refinery cracking and reforming data for the United States are available only on a stream day basis. These figures have been converted to calendar day by reducing the stream day data by 5 percent. Thus, the United States cracking and reforming data are estimated.

--Not applicable.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

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Section 4

Natural Gas

Table 4.1 World Natural Gas Production, 1995
(Billion Cubic Feet)

Region Country	Gross Production	Vented, Flared	Reinjected	Marketed Production	Dry Gas Production
North America					
Canada.....	6,798	89	482	6,228	5,638
Mexico.....	1,372	78	0	1,294	940
United States.....	23,744	284	3,565	19,506	18,599
Total.....	31,914	451	4,047	27,028	25,177
Central & South America					
Argentina.....	1,076	78	46	952	883
Barbados.....	1	0	0	1	1
Bolivia.....	189	18	53	119	113
Brazil.....	281	38	50	193	159
Chile.....	133	4	59	71	67
Colombia.....	271	16	87	168	161
Cuba.....	1	0	0	1	1
Ecuador.....	37	30	4	4	4
Peru.....	45	8	4	33	33
Trinidad and Tobago.....	360	92	0	268	268
Venezuela.....	1,679	126	495	1,058	890
Total.....	4,074	409	797	2,868	2,581
Western Europe					
Austria.....	52	0	0	52	52
Belgium.....	0	0	0	0	0
Bosnia and Herzegovina....	32	0	0	32	32
Croatia.....	70	0	0	70	70
Denmark.....	236	6	43	187	187
France.....	118	0	0	118	118
Germany.....	730	22	0	708	708
Greece.....	1	(s)	0	1	1
Ireland.....	98	0	0	98	98
Italy.....	720	0	0	720	720
Netherlands.....	2,981	7	0	2,973	2,973
Norway.....	1,667	14	534	1,118	1,076
Serbia and Montenegro.....	32	0	0	32	32
Slovenia.....	(s)	0	0	(s)	(s)
Spain.....	15	(s)	0	14	14
Switzerland.....	0	0	0	0	0
Turkey.....	6	0	0	6	6
United Kingdom.....	2,949	81	102	2,767	2,666
Total.....	9,707	130	679	8,897	8,755
Eastern Europe & Former U.S.S.R.					
Albania.....	2	0	1	1	1
Bulgaria.....	2	0	0	2	2
Czech Republic.....	9	0	0	9	9
Hungary.....	173	0	0	173	173
Poland.....	170	0	0	170	170
Romania.....	694	0	0	694	683
Slovakia.....	12	0	0	12	12
Azerbaijan.....	232	0	0	232	232
Belarus.....	11	0	0	11	11
Kazakhstan.....	169	0	0	169	169
Kyrgyzstan.....	1	0	0	1	1
Russia.....	21,005	0	0	21,005	21,005
Tajikistan.....	1	0	0	1	1
Turkmenistan.....	1,141	0	0	1,141	1,141
Ukraine.....	616	0	0	616	620
Uzbekistan.....	1,695	0	0	1,695	1,695
Total.....	25,933	0	1	25,932	25,925

See footnotes at end of table.

Table 4.1 World Natural Gas Production, 1995 (Continued)
(Billion Cubic Feet)

Region Country	Gross Production	Vented, Flared	Reinjected	Marketed Production	Dry Gas Production
Middle East					
Bahrain.....	339	0	102	238	229
Iran.....	2,671	410	913	1,349	1,247
Iraq.....	120	2	0	119	112
Israel.....	1	0	0	1	1
Jordan.....	10	0	0	10	10
Kuwait.....	267	18	0	249	211
Oman.....	268	8	100	160	147
Qatar.....	650	0	109	540	477
Saudi Arabia.....	2,612	449	248	1,915	1,343
Syria.....	155	16	16	123	104
United Arab Emirates.....	1,443	13	212	1,218	1,106
Yemen.....	471	0	461	11	0
Total.....	9,008	914	2,160	5,934	4,987
Africa					
Algeria.....	4,864	251	2,377	2,236	2,052
Angola.....	184	132	26	25	20
Cameroon.....	85	85	0	0	0
Congo (Brazzaville).....	46	46	0	0	0
Cote d'Ivoire (Ivory Coast).....	1	0	0	1	1
Egypt.....	563	41	35	487	439
Equatorial Guinea.....	21	18	0	3	0
Gabon.....	91	63	21	7	4
Libya.....	440	63	132	245	224
Morocco.....	1	0	0	1	1
Nigeria.....	1,234	926	125	183	183
Senegal.....	2	0	0	2	2
South Africa.....	69	0	0	69	69
Tunisia.....	26	12	0	14	12
Total.....	7,627	1,637	2,718	3,273	3,006
Far East & Oceania					
Afghanistan.....	7	0	0	7	7
Australia.....	1,035	6	0	1,029	1,029
Bangladesh.....	260	0	0	260	260
Brunei.....	395	0	59	336	330
Burma.....	58	0	0	58	58
China.....	601	0	0	601	601
India.....	748	94	4	651	628
Indonesia.....	3,005	177	544	2,285	2,238
Japan.....	78	0	0	78	78
Malaysia.....	1,036	0	0	1,036	1,020
New Zealand.....	166	2	0	164	164
Pakistan.....	646	0	0	646	646
Papua New Guinea.....	4	0	(s)	4	4
Philippines.....	(s)	0	0	(s)	(s)
Taiwan.....	34	0	0	34	34
Thailand.....	401	0	0	401	368
Vietnam.....	35	10	0	25	25
Total.....	8,510	287	607	7,615	7,489
World Total.....	96,773	3,828	11,009	81,547	77,920

(s) = Value less than 500 million cubic feet.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

Table 4.2 World Dry Natural Gas Supply and Disposition, 1995
(Billion Cubic Feet)

Region Country	Dry Gas Production	Imports ¹	Exports ¹	Apparent Consumption ²
North America				
Canada.....	5,638	24	2,795	2,867
Mexico.....	940	61	7	994
United States.....	18,599	2,841	154	21,581
Total.....	25,177	2,926	2,956	25,442
Central & South America				
Argentina.....	883	70	0	953
Barbados.....	1	0	0	1
Bolivia.....	113	0	70	43
Brazil.....	159	0	0	159
Chile.....	67	0	0	67
Colombia.....	161	0	0	161
Cuba.....	1	0	0	1
Ecuador.....	4	0	0	4
Peru.....	33	0	0	33
Trinidad and Tobago.....	268	0	0	268
Venezuela.....	890	0	0	890
Total.....	2,581	70	70	2,581
Western Europe				
Austria.....	52	225	1	262
Belgium.....	0	431	0	443
Bosnia and Herzegovina....	32	55	0	87
Croatia.....	70	12	0	82
Denmark.....	187	0	61	126
Finland.....	0	123	0	123
France.....	118	1,146	25	1,183
Germany.....	708	2,726	118	3,364
Greece.....	1	0	0	1
Ireland.....	98	3	0	102
Italy.....	720	1,212	1	1,921
Luxembourg.....	0	22	0	22
Netherlands.....	2,973	136	1,436	1,694
Norway.....	1,076	0	975	101
Serbia and Montenegro.....	32	7	0	39
Slovenia.....	(s)	34	0	35
Spain.....	14	291	0	298
Sweden.....	0	30	0	28
Switzerland.....	0	89	0	89
Turkey.....	6	243	0	249
United Kingdom.....	2,666	60	36	2,690
Total.....	8,755	6,847	2,654	12,938

See footnotes at end of table.

Table 4.2 World Dry Natural Gas Supply and Disposition, 1995 (Continued)
(Billion Cubic Feet)

Region Country	Dry Gas Production	Imports ¹	Exports ¹	Apparent Consumption ²
Eastern Europe & Former U.S.S.R.				
Albania.....	1	0	0	1
Bulgaria.....	2	207	0	208
Czech Republic.....	9	279	(s)	285
Hungary.....	173	241	0	407
Poland.....	170	256	0	426
Romania.....	683	217	0	901
Slovakia.....	12	261	0	273
Armenia.....	0	57	0	57
Azerbaijan.....	232	85	0	318
Belarus.....	11	441	0	452
Estonia.....	0	26	0	26
Georgia.....	0	74	0	74
Kazakhstan.....	169	399	85	443
Kyrgyzstan.....	1	30	0	31
Latvia.....	0	39	0	39
Lithuania.....	0	99	0	99
Moldova.....	0	49	0	49
Russia.....	21,005	290	6,488	14,507
Tajikistan.....	1	27	0	29
Turkmenistan.....	1,141	0	971	170
Ukraine.....	620	2,356	0	2,970
Uzbekistan.....	1,695	0	346	1,349
Total.....	25,925	5,432	7,890	23,113
Middle East				
Bahrain.....	229	0	0	229
Iran.....	1,247	0	4	1,243
Iraq.....	112	0	0	112
Israel.....	1	0	0	1
Jordan.....	10	0	0	10
Kuwait.....	211	0	0	211
Oman.....	147	0	18	130
Qatar.....	477	0	0	477
Saudi Arabia.....	1,343	0	0	1,343
Syria.....	104	0	0	104
United Arab Emirates.....	1,106	18	248	875
Total.....	4,987	18	269	4,735
Africa				
Algeria.....	2,052	0	1,310	742
Angola.....	20	0	0	20
Cote d'Ivoire (Ivory Coast).....	1	0	0	1
Egypt.....	439	0	0	439
Gabon.....	4	0	0	4
Libya.....	224	0	53	171
Morocco.....	1	0	0	1
Nigeria.....	183	0	0	183
Senegal.....	2	0	0	2
South Africa.....	69	0	0	69
Tunisia.....	12	46	0	58
Total.....	3,006	46	1,362	1,689

See footnotes at end of table.

Table 4.2 World Dry Natural Gas Supply and Disposition, 1995 (Continued)
(Billion Cubic Feet)

Region Country	Dry Gas Production	Imports ¹	Exports ¹	Apparent Consumption ²
Far East & Oceania				
Afghanistan.....	7	0	0	7
Australia.....	1,029	0	324	706
Bangladesh.....	260	0	0	260
Brunei.....	330	0	296	34
Burma.....	58	0	0	58
China.....	601	0	0	601
India.....	628	0	0	628
Indonesia.....	2,238	0	1,176	1,061
Japan.....	78	2,114	0	2,207
Korea, South.....	0	337	0	337
Malaysia.....	1,020	0	535	485
New Zealand.....	164	0	0	162
Pakistan.....	646	0	0	646
Papua New Guinea.....	4	0	0	4
Philippines.....	(s)	0	0	(s)
Singapore.....	0	53	0	53
Taiwan.....	34	117	0	151
Thailand.....	368	0	0	368
Vietnam.....	25	0	0	25
Total.....	7,489	2,621	2,331	7,792
World Total.....	77,920	17,960	17,532	78,290

¹ Includes liquefied natural gas.

² Includes stock changes.

(s) = Value less than 500 million cubic feet.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

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Section 5

Coal

Table 5.1 World Coal Production, 1995
(Thousand Short Tons)

Region Country	Primary ¹			Secondary ²		
	Anthracite	Bituminous	Lignite	Metallurgical Coke	Anthracite and Bituminous Briquets	Lignite Briquets
North America						
Canada.....	0	70,874	11,839	3,619	0	0
Mexico.....	0	9,795	0	2,562	0	0
United States.....	4,711	941,763	86,500	23,749	0	0
Total.....	4,711	1,022,432	98,339	29,930	0	0
Central & South America						
Argentina.....	0	336	0	772	0	0
Brazil.....	0	4,579	0	9,074	0	0
Chile.....	0	1,104	44	516	0	0
Colombia.....	0	28,682	0	637	0	0
Cuba.....	0	0	0	18	0	0
Peru.....	18	140	0	0	0	0
Uruguay.....	0	0	0	1	0	0
Venezuela.....	0	5,115	0	0	0	0
Total.....	18	39,956	44	11,018	0	0
Western Europe						
Austria.....	0	1,227	0	1,596	0	0
Belgium.....	0	702	0	4,074	23	0
Bosnia and Herzegovina....	0	0	3,133	0	0	0
Croatia.....	77	110	9	331	0	0
Finland.....	0	0	0	1,014	0	0
France.....	484	7,209	1,543	6,135	316	0
Germany.....	5,853	55,823	212,477	12,238	418	9,858
Greece.....	0	77	63,584	0	0	103
Ireland.....	0	1	0	0	0	368
Italy.....	0	0	419	5,715	0	0
Macedonia, TFYR.....	0	0	3,016	0	0	0
Netherlands.....	0	0	0	3,191	0	0
Norway.....	0	322	0	0	0	0
Portugal.....	0	157	0	365	0	0
Serbia and Montenegro.....	0	78	44,092	0	0	0
Slovenia.....	0	1,066	4,318	0	0	0
Spain.....	7,571	11,827	11,879	2,687	0	0
Sweden.....	0	0	0	1,267	0	0
Turkey.....	0	2,478	58,156	3,451	0	2
United Kingdom.....	1,047	51,313	0	6,636	562	0
Total.....	15,032	132,389	402,624	48,701	1,319	10,331
Eastern Europe & Former U.S.S.R.						
Albania.....	0	0	132	0	0	0
Bulgaria.....	121	3,650	27,416	1,367	0	1,114
Czech Republic.....	0	77,473	1,139	5,809	0	683
Hungary.....	0	10,405	4,793	0	0	683
Poland.....	0	151,200	70,049	12,764	11	11
Romania.....	0	4,656	39,261	3,730	0	0
Slovakia.....	0	2,109	827	2,105	0	0
Estonia.....	0	0	14,672	44	0	0
Georgia.....	0	47	9	0	0	0
Kazakhstan.....	0	88,044	3,668	1,996	0	0
Kyrgyzstan.....	0	1,455	309	0	0	0
Moldova.....	0	35	0	0	0	0
Russia.....	21,667	179,897	108,467	30,536	774	256
Tajikistan.....	0	0	35	1	0	0
Ukraine.....	19,910	68,936	3,307	20,051	2,315	882
Uzbekistan.....	0	132	3,276	0	0	0
Total.....	41,698	588,039	277,360	78,404	3,100	3,630

See footnotes at end of table.

Table 5.1 World Coal Production, 1995 (Continued)
(Thousand Short Tons)

Region Country	Primary ¹			Secondary ²		
	Anthracite	Bituminous	Lignite	Metallurgical Coke	Anthracite and Bituminous Briquets	Lignite Briquets
Middle East						
Iran.....	0	1,102	0	50	0	0
Total.....	0	1,102	0	50	0	0
Africa						
Algeria.....	0	24	0	0	0	0
Botswana.....	0	958	0	0	0	0
Cameroon.....	0	1	0	0	0	0
Congo (Kinshasa).....	0	105	0	0	0	0
Egypt.....	0	0	0	1,620	0	0
Malawi.....	0	60	0	0	0	0
Morocco.....	715	0	0	0	0	0
Mozambique.....	0	42	0	0	0	0
Niger.....	0	191	0	0	0	0
Nigeria.....	0	55	0	0	0	0
South Africa.....	4,255	223,054	0	3,318	0	0
Swaziland.....	23	37	0	0	0	0
Tanzania.....	0	6	0	0	0	0
Zambia.....	0	397	0	35	0	0
Zimbabwe.....	0	2,337	0	248	0	0
Total.....	4,993	227,265	0	5,221	0	0
Far East & Oceania						
Afghanistan.....	0	6	0	0	0	0
Australia.....	0	210,602	55,945	5,089	0	631
Bhutan.....	0	2	0	0	0	0
Burma.....	0	42	44	0	0	0
China.....	296,878	1,169,920	70,171	148,832	0	0
India.....	0	280,072	21,227	12,070	0	231
Indonesia.....	0	45,355	0	0	0	0
Japan.....	204	6,902	18	46,605	85	0
Korea, North.....	48,744	0	29,321	3,858	0	0
Korea, South.....	6,305	0	0	13,911	3,312	0
Laos.....	0	1	0	0	0	0
Malaysia.....	0	123	0	0	0	0
Mongolia.....	0	721	7,699	0	0	0
Nepal.....	0	0	13	0	0	0
New Zealand.....	164	3,265	228	0	0	0
Pakistan.....	0	3,318	0	773	0	0
Philippines.....	0	1,899	3	0	0	0
Taiwan.....	0	259	0	3,520	0	0
Thailand.....	6	0	20,300	0	0	0
Vietnam.....	8,214	0	0	0	0	0
Total.....	360,516	1,722,487	204,969	234,658	3,397	862
World Total.....	426,968	3,733,671	983,336	407,982	7,816	14,823

¹ Primary coal includes all coal mined and, when necessary, washed and sorted.

² Secondary coal (e.g. coke, briquets), is derived from primary coal.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

Table 5.2 World Anthracite Coal Production, 1987 - 1996
(Thousand Short Tons)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
United States.....	3,560	3,555	3,348	3,506	3,445	3,483	4,306	4,621	4,711	4,768
Total.....	3,560	3,555	3,348	3,506	3,445	3,483	4,306	4,621	4,711	4,768
Central & South America										
Peru.....	9	10	11	22	12	89	34	29	18	10
Total.....	9	10	11	22	12	89	34	29	18	10
Western Europe										
Belgium.....	2,575	799	713	95	0	0	0	0	0	0
Croatia.....	--	--	--	--	--	132	116	106	77	64
France.....	2,335	1,848	1,762	2,007	1,764	1,580	1,488	1,044	484	503
Germany.....	--	--	--	--	7,217	7,546	6,650	6,028	5,853	5,491
Germany, West.....	8,254	7,941	7,315	7,447	--	--	--	--	--	--
Spain.....	7,373	7,204	7,490	7,791	7,503	8,009	7,846	7,862	7,571	7,404
Turkey.....	512	657	473	0	0	0	0	0	0	0
United Kingdom.....	2,302	2,248	2,201	1,928	1,942	1,737	1,128	1,051	1,047	1,004
Total.....	23,351	20,696	19,955	19,268	18,426	19,005	17,227	16,090	15,032	14,466
Eastern Europe & Former U.S.S.R.										
Bulgaria.....	78	72	69	47	42	84	79	90	121	123
Former U.S.S.R.....	78,815	79,697	74,957	69,005	61,399	--	--	--	--	--
Russia.....	--	--	--	--	--	27,836	25,207	22,384	21,667	21,104
Ukraine.....	--	--	--	--	--	31,526	27,055	22,505	19,910	16,724
Total.....	78,894	79,769	75,027	69,052	61,441	59,446	52,341	44,979	41,698	37,951
Africa										
Morocco.....	699	702	556	580	607	635	666	693	715	718
South Africa.....	5,789	5,458	4,639	4,037	2,964	5,364	5,183	4,721	4,255	3,894
Swaziland.....	71	71	71	68	53	43	21	22	23	22
Total.....	6,559	6,230	5,265	4,685	3,624	6,042	5,870	5,437	4,993	4,634
Far East & Oceania										
China.....	212,019	223,339	240,227	234,627	239,753	243,567	251,048	270,516	296,878	298,900
Japan.....	481	387	313	246	238	239	219	224	204	209
Korea, North.....	45,746	46,297	47,069	47,069	47,399	47,399	47,951	48,502	48,744	50,548
Korea, South.....	26,756	26,781	22,912	18,978	16,599	13,195	10,409	8,199	6,305	5,458
New Zealand.....	197	139	100	98	143	193	167	157	164	158
Thailand.....	8	15	9	21	24	24	18	13	6	6
Vietnam.....	7,521	7,667	4,220	5,100	4,772	5,282	6,503	6,652	8,214	8,519
Total.....	292,728	304,624	314,849	306,139	308,928	309,899	316,315	334,263	360,516	363,797
World Total.....	405,101	414,884	418,453	402,673	395,877	397,964	396,092	405,418	426,968	425,625

¹ Preliminary.

-- Not applicable.

Notes: Sum of components may not equal total due to independent rounding.

No production is reported for Middle East.

Sources: See sources at the end of this Section.

Table 5.3 World Bituminous Coal Production, 1987 - 1996
(Thousand Short Tons)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	56,430	64,481	65,804	64,981	68,506	61,270	65,015	68,497	70,874	71,601
Mexico.....	8,853	7,904	8,491	6,659	6,057	6,729	7,840	9,809	9,795	10,097
United States.....	836,774	861,609	890,942	937,480	906,025	904,000	851,570	940,803	941,763	971,032
Total.....	902,056	933,993	965,237	1,009,120	980,589	971,998	924,425	1,019,108	1,022,432	1,052,730
Central & South America										
Argentina.....	411	564	568	298	322	237	184	384	336	343
Brazil.....	7,588	8,081	7,354	5,065	5,719	5,215	5,065	4,905	4,579	4,734
Chile.....	1,727	2,123	2,148	2,406	2,434	1,792	1,494	1,303	1,104	1,190
Colombia.....	14,836	16,607	20,208	22,562	26,015	26,209	23,934	24,832	28,682	33,141
Peru.....	105	186	188	90	54	10	74	115	140	166
Venezuela.....	262	1,182	2,347	2,413	2,819	3,386	4,289	5,226	5,115	3,843
Total.....	24,930	28,744	32,813	32,834	37,362	36,849	35,040	36,765	39,956	43,417
Western Europe										
Austria.....	3,071	2,347	2,277	2,698	2,294	1,952	1,864	1,533	1,227	1,218
Belgium.....	4,817	2,741	2,087	2,598	2,323	1,319	1,070	830	702	634
Croatia.....	--	--	--	--	--	0	116	106	110	77
France.....	15,626	12,365	11,792	10,894	10,523	9,939	8,622	7,777	7,209	7,490
Germany.....	--	--	--	--	72,970	71,989	64,091	57,491	55,823	52,362
Germany, West.....	85,313	82,176	80,429	79,019	--	--	--	--	--	--
Greece.....	0	0	0	0	0	0	19	76	77	76
Ireland.....	50	46	47	28	1	1	1	(s)	1	1
Italy.....	15	44	82	64	23	18	11	6	0	0
Norway.....	440	291	397	334	364	396	295	332	322	270
Portugal.....	287	253	284	310	298	244	217	162	157	154
Spain.....	22,710	23,587	21,902	13,791	12,381	12,595	12,256	12,281	11,827	15,077
Slovenia.....	--	--	--	--	--	1,458	1,323	1,189	1,066	1,051
Sweden.....	28	33	22	12	31	41	4	1	0	0
Turkey.....	3,815	3,589	3,349	3,330	3,198	3,354	3,169	3,128	2,478	2,680
United Kingdom.....	112,780	112,503	109,242	104,055	104,632	93,139	75,177	52,944	51,313	54,877
Former Yugoslavia.....	13,794	13,490	13,589	12,957	11,309	--	--	--	--	--
Serbia and Montenegro.....	--	--	--	--	--	112	80	90	78	66
Total.....	262,746	253,466	245,499	230,090	220,347	196,557	168,316	137,945	132,389	136,034
Eastern Europe & Former U.S.S.R.										
Bulgaria.....	5,894	5,394	5,210	4,194	3,767	4,092	3,914	3,835	3,650	3,719
Former Czechoslovakia.....	136,778	134,332	127,852	113,848	105,867	99,912	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	75,806	80,954	77,473	75,891
Slovakia.....	--	--	--	--	--	--	2,526	2,381	2,109	2,008
Hungary.....	17,219	16,800	15,594	13,348	12,840	11,979	11,045	10,661	10,405	11,388
Moldova.....	--	--	--	--	--	287	197	122	35	40
Poland.....	212,758	212,763	195,807	162,851	154,738	145,086	143,828	147,636	151,200	149,990
Romania.....	10,962	11,026	10,078	5,606	4,827	5,769	4,376	4,987	4,656	4,777
Former U.S.S.R.....	576,950	581,579	560,856	640,222	472,671	--	--	--	--	--
Georgia.....	--	--	--	--	--	342	26	43	47	79
Kazakhstan.....	--	--	--	--	--	134,924	118,521	110,478	88,044	81,000
Kyrgyzstan.....	--	--	--	--	--	2,303	2,001	2,153	1,455	1,168
Russia.....	--	--	--	--	--	238,209	214,510	185,299	179,897	175,220
Ukraine.....	--	--	--	--	--	109,358	95,924	77,916	68,936	57,907
Uzbekistan.....	--	--	--	--	--	197	177	157	132	126
Total.....	960,562	961,895	915,397	940,069	754,710	752,459	672,853	626,621	588,039	563,114

See footnotes at end of table.

Table 5.3 World Bituminous Coal Production, 1987 - 1996 (Continued)
(Thousand Short Tons)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Middle East										
Iran.....	1,367	1,389	1,323	1,213	1,087	1,070	1,069	1,080	1,102	1,102
Total.....	1,367	1,389	1,323	1,213	1,087	1,070	1,069	1,080	1,102	1,102
Africa										
Algeria.....	9	11	17	11	17	17	22	22	24	24
Botswana.....	638	671	698	875	882	893	882	919	958	939
Cameroon.....	1	1	1	1	1	1	1	1	1	1
Congo (Kinshasa).....	134	165	121	86	88	94	101	106	105	105
Malawi.....	20	28	35	44	59	54	55	57	60	62
Mozambique.....	47	50	46	44	46	44	44	44	42	41
Niger.....	181	171	188	190	190	187	190	190	191	187
Nigeria.....	127	90	89	84	152	96	45	55	55	54
South Africa.....	188,826	194,458	189,833	189,145	193,463	197,512	202,288	211,117	223,054	223,581
Swaziland.....	111	111	111	108	83	67	34	35	37	36
Tanzania.....	3	3	3	4	4	4	4	4	6	6
Zambia.....	510	692	438	416	419	435	441	460	397	411
Zimbabwe.....	5,338	5,583	5,634	5,465	6,169	6,115	5,805	6,080	2,337	2,423
Total.....	195,947	202,035	197,216	196,473	201,573	205,519	209,912	219,091	227,265	227,870
Far East & Oceania										
Afghanistan.....	184	152	140	116	104	9	8	7	6	6
Australia.....	162,831	148,599	162,897	175,085	181,489	193,048	195,060	194,723	210,602	214,922
Bhutan.....	2	2	2	2	2	2	2	2	2	2
Burma.....	43	33	43	34	40	37	35	36	42	43
China.....	774,286	816,328	874,563	905,582	909,539	932,908	989,315	1,066,032	1,169,920	1,177,889
India.....	198,306	200,643	207,510	217,839	235,134	252,820	262,910	271,561	280,072	286,601
Indonesia.....	3,550	4,643	9,246	11,870	15,118	25,398	31,955	32,672	45,355	53,338
Japan.....	14,037	13,382	12,220	11,068	9,335	8,379	7,717	7,867	6,902	7,130
Laos.....	1	1	1	1	1	1	1	1	1	1
Malaysia.....	96	98	120	122	198	83	415	148	123	129
Mongolia.....	722	761	763	761	744	700	689	718	721	754
New Zealand.....	2,551	2,488	2,908	2,675	2,760	3,052	3,224	3,027	3,265	3,125
Pakistan.....	2,377	3,006	2,887	3,033	3,183	3,388	3,389	3,543	3,318	3,801
Philippines.....	1,316	1,472	1,360	1,370	1,391	1,831	1,846	1,889	1,899	1,969
Taiwan.....	1,653	1,351	865	520	444	369	362	314	259	163
Total.....	1,161,954	1,192,960	1,275,525	1,330,078	1,359,483	1,422,024	1,496,929	1,582,541	1,722,487	1,749,871
World Total.....	3,509,562	3,574,481	3,633,009	3,739,877	3,555,150	3,586,478	3,508,544	3,623,151	3,733,671	3,774,138

¹ Preliminary.

-- Not applicable.

(s) = Value less than 500 short tons.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

Table 5.4 World Lignite Coal Production, 1987 - 1996
(Thousand Short Tons)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	11,045	13,391	11,921	10,369	9,899	11,053	11,074	11,778	11,839	11,964
United States.....	78,427	85,101	86,439	88,090	86,514	90,062	89,549	88,081	86,500	88,056
Total.....	89,472	98,492	98,360	98,459	96,413	101,115	100,623	99,859	98,339	100,020
Central & South America										
Chile.....	40	41	42	44	44	66	46	44	44	39
Total.....	40	41	42	44	44	66	46	44	44	39
Western Europe										
France.....	2,271	1,822	2,390	2,572	2,167	1,739	1,843	1,655	1,543	1,544
Germany.....	--	--	--	--	308,182	266,552	244,494	228,263	212,477	206,396
Germany, East.....	340,588	342,063	331,860	308,647	--	--	--	--	--	--
Germany, West.....	119,989	119,735	121,118	118,597	--	--	--	--	--	--
Greece.....	49,176	53,267	57,172	57,206	58,086	60,683	60,425	62,470	63,584	65,503
Italy.....	1,057	1,102	1,102	1,054	1,036	787	683	294	419	342
Spain.....	17,226	14,280	19,042	18,048	17,111	16,291	14,713	12,524	11,879	10,587
Turkey.....	47,285	38,953	53,752	48,950	47,628	53,339	50,359	56,805	58,156	59,818
Former Yugoslavia.....	64,977	66,509	68,637	70,652	66,727	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	6,924	5,539	3,240	3,133	2,609
Croatia.....	--	--	--	--	--	17	12	8	9	8
Macedonia, TFYR.....	--	--	--	--	--	7,135	7,626	7,562	3,016	2,973
Serbia and Montenegro.....	--	--	--	--	--	46,532	40,570	40,210	44,092	42,439
Slovenia.....	--	--	--	--	--	4,666	4,322	4,161	4,318	4,257
Total.....	642,568	637,732	655,073	625,725	500,938	464,666	430,587	417,192	402,624	396,475
Eastern Europe & Former U.S.S.R.										
Albania.....	2,352	2,407	2,417	2,282	1,198	403	237	186	132	130
Bulgaria.....	34,616	32,175	32,528	30,675	27,553	29,268	28,010	27,807	27,416	27,937
Former Czechoslovakia.....	4,059	3,976	4,011	3,643	3,403	1,987	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	1,367	1,190	1,139	1,092
Slovakia.....	--	--	--	--	--	--	1,039	882	827	787
Hungary.....	7,962	6,210	6,485	6,029	5,872	5,470	5,056	4,881	4,793	5,208
Poland.....	80,683	81,008	79,164	74,499	76,507	73,692	75,073	73,601	70,049	69,489
Romania.....	45,852	53,780	58,470	36,483	30,894	36,408	38,423	40,346	39,261	40,282
Former U.S.S.R.....	181,815	190,033	180,253	172,609	167,585	--	--	--	--	--
Estonia.....	--	--	--	--	--	20,777	16,441	16,017	14,672	12,221
Georgia.....	--	--	--	--	--	77	7	7	9	9
Kazakhstan.....	--	--	--	--	--	4,577	5,147	4,603	3,668	3,375
Kyrgyzstan.....	--	--	--	--	--	1,225	1,086	493	309	265
Russia.....	--	--	--	--	--	139,808	124,316	112,656	108,467	105,648
Tajikistan.....	--	--	--	--	--	287	197	122	35	30
Ukraine.....	--	--	--	--	--	6,370	4,572	3,748	3,307	2,778
Uzbekistan.....	--	--	--	--	--	4,992	4,012	4,075	3,276	3,286
Total.....	357,338	369,590	363,328	326,218	313,013	325,342	304,984	290,615	277,360	272,537
Far East & Oceania										
Australia.....	46,081	47,838	53,230	50,695	54,439	55,913	52,523	53,740	55,945	59,088
Burma.....	39	39	40	42	43	43	43	44	44	46
China.....	36,597	40,455	47,157	50,155	49,373	52,106	63,167	66,957	70,171	72,977
India.....	10,325	13,867	13,933	15,554	17,604	17,429	18,318	19,850	21,227	24,251
Japan.....	13	14	15	17	17	19	18	18	18	18
Korea, North.....	16,535	19,842	22,046	24,251	25,353	26,455	29,762	29,211	29,321	30,406
Mongolia.....	8,639	9,616	8,927	8,749	8,627	7,606	7,496	7,661	7,699	8,046
Nepal.....	6	10	12	12	13	11	12	13	13	13
New Zealand.....	95	192	175	177	191	197	194	278	228	218
Philippines.....	3	3	3	3	3	3	3	3	3	3
Thailand.....	7,607	8,002	9,812	13,692	16,192	16,904	17,119	18,831	20,300	21,051
Total.....	125,940	139,878	155,350	163,347	171,854	176,686	188,655	196,605	204,969	216,118
World Total.....	1,215,359	1,245,732	1,272,154	1,213,793	1,082,261	1,067,875	1,024,895	1,004,316	983,336	985,189

¹ Preliminary.

-- Not applicable.

Notes: Sum of components may not equal total due to independent rounding.

No production is reported for Middle East.

No production is reported for Africa.

Sources: See sources at the end of this Section.

Table 5.5 World Coal Supply and Disposition, 1995
(Trillion Btu)

Region Country	Production	Imports ¹	Exports ¹	Apparent Consumption ²
North America				
Canada.....	1,885	276	936	1,279
Mexico.....	153	40	(s)	221
United States ³	21,979	225	2,337	19,610
Total.....	24,017	541	3,273	21,111
Central & South America				
Argentina.....	7	33	1	39
Brazil.....	102	364	0	471
Chile.....	28	73	1	107
Colombia.....	671	0	510	113
Peru.....	4	13	0	20
Venezuela.....	129	3	119	18
Other.....	0	26	0	25
Total.....	942	512	632	794
Western Europe				
Austria.....	30	98	0	144
Belgium.....	11	430	38	362
Bosnia and Herzegovina.....	16	0	0	16
Croatia.....	5	15	5	15
Denmark.....	0	313	1	246
Finland.....	0	153	(s)	171
France.....	208	378	18	605
Germany.....	3,055	462	55	3,556
Greece.....	301	37	0	335
Italy.....	3	483	4	453
Luxembourg.....	0	20	0	20
Macedonia, TFYR.....	34	3	(s)	38
Netherlands.....	0	450	102	337
Norway.....	8	39	5	41
Portugal.....	4	151	2	148
Serbia and Montenegro.....	233	17	0	250
Slovenia.....	60	6	(s)	65
Spain.....	430	346	2	783
Sweden.....	0	102	2	97
Turkey.....	468	156	0	625
United Kingdom.....	1,133	395	31	1,707
Other.....	(s)	98	(s)	94
Total.....	5,998	4,152	265	10,109
Eastern Europe & Former U.S.S.R.				
Bulgaria.....	248	46	(s)	292
Czech Republic.....	1,645	49	152	1,541
Hungary.....	180	40	0	220
Poland.....	3,603	39	813	2,807
Romania.....	358	125	16	469
Slovakia.....	31	165	(s)	191
Belarus.....	0	28	(s)	25
Estonia.....	98	13	2	113
Kazakhstan.....	1,156	50	303	903
Kyrgyzstan.....	27	35	14	48
Latvia.....	0	6	(s)	6
Lithuania.....	0	7	(s)	10
Moldova.....	1	29	0	30
Russia.....	4,853	588	874	4,716
Turkmenistan.....	0	6	0	6
Ukraine.....	1,914	107	56	1,965
Uzbekistan.....	35	72	2	104
Other.....	3	7	0	9
Total.....	14,151	1,412	2,232	13,454

See footnotes at end of table.

Table 5.5 World Coal Supply and Disposition, 1995 (Continued)
(Trillion Btu)

Region Country	Production	Imports ¹	Exports ¹	Apparent Consumption ²
Middle East				
Iran.....	28	9	0	37
Israel.....	0	172	0	170
Other.....	0	6	0	6
Total.....	28	187	0	213
Africa				
Algeria.....	1	24	0	25
Botswana.....	24	(s)	0	25
Congo (Kinshasa).....	3	4	0	7
Egypt.....	0	37	12	26
Kenya.....	0	3	0	3
Malawi.....	2	(s)	0	2
Mauritius.....	0	2	0	2
Morocco.....	18	46	0	65
Mozambique.....	1	1	0	2
Niger.....	5	0	0	5
Nigeria.....	1	(s)	0	2
South Africa.....	4,643	11	1,584	3,077
Swaziland.....	1	0	0	1
Tunisia.....	0	2	0	2
Zambia.....	8	0	(s)	8
Zimbabwe.....	57	3	2	58
Other.....	(s)	1	0	1
Total.....	4,764	134	1,597	3,310
Far East & Oceania				
Afghanistan.....	(s)	0	0	(s)
Australia.....	4,932	3	3,323	1,553
Bhutan.....	(s)	1	(s)	1
Burma.....	1	(s)	0	2
China.....	27,650	38	806	26,731
Hong Kong.....	0	193	0	199
India.....	6,026	250	15	6,283
Indonesia.....	1,143	13	870	286
Japan.....	141	2,880	79	2,950
Korea, North.....	1,672	71	11	1,731
Korea, South.....	144	1,179	0	1,215
Malaysia.....	3	59	2	69
Mongolia.....	82	4	3	83
Nepal.....	(s)	3	0	3
New Caledonia.....	0	5	0	5
New Zealand.....	86	0	29	71
Pakistan.....	63	28	0	92
Philippines.....	32	35	0	70
Singapore.....	0	1	(s)	1
Taiwan.....	7	798	0	727
Thailand.....	322	60	0	383
Vietnam.....	207	(s)	78	119
Other.....	(s)	1	0	1
Total.....	42,512	5,625	5,217	42,574
World Total.....	92,412	12,562	13,215	91,564

¹ Includes coke.

² Sum of production plus imports minus exports (from this Table) minus stock change.

³ United States apparent coal consumption differs from that published in the Monthly Energy Review (MER). Consumption was 19,608 trillion Btu in the November 1997 issue of the MER.

(s) = Value less than 0.5 trillion Btu.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

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Section 6

Electricity

Table 6.1 World Net Conventional Thermal Electricity Generation, 1987 - 1996
(Billion Kilowatthours)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	96.0	107.3	119.2	105.5	107.6	116.4	102.5	111.1	112.5	111.7
Mexico.....	82.0	84.2	88.7	85.7	89.7	88.7	93.1	110.5	104.2	110.3
United States.. ²	1,855.0	1,942.0	2,113.0	2,096.0	2,104.0	2,139.0	2,231.2	2,263.5	2,283.0	2,362.2
Other.....	0.6	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8
Total.....	2,033.7	2,134.2	2,321.5	2,287.9	2,302.0	2,344.8	2,427.6	2,485.8	2,500.5	2,585.0
Central & South America										
Argentina.....	22.4	29.6	30.5	24.0	28.1	27.8	28.8	28.7	28.9	29.1
Bahamas, The.....	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0
Bolivia.....	0.4	0.6	0.7	0.8	0.8	1.0	1.0	1.4	1.2	1.2
Brazil.....	11.0	9.5	9.9	7.9	8.6	9.1	8.8	9.1	10.6	12.5
Chile.....	3.3	5.1	7.7	6.0	6.4	5.3	6.0	7.8	10.8	15.0
Colombia.....	9.1	8.2	7.5	8.1	8.6	12.7	11.6	10.4	10.4	10.4
Costa Rica.....	0.1	0.1	(s)	(s)	0.2	0.6	0.4	0.8	0.7	0.7
Cuba.....	12.7	13.6	14.2	13.7	11.9	10.4	10.3	10.2	10.4	10.5
Dominican Republic.....	4.3	3.4	2.7	3.2	3.3	3.4	4.1	4.3	4.5	4.7
Ecuador.....	0.8	0.8	0.8	1.3	1.8	2.1	1.5	1.7	1.5	1.5
Guadeloupe.....	0.6	0.6	0.6	0.7	0.8	0.8	0.9	1.0	1.0	1.0
Guatemala.....	0.3	0.3	0.2	0.2	0.3	0.6	1.1	1.1	1.0	0.9
Jamaica.....	1.7	1.7	1.9	2.2	1.9	2.0	3.5	4.4	5.4	6.0
Martinique.....	0.5	0.6	0.6	0.6	0.7	0.7	0.8	0.8	0.9	0.9
Nicaragua.....	0.6	0.6	0.4	0.6	0.6	0.8	0.8	0.8	0.8	0.8
Panama.....	0.7	0.4	0.4	0.5	0.8	1.1	0.9	1.0	1.0	1.1
Peru.....	3.0	2.9	3.0	3.1	2.8	3.2	2.8	2.9	2.1	3.1
Puerto Rico.....	12.7	13.3	13.2	14.1	14.5	15.2	15.3	16.5	17.6	18.0
Trinidad and Tobago.....	3.3	3.3	3.2	3.4	3.5	3.7	3.7	3.8	4.0	4.0
Venezuela.....	21.9	22.6	21.6	21.2	14.9	17.9	22.5	20.4	18.1	15.0
Virgin Islands, U.S.....	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0
Other.....	4.0	5.3	5.3	4.6	5.6	5.7	5.6	5.5	6.4	6.7
Total.....	114.9	124.2	126.3	118.2	117.9	125.9	132.2	134.5	139.3	144.9
Western Europe										
Austria.....	12.9	11.7	13.1	16.8	18.4	15.1	13.7	15.4	16.9	18.1
Belgium.....	18.8	19.9	23.9	25.6	26.4	26.0	26.2	28.6	30.0	29.7
Denmark.....	27.4	25.5	20.8	23.6	33.4	28.1	30.7	36.6	33.4	49.4
Finland.....	18.7	12.3	20.3	22.8	23.8	22.0	26.0	32.3	29.8	36.9
France.....	37.4	35.7	48.5	45.8	58.2	48.8	33.9	33.2	37.8	41.9
Germany.....	--	--	--	--	351.1	335.7	329.6	331.9	334.9	341.1
Germany, East.....	101.2	104.9	105.1	97.3	--	--	--	--	--	--
Germany, West.....	265.0	263.2	251.3	261.6	--	--	--	--	--	--
Greece.....	24.9	27.4	29.5	31.0	30.7	32.8	33.6	35.4	35.4	35.7
Ireland.....	11.1	11.1	12.0	12.7	13.3	14.1	14.4	14.9	15.9	17.1
Italy.....	145.9	130.8	159.8	167.7	162.6	166.1	163.8	169.5	184.0	181.4
Malta.....	0.9	1.0	1.0	1.1	1.2	1.3	1.4	1.4	1.4	1.4
Netherlands.....	61.0	62.0	64.8	64.1	66.5	68.8	68.4	70.8	71.8	75.4
Portugal.....	10.3	8.3	18.6	18.0	19.4	23.5	21.1	19.4	23.3	19.0
Spain.....	59.5	46.6	66.9	67.2	67.6	77.0	70.4	72.5	81.6	70.6
Sweden.....	6.5	6.1	5.3	5.0	6.5	7.5	8.6	9.7	9.4	13.2
Switzerland.....	1.0	0.4	1.1	1.1	1.4	1.5	1.2	2.0	2.1	2.2
Turkey.....	21.6	17.8	28.2	32.3	35.2	38.3	37.4	44.8	47.6	51.1
United Kingdom.....	229.7	227.2	225.5	231.3	230.7	222.8	214.3	216.4	224.0	223.8
Former Yugoslavia.....	47.0	50.4	51.2	54.7	52.1	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	8.6	9.1	0.6	0.7	0.8
Croatia.....	--	--	--	--	--	4.3	4.7	3.1	3.4	3.1
Macedonia, TFYR.....	--	--	--	--	--	4.9	4.4	4.5	5.0	4.9
Serbia and Montenegro.....	--	--	--	--	--	23.0	21.9	22.0	24.4	22.9
Slovenia.....	--	--	--	--	--	4.2	4.2	4.1	4.3	4.2
Other.....	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.2	1.3
Total.....	1,101.9	1,063.2	1,148.2	1,181.0	1,199.8	1,175.6	1,140.4	1,170.8	1,218.2	1,245.2

See footnotes at end of table.

Table 6.1 World Net Conventional Thermal Electricity Generation, 1987 - 1996 (Continued)
(Billion Kilowatthours)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	0.3	0.2	0.2	0.4	0.2	0.1	0.2	0.1	0.2	0.2
Bulgaria.....	26.7	24.7	25.4	24.1	21.9	20.7	20.8	20.1	20.9	21.3
Former Czechoslovakia.....	55.2	56.1	56.7	54.6	52.9	51.2	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	42.0	41.3	43.6	46.2
Slovakia.....	--	--	--	--	--	--	8.1	7.5	8.7	9.2
Hungary.....	17.5	14.7	14.6	13.6	15.1	16.4	18.1	18.1	18.6	19.5
Poland.....	133.3	131.8	133.2	126.8	123.4	121.4	122.5	123.7	127.0	130.8
Romania.....	59.1	58.0	59.4	50.1	40.1	39.9	40.1	39.6	40.0	42.7
Former U.S.S.R.....	1,178.1	1,178.0	1,209.2	1,204.1	1,173.0	--	--	--	--	--
Armenia.....	--	--	--	--	--	5.6	1.9	2.0	3.1	3.5
Azerbaijan.....	--	--	--	--	--	16.9	15.7	14.9	14.5	14.5
Belarus.....	--	--	--	--	--	35.3	31.3	29.5	23.4	21.0
Estonia.....	--	--	--	--	--	11.1	8.6	8.6	8.1	8.6
Georgia.....	--	--	--	--	--	4.7	2.9	2.0	2.0	2.0
Kazakhstan.....	--	--	--	--	--	71.3	65.6	53.8	54.8	50.0
Kyrgyzstan.....	--	--	--	--	--	2.5	2.1	1.1	1.2	1.3
Latvia.....	--	--	--	--	--	1.2	1.0	1.1	1.0	0.9
Lithuania.....	--	--	--	--	--	3.5	1.4	1.5	1.2	1.4
Moldova.....	--	--	--	--	--	10.3	9.3	7.5	7.6	8.0
Russia.....	--	--	--	--	--	679.6	627.9	583.7	569.6	549.0
Tajikistan.....	--	--	--	--	--	0.8	0.6	0.6	0.5	0.6
Turkmenistan.....	--	--	--	--	--	12.4	11.9	9.9	9.2	9.5
Ukraine.....	--	--	--	--	--	160.4	134.8	120.3	120.6	115.0
Uzbekistan.....	--	--	--	--	--	42.0	39.3	38.2	37.7	36.2
Total.....	1,470.1	1,463.5	1,498.8	1,473.7	1,426.6	1,307.7	1,206.0	1,124.9	1,113.6	1,091.3
Middle East										
Bahrain.....	3.1	3.3	3.3	3.3	3.3	3.3	4.1	4.3	4.5	4.7
Cyprus.....	1.4	1.6	1.7	1.9	2.0	2.3	2.4	2.5	2.3	2.2
Iran.....	29.6	37.9	39.2	49.8	53.6	55.5	62.2	67.4	69.4	72.0
Iraq.....	22.2	25.1	26.6	26.8	19.3	23.1	24.2	25.8	26.7	27.0
Israel.....	16.4	18.2	19.2	19.6	20.2	23.2	24.4	26.6	27.3	28.0
Jordan.....	2.3	2.5	3.2	3.5	3.5	4.1	4.5	4.8	5.3	5.5
Kuwait.....	17.3	18.8	20.2	17.8	10.2	16.1	17.1	21.8	22.7	23.0
Lebanon.....	3.8	3.4	2.0	1.1	1.8	3.1	3.7	3.9	4.6	5.0
Oman.....	3.7	4.1	4.4	5.0	5.2	5.9	6.9	7.4	7.8	8.0
Qatar.....	4.2	4.2	4.4	4.6	4.4	4.9	5.2	5.5	5.4	5.2
Saudi Arabia.....	50.6	57.2	61.6	64.9	69.2	74.0	82.2	91.0	93.9	95.0
Syria.....	5.6	4.5	5.3	9.5	10.1	10.5	10.5	12.0	12.0	12.3
United Arab Emirates.....	12.8	14.0	14.7	16.1	16.2	16.4	16.5	17.7	17.9	18.0
Yemen.....	1.2	1.6	1.6	1.6	1.6	1.7	1.8	1.8	1.9	1.9
Total.....	174.2	196.3	207.3	225.4	220.6	244.1	265.7	292.5	301.6	307.8
Africa										
Algeria.....	12.5	13.9	14.2	15.0	16.0	17.0	17.9	18.5	18.4	18.2
Angola.....	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Botswana.....	0.8	0.8	0.8	0.9	0.9	1.1	1.1	1.0	1.0	1.0
Cote d'Ivoire (Ivory Coast).....	1.2	1.0	1.5	0.9	0.5	0.8	0.8	0.8	0.8	0.8
Egypt.....	28.6	27.6	29.8	27.7	33.7	34.4	35.7	36.4	35.8	35.0
Libya.....	14.7	15.0	15.1	15.8	15.9	15.9	16.0	16.7	16.9	17.0
Mauritius.....	0.4	0.5	0.5	0.6	0.7	0.8	0.8	0.9	0.9	1.0
Morocco.....	6.9	7.5	7.4	7.4	7.5	8.2	8.9	9.3	10.5	11.0
Nigeria.....	7.5	7.2	8.2	10.3	7.9	8.2	8.3	8.3	8.3	8.4
Reunion.....	0.1	0.3	0.3	0.3	0.5	0.6	0.6	0.6	0.6	0.6
Senegal.....	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
South Africa.....	134.2	134.5	139.6	146.6	147.8	147.1	155.9	160.0	164.4	173.9
Tunisia.....	4.2	4.6	4.8	5.4	5.6	6.0	6.2	6.5	7.1	7.5
Zimbabwe.....	5.2	5.4	5.4	6.0	5.7	5.6	6.0	5.9	5.9	6.1
Other.....	4.6	4.6	4.5	4.2	4.3	4.3	4.5	4.5	4.9	5.2
Total.....	222.0	223.9	233.0	242.3	248.1	251.1	263.7	270.7	276.5	286.8

See footnotes at end of table.

Table 6.1 World Net Conventional Thermal Electricity Generation, 1987 - 1996 (Continued)
(Billion Kilowatthours)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Far East & Oceania										
Afghanistan.....	0.5	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2
American Samoa.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Australia.....	108.5	117.1	124.2	131.8	132.3	135.5	138.2	142.1	148.0	151.9
Bangladesh.....	5.1	5.8	6.1	6.7	7.6	8.2	8.7	9.2	10.6	11.0
Bhutan.....	(s)	0.0	0.0	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Brunei.....	0.9	1.0	1.1	1.2	1.3	1.4	1.4	1.5	1.5	1.5
Burma.....	1.2	1.2	1.3	1.2	1.4	1.4	1.6	1.9	2.1	2.3
Cambodia.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China.....	373.3	409.8	438.3	465.2	519.3	585.3	644.0	701.2	756.1	805.3
Cook Islands.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Fiji.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
French Polynesia.....	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Guam.....	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Hong Kong.....	22.3	24.0	25.7	27.2	30.0	33.0	33.8	25.1	26.2	27.0
India.....	156.5	166.9	189.8	198.9	223.1	240.7	263.6	290.4	315.7	325.0
Indonesia.....	26.8	29.9	29.1	35.3	37.8	38.7	43.0	48.5	53.2	55.0
Japan.....	419.7	449.1	483.8	524.0	533.2	545.8	517.2	580.4	568.0	583.1
Kiribati.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Korea, North.....	19.8	20.2	20.4	20.4	20.4	13.2	13.2	12.7	12.2	12.0
Korea, South.....	27.5	39.3	40.0	45.5	53.8	65.4	75.5	96.1	105.4	118.8
Laos.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Macau.....	0.6	0.6	0.7	0.7	0.8	0.9	1.1	1.2	1.2	1.1
Malaysia.....	11.6	12.8	15.6	20.0	22.5	25.9	28.8	31.5	36.8	40.0
Maldives.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.1	0.1
Mongolia.....	3.0	3.1	3.4	3.1	3.0	2.8	2.4	2.6	2.5	2.3
Nauru.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Nepal.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
New Caledonia.....	0.7	0.6	0.6	0.6	0.8	0.8	0.8	0.8	0.8	0.8
New Zealand.....	5.3	4.9	6.4	5.7	7.0	7.9	7.2	6.9	6.1	6.7
Niue.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Pakistan.....	16.7	20.4	21.9	25.1	26.9	30.7	31.5	35.0	34.6	34.0
Papua New Guinea.....	1.3	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.2	1.2
Philippines.....	11.2	11.9	13.2	13.2	13.0	13.2	13.2	17.1	19.7	20.0
Samoa.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Singapore.....	11.1	12.2	13.2	14.7	15.6	16.5	17.8	19.4	20.7	21.0
Solomon Islands.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Sri Lanka.....	0.5	0.2	0.1	(s)	0.2	0.3	0.2	0.3	0.3	0.3
Taiwan.....	26.6	36.1	46.5	46.4	55.2	59.7	70.1	76.6	84.2	89.6
Thailand.....	24.4	28.4	31.5	38.7	45.0	52.1	58.8	65.7	72.3	75.0
Tonga.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
U.S. Pacific Islands.....	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Vanuatu.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Vietnam.....	3.9	4.5	3.7	3.2	3.4	3.7	1.8	1.8	1.8	1.8
Total.....	1,280.4	1,403.3	1,519.8	1,632.2	1,756.9	1,886.1	1,977.1	2,171.0	2,283.2	2,388.7
World Total.....	6,397.2	6,608.6	7,055.0	7,160.7	7,272.0	7,335.4	7,412.8	7,650.1	7,832.9	8,049.7

¹ Preliminary.

² U.S. data include purchases from nonutilities.

--- Not applicable.

(s) = Value less than 50 million kilowatthours.

Notes: Sum of components may not equal total due to independent rounding.

Thermal generation consist of electricity generated from coal, oil, and gas.

Generation data consist of both utility and nonutility sources.

Sources: See sources at the end of this Section.

Table 6.2 World Total Net Electricity Consumption, 1987 - 1996
(Billion Kilowatthours)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	404.0	424.8	438.8	435.1	438.3	443.4	449.8	457.0	462.1	473.1
Mexico.....	95.3	100.3	108.1	107.1	110.5	114.1	119.2	128.9	133.7	143.6
United States.....	2,457.3	2,578.1	2,646.8	2,712.6	2,762.0	2,885.4	2,988.5	3,075.6	3,163.3	3,242.7
Other.....	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Total.....	2,957.2	3,103.8	3,194.4	3,255.4	3,311.5	3,443.6	3,558.2	3,662.2	3,759.8	3,860.2
Central & South America										
Argentina.....	54.3	52.6	47.5	48.5	52.1	57.0	62.5	66.1	66.6	63.0
Bolivia.....	1.4	1.7	1.8	1.9	2.1	2.2	2.2	2.6	2.7	2.7
Brazil.....	203.8	214.9	225.1	228.6	242.1	246.3	259.4	271.7	288.4	303.2
Chile.....	14.2	15.3	16.0	16.6	18.1	20.3	21.8	22.9	27.0	33.3
Colombia.....	28.2	30.2	31.7	33.1	33.5	32.8	36.8	39.7	41.5	50.1
Costa Rica.....	3.0	3.1	3.2	3.4	3.5	3.7	4.0	4.3	4.2	4.6
Cuba.....	11.9	12.7	13.3	12.8	11.1	9.7	9.7	9.6	9.8	9.9
Dominican Republic.....	4.9	4.0	3.0	3.4	3.6	5.2	5.5	5.7	6.1	6.2
Ecuador.....	4.9	5.1	5.2	5.8	6.3	6.5	6.8	7.4	7.6	7.9
El Salvador.....	1.8	1.9	1.9	2.1	2.1	2.3	2.7	3.0	3.0	3.3
Guatemala.....	1.8	2.0	2.1	2.1	2.3	2.5	2.8	2.9	2.9	2.9
Honduras.....	1.2	1.8	1.9	2.1	2.1	2.1	2.3	2.5	2.5	2.5
Jamaica.....	1.7	1.7	1.9	2.2	1.9	1.9	3.3	4.2	5.1	5.7
Nicaragua.....	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5
Panama.....	2.6	2.5	2.5	2.6	2.8	2.9	3.1	3.2	3.3	3.2
Peru.....	12.8	12.3	12.4	12.6	13.2	12.0	13.5	14.5	14.7	15.1
Puerto Rico.....	12.0	12.6	12.5	13.4	13.8	14.4	14.5	15.6	16.7	17.0
Suriname.....	0.6	0.8	1.2	1.4	1.4	1.4	1.4	1.5	1.5	1.5
Trinidad and Tobago.....	3.1	3.1	3.0	3.1	3.3	3.5	3.4	3.6	3.7	3.7
Uruguay.....	4.0	4.3	4.1	5.6	4.6	4.8	5.1	5.3	7.5	7.6
Venezuela.....	48.8	52.5	52.0	53.7	54.5	59.6	64.3	66.0	67.9	67.7
Virgin Islands, U.S.....	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Other.....	6.7	6.6	5.4	5.8	6.0	6.4	7.1	7.2	7.2	8.5
Total.....	426.0	443.8	450.1	463.3	482.7	499.9	534.4	561.8	592.4	622.3
Western Europe										
Austria.....	30.0	40.8	42.1	44.2	46.9	46.6	45.8	46.4	47.4	49.3
Belgium.....	52.7	54.7	56.3	58.1	60.8	63.0	63.9	66.9	68.8	70.3
Denmark.....	28.1	28.2	29.2	29.4	29.8	30.7	30.7	30.2	31.4	31.7
Finland.....	52.9	48.3	56.5	59.0	58.8	59.7	61.8	64.7	63.7	66.4
France.....	301.5	307.9	314.8	324.3	346.9	353.3	354.5	357.5	364.8	378.1
Germany.....	--	--	--	--	469.9	463.3	459.8	463.3	472.8	473.4
Germany, East.....	109.5	111.1	110.4	97.7	--	--	--	--	--	--
Germany, West.....	388.7	397.0	379.8	386.9	--	--	--	--	--	--
Greece.....	26.4	28.0	29.6	31.2	32.0	33.1	34.2	35.7	37.0	38.6
Iceland.....	3.9	4.1	4.2	4.1	4.1	4.2	4.3	4.4	4.6	4.7
Ireland.....	11.0	11.1	11.8	12.5	13.1	13.8	14.2	14.8	15.4	16.5
Italy.....	197.9	193.0	216.4	222.3	228.0	231.9	233.5	239.7	246.8	248.1
Luxembourg.....	4.1	4.3	4.4	4.5	4.8	4.5	4.6	5.0	5.5	5.4
Netherlands.....	63.5	66.7	68.8	71.1	74.1	76.3	77.7	80.3	82.1	84.8
Norway.....	95.3	95.2	94.7	96.0	99.0	99.1	102.4	103.1	105.6	105.1
Portugal.....	21.0	21.3	23.8	25.2	26.5	27.5	27.7	28.8	30.4	31.7
Spain.....	117.3	119.3	128.1	133.4	136.4	139.0	138.8	144.3	150.9	153.1
Sweden.....	127.7	128.2	128.8	129.5	130.8	129.5	130.4	128.5	130.6	131.9
Switzerland.....	42.5	43.7	45.9	47.0	48.1	47.9	47.5	47.6	49.1	49.9
Turkey.....	37.7	43.4	43.2	50.6	54.0	60.0	65.7	69.4	76.4	84.8
United Kingdom.....	273.9	280.5	285.9	286.2	293.5	293.2	291.7	293.8	301.0	304.6
Former Yugoslavia.....	72.2	72.9	73.0	72.8	65.5	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	10.9	10.9	1.9	2.2	2.3
Croatia.....	--	--	--	--	--	10.9	10.7	11.1	11.5	13.9
Macedonia, TFYR.....	--	--	--	--	--	5.6	5.2	5.0	5.4	5.6
Serbia and Montenegro.....	--	--	--	--	--	33.0	29.6	30.7	33.0	33.5
Slovenia.....	--	--	--	--	--	8.7	8.8	11.1	9.5	10.4
Other.....	1.1	1.2	1.2	1.3	1.4	1.5	1.5	1.6	1.6	1.6
Total.....	2,058.5	2,100.8	2,149.0	2,187.4	2,224.4	2,247.2	2,256.0	2,285.9	2,347.4	2,395.9

See footnotes at end of table.

Table 6.2 World Total Net Electricity Consumption, 1987 - 1996 (Continued)
(Billion Kilowatthours)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	3.5	3.1	3.2	3.2	2.8	2.6	3.1	3.6	4.1	4.9
Bulgaria.....	42.4	43.8	44.4	40.5	36.3	33.9	33.6	33.5	36.7	38.2
Former Czechoslovakia.....	78.7	79.7	81.1	80.7	76.4	70.9	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	49.4	50.9	53.6	55.9
Slovakia.....	--	--	--	--	--	--	23.9	24.2	23.9	24.5
Hungary.....	36.7	36.9	37.0	36.2	33.7	31.1	31.7	31.5	32.3	33.0
Poland.....	129.4	130.9	129.1	119.9	115.3	111.9	114.8	115.9	118.9	122.9
Romania.....	70.4	73.5	74.7	66.2	55.5	52.1	51.0	49.6	52.9	55.9
Former U.S.S.R.....	1,427.9	1,459.9	1,491.0	1,488.4	1,475.3	--	--	--	--	--
Armenia.....	--	--	--	--	--	8.3	5.7	5.1	4.7	7.1
Azerbaijan.....	--	--	--	--	--	16.8	16.9	15.8	15.3	15.1
Belarus.....	--	--	--	--	--	39.3	35.2	31.4	29.1	29.0
Estonia.....	--	--	--	--	--	7.1	6.6	6.9	6.8	7.2
Georgia.....	--	--	--	--	--	11.3	9.9	7.1	7.0	6.5
Kazakhstan.....	--	--	--	--	--	86.2	83.4	64.9	66.1	60.3
Kyrgyzstan.....	--	--	--	--	--	8.8	9.3	9.4	10.9	10.0
Latvia.....	--	--	--	--	--	7.5	6.1	5.9	5.9	6.0
Lithuania.....	--	--	--	--	--	11.2	10.3	9.8	8.8	8.6
Moldova.....	--	--	--	--	--	9.8	6.9	7.8	7.8	6.2
Russia.....	--	--	--	--	--	879.9	830.6	770.9	760.2	731.6
Tajikistan.....	--	--	--	--	--	16.3	15.1	14.8	14.7	11.6
Turkmenistan.....	--	--	--	--	--	8.6	7.9	6.6	6.7	6.5
Ukraine.....	--	--	--	--	--	216.7	200.6	183.5	181.9	186.9
Uzbekistan.....	--	--	--	--	--	44.2	40.4	43.7	42.1	40.9
Total.....	1,789.1	1,827.7	1,860.5	1,835.1	1,795.3	1,674.4	1,592.3	1,492.8	1,490.5	1,468.7
Middle East										
Bahrain.....	2.9	3.0	3.1	3.1	3.1	3.1	3.8	4.0	4.2	4.4
Cyprus.....	1.3	1.5	1.6	1.7	1.8	2.1	2.3	2.3	2.2	2.0
Iran.....	33.4	41.2	42.6	51.9	56.4	60.4	66.9	69.5	71.4	73.9
Iraq.....	21.2	24.0	25.3	25.5	18.2	22.1	23.0	24.5	25.4	25.7
Israel.....	14.9	16.5	17.5	17.9	18.4	21.2	22.4	24.4	25.1	25.8
Jordan.....	1.8	2.3	3.0	3.2	3.4	4.0	4.3	4.6	4.9	5.1
Kuwait.....	16.1	17.5	18.8	16.5	9.5	14.9	15.9	20.2	21.1	21.4
Lebanon.....	4.8	4.1	2.7	1.7	2.2	3.5	4.4	4.6	5.2	5.6
Oman.....	3.4	3.9	4.1	4.7	4.8	5.5	6.4	6.9	7.2	7.4
Qatar.....	3.9	3.9	4.1	4.2	4.1	4.5	4.9	5.1	5.0	4.8
Saudi Arabia.....	47.1	53.2	57.3	60.4	64.4	68.8	76.4	84.6	87.3	88.3
Syria.....	7.1	8.6	9.2	14.0	15.2	16.6	16.1	17.5	17.6	17.9
United Arab Emirates.....	11.9	13.0	13.6	14.9	15.1	15.3	15.4	16.5	16.7	16.7
Yemen.....	1.1	1.5	1.5	1.5	1.5	1.6	1.7	1.7	1.7	1.8
Total.....	170.9	194.2	204.4	221.3	218.2	243.8	263.8	286.5	295.1	301.0
Africa										
Algeria.....	12.1	13.1	13.4	14.0	14.5	15.1	15.8	16.3	16.8	16.8
Angola.....	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Cameroon.....	2.2	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Congo (Kinshasa).....	4.8	4.8	6.3	5.0	4.7	5.4	4.1	4.1	4.6	5.8
Cote d'Ivoire (Ivory Coast).....	2.2	2.1	2.9	2.1	1.6	1.7	1.7	1.7	1.7	1.7
Egypt.....	34.2	32.9	35.1	34.9	39.3	39.8	42.9	43.8	43.2	42.8
Ghana.....	4.1	4.2	4.6	5.2	5.4	5.4	5.4	5.4	5.4	5.5
Kenya.....	2.4	2.7	2.8	2.9	3.1	3.1	3.4	3.5	3.6	3.7
Libya.....	13.6	14.0	14.1	14.7	14.8	14.8	14.9	15.6	15.7	15.8
Morocco.....	7.2	7.9	8.0	8.1	8.7	9.5	10.0	10.6	11.2	11.7
Nigeria.....	9.9	10.3	11.3	13.5	12.7	13.1	12.7	12.7	12.7	12.8
South Africa.....	132.1	137.8	142.7	143.8	146.1	144.6	149.4	156.2	161.0	168.3
Tunisia.....	4.0	4.3	4.4	5.1	5.3	5.7	5.8	6.1	6.7	7.1
Zambia.....	6.4	6.3	4.8	5.7	5.7	5.8	5.8	5.8	5.6	5.8
Zimbabwe.....	8.1	8.3	8.4	10.2	9.6	9.7	9.0	9.4	9.5	10.2
Other.....	13.4	13.7	14.4	16.0	16.8	17.1	18.7	18.2	18.4	19.4
Total.....	258.2	266.4	277.1	285.4	292.6	294.9	303.5	313.5	320.4	331.7

See footnotes at end of table.

Table 6.2 World Total Net Electricity Consumption, 1987 - 1996 (Continued)
(Billion Kilowatthours)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Far East & Oceania										
Afghanistan.....	1.1	1.0	1.0	1.0	1.0	0.8	0.7	0.8	0.7	0.6
American Samoa.....	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Australia.....	113.5	121.4	128.8	135.6	137.6	140.2	143.8	147.2	152.3	155.0
Bangladesh.....	5.2	6.0	6.5	7.1	7.8	8.4	8.7	9.3	10.2	10.5
Bhutan.....	(s)	0.1	(s)	(s)	0.1	0.1	0.1	0.1	0.1	0.1
Brunei.....	0.9	1.0	1.0	1.1	1.2	1.3	1.3	1.3	1.4	1.4
Burma.....	2.1	2.0	2.2	2.2	2.4	2.7	3.0	3.2	3.4	3.5
Cambodia.....	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
China.....	440.7	483.1	518.2	550.9	600.9	670.6	744.1	816.0	881.4	924.9
Fiji.....	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5
French Polynesia.....	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Guam.....	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Hong Kong.....	19.4	20.9	22.2	23.5	24.8	25.7	27.3	25.4	28.8	29.5
India.....	194.5	214.4	238.1	257.1	280.6	295.1	316.9	341.3	367.2	377.7
Indonesia.....	32.7	36.4	35.9	43.2	45.5	48.6	52.1	56.8	60.6	62.1
Japan.....	635.8	664.2	697.9	749.8	775.8	782.4	790.8	841.3	864.0	882.2
Korea, North.....	45.2	47.8	48.2	48.2	48.2	34.3	34.3	33.4	32.5	31.6
Korea, South.....	64.9	75.0	83.2	94.9	104.5	115.2	127.1	145.0	162.3	180.6
Laos.....	0.2	0.1	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.2
Macau.....	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.5	1.4
Malaysia.....	15.3	17.1	19.2	22.3	25.0	28.1	31.4	35.4	41.1	44.6
Mongolia.....	2.8	3.0	3.3	3.1	2.9	2.7	2.3	2.5	2.7	2.5
Nepal.....	0.5	0.6	0.6	0.7	0.8	0.9	0.8	0.9	0.9	0.9
New Caledonia.....	0.9	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.1
New Zealand.....	26.5	27.2	28.1	28.8	29.7	28.4	30.2	32.1	32.9	33.0
Pakistan.....	30.0	34.5	36.0	39.2	42.3	46.2	49.1	50.9	53.7	55.2
Papua New Guinea.....	1.6	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Philippines.....	19.3	21.1	22.9	22.7	22.8	23.0	23.1	27.0	29.6	29.9
Samoa.....	(s)	(s)	(s)	(s)	(s)	0.1	0.1	0.1	0.1	0.1
Singapore.....	10.3	11.4	12.3	13.7	14.5	15.3	16.5	18.0	19.3	19.5
Sri Lanka.....	2.5	2.6	2.6	2.9	3.1	2.9	3.7	4.0	4.4	4.7
Taiwan.....	60.9	66.6	74.6	80.1	87.7	93.5	102.2	110.5	118.0	125.5
Thailand.....	26.8	30.3	35.1	41.2	46.8	53.0	58.6	65.8	74.0	76.8
U.S. Pacific Islands.....	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Vietnam.....	5.4	6.0	7.0	7.9	8.4	8.8	9.9	11.6	13.6	13.8
Other.....	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2
Total.....	1,761.2	1,898.6	2,030.4	2,182.9	2,320.0	2,434.1	2,584.0	2,786.0	2,961.7	3,072.9
World Total.....	9,421.1	9,835.2	10,165.8	10,430.7	10,644.8	10,837.8	11,092.2	11,388.7	11,767.3	12,052.7

¹ Preliminary.

² There is a discontinuity in this time series between 1988 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1989 and biofuels electric power beginning in 1990.

--- Not applicable.

(s) = Value less than 50 million kilowatthours.

Notes: Sum of components may not equal total due to independent rounding.

Consumption equals generation plus imports minus exports minus distribution losses.

Sources: See sources at the end of this Section.

Table 6.3 World Net Electricity Generation by Type, 1995
(Billion Kilowatthours)

Region Country	Thermal ¹	Hydro	Nuclear	Geothermal and Other ²	Total
North America					
Canada.....	112.5	330.7	93.0	0.1	536.2
Mexico.....	104.2	27.3	8.0	5.4	144.9
United States.....	2,283.0	311.0	673.4	231.9	3,499.3
Other.....	0.8	0.0	0.0	0.0	0.8
Total.....	2,500.5	668.9	774.4	237.4	4,181.2
Central & South America					
Argentina.....	28.9	33.4	7.1	0.0	69.4
Bolivia.....	1.2	1.7	0.0	0.0	2.9
Brazil.....	10.6	251.4	2.4	7.4	271.8
Chile.....	10.8	18.2	0.0	0.0	29.0
Colombia.....	10.4	33.9	0.0	0.0	44.3
Costa Rica.....	0.7	3.6	0.0	0.4	4.7
Cuba.....	10.4	0.1	0.0	0.0	10.5
Dominican Republic.....	4.5	2.0	0.0	0.0	6.5
Ecuador.....	1.5	6.7	0.0	0.0	8.2
El Salvador.....	0.8	2.0	0.0	0.5	3.3
Guadeloupe.....	1.0	0.0	0.0	0.0	1.0
Guatemala.....	1.0	2.1	0.0	0.0	3.1
Honduras.....	0.3	2.4	0.0	0.0	2.7
Jamaica.....	5.4	0.1	0.0	0.0	5.5
Nicaragua.....	0.8	0.3	0.0	0.5	1.6
Panama.....	1.0	2.4	0.0	0.0	3.4
Paraguay.....	(s)	41.2	0.0	0.0	41.2
Peru.....	2.1	13.6	0.0	0.0	15.8
Puerto Rico.....	17.6	0.3	0.0	0.0	17.9
Suriname.....	0.3	1.3	0.0	0.0	1.6
Trinidad and Tobago.....	4.0	0.0	0.0	0.0	4.0
Uruguay.....	0.7	7.4	0.0	0.0	8.2
Venezuela.....	18.1	55.0	0.0	0.0	73.2
Virgin Islands, U.S.....	1.0	0.0	0.0	0.0	1.0
Other.....	6.0	0.2	0.0	0.0	6.3
Total.....	139.3	479.5	9.5	8.8	637.0
Western Europe					
Austria.....	16.9	36.7	0.0	0.0	53.6
Belgium.....	30.0	0.3	39.3	(s)	69.6
Bosnia and Herzegovina.....	0.7	1.4	0.0	0.0	2.1
Croatia.....	3.4	5.2	0.0	0.0	8.6
Denmark.....	33.4	(s)	0.0	1.1	34.6
Finland.....	29.8	12.8	18.3	(s)	60.9
France.....	37.8	70.6	358.4	0.5	467.3
Germany.....	334.9	19.6	146.4	2.4	503.2
Greece.....	35.4	3.5	0.0	(s)	38.9
Iceland.....	(s)	4.6	0.0	0.3	4.9
Ireland.....	15.9	0.7	0.0	(s)	16.6
Italy.....	184.0	37.4	0.0	3.6	225.0
Macedonia, TFYR.....	5.0	0.8	0.0	0.0	5.8
Malta.....	1.4	0.0	0.0	0.0	1.4
Netherlands.....	71.8	0.1	3.8	0.3	76.0
Norway.....	0.7	120.1	0.0	(s)	120.8
Portugal.....	23.3	8.3	0.0	0.1	31.6
Serbia and Montenegro.....	24.4	11.1	0.0	0.0	35.5
Slovenia.....	4.3	3.2	4.5	0.0	11.9
Spain.....	81.6	22.9	52.7	0.3	157.4
Sweden.....	9.4	66.3	66.4	0.1	142.2
Switzerland.....	2.1	34.8	23.7	(s)	60.6
Turkey.....	47.6	35.2	0.0	0.1	82.9
United Kingdom.....	224.0	5.2	76.6	0.3	306.1
Other.....	0.6	0.2	0.0	0.0	0.7
Total.....	1,218.2	501.0	789.9	9.2	2,518.3

See footnotes at end of table.

Table 6.3 World Net Electricity Generation by Type, 1995 (Continued)
(Billion Kilowatthours)

Region Country	Thermal ¹	Hydro	Nuclear	Geothermal and Other ²	Total
Eastern Europe & Former U.S.S.R.					
Albania.....	0.2	4.2	0.0	0.0	4.4
Bulgaria.....	20.9	2.3	16.4	0.0	39.6
Czech Republic.....	43.6	2.0	11.6	0.0	57.2
Hungary.....	18.6	0.2	13.3	0.0	32.1
Poland.....	127.0	3.8	0.0	(s)	130.8
Romania.....	40.0	16.5	0.0	0.0	56.5
Slovakia.....	8.7	4.6	10.9	0.0	24.1
Armenia.....	3.1	1.9	0.0	0.0	5.0
Azerbaijan.....	14.5	1.5	0.0	0.0	16.0
Belarus.....	23.4	(s)	0.0	0.0	23.4
Estonia.....	8.1	(s)	0.0	0.0	8.1
Georgia.....	2.0	4.7	0.0	0.0	6.6
Kazakhstan.....	54.8	8.2	0.1	0.0	63.2
Kyrgyzstan.....	1.2	11.0	0.0	0.0	12.2
Latvia.....	1.0	2.9	0.0	0.0	3.9
Lithuania.....	1.2	0.4	10.6	0.0	12.3
Moldova.....	7.6	0.3	0.0	0.0	7.9
Russia.....	569.6	174.5	94.3	(s)	838.5
Tajikistan.....	0.5	14.5	0.0	0.0	15.0
Turkmenistan.....	9.2	(s)	0.0	0.0	9.2
Ukraine.....	120.6	10.1	67.0	0.0	197.6
Uzbekistan.....	37.7	7.0	0.0	0.0	44.7
Total.....	1,113.6	270.5	224.3	(s)	1,608.4
Middle East					
Bahrain.....	4.5	0.0	0.0	0.0	4.5
Cyprus.....	2.3	0.0	0.0	0.0	2.3
Iran.....	69.4	7.5	0.0	0.0	76.8
Iraq.....	26.7	0.6	0.0	0.0	27.3
Israel.....	27.3	(s)	0.0	0.0	27.4
Jordan.....	5.3	(s)	0.0	(s)	5.3
Kuwait.....	22.7	0.0	0.0	0.0	22.7
Lebanon.....	4.6	0.7	0.0	0.0	5.3
Oman.....	7.8	0.0	0.0	0.0	7.8
Qatar.....	5.4	0.0	0.0	0.0	5.4
Saudi Arabia.....	93.9	0.0	0.0	0.0	93.9
Syria.....	12.0	6.9	0.0	0.0	18.9
United Arab Emirates.....	17.9	0.0	0.0	0.0	17.9
Yemen.....	1.9	0.0	0.0	0.0	1.9
Total.....	301.6	15.7	0.0	(s)	317.3
Africa					
Algeria.....	18.4	0.2	0.0	0.0	18.5
Angola.....	0.5	1.4	0.0	0.0	1.8
Botswana.....	1.0	0.0	0.0	0.0	1.0
Cameroon.....	0.1	2.6	0.0	0.0	2.7
Congo (Kinshasa).....	0.2	5.9	0.0	0.0	6.1
Cote d'Ivoire (Ivory Coast).....	0.8	1.1	0.0	0.0	1.9
Egypt.....	35.8	10.7	0.0	0.0	46.5
Ethiopia.....	0.1	1.1	0.0	0.1	1.3
Ghana.....	(s)	6.1	0.0	0.0	6.1
Kenya.....	0.3	3.1	0.0	0.3	3.7
Libya.....	16.9	0.0	0.0	0.0	16.9
Morocco.....	10.5	0.6	0.0	0.0	11.1
Nigeria.....	8.3	5.4	0.0	0.0	13.7
Reunion.....	0.6	0.5	0.0	0.0	1.1
South Africa.....	164.4	0.5	11.3	0.0	176.3
Sudan.....	0.4	0.9	0.0	0.0	1.3
Tunisia.....	7.1	(s)	0.0	0.0	7.1
Zambia.....	(s)	7.8	0.0	0.0	7.8
Zimbabwe.....	5.9	2.4	0.0	0.0	8.3
Other.....	5.4	6.0	0.0	0.0	11.4
Total.....	276.5	56.4	11.3	0.3	344.6

See footnotes at end of table.

Table 6.3 World Net Electricity Generation by Type, 1995 (Continued)
(Billion Kilowatthours)

Region Country	Thermal ¹	Hydro	Nuclear	Geothermal and Other ²	Total
Far East & Oceania					
Afghanistan.....	0.2	0.4	0.0	0.0	0.6
American Samoa.....	0.1	0.0	0.0	0.0	0.1
Australia.....	148.0	15.7	0.0	(s)	163.8
Bangladesh.....	10.6	0.4	0.0	0.0	11.0
Bhutan.....	(s)	1.7	0.0	0.0	1.7
Brunei.....	1.5	0.0	0.0	0.0	1.5
Burma.....	2.1	1.5	0.0	0.0	3.6
Cambodia.....	0.1	0.1	0.0	0.0	0.2
China.....	756.1	184.9	12.4	0.0	953.4
Cook Islands.....	(s)	0.0	0.0	0.0	(s)
Fiji.....	0.1	0.4	0.0	0.0	0.5
French Polynesia.....	0.2	0.1	0.0	0.0	0.3
Guam.....	0.8	0.0	0.0	0.0	0.8
Hong Kong.....	26.2	0.0	0.0	0.0	26.2
India.....	315.7	70.9	6.5	0.1	393.2
Indonesia.....	53.2	10.3	0.0	1.7	65.2
Japan.....	568.0	81.4	276.7	3.0	929.1
Kiribati.....	(s)	0.0	0.0	0.0	(s)
Korea, North.....	12.2	22.8	0.0	0.0	35.0
Korea, South.....	105.4	5.4	63.7	0.0	174.5
Laos.....	(s)	0.9	0.0	0.0	0.9
Macau.....	1.2	0.0	0.0	0.0	1.2
Malaysia.....	36.8	7.4	0.0	0.0	44.2
Maldives.....	0.1	0.0	0.0	0.0	0.1
Mongolia.....	2.5	0.0	0.0	0.0	2.5
Nauru.....	(s)	0.0	0.0	0.0	(s)
Nepal.....	(s)	1.0	0.0	0.0	1.0
New Caledonia.....	0.8	0.3	0.0	0.0	1.1
New Zealand.....	6.1	27.3	0.0	2.0	35.4
Niue.....	(s)	0.0	0.0	0.0	(s)
Pakistan.....	34.6	22.6	0.5	0.0	57.7
Papua New Guinea.....	1.2	0.5	0.0	0.0	1.7
Philippines.....	19.7	6.5	0.0	5.7	31.8
Samoa.....	(s)	(s)	0.0	0.0	0.1
Singapore.....	20.7	0.0	0.0	0.0	20.7
Solomon Islands.....	(s)	0.0	0.0	0.0	(s)
Sri Lanka.....	0.3	4.5	0.0	0.0	4.7
Taiwan.....	84.2	8.8	33.9	0.0	126.9
Thailand.....	72.3	6.6	0.0	0.0	79.0
Tonga.....	(s)	0.0	0.0	0.0	(s)
U.S. Pacific Islands.....	0.2	(s)	0.0	0.0	0.2
Vanuatu.....	(s)	0.0	0.0	0.0	(s)
Vietnam.....	1.8	12.2	0.0	0.6	14.6
Total.....	2,283.2	494.7	393.6	13.1	3,184.6
World Total.....	7,832.9	2,486.7	2,203.0	268.9	12,791.4

¹ Thermal generation consists of electricity generated from coal, oil, and gas.

² Geothermal and Other consists of geothermal, wind, photovoltaic, and solar thermal generation. Electricity generated from biofuels is included for the United States and Brazil.

(s)=Value less than 50 million kilowatthours.

Notes: Generation data consist of both utility and nonutility sources. Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

Table 6.4 World Electricity Installed Capacity by Type, January 1, 1996
(Million Kilowatts)

Region Country	Thermal ¹	Hydro	Nuclear	Geothermal and Other ²	Total
North America					
Canada.....	34	65	16	(s)	115
Mexico.....	24	9	1	1	36
United States.....	553	100	100	17	770
Other.....	(s)	0	0	0	(s)
Total.....	612	174	117	18	921
Central & South America					
Argentina.....	11	8	1	0	20
Brazil.....	5	51	1	2	59
Chile.....	3	3	0	0	6
Colombia.....	3	8	0	0	11
Cuba.....	4	(s)	0	0	4
Paraguay.....	(s)	6	0	0	7
Peru.....	1	2	0	0	4
Puerto Rico.....	4	(s)	0	0	5
Venezuela.....	9	11	0	0	20
Other.....	10	6	0	(s)	16
Total.....	50	97	2	2	151
Western Europe					
Austria.....	6	11	0	0	17
Belgium.....	8	(s)	6	(s)	14
Croatia.....	2	2	0	0	4
Denmark.....	11	(s)	0	1	11
Finland.....	9	3	2	0	14
France.....	24	21	59	(s)	103
Germany.....	83	4	23	2	112
Greece.....	6	2	0	(s)	9
Ireland.....	4	(s)	0	(s)	4
Italy.....	45	13	0	1	59
Netherlands.....	18	(s)	1	(s)	19
Norway.....	(s)	26	0	(s)	27
Portugal.....	5	4	0	(s)	9
Serbia and Montenegro.....	8	4	0	0	12
Spain.....	22	12	7	(s)	41
Sweden.....	7	16	10	(s)	33
Switzerland.....	1	10	3	(s)	15
Turkey.....	11	10	0	(s)	21
United Kingdom.....	53	1	13	(s)	67
Other.....	4	3	1	(s)	8
Total.....	328	144	123	4	600
Eastern Europe & Former U.S.S.R.					
Bulgaria.....	7	1	4	0	12
Czech Republic.....	11	1	2	0	13
Hungary.....	5	(s)	2	0	7
Poland.....	27	2	0	0	29
Romania.....	16	6	1	0	23
Slovakia.....	4	2	2	0	7
Armenia.....	2	1	1	0	4
Azerbaijan.....	4	1	0	0	5
Belarus.....	7	(s)	0	0	7
Estonia.....	3	0	0	0	3
Georgia.....	2	3	0	0	5
Kazakhstan.....	17	2	(s)	0	19
Kyrgyzstan.....	1	3	0	0	4
Lithuania.....	3	1	3	0	6
Russia.....	146	44	21	(s)	211
Tajikistan.....	(s)	4	0	0	4
Turkmenistan.....	4	(s)	0	0	4
Ukraine.....	37	5	13	0	54
Uzbekistan.....	10	2	0	0	11
Other.....	3	3	0	0	7
Total.....	309	80	47	(s)	436

See footnotes at end of table.

Table 6.4 World Electricity Installed Capacity by Type, January 1, 1996 (Continued)
(Million Kilowatts)

Region Country	Thermal ¹	Hydro	Nuclear	Geothermal and Other ²	Total
Middle East					
Bahrain.....	1	0	0	0	1
Cyprus.....	1	0	0	0	1
Iran.....	24	3	0	0	26
Iraq.....	9	1	0	0	10
Israel.....	4	(s)	0	0	4
Jordan.....	1	(s)	0	(s)	1
Kuwait.....	7	0	0	0	7
Lebanon.....	1	(s)	0	0	1
Oman.....	2	0	0	0	2
Qatar.....	1	0	0	0	1
Saudi Arabia.....	21	0	0	0	21
Syria.....	3	1	0	0	4
United Arab Emirates.....	5	0	0	0	5
Yemen.....	1	0	0	0	1
Total.....	81	5	0	(s)	86
Africa					
Algeria.....	6	(s)	0	0	6
Angola.....	(s)	(s)	0	0	1
Cameroon.....	(s)	1	0	0	1
Congo (Kinshasa).....	(s)	3	0	0	3
Cote d'Ivoire (Ivory Coast).....	(s)	1	0	0	1
Egypt.....	13	3	0	0	16
Ghana.....	(s)	1	0	0	1
Kenya.....	(s)	1	0	(s)	1
Libya.....	5	0	0	0	5
Morocco.....	3	1	0	0	4
Mozambique.....	(s)	2	0	0	2
Nigeria.....	4	2	0	0	6
South Africa.....	32	1	2	0	35
Sudan.....	(s)	(s)	0	0	1
Tanzania.....	(s)	(s)	0	0	1
Tunisia.....	2	(s)	0	0	2
Zambia.....	(s)	2	0	0	2
Zimbabwe.....	2	1	0	0	2
Other.....	3	2	0	(s)	4
Total.....	70	21	2	(s)	92
Far East & Oceania					
Australia.....	32	7	0	(s)	39
Bangladesh.....	3	(s)	0	0	3
Burma.....	1	(s)	0	0	1
China.....	154	48	2	0	204
Hong Kong.....	10	0	0	0	10
India.....	70	21	2	(s)	94
Indonesia.....	17	3	0	(s)	20
Japan.....	142	21	41	1	205
Korea, North.....	5	5	0	0	10
Korea, South.....	20	3	9	0	32
Malaysia.....	9	2	0	0	11
New Zealand.....	2	5	0	(s)	8
Pakistan.....	9	5	(s)	0	14
Philippines.....	4	2	0	1	8
Singapore.....	5	0	0	0	5
Sri Lanka.....	(s)	1	0	0	2
Taiwan.....	15	4	5	0	24
Thailand.....	15	3	0	0	18
Vietnam.....	2	3	0	(s)	5
Other.....	3	1	0	0	5
Total.....	517	136	59	2	715
World Total.....	1,968	656	351	27	3,001

¹ Thermal capacity consists of coal, oil, and gas.

² Geothermal and Other Capacity consists of geothermal, solar, and wind sources. Biofuels capacity is

included for United States and Brazil.

(s)=Value less than 500 thousand kilowatts.

Notes: Capacity data consist of both utility and nonutility sources. Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of this Section.

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Section 7

Prices

Table 7.1 Selected Crude Oil Prices, 1987-1997
(U.S. Dollars per Barrel)

Region		Sulfur											
Country	Crude (API Gravity)	Weight ¹	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
North America													
Canada.....	Lloydminster (22)	2.2	14.03	15.25	9.97	14.98	19.27	11.38	15.95	11.58	16.44	18.24	24.44
Mexico.....	Isthmus (33)	1.3	17.00	14.83	14.53	19.90	24.80	15.80	17.25	11.86	15.92	18.53	23.82
Mexico.....	Maya (22)	3.4	14.00	11.10	10.63	17.05	20.00	10.75	12.50	9.01	13.77	15.79	19.33
United States.....	West Texas Inter. (44)	0.2	17.85	16.55	16.95	21.38	23.48	17.61	17.77	13.35	16.80	17.83	24.02
United States.....	U S Refiner Acquisition	--	16.45	15.45	16.04	20.51	22.30	16.10	16.80	12.93	16.56	17.51	23.05
	Cost of Imported Crude Oil												
Central & South America													
Colombia.....	Cano Limon (30)	0.5	17.50	15.85	15.20	20.15	24.95	15.73	16.58	11.72	16.02	18.49	23.94
Ecuador.....	Oriente (30)	0.9	15.86	15.46	13.56	18.81	22.87	13.94	15.62	11.60	16.17	18.20	22.85
Venezuela.....	Tia Juana Light(31)	1.2	15.10	17.62	12.27	24.69	28.62	19.67	17.97	12.97	16.57	18.52	26.62
Venezuela.....	Bachaquero (24)	1.6	13.44	14.26	11.45	16.87	27.89	13.94	14.88	11.12	15.25	17.64	24.74
Venezuela.....	Bachaquero (17)	2.4	11.95	12.20	10.00	15.00	24.45	10.45	12.75	9.25	14.10	15.70	20.45
Western Europe													
Norway.....	Ekofisk Blend (42)	0.1	16.86	17.60	15.85	20.75	27.25	18.00	18.15	13.20	15.95	19.45	24.30
United Kingdom.....	Brent Blend (38)	0.3	18.25	18.00	15.80	21.00	27.20	17.75	17.90	13.15	16.15	19.37	24.05
Eastern Europe & Former U.S.S.R.													
Russia.....	Urals (33)	1.3	18.30	15.80	14.55	20.25	26.05	16.55	16.30	12.35	16.40	19.47	22.85
Middle East													
Iran.....	Iranian Light (34)	1.4	16.14	15.55	12.75	18.20	23.65	15.50	16.70	12.40	16.18	17.73	22.63
Iraq.....	Kirkuk Blend (35)	2.0	17.60	16.20	14.40	19.45	--	--	--	--	--	--	--
Kuwait.....	Kuwait Blend (31)	2.5	16.70	16.67	12.30	17.35	--	--	15.30	11.10	15.58	17.40	21.83
Oman.....	Oman (34)	1.2	15.25	17.38	13.40	18.05	23.65	15.20	16.65	12.70	16.35	17.80	22.30
Qatar.....	Dukhan (42)	1.3	15.30	15.70	13.45	18.30	24.40	16.05	17.35	13.53	16.93	18.22	23.24
Saudi Arabia.....	Arabian Light (33)	1.8	16.15	17.52	13.15	18.40	24.00	15.90	16.80	12.40	16.63	18.20	22.98
Saudi Arabia.....	Arabian Medium (29)	2.9	15.81	16.92	12.30	17.55	22.00	14.25	15.40	11.20	15.73	17.40	21.93
Saudi Arabia.....	Arabian Heavy (27)	2.8	14.96	16.27	11.90	17.15	20.00	13.15	14.40	10.10	15.13	17.05	21.08
United Arab Emirates..	Murban (41)	0.8	15.55	17.92	13.70	19.05	24.65	16.80	18.15	14.09	17.31	18.81	24.06
Africa													
Algeria.....	Saharan Blend (44)	0.1	17.30	18.87	16.10	21.15	28.85	18.80	18.60	13.80	16.30	19.79	24.75
Angola.....	Cabinda (32)	0.1	16.85	16.40	14.40	19.65	25.35	16.65	17.35	12.28	15.42	18.67	23.70
Egypt.....	Suez Blend (32)	1.5	16.60	15.90	12.75	16.75	24.25	15.20	14.75	10.55	14.60	17.65	21.80
Gabon.....	Mandji (31)	1.1	16.30	17.32	14.00	19.05	23.25	14.55	15.60	11.10	14.75	17.80	22.30
Libya.....	Es Sider (37)	0.5	16.95	18.52	15.40	20.40	26.90	17.20	17.55	12.55	16.05	19.20	24.10
Nigeria.....	Bonny Light (36)	0.1	17.13	18.92	15.05	21.20	27.80	18.20	18.50	13.50	16.15	19.70	24.65
Nigeria.....	Forcados (31)	0.2	17.21	18.52	15.95	21.35	27.30	18.10	17.95	13.60	16.15	19.70	24.75
Far East & Oceania													
Australia.....	Gippsland (42)	--	--	16.70	16.00	19.65	26.75	21.35	18.60	14.40	16.90	19.40	24.95
Brunei.....	Seria Light (37)	0.1	14.10	17.20	16.50	20.20	27.25	21.15	19.40	15.60	18.05	20.85	24.80
China.....	Daqing (33)	0.1	12.80	17.70	15.30	18.15	26.10	18.50	19.00	13.20	16.90	19.95	25.00
Indonesia.....	Minas (34)	0.1	16.28	17.56	15.50	18.55	26.50	18.65	19.10	14.15	16.95	20.05	24.95
Malaysia.....	Tapis Blend (44)	0.1	14.15	18.40	16.75	20.35	27.60	21.45	19.50	15.70	17.60	20.89	25.70

¹ Percentage of sulfur contained by gross weight.

--=Not applicable.

(s)=No significant volume of exports.

Note: Most foreign crude oil prices are for the available date that is closest to January 1 of the year. The prices for crude oils from Brunei and Malaysia and the United States prices are averages for the month of January. The foreign crude oils are free on board (f.o.b.) at the port of lading. The United States refiner acquisition cost for imported crude oil includes all charges associated with the acquisition, transportation, and storage of imported crude oil up to the time that the oil is booked into the U.S. refineries.

Sources: Bloomberg L.P., Bloomberg Oil Buyers' Guide, various issues. Dow Jones & Co., The Wall Street Journal, various issues. Energy Information Administration, Weekly Petroleum Status Report, DOE/EIA-0208, various issues. The McGraw-Hill Companies, Inc., Platt's Oilgram Price Report, various issues. PennWell Publishing Co., Oil & Gas Journal, various issues. Petroleum and Energy Intelligence Weekly, Inc., Petroleum Intelligence Weekly and Oil Market Intelligence, various issues. Petroleum Intelligence Group, Petroleum Market Intelligence, various issues.

Table 7.2 World Survey of Recent Selected Petroleum Product Prices (Including Taxes)

Region Country	Date ¹	Automotive Fuels		Residential Fuels			Industrial Fuels	
		Premium Gasoline	Diesel Fuel	Light Fuel Oil	Kerosene	LPG ²	Light Fuel Oil	Heavy Fuel Oil
		U.S. Dollars per Gallon					U.S. Dollars per Barrel	
North America								
Canada	1Q/97	1.92	1.56	1.15	--	--	29.60	18.67
Mexico.....	1/97	1.41	1.05	0.86	1.05	0.67	44.12	19.72
United States.....	1/97	1.42	1.29	1.08	0.89	0.92	31.71	20.62
Central & South America								
Argentina.....	1/97	3.10	1.00	0.87	1.15	2.39	41.81	23.31
Barbados.....	1/97	2.90	2.43	1.11	1.04	2.15	102.02	31.09
Bolivia.....	1/97	2.20	1.47	0.78	0.81	0.54	61.62	39.74
Brazil.....	1/97	2.30	1.31	1.04	1.38	1.21	54.82	28.97
Chile.....	1/97	2.16	1.41	0.99	1.17	1.57	59.01	28.68
Colombia.....	1/97	0.94	0.88	0.74	0.88	0.50	37.05	16.33
Costa Rica.....	1/97	2.03	1.37	1.17	1.24	1.31	57.37	26.34
Cuba.....	1/97	1.89	0.61	0.57	0.32	0.51	25.44	23.50
Dominican Republic.....	1/97	1.69	0.97	1.43	1.31	0.23	40.54	23.66
Ecuador.....	1/97	1.27	0.76	0.82	--	0.11	31.71	16.47
El Salvador.....	1/97	2.11	1.29	0.95	1.16	0.71	54.13	31.22
Grenada.....	1/97	1.85	1.49	--	1.09	1.99	62.43	--
Guatemala.....	1/97	1.70	1.34	0.96	0.96	0.57	56.33	29.53
Guyana.....	1/97	1.54	1.61	1.07	1.15	2.21	67.59	25.67
Haiti.....	1/97	2.03	1.45	1.14	1.14	1.35	60.69	31.51
Honduras.....	1/97	1.48	1.07	1.07	1.03	1.00	44.94	28.94
Jamaica.....	1/97	1.49	1.34	1.05	1.14	1.27	56.16	20.60
Nicaragua.....	1/97	2.62	1.32	0.56	1.35	1.24	55.29	23.40
Panama.....	1/97	1.81	1.38	1.09	1.32	1.27	58.11	33.86
Paraguay.....	1/97	2.39	1.20	1.33	1.33	1.46	50.52	36.78
Peru.....	1/97	2.68	1.40	--	1.14	1.70	58.71	27.68
Suriname.....	1/97	2.11	1.55	1.36	1.36	1.50	65.01	10.65
Trinidad and Tobago.....	1/97	1.45	0.77	1.29	0.71	0.75	32.32	22.03
Uruguay.....	1/97	3.87	1.81	1.38	1.77	1.62	75.88	26.20
Venezuela.....	1/97	0.47	0.38	0.07	0.55	0.29	15.86	1.18
Western Europe								
Austria.....	1Q/97	4.05	3.10	1.59	--	--	--	--
Belgium.....	1Q/97	4.20	3.02	1.04	--	--	36.04	20.10
Croatia.....	1995	2.88	2.46	1.48	--	--	62.33	--
Denmark.....	1Q/97	4.05	3.07	2.67	--	--	50.22	25.02
Finland.....	1Q/97	4.26	2.96	1.42	--	--	49.05	31.81
France.....	1Q/97	4.22	3.08	1.63	--	--	48.60	23.55
Germany.....	1Q/97	3.87	2.91	1.18	--	--	43.22	20.95
Greece.....	1Q/97	3.06	2.43	1.71	--	--	60.70	31.07
Ireland.....	3Q/96	3.74	0.00	1.53	--	--	45.91	25.78
Italy.....	1Q/97	4.21	3.38	3.29	--	--	116.23	25.79
Luxembourg.....	1Q/97	3.04	2.53	1.09	--	--	40.71	22.29
Netherlands.....	4Q/96	4.57	3.92	1.54	--	--	--	32.06
Norway.....	4Q/96	4.97	4.41	2.38	--	--	76.77	55.40
Portugal.....	1Q/97	3.85	2.62	2.64	--	--	93.98	27.20
Slovenia.....	1995	2.42	2.04	1.06	--	--	44.68	--
Spain.....	1Q/97	3.10	2.53	1.35	--	--	48.74	27.31
Sweden.....	1Q/97	4.34	3.55	2.30	--	--	39.93	30.94
Switzerland.....	1Q/97	3.29	3.47	0.98	--	--	33.39	21.55
Turkey.....	1Q/97	2.55	1.87	2.02	--	--	--	26.12
United Kingdom.....	1Q/97	4.25	3.78	1.04	--	--	38.45	24.30

See footnotes at end of table.

Table 7.2 World Survey of Recent Selected Petroleum Product Prices (Including Taxes) (Continued)

Region Country	Date ¹	Automotive Fuels		Residential Fuels			Industrial Fuels	
		Premium Gasoline	Diesel Fuel	Light Fuel Oil	Kerosene	LPG ²	Light Fuel Oil	Heavy Fuel Oil
		U.S. Dollars per Gallon					U.S. Dollars per Barrels	
Eastern Europe & Former U.S.S.R.								
Azerbaijan.....	1995	0.87 ³	0.00	0.00	--	--	--	--
Czech.....	1Q/97	2.85	2.46	2.16	--	--	74.39	15.48
Estonia.....	1995	1.24 ³	1.04	--	--	--	--	--
Hungary.....	1Q/97	3.26	2.82	0.00	--	--	94.22	20.42
Kazakstan.....	1995	1.12 ³	0.65	0.00	--	--	17.49	0.00
Kyrgyzstan.....	1995	1.08 ³	0.00	0.00	--	--	0.00	0.00
Latvia.....	1995	1.36 ³	0.00	0.00	--	--	0.00	0.00
Lithuania.....	1995	0.71 ³	0.52	0.00	--	--	0.00	0.00
Poland.....	1Q/97	2.29	1.77	1.36	--	--	44.34	19.21
Romania.....	1995	0.93 ³	0.67	--	--	--	--	--
Russia.....	3/97	0.46 ³	0.48	0.22	--	--	9.31	--
Slovak.....	1996	2.59	2.32	0.64	--	--	26.83	17.71
Middle East								
Iran.....	1996	0.32 ³	0.06	0.03	0.06	--	--	--
Kuwait.....	1996	0.05 ³	0.05	0.02	0.05	--	--	--
Lebanon.....	1/1/95	0.92	--	0.74	0.77	1.06	29.97	16.60
Qatar.....	1996	0.60 ³	0.57	--	0.42	--	--	--
Saudi Arabia.....	1996	0.61 ³	0.37	0.15	0.44	--	0.37	--
United Arab Emirates.....	1996	0.86 ³	0.77	0.58	0.79	--	--	--
Africa								
Algeria.....	1996	1.11 ³	0.64	0.59	0.26	--	--	--
Ghana.....	1/6/95	1.50	1.28	--	0.98	0.39	--	19.43
Libya.....	1995	0.15 ³	0.11	0.02	0.08	--	--	--
Nigeria.....	1995	1.90 ³	1.56	1.21	2.42	--	--	--
South Africa.....	6/30/95	2.57	2.36	--	--	--	--	--
Tunisia.....	1/1/95	2.19	1.19	1.35	--	0.61	--	16.26
Far East & Oceania								
Australia.....	1Q/97	2.20	2.27	--	--	--	--	--
China.....	7/96	0.93 ³	0.88	--	--	--	--	--
Hong Kong.....	3Q/96	4.90	3.23	1.07	1.50	2.02	73.80	44.81
India.....	1995	2.25 ³	0.92	--	--	--	30.77	24.51
Indonesia.....	1995	0.94 ³	0.64	0.51	0.55	--	--	--
Japan.....	1Q/97	3.28 ³	2.34	1.55	1.56	--	44.14	25.00
Korea, South.....	1Q/97	3.82	1.74	--	1.72	2.27	--	35.71
New Zealand.....	1Q/97	2.53	1.42	--	--	--	37.93	33.51
Philippines.....	1/1/95	1.38	1.08	--	1.08	0.81	--	17.12
Singapore.....	1/15/95	3.23	1.25	--	--	1.95	52.55	--
Taiwan.....	8/97	2.45	1.59	--	1.88	--	28.76	25.83
Thailand.....	12/96	1.44	1.37	0.79	1.55	0.86	33.23	24.69

¹Data are for the available time period that is closest to 1/1/97. Daily, monthly, quarterly, and annual data are averages. (1Q=first quarter)

²Liquefied petroleum gas (LPG) prices refer to residential propane or a mixture of propane and butane.

³Price is for regular gasoline.

--=Not applicable.

Note: Comparisons between prices and price trends in different countries require care. They are of limited validity because of fluctuations in exchange rates; differences in product quality, marketing practices, and market structures; and the extent to which the standard categories of sales are representative of total national sales for a given period.

Sources: Eastern Bloc Research Ltd., *Eastern Bloc Energy*, various issues. Energy Information Administration, *Monthly Energy Review*, October 1997 and *Petroleum Marketing Monthly*, July 1997. International Energy Agency, *Energy Prices and Taxes, Second Quarter 1997*, 1997. International Monetary Fund, *International Financial Statistics*, November 1997. Organization of Petroleum Exporting Countries, *Annual Statistical Bulletin 1996*, 1997. Latin American Energy Organization, *Energy-Economic Information System*, various versions. United Nations Economic Commission for Europe, *The Energy Situation and Policies in the ECE Region*, August 21, 1996.

Section 8

Energy Reserves

Table 8.1 World Crude Oil and Natural Gas Reserves, January 1, 1997

Region Country	Crude Oil (Billion Barrels)		Natural Gas (Trillion Cubic Feet)	
	Oil and Gas Journal	World Oil	Oil and Gas Journal	World Oil
North America				
Canada.....	4.9	5.5	68.1	68.1
Mexico.....	48.8	48.5	67.7	63.9
United States.. ¹	22.0	22.0	166.5	166.5
Total.....	75.7	76.0	302.3	298.5
Central & South America				
Argentina.....	2.4	2.6	21.9	24.3
Barbados.....	(s)	NA	(s)	NA
Bolivia.....	0.1	0.1	4.5	4.4
Brazil.....	4.8	7.0	5.4	8.3
Chile.....	0.3	0.1	3.6	3.5
Colombia.....	2.8	3.4	8.3	8.0
Cuba.....	0.1	0.3	0.1	0.1
Ecuador.....	2.1	3.3	3.7	3.4
Guatemala.....	0.2	NA	(s)	NA
Peru.....	0.8	0.7	7.0	7.0
Suriname.....	0.1	NA	0.0	NA
Trinidad and Tobago.....	0.6	0.6	12.4	12.1
Venezuela.....	64.9	72.6	141.6	143.0
Other.....	0.0	0.7	0.0	(s)
Total.....	79.1	91.2	208.5	213.9
Western Europe				
Austria.....	0.1	0.1	0.8	0.9
Croatia.....	0.1	0.1	0.8	1.3
Denmark.....	1.0	0.9	3.9	3.7
France.....	0.1	0.1	0.7	0.7
Germany.....	0.4	0.4	11.6	12.1
Greece.....	(s)	NA	0.3	NA
Ireland.....	0.0	NA	0.4	NA
Italy.....	0.7	0.7	10.5	9.8
Netherlands.....	0.1	0.1	64.1	62.3
Norway.....	11.2	26.9	47.7	123.3
Serbia and Montenegro.....	0.1	0.1	1.6	0.7
Spain.....	(s)	NA	0.6	NA
Turkey.....	0.3	0.3	0.3	0.3
United Kingdom.....	4.5	5.0	24.7	26.8
Other.....	0.0	0.1	0.0	0.4
Total.....	18.5	34.9	167.9	242.3
Eastern Europe & Former U.S.S.R.				
Albania.....	0.2	0.1	0.1	0.1
Bulgaria.....	(s)	NA	0.1	NA
Czech Republic.....	(s)	(s)	0.1	0.1
Slovakia.....	(s)	NA	0.5	NA
Hungary.....	0.1	0.1	3.3	3.1
Poland.....	(s)	0.1	5.3	5.3
Romania.....	1.6	1.0	14.0	4.5
Former U.S.S.R.. ²	57.0	183.8	1,977.0	1,939.3
Other.....	0.0	(s)	0.0	1.2
Total.....	59.0	185.1	2,000.4	1,953.6

See footnotes at end of table.

Table 8.1 World Crude Oil and Natural Gas Reserves, January 1, 1997 (Continued)

Region Country	Crude Oil (Billion Barrels)		Natural Gas (Trillion Cubic Feet)	
	Oil and Gas Journal	World Oil	Oil and Gas Journal	World Oil
Middle East				
Bahrain.....	0.2	0.1	5.2	5.0
Iran.....	93.0	90.5	741.6	812.2
Iraq.....	112.0	112.0	118.0	118.5
Israel.....	(s)	NA	(s)	NA
Jordan.....	(s)	NA	0.2	NA
Kuwait ³	96.5	94.7	52.9	52.7
Oman.....	5.1	3.6	30.0	21.1
Qatar.....	3.7	3.9	250.0	244.8
Saudi Arabia ³	261.5	261.8	189.1	191.5
Syria.....	2.5	2.4	8.3	8.2
United Arab Emirates.....	97.8	63.5	204.9	203.6
Yemen.....	4.0	3.1	16.9	17.0
Other.....	0.0	(s)	0.0	0.2
Total.....	676.4	635.7	1,617.1	1,675.0
Africa				
Algeria.....	9.2	13.0	130.3	138.9
Angola.....	5.4	3.6	1.7	1.7
Benin.....	(s)	NA	(s)	NA
Cameroon.....	0.4	0.1	3.9	3.9
Congo (Brazzaville).....	1.5	1.6	3.2	4.3
Congo (Kinshasa).....	0.2	NA	(s)	NA
Cote d'Ivoire (Ivory Coast).....	0.1	0.1	0.8	1.1
Egypt.....	3.7	3.7	20.4	20.4
Equatorial Guinea.....	(s)	NA	1.3	NA
Ethiopia.....	(s)	NA	0.9	NA
Gabon.....	1.3	1.3	0.5	0.5
Ghana.....	(s)	NA	0.2	NA
Libya.....	29.5	29.5	46.3	46.3
Madagascar.....	0.0	NA	0.1	NA
Morocco.....	(s)	NA	(s)	NA
Mozambique.....	0.0	NA	2.0	NA
Namibia.....	0.0	NA	3.0	NA
Nigeria.....	15.5	20.8	104.7	109.7
Rwanda.....	0.0	NA	2.0	NA
Somalia.....	0.0	NA	0.2	NA
South Africa.....	(s)	NA	0.9	NA
Sudan.....	0.3	NA	3.0	NA
Tanzania.....	0.0	NA	0.7	NA
Tunisia.....	0.3	0.3	2.4	2.7
Other.....	0.0	2.1	0.0	15.2
Total.....	67.6	76.2	328.6	344.6

See footnotes at end of table.

Table 8.1 World Crude Oil and Natural Gas Reserves, January 1, 1997 (Continued)

Region Country	Crude Oil (Billion Barrels)		Natural Gas (Trillion Cubic Feet)	
	Oil and Gas Journal	World Oil	Oil and Gas Journal	World Oil
Far East & Oceania				
Afghanistan.....	0.0	NA	3.5	NA
Australia.....	1.8	3.7	19.4	83.5
Bangladesh.....	(s)	NA	10.2	NA
Brunei.....	1.4	1.1	14.1	13.5
Burma.....	0.1	0.1	11.0	10.0
China.....	24.0	34.1	41.4	39.6
India.....	4.3	5.0	24.2	19.5
Indonesia.....	5.0	9.2	72.3	135.9
Japan.....	0.1	NA	1.1	NA
Malaysia.....	4.0	5.2	80.2	79.1
New Zealand.....	0.1	0.1	2.4	2.2
Pakistan.....	0.2	0.2	22.0	18.3
Papua New Guinea.....	0.3	0.3	1.5	8.6
Philippines.....	0.2	0.3	3.9	5.1
Taiwan.....	(s)	NA	2.7	NA
Thailand.....	0.3	0.3	7.1	7.1
Vietnam.....	0.6	0.6	5.0	6.0
Other.....	0.0	0.6	0.0	20.2
Total.....	42.3	60.8	321.8	448.7
World Total.....	1,018.5	1,160.1	4,946.7	5,176.6

¹ Data for the United States are from the Energy Information Administration.

² The Oil and Gas Journal and World Oil did not present disaggregated data for the Other Republics of the Former U.S.S.R.. World Oil presented data for Russia (155 billion barrels of crude oil and 1.7 trillion cubic feet of natural gas) and aggregated data for the Other Republics of the Former U.S.S.R. (29 billion barrels of crude oil and 0.2 trillion cubic feet of natural gas).

³ Includes one-half of the reserves in the Neutral Zone.

NA = Not Available

(s) = Value less than 50 million barrels of crude oil or less than 50 billion cubic feet of natural gas.

Notes: Sum of components may not equal total due to independent rounding. All reserve data except those for the Former U.S.S.R. and natural gas reserves in Canada are proved reserves. Former U.S.S.R. data are "explored reserves," which include proved, probable, and partially possible reserves.

Sources: PennWell Publishing Co., Oil and Gas Journal. Vol 94, No. 53, (December 1996). Gulf Publishing Co., World Oil. Vol 218, No. 8, (August 1997). Energy Information Administration, U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1996 Annual Report, DOE/EIA-0216(96) (November 1997).

Table 8.2 World Estimated Recoverable Coal
(Million Short Tons)

Region Country	Recoverable Anthracite and Bituminous ¹	Recoverable Lignite and Subbituminous ¹	Total Recoverable Coal ¹
North America			
Canada.....	4,970	4,535	9,505
Greenland.....	0	202	202
Mexico.....	948	387	1,335
United States... ²	122,192	148,708	270,901
Total.....	128,110	153,832	281,942
Central & South America			
Argentina.....	0	143	143
Bolivia.....	1	0	1
Brazil.....	0	3,136	3,136
Chile.....	34	1,268	1,302
Colombia.....	4,674	330	5,003
Ecuador.....	0	26	26
Peru.....	1,058	110	1,168
Venezuela.....	460	0	460
Total.....	6,227	5,013	11,240
Western Europe			
Austria.....	0	34	34
Croatia.....	7	36	43
France.....	125	29	153
Germany.....	26,455	47,730	74,186
Greece.....	0	3,307	3,307
Ireland.....	15	0	15
Italy.....	0	37	37
Netherlands.....	548	0	548
Norway.....	0	4	4
Portugal.....	3	36	40
Slovenia.....	0	(s)	(s)
Spain.....	937	661	1,598
Sweden.....	0	1	1
Turkey.....	179	7,701	7,879
United Kingdom.....	2,205	551	2,756
Former Yugoslavia... ³	70	18,152	18,222
Total.....	30,544	78,281	108,825
Eastern Europe & Former U.S.S.R.			
Albania.....	0	(s)	(s)
Bulgaria.....	14	2,974	2,988
Czech Republic.....	1,810	3,858	5,668
Hungary.....	657	4,260	4,917
Poland.....	32,077	14,330	46,407
Romania.....	1	3,436	3,437
Slovakia.....	0	251	251
Former U.S.S.R... ⁴	114,640	150,122	264,762
Total.....	149,200	179,232	328,431
Middle East			
Iran.....	213	0	213
Total.....	213	0	213

See footnotes at end of table.

Table 8.2 World Estimated Recoverable Coal (Continued)
(Million Short Tons)

Region	Country	Recoverable Anthracite and Bituminous ¹	Recoverable Lignite and Subbituminous ¹	Total Recoverable Coal ¹
--------	---------	--	--	-------------------------------------

Africa

Algeria	47	0	0	47
Botswana	3,858	0	0	3,858
Central African Republic	0	4	0	4
Congo (Kinshasa)	97	0	0	97
Egypt	14	44	58	116
Malawi	2	0	2	4
Morocco	50	0	50	100
Mozambique	265	0	265	530
Niger	77	0	77	154
Nigeria	23	186	209	418
South Africa	60,994	0	60,994	121,988
Swaziland	128	1,101	1,229	2,429
Tanzania ²	220	(s)	221	441
Zambia	0	61	61	122
Zimbabwe	809	0	809	1,618
Total	66,585	1,397	67,982	135,964

Far East & Oceania

Afghanistan	73	0	73	146
Australia	49,979	50,265	100,244	200,488
Burma	3	0	3	6
China	68,564	57,651	126,215	253,870
India	75,009	2,094	77,103	154,113
Indonesia	1,060	34,283	35,343	70,683
Japan	886	19	905	1,810
Korea, North	331	331	661	1,322
Korea, South	202	0	202	404
Malaysia	4	0	4	8
Mongolia ³	(s)	(s)	(s)	(s)
Nepal	0	(s)	2	2
New Caledonia	2	0	2	4
New Zealand	30	99	129	258
Pakistan	0	809	809	1,618
Philippines	(s)	289	289	578
Taiwan	109	0	109	218
Thailand	(s)	1,101	1,101	2,202
Vietnam	165	0	165	330
Total	196,417	146,941	343,359	687,307

World Total..... 1,141,992

¹ World Energy Council definition of "Proved Recoverable Reserves": "Proved Recoverable Reserves are the tonnage of Proved Amount in Place that can be recovered (extracted from the earth in raw form) under present and expected local economic conditions with existing available technology. The U.S. term "measured" approximates the term "proved" used by the World Energy Council. The U.S. "measured and indicated" data have been combined prior to depletion adjustments and cannot be recaptured as "measured alone." This excludes estimates for Croatia of 7 million short tons of recoverable anthracite and bituminous and 36 million short tons of recoverable lignite for total recoverable coal of 43 million short tons.

² No data are available for Kyrgyzstan of 895 million short tons of recoverable lignite.

³ No data are available for subbituminous reserves. This quantity is not included.

⁴ No data available.

⁵ Not applicable.

(s) = Value less than 500,000 short tons.

Notes: Formerly entitled "World Estimated Recoverable Reserves of Coal." The estimates in this table are dependent on the judgment of each reporting country to interpret local economic conditions and its own mineral assessment criteria in terms of specified standards of the World Energy Council. Consequently, the data may not all meet the same standards of reliability and some data, including the Energy Information Administration's (EIA)'s, may not represent reserves of coal that are known to be recoverable under current economic conditions and regulations. Some data, including the EIA's, represent estimated recovery rates for highly reliable estimates of coal quantities in the ground that have physical characteristics like those of coals currently being profitably mined. U.S. coal rank approximations are based partly on Bitu and may not match precisely borderline geologic ranks. Further, data in this table may represent different base years. Data for the U.S. represent recoverable coal estimates as of December 31, 1996. Data for other countries are as of December 31, 1993, the most recent period for which they are available. The Energy Information Administration does not certify the international reserves data but reproduces the information as a matter of convenience for the reader. Sum of components may not equal total due to independent rounding.

Sources: World Energy Council, 1995 Survey of Energy Resources, World Energy Conference (1995), United States: Energy Information Administration, Unpublished File Data of the Coal Reserves Database (December 1997).

Appendix A

Geographical and Organizational Definitions

Appendix A

Geographical and Organizational Definitions

North America

Bermuda
Canada

Greenland
Mexico

Saint Pierre and Miquelon
United States

Central and South America

Antarctica¹
Antigua and Barbuda
Argentina
Aruba
Bahamas, The
Barbados
Belize
Bolivia
Brazil
Cayman Islands
Chile
Colombia
Costa Rica
Cuba
Dominica

Dominican Republic
Ecuador
El Salvador
Falkland Islands
French Guiana
Grenada
Guadeloupe
Guatemala
Guyana
Haiti
Honduras
Jamaica
Martinique
Montserrat
Netherlands Antilles

Nicaragua
Panama
Paraguay
Peru
Puerto Rico
Saint Kitts and Nevis
Saint Lucia
Saint Vincent/Grenadines
Suriname
Trinidad and Tobago
Turks and Caicos Islands
Uruguay
Venezuela
Virgin Islands, British
Virgin Islands, U.S.

Western Europe

Austria
Belgium
Denmark
Faroe Islands
Finland
France
Germany
Germany, East
Germany, West
Gibraltar
Greece

Iceland
Ireland
Italy
Luxembourg
Malta
Netherlands
Norway
Portugal
Spain
Sweden

Switzerland
Turkey
United Kingdom
Former Yugoslavia
Bosnia and Herzegovina
Croatia
Macedonia, The Former Yugoslav
Republic of (TFYR)
Serbia and Montenegro
Slovenia

¹Formerly listed as Antarctic Fisheries.

Eastern Europe and Former U.S.S.R.

Albania
Bulgaria
Former Czechoslovakia
Czech Republic
Slovakia
Hungary
Poland
Romania

Former U.S.S.R.
Armenia
Azerbaijan
Belarus
Estonia
Georgia
Kazakhstan
Kyrgyzstan

Latvia
Lithuania
Moldova
Russia
Tajikistan
Turkmenistan
Ukraine
Uzbekistan

Middle East

Bahrain
Cyprus
Iran
Iraq
Israel

Jordan
Kuwait
Lebanon
Oman
Qatar

Saudi Arabia
Syria
United Arab Emirates
Yemen

Africa

Algeria
Angola
Benin
Botswana
Burkina Faso
Burundi
Cameroon
Cape Verde
Central African Republic
Chad
Comoros
Congo (Brazzaville)¹
Congo (Kinshasa)²
Cote d'Ivoire (Ivory Coast)
Djibouti
Egypt
Equatorial Guinea
Eritrea
Ethiopia

Gabon
Gambia, The
Ghana
Guinea
Guinea-Bissau
Kenya
Lesotho
Liberia
Libya
Madagascar
Malawi
Mali
Mauritania
Mauritius
Morocco
Mozambique
Namibia
Niger
Nigeria

Reunion
Rwanda
Saint Helena
Sao Tome and Principe
Senegal
Seychelles
Sierra Leone
Somalia
South Africa
Sudan
Swaziland
Tanzania
Togo
Tunisia
Uganda
Western Sahara
Zambia
Zimbabwe

¹Formerly listed as Congo.

²Formerly named Zaire.

Far East and Oceania

Afghanistan	India	Niue
American Samoa	Indonesia	Pakistan
Australia	Japan	Papua New Guinea
Bangladesh	Kiribati	Philippines
Bhutan	Korea, North	Samoa ³
Brunei	Korea, South	Singapore
Burma	Laos	Solomon Islands
Cambodia	Macau	Sri Lanka
China	Malaysia	Taiwan
Cook Islands	Maldives	Thailand
Fiji	Mongolia	Tonga
French Polynesia	Nauru	U.S. Pacific Islands ⁴
Guam	Nepal	Vanuatu
Hawaiian Trade Zone ¹	New Caledonia	Vietnam
Hong Kong ²	New Zealand	Wake Island

Organization for Economic Cooperation and Development (OECD)⁵

Australia	Greenland	New Zealand
Austria	Guam	Norway
Belgium	Hawaiian Trade Zone ¹	Poland
Canada	Hungary	Portugal
Czech Republic	Iceland	Puerto Rico
Denmark	Ireland	Spain
Faroe Islands	Italy	Sweden
Finland	Japan	Switzerland
France	Korea, South	Turkey
Germany	Luxembourg	United Kingdom
Germany, East	Mexico	United States
Germany, West	Netherlands	Virgin Islands, U.S.
Greece		

OECD Europe

Austria	Germany, West	Norway
Belgium	Greece	Poland
Czech Republic	Hungary	Portugal
Denmark	Iceland	Spain
Faroe Islands	Ireland	Sweden
Finland	Italy	Switzerland
France	Luxembourg	Turkey
Germany	Netherlands	United Kingdom
Germany, East		

¹As of January 1, 1987, Hawaiian Trade Zone data are included in the United States data.

²Under a Sino-British declaration of September 1984, Hong Kong reverted to Chinese control on July 1, 1997. It is now a semi-autonomous entity that exists pursuant to international agreement and maintains its own government apart from the People's Republic of China.

³Formerly named Western Samoa.

⁴Includes data for three independent countries - Federated States of Micronesia, Republic of the Marshall Islands, and Republic of Palau - and a United States territory, Commonwealth of the Northern Mariana Islands.

⁵Membership is as of December 31, 1996.

International Energy Agency (IEA)¹

Australia
Austria
Belgium
Canada
Denmark
Faroe Islands
Finland
France
Germany
Germany, East
Germany, West

Greece
Greenland
Guam
Hawaiian Trade Zone²
Ireland
Italy
Japan
Luxembourg
Netherlands
New Zealand

Norway
Portugal
Puerto Rico
Spain
Sweden
Switzerland
Turkey
United Kingdom
United States
Virgin Islands, U.S.

European Union (EU)³

Austria
Belgium
Denmark
Faroe Islands
Finland
France

Germany
Germany, East
Germany, West
Greece
Ireland
Italy

Luxembourg
Netherlands
Portugal
Spain
Sweden
United Kingdom

Former U.S.S.R.

Armenia
Azerbaijan
Belarus
Estonia
Georgia

Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Moldova

Russia
Tajikistan
Turkmenistan
Ukraine
Uzbekistan

Organization of Petroleum Exporting Countries (OPEC)³

Algeria
Indonesia
Iran
Iraq

Kuwait
Libya
Nigeria
Qatar

Saudi Arabia
United Arab Emirates
Venezuela

¹Membership is as of December 31, 1996. Since Hungary joined the IEA on June 2, 1997, it will not be included in the historical series of IEA totals until publication of the *International Energy Annual 1997*.

²As of January 1, 1987, Hawaiian Trade Zone data are included in the United States data.

³Membership is as of December 31, 1996.

Appendix B

**World Population
and Gross Domestic
Product, 1987-1996**

Table B1 World Population, 1987 - 1996
(Millions)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Bermuda.....	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Canada.....	26.55	26.89	27.38	27.79	28.12	28.54	28.95	29.25	29.61	29.96
Greenland.....	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Mexico.....	81.20	82.72	84.27	86.15	87.84	89.54	91.21	93.01	94.85	96.58
Saint Pierre and Miquelon.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
United States.....	242.80	245.02	247.34	249.91	252.65	255.46	258.25	260.71	263.03	265.28
Total.....	350.67	354.75	359.12	363.97	368.73	373.67	378.53	383.10	387.62	391.95
Central & South America										
Antigua and Barbuda.....	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07
Argentina.....	31.19	31.64	32.08	32.53	32.97	33.42	33.87	34.32	34.77	35.22
Aruba.....	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Bahamas, The.....	0.24	0.25	0.25	0.26	0.26	0.26	0.27	0.27	0.28	0.28
Barbados.....	0.25	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Belize.....	0.17	0.18	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.22
Bolivia.....	6.16	6.29	6.43	6.57	6.73	6.90	7.07	7.24	7.41	7.59
Brazil.....	137.27	139.82	142.31	144.72	147.07	149.36	151.57	153.73	155.82	157.87
Cayman Islands.....	0.22	0.23	0.24	0.25	0.26	0.26	0.30	0.32	0.33	0.34
Chile.....	12.54	12.75	12.96	13.10	13.32	13.54	13.77	13.99	14.20	14.42
Colombia.....	30.58	31.14	31.71	32.30	32.84	33.39	33.95	34.52	35.10	35.63
Costa Rica.....	2.68	2.72	2.76	2.80	2.87	2.94	3.10	3.27	3.33	3.40
Cuba.....	10.30	10.41	10.52	10.62	10.74	10.83	10.90	10.95	10.98	11.02
Dominica.....	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Dominican Republic.....	6.72	6.87	7.02	7.17	7.32	7.47	7.62	7.77	7.91	8.05
Ecuador.....	9.56	9.79	10.03	10.26	10.50	10.74	10.98	11.22	11.46	11.70
El Salvador.....	5.05	5.09	5.19	5.27	5.35	5.48	5.52	5.64	5.73	5.80
Falkland Islands.....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
French Guiana.....	0.10	0.11	0.11	0.12	0.12	0.13	0.13	0.14	0.15	0.15
Grenada.....	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10
Guadeloupe.....	0.36	0.37	0.38	0.39	0.40	0.40	0.41	0.42	0.42	0.43
Guatemala.....	8.43	8.68	8.94	9.20	9.47	9.74	10.03	10.32	10.62	10.93
Guyana.....	0.79	0.79	0.79	0.80	0.80	0.81	0.82	0.82	0.83	0.84
Haiti.....	6.11	6.24	6.36	6.49	6.62	6.76	6.90	7.04	7.18	7.34
Honduras.....	4.66	4.80	4.95	5.11	5.26	5.43	5.59	5.77	5.95	6.14
Jamaica.....	2.35	2.36	2.37	2.39	2.41	2.43	2.47	2.50	2.53	2.55
Martinique.....	0.35	0.35	0.36	0.36	0.37	0.37	0.38	0.38	0.38	0.38
Montserrat.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Netherlands Antilles.....	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.20	0.20	0.20
Nicaragua.....	3.50	3.62	3.74	3.87	4.00	4.13	4.26	4.40	4.54	4.69
Panama.....	2.26	2.30	2.35	2.40	2.44	2.49	2.53	2.58	2.63	2.67
Paraguay.....	3.84	3.96	4.09	4.22	4.33	4.45	4.57	4.70	4.83	4.96
Peru.....	20.26	20.68	21.11	21.55	22.00	22.45	22.64	23.09	23.53	23.95
Puerto Rico.....	3.43	3.46	3.50	3.53	3.55	3.58	3.62	3.65	3.70	3.74
Saint Kitts and Nevis.....	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Saint Lucia.....	0.14	0.15	0.15	0.13	0.13	0.14	0.14	0.14	0.14	0.14
Saint Vincent/Grenadines.....	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Suriname.....	0.39	0.39	0.40	0.40	0.40	0.41	0.41	0.42	0.42	0.43
Trinidad and Tobago.....	1.21	1.21	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.28
Turks and Caicos Islands.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Uruguay.....	3.04	3.06	3.08	3.09	3.11	3.13	3.15	3.17	3.19	3.20
Venezuela.....	17.97	18.42	18.87	19.33	19.79	20.44	20.91	21.38	21.64	22.01
Virgin Islands, British.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Virgin Islands, U.S.....	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10
Total.....	332.91	339.16	345.49	351.70	357.89	364.36	370.38	376.68	382.55	388.44

See footnotes at end of table.

Table B1 World Population, 1987 - 1996 (Continued)
(Millions)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Western Europe										
Austria.....	7.60	7.62	7.66	7.73	7.81	7.91	7.99	8.03	8.05	8.11
Belgium.....	9.87	9.90	9.94	9.97	10.01	10.05	10.08	10.11	10.14	10.16
Denmark.....	5.13	5.13	5.13	5.14	5.15	5.17	5.19	5.20	5.23	5.26
Faroe Islands.....	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Finland.....	4.93	4.95	4.96	4.99	5.01	5.04	5.07	5.09	5.11	5.12
France.....	55.82	56.12	56.42	56.73	57.05	57.37	57.65	57.90	58.14	58.37
Germany.....	--	--	--	--	79.98	80.57	81.19	81.41	81.64	81.91
Germany, East.....	16.64	16.67	16.63	16.25	--	--	--	--	--	--
Germany, West.....	61.09	61.42	61.99	63.23	--	--	--	--	--	--
Gibraltar.....	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Greece.....	10.00	10.04	10.09	10.16	10.25	10.32	10.38	10.43	10.45	10.47
Iceland.....	0.25	0.25	0.25	0.25	0.26	0.26	0.26	0.27	0.27	0.27
Ireland.....	3.50	3.51	3.52	3.53	3.54	3.55	3.56	3.57	3.58	3.60
Italy.....	57.34	57.44	57.54	57.66	57.75	57.86	57.97	58.10	58.20	58.28
Luxembourg.....	0.37	0.37	0.38	0.38	0.39	0.39	0.40	0.40	0.41	0.42
Malta.....	0.34	0.35	0.35	0.35	0.36	0.36	0.36	0.36	0.37	0.37
Netherlands.....	14.66	14.76	14.85	14.95	15.07	15.18	15.29	15.38	15.45	15.52
Norway.....	4.19	4.21	4.23	4.24	4.26	4.29	4.31	4.33	4.36	4.38
Portugal.....	9.91	9.90	9.89	9.88	9.88	9.89	9.90	9.91	9.92	9.94
Spain.....	38.63	38.72	38.79	38.85	38.92	39.01	39.09	39.15	39.21	39.27
Sweden.....	8.40	8.44	8.49	8.56	8.62	8.67	8.72	8.78	8.83	8.89
Switzerland.....	6.55	6.59	6.65	6.71	6.80	6.88	6.94	6.99	7.04	7.07
Turkey.....	52.56	53.71	54.89	56.10	57.31	58.40	59.49	60.58	61.64	62.69
United Kingdom.....	57.01	57.16	57.36	57.56	57.81	58.01	58.19	58.39	58.61	58.78
Former Yugoslavia.....	23.42	23.57	23.69	23.82	23.93	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	4.41	4.43	4.46	4.48	4.51
Croatia.....	--	--	--	--	--	4.78	4.78	4.78	4.78	4.78
Macedonia, TFYR.....	--	--	--	--	--	2.06	2.12	2.14	2.16	2.18
Serbia and Montenegro.....	--	--	--	--	--	10.45	10.48	10.52	10.55	10.57
Slovenia.....	--	--	--	--	--	2.00	1.99	1.99	1.99	1.99
Total.....	448.29	450.91	453.78	457.12	460.23	462.96	465.91	468.35	470.69	472.99
Eastern Europe & Former U.S.S.R.										
Albania.....	3.08	3.14	3.20	3.26	3.32	3.36	3.41	3.48	3.55	3.61
Bulgaria.....	8.97	8.98	8.99	8.99	8.98	8.98	8.97	8.97	8.96	8.96
Former Czechoslovakia.....	15.57	15.61	15.64	15.66	15.68	15.73	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	10.33	10.34	10.33	10.32
Slovakia.....	--	--	--	--	--	--	5.32	5.35	5.36	5.37
Hungary.....	10.49	10.44	10.40	10.36	10.35	10.32	10.29	10.26	10.22	10.19
Poland.....	37.66	37.86	37.96	38.12	38.24	38.36	38.46	38.54	38.59	38.62
Romania.....	22.94	23.05	23.15	23.21	23.19	22.79	22.76	22.74	22.68	22.61
Former U.S.S.R.....	283.10	283.68	285.86	290.10	292.05	--	--	--	--	--
Armenia.....	--	--	--	--	--	3.69	3.73	3.75	3.76	3.76
Azerbaijan.....	--	--	--	--	--	7.30	7.37	7.43	7.49	7.55
Belarus.....	--	--	--	--	--	10.31	10.36	10.31	10.28	10.25
Estonia.....	--	--	--	--	--	1.54	1.52	1.50	1.48	1.47
Georgia.....	--	--	--	--	--	5.47	5.47	5.46	5.45	5.44
Kazakhstan.....	--	--	--	--	--	16.90	16.89	16.74	16.54	16.53
Kyrgyzstan.....	--	--	--	--	--	4.49	4.48	4.49	4.51	4.57
Latvia.....	--	--	--	--	--	2.63	2.59	2.55	2.51	2.49
Lithuania.....	--	--	--	--	--	3.74	3.73	3.72	3.71	3.71
Moldova.....	--	--	--	--	--	4.35	4.36	4.35	4.35	4.33
Russia.....	--	--	--	--	--	148.31	148.15	147.97	148.14	147.74
Tajikistan.....	--	--	--	--	--	5.57	5.64	5.74	5.84	5.92
Turkmenistan.....	--	--	--	--	--	4.03	4.31	4.41	4.51	4.57
Ukraine.....	--	--	--	--	--	52.15	52.18	51.92	51.64	51.09
Uzbekistan.....	--	--	--	--	--	21.36	21.85	22.28	22.47	22.91
Total.....	381.81	382.76	385.20	389.70	391.81	391.38	392.17	392.30	392.37	392.01

See footnotes at end of table.

Table B1 World Population, 1987 - 1996 (Continued)
(Millions)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Middle East										
Bahrain.....	0.46	0.47	0.49	0.50	0.51	0.52	0.54	0.56	0.58	0.60
Cyprus.....	0.68	0.69	0.69	0.70	0.70	0.71	0.72	0.73	0.74	0.76
Iran.....	50.66	51.91	53.19	54.50	55.84	57.15	58.49	59.78	60.28	61.13
Iraq.....	16.33	17.25	17.55	18.08	18.51	18.90	19.26	19.65	20.09	20.61
Israel.....	4.37	4.44	4.52	4.66	4.95	5.12	5.26	5.40	5.54	5.70
Jordan.....	4.00	4.06	4.13	4.26	4.44	4.67	4.94	5.20	5.44	5.58
Kuwait.....	1.88	1.97	2.05	2.14	2.09	1.42	1.46	1.62	1.69	1.69
Lebanon.....	2.60	2.56	2.54	2.55	2.61	2.70	2.81	2.91	3.01	3.08
Oman.....	1.53	1.60	1.67	1.75	1.83	1.91	1.99	2.08	2.16	2.30
Qatar.....	0.41	0.43	0.46	0.49	0.51	0.53	0.56	0.59	0.61	0.63
Saudi Arabia.....	13.61	14.02	14.43	14.87	16.54	16.96	17.35	17.76	18.25	18.84
Syria.....	10.97	11.34	11.72	12.12	12.53	12.96	13.39	13.84	14.19	14.62
United Arab Emirates.....	1.50	1.56	1.62	1.92	1.98	2.04	2.11	2.16	2.21	2.26
Yemen.....	10.16	10.61	10.95	11.28	11.61	11.95	12.30	12.67	13.05	13.50
Total.....	119.16	122.91	126.01	129.82	134.65	137.54	141.18	144.95	147.84	151.30
Africa										
Algeria.....	23.02	23.73	24.33	25.07	25.66	26.27	26.90	27.56	28.55	29.17
Angola.....	8.41	8.64	9.24	9.74	10.23	10.41	10.58	10.67	10.82	11.19
Benin.....	4.32	4.46	4.61	4.74	4.89	5.05	5.22	5.34	5.56	5.71
Botswana.....	1.17	1.21	1.24	1.30	1.33	1.36	1.39	1.42	1.46	1.49
Burkina.....	8.31	8.54	8.77	9.00	9.19	9.43	9.68	9.94	10.20	10.48
Burundi.....	5.00	5.15	5.30	5.46	5.62	5.74	5.81	5.90	5.98	6.09
Cameroon.....	10.82	10.88	11.54	11.68	11.85	12.14	12.48	12.83	13.28	13.56
Cape Verde.....	0.35	0.33	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40
Central African Republic.....	2.78	2.88	2.96	3.01	3.04	3.08	3.16	3.23	3.31	3.40
Chad.....	5.22	5.32	5.56	5.69	5.82	5.96	6.09	6.21	6.33	6.52
Comoros.....	0.49	0.51	0.52	0.52	0.54	0.56	0.57	0.59	0.61	0.63
Congo (Brazzaville).....	2.04	2.10	2.16	2.23	2.30	2.37	2.44	2.52	2.59	2.67
Congo (Kinshasa).....	32.46	33.46	34.49	35.56	36.67	38.94	42.28	43.93	45.45	46.81
Cote d'Ivoire (Ivory Coast).....	10.72	10.82	11.26	11.72	12.19	12.67	13.18	13.70	14.23	14.78
Djibouti.....	0.44	0.47	0.50	0.52	0.54	0.55	0.57	0.58	0.60	0.62
Egypt.....	49.05	50.27	51.48	52.69	53.92	55.74	56.49	57.85	59.23	60.60
Equatorial Guinea.....	0.33	0.33	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41
Eritrea.....	--	--	--	--	--	--	--	3.22	3.32	3.43
Ethiopia.....	47.19	48.59	50.17	51.69	53.38	55.12	56.90	54.94	56.68	58.51
Gabon.....	0.85	0.88	0.91	0.93	0.96	0.99	1.02	1.05	1.08	1.11
Gambia, The.....	0.81	0.85	0.88	0.92	0.96	0.99	1.03	1.08	1.11	1.14
Ghana.....	13.39	14.14	14.57	15.02	15.47	15.92	16.38	16.86	17.34	17.83
Guinea.....	4.93	5.07	5.53	5.75	6.05	6.40	6.76	7.09	7.35	7.52
Guinea-Bissau.....	0.91	0.93	0.94	0.96	0.98	1.01	1.03	1.05	1.07	1.09
Kenya.....	22.94	23.88	24.87	25.03	25.91	26.98	28.11	29.29	30.52	31.80
Lesotho.....	1.62	1.66	1.70	1.78	1.83	1.88	1.93	1.98	2.03	2.08
Liberia.....	2.28	2.34	2.40	2.46	2.52	2.58	2.64	2.70	2.76	2.81
Libya.....	3.67	3.82	3.98	4.15	4.33	4.51	4.70	4.90	5.21	5.59
Madagascar.....	11.37	11.76	12.06	12.50	12.99	13.50	13.95	14.41	14.87	15.35
Malawi.....	7.50	7.75	8.02	8.29	8.56	8.82	9.13	9.46	9.79	10.14
Mali.....	7.70	7.83	7.96	8.16	9.51	9.82	10.13	10.46	10.79	11.07
Mauritania.....	1.86	1.90	1.95	2.00	2.04	2.11	2.15	2.21	2.28	2.35
Mauritius.....	1.00	1.01	1.02	1.03	1.04	1.05	1.06	1.08	1.09	1.13
Morocco.....	22.88	23.41	23.95	24.49	25.02	25.55	26.07	26.59	27.11	27.62
Mozambique.....	14.12	13.95	13.96	14.15	14.42	14.79	15.58	16.61	17.42	17.80
Namibia.....	1.24	1.28	1.31	1.35	1.38	1.42	1.46	1.50	1.54	1.58
Niger.....	7.04	7.26	7.49	7.73	7.99	8.26	8.36	8.85	9.15	9.47
Nigeria.....	101.41	104.96	105.06	108.54	112.07	115.66	118.33	121.97	123.72	125.02
Reunion.....	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.65	0.66
Rwanda.....	6.42	6.61	6.80	7.18	6.67	6.20	5.68	5.30	5.18	5.40
Saint Helena.....	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Sao Tome and Principe.....	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.14
Senegal.....	6.91	7.11	7.30	7.50	7.76	7.93	8.05	8.21	8.35	8.57
Seychelles.....	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08
Sierra Leone.....	3.74	3.82	3.91	4.00	4.09	4.19	4.30	4.40	4.51	4.60
Somalia.....	8.25	8.41	8.55	8.68	8.78	8.86	8.95	9.08	9.25	9.82
South Africa.....	34.63	35.42	36.24	37.07	38.01	38.82	39.63	40.44	41.24	42.39
Sudan.....	23.52	24.24	24.99	25.75	26.53	27.32	28.13	28.95	29.71	30.29

Table B1 World Population, 1987 - 1996 (Continued)

(Millions)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Swaziland.....	0.69	0.72	0.74	0.77	0.80	0.83	0.85	0.88	0.91	0.94
Tanzania.....	23.22	24.00	24.80	25.63	26.36	27.30	28.25	29.17	30.34	30.80
Togo.....	3.22	3.32	3.42	3.52	3.63	3.74	3.86	3.93	4.08	4.20
Tunisia.....	7.68	7.82	7.97	8.15	8.32	8.48	8.66	8.81	8.96	9.09
Uganda.....	16.15	16.72	17.32	17.95	18.59	19.26	19.94	20.62	21.30	22.00
Western Sahara.....	0.20	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.28	0.28
Zambia.....	7.37	7.53	7.80	8.07	8.39	8.55	8.72	8.90	9.09	9.28
Zimbabwe.....	8.64	8.88	9.12	9.37	10.14	10.41	10.78	11.15	11.53	11.91
Total.....	591.09	608.00	623.39	641.28	661.09	681.38	701.26	721.35	740.87	759.49
Far East & Oceania										
Afghanistan.....	15.22	15.51	15.81	16.12	16.43	16.62	17.69	18.47	19.66	20.88
American Samoa.....	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06
Australia.....	16.26	16.53	16.81	17.06	17.28	17.49	17.66	17.84	18.05	18.29
Bangladesh.....	102.56	104.53	106.51	108.12	109.88	112.71	114.84	116.49	118.23	120.07
Bhutan.....	1.45	1.48	1.52	1.54	1.57	1.58	1.60	1.61	1.64	1.71
Brunei.....	0.23	0.24	0.25	0.25	0.26	0.27	0.28	0.28	0.29	0.30
Burma.....	39.19	40.04	40.92	41.35	41.55	42.33	43.12	43.92	44.80	45.92
Cambodia.....	8.07	8.32	8.45	8.57	8.81	9.05	9.31	9.57	9.84	10.27
China.....	1,104.20	1,121.90	1,139.20	1,155.30	1,170.10	1,183.60	1,196.40	1,208.80	1,221.50	1,232.08
Cook Islands.....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Fiji.....	0.72	0.72	0.72	0.73	0.74	0.75	0.76	0.77	0.78	0.80
French Polynesia.....	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.21	0.22	0.22
Guam.....	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.15
Hong Kong.....	5.58	5.63	5.69	5.70	5.75	5.81	5.92	6.06	6.19	6.31
India.....	783.73	800.50	817.49	834.70	851.66	867.82	883.91	899.95	915.97	939.42
Indonesia.....	172.01	175.59	179.14	180.48	181.38	184.49	187.66	190.68	193.75	196.81
Japan.....	122.07	122.58	123.09	123.48	123.92	124.32	124.67	124.96	125.20	125.76
Kiribati.....	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08
Korea, North.....	19.48	19.76	20.05	20.36	20.69	21.03	21.38	21.73	22.10	22.47
Korea, South.....	41.62	42.03	42.45	42.87	43.30	43.74	44.19	44.64	45.09	45.54
Laos.....	3.82	3.94	4.07	4.20	4.33	4.46	4.60	4.74	4.88	5.04
Macau.....	0.31	0.32	0.33	0.33	0.35	0.37	0.38	0.40	0.41	0.42
Malaysia.....	16.53	16.94	17.35	17.76	18.33	18.76	19.21	19.66	20.11	20.57
Maldives.....	0.20	0.20	0.21	0.22	0.22	0.23	0.24	0.25	0.25	0.26
Mongolia.....	1.97	2.02	2.07	2.18	2.23	2.27	2.32	2.36	2.41	2.46
Nauru.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Nepal.....	17.56	17.99	18.44	18.92	19.60	20.28	20.81	21.36	21.82	22.13
New Caledonia.....	0.16	0.16	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.19
New Zealand.....	3.30	3.32	3.33	3.36	3.41	3.44	3.45	3.49	3.54	3.57
Niue.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Pakistan.....	102.70	105.97	109.14	112.40	115.77	119.23	122.79	126.47	130.25	134.15
Papua New Guinea.....	3.48	3.56	3.63	3.70	3.77	3.85	3.92	4.00	4.07	4.16
Philippines.....	57.36	58.72	60.10	61.48	63.69	65.34	66.98	68.62	70.27	71.90
Samoa.....	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.17
Singapore.....	2.55	2.60	2.65	2.71	2.76	2.82	2.87	2.93	2.99	3.04
Solomon Islands.....	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.37	0.38	0.39
Sri Lanka.....	16.37	16.60	16.83	16.99	17.25	17.41	17.62	17.86	18.11	18.30
Taiwan.....	19.80	19.90	20.11	20.35	20.56	20.75	20.94	21.13	21.30	21.47
Thailand.....	53.43	54.33	55.21	55.84	56.57	57.29	58.01	58.71	59.40	60.00
Tonga.....	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
U.S. Pacific Islands.....	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Vanuatu.....	0.14	0.15	0.15	0.15	0.15	0.15	0.16	0.16	0.17	0.17
Vietnam.....	62.45	63.73	64.77	66.23	67.77	69.41	70.98	72.51	73.79	75.18
Wake Island.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Total.....	2,795.52	2,846.84	2,897.71	2,944.71	2,991.35	3,038.96	3,086.00	3,131.77	3,178.26	3,230.86
World Total.....	5,019.45	5,105.33	5,190.71	5,278.30	5,365.75	5,450.25	5,535.43	5,618.50	5,700.20	5,787.04

¹ Preliminary.

-- Not applicable.

(s) = Value less than 5000.

Notes: Sum of components may not equal total due to independent rounding.

Sources: The United Nations, Monthly Bulletin of Statistics, (September 1997). U.S. Department of Commerce, Bureau of the Census, Statistical Abstract of the United States 1996. International Monetary Fund, International Financial Statistics various issues.

Table B2 World Gross Domestic Product at Market Exchange Rates, 1987 - 1996
(Millions of 1987 U.S. Dollars)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Bermuda.....	1,281	1,317	1,328	1,320	1,300	1,319	1,323	--	--	--
Canada.....	412,356	432,726	443,035	441,761	433,389	436,142	446,029	466,484	477,338	484,359
Greenland.....	--	--	--	--	--	--	--	--	--	--
Mexico.....	140,266	141,681	146,556	152,767	158,250	163,017	163,719	164,702	154,601	162,435
Saint Pierre and Miquelon.....	--	--	--	--	--	--	--	--	--	--
United States.....	4,539,900	4,718,600	4,838,000	4,897,300	4,861,400	4,986,300	5,134,500	5,344,000	5,450,200	5,600,800
Central & South America										
Antigua and Barbuda.....	288	308	324	336	353	354	367	382	--	--
Argentina.....	108,811	106,859	100,179	100,342	109,232	118,601	125,720	135,049	129,107	134,604
Aruba.....	--	--	--	--	--	--	--	--	--	--
Bahamas, The.....	2,714	2,777	2,841	2,877	2,788	2,791	2,847	2,859	2,916	--
Barbados.....	1,449	1,549	1,632	1,543	1,507	1,424	1,446	1,500	1,540	--
Belize.....	277	301	337	369	385	421	439	448	465	471
Bolivia.....	4,310	4,474	4,604	4,842	5,065	5,207	5,420	5,650	5,900	--
Brazil.....	294,086	293,326	302,893	289,037	290,310	286,936	302,141	319,516	332,616	--
Cayman Islands.....	--	--	--	--	--	--	--	--	--	--
Chile.....	20,682	22,202	24,394	25,172	26,991	29,958	31,822	33,174	36,009	38,610
Colombia.....	36,372	37,851	39,159	40,747	41,533	43,202	45,463	48,067	50,581	51,628
Costa Rica.....	4,533	4,687	4,956	5,135	5,250	5,656	6,003	6,270	6,423	6,378
Cuba.....	--	--	--	--	--	--	--	--	--	--
Dominica.....	127	136	132	143	150	152	154	157	155	--
Dominican Republic.....	5,081	5,116	5,768	5,494	5,545	5,975	6,151	6,415	6,720	7,213
Ecuador.....	10,527	11,653	11,671	12,012	12,612	13,063	13,342	13,884	14,249	14,667
El Salvador.....	4,433	4,516	4,563	4,699	4,883	5,128	5,428	5,753	6,113	7,265
Falkland Islands.....	--	--	--	--	--	--	--	--	--	--
French Guiana.....	--	--	--	--	--	--	--	--	--	--
Grenada.....	150	160	168	179	183	181	183	186	191	--
Guadeloupe.....	--	--	--	--	--	--	--	--	--	--
Guatemala.....	7,084	7,360	7,650	7,887	8,179	8,572	8,907	9,265	9,715	10,021
Guyana.....	356	346	335	316	336	363	394	410	430	--
Haiti.....	2,161	2,177	2,201	2,198	2,131	1,816	1,769	1,625	1,696	1,743
Honduras.....	4,153	4,358	4,522	4,524	4,663	4,923	5,230	5,158	5,380	5,543
Jamaica.....	3,030	3,117	3,330	3,512	3,530	3,580	3,623	3,658	3,810	4,031
Martinique.....	--	--	--	--	--	--	--	--	--	--
Montserrat.....	--	--	--	--	--	--	--	--	--	--
Netherlands Antilles.....	--	--	--	--	--	--	--	--	--	--
Nicaragua.....	3,851	3,425	3,380	3,380	3,356	3,382	3,358	3,465	3,609	3,819
Panama.....	5,363	4,527	4,509	4,718	5,170	5,611	5,914	6,082	6,189	6,345
Paraguay.....	3,733	3,975	4,207	4,335	4,439	4,517	4,685	4,830	5,057	5,121
Peru.....	27,583	25,317	22,326	21,565	22,176	21,653	23,061	26,066	27,890	28,605
Puerto Rico.....	23,878	25,428	26,765	27,724	28,304	28,926	29,563	30,450	31,972	--
Saint Kitts and Nevis.....	108	117	127	130	132	137	146	--	--	--
Saint Lucia.....	288	325	355	368	376	403	417	--	--	--
Saint Vincent/Grenadines.....	142	155	165	173	179	188	193	191	205	--
Suriname.....	1,106	1,222	1,382	1,381	1,424	1,484	1,442	--	--	--
Trinidad and Tobago.....	4,798	4,611	4,574	4,646	4,771	4,690	4,611	4,771	4,882	--
Turks and Caicos Islands.....	--	--	--	--	--	--	--	--	--	--
Uruguay.....	7,330	7,330	7,431	7,503	7,680	8,247	8,075	8,587	8,418	8,830
Venezuela.....	48,029	50,828	46,292	49,475	54,606	57,579	57,737	56,087	57,984	57,053
Virgin Islands, British.....	--	--	--	--	--	--	--	--	--	--
Virgin Islands, U.S.....	1,148	1,166	1,249	1,285	1,300	1,340	1,372	--	--	--

See footnotes at end of table.

Table B2 World Gross Domestic Product at Market Exchange Rates, 1987 - 1996 (Continued)

(Millions of 1987 U.S. Dollars)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Western Europe										
Austria.....	117,176	121,962	126,852	132,031	135,915	138,398	138,319	142,108	144,703	147,346
Belgium.....	139,602	146,461	151,588	156,538	160,068	163,047	160,266	163,827	166,940	169,444
Denmark.....	102,321	103,565	104,198	105,673	106,708	108,061	109,597	114,437	117,631	120,499
Faroe Islands.....	--	--	--	--	--	--	--	--	--	--
Finland.....	88,009	92,386	97,651	97,635	90,596	87,313	85,584	89,050	92,833	96,242
France.....	887,865	925,814	960,735	983,678	989,467	1,001,230	991,164	1,019,168	1,041,766	1,056,967
Germany.....	--	--	--	--	1,423,847	1,455,210	1,438,829	1,472,013	1,500,645	1,520,634
Germany, East.....	--	--	--	--	--	--	--	--	--	--
Germany, West.....	1,107,428	1,148,356	1,187,571	1,248,007	--	--	--	--	--	--
Gibraltar.....	--	--	--	--	--	--	--	--	--	--
Greece.....	46,311	48,360	50,077	49,664	51,191	51,688	51,433	52,186	53,230	54,614
Iceland.....	5,405	5,401	5,416	5,475	5,545	5,363	5,409	5,601	5,667	5,989
Ireland.....	31,318	32,655	35,074	38,080	39,177	41,139	42,778	45,659	50,428	54,322
Italy.....	759,066	789,934	813,184	830,433	840,387	846,636	841,081	859,336	884,548	890,676
Luxembourg.....	6,819	7,212	7,692	7,935	8,176	8,328	8,352	8,602	8,775	--
Malta.....	1,590	1,723	1,864	1,981	2,106	2,197	2,295	2,387	2,603	--
Netherlands.....	217,495	223,182	233,648	243,313	248,847	251,992	252,871	259,481	265,482	274,856
Norway.....	83,337	83,193	84,437	85,886	87,566	90,518	93,516	98,322	102,173	107,560
Portugal.....	41,820	44,194	46,752	48,739	49,784	50,328	49,749	50,147	51,147	52,670
Spain.....	292,716	307,828	322,381	334,423	341,919	344,289	340,483	347,219	357,489	365,124
Sweden.....	161,440	165,020	169,026	171,360	169,294	166,850	162,560	166,863	171,862	173,753
Switzerland.....	170,793	175,747	182,533	186,729	186,676	186,106	184,517	185,343	186,758	186,404
Turkey.....	87,173	89,043	89,331	97,453	98,418	104,300	112,015	105,904	113,518	121,464
United Kingdom.....	689,446	723,797	739,567	742,475	727,800	724,074	738,749	767,428	786,546	803,346
Former Yugoslavia.....	66,683	65,626	66,126	63,812	55,646	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	--	--	--	--	--
Croatia.....	--	--	--	--	--	--	--	--	--	--
Macedonia, TFYR.....	--	--	--	--	--	--	--	--	--	--
Serbia and Montenegro.....	--	--	--	--	--	--	--	--	--	--
Slovenia.....	--	--	--	--	--	--	6,260	6,594	6,913	7,127
Eastern Europe & Former U.S.S.R.										
Albania.....	2,157	2,126	2,335	2,102	1,520	1,372	--	--	--	--
Bulgaria.....	28,429	31,523	30,728	27,691	23,952	22,495	21,442	21,742	22,307	20,115
Former Czechoslovakia.....	54,700	56,111	56,841	55,150	46,612	44,165	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	30,524	31,170	32,671	34,098
Slovakia.....	--	--	--	--	--	--	13,229	13,880	14,824	15,854
Hungary.....	26,110	26,016	26,034	25,167	23,297	22,011	21,289	21,911	22,235	22,462
Poland.....	63,905	66,319	66,750	59,957	56,058	56,566	58,610	61,658	65,974	69,932
Romania.....	38,068	37,710	35,500	33,184	28,788	24,780	25,085	26,081	27,881	28,918
Former U.S.S.R.....	710,514	740,862	754,823	728,969	644,058	--	--	--	--	--
Armenia.....	--	--	--	--	--	2,612	2,226	2,348	2,510	2,643
Azerbaijan.....	--	--	--	--	--	4,700	4,089	3,194	2,644	2,678
Belarus.....	--	--	--	--	--	23,973	21,652	18,231	16,408	16,835
Estonia.....	--	--	--	--	--	3,899	3,590	3,479	3,580	3,723
Georgia.....	--	--	--	--	--	4,585	3,135	2,195	2,247	2,494
Kazakhstan.....	--	--	--	--	--	23,247	20,248	15,085	13,742	13,893
Kyrgyzstan.....	--	--	--	--	--	3,642	3,059	2,444	2,293	2,421
Latvia.....	--	--	--	--	--	5,710	5,166	5,196	5,114	5,257
Lithuania.....	--	--	--	--	--	5,275	4,045	4,086	4,192	4,343
Moldova.....	--	--	--	--	--	4,647	4,591	3,159	3,064	2,837
Russia.....	--	--	--	--	--	334,367	294,243	257,168	246,882	235,126
Tajikistan.....	--	--	--	--	--	2,479	2,050	1,790	1,568	1,344
Turkmenistan.....	--	--	--	--	--	4,327	3,934	3,278	3,049	2,932
Ukraine.....	--	--	--	--	--	83,116	76,382	58,814	52,606	47,780
Uzbekistan.....	--	--	--	--	--	14,823	14,467	13,961	13,793	14,014

See footnotes at end of table.

Table B2 World Gross Domestic Product at Market Exchange Rates, 1987 - 1996 (Continued)
(Millions of 1987 U.S. Dollars)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Middle East										
Bahrain.....	3,170	3,537	3,598	3,642	3,820	4,105	4,336	4,438	4,536	4,650
Cyprus.....	3,702	4,022	4,345	4,661	4,695	5,190	5,277	5,596	5,875	--
Iran.....	137,665	129,917	134,886	148,736	163,604	174,663	179,220	180,548	188,123	195,836
Iraq.....	43,702	39,332	42,282	29,301	14,475	11,580	--	--	--	--
Israel.....	39,300	40,091	40,441	43,105	46,411	49,782	51,604	55,003	58,904	61,497
Jordan.....	6,390	6,360	5,499	5,595	5,694	6,334	6,699	7,244	7,747	8,153
Kuwait.....	22,369	20,714	24,484	19,240	8,157	15,597	20,936	22,696	22,929	23,480
Lebanon.....	--	--	--	--	--	--	--	--	--	--
Oman.....	7,811	8,268	8,557	9,197	10,072	10,765	11,518	12,551	13,128	13,890
Qatar.....	--	5,813	5,980	6,502	5,847	6,327	6,422	6,435	6,532	6,695
Saudi Arabia.....	73,552	79,030	79,028	85,866	95,951	96,933	96,316	96,809	97,286	97,278
Syria.....	11,356	13,007	11,617	12,598	13,585	15,018	15,607	16,581	17,592	18,559
United Arab Emirates.....	23,800	23,242	26,369	31,087	31,136	31,351	32,160	31,838	32,794	33,122
Yemen.....	--	--	9,446	9,097	8,742	9,004	9,471	--	--	--
Africa										
Algeria.....	64,476	63,497	66,935	66,247	65,522	66,463	65,637	67,278	69,633	73,114
Angola.....	--	--	--	--	--	--	--	--	--	--
Benin.....	1,564	1,623	1,584	1,638	1,717	1,788	1,842	1,918	2,033	--
Botswana.....	1,543	1,786	2,017	2,137	2,327	2,479	2,474	2,574	2,655	2,840
Burkina.....	2,023	2,143	2,211	2,205	2,343	2,358	2,367	--	--	--
Burundi.....	1,129	1,184	1,202	1,245	1,313	1,348	1,273	--	--	--
Cameroon.....	12,108	11,012	11,138	10,353	9,846	9,628	8,718	8,326	8,451	8,751
Cape Verde.....	183	195	201	206	217	224	233	243	--	--
Central African Republic.....	1,046	1,072	1,100	1,108	1,091	1,068	1,042	1,116	1,163	1,085
Chad.....	819	952	1,001	1,008	1,077	1,080	1,049	1,091	--	--
Comoros.....	196	202	198	200	204	208	210	212	--	--
Congo (Brazzaville).....	2,298	2,339	2,403	2,425	2,461	2,541	2,487	--	--	--
Congo (Kinshasa).....	7,660	7,703	7,550	7,376	6,845	6,130	5,301	5,095	5,065	5,130
Cote d'Ivoire (Ivory Coast).....	10,374	10,166	10,065	9,853	9,774	9,774	9,667	9,783	10,028	10,680
Djibouti.....	380	382	373	370	375	384	375	--	--	--
Egypt.....	35,545	37,038	38,147	39,060	39,894	40,031	40,238	41,826	43,733	45,971
Equatorial Guinea.....	120	123	122	126	125	142	152	--	--	--
Eritrea.....	--	--	--	--	--	--	--	--	--	--
Ethiopia.....	5,507	5,615	5,705	5,615	5,584	5,165	5,598	5,969	7,325	8,263
Gabon.....	3,397	3,854	4,107	4,254	4,535	4,428	4,539	4,630	4,732	4,909
Gambia, The.....	242	257	272	273	296	279	299	330	--	--
Ghana.....	5,075	5,356	5,619	5,791	6,092	6,314	6,617	6,862	7,191	7,565
Guinea.....	2,042	2,159	2,227	2,321	2,379	2,457	2,567	--	--	--
Guinea-Bissau.....	168	182	192	200	209	217	225	--	--	--
Kenya.....	7,972	8,462	8,860	9,230	9,365	9,295	9,394	9,641	10,066	10,484
Lesotho.....	370	421	473	492	501	516	548	616	--	--
Liberia.....	1,013	1,013	1,033	1,054	1,075	1,097	1,113	--	--	--
Libya.....	20,580	20,724	20,857	22,671	23,174	23,221	22,615	23,045	23,552	24,141
Madagascar.....	2,566	2,653	2,761	2,849	2,659	2,689	2,739	2,738	2,787	2,851
Malawi.....	1,161	1,197	1,203	1,275	1,390	1,288	1,408	1,245	1,357	--
Mali.....	1,965	1,960	2,191	2,200	2,146	2,313	2,296	--	--	--
Mauritania.....	910	926	965	945	972	989	1,042	--	--	--
Mauritius.....	1,831	1,951	2,034	2,182	2,270	2,409	2,545	2,660	2,777	2,928
Morocco.....	18,746	20,665	21,137	21,936	23,221	22,298	22,056	24,600	22,664	25,376
Mozambique.....	1,336	1,464	1,559	1,575	1,652	1,639	1,952	2,063	--	--
Namibia.....	1,726	1,849	1,876	1,883	2,008	2,139	2,122	2,237	2,296	2,330
Niger.....	2,233	2,345	2,261	2,378	2,438	2,279	2,312	--	--	--
Nigeria.....	27,111	29,762	31,745	33,510	35,206	37,251	37,823	38,329	39,349	40,608
Reunion.....	--	--	--	--	--	--	--	--	--	--
Rwanda.....	2,152	2,283	2,270	2,151	2,280	2,354	2,117	--	--	--
Saint Helena.....	--	--	--	--	--	--	--	--	--	--
Sao Tome and Principe.....	55	57	58	57	58	59	59	--	--	--
Senegal.....	4,599	4,832	4,815	5,030	5,091	5,157	5,051	--	--	--
Seychelles.....	249	260	287	308	316	338	358	--	--	--
Sierra Leone.....	554	565	581	609	592	511	481	480	467	--
Somalia.....	1,010	1,003	1,002	986	--	--	--	--	--	--
South Africa.....	82,071	85,502	87,672	87,252	86,372	84,162	85,319	87,303	90,156	93,055
Sudan.....	10,173	9,735	10,452	10,293	10,360	11,531	12,338	--	--	--

Table B2 World Gross Domestic Product at Market Exchange Rates, 1987 - 1996 (Continued)

(Millions of 1987 U.S. Dollars)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Swaziland.....	2,431	2,518	2,609	2,700	2,725	2,679	2,754	2,848	2,920	--
Tanzania.....	3,524	3,780	4,094	4,385	4,635	4,798	4,643	4,944	5,117	5,373
Togo.....	1,249	1,327	1,380	1,382	1,370	1,241	1,083	--	--	--
Tunisia.....	9,651	9,673	9,843	10,591	10,994	11,870	12,128	12,536	12,848	13,715
Uganda.....	6,299	6,812	7,264	7,667	7,969	8,142	8,737	9,562	10,629	11,532
Western Sahara.....	--	--	--	--	--	--	--	--	--	--
Zambia.....	2,078	2,193	2,174	2,185	2,175	2,162	2,310	2,110	2,018	2,148
Zimbabwe.....	5,380	5,904	6,278	6,398	6,552	6,205	6,492	6,758	6,623	6,987
Far East & Oceania										
Afghanistan.....	--	--	--	--	--	--	--	--	--	--
American Samoa.....	--	--	--	--	--	--	--	--	--	--
Australia.....	209,350	218,635	225,140	223,690	224,110	231,385	241,216	253,243	261,363	271,692
Bangladesh.....	17,601	18,100	18,546	19,779	20,447	21,299	22,238	23,263	24,297	25,589
Bhutan.....	278	287	295	311	327	339	360	384	413	439
Brunei.....	2,822	2,917	2,996	3,026	3,056	--	--	--	--	--
Burma.....	10,543	9,333	9,682	9,942	9,855	10,784	11,413	12,190	13,112	13,855
Cambodia.....	2,536	3,013	3,069	3,065	3,459	3,462	3,718	--	--	--
China.....	253,523	282,197	294,004	305,614	331,405	378,921	432,158	487,042	538,181	590,385
Cook Islands.....	--	--	--	--	--	--	--	--	--	--
Fiji.....	1,187	1,195	1,359	1,426	1,440	1,488	1,516	--	--	--
French Polynesia.....	--	--	--	--	--	--	--	--	--	--
Guam.....	--	--	--	--	--	--	--	--	--	--
Hong Kong.....	47,139	51,045	52,493	54,192	56,410	59,424	62,694	66,008	68,984	72,036
India.....	256,933	282,510	301,124	316,759	319,131	333,712	343,124	356,162	382,260	--
Indonesia.....	75,932	80,340	86,282	92,361	98,553	104,935	111,585	119,772	129,609	139,741
Japan.....	2,408,963	2,560,422	2,682,717	2,813,754	2,934,607	2,966,547	2,968,474	2,987,604	3,028,685	3,136,421
Kiribati.....	26	29	28	27	27	28	28	--	--	--
Korea, North.....	--	--	--	--	--	--	--	--	--	--
Korea, South.....	136,317	151,726	161,500	177,116	193,417	203,418	214,455	232,854	253,664	271,740
Laos.....	1,087	1,065	1,216	1,303	1,350	1,444	1,529	1,654	1,770	1,889
Macau.....	2,245	2,416	2,555	2,759	2,845	2,987	3,321	--	--	--
Malaysia.....	31,602	34,427	37,597	41,256	44,827	48,326	52,417	57,261	62,769	--
Maldives.....	66	73	80	92	99	104	111	118	126	--
Mongolia.....	3,348	3,633	3,823	3,735	3,422	3,128	3,078	--	--	--
Nauru.....	--	--	--	--	--	--	--	--	--	--
Nepal.....	2,957	3,185	3,323	3,478	3,696	3,844	3,959	4,247	4,369	4,664
New Caledonia.....	--	--	--	--	--	--	--	--	--	--
New Zealand.....	36,903	36,612	37,182	38,210	36,515	37,599	39,600	42,126	43,938	44,850
Niue.....	--	--	--	--	--	--	--	--	--	--
Pakistan.....	33,353	35,949	37,671	39,355	41,502	44,733	45,621	47,465	49,589	52,400
Papua New Guinea.....	3,143	3,237	3,177	3,081	3,395	3,818	4,487	--	--	--
Philippines.....	33,196	35,441	37,645	38,653	38,572	38,682	39,440	41,144	43,200	45,258
Samoa.....	103	101	105	100	100	97	99	--	--	--
Singapore.....	20,232	22,496	24,571	26,714	28,500	30,218	33,219	36,573	39,775	42,686
Solomon Islands.....	164	170	184	187	193	209	--	--	--	--
Sri Lanka.....	6,800	6,984	7,132	7,582	7,921	8,245	8,815	--	--	--
Taiwan.....	103,200	111,291	120,172	126,829	136,405	144,903	153,626	162,967	172,517	181,816
Thailand.....	50,535	57,250	64,215	71,759	77,522	83,381	89,899	97,579	106,250	--
Tonga.....	46	44	45	45	47	48	50	53	--	--
U.S. Pacific Islands.....	--	--	--	--	--	--	--	--	--	--
Vanuatu.....	122	123	128	135	137	139	144	148	152	--
Vietnam.....	34,069	35,824	38,708	45,008	46,116	50,104	54,149	58,914	64,511	--
Wake Island.....	--	--	--	--	--	--	--	--	--	--

¹ Preliminary.

-- Not applicable.

Notes: The data presented in this table are obtained by converting the gross domestic product (GDP) for each country measured in 1987 foreign currency units to U.S. dollars using 1987 annual average foreign currency market exchange rates. GDP figures theoretically should be converted by using purchasing power parity (PPP) rates to avoid the problem that the market exchange rate for a foreign currency is not a precise reflection of the purchasing power of that currency. In practice, it is often difficult to find generally agreeable PPP rates for some countries.

Sources: World Bank, World Tables 1995. International Monetary Fund, International Financial Statistics, various issues. U.S. Department of Commerce, Bureau of Economic Analysis, Survey of Current Business, various issues. WEFA Group, Asia Economic Outlook, November 1996; Eurasia Economic Outlook, August 1997; Latin America Economic Outlook, August 1996; Middle East and Africa Economic Outlook, May 1997; and World Economic Outlook, May 1997.

Appendix C

**Conversion Factors
and Heat Contents**

Table C1 General Conversion Factors

Product	Barrels per Metric Ton
Refined Petroleum Products	
Asphalt.....	6.06
Distillate Fuel Oil.....	7.46
Gasoline, Aviation.....	8.90
Gasoline, Motor.....	8.53
Greases.....	6.30
Jet Fuel, Kerosene-Type.....	7.93
Jet Fuel, Naphtha-Type.....	8.27
Kerosene.....	7.73
Liquefied Petroleum Gas (LPG).....	11.60
Lubricants.....	7.00
Miscellaneous Products.....	8.04
Naphthas.....	8.22
Natural Gas Liquids (NGL).....	10.40
Natural Gasoline.....	10.00
Paraffin Oil.....	7.14
Paraffin Wax.....	7.87
Petrolatum.....	7.87
Petroleum Coke.....	5.51
Residual Fuel Oil.....	6.66
White Spirits.....	8.50
Crude Oil.....	See Table C2 on next page.

Product Unit	Equivalent
Liquid Fuels	
42 U.S. gallons.....	1 barrel
1 cubic meter.....	6.289 barrels
159 liters.....	1 barrel
Gaseous Fuels	
35.315 cubic feet.....	1 cubic meter
Liquefied Natural Gas (LNG)	
1 metric ton.....	48,700 cubic feet of natural gas
Solid Fuels	
1 long ton.....	1.120 short tons
1 metric ton.....	1.102 short tons
Heat	
1 quadrillion (10 ¹⁵) British thermal units (Btu).....	1.055056 exa (10 ¹⁸) joules
1 exa (10 ¹⁸) joule.....	0.9478 quadrillion (10 ¹⁵) Btu

Table C2 Barrels of Crude Oil Per Metric Ton, 1987 - 1996

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
North America										
Canada.....	7.453	7.453	7.453	7.186	7.186	7.186	7.186	7.186	7.186	7.186
Mexico.....	6.965	6.965	6.965	6.965	6.965	6.965	6.965	6.965	6.965	6.965
United States.....	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333
Central & South America										
Argentina.....	7.149	7.149	7.149	7.120	7.120	7.120	7.120	7.120	7.120	7.120
Bolivia.....	7.881	7.881	7.881	7.881	7.881	7.881	7.881	7.881	7.881	7.881
Brazil.....	7.268	7.268	7.268	7.056	7.056	7.056	7.056	7.056	7.056	7.056
Chile.....	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Colombia.....	7.084	7.084	7.084	7.080	7.080	7.080	7.080	7.080	7.080	7.080
Cuba.....	6.449	6.449	6.449	6.449	6.449	6.449	6.449	6.449	6.449	6.449
Ecuador.....	7.130	7.130	7.130	7.130	7.130	7.130	7.130	7.130	7.130	7.130
Peru.....	7.407	7.407	7.407	7.407	7.407	7.407	7.407	7.407	7.407	7.407
Trinidad and Tobago.....	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084
Venezuela.....	6.880	6.880	6.880	6.890	6.890	6.890	6.890	6.890	6.890	6.890
Western Europe										
Austria.....	7.082	7.082	7.082	7.200	7.200	7.200	7.200	7.200	7.200	7.200
Denmark.....	7.689	7.689	7.689	7.405	7.405	7.405	7.405	7.405	7.405	7.405
France.....	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Germany.....	--	--	--	--	7.330	7.330	7.330	7.330	7.330	7.330
Germany, East.....	7.340	7.340	7.340	7.340	--	--	--	--	--	--
Germany, West.....	7.247	7.247	7.247	7.247	--	--	--	--	--	--
Greece.....	7.178	7.178	7.178	7.231	7.231	7.231	7.231	7.231	7.231	7.231
Italy.....	6.853	6.853	6.853	7.300	7.300	7.300	7.300	7.300	7.300	7.300
Netherlands.....	6.853	6.853	6.853	7.239	7.239	7.239	7.239	7.239	7.239	7.239
Norway.....	7.810	7.810	7.810	7.644	7.644	7.644	7.644	7.644	7.644	7.644
Spain.....	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Sweden.....	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247
Turkey.....	7.150	7.150	7.150	7.200	7.200	7.200	7.200	7.200	7.200	7.200
United Kingdom.....	7.466	7.466	7.466	7.523	7.523	7.523	7.523	7.523	7.523	7.523
Former Yugoslavia.....	7.418	7.418	7.418	7.418	7.418	--	--	--	--	--
Croatia.....	--	--	--	--	--	7.418	7.418	7.418	7.418	7.418
Serbia and Montenegro.....	--	--	--	--	--	7.418	7.418	7.418	7.418	7.418
Slovenia.....	--	--	--	--	--	--	7.418	7.418	7.418	7.418
Eastern Europe & Former U.S.S.R.										
Albania.....	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.594
Bulgaria.....	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Former Czechoslovakia.....	6.780	6.780	6.780	6.780	6.780	6.780	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	6.780	6.780	6.780	6.780
Slovakia.....	--	--	--	--	--	--	6.780	6.780	6.780	6.780
Hungary.....	6.690	6.690	6.690	6.690	6.690	6.690	6.690	6.690	6.690	6.690
Poland.....	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418	7.418
Romania.....	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Former U.S.S.R.....	7.270	7.270	7.270	7.270	7.270	--	--	--	--	--
Azerbaijan.....	--	--	--	--	--	7.270	7.270	7.270	7.270	7.270
Belarus.....	--	--	--	--	--	7.270	7.270	7.270	7.270	7.270
Georgia.....	--	--	--	--	--	7.270	7.270	7.270	7.270	7.270
Lithuania.....	--	--	--	--	--	--	7.270	7.270	7.270	7.270
Kazakhstan.....	--	--	--	--	--	7.270	7.270	7.270	7.270	7.270
Kyrgyzstan.....	--	--	--	--	--	7.270	7.270	7.270	7.270	7.270
Russia.....	--	--	--	--	--	7.270	7.270	7.270	7.270	7.270
Tajikistan.....	--	--	--	--	--	7.270	7.270	7.270	7.270	7.270
Turkmenistan.....	--	--	--	--	--	7.270	7.270	7.270	7.270	7.270
Ukraine.....	--	--	--	--	--	7.270	7.270	7.270	7.270	7.270
Uzbekistan.....	--	--	--	--	--	7.270	7.270	7.270	7.270	7.270

See footnotes at end of table.

Table C2 Barrels of Crude Oil Per Metric Ton, 1987 - 1996 (Continued)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Middle East										
Bahrain.....	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320
Iran.....	7.305	7.305	7.305	7.350	7.350	7.350	7.350	7.350	7.350	7.350
Iraq.....	7.426	7.426	7.426	7.430	7.430	7.430	7.430	7.430	7.430	7.430
Israel.....	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247
Jordan.....	7.190	7.190	7.190	7.190	7.190	7.190	7.190	7.190	7.190	7.190
Kuwait.....	7.245	7.245	7.245	7.250	7.250	7.250	7.250	7.250	7.250	7.250
Oman.....	7.332	7.332	7.332	7.330	7.330	7.330	7.330	7.330	7.330	7.330
Qatar.....	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500
Saudi Arabia.....	7.268	7.268	7.268	7.323	7.323	7.323	7.323	7.323	7.323	7.323
Syria.....	6.836	6.836	6.836	6.836	6.836	6.836	6.836	6.836	6.836	6.836
United Arab Emirates.....	7.480	7.480	7.480	7.480	7.480	7.480	7.480	7.480	7.480	7.480
Yemen.....	7.636	7.632	7.632	7.631	7.631	7.631	7.631	7.631	7.631	7.631
Africa										
Algeria.....	7.936	7.936	7.936	8.130	8.130	8.130	8.130	8.130	8.130	8.130
Angola.....	7.409	7.409	7.409	7.409	7.409	7.409	7.409	7.409	7.409	7.409
Benin.....	6.870	6.870	6.870	6.870	6.870	6.870	6.870	6.870	6.870	6.870
Cameroon.....	7.205	7.205	7.205	7.205	7.205	7.205	7.205	7.205	7.205	7.205
Congo (Brazzaville).....	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Congo (Kinshasa).....	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320
Cote d'Ivoire (Ivory Coast).....	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285
Egypt.....	7.256	7.256	7.256	7.256	7.256	7.256	7.256	7.256	7.256	7.256
Equatorial Guinea.....	--	--	--	--	8.077	8.077	8.077	8.077	8.077	8.077
Gabon.....	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305
Ghana.....	--	--	--	--	--	7.285	7.285	7.285	7.285	7.285
Libya.....	7.515	7.515	7.515	7.580	7.580	7.580	7.580	7.580	7.580	7.580
Morocco.....	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600
Nigeria.....	7.315	7.315	7.315	7.315	7.315	7.315	7.315	7.315	7.315	7.315
South Africa.....	--	--	--	--	--	9.853	9.853	9.853	9.853	9.853
Sudan.....	--	--	--	--	--	7.452	7.452	7.452	7.452	7.452
Tunisia.....	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689
Far East & Oceania										
Australia.....	7.855	7.855	7.855	7.868	7.868	7.868	7.868	7.868	7.868	7.868
Bangladesh.....	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453
Brunei.....	7.340	7.340	7.340	7.340	7.340	7.340	7.340	7.340	7.340	7.340
Burma.....	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084
China.....	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320
India.....	7.600	7.600	7.600	7.440	7.440	7.440	7.440	7.440	7.440	7.440
Indonesia.....	7.558	7.558	7.558	7.360	7.360	7.360	7.360	7.360	7.360	7.360
Japan.....	7.285	7.285	7.285	7.357	7.357	7.357	7.357	7.357	7.357	7.357
Malaysia.....	7.641	7.641	7.641	7.641	7.641	7.641	7.641	7.641	7.641	7.641
New Zealand.....	8.127	8.127	8.127	8.127	8.127	8.127	8.127	8.127	8.127	8.127
Pakistan.....	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500
Papua New Guinea.....	--	--	--	--	7.809	7.809	7.809	7.809	7.809	7.809
Philippines.....	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285
Taiwan.....	6.568	6.568	6.568	6.568	6.568	6.568	6.568	6.568	6.568	6.568
Thailand.....	6.758	6.758	6.758	6.758	6.758	6.758	6.758	6.758	6.758	6.758
Vietnam.....	7.082	7.082	7.082	7.082	7.082	7.082	7.082	7.082	7.082	7.082

-- Not applicable.

Sources: See sources at the end of Section 3.

Table C3 Gross Heat Content of Crude Oil, 1987 - 1996
(Thousand Btu per Barrel)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
North America										
Canada.....	5,810	5,810	5,810	5,810	5,810	5,810	5,810	5,810	5,810	5,810
Mexico.....	6,010	6,010	6,010	6,010	6,010	6,010	6,010	6,010	6,010	6,010
United States.....	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800	5,800
Central & South America										
Argentina.....	5,993	5,993	5,993	5,993	5,993	5,993	5,993	5,993	5,993	5,993
Bolivia.....	5,575	5,574	5,574	5,574	5,574	5,574	5,574	5,574	5,574	5,574
Brazil.....	5,910	5,910	5,910	5,910	5,910	5,910	5,910	5,910	5,910	5,910
Chile.....	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780
Colombia.....	6,023	6,023	6,023	6,023	6,023	6,023	6,023	6,023	6,023	6,023
Cuba.....	6,394	6,393	6,393	6,393	6,393	6,393	6,393	6,393	6,393	6,393
Ecuador.....	5,986	5,986	5,986	5,986	5,986	5,986	5,986	5,986	5,986	5,986
Peru.....	5,831	5,831	5,831	5,831	5,831	5,831	5,831	5,831	5,831	5,831
Trinidad and Tobago.....	6,023	6,023	6,023	6,023	6,023	6,023	6,023	6,023	6,023	6,023
Venezuela.....	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135	6,135
Western Europe										
Austria.....	6,021	6,020	6,020	6,020	6,020	6,020	6,020	6,020	6,020	6,020
Denmark.....	5,677	5,677	5,677	5,677	5,677	5,677	5,677	5,677	5,677	5,677
France.....	5,869	5,869	5,869	5,869	5,869	5,869	5,869	5,869	5,869	5,869
Germany.....	--	--	--	--	5,926	5,926	5,926	5,926	5,926	5,926
Germany, East.....	5,863	5,874	5,874	5,874	--	--	--	--	--	--
Germany, West.....	5,927	5,927	5,927	5,927	--	--	--	--	--	--
Greece.....	5,927	5,926	5,926	5,926	5,926	5,926	5,926	5,926	5,926	5,926
Italy.....	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158
Netherlands.....	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158
Norway.....	5,620	5,620	5,620	5,620	5,620	5,620	5,620	5,620	5,620	5,620
Spain.....	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780
Sweden.....	5,936	6,148	6,148	6,148	6,148	6,148	6,148	6,148	6,148	6,148
Turkey.....	5,976	5,976	5,976	5,976	5,976	5,976	5,976	5,976	5,976	5,976
United Kingdom.....	5,803	5,803	5,803	5,803	5,803	5,803	5,803	5,803	5,803	5,803
Former Yugoslavia.....	5,823	5,823	5,823	5,823	5,823	--	--	--	--	--
Croatia.....	--	--	--	--	--	5,823	5,823	5,823	5,823	5,823
Serbia and Montenegro.....	--	--	--	--	--	5,823	5,823	5,823	5,823	5,823
Slovenia.....	--	--	--	--	--	--	5,823	5,823	5,823	5,823
Eastern Europe & Former U.S.S.R.										
Albania.....	6,305	6,305	6,305	6,305	6,305	6,305	6,305	6,305	6,305	6,305
Bulgaria.....	5,881	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879
Former Czechoslovakia.....	6,210	6,211	6,211	6,211	6,211	6,211	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	6,211	6,211	6,211	6,211
Slovakia.....	--	--	--	--	--	--	6,211	6,211	6,211	6,211
Hungary.....	6,249	6,249	6,249	6,249	6,249	6,249	6,249	6,249	6,249	6,249
Poland.....	5,826	5,820	5,820	5,820	5,820	5,820	5,820	5,820	5,820	5,820
Romania.....	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780
Former U.S.S.R.....	5,880	5,880	5,880	5,880	5,880	--	--	--	--	--
Azerbaijan.....	--	--	--	--	--	5,880	5,880	5,880	5,880	5,880
Belarus.....	--	--	--	--	--	5,880	5,880	5,880	5,880	5,880
Georgia.....	--	--	--	--	--	5,880	5,880	5,880	5,880	5,880
Kazakhstan.....	--	--	--	--	--	5,880	5,880	5,880	5,880	5,880
Kyrgyzstan.....	--	--	--	--	--	5,880	5,880	5,880	5,880	5,880
Lithuania.....	--	--	--	--	--	--	5,880	5,880	5,880	5,880
Russia.....	--	--	--	--	--	5,880	5,880	5,880	5,880	5,880
Tajikistan.....	--	--	--	--	--	5,880	5,880	5,880	5,880	5,880
Turkmenistan.....	--	--	--	--	--	5,880	5,880	5,880	5,880	5,880
Ukraine.....	--	--	--	--	--	5,880	5,880	5,880	5,880	5,880
Uzbekistan.....	--	--	--	--	--	5,880	5,880	5,880	5,880	5,880

See footnotes at end of table.

Table C3 Gross Heat Content of Crude Oil, 1987 - 1996 (Continued)
(Thousand Btu per Barrel)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Middle East										
Bahrain.....	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879
Iran.....	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888
Iraq.....	5,820	5,820	5,820	5,820	5,820	5,820	5,820	5,820	5,820	5,820
Israel.....	5,952	5,920	5,920	5,920	5,920	5,920	5,920	5,920	5,920	5,920
Jordan.....	5,973	5,956	5,956	5,956	5,956	5,956	5,956	5,956	5,956	5,956
Kuwait.....	5,921	5,921	5,921	5,921	5,921	5,921	5,921	5,921	5,921	5,921
Oman.....	5,869	5,869	5,869	5,869	5,869	5,869	5,869	5,869	5,869	5,869
Qatar.....	5,777	5,777	5,777	5,777	5,777	5,777	5,777	5,777	5,777	5,777
Saudi Arabia.....	5,910	5,910	5,910	5,910	5,910	5,910	5,910	5,910	5,910	5,910
Syria.....	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158	6,158
United Arab Emirates.....	5,788	5,788	5,788	5,788	5,788	5,788	5,788	5,788	5,788	5,788
Yemen.....	5,744	5,728	5,729	5,725	5,725	5,725	5,725	5,725	5,725	5,725
Africa										
Algeria.....	5,555	5,555	5,555	5,555	5,555	5,555	5,555	5,555	5,555	5,555
Angola.....	5,828	5,828	5,828	5,828	5,828	5,828	5,828	5,828	5,828	5,828
Benin.....	6,141	6,142	6,142	6,142	6,142	6,142	6,142	6,142	6,142	6,142
Cameroon.....	5,948	5,948	5,948	5,948	5,948	5,948	5,948	5,948	5,948	5,948
Congo (Brazzaville).....	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780	5,780
Congo (Kinshasa).....	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879
Cote d'Ivoire (Ivory Coast).....	5,900	5,899	5,899	5,899	5,899	5,899	5,899	5,899	5,899	5,899
Egypt.....	5,922	5,922	5,922	5,922	5,922	5,922	5,922	5,922	5,922	5,922
Equatorial Guinea.....	--	--	--	--	5,464	5,464	5,464	5,464	5,464	5,464
Gabon.....	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888	5,888
Ghana.....	--	--	--	--	--	5,936	5,936	5,936	5,936	5,936
Libya.....	5,775	5,775	5,775	5,775	5,775	5,775	5,775	5,775	5,775	5,775
Morocco.....	5,753	5,738	5,738	5,738	5,738	5,738	5,738	5,738	5,738	5,738
Nigeria.....	5,880	5,880	5,880	5,880	5,880	5,880	5,880	5,880	5,880	5,880
Sudan.....	--	--	--	--	--	5,084	5,084	5,084	5,084	5,084
Tunisia.....	5,677	5,677	5,677	5,677	5,677	5,677	5,677	5,677	5,677	5,677
Far East & Oceania										
Australia.....	5,578	5,578	5,578	5,578	5,578	5,578	5,578	5,578	5,578	5,578
Bangladesh.....	5,808	5,792	5,792	5,792	5,792	5,792	5,792	5,792	5,792	5,792
Brunei.....	5,865	5,865	5,865	5,865	5,865	5,865	5,865	5,865	5,865	5,865
Burma.....	6,019	6,020	6,020	6,020	6,020	6,020	6,020	6,020	6,020	6,020
China.....	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879	5,879
India.....	5,729	5,729	5,729	5,729	5,729	5,729	5,729	5,729	5,729	5,729
Indonesia.....	5,740	5,740	5,740	5,740	5,740	5,740	5,740	5,740	5,740	5,740
Japan.....	5,900	5,899	5,899	5,899	5,899	5,899	5,899	5,899	5,899	5,899
Malaysia.....	5,697	5,697	5,697	5,697	5,697	5,697	5,697	5,697	5,697	5,697
New Zealand.....	5,441	5,441	5,441	5,441	5,441	5,441	5,441	5,441	5,441	5,441
Pakistan.....	5,777	5,777	5,777	5,777	5,777	5,777	5,777	5,777	5,777	5,777
Papua New Guinea.....	--	--	--	--	5,607	5,607	5,607	5,607	5,607	5,607
Philippines.....	5,900	5,902	5,902	5,902	5,902	5,902	5,902	5,902	5,902	5,902
Taiwan.....	6,320	6,321	6,321	6,321	6,321	6,321	6,321	6,321	6,321	6,321
Thailand.....	6,317	6,317	6,317	6,317	6,317	6,317	6,317	6,317	6,317	6,317
Vietnam.....	6,022	6,022	6,022	6,022	6,022	6,022	6,022	6,022	6,022	6,022

-- Not applicable.

Sources: See sources at the end of Section 3.

Table C4 Gross Heat Content of Natural Gas Plant Liquids, 1987 - 1996
(Thousand Btu per Barrel)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
North America										
Canada.....	3,980	3,980	3,980	3,980	3,980	3,980	3,980	3,980	3,980	3,980
Mexico.....	3,620	3,620	3,620	3,620	3,620	3,620	3,620	3,620	3,620	3,620
United States.....	3,804	3,800	3,826	3,822	3,807	3,804	3,801	3,794	3,796	3,777
Central & South America										
Argentina.....	3,820	3,820	3,820	3,820	3,820	3,820	3,820	3,820	3,820	3,820
Bolivia.....	4,130	4,130	4,130	4,130	4,130	4,130	4,130	4,130	4,130	4,130
Brazil.....	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250	4,250
Chile.....	4,151	4,150	4,150	4,150	4,150	4,150	4,150	4,150	4,150	4,150
Colombia.....	3,283	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286	3,286
Cuba.....	4,342	4,344	4,344	4,344	4,344	4,344	4,344	4,344	4,344	4,344
Ecuador.....	4,233	4,235	4,235	4,235	4,235	4,235	4,235	4,235	4,235	4,235
Peru.....	4,630	4,617	4,617	4,617	4,617	4,617	4,617	4,617	4,617	4,617
Trinidad and Tobago.....	--	--	--	--	4,344	4,344	4,344	4,344	4,344	4,344
Venezuela.....	4,195	4,195	4,195	4,195	4,195	4,195	4,195	4,195	4,195	4,195
Western Europe										
Austria.....	4,247	4,262	4,262	4,262	4,262	4,262	4,262	4,262	4,262	4,262
France.....	4,386	4,385	4,385	4,385	4,385	4,385	4,385	4,385	4,385	4,385
Greece.....	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050
Italy.....	4,258	4,259	4,259	4,259	4,259	4,259	4,259	4,259	4,259	4,259
Netherlands.....	4,349	4,347	4,347	4,347	4,347	4,347	4,347	4,347	4,347	4,347
Norway.....	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348
Spain.....	4,347	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348
United Kingdom.....	4,490	4,490	4,490	4,490	4,490	4,490	4,490	4,490	4,490	4,490
Former Yugoslavia.....	4,349	4,349	4,349	4,349	4,349	--	--	--	--	--
Croatia.....	--	--	--	--	--	4,349	4,349	4,349	4,349	4,349
Eastern Europe & Former U.S.S.R.										
Former Czechoslovakia.....	4,658	4,645	4,645	4,645	4,645	4,645	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	4,645	4,645	4,645	4,645
Hungary.....	4,387	4,386	4,386	4,386	4,386	4,386	4,386	4,386	4,386	4,386
Poland.....	4,438	4,454	4,454	4,454	4,454	4,454	4,454	4,454	4,454	4,454
Romania.....	4,619	4,619	4,619	4,619	4,619	4,619	4,619	4,619	4,619	4,619
Former U.S.S.R.....	4,150	4,150	4,150	4,150	4,150	--	--	--	--	--
Azerbaijan.....	--	--	--	--	--	4,150	4,150	4,150	4,150	4,150
Kazakhstan.....	--	--	--	--	--	4,150	4,150	4,150	4,150	4,150
Kyrgyzstan.....	--	--	--	--	--	4,150	4,150	4,150	4,150	4,150
Russia.....	--	--	--	--	--	4,150	4,150	4,150	4,150	4,150
Tajikistan.....	--	--	--	--	--	4,150	4,150	4,150	4,150	4,150
Turkmenistan.....	--	--	--	--	--	4,150	4,150	4,150	4,150	4,150
Ukraine.....	--	--	--	--	--	4,150	4,150	4,150	4,150	4,150
Uzbekistan.....	--	--	--	--	--	4,150	4,150	4,150	4,150	4,150
Middle East										
Bahrain.....	4,286	4,287	4,287	4,287	4,287	4,287	4,287	4,287	4,287	4,287
Iran.....	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348
Iraq.....	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348
Kuwait.....	4,190	4,190	4,190	4,190	4,190	4,190	4,190	4,190	4,190	4,190
Oman.....	4,580	4,581	4,581	4,581	4,581	4,581	4,581	4,581	4,581	4,581
Qatar.....	3,790	3,790	3,790	3,790	3,790	3,790	3,790	3,790	3,790	3,790
Saudi Arabia.....	4,265	4,265	4,265	4,265	4,265	4,265	4,265	4,265	4,265	4,265
Syria.....	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300
United Arab Emirates.....	4,532	4,532	4,532	4,532	4,532	4,532	4,532	4,532	4,532	4,532

See footnotes at end of table.

Table C4 Gross Heat Content of Natural Gas Plant Liquids, 1987 - 1996 (Continued)
(Thousand Btu per Barrel)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Africa										
Algeria.....	5,080	5,080	5,080	5,080	5,080	5,080	5,080	5,080	5,080	5,080
Egypt.....	4,940	4,940	4,940	4,940	4,940	4,940	4,940	4,940	4,940	4,940
Libya.....	4,350	4,350	4,350	4,350	4,350	4,350	4,350	4,350	4,350	4,350
South Africa.....	--	--	--	--	--	4,649	4,649	4,649	4,649	4,649
Tunisia.....	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300	4,300
Far East & Oceania										
Australia.....	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290	4,290
Bangladesh.....	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050	4,050
Brunei.....	4,506	4,506	4,506	4,506	4,506	4,506	4,506	4,506	4,506	4,506
Burma.....	--	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348	4,348
India.....	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600	4,600
Indonesia.....	4,060	4,060	4,060	4,060	4,060	4,060	4,060	4,060	4,060	4,060
Japan.....	4,326	4,327	4,327	4,327	4,327	4,327	4,327	4,327	4,327	4,327
Malaysia.....	4,411	4,410	4,410	4,410	4,410	4,410	4,410	4,410	4,410	4,410
New Zealand.....	4,073	4,075	4,075	4,075	4,075	4,075	4,075	4,075	4,075	4,075
Pakistan.....	4,384	4,372	4,372	4,372	4,372	4,372	4,372	4,372	4,372	4,372
Taiwan.....	3,836	3,825	3,825	3,825	3,825	3,825	3,825	3,825	3,825	3,825
Thailand.....	4,350	4,349	4,349	4,349	4,349	4,349	4,349	4,349	4,349	4,349

-- Not applicable.

Sources: See sources at the end of Section 3.

Table C5 Gross Heat Content of Dry Natural Gas, 1987 - 1996
(Btu per Cubic Foot)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
North America										
Canada.....	1,015	1,017	1,014	1,014	1,015	1,017	1,017	1,035	1,024	1,021
Mexico.....	1,011	1,018	1,018	1,018	1,222	1,220	1,220	1,220	1,093	1,093
United States.....	1,031	1,029	1,031	1,031	1,030	1,030	1,027	1,028	1,027	1,027
Central & South America										
Argentina.....	933	933	933	933	933	1,083	1,083	1,083	1,083	1,083
Barbados.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Bolivia.....	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Brazil.....	1,107	1,107	1,107	1,175	1,175	1,174	1,174	1,174	1,174	1,174
Chile.....	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Colombia.....	929	929	929	929	929	929	929	929	929	929
Cuba.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Ecuador.....	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300	1,300
Peru.....	929	929	929	929	929	929	929	929	929	929
Trinidad and Tobago.....	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045	1,045
Venezuela.....	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,191	1,098
Western Europe										
Austria.....	1,079	1,074	1,074	1,074	1,060	1,060	1,063	1,063	1,063	1,063
Belgium.....	944	944	944	1,065	1,065	1,065	1,065	1,065	1,065	1,065
Denmark.....	1,090	1,091	1,092	1,089	1,092	1,091	1,093	1,099	1,098	1,098
Finland.....	1,052	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051	1,051
France.....	1,045	1,098	1,091	1,092	1,101	1,102	1,052	1,052	1,040	1,081
Germany.....	--	--	--	--	893	893	895	895	894	894
Germany, East.....	385	385	385	351	--	--	--	--	--	--
Germany, West.....	888	888	888	888	--	--	--	--	--	--
Greece.....	1,439	1,443	1,443	1,399	1,476	1,449	1,428	1,558	1,535	1,544
Ireland.....	1,008	1,008	1,010	1,009	1,010	1,010	1,009	1,009	1,011	1,011
Italy.....	1,043	1,042	1,039	1,038	1,013	1,013	1,001	1,001	1,001	1,023
Luxembourg.....	1,079	1,079	1,079	1,088	1,093	1,093	1,092	1,094	1,094	1,098
Netherlands.....	894	894	894	894	894	894	894	894	894	894
Norway.....	1,085	1,085	1,085	1,091	1,088	1,093	1,099	1,113	1,113	1,112
Spain.....	1,143	1,143	1,140	1,140	1,140	1,140	1,156	1,156	1,141	1,141
Sweden.....	1,045	1,045	1,045	1,045	1,043	1,043	1,043	989	989	989
Switzerland.....	1,079	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082	1,082
Turkey.....	1,029	1,028	1,028	1,028	1,028	1,028	1,028	1,028	1,028	1,028
United Kingdom.....	1,033	1,033	1,033	1,094	1,002	1,040	1,038	1,042	1,052	1,053
Former Yugoslavia.....	955	955	955	955	955	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	955	955	955	955	955
Croatia.....	--	--	--	--	--	913	913	912	912	912
Macedonia, TFYR.....	--	--	--	--	--	955	955	955	955	955
Serbia and Montenegro.....	--	--	--	--	--	955	955	955	955	955
Slovenia.....	--	--	--	--	--	955	955	955	955	955

See footnotes at end of table.

Table C5 Gross Heat Content of Dry Natural Gas, 1987 - 1996 (Continued)
(Btu per Cubic Foot)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Eastern Europe & Former U.S.S.R.										
Albania.....	1,047	1,047	1,047	1,047	1,047	1,047	939	939	1,058	1,020
Bulgaria.....	943	943	943	943	943	943	943	943	988	988
Former Czechoslovakia.....	906	906	906	906	877	877	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	877	877	966	1,013
Slovakia.....	--	--	--	--	--	--	877	877	877	877
Hungary.....	878	878	878	878	878	878	926	926	967	965
Poland.....	842	842	842	842	832	871	871	793	773	787
Romania.....	1,070	1,070	1,070	1,070	908	909	909	909	1,009	1,055
Former U.S.S.R.....	923	923	923	923	911	--	--	--	--	--
Armenia.....	--	--	--	--	--	911	911	911	911	911
Azerbaijan.....	--	--	--	--	--	911	911	911	911	911
Belarus.....	--	--	--	--	--	911	933	933	933	933
Estonia.....	--	--	--	--	--	900	900	900	900	900
Georgia.....	--	--	--	--	--	911	911	911	911	911
Kazakhstan.....	--	--	--	--	--	911	907	907	907	907
Kyrgyzstan.....	--	--	--	--	--	911	911	911	911	911
Latvia.....	--	--	--	--	--	902	902	902	902	902
Lithuania.....	--	--	--	--	--	911	911	911	911	911
Moldova.....	--	--	--	--	--	911	911	911	911	911
Russia.....	--	--	--	--	--	911	911	911	911	911
Tajikistan.....	--	--	--	--	--	911	911	911	911	911
Turkmenistan.....	--	--	--	--	--	911	909	911	911	911
Ukraine.....	--	--	--	--	--	911	911	911	911	911
Uzbekistan.....	--	--	--	--	--	911	911	912	912	912
Middle East										
Bahrain.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,105	1,105	1,105
Iran.....	1,056	1,058	1,058	1,056	1,056	1,056	1,056	1,056	1,056	1,056
Iraq.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Israel.....	1,039	1,039	1,039	1,039	1,039	1,039	1,039	1,039	1,039	1,040
Jordan.....	--	--	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Kuwait.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Oman.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Qatar.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Saudi Arabia.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Syria.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	962	962
United Arab Emirates.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Africa										
Algeria.....	1,062	1,062	1,062	1,062	1,062	1,062	1,062	1,062	1,169	1,169
Angola.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,003	1,012
Congo (Brazzaville).....	1,047	--	--	--	--	--	1,047	1,047	1,047	1,047
Cote d'Ivoire (Ivory Coast).....	--	--	--	--	--	--	--	--	1,047	1,047
Egypt.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Gabon.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Libya.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Morocco.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Nigeria.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Senegal.....	--	--	--	--	--	--	1,047	1,047	1,047	1,047
South Africa.....	--	--	--	--	--	1,047	1,047	1,047	1,047	1,047
Tunisia.....	1,236	1,236	1,236	1,236	1,236	1,236	1,236	1,236	1,236	1,239

See footnotes at end of table.

Table C5 Gross Heat Content of Dry Natural Gas, 1987 - 1996 (Continued)
(Btu per Cubic Foot)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Far East & Oceania										
Afghanistan.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Australia.....	1,048	1,043	1,043	1,045	1,044	1,063	1,065	1,070	1,067	1,064
Bangladesh.....	941	941	941	941	941	941	941	941	941	941
Brunei.....	1,214	1,214	1,214	1,214	1,154	1,154	1,154	1,154	1,154	1,154
Burma.....	1,004	1,004	1,004	1,004	1,004	1,004	1,004	1,004	1,014	1,014
China.....	1,112	1,112	1,112	1,112	1,112	1,112	1,112	1,112	1,163	1,163
Hong Kong.....	--	--	--	--	--	--	--	--	1,047	1,047
India.....	1,036	1,036	1,036	1,036	1,036	1,036	1,036	1,036	1,151	1,151
Indonesia.....	1,099	1,099	1,099	1,000	1,000	1,000	1,000	1,000	1,111	1,111
Japan.....	1,101	1,101	1,101	1,101	1,101	1,101	1,101	1,101	1,101	1,101
Korea, South.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,152	1,152
Malaysia.....	1,043	1,043	1,043	1,043	1,043	1,043	1,043	1,043	1,053	1,053
New Zealand.....	1,011	1,017	1,019	1,018	1,009	1,012	1,018	1,025	1,017	1,038
Pakistan.....	934	934	934	934	934	934	934	934	934	934
Papua New Guinea.....	--	--	--	--	--	1,047	1,047	1,047	1,047	1,047
Philippines.....	--	--	--	--	--	--	--	--	1,047	1,047
Singapore.....	--	--	--	--	--	976	976	976	1,047	1,047
Taiwan.....	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047	1,047
Thailand.....	1,000	1,000	1,000	1,000	1,000	1,000	1,000	868	1,000	1,000
Vietnam.....	1,025	1,025	1,025	1,025	1,025	1,036	1,036	1,036	1,036	1,036

-- Not applicable.

Sources: See sources at the end of Section 4.

Table C6 Gross Heat Content of Coal, 1987 - 1996
(Thousand Btu per Short Ton)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
North America										
Canada.....	22,252	22,159	22,367	22,543	22,670	22,414	22,485	22,747	22,791	22,790
Mexico.....	19,352	19,352	19,352	19,352	19,352	19,352	19,352	15,644	15,644	15,644
United States.....	21,922	21,823	21,765	21,822	21,681	21,646	21,388	21,352	21,277	21,277
Central & South America										
Argentina.....	19,438	19,438	19,438	19,438	19,438	21,244	21,244	21,244	21,191	21,191
Brazil.....	17,459	17,459	17,459	17,459	17,459	16,000	16,000	16,000	22,383	22,383
Chile.....	24,619	24,655	24,652	24,664	24,666	28,973	29,054	29,015	24,460	24,530
Colombia.....	23,405	23,405	23,405	23,405	23,405	23,405	23,405	23,405	23,406	23,406
Peru.....	24,915	24,823	24,826	25,276	25,219	27,464	24,965	24,490	23,852	23,852
Venezuela.....	24,403	24,403	24,403	24,403	24,403	25,190	29,308	29,308	25,174	25,174
Western Europe										
Austria.....	24,082	24,082	24,082	24,082	24,082	24,082	24,082	24,083	24,083	24,083
Belgium.....	18,785	18,175	18,319	17,229	17,054	17,054	17,054	15,184	15,184	15,184
France.....	22,897	22,878	22,378	22,174	22,389	22,582	22,391	22,077	22,495	22,543
Germany.....	--	--	--	--	10,205	10,544	10,690	10,992	11,143	11,049
Germany, East.....	7,640	7,640	7,640	7,640	--	--	--	--	--	--
Germany, West.....	13,464	13,341	13,208	13,230	--	--	--	--	--	--
Greece.....	5,444	5,444	5,444	5,444	5,444	4,479	4,945	4,724	4,724	4,723
Ireland.....	24,768	24,768	24,768	24,768	24,768	23,414	23,604	22,469	22,469	22,469
Italy.....	9,196	9,521	9,932	9,774	9,297	9,298	9,216	8,608	8,348	8,348
Norway.....	24,172	24,172	24,172	24,172	24,172	24,168	24,168	24,161	24,161	24,161
Portugal.....	14,763	14,763	14,763	14,763	14,763	14,763	14,759	14,755	25,203	25,203
Spain.....	14,333	14,830	14,031	13,482	13,423	13,429	13,393	13,704	13,760	14,481
Sweden.....	20,642	20,642	20,642	20,642	20,642	23,404	23,404	23,404	--	--
Turkey.....	8,804	8,966	8,635	8,563	8,556	8,557	8,747	7,848	7,719	7,738
United Kingdom.....	22,689	22,689	22,689	22,687	22,687	20,860	20,849	20,828	21,645	21,645
Former Yugoslavia.....	10,844	10,754	10,707	10,564	10,425	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	7,958	7,958	7,958	5,243	5,243
Croatia.....	--	--	--	--	--	20,829	24,949	25,159	24,303	24,165
Macedonia, TFYR.....	--	--	--	--	--	11,283	11,283	11,283	11,283	9,702
Serbia and Montenegro.....	--	--	--	--	--	7,987	7,982	7,985	5,275	5,271
Slovenia.....	--	--	--	--	--	9,995	9,920	9,679	11,054	11,053
Eastern Europe & Former U.S.S.R.										
Albania.....	9,325	9,325	9,325	9,325	9,325	9,325	9,325	9,325	9,325	9,325
Bulgaria.....	9,130	9,097	9,004	8,700	8,700	8,280	9,014	8,989	7,963	7,963
Former Czechoslovakia.....	20,686	20,687	20,669	20,663	20,662	20,783	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	20,891	20,926	20,926	20,929
Slovakia.....	--	--	--	--	--	--	17,991	18,209	10,712	10,712
Hungary.....	10,296	10,413	10,353	10,309	10,302	11,129	10,660	11,826	11,828	7,780
Poland.....	16,299	16,288	16,117	15,752	15,513	16,118	16,038	16,173	16,284	16,284
Romania.....	8,526	8,330	8,131	8,012	8,029	6,896	7,970	8,086	8,156	8,156
Former U.S.S.R.....	15,393	15,339	15,351	15,507	15,180	--	--	--	--	--
Estonia.....	--	--	--	--	--	8,343	6,704	6,704	6,654	6,654
Georgia.....	--	--	--	--	--	15,275	15,141	15,707	19,075	19,799
Kazakhstan.....	--	--	--	--	--	16,561	16,664	12,602	12,603	12,603
Kyrgyzstan.....	--	--	--	--	--	13,890	13,851	15,257	15,591	15,522
Moldova.....	--	--	--	--	--	16,840	16,840	16,840	16,840	16,840
Russia.....	--	--	--	--	--	15,670	15,686	15,645	15,653	15,653
Tajikistan.....	--	--	--	--	--	8,343	8,343	8,343	8,343	8,343
Ukraine.....	--	--	--	--	--	17,377	19,180	19,228	20,769	20,769
Uzbekistan.....	--	--	--	--	--	11,494	11,518	11,489	10,143	10,121

See footnotes at end of table.

Table C6 Gross Heat Content of Coal, 1987 - 1996 (Continued)

(Thousand Btu per Short Ton)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Middle East										
Iran.....	26,232	26,232	26,232	26,232	26,232	26,232	26,232	26,232	25,200	25,200
Africa										
Algeria.....	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	25,200	25,200
Botswana.....	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	25,200	25,200
Cameroon.....	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
Congo (Kinshasa).....	23,927	23,927	23,927	23,927	23,927	23,927	23,927	23,927	25,200	25,200
Malawi.....	22,000	22,000	22,000	22,000	21,500	21,500	21,500	21,500	25,200	25,200
Morocco.....	30,103	30,103	30,103	30,103	30,103	30,103	30,103	30,103	25,200	25,200
Mozambique.....	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	25,200	25,200
Niger.....	25,200	25,200	25,200	25,200	25,200	25,200	25,200	25,200	25,200	25,200
Nigeria.....	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	25,200	25,200
South Africa.....	20,494	20,478	20,456	20,438	20,401	20,473	20,464	20,444	20,424	20,414
Swaziland.....	23,400	23,400	23,400	23,399	23,402	23,402	23,391	23,396	23,396	25,200
Tanzania.....	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	25,200	25,200
Zambia.....	23,411	23,411	23,411	23,411	23,411	24,244	25,308	25,308	21,246	21,246
Zimbabwe.....	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	25,200
Far East & Oceania										
Afghanistan.....	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000
Australia.....	17,622	17,343	17,309	17,574	17,498	17,540	17,782	18,374	18,502	18,420
Bhutan.....	17,500	17,500	17,500	17,500	17,500	17,500	18,500	18,500	25,200	25,200
Burma.....	16,615	15,536	16,499	15,334	15,840	15,606	15,537	15,559	17,233	17,164
China.....	18,148	18,138	18,121	18,101	18,109	18,100	17,973	17,978	17,990	17,982
India.....	16,966	16,786	16,807	16,762	16,727	17,050	17,042	17,006	20,000	19,905
Indonesia.....	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	25,200	25,200
Japan.....	21,102	21,096	21,091	21,086	21,088	21,088	21,088	19,816	19,813	19,813
Korea, North.....	22,349	22,082	21,935	21,772	21,707	21,079	20,849	20,915	21,415	21,415
Korea, South.....	16,203	16,203	16,203	16,203	16,203	16,200	16,200	16,200	22,891	22,891
Laos.....	22,500	22,500	22,500	22,500	22,500	22,500	22,500	22,500	25,200	25,200
Malaysia.....	24,403	24,403	24,403	24,403	24,403	24,403	24,403	24,403	25,200	25,200
Mongolia.....	10,146	10,108	10,162	10,175	10,169	9,250	9,249	9,265	9,764	9,764
Nepal.....	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000	8,000
New Zealand.....	22,928	22,558	22,656	22,609	22,616	22,626	22,645	21,628	23,619	23,484
Pakistan.....	19,443	19,443	19,443	19,443	19,443	19,443	19,443	19,443	19,124	19,124
Philippines.....	20,203	20,204	20,204	20,204	20,204	20,206	20,206	20,206	17,003	17,003
Taiwan.....	24,602	24,602	24,602	24,602	24,602	23,500	22,324	22,324	25,200	25,200
Thailand.....	9,904	9,917	9,902	9,912	9,911	9,415	9,418	9,412	15,843	15,843
Vietnam.....	24,403	24,403	24,403	24,403	24,403	24,403	29,308	29,308	25,200	25,200

-- Not applicable.

Note: Heat contents are calculated based on individual heat contents for production of anthracite, bituminous, and lignite.

Sources: See sources at the end of Section 5.

Table C7 Gross Heat Content of Hyrdoelectric Power, 1987 - 1996
(Btu per Kilowatthour)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
North America										
Canada.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Mexico.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
United States.....	10,419	10,324	10,317	10,335	10,352	10,302	10,280	10,272	10,301	10,301
Central & South America										
Argentina.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Bolivia.....	10,403	10,403	10,403	10,403	10,403	10,403	10,403	10,403	10,403	10,403
Brazil.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Chile.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Colombia.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Costa Rica.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Dominican Republic.....	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404
Ecuador.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
El Salvador.....	10,402	10,402	10,402	10,402	10,402	10,402	10,402	10,402	10,402	10,402
Guatemala.....	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Haiti.....	10,410	10,410	10,410	10,410	10,410	10,410	10,410	10,410	10,410	10,410
Honduras.....	10,402	10,402	10,402	10,402	10,402	10,402	10,402	10,402	10,402	10,402
Jamaica.....	10,403	10,403	10,403	10,403	10,403	10,403	10,403	10,403	10,403	10,403
Nicaragua.....	10,415	10,415	10,415	10,415	10,415	10,415	10,415	10,415	10,415	10,415
Panama.....	10,398	10,398	10,398	10,398	10,398	10,398	10,398	10,398	10,398	10,398
Paraguay.....	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Peru.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Puerto Rico.....	10,389	10,389	10,389	10,389	10,389	10,389	10,389	10,389	10,389	10,389
Suriname.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Uruguay.....	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Venezuela.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Western Europe										
Austria.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Belgium.....	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397
Finland.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
France.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Germany.....	--	--	--	--	10,400	10,400	10,400	10,400	10,400	10,400
Germany, East.....	10,400	10,400	10,400	10,400	--	--	--	--	--	--
Germany, West.....	10,400	10,400	10,400	10,400	--	--	--	--	--	--
Greece.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Iceland.....	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Ireland.....	10,398	10,398	10,398	10,398	10,398	10,398	10,398	10,398	10,398	10,398
Italy.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Luxembourg.....	10,409	10,409	10,409	10,409	10,409	10,409	10,409	10,409	10,409	10,409
Norway.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Portugal.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Spain.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Sweden.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Switzerland.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Turkey.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
United Kingdom.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Former Yugoslavia.....	10,400	10,400	10,400	10,400	10,400	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Croatia.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Macedonia, TFYR.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Serbia and Montenegro.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Slovenia.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400

See footnotes at end of table.

Table C7 Gross Heat Content of Hyrdoelectric Power, 1987 - 1996 (Continued)
(Btu per Kilowatthour)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Eastern Europe & Former U.S.S.R.										
Albania.....	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Bulgaria.....	10,398	10,398	10,398	10,398	10,398	10,398	10,398	10,398	10,398	10,398
Former Czechoslovakia.....	10,400	10,400	10,400	10,400	10,400	10,400	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	10,400	10,400	10,400	10,400
Slovakia.....	--	--	--	--	--	--	10,400	10,400	10,400	10,400
Hungary.....	10,419	10,419	10,419	10,419	10,419	10,419	10,419	10,419	10,419	10,419
Poland.....	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399
Romania.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Former U.S.S.R.....	10,400	10,400	10,400	10,400	10,400	--	--	--	--	--
Armenia.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Azerbaijan.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Georgia.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Kazakhstan.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Kyrgyzstan.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Latvia.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Lithuania.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Moldova.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Russia.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Tajikistan.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Ukraine.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Uzbekistan.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Middle East										
Iran.....	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Iraq.....	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397
Israel.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Jordan.....	10,526	10,526	10,526	10,526	10,526	10,526	10,526	10,526	10,526	10,526
Lebanon.....	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397
Syria.....	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397
Africa										
Algeria.....	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404
Angola.....	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Cameroon.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Congo (Brazzaville).....	10,390	10,390	10,390	10,390	10,390	10,390	10,390	10,390	10,390	10,390
Congo (Kinshasa).....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Cote d'Ivoire (Ivory Coast).....	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399
Egypt.....	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Ethiopia.....	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404
Gabon.....	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404
Ghana.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Kenya.....	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Madagascar.....	10,412	10,412	10,412	10,412	10,412	10,412	10,412	10,412	10,412	10,412
Malawi.....	10,394	10,394	10,394	10,394	10,394	10,394	10,394	10,394	10,394	10,394
Mali.....	10,375	10,375	10,375	10,375	10,375	10,375	10,375	10,375	10,375	10,375
Morocco.....	10,407	10,407	10,407	10,407	10,407	10,407	10,407	10,407	10,407	10,407
Nigeria.....	10,398	10,398	10,398	10,398	10,398	10,398	10,398	10,398	10,398	10,398
Reunion.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
South Africa.....	10,394	10,394	10,394	10,394	10,394	10,394	10,394	10,394	10,394	10,394
Sudan.....	10,391	10,391	10,391	10,391	10,391	10,391	10,391	10,391	10,391	10,391
Tanzania.....	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397
Uganda.....	10,392	10,392	10,392	10,392	10,392	10,392	10,392	10,392	10,392	10,392
Zambia.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Zimbabwe.....	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401

See footnotes at end of table.

Table C7 Gross Heat Content of Hyrdoelectric Power, 1987 - 1996 (Continued)
(Btu per Kilowatthour)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
Far East & Oceania										
Afghanistan.....	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397
Australia.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Bangladesh.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Bhutan.....	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
Burma.....	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397
Cambodia.....	10,333	10,333	10,333	10,333	10,333	10,333	10,333	10,333	10,333	10,333
China.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Fiji.....	10,405	10,405	10,405	10,405	10,405	10,405	10,405	10,405	10,405	10,405
French Polynesia.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
India.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Indonesia.....	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Japan.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Korea, North.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Korea, South.....	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Laos.....	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404	10,404
Malaysia.....	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399
Nepal.....	10,394	10,394	10,394	10,394	10,394	10,394	10,394	10,394	10,394	10,394
New Caledonia.....	10,394	10,394	10,394	10,394	10,394	10,394	10,394	10,394	10,394	10,394
New Zealand.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Pakistan.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Papua New Guinea.....	10,393	10,393	10,393	10,393	10,393	10,393	10,393	10,393	10,393	10,393
Philippines.....	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401	10,401
Samoa.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Sri Lanka.....	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399
Taiwan.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Thailand.....	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399
U.S. Pacific Islands.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Vietnam.....	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399	10,399

-- Not applicable.

Note: There is no generally accepted practice for evaluating the thermal conversion rates for power plants that generate electricity from hydroelectric sources. Therefore, estimates of the prevailing annual average heat content for fossil-fueled, steam-electric power plants are used to evaluate the heat content for hydroelectric power. By using that factor, it is possible to evaluate fossil fuel requirements for replacing those sources during periods of interruption such as droughts.

Sources: See sources at the end of Section 6.

Table C8 Gross Heat Content of Nuclear Electric Power, 1987 - 1996

(Btu per Kilowatthour)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
North America										
Canada.....	11,550	11,550	11,550	11,478	11,478	11,440	11,376	11,376	11,365	11,365
Mexico.....	--	--	--	10,295	10,065	10,065	10,065	10,065	10,065	10,065
United States.....	10,776	10,743	10,724	10,680	10,740	10,678	10,682	10,676	10,658	10,623
Central & South America										
Argentina.....	11,809	11,809	11,809	11,809	11,809	11,809	11,809	11,809	11,809	11,809
Brazil.....	10,251	10,258	10,258	10,258	10,246	10,246	10,246	10,246	10,246	10,246
Western Europe										
Belgium.....	10,378	10,378	10,378	10,378	10,373	10,373	10,373	10,373	10,373	10,373
Finland.....	10,365	10,365	10,365	10,365	10,278	10,278	10,278	10,278	10,278	10,278
France.....	10,161	10,161	10,161	10,413	10,405	10,399	10,396	10,355	10,355	10,349
Germany.....	--	--	--	--	10,205	10,205	10,205	10,205	10,189	10,189
Germany, East.....	11,278	11,278	11,278	11,278	--	--	--	--	--	--
Germany, West.....	10,471	10,467	10,469	10,437	--	--	--	--	--	--
Italy.....	12,041	--	--	--	--	--	--	--	--	--
Netherlands.....	10,548	10,548	10,548	10,548	10,485	10,485	10,485	10,485	10,485	10,485
Spain.....	10,775	10,775	10,775	10,151	10,151	10,151	10,151	10,151	10,151	10,151
Sweden.....	10,001	10,001	10,001	10,001	10,090	10,090	10,090	10,090	10,090	10,090
Switzerland.....	10,632	10,632	10,632	10,632	10,540	10,540	10,540	10,540	10,540	10,540
United Kingdom.....	11,892	11,892	11,892	11,892	12,461	12,461	12,424	12,552	12,446	12,446
Former Yugoslavia.....	11,374	11,373	11,373	11,373	10,035	--	--	--	--	--
Slovenia.....	--	--	--	--	--	10,035	10,035	10,035	10,035	10,035
Eastern Europe & Former U.S.S.R.										
Bulgaria.....	11,006	11,006	11,006	11,006	11,006	11,006	11,006	11,006	11,006	11,006
Former Czechoslovakia.....	12,274	12,274	12,274	12,274	12,274	12,274	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	12,099	12,099	12,099	12,099
Slovakia.....	--	--	--	--	--	--	12,318	12,318	12,318	12,318
Hungary.....	11,373	11,373	11,373	11,373	10,065	10,065	10,065	10,065	10,065	10,065
Romania.....	--	--	--	--	--	--	--	--	--	11,930
Former U.S.S.R.....	11,524	11,433	11,443	11,463	11,469	--	--	--	--	--
Armenia.....	--	--	--	--	--	--	--	--	--	11,725
Kazakhstan.....	--	--	--	--	--	11,373	11,373	11,373	11,373	11,373
Lithuania.....	--	--	--	--	--	10,663	10,663	10,663	10,663	10,663
Russia.....	--	--	--	--	--	11,038	11,030	11,030	11,030	11,030
Ukraine.....	--	--	--	--	--	10,911	10,911	10,911	10,873	10,873
Africa										
South Africa.....	10,308	10,308	10,308	10,308	10,035	10,035	10,035	10,035	10,035	10,035
Far East & Oceania										
China.....	--	--	--	--	--	10,339	10,207	10,159	10,159	10,159
India.....	11,670	11,671	11,671	11,671	11,844	11,906	11,957	11,957	11,998	11,998
Japan.....	10,646	10,646	10,646	10,273	10,250	10,250	10,234	10,226	10,236	10,223
Korea, South.....	10,422	10,422	10,422	10,088	10,088	10,088	10,088	10,035	10,035	10,035
Pakistan.....	11,809	11,784	11,784	10,797	10,797	10,797	10,797	10,797	10,797	10,797
Taiwan.....	10,227	10,227	10,227	10,227	9,876	9,876	9,876	9,876	9,876	9,876

-- Not applicable.

Note: The average heat content of electricity generated by nuclear electric power plants is calculated by dividing the heat content of electricity consumed in nuclear generating units (3,412 Btu per kilowatthour) by the estimated efficiency factor (the ratio of output to input) for each nuclear power plant.

Sources: See sources at the end of Section 6.

Table C9 Gross Heat Content of Geothermal Electric Power, 1987 - 1996
(Btu per Kilowatthour)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
North America										
Mexico.....	21,273	21,273	21,020	21,020	21,020	21,020	21,020	21,020	21,020	21,020
United States.....	21,263	21,096	21,096	21,096	20,997	20,914	20,914	20,914	20,914	20,960
Central & South America										
Costa Rica.....	--	--	--	--	--	--	--	21,020	21,020	21,020
El Salvador.....	21,273	21,273	21,020	21,020	21,020	21,020	21,020	21,020	21,020	21,020
Nicaragua.....	21,273	21,273	21,020	21,020	21,020	21,020	21,020	21,020	21,020	21,020
Western Europe										
Greece.....	21,273	21,273	--	--	--	--	--	--	--	--
Iceland.....	21,273	21,273	21,020	21,020	21,020	21,020	21,020	21,020	21,020	21,020
Italy.....	21,273	21,273	21,020	21,020	21,020	21,020	21,020	21,020	21,020	21,020
Portugal.....	21,273	21,273	21,020	21,020	21,020	21,020	21,020	21,020	21,020	21,020
Turkey.....	21,273	21,273	21,020	21,020	21,020	21,020	21,020	21,020	21,020	21,020
Eastern Europe & Former U.S.S.R.										
Romania.....	21,273	21,273	21,273	21,273	--	--	--	--	--	--
Former U.S.S.R.....	21,273	21,273	21,020	21,020	21,020	--	--	--	--	--
Russia.....	--	--	--	--	--	21,020	21,020	21,020	21,020	21,020
Middle East										
Jordan.....	--	--	21,020	21,020	21,020	21,020	21,020	21,020	21,020	21,020
Africa										
Ethiopia.....	21,273	21,273	21,020	21,020	21,020	21,020	21,020	21,020	21,020	21,020
Kenya.....	21,273	21,273	21,020	21,020	21,020	21,020	21,020	21,020	21,020	21,020
Far East & Oceania										
Indonesia.....	21,273	21,273	21,020	21,020	21,020	21,020	21,020	21,020	21,020	21,020
Japan.....	21,273	21,273	21,020	21,020	21,020	21,020	21,020	21,020	21,020	21,020
New Zealand.....	21,273	21,273	21,020	21,020	21,020	21,020	21,020	21,020	21,020	21,020
Philippines.....	21,273	21,273	21,020	21,020	21,020	21,020	21,020	21,020	21,020	21,020
Vietnam.....	21,273	21,273	21,020	21,020	21,020	21,020	21,020	21,020	21,020	21,020

-- Not applicable.

Note: The average heat content of electricity generated by geothermal electric power plants is calculated by weighting the annual average heat rates of operating geothermal units by the installed nameplate capacities.

Sources: See sources at the end of Section 6.

Table C10 Gross Heat Content of Solar and Wind Electric Power, 1987 - 1996
(Btu per Kilowatthour)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
North America										
Canada.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Mexico.....	--	--	--	--	--	--	--	10,400	10,400	10,400
United States.....	10,419	10,324	10,317	10,335	10,352	10,302	10,280	10,272	10,301	10,301
Central & South America										
Brazil.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Western Europe										
Belgium.....	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397	10,397
Denmark.....	10,345	10,345	10,345	10,345	10,345	10,345	10,345	10,345	10,345	10,345
France.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Germany.....	--	--	--	--	10,400	10,400	10,400	10,400	10,400	10,400
Germany, West.....	--	10,400	10,400	10,400	--	--	--	--	--	--
Greece.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Ireland.....	--	--	--	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Italy.....	--	--	--	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Netherlands.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Norway.....	--	--	--	--	--	10,400	10,400	10,400	10,400	10,400
Portugal.....	--	--	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Spain.....	--	--	--	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Sweden.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Switzerland.....	--	--	--	--	10,400	10,400	10,400	10,400	10,400	10,400
United Kingdom.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Eastern Europe & Former U.S.S.R.										
Romania.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Far East & Oceania										
Australia.....	--	--	--	--	--	--	--	10,400	10,400	10,400
India.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400
Japan.....	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400	10,400

-- Not applicable.

Note: There is no generally accepted practice for evaluating the thermal conversion rates for power plants that generate electricity from wind and solar thermal sources. Therefore, estimates of the prevailing annual average heat content for fossil-fueled, steam-electric power plants are used to evaluate the heat content for wind and solar thermal power. (These same estimates are used to evaluate the heat content for biofuels thermal power for the United States and Brazil.)

Sources: See sources at the end of Section 6.

Appendix D

**Oil and Gas Market
Chronology: 1996**

Appendix D

Oil and Gas Market Chronology: 1996

The following chronology lists international events of significance for the world oil and natural gas markets in 1996. Sources include: *Dallas Morning News (DMN)*, *Dow Jones (DJ)*, *Financial Times (FT)*, *Middle East Economic Survey, (MEES)*, *New York Times (NYT)*, *Oil and Gas Journal (OGJ)*, *Petroleum Intelligence Weekly (PIW)*, *Platt's Oilgram News (PON)*, *Wall Street Journal (WSJ)*, *Washington Times (WT)*, *Washington Post (WP)*, and *World Gas Intelligence (WGI)*.

(Note: For monthly chronologies for 1997 and 1998 and annual highlights for 1970-1996, see the Chronologies section of our International Energy Web Page at (<http://www.eia.doe.gov/emeu/international/chronolo.html>).

- Jan. 1** Russia temporarily stops oil flows through the 1.2-million-barrel-per-day capacity Druzhba pipeline after Ukraine imposes a 13-percent increase in transit tariffs from \$4.53 to \$5.20 per ton per kilometer. Talks between the two countries are suspended shortly thereafter and oil shipments to Ukraine's 78,000-barrel per-day Drogobych refinery are cut. In 1995, Russia shipped about 600,000 barrels per day through the Druzhba pipeline to Eastern Europe. (DJ)
- Jan. 3** Under a new hydrocarbon law, which brings the country in line with European Union regulations, Greece opens bidding for six onshore and offshore exploration concessions. Onshore concessions are located in northwest Peloponnese, Aetolo-Archarnania, and Ioannina. Offshore blocks are near Katakolo in the Ionian Sea's northwest Peloponnese, the Patras Gulf, and near Paxi Island. Greece produces about 10,000 barrels per day from its offshore Prinos field near Thasos Island in the northern Aegean Sea. However, it has not been able to develop other Aegean Sea oil and gas fields because of territorial disputes with Turkey. (FT)
- Jan. 9** In Cairo, Israeli Energy Minister Gonen Segev meets with Egyptian Oil Minister Hamdy al-Banbi to discuss possible construction of a \$500-million pipeline to carry 250 million cubic feet per day of Egyptian natural gas to Israel, a similar amount to Jordan, and 50 million cubic feet per day to the Palestinian-controlled Gaza Strip. In 1995, Egypt augmented its 22 trillion cubic feet of natural gas reserves with new discoveries in the Mediterranean Sea. Amoco and Agip hold the concessions that would supply gas for the Israeli pipeline. (DJ)
- Jan. 13** According to Iran's official Islamic Republic News Agency, Iran and Nigeria have agreed to cooperate in oil exploration, production, and marketing. The deal comes after oil officials from the two countries met in Lagos. Both Iran and Nigeria have had various forms of economic sanctions imposed on them by members of the international community. (DJ)
- Jan. 15** The British Government approves the \$2.47-billion Eastern Trough Area Project development. The Eastern Trough is located near the giant Forties field and contains an estimated 400 million barrels of oil, 35 million barrels of natural gas liquids, and 1.1 trillion cubic feet of natural gas. British Petroleum, Royal Dutch/Shell, Exxon, Agip, BHP, Murphy Oil, and Mitsubishi Oil will be partners in the development. The area is also located near the 1-billion-barrel Foinaven and Schiehallion heavy oil fields currently under development. (NYT)
- Jan. 16** In Peru, state-owned Petroperu workers stage a 24-hour strike to protest the government's privatization plans. While union representatives declare that Petroperu "is totally paralyzed," operations and oil production appear to remain unaffected. Privatization could result in the loss of about 1,500 of the company's current 5,500 jobs. Peru produces about 130,000 barrels per day of crude oil, most of which is consumed domestically. (DJ)
- Jan. 16** South Africa's Central Energy Fund reports that an environmental study designed to assess the impact of storing Iranian oil in South Africa would be delayed by six months until September 1996. In July 1995, South Africa agreed to allow Iran to store up to 15 million barrels at the 45-million-barrel Saldanha Bay storage facility near Cape Town. The United States opposes the deal and came after the United States imposed a unilateral embargo on Iranian oil exports in April 1995. (DJ)
- Jan. 17** Iraq agrees to talks concerning a United Nations (U.N.) plan to allow for the Iraqi sale of \$1 billion of oil every 90 days for a 180-day trial period. Under U.N. Resolution 986, proceeds from the sale would be used for humanitarian

purposes. In the past, Iraq has opposed clauses 6 and 8b contained in Resolution 986. Clause 6 stipulates that the larger share of the oil is to be exported via the 1.6-million-barrel-per-day Iraq-Turkey pipeline, which currently is unusable because of sludge build-ups and pumping station damage. By most estimates, the line would take a minimum of three months to repair. Clause 8b states that part of the proceeds from the sales would be disbursed under U.N. supervision to Kurdish provinces in northern Iraq. Negotiations between Iraq and the U.N. are scheduled to begin February 6, 1996. (FT, PON, DJ)

- Jan. 17** Romanian officials announce that the country's new petroleum law will take effect in March 1996 and will provide a framework for the country's upcoming second exploration licensing round. Romania currently produces about 135,000 barrels per day of oil, with reserves of about 1 billion barrels. Amoco, Shell, and Enterprise Oil are actively exploring in the country. (PON)
- Jan. 22** Venezuela starts a bidding round that offers 10 concessions with a resource potential of between 7 and 23 billion barrels of oil and up to 10 trillion cubic feet of natural gas reserves. Five blocks are located near the Furrial field in the Orinoco Delta, two in the northern Andes near Lake Maracaibo, two in the eastern Anzoategui and Monagas states, and one in the Barinas region near the Colombian border. The government anticipates that production in these blocks may be able to increase the country's light and medium crude oil production by as much as 1 million barrels per day by 2003 and bring in tax revenues of between \$15 and \$20 billion. Over 75 companies, including British Petroleum, Exxon, and Shell, are involved in the auction. Awarded acreage will allow companies to develop the concessions on a profit sharing basis. (FT, PON)
- Jan. 23** Bahrain agrees to accept International Court of Justice (ICJ) jurisdiction in a longstanding dispute over the potentially oil-rich Hawar Islands and the Fahst al-Dibal and Jarada sandbars. In May 1993, Bahrain passed a law that decreed its sovereignty over the islands and reefs, some of which are only a mile from Qatar's coast. After Qatar filed a case with the ICJ in February 1994, Bahrain refused to acknowledge the Court's jurisdiction. In February 1995, both sides then requested Saudi mediation outside of the ICJ. Bahrain now states that it will accept the ICJ's jurisdiction if a related dispute over northwestern Qatar's Zubara region is included in the case. The ancestors of Bahrain's ruling family are buried in Zubara. (DJ)
- Jan. 26** Colombian rebels dynamite the country's 230,000-barrel-per-day Cano Limon-Covenas pipeline. The pipeline is bombed simultaneously in two locations 200 miles apart, resulting in an estimated spill of about 10,800 barrels of oil. The line is the primary transport route for crude oil production from the country's prolific Llanos basin fields to the Covenas export terminal on the Caribbean coast. So far, the line has been bombed eight times in 1996, 46 times in 1995, and around 400 times since its inauguration in 1986. In late 1995, the Colombian government released a report stating that oil companies have spent \$500 million since 1991 on security measures to protect oil infrastructure from guerilla attacks. (DJ)
- Jan. 29** In Nigeria, Shell workers stage a strike after the company announces plans to cut 10 percent of its 5,000-person workforce. Initial reports state that oil production remains unaffected. The strike also comes a day after Shell admits to importing weapons for Nigeria's police force. The company says that it provided handguns to police in order to provide adequate protection for its oil facilities. In other developments in Nigeria during the month, the son of Nigerian ruler General Sani Abacha is killed in a plane crash on January 17. The crash is followed several days later by bomb blasts at the Kano airport where Ibrahim Abacha's plane attempted to land. (DJ, WP)
- Jan. 30** Vice Admiral Scott Redd, commander of the U.S. Fifth Fleet based in the Persian Gulf, states that Iran test-fired a new anti-ship missile near the Strait of Hormuz on January 6. The missile reportedly has a range of 60 miles and is viewed as a threat to regional security by U.S. naval forces operating in the area. Oil tankers carry about 15 million barrels per day through the Strait. (DJ)
- Jan. 30** A Dubai-based oil tanker sinks approximately 1.5 miles off Iran's Lavan Island in the Persian Gulf. The 803-ton ship was *en route* from Dubai to the Iranian port at Bushehr when it suffered an unspecified "accident" and began taking on water. (DJ)
- Jan. 31** In Mexico's southeastern Tabasco region, about 1,000 protestors demand compensation for pollution caused by state-owned Pemex's oil operations. Demonstrators take control of 18 oil drilling rigs and prevent drilling and maintenance activity at 21 other rigs by blocking regional highways. Mexico has an estimated 4,700 oil wells nationwide and the country's oil production remains unaffected. (NYT)

- Jan. 31** In Yemen, France-based Total and U.S.-based Hunt Oil sign a memorandum of participation regarding a \$3-billion liquefied natural gas (LNG) export deal recently ratified by the Yemeni parliament. In September 1995, Total and Yemen's government agreed to build a 5-million-ton-per-year LNG plant. However, natural gas to supply the LNG plant would come from the Marib concession already awarded to a Hunt Oil-led consortium, which includes Exxon. After months of talks between the various companies, Total and the government agree to give the Hunt consortium a 38 percent stake in the project. (DJ)
- Feb. 5** Turkmenistan cuts natural gas shipments to Armenia by 20 percent, to 140 million cubic feet per day. The move comes after Armenia's arrears to Turkmenistan reach \$50 million. Since the 1988 outbreak of hostilities between Armenia and Azerbaijan, Armenia's gas supply has been disrupted frequently. The country currently receives its gas supplies through a Georgian pipeline and from Iran. (DJ)
- Feb. 5** Clashes between Nigeria and Cameroon over the disputed Bakassi Peninsula result in two deaths. The Bakassi Peninsula is a 600-square mile region bordering the two countries that contains oil and natural gas reserves. Nigeria claims that a pre-independence treaty places the Peninsula in its territory. Cameroon contends that Nigeria offered it the region after Cameroon refused to help Biafran rebels during Nigeria's 1967 civil war. More recently, Nigeria has accused Cameroon of siphoning off 130,000 barrels per day of oil from the region's producing fields. The International Court of Justice in The Hague is currently reviewing the case. (DJ)
- Feb. 9** Ecuador's state-owned oil company, Petroecuador, announces that it will offer nine exploration blocks in the country's eastern Amazon basin region called the Oriente. Despite transportation problems and environmental concerns, the Oriente region has been a focus of Ecuador's last two bidding rounds for exploration acreage. Petroecuador believes the region could hold between 100 million and 1 billion barrels of additional oil reserves, which could yield new production of at least 100,000 barrels per day between 2002 and 2004, depending on development timetables. (DJ)
- Feb. 10** Mexico's state-owned oil company, Petroleos Mexicanos (Pemex), announces that protests led by the Democratic Revolutionary Party in the Tabasco region have shut-in 28,000 barrels per day of oil production, resulting in cumulative losses of \$8.5 million during the past 13 days. Demonstrations have occurred at 61 sites in the Tabasco region, which accounts for about one-quarter of Mexico's oil production. About 1,000 protesters are demanding compensation for pollution caused by Pemex's oil operations in the region. In 1995, Mexico produced roughly 2.6 million barrels per day of crude oil. (DJ, DMN)
- Feb. 11** In the South China Sea, Philippine navy patrol boats forcibly seize a "pirate ship" which violates Philippine territorial waters. The vessel is stopped in the same region as two ships were three weeks earlier. Those ships were reported to be of a similar class as those used by the Chinese navy. The Philippines and China currently are involved in a territorial dispute over the South China Sea's Spratly Islands. In 1995, a Russian geological team estimated that the Spratly Islands contain up to 1 billion barrels of hydrocarbon reserves. (DJ)
- Feb. 12** Turkey and Turkmenistan sign a protocol to build a pipeline that could carry up to 350 billion cubic feet per day of Turkmen natural gas to European markets. Possible routes are either through Georgia or Iran. However, financing for the \$8-billion project still remains an issue. (DJ)
- Feb. 14** At the 62,000-barrel-per-day Talara refinery in northern Peru, over 2,000 employees of the state-owned oil company, Petroperu, end a 13-day strike protesting the company's planned privatization. As preparation for Petroperu's privatization, about 1,500 of the company's 5,500 employees recently were laid-off, with about 80 percent of those workers employed at the Talara refinery. Striking employees return to work after a judge issues an order rescinding the lay-off notices. (DJ, PON)
- Feb. 15** In Wales, a Liberian-flagged oil tanker carrying 900,000 barrels of light crude oil runs aground. Force 10 gale storms lead to evacuation of the tanker's 35-member crew. The tanker had been transporting crude from the North Sea to Texaco's refinery at Milford Haven Harbour on the Welsh coast. During the following week of salvage operations, the tanker spills an estimated 450,000 barrels of oil. (DJ, WSJ, WT)
- Feb. 15** Yemen accepts a French-brokered proposal to end the conflict between Yemen and Eritrea over Greater Hanish Island in the Red Sea. Press reports state that the French proposal would allow both countries to station troops on the disputed island. In December 1995, Yemen and Eritrea clashed for several days over Greater Hanish Island, which is strategically located in the Red Sea's Bab al-Mandab strait. (DJ)

- Feb. 16** In Algeria, U.S.-based ARCO signs a \$1.5-billion production sharing contract to conduct enhanced oil recovery work on the Rhourde el-Baguel oil field. Rhourde el-Baguel is Algeria's second largest oil field, containing 2.5 billion barrels of remaining reserves. ARCO plans to drill additional wells and introduce gas injection at the field in the hopes of raising the 25,000 barrels per day of current output to 125,000 barrels per day within 10 years. The deal is the latest in a series of large commitments by foreign oil companies to invest in Algeria's oil sector. (FT)
- Feb. 19** Mexican Energy Minister Jesus Reyes Heróles states that Pemex will not be privatized and that such action is still against the country's constitution. A week earlier at the Tula Hidalgo oil refinery, Mexican President Ernesto Zedillo had reiterated his support for selling part of the state-owned oil company. Due to changes in Mexican law in 1995, some of Pemex's operations, including petrochemicals, could be privatized. (NYT)
- Feb. 19** In New York, the United Nations and Iraq end almost two weeks of negotiations over Iraq's possible sale of \$1 billion of oil every 90 days for a 180-day trial period. Under U.N. Resolution 986, proceeds from the sale would be used for humanitarian purposes. Concurrent with the talks, Iraqi and Turkish officials meet to determine the status of the 1.6-million barrel-per-day Iraq-Turkey pipeline, through which a majority of the oil exports would flow. The U.N.-Iraq talks, which end without a decision, are scheduled to restart in March 1996. (NYT)
- Feb. 22** In Qatar, authorities arrest 60 army and police officers after a failed coup attempt to restore the deposed emir, Sheik Khalifa bin Hamad al-Thani. The Sheik is the father of the current emir, Sheik Hamad bin Khalifa al-Thani, who overthrew his father while he was vacationing in Switzerland in June 1995. Policies regarding Qatar's oil sector remained unchanged after the son's coup. (DJ)
- Feb. 22** In the Caucasus, suspected Chechen rebels blow up a natural gas pipeline near the town of Shelkovskaya, cutting off Russian gas shipments to the region. Simultaneously, a separate attack on the pipeline occurs in neighboring Dagestan. The pipeline carries gas from Stavropol to Makhachkala. The pipeline attacks are followed by the region's heaviest fighting since Russian forces invaded Chechnya in December 1994. Historically, Chechnya has been Azerbaijan's primary route for its oil exports to Russia. (DJ, WP)
- Feb. 23** Morocco begins privatizing its 129,000-barrel-per-day Société Marocaine de l'Industrie du Raffinage (Samir) oil refinery by listing the refinery on the country's stock exchange. A projected 25 percent of the Samir refinery's shares will be sold in what is expected to be the country's largest privatization to date. The Samir refinery was built in 1962 and satisfies about 75 percent of Morocco's domestic demand for refined products. In another development, Mobil freezes investments at the 225 service stations it operates in Morocco. The company makes the move after stating that the government's control over margins has adversely affected its profitability. Mobil had planned to double its current investment in Morocco to \$5 million. (DJ, FT, WT)
- Feb. 26** In Congo, the Angolan government and the Front for the Liberation of the Enclave of Cabinda - Renovado (FLEC-R) agree to extend their present truce by another 120 days. Cabinda is the source of over 50 percent of Angola's oil production, which reached almost 700,000 barrels per day at the end of 1995. The enclave is separated from the Angolan mainland by a 16-mile wide coastal strip of Zairian territory. Various FLEC factions have fought for Cabindan autonomy since Angola's 1975 independence from Portugal. Since most of Cabinda's oil fields are located offshore, however, oil production has remained relatively unscathed. (DJ)
- Feb. 27** Russian First Deputy Prime Minister Vladimir Kadannikov states that the Russian duty on oil exports will be reduced shortly from ECU 20 per ton to ECU 14 per ton, before its elimination in July 1996. However, the government will raise excise taxes on oil producers and institute a new pipeline levy to compensate for any loss in revenue to the government. (DJ)
- Feb. 27** In Nigeria, an explosion occurs on a pipeline carrying refined products to a depot about 40 miles from Lagos in the southwestern area of the country. Local repair workers notice that digging was evident around the pipeline, leading officials to suspect sabotage. (DJ)
- Feb. 27** The Azerbaijan International Operating Company (AIOC) approves a \$231-million export pipeline through Georgia for part of the initial oil production from the consortium's new Caspian Sea oil fields. The AIOC is a consortium of international oil companies which is developing the Azeri, Chirag, and Guneshli oil fields off Azerbaijan in the Caspian Sea. In late 1995, the consortium also approved the use of existing Russian pipelines to export part of the 70,000 barrels per day of new oil production. Even though Turkey and Russia have lobbied aggressively for pipeline routes

through their respective countries, no decision has been made yet on the export route for later oil production, which could reach 700,000 barrels per day by 2005. (DJ, FT)

- Feb. 28** Oil industry sources report that Kuwait National Petroleum Corporation plans to temporarily shut down two of the country's three refineries for maintenance activities. The 415,000-barrel-per-day Mina al-Ahmadi refinery will be closed in mid-March for 40 days. Subsequently, the 145,000 barrels per day Shuaiba refinery will be shut for a similar time period beginning in mid-May 1996. The refinery closures are expected to result in a temporary shortage of refined products, especially from the Mina al-Ahmadi refinery. Kuwait plans to restore the Shuaiba refinery's pre-Gulf War operating capacity of 195,000 barrels per day by 1997. (DJ)
- Feb. 29** Canada-based MacDonald Oil Exploration announces that it will sign an exploration agreement covering a 6,000-square mile area on Cuba's southeast coast. The deal comes amidst increased Canadian concern over possible U.S. sanctions against non-U.S. companies that conduct business in Cuba. In response to Cuba's downing of two U.S. civilian aircraft, the U.S. government is considering punitive measures which might allow litigation by U.S. citizens and corporations against foreign companies operating in Cuba as well as denying U.S. entry visas to foreign executives of those companies. (DJ, WP)
- Mar. 3** In Peru, negotiations between state-owned Petroperu and a Shell/Mobil consortium are extended until April 26. Since July 1995, the companies have been negotiating development terms for the Amazon Basin's Camisea gas field, which is believed to hold an estimated 11 trillion cubic feet of non-associated gas and 700 million barrels of condensate. The original deadline for the conclusion of negotiations was December 1995, but was later extended until March 1996. The Camisea development could involve connecting the field to the Bolivia-Brazil gas export pipeline now under construction. However, present talks are rumored to have stalled over potential tax breaks for Shell. Chevron and Elf Aquitaine also are interested in developing the Camisea field. (PON)
- Mar. 6** Afghan President Burhanuddin Rabbani visits Turkmenistan to discuss two proposed pipelines that could export up to 1 million barrels per day of crude oil and 2 billion cubic feet per day of natural gas from fields in southern Turkmenistan to Pakistan. The project is being evaluated by a venture formed by Unocal (40percent) and Saudi Arabia's Delta Oil (60percent). The pipeline would be supplied with gas from the giant Dauletabad field, which holds a probable 45 trillion cubic feet of Turkmenistan's estimated 113 trillion cubic feet of reserves. The proposed pipelines are anticipated to run through territory controlled by several of Afghanistan's 13 rebel factions, which have been fighting since the Soviet withdrawal in 1989. (DJ, FT)
- Mar. 7** In offshore Nigeria, Shell makes a potentially large discovery with its Bongo-1 well in over 3,000 feet of water. The company estimates oil reserves at up to 500 million barrels. However, extensive appraisal drilling will be necessary before any accurate reserve estimates are compiled. Shell accounts for about half of Nigeria's oil production, which averaged roughly 1.9 million barrels per day in 1995. (FT, PIW)
- Mar. 7** The Caspian Pipeline Consortium agrees to a reorganization reducing Oman Oil Company's stake in the venture from 25 percent to 10 percent. The CPC consortium is dominated by the Russian (25percent) and Kazak (25percent) governments and plans to begin work shortly on a \$1.5-billion pipeline to export crude oil from Chevron's Tengiz field to the Black Sea. The project has been stalled because of financing difficulties. In 1995, another venture comprising Chevron, Mobil, British Gas, and Agip developed an alternative pipeline export scheme. Tengiz output currently is limited to less than 80,000 barrels per day because of insufficient space on Russia's Transneft pipeline network. (PON)
- Mar. 18** Iran rejects a recent Gulf Cooperation Council proposal stating that Iran's dispute with the United Arab Emirates (UAE) over the Abu Musa and Tunb Islands should be settled by the International Court of Justice. Iran forcibly seized the two islands from the UAE in the early 1970s, although joint sovereignty was maintained until 1994. Shortly after Iran's statement, the United States announces that, in April 1996, it will conduct its first military joint maneuvers with the UAE. (DJ)
- Mar. 18** In Taiwan, Conoco and state-owned Chinese Petroleum Corporation (CPC) sign a joint venture deal in which Conoco will invest at least \$65 million to drill 13 wells over the next five and a half years. Conoco has a 75 percent stake in the venture, but CPC has the future right to increase its stake to 50 percent. CPC will purchase all oil and gas produced from the venture over the next 20 years. The agreement comes amidst Taiwan's presidential elections and Chinese military maneuvers near offshore acreage in which development is planned. (FT, OGJ)

- Mar. 18** In New York, the United Nations (U.N.) and Iraq end a second round of negotiations over Iraq's possible sale of \$1 billion of oil every 90 days for a 180-day trial period. Under U.N. Resolution 986, proceeds from the sale would be used for humanitarian purposes, as well as to pay the costs of U.N. monitoring operations in Iraq and to pay war reparations to the Kuwaiti people. While both sides have reached agreement on several key issues, the details concerning distribution of aid to Kurds in northern Iraq remains unresolved. Due in part to market uncertainty surrounding the talks, oil prices rise to their highest levels since the 1991 Gulf War. The U.N.-Iraq talks are scheduled to restart on April 8. (DJ, NYT)
- Mar. 19** After internal disputes over the extent of Israeli government involvement, Prime Minister Shimon Peres temporarily freezes the pipeline project to export natural gas from Egypt to Israel. At present, the Israeli government is divided over whether to take up to a 30 percent stake in the project. The proposed \$500-million pipeline will carry 250 million cubic feet per day of Egyptian natural gas to Israel, a similar amount to Jordan, and 50 million cubic feet per day to the Palestinian-controlled Gaza Strip. Amoco and Agip hold the concessions that would supply gas for the Egyptian-Israeli pipeline. (DJ)
- Mar. 20** The state-owned oil company of Azerbaijan (SOCAR) cedes a quarter of its 40 percent stake in the offshore Shakh Deniz field development to Elf Aquitaine (Elf). Iran's NIOC as well as Russia's Yukos, Sidanko, and Rosneft also are seeking stakes in the \$4 billion project. Shakh Deniz contains possible reserves of 700 million barrels of oil and up to 14 trillion cubic feet of natural gas. In addition to SOCAR and Elf, current partners in the project are BP, Statoil, and Turkey's TPAO. (PON, DJ)
- Mar. 20** Turkmen President Sapamurat Niyazov and Georgian President Eduard Shevardnadze meet in Tbilisi to discuss energy cooperation between the two countries. The meeting focuses on allowing a proposed Turkmen gas export pipeline to cross Georgian territory. The line would carry up to 1.5 million cubic feet per day of natural gas to Turkey and Western Europe by 2020. Also at the meeting, President Niyazov agrees to write-off about one-fifth of Georgia's current \$480 million debt for Turkmen gas it already has received. (PON, DJ)
- Mar. 21** Greek Foreign Minister Theodoros Pangalos states in an Izvestia newspaper article that Russia, Greece, and Bulgaria are considering the construction of a \$2.5-billion oil pipeline which would bypass Turkey's Bosphorus Strait. The proposed pipeline would run from the Bulgarian city of Burgas to Alexandroupolis in Greece. If built, the Bulgarian-Greek pipeline could compete against a proposed plan to export new Caspian Sea oil production through a proposed Turkish pipeline. (DJ)
- Mar. 22** In April 1996 Nigeria plans to implement two new procedures to curtail corruption with respect to oil export revenues. The first measure will have "internationally recognized" agents inspect all crude oil exports. The second measure involves announcing oil export earnings on a monthly, rather than yearly, basis. A government-sponsored study released in 1995 stated that the government could not account for about \$12 billion worth of oil export revenues between 1988 and 1994. (DJ)
- Mar. 22** Kenyan Minister for Finance Musalia Mudavadi states to World Bank representatives that his government has "initiated the process" of privatizing the country's oil industry. Possible privatizations would include Kenya Petroleum Refineries Limited and Kenya Pipeline Corporation. The former owns a 50 percent stake in the 90,000-barrel-per-day Mombasa refinery. The latter has so far invested an estimated \$400 million in the construction of a liquefied petroleum gas import pipeline which would have an extension to Kampala, Uganda. (DJ)
- Mar. 24** Kuwaiti Oil Minister Abdul Mohsen al-Mudej states that his government will sell off 30 Kuwait National Petroleum Corporation (KNPC)-owned gasoline stations. The move is part of the Kuwaiti government's efforts to encourage private involvement in the country's oil sector. KNPC currently owns about 90 retail gasoline stations in Kuwait. (DJ)
- Mar. 25** In Bolivia, employees of the state-owned oil company, Yacimientos Petroliferos Fiscales Bolivianos (YPFB), begin a strike in protest of the government's planned privatization of the country's "strategic industries." In anticipation of the strike, army troops and police are stationed at refineries, pipelines, and gas distribution facilities in order to ensure that oil and gas output remained unaffected. No initial disruptions in production are reported. Bolivian President Gonzalo Sanchez de Lozada currently is meeting with opposition leaders to reach an agreement on the country's new hydrocarbon law. YPFB workers are demanding one year of severance pay for every year of employment with the company. (PON, DJ)

- Mar. 26** Jordanian Energy and Mineral Resources Minister Hashem Dabbas states that Jordan currently is negotiating with three oil companies to build a \$2-billion, 250,000-barrel-per-day refinery at Aqaba on the Red Sea. Under optimal conditions, the refinery could be operational by 2000. Jordan currently has a 100,000-barrel-per-day refinery at Zarqa, which runs at around 60 percent of capacity. The country imports its 75,000-barrel-per-day crude oil requirement from Iraq under a U.N.-approved plan. (DJ)
- Mar. 26** Arco and Lukoil, one of Russia's largest independent oil companies, form a joint venture to develop oil and gas reserves in Russia and other former Soviet republics. Total investment could reach \$3 billion over a three-year period. Arco will contribute almost all of the projected capital needs, even though it has only a 54 percent stake in the venture. In September 1995, Arco purchased \$250 million worth of convertible bonds in Lukoil, giving it a 6 percent stake in the Russian company. (FT, WSJ)
- Mar. 29** The Pakistani government officially agrees to allow a proposed Iranian natural gas pipeline to run over Pakistani territory on its way to India. The \$3-billion pipeline will carry an estimated 1.6 billion cubic feet from Iran's South Pars gas field to markets in Karachi. Negotiations concerning a possible extension to western India recently were stalled over whether the pipeline route would run through offshore or onshore Pakistani territory. Recent discussions between the Indian and Pakistani governments also focused on the location of compressor stations. (DJ)
- Mar. 28** In the Philippines, President Ramos signs legislation ending 25 years of government control over petroleum product prices. The new deregulation law implements a 4 percent tariff on sales of refined products that will be eliminated by 2004. The law also encourages new investment in the Philippine refining sector, which is dominated by three large refining companies. (DJ)
- Apr. 1** In Australia, a federal court upholds a 1994 decision regarding oil exploration permits in the Timor Gap between Australia and Indonesia. Prior to the signing of the Timor Gap Zone of Cooperation Treaty in 1989, Australia-based WMC held a permit for exploration in what was then Australian territorial waters. The court's rejection of the recent government appeal now clears the way for three other permit holders to file monetary claims for compensation from the government. WMC's claim is estimated at around \$120 million. (PON)
- Apr. 3** U.S.-based Pennzoil sells half of its roughly 10 percent stake in a large offshore Caspian Sea oil field development project. The \$8-billion development of the offshore Azeri, Chirag, and Guneshli fields is being undertaken by a consortium of Western companies led by Amoco and British Petroleum. Pennzoil's partial stake is bought by Japan-based Itochu Exploration, which will now be required to invest approximately \$400 million in future field development costs. The three Caspian Sea fields contain estimated reserves of up to 5 billion barrels of oil and 2.5 trillion cubic feet of natural gas. Pennzoil also retains a 30 percent interest in the nearby 1-billion-barrel Karabakh oil field development. (PON)
- Apr. 4** Russia-based Lukoil purchases a 10 percent stake in the Caspian Sea's Shakh Deniz oil field development. Lukoil's share leaves Azerbaijan's state-owned oil company, SOCAR, with a 20 percent stake in the project. The field is estimated to contain up to 700 million barrels of oil and 14 trillion cubic feet of natural gas. The development is being undertaken by British Petroleum/Statoil (45 percent), SOCAR (20 percent), Turkey's TPAO (15 percent), and Elf Aquitaine (10 percent). (PON)
- Apr. 4** U.S. based Enron Corporation files a lawsuit in Texas against the owners of the United Kingdom's Central Area Transmission System (CATS). Enron, which signed a "take-or-pay" contract for 240 million cubic feet per day of natural gas from the offshore J-Block area fields, has refused to accept or pay for gas shipments since September 1995. Subsequently, Phillips Petroleum, an owner of CATS, has been reinjecting the gas into the J-Block fields in order to boost condensate production. Enron argues that the CATS pipeline does not meet the standards necessary to fulfill the contract and that reinjection could jeopardize reservoir integrity and future gas shipments. Due to recent gas market deregulation in the United Kingdom, gas prices have fallen below those to which Enron agreed to pay when it signed its take-or-pay contract with CATS. (FT, PON)
- Apr. 4** The Ecuadorean government awards exploration rights to U.S.-based ARCO and two Argentinean companies. The award gives ARCO rights to the block 24 concession in Ecuador's Amazon basin. Although Ecuador has raised its oil production above 390,000 barrels per day output is capped because of limited pipeline access from the Amazonian Oriente region to the Esmeraldas export terminal on the Pacific Ocean. This month, ARCO agreed to construct an

80,000-barrel-per-day pipeline to connect Oriente fields to the 350,000-barrel-per-day Trans-Ecuadorean pipeline at Baeza. (DJ, PON)

- Apr. 6** According to press reports in Yemen, government sources state that the country's oil production will reach 400,000 barrels per day by 1997. The projected 40,000 barrel per day increase over current levels will come from a new discovery in Hadramawt in southern Yemen as well as from new production at the East Shabwah field near Sanaa. The Hadramawt area's Jannah block is expected to yield about 30,000 barrels per day from the four area fields. (DJ)
- Apr. 9** In the South China Sea, Indonesia sends eight warships and a helicopter to Natuna Island after the captain of a private boat is allegedly shot and killed by unidentified gunmen. Indonesia's Pertamina and Exxon currently are undertaking a \$35-billion gas field development in the area, which could include construction of a liquefied natural gas plant on Natuna Island. The offshore Natuna gas field is estimated to have approximately 45 trillion cubic feet of recoverable reserves. (DJ)
- Apr. 12** In Vietnam, U.S.-based Conoco is awarded exploration rights to offshore blocks 133 and 134, which are located approximately 200 miles off the country's southeastern coast. The two tracts overlap with Chinese territorial claims in the South China Sea and acreage which previously was awarded by China to U.S.-based Crestone Energy in May 1992. Crestone has conducted limited exploration in its Wan'an Bei 21 concession. After the Vietnamese award, a Chinese foreign ministry spokesman states that "China has indisputable sovereignty in this area of the South China Sea." (PON, FT, DJ)
- Apr. 15** The Vietnamese government approves the creation of a 100,000-acre industrial park at Dung Quat on Vietnam's central coast. The facility will be the site of the country's first refinery, even though Vietnam's crude oil reserves and primary markets for refined products are located in the south. After government insistence in late 1995 that the refinery be located at Dung Quat, Total pulled out of the \$1-billion project and stated that a refinery at that location was not financially viable. Subsequently, Conoco, Malaysia's Petronas, and South Korea's Lucky Goldstar agreed to continue with the 125,000-barrel-per-day project. (DJ)
- Apr. 16** The Colombian army is put on high alert after rebels from the leftist guerilla organization, Revolutionary Armed Forces of Colombia, allegedly attack a six-truck military convoy near the southern town of Puerres. The attack results in the deaths of 31 soldiers who were assigned to guard the Trans-Andean pipeline. The pipeline transports about 40,000 barrels per day of Ecuadorean crude oil to the Colombian terminal at Tumaco on the Pacific Ocean. (DJ)
- Apr. 17** The Iranian government-run Islamic Republic News Agency states that Iran will soon receive its first shipment of five new 300,000-Dwt oil tankers from South Korea's Daewoo. The deliveries will boost state-owned National Iranian Tanker Company's (NITC) fleet capacity to 3.8 million tons. The tanker acquisitions have become especially important to Iran since the mid-1995 imposition of the unilateral U.S. embargo of Iranian oil exports. In the second half of 1995, FOB liftings of Iranian crude at domestic terminals fell dramatically, requiring NITC to increase its capabilities to transport Iranian crude oil to spot markets. (DJ)
- Apr. 17** In Congo, Elf Aquitaine states that its offshore N'Kossa field development has fallen three months behind schedule. Production of 50,000 barrels per day from the 400 million-barrel field will be pushed to July after a delay in the arrival of a floating production platform. Output is expected to reach 100,000 barrels per day within two years after field start-up. By 1998, Congo's oil production is expected to rise from 175,000 barrels per day at present to around 260,000 barrels per day. Additional production will come from Agip's offshore Kitina field. The N'Kossa field is being developed by Elf (51 percent), Chevron (30 percent), state-owned Hydro-Congo (15 percent), and South Africa's Engen (4 percent). (PON)
- Apr. 18** Mobil agrees to purchase a 25 percent stake from the Kazak government in the giant Tengizchevroil consortium. The sale decreases the Kazak government's share in the venture to 25 percent and leaves Chevron's 50 percent stake unchanged. Tengizchevroil's development of the 6.6-billion-barrel Tengiz oil field is expected to cost close to \$20 billion. Chevron has invested about \$700 million in the field so far, which now produces about 80,000 barrels per day. Output has been constrained up until now because of lack of space on Russia's Transneft pipeline network. (FT, WP)
- Apr. 18** Press reports state that the Laotian government has signed a memorandum of understanding with an unnamed U.S. company regarding construction of an oil refinery in Borikhamxay province east of Vientiane. The proposed refinery would be supplied via a crude oil pipeline from Vietnam. As of early 1996, several Western oil companies, including

Hunt Oil, were conducting exploration activities in Laos. (DJ)

- Apr. 18** The United Arab Emirates (UAE) criticizes Iran for starting up a power plant on Greater Tunb Island, which is located strategically in the Persian Gulf's Strait of Hormuz. Iran seized control of the Greater and Lesser Tunb islands in the early 1970s. Joint control over nearby Abu Musa was maintained until 1994, at which time Iran forcibly took the island. The UAE has recently called for International Court of Justice resolution of the dispute. However, Iran does not recognize the Court's authority. (DJ)
- Apr. 19** Kenyan Minister of State Jackson Kalweo states that his country would like to have the International Court of Justice settle a territorial dispute with Sudan over a triangular region of desert and swamps around the town of Elimi. The 2,400-square mile Elimi region, which is recognized internationally as part of Sudan, is thought by Kenyan officials to hold an unspecified amount of oil. (DJ)
- Apr. 20** At an oil refinery in the central Russian city of Ryazan, an underground oil tank explodes, killing two workers who were conducting maintenance work on the structure. The blast occurs after the workers penetrate the top of the 350,000-cubic-foot tank and cause gas vapors to ignite. (DJ)
- Apr. 24** In New York, the United Nations and Iraq end a third round of negotiations over Iraq's possible sale of \$1 billion of oil every 90 days for a 180-day trial period. Under U.N. Resolution 986, proceeds from the sale would be used for humanitarian purposes. While both sides have reached agreement on most of the key issues, chief Iraqi negotiator Abdul Amir al-Anbari says that the United States and the United Kingdom have fundamentally altered the text of a proposed agreement which he had received from the United Nations early in the third round. Al-Anbari states that the changes have postponed any possible deal. The U.N.-Iraq talks are scheduled to restart on May 10. (DJ)
- Apr. 25** Clashes between Nigeria and Cameroon over the disputed Bakassi Peninsula erupt for the second time since February 1996. Both countries claim the other side started the latest confrontation. No casualties are reported. The Bakassi Peninsula is a 600-square mile region bordering the two countries that contains oil and natural gas reserves. Nigeria claims that a pre-independence treaty places the Peninsula in its territory. Cameroon contends that Nigeria offered it the region after Cameroon refused to help Biafran rebels during Nigeria's 1967 civil war. More recently, Nigeria has accused Cameroon of siphoning off 130,000 barrels per day of oil from the region's producing fields. The International Court of Justice in The Hague is currently reviewing the case. (DJ)
- Apr. 27** The Caspian Pipeline Consortium (CPC) agrees to build a 900-mile pipeline that could carry oil produced at the Tengiz oil field to export terminals on the Black Sea. In early 1996, CPC was reorganized, resulting in a decreased stake for Oman Oil Company and an option for Chevron to acquire a 15 percent share in the pipeline. The consortium includes the governments of Kazakhstan, Russia, and Oman as well as eight oil companies. The \$1.2 billion pipeline deal will extend Russia's existing pipeline system from Tikhoretsk to the Novorossiisk terminal on the Black Sea. Second phase development will include a new line from Tengiz to Tikhoretsk. (FT, DJ, PON, OGJ)
- Apr. 29** In Congo, the government announces that bidding documents will be issued shortly for the privatization of Hydrocarbures de Congo (Hydro-Congo) and Congolaise de Raffinage (CORAF). Although Hydro-Congo was previously active in upstream exploration and production, its activities recently were limited by a lack of financial resources to the distribution of petroleum products. CORAF is the state-owned refining company. The privatizations are expected to spur foreign investment in the country's ailing downstream sector and allow for adequate processing of increased domestic oil output. In 1995, Congo produced about 175,000 barrels per day. Oil production is expected to rise to around 260,000 barrels per day by 1998 after Elf's N'Kossa and Agip's Kitina fields come online. (DJ)
- Apr. 30** In the United States, President Clinton approves the sale of \$227 million of crude oil from the Strategic Petroleum Reserve. At current oil prices, roughly 12 million barrels would be sold. The Clinton Administration hopes that the sale will lower gasoline prices in the United States, which are at their highest levels in five years. (WSJ)
- May 1** Bolivian President Gonzalo Sanchez de Lozada signs a new hydrocarbon law allowing for the privatization of state-owned Yacimientos Petroliferos de Fiscales Bolivianos (YPFB). YPFB is one of six large state-owned companies that are undergoing privatization. Fifty-two foreign companies have pre-qualified to bid for YPFB's exploration, transportation, and product marketing operations. YPFB will retain control of three domestic oil refineries and all domestic pipelines. Bolivia currently is involved in a \$1.5-billion export pipeline project to carry natural gas to Brazil. A number of foreign companies, including Enron and Tenneco, are building the privately-financed line. (DJ, WSJ)

- May 3** Following French diplomatic initiatives, Yemen and Eritrea agree to form an arbitration panel to solve their territorial dispute over three islands located 100 miles north of the Red Sea's Bab al-Mandab Strait. In December 1995, the two countries fought briefly over control of Greater Hanish Island, resulting in twelve deaths. Eritrea now controls Greater Hanish Island, while Yemeni forces hold Lesser Hanish and Zugar Islands. All of the islands lie astride major oil shipping routes as well as near offshore oil exploration acreage held by foreign companies, including Houston-based Anadarko Petroleum. (DJ)
- May 4** Eight hundred Norwegian oil workers stage a strike in sympathy with a similar month-long action by a construction workers' union demanding revised contract laws. The strike by the Federation of Trade Unions of Oil Workers' (OFS) cuts 1 million barrels per day of oil production from the 190,000-barrel-per-day Statfjord B, 320,000-barrel-per-day Statfjord C, 150,000-barrel-per-day Gullfaks A, 150,000-barrel-per-day Gullfaks C, and the smaller Ula, Heimdal, and Oseberg C fields. The shut-in amounts to about one-third of Norway's oil output. Subsequently, Statoil, a major Norwegian oil company, declares *force majeure* on one cargo of crude oil deliveries. The strike ends after six-days due to lack of unanimity among OFS members. (DJ, PON)
- May 10** In Vietnam, Royal Dutch/Shell relinquishes its Block 10 concession in the Nam Con Son basin off the country's southeastern coast. Shell makes the decision after drilling four unsuccessful exploration wells on the acreage, which was long-thought to hold promising potential. The move is made amidst the Vietnamese government's rejection of Australia-based BHP's efforts to renegotiate the terms for its Dai Hung oil field in Block 5-1. BHP sought a revised contract after appraisal drilling reduced Dai Hung's estimated reserves from 500 million to 200 million barrels. Due to unexpectedly complex geology, Dai Hung's production since its October 1994 start-up has fallen from 35,000 barrels per day to 12,000 barrels per day. (FT)
- May 11** The Vietnamese government states its intention to build a second 120,000-barrel-per-day refinery in Thanh Hoa province, roughly 75 miles south of Hanoi. Vietnam is planning to build its first 120,000-barrel-per-day refinery at Dung Quat on the country's central coast. Foreign companies such as France-based Total have criticized the government's decision to build the two new refineries far away from the country's crude oil reserves and main product markets in the south. A consortium including Conoco is developing plans to build the first refinery, which could become operational by 2000. The government hopes to finish the second refinery by 2002. (DJ)
- May 11** Kazakhstan and Iran sign an agreement in which Kazakhstan will ship up to 80,000 barrels per day of crude oil from the Tengiz oil field in exchange for a comparable amount of Iranian crude oil supplied at the Kharg Island oil terminal in the Persian Gulf. It is unknown how U.S. sanctions against Iran will impact on the agreement, which involves U.S.-based Chevron. In March 1996, output at the Chevron-operated Tengiz field reached 100,000 barrels per day, up dramatically from the 50,000-60,000 barrels per day which the field had been limited to prior to a recent export pipeline agreement with Russia. Production is slated to reach 130,000 barrels per day by the end of 1996. Peak output from the 6-billion barrel field could reach more than 700,000 barrels per day by 2010. (DJ)
- May 14** The Peruvian government and a Shell/Mobil consortium sign a \$2.8-billion deal to develop the Camisea natural gas field. The Camisea field contains estimated reserves of 11 trillion cubic feet of natural gas and 700 million barrels of condensate. Development will include construction of a 600-megawatt gas-fired power plant and 373 miles of oil and gas pipelines to link the Amazonian field to the coastal capital of Lima. Construction of other gas-fired power stations is possible, as is a link to the proposed gas export pipeline between Bolivia and Brazil. Concurrent with the agreement, a car bomb explodes at a Shell office building in Lima. The Peruvian government blames Maoist Sendero Luminoso rebels opposing foreign involvement in Peru's natural resource development for the attack. (PON, DJ, WSJ)
- May 14** Iran signs an agreement to acquire a 10 percent stake in the Caspian Sea's Shakh Deniz oil field from Azerbaijan's state-owned oil company SOCAR. However, the Iranian share will be taken by OEIC, a 60 percent privately-owned engineering and construction company, rather than by state-owned National Iranian Oil Company. In April 1996, Russia-based Lukoil purchased from SOCAR a 10 percent stake in Shakh Deniz, which contains up to 700 million barrels of oil and 14 trillion cubic feet of natural gas. The new development consortium now comprises Iran's OEIC (10 percent), Lukoil (10 percent), British Petroleum/Statoil (45 percent), SOCAR (10 percent), Turkey's TPAO (15 percent), and Elf Aquitaine (10 percent). (PON)
- May 15** In offshore Myanmar, U.S.-based ARCO is awarded the block M-7 concession, which lies adjacent to Total's and Unocal's \$1.1-billion Yadana gas field development. The Yadana field contains estimated gas reserves of 5.7 trillion cubic feet. Total and Unocal currently are planning to construct a pipeline to supply 525 million cubic feet per day of

Yadana gas to Thailand, starting in 1998. In nearby acreage, a Texaco consortium is negotiating a similar gas sales contract with Thailand for the 1.5-trillion-cubic-foot Yetagun field. (PON)

May 16 Chevron and state-owned China National Offshore Oil Corporation sign a production sharing contract for promising exploration acreage in the South China Sea. Chevron's Contract Area 63/15 lies south of Hainan Island off the Vietnamese coast. The concession also is adjacent to Arco's large Yacheng 13-1 gas field, which in January 1996 began supplying natural gas to Hong Kong and Mainland China via pipeline. (PON, DJ, OGJ)

May 16 In Kazakhstan, Mobil acquires a \$1.1-billion, 25 percent stake in the Tengiz field development from the Kazak government. Chevron (50 percent), Mobil (25 percent), and the Kazak government (25 percent) are now the parties involved in the project. Chevron has spent almost \$1 billion so far in field development work, which has suffered delays because of difficulties finding a solution to the problem of export routes. Chevron is expected to spend another \$750 million for its share of a new export pipeline, which will run to Russia's Novorossiisk oil terminal on the Black Sea. Mobil's commitment will require an initial investment of \$500 million, with the balance of \$600 million due in installments by 2000. (WSJ, DJ)

May 20 In New York, the United Nations (U.N.) and Iraq agree to U.N. Resolution 986, which provides Iraq with the opportunity to sell \$1 billion of oil every 90 days for a 180-day trial period. Under the resolution, proceeds from the sale would be used for humanitarian purposes. The agreement comes following months of negotiations. Iraqi oil exports are expected to begin by the fall of 1996, after a pumping station on the Iraq-Turkey pipeline is repaired and U.N. monitoring and aid distribution facilities are put in place. Shortly after the agreement, the White House announces its decision to allow U.S. oil companies to purchase Iraqi oil exports. (FT, PON, WSJ)

May 22 In Cabinda, Front for the Liberation of the Enclave of Cabinda - Armed Forces of Cabinda (FLEC-FAC) rebels fight with Angolan government troops only a week after FLEC-FAC signed a cease-fire agreement with the government. Since 1975, FLEC-FAC's 3,000-man army has fought the Angolan government for the 2,880-square mile Cabinda province, which is located on the coast between Zaire and Congo. Cabinda's offshore oil fields are run primarily by Chevron and account for over half of Angola's 700,000-barrel-per-day oil production. FLEC-FAC's struggle is separate from Jonas Savimbi's UNITA conflict. In 1995, UNITA and the government signed a peace accord and presently are demobilizing their armies. (DJ)

May 22 In Equatorial Guinea, Planning Minister Antonio Fernando Nve Ngu states that oil production from Mobil's offshore Zafiro field will begin by August 1996, only 18 months after the field's discovery. A floating production, storage, and offloading vessel will be used in a fast-track development program, which is slated to yield 40,000 barrels per day initially and 80,000 barrels per day by 1998. The Zafiro field is a boon for the country's economy, which is one of the poorest in Africa. (DJ, OGJ)

May 23 State-owned Petroleum Authority of Thailand (PTT) signs agreements to increase its purchases of gas from foreign-operated Gulf of Thailand gas fields. In the two separate deals, PTT agrees to buy 330 million cubic feet per day of gas from Unocal's 1-trillion-cubic-foot Pailin field by 2001 and 550 million cubic feet per day of gas from Total's 3.3-trillion-cubic-foot Bongkot field by mid-1998. Thailand's domestic gas demand is estimated at 1 billion cubic feet per day and is projected to double over the next five years. To meet its increased requirements, Thailand also is planning to import gas from Malaysia, Myanmar, and Indonesia. (PON)

May 28 Following a May 7 ambush of Nigerian troops by Cameroonian army forces, Nigeria and Cameroon agree to allow a U.N. mission to travel to the disputed Bakassi Peninsula. Clashes between Nigeria and Cameroon have erupted several times on the Peninsula since February 1996. The Bakassi Peninsula is a 600-square mile region bordering the two countries. It contains oil and natural gas reserves and is near Shell production facilities in southeastern Nigeria. Nigeria claims that an 1858 treaty places the Peninsula in its territory. Cameroon contends that Nigeria offered it the region after Cameroon refused to help Biafran rebels during Nigeria's 1967 civil war. More recently, Nigeria has accused Cameroon of siphoning off 130,000 barrels per day of oil from the region's producing fields. The International Court of Justice in The Hague also is reviewing the case. (DJ)

May 29 In Vietnam, Unocal signs a contract for the Block B concession off the country's southwestern coast. The move follows Conoco's acquisition last month of offshore acreage claimed by both Vietnam and China. Unocal's latest acquisition is the first by a foreign company in Vietnam's territory in the Gulf of Thailand. The company believes that natural gas

may be present in Block B. Any sizable gas discoveries by Unocal likely would be exported to Thailand via Unocal's other existing gas processing complexes in the Gulf of Thailand. (FT)

- May 29** In Russia, Mobil and Texaco sign a production sharing agreement (PSA) for the Sakhalin III venture. Located offshore Sakhalin Island in Russia's Far East, Sakhalin III is one of three large oil and gas developments being planned by foreign oil companies. In the deal, both companies agree to spend \$150 million in exploration activities over a six-year period. Since last year, many foreign oil companies have been waiting for revisions to Russia's new PSA law, which is widely viewed as not offering adequate legal protection for foreign investment in the country's oil and gas sectors. (DJ, PON)
- June 6** Representatives of the Organization of Petroleum Exporting Countries (OPEC) convene in Vienna. Overproduction by member countries, Gabon's departure from the organization, and Iraq's anticipated oil exports under U.N. Resolution 986 are the major issues discussed at the session. Iraq's production quota is raised by 800,000 barrels per day to 1.2 million barrels per day. Other member's production quotas remain unchanged, except for Gabon, which officially leaves OPEC as of January 1, 1995. (DJ, PON, WT)
- June 7** In Vietnam, Australia-based Anzoil announces the discovery of a potential 900-billion-cubic-foot natural gas field located onshore about 60 miles southeast of Hanoi. The find is unique because very few oil and gas exploration efforts have surveyed Vietnam's onshore or northern areas. The only other known onshore oil or gas field in Vietnam is the small 50-billion-cubic-foot Tien Hai gas field developed in the 1970s. It now supplies local industrial customers with about 10 million cubic feet per day of gas. (FT, DJ)
- June 11** Exxon states that it will soon begin work on its \$15-billion Sakhalin I oil and natural gas development in Russia's Far East. The Sakhalin I project will develop an estimated 5 billion barrels of oil and 15 trillion cubic feet of gas located in three offshore hydrocarbon fields. The \$300 million appraisal program will include drilling one exploration well and conducting a 3-D seismic survey. The U.S. company says that it will start working despite ongoing differences with the Russian government over the country's new production sharing law, which is widely viewed as not offering adequate legal protection for foreign investment in the country's oil and gas sectors. (FT)
- June 14** In Manila, the Philippine government announces that full deregulation of the downstream oil sector will occur by March 1997. This deregulation program calls for a complete phaseout of the Oil Price Buffer Fund, which has been used to protect consumers from world oil price fluctuations. Past increases in refined product prices, such as the 13 percent hike in February 1996, have resulted in physical threats against government officials. Freeing of prices will likely spur investment in the country's downstream sector by foreign companies like British Petroleum and Mobil. (FT)
- June 17** Petronas, Malaysia's state-owned oil and gas company, acquires a 30 percent stake in Engen, South Africa's domestic refining and retailing company. The acquisition price is \$436 million. The move will help to secure Petronas' downstream market access in southern Africa. (FT)
- June 17** The Middle East Economic Digest reports that Iraq's State Oil Marketing Organization will soon sign 3-month sales contracts with foreign oil companies. In another development, the United Nations (U.N.) selects France-based Banque Nationale de Paris to hold the escrow account for Iraqi oil sales, the proceeds of which will be used by the U.N. for humanitarian purposes. (DJ)
- June 17** In one the few oil field development projects moving forward in Vietnam, Mitsubishi announces plans to bring its offshore Rang Dong field into production by May 1998. The 250 to 300 million-barrel oil field is expected to come online with output of 45,000 barrels per day, with a later peak production rate of 100,000 barrels per day. The field will use a floating, production, storage, and offloading vessel to decrease capital costs. The Rang Dong project announcement comes amidst difficulties recently encountered by foreign companies with other oil field developments, such as Australia's BHP at Dai Hung, Mobil at Thanh Long, and Petronas at the Ruby field. (DJ)
- June 19** The U.S. House of Representatives passes a bill calling for the imposition of punitive sanctions on foreign companies that invest over \$40 million in Iran's oil industry. The bill also penalizes companies and individuals that sell weapons or oil equipment to Libya. The U.S. Senate already has approved a similar measure. President Clinton is expected to support the bill after a committee works out differences between the House and Senate versions of the measure. (DJ)

- June 20** The Venezuelan Congress approves eight, multi-billion dollar, profit sharing deals which allow foreign oil companies to explore for and produce oil in Venezuela for the first time since the country's 1976 nationalization of the oil industry. The deals could boost Venezuela's current oil production by 500,000 barrels per day by 2005. Foreign oil companies, such as Amoco and British Petroleum, are expected to sign final deals with state-owned PDVSA within 10 days and may begin working on their new acreage by the third quarter of 1996. The eight blocks are estimated to hold between 7 and 11 billion barrels of light crude oil reserves. (PON, DJ)
- June 20** In Ecuador, U.S.-based Arco announces that it will build a 105-mile secondary crude oil pipeline to connect its Villano field to the main 350,000-barrel-per-day Trans-Ecuadorean export pipeline. This move is significant because it follows the Ecuadorean government's recent abandonment of a 100,000-barrel-per-day expansion of the Trans-Ecuadorean pipeline. The proposed expansion would have boosted the country's ability to carry heavier crude oil from the Amazonian Oriente region, where the Villano field is situated. After coming online in 1999, Arco's new pipeline will transport up to 80,000 barrels per day of heavy, 21° API crude oil. (DJ)
- June 21** The Brazilian government says it will create an independent organization to regulate foreign and domestic investment in the country's oil sector. In November 1995, a constitutional amendment was passed ending state-owned Petrobras' monopoly over Brazil's oil industry. However, no legal framework has been developed to allow for foreign investment, especially in upstream oil exploration and production. Brazil currently produces approximately 785,000 barrels per day of oil, enough to meet only about half of domestic demand. Foreign investment is viewed as a necessity to increase domestic production so as to meet as much of future consumption requirements, which are projected to rise to 2.3 million barrels per day by 2005, as possible. (DJ)
- June 21** In Lima, the Peruvian Defense Ministry states that between 8,000 and 10,000 Ecuadorean troops have moved into the northern Cordillera del Condor demilitarized zone. Border skirmishes have occurred in the region ever since a 1942 war between Peru and Ecuador, in which the latter country lost over half of its territory. The most recent conflict took place in early 1995, resulting in the death and injury of over 1,000 soldiers from both sides. The Cordillera del Condor region lies near Peru's Block 1A-B, which accounts for about half of Peru's 125,000 barrels per day of oil output. (DJ)
- June 24** China National Petroleum Corporation (CNPC) states that oil production from the Tarim Basin, which is located in China's western Xinjiang Uygur Autonomous Region, will reach 64,000 barrels per day in 1996. This represents a 25 percent rise in output as compared to 1995. By 2005, CNPC predicts that the Tarim Basin will become the country's second largest oil production region after Daqing. (PON, DJ)
- June 24** Following a failure to obtain long-term gas purchase agreements with power producers, U.S.-based Tenneco suspends its plan to build a \$689-million, 750-mile pipeline to carry Argentinean natural gas over the Andes to Chile. Canada's NovaGas currently is building a competing \$350-million, 290-mile natural gas pipeline to link the two countries. However, NovaGas' pipeline has provoked criticism by environmental groups and local residents, who recently demonstrated along the main highway near Santiago that provides access to the pipeline route. (PON, WSJ)
- June 24** Qatar's government and Arco sign an agreement to bring the offshore al-Rayyan oil field online in September 1996. A test well drilled at al-Rayyan in September 1995 resulted in a flow rate of 10,000 barrels per day. Initial output of 35,000 barrels per day will come from temporary production facilities. A determination of whether to install permanent platforms will be made by mid-1997. Qatar currently produces about 500,000 barrels per day, more than 30 percent above the country's OPEC quota of 378,000 barrels per day. (DJ)
- June 27** In Bolivia, Enron agrees to a revised contract for its role in the construction of a \$1.5-billion pipeline to transport Bolivian natural gas to markets in southeastern Brazil. The revision substantially decreases Enron's profit margin and requires that the U.S. company have all financing completed and construction begun by June 15, 1997. The changes come after critics charged that the original 1994 contract was contrary to Bolivia's national interests. (WSJ)
- June 27** Following arrests of pro-democracy activists by Burma's military government, the U.S. Senate Appropriations Committee approves mandatory unilateral sanctions against Burma. In September 1996, the Senate is expected to vote on the 1995 Free Burma Bill as an amendment to the U.S. State Department's foreign aid appropriations bill. If passed, proposed U.S. sanctions would bar any future U.S. investment in Burma until democracy is restored. This would likely affect U.S.-based Unocal, which is undertaking a \$1.1-billion development of its 5.8-trillion-cubic-foot Yadana natural gas field located in Burma's Gulf of Martaban. The Yadana project also will entail constructing an export pipeline to ship up to 550 million cubic feet per day of natural gas to Thailand, starting in 1998. (DJ)

- July 1** The United States rejects an Iraqi plan for distributing food and medicine under United Nations Resolution 986, on the grounds that it would allow Saddam Hussein's government to evade certain sanctions as well as give it control over distribution of supplies to separatist Kurds in northern Iraq. Resolution 986 would allow Iraq to sell \$1 billion worth of oil every 90 days for an initial period of 6 months. (WP)
- July 1** Norway's offshore oil unions reach a new wage agreement with their employers, averting a planned strike that could have resulted in a 330,000-barrel-per-day cut in oil production. The strike would have initially affected operations at Statoil's Statfjord A platform and then spread to the Gullfaks C platform later in the week. (PON)
- July 1** Chevron formally takes control of Venezuela's Boscan oilfield, which currently produces 80,000 barrels per day of heavy crude oil. Chevron plans to invest \$400 million over the next 3 years in order to boost capacity by 50 percent, to about 115,000 barrels per day. (PON)
- July 2** Mobil announces that Norway's government has approved a \$7-billion project to develop 2.2 billion barrels of oil and natural gas in the Norwegian Sea off the country's west coast. When complete, the Asgard project will be one of the world's most extensive subsea oil projects. Norway's state-owned oil company, Statoil, holds a 60.5 percent share and will be the operator of the project, which is expected to begin producing 200,000 barrels per day of crude oil by the end of 1998. Natural gas output of 1 billion cubic feet per day is expected to begin in the year 2000 (WT)
- July 2** Shell Oil announces that it has finalized plans with 3 other oil companies on a \$1.45-billion project to drill at record depths in the Gulf of Mexico. The project, known as Ursa, is expected at its peak to produce 150,000 barrels per day of crude oil from a depth of 4,000 feet. (WT)
- July 5** Six international consortia have bid for oil exploration licenses in disputed waters surrounding the British-owned Falkland Islands. Britain and Argentina fought a short war over the Islands in 1982, but in recent years have improved relations and attempted to cooperate in developing the potentially large oil reserves in the Falklands area. (FT)
- July 7** OPEC issues a resolution announcing Gabon's withdrawal from the organization, effective January 1, 1995. Gabon had an OPEC quota of 287,000 barrels per day. (FT)
- July 11** China's official Xinhua news agency announces that China is planning to open up additional oil and natural gas resources, in the western Tarim Basin and elsewhere, to foreign energy companies. Faced with rapidly rising energy demand, China is attempting to significantly expand its oil and gas exploration and production efforts. According to the report, China to date has signed 35 oil contracts worth \$500 million with 32 foreign oil companies. (DJ)
- July 11** Shell Nigeria reopens four flow stations at the Nembe Creek crude oil pipeline in southeastern Nigeria after a shutdown of nearly a week. The pipeline and four pumping stations have a combined capacity of 125,000 barrels per day of Bonny Light crude oil. (DJ)
- July 16** A \$1-billion, class-action lawsuit is filed against Texaco on behalf of Ecuador's Amazon Indians and settlers. The suit seeks to recover damages incurred from Texaco's activities over 25 years in Ecuador's rain forest, as well as compensation for the families living in the area, located in eastern Ecuador. Texaco pulled out of Ecuador in 1991. (WP)
- July 17** The United States Senate passes legislation that would penalize foreign energy companies investing in or trading with Iran or Libya. The U.S. House of Representatives passed a similar bill in June, with differences in the two bills to be worked out in a House-Senate conference. (WSJ)
- July 17** Anadarko Petroleum announces that Algeria has issued a Provisional Exploitation Authorization for initial crude oil production from the Hassi Berkine and Hassi Berkine South oilfields in the Sahara Desert in southeastern Algeria. Anadarko expects production from the fields to reach 200,000 barrels per day by 1999. The 42-degree API crude oil will be shipped by pipeline to Mediterranean ports. (PON)
- July 18** The United Nations formally approves an Iraqi aid distribution plan, a major step forward in the direction of allowing Iraq to sell oil under Resolution 986. (DJ)

- July 19** Ecuador's newly appointed energy minister, Alfredo Adum, announces that Ecuador will need additional oil pipelines to increase the country's crude oil delivery capacity. Adum will take over the Energy Ministry on August 10, when Ecuador's president-elect, Abdala Bucaram, replaces President Sixto Duran-Ballen. (DJ)
- July 26** Explosions fed by a propane leak at a major natural gas processing plant in the southern Mexican state of Chiapas kill six workers and injure 39 others. It is estimated that the accident could cost state oil company Petroleos Mexicanos (Pemex) more than \$200 million. The Cactus facility processed about one-third of the propane and butane gas used for cooking and heating in Mexico. (DJ)
- July 29** In Colombia, around 5,000 rural residents block entrances to state oil company Ecopetrol facilities in the Orito region, where 112,000 barrels per day of crude oil are produced. The protestors are demanding government assistance in improving their living conditions. (DJ)
- July 30** Mobil announces that it has acquired a 26 percent stake in the giant Natuna natural gas field from Indonesia's state oil company Pertamina. Natuna is located 800 miles north of Jakarta, Indonesia, in the South China Sea. Mobil joins Exxon, which owns 50 percent of the field, and Pertamina, which retains a 24 percent stake. Natuna was discovered in 1973 and is estimated to contain at least 45 trillion cubic feet of recoverable natural gas. (WP)
- July 30** Occidental Petroleum Corporation announces that it has sold all of its oil interests in the Congo back to the Congolese government for \$215 million. Occidental's production from its holdings in Congo amounted to 9,000 barrels per day during 1995. (WSJ)
- Aug. 1** Kuwait Oil Company renews its technical service agreement with British Petroleum (BP). The new contract follows an original 1992 contract under which BP provided assessments of the extent of reservoir damage to Kuwait's war-damaged oil fields. Under the new contract, BP will continue to provide technical support related to reservoir management and field development. Although Kuwait's upstream is closed to private equity investment, two other major oil companies, Chevron and Shell, have similar technical service contracts. (OGJ, DJ)
- Aug. 1** State Oil Company of Azerbaijan officials announce that a recently signed deal between Houston-based Brown & Root and Chevron's Tengizchevroil venture will lead to exports of 20,000 barrels per day of oil from the 5-billion-barrel Tengiz oil field in Kazakhstan to the Black Sea. Due to begin in October 1996, the exports will account for about 20 percent of the field's production. Under the plan, oil will be shipped by barge from Aktau in Kazakhstan across the Caspian. It subsequently will be carried by rail through Azerbaijan to Georgia's Black Sea export terminal at Poti. Tengiz crude currently is exported through Russian pipelines to the Black Sea terminal of Novorossiisk. (PON)
- Aug. 4** Near the southeastern town of Georgievka in Kazakhstan, a section of gas pipeline explodes killing two people and temporarily cutting gas supply to the nation's capital of Almaty. An investigation has begun to determine the cause of the blast. (DJ)
- Aug. 5** The Vietnamese government announces that it will raise import tariffs on a variety of refined petroleum products, beginning on August 15. The move is made after tax and tariff collection efforts fall below target levels. The increase reverses recent attempts to lower imported product tariffs, some of which are as much as 60 percent of landed costs. (DJ)
- Aug. 6** President Clinton signs a new bill imposing sanctions on non-U.S. companies which invest over \$40 million a year in the energy sectors of either Iran or Libya. Under the law, the President would be required to impose at least two of the following sanctions: import and export bans; lending embargoes from U.S. banks; a ban on U.S. government procurement of goods and services from sanctioned companies; and a denial of U.S. export financing. The European Union has stated its opposition to the U.S. law and has threatened retaliation. (FT)
- Aug. 8** In Norway, 280 members of the YS skilled workers' union threaten to strike unless an agreement on general working terms is reached with the Norwegian Oil Industry Association. The proposed strike would shut the Mongstad terminal, which handles crude oil from Norsk Hydro's Troll and Statoil's Heidrun fields as well as smaller deliveries from the Gullfaks and Statfjord production systems. The Mongstad terminal has a storage capacity of 8 million barrels. The strike also would close the 150,000-barrel-per-day Mongstad refinery, the country's largest. (FT, DJ)

- Aug. 8** The United States withdraws its opposition to the United Nations (U.N.) Resolution 986, which would allow Iraq to sell \$1 billion of oil every 90 days for an initial period of 6 months. Under the plan, proceeds from the oil sales would be used for humanitarian purposes. In recent days, the United States had been the only nation on the 15-member U.N. Security Council to oppose the plan. It had done so reportedly to ensure that proper monitoring procedures were in place to allow for the equitable distribution of humanitarian supplies to civilians. (FT)
- Aug. 8** U.S.-based Unocal and the government of Turkmenistan sign a deal to build a \$2 billion, 900-mile pipeline to carry natural gas from Turkmenistan's 45-trillion-cubic-foot Dauletabad gas field through Afghanistan to markets in Pakistan. The proposed pipeline will carry 1.9 billion cubic feet per day initially and 3.8 billion cubic feet per day after final completion in 2002. Unocal and Saudi Arabia-based Delta Oil will hold an 85 percent stake in the project, with Gazprom (10 percent) and Turkmenrusgaz (5 percent) holding the remainder. (DJ)
- Aug. 11** Australia-based BHP reportedly pulls out of negotiations with Iran regarding construction of a \$3-billion, 1.6-billion-cubic-feet-per-day, 1,000-mile overland pipeline to carry gas from Iran's South Pars gas field to Pakistan and possibly India. BHP's withdrawal follows President Clinton's signature of the bill imposing new sanctions against Iran and Libya. (DJ)
- Aug. 12** India and Oman agree to set up a joint working group to evaluate the technical aspects of a proposed \$5-billion, 810-mile, 2-billion-cubic-feet-per-day natural gas pipeline between the two countries. In 1995, Oman Oil Company (OOC) officials stated that such a line, which would run offshore at depths of up to 13,000 feet, was not technically feasible. OOC also expressed doubts that Oman had enough gas reserves to support both the pipeline and Oman's proposed liquefied natural gas project. (DJ, PON)
- Aug. 16** Azerbaijan Foreign Ministry officials reject a recent Russian proposal to resolve Caspian Sea territorial issues by using a 1941 treaty between the Soviet Union and Iran as a starting point. Both Azerbaijan and Kazakhstan oppose Russia's plan to use the 12-mile territorial limit normally applied to international waters. The five Caspian states plan to meet in Ashgabad in November 1996 to discuss their respective differences. (PON)
- Aug. 16** U.S.-based Mobil agrees to pay \$18.8 million for Petrolube, a state-owned Peruvian lubricants company. The sale is one of the first in the Peruvian government's efforts to privatize its downstream oil sector. (WT)
- Aug. 19** Malaysia's state-owned oil company, Petronas, agrees to take a 30 percent stake in France-based Total's \$600-million project to develop Iran's offshore Sirri A and E oil and gas fields. Total signed the development deal in July 1995, after the U.S. government barred U.S.-based Conoco from continuing advanced negotiations with Iran concerning the project. The recent farm-in by Petronas will require the Malaysian company to spend \$180 million over a four-year period. It is unclear how the recently passed U.S. sanctions on Iran will affect Petronas or Total. (PON)
- Aug. 19** South Africa's Minister of Mineral and Energy Affairs Penuell Maduna states that his government is discussing new oil supply arrangements with Saudi Arabia and Iraq in an effort to decrease South Africa's dependence on Iranian oil imports. The majority of South Africa's 230,000 barrels per day of oil imports come from Iran. Minister Maduna also added that a proposed deal in which South Africa would allow Iran to store 15 million barrels of oil at a 45-million-barrel facility near Cape Town was still under consideration, but that a number of environmental issues were still outstanding. (DJ)
- Aug. 20** A Dubai-based shipping company states that Iraq recently loaded a trial cargo of crude oil from the Mina al-Bakr terminal onto a 36,000-dwt tanker. Mina al-Bakr has four 400,000-barrel-per-day berths capable of handling very large crude carriers. In mid-1996, Iraqi officials stated that the 1.2 million barrels per day of capacity at the terminal had been restored. However, it is reported that mines and sunken ships in the terminal's main shipping channel still present a danger to large tankers. Under U.N. Resolution 986, about half of Iraq's limited oil exports would be shipped through Mina al-Bakr. (PON)
- Aug. 20** Iran and Pakistan agree to build a \$1-billion, 120,000-barrel-per-day refinery in western Pakistan. When completed, the proposed refinery will be supplied with Iranian crude oil. Both countries will have a 50 percent stake in the project, which still requires approval by Pakistan's cabinet. (PON)
- Aug. 21** In Venezuela, a subsidiary of state-owned Petroleos de Venezuela (PDVSA), Corpoven, signs a memorandum of understanding (MOU) with U.S.-based ARCO. The MOU provides for a \$3.5-billion joint venture to develop and

upgrade roughly 200,000 barrels per day of crude oil from the country's 270-billion barrel Orinoco Heavy Oil Belt. The project will produce 9° API gravity crude oil in the Hamaca region and upgrade it to 25° API for export to U.S. refineries. The project will be implemented in three phases, the last of which will be completed in 2006. Another PDVSA subsidiary, Maraven, recently signed a similar deal with Conoco. (PON, FT)

- Aug. 22** Nigerian Oil Minister Dan Etete states that the National Nigerian Petroleum Corporation's (NNPC) joint venture partners, which include Shell, Mobil, and Chevron, do not "show accountability and transparency" in their operations. He states that the Nigerian government shortly will introduce a wide array of changes to day-to-day operations and accounting procedures which will provide Nigeria with a more equitable return from the country's oil production. The move comes amidst delinquent payments by NNPC to its joint venture partners of almost \$1 billion during the first half of 1996. Oil Minister Etete's statements also come after a World Bank review criticizes the Nigerian government for failing to account recently for \$700 million in oil revenues. (DJ)
- Aug. 23** Argentina's YPF reaches a preliminary agreement with the Ecuadorean government that would convert a service contract signed in the 1980's into a participation contract which provides Ecuador with a greater return on oil production from the company's field in Block 16 of the Oriente region. Several days earlier, the Ecuadorean government sent troops in to take control of the fields, which are operated by U.S.-based Maxus, a YPF subsidiary. Output was cut from 34,000 barrels per day to 18,000 barrels per day. Most recent oil deals in Ecuador are participation contracts, which were introduced in the early 1990's. (PON, DJ)
- Aug. 24** Oman begins mediation of a territorial dispute between Bahrain and Qatar involving the potentially oil-rich Hawar islands and reefs. Qatar originally filed the case with the International Court of Justice (ICJ) in The Hague in 1991. Bahrain then rejected the ICJ's jurisdiction. Subsequent mediation attempts by Saudi Arabia also failed. (DJ)
- Aug. 25** Equatorial Guinea begins commercial oil production with the start-up of its Zafiro field. With initial output of 7,000 barrels per day, the Mobil-operated Zafiro field is expected to reach peak production of 40,000 barrels per day by the end of 1996. Mobil discovered the field in mid-1995 and brought the field on-stream through a fast-track plan that utilizes a floating production vessel. (PON)
- Aug. 27** In Congo, Exxon signs a production-sharing contract for the Mer Profund Nord concession located 50 to 75 miles offshore in an area where water depths reach up to 6,000 feet. Exxon will begin seismic exploration in the 1-million acre block in early 1997. Exxon and Elf currently are involved in the development of the nearby Mer Profund Sud concession. Work on these concessions represents an important trend in deepwater exploration activity offshore West Africa and is a significant part of Congo's ongoing effort to boost its oil output above current levels with the addition of offshore fields. (DJ, OGG)
- Aug. 30** Iran and Turkey sign a deal to export \$23-billion worth of natural gas through a proposed 800-mile "friendship pipeline" between the two countries. The deal comes amidst new U.S. sanctions on Iran. (FT)
- Aug. 30** The United States presents "conclusive evidence" to the U.N. Sanctions Committee that Iran is "complicitous in the smuggling of petroleum products" from Iraq through the Persian Gulf. According to U.S. allegations, Iran uses barges and small ships to carry oil products from southern Iraq into Iranian territorial waters. Shipping documents then are forged to show that the cargo is of Iranian origin. (PON, NYT)
- Sep. 3** In Yemen, Oil Minister Mohammed Attar states that the country will raise its oil production from 350,000 barrels per day at present to 400,000 barrels per day by 2000. Initial boosts in output will come from the 27,000-barrel-per-day Jannah and 20,000-barrel-per-day East Shabwa fields, both of which are due to come online in 1997. (DJ)
- Sep. 3** Officials from Nigeria and Equatorial Guinea meet to discuss territorial rights concerning Equatorial Guinea's Zafiro field, which Mobil recently brought online in a fast-track development program. The field currently produces about 10,000 barrels per day and is expected to reach an output level of 40,000 barrels per day in 1997. Nigeria previously had awarded Zafiro development rights to Elf. Nigeria also is involved in a dispute with Cameroon over the oil-rich Bakassi Peninsula. A United Nation's team is expected to depart soon for the region in the hopes of mediating a settlement. (DJ)
- Sep. 4** India's Foreign Investment Promotion Board rejects four proposed oil and petrochemical projects, including Occidental's plan to invest up to \$2 billion in enhanced oil recovery (EOR) technology for the mature Bombay High

field. About one half of India's oil production comes from the Bombay High region. Perceived endangerment to national security was one of the Board's reasons for rejecting Occidental's EOR proposal. (PON)

- Sep. 4 Trade press reports indicate that Azerbaijani and Iranian officials still disagree over the construction timetable for a \$70-million pipeline to supply Iranian natural gas to Azerbaijan's enclave of Nakhichevan, which is separated from the majority of the country by Armenia. The two countries signed a pipeline construction agreement in 1992. However, further progress has been stalled by Iran's refusal to accept oil products as payment from Azerbaijan, rather than cash, for the 8.8 billion cubic feet of Iranian gas already delivered to Nakhichevan. (PON)
- Sep. 5 Bolivia and Brazil sign a \$1.8-billion natural gas export pipeline construction contract. Brazil's state-owned Petrobras will oversee construction of the proposed 1,900-mile pipeline. Under the gas supply contract, Petrobras will purchase 280 million cubic feet per day of Bolivian gas for the first seven years of the 20-year sales period. Gas purchase volumes will double after the first seven years. After coming online in late 1998, the pipeline's first phase will link Santa Cruz, Bolivia with Campinas, Brazil. A second phase will extend the Brazilian line from Campinas to Porto Alegre by 1999. (DJ)
- Sep. 5 Following U.S. cruise missile strikes on military facilities in southern Iraq, crude oil prices rise as the market speculates on when Iraq will be allowed to begin exporting oil under the United Nations (U.N.) Resolution 986. Benchmark Brent Blend crude oil for October rises above \$22 per barrel amidst the uncertainty. The U.S. attack follows an Iraqi-supported invasion of Kurdish safe haven areas in the country's northern area. Subsequently, President Clinton states that the U.N. oil-for-food sale should be postponed indefinitely. (DJ)
- Sep. 6 In Kazakhstan, British Gas confirms that it will reduce its 42.5-percent stake in the giant Karachaganak natural gas field development project. Karachaganak, which is an extension of Russia's Orenburg field, is located in the northwestern part of Kazakhstan and contains about 46 trillion cubic feet of natural gas. In 1992, British Gas and Agip of Italy won a tender allowing them exclusive development rights to the field. Russia's Gazprom later joined the project with a 15 percent stake. It is rumored that Russia's Lukoil will acquire any interest relinquished by British Gas. The Karachaganak project will require a total investment of \$10 billion over 40 years. (DJ)
- Sep. 8 The Revolutionary Armed Forces of Colombia (FARC) launch a new series of attacks in the country, killing at least 23 people and blowing up a section of the 200,000-barrel-per-day Cano Limon-Covenas crude oil pipeline. The resulting pipeline rupture spills 8,000 barrels of oil. Since it came into operation in 1986, this strategic pipeline has been attacked over 400 times. (NYT)
- Sep. 9 Malaysia's state-owned Petronas says that it will proceed with its contract to develop Iran's offshore Sirri A and E crude oil and natural gas fields. After pressure from the U.S. government, Conoco withdrew from the project in March 1995. Subsequently, Total was awarded the development project. Recently, Petronas acquired a 30 percent stake in the \$600-million venture, which will develop the fields' estimated 600 million barrels of oil reserves. Peak production is expected to reach 120,000 barrels per day. (DJ)
- Sep. 12 In Burma, Unocal and Total, the partners undertaking development of the 5.7-trillion-cubic-foot Yadana natural gas field in the Gulf of Martaban, release the proposal's feasibility study. A \$700-million domestic project will complement a controversial 525-million-cubic-foot-per-day natural gas export pipeline which will link the offshore field to Thailand. The domestic project, called the "Three-in-One," comprises a 90-mile natural gas pipeline link between the field and Rangoon, a 200-megawatt gas-fired electric power station, and a 1,750-ton-per-day urea fertilizer plant. Controversy over the natural gas export pipeline has been fueled by alleged human rights violations by Burma's military government. Currently, a unilateral sanctions bill against Burma is pending in the U.S. Congress. (DJ)
- Sep. 16 The Norwegian Petroleum Directorate (NPD) states that it will aid Angola's Ministry of Petroleum in formulating the country's future oil development strategy. The NPD specifically will project future production levels and export revenues, advise on appropriate safety and environmental programs, and provide relevant legal assistance for Angola's petroleum sector. The new agreement will last three years and follows previous cooperation activities under which Norway has advised Angola on topics such as deepwater oil production. (PON)
- Sep. 19 U.S. officials tell the International Court of Justice in the Hague that the United States should not be held liable for damages resulting from U.S. naval attacks on three offshore Iranian oil platforms during the Iran-Iraq War in 1988. The United States launched the attacks after Iran fired a Silkworm missile at a U.S.-flagged Kuwaiti tanker in 1987.

That incident, along with another in which a U.S. frigate struck a mine in the southern Persian Gulf, resulted in injuries to U.S. naval personnel. The U.S. contends that the three oil platforms were armed military bases and were used to facilitate Iranian attacks on neutral shipping during the War. Iran counters that the oil platforms were of "vital commercial and economic importance" and were targeted by the U.S. to inflict "maximum financial, commercial, and economic damage." (DJ)

- Sep. 19** After extensive negotiating efforts by Unocal, Afghanistan's main rebel factions sign an agreement to ensure the safety of a proposed 890-mile, 2-billion-cubic-feet-per-day capacity pipeline which would carry natural gas from Turkmenistan's 45-trillion-cubic-foot Dauletabad natural gas field to Pakistan. The proposed \$2-billion pipeline tentatively would run from the Dauletabad field south to the Afghan border and through Herat and Qandahar in Afghanistan and Quetta in Pakistan. The line would then link with Pakistan's gas grid at Sui. Natural gas shipments are projected to start at 700 million cubic feet per day in 1999 and rise to 1.4 billion cubic feet per day or higher by 2002. Following a memorandum of understanding signed in August 1996, a consortium of companies comprising Unocal and Saudi Arabia's Delta Oil (85 percent combined share), Russia's Gazprom (10 percent), and state-owned Turkmenrusgaz (5 percent) is planning to build the line, but political risk, security, and financing concerns may stall the project. (DJ, PON)
- Sep. 20** In Russia, Arco signs several agreements with Lukoil to jointly invest \$5-billion in energy projects over the next 18 years. The deals also create a new company, LukArco, which will be held jointly by Lukoil (54 percent) and Arco (46 percent). In late 1995, Arco bought an 8 percent stake in Lukoil. The recent moves will provide Arco with a prominent position in Russian upstream activities. (DMN)
- Sep. 20** After pressure from 20 multinational oil companies belonging to the Colombian Petroleum Association (ACP), the Colombian government agrees to review the terms of the sliding scale production sharing contracts that most foreign oil companies signed between 1989 and 1994. The contracts provide state-owned Ecopetrol with as much as 70 percent of the oil produced from large fields. The ACP states that the unfavorable terms have led to a decrease in exploration activities in Colombia. The government's decision is made despite threats from the National Liberation Army, one of Colombia's two insurgent factions, to assassinate Rodrigo Villamizar, Minister of Mines and Energy, if British Petroleum's contract to develop the Volcanera, Pauto, and Florena fields are revised. (DJ)
- Sep. 25** In New York, visiting Colombian President Ernesto Samper states that the state-owned oil company, Ecopetrol, has discovered a new 700-million-barrel oil field in central Colombia. Later, Ecopetrol President Luis Bernardo Florez says that, while the field may contain as much as 600 to 700 million barrels of high-quality crude oil, further appraisal work is needed. If confirmed, the find would increase Colombia's proven oil reserves by 20 percent. (DJ)
- Oct. 2** Yemen's Oil Ministry states that it is examining plans to build a 60,000-barrel-per-day refinery at Ras Katnib, northwest of Aden. The \$250-million refinery project would be financed by private investors from Yemen and the Persian Gulf. It would be the first private investment in Yemen's downstream oil industry. A second phase would raise the refinery's capacity to 100,000 barrels per day. Yemen now has two refineries with a combined capacity of 110,000 barrels per day. The country's current crude oil production is approximately 350,000 barrels per day, of which 80,000 barrels per day is consumed domestically. (DJ)
- Oct. 3** In Paris, Yemen and Eritrea sign an agreement to allow international arbitration of their territorial dispute over the Hunaish and Zuqar Islands. These islands are located in the Bab al-Mandab Strait at the mouth of the Red Sea. The dispute flared in December 1995 after Eritrea forcibly took control of Greater Hunaish Island. In August 1996, Eritrea seized Lesser Hunaish Island, but withdrew after French mediation efforts. The Bab al-Mandab is a strategic shipping lane and is also an area that international companies have targeted for oil exploration. (MEES)
- Oct. 4** U.S.-based Unocal and France's Total are sued in a federal court in Los Angeles for their alleged complicity in human rights abuses by Burma's military government. The plaintiffs state that the two companies had knowledge that the military was relocating villages, using forced labor, and committing a variety of abuses during efforts to clear a path for an onshore natural gas export pipeline. The companies maintain that no such actions have occurred along the pipeline route and that local workers are paid above average wages. The pipeline is part of a \$1.2-billion project to carry 525 million cubic feet per day of natural gas from the 5.7-trillion-cubic-foot Yadana field to power companies in Thailand. Shipments will begin in 1998, after the anticipated completion of the onshore pipeline. (PON, DJ, FT)

- Oct. 4** Azerbaijan's parliament ratifies the \$4-billion Shakh Deniz field development. The project is being undertaken by a consortium comprising British Petroleum (25.5 percent), Statoil (25.5 percent), Elf (10 percent), Lukoil (10 percent), Iran's OEIC (10 percent), and TPAO (9 percent). The offshore Shakh Deniz field contains an estimated 1 billion barrels of oil and up to 17.6 trillion cubic feet of natural gas. (PON)
- Oct. 4** In Irian Jaya, Indonesia, British Gas says that its Mogoi Deep-1 well on its Muturi concession resulted in flow rates of 40 million cubic feet per day of natural gas. This find is the latest in a number of natural gas discoveries on the island in eastern Indonesia. U.S.-based Arco is planning to build a liquefied natural gas plant on Irian Jaya. It would be supplied with reserves from Arco's Wiriagar field, which may hold up to 12 trillion cubic feet of reserves. (PON)
- Oct. 8** Kuwait Oil Company and Exxon sign a joint technical study agreement concerning possible development of the Karaa al-Marū oil field in northwestern Kuwait. The field contains estimated reserves of between 300 to 350 million barrels of light 49° API crude oil. This would be the first development of oil fields in this region of Kuwait. While Kuwait's upstream sector remains closed to foreign investment, several other foreign oil companies have technical service agreements with the government. These companies include British Petroleum, Chevron, and Royal Dutch/Shell. (PON)
- Oct. 8** Qatari Foreign Minister Hamed Ben Jassem al-Thani states that his country has frozen all business dealings with Israel because of lack of progress in the Middle East peace process. Earlier in the year, Enron had proposed constructing a terminal at the Israeli port of Eilat on the Gulf of Aqaba to receive liquefied natural gas from the company's planned project in Qatar. (PON)
- Oct. 8** After more than a year of review, Oman cancels its plans to build a \$10-billion, 1-billion-cubic-foot-per-day pipeline to supply India with natural gas. The pipeline faced technical and cost problems, since it would have been laid at underwater depths of up to 13,500 feet. Also, Oman is planning to build a liquefied natural gas export facility, and questions were raised as to whether the country's natural gas reserves could support both projects. Oman's proven natural gas reserves are around 25 trillion cubic feet. (FT)
- Oct. 9** In southern Algeria, the Armed Islamic Group blocks a road near Laghouat inside the Hassi R'Mel security zone and allegedly kills 34 people after their vehicles are stopped at a false police checkpoint. In April 1995, the government created four "exclusion zones" to protect oil and gas facilities and personnel in the producing centers of El Oued, Laghouat, Illizi, and Ouargla. Within these zones, army and police units regulate traffic and shipments. The conflict in Algeria, which began in 1992, has claimed an estimated 60,000 lives. (MEES)
- Oct. 9** In Venezuela, PDVSA President Luis Giusti announces that the state-owned oil company's third round of marginal field bidding will involve 20 fields in Monagas, Anzoategui, and Western Venezuela. Giusti also states that this round will differ from the previous two in that it will involve already producing oil fields as well as those in need of secondary recovery technology. This third round marks continuing efforts by PDVSA to boost oil production above the current 3-million-barrels-per-day rate. (PON)
- Oct. 10** Workers employed by Bolivia's state-owned oil company, YPFB, stage a 24-hour strike to demand passage of a new land reform bill. The strike shuts down the country's three refineries, which have a combined capacity of 45,000 barrels per day. (DJ)
- Oct. 11** In Georgia, the 11-member Azerbaijan International Operating Company (AIOC), which includes British Petroleum, Amoco, and Exxon, sign a pipeline-engineering contract with John Brown Engineers and Constructors, a British subsidiary of Norway's Kvaerner. The \$300-million pipeline project will involve renovating an existing line that links Baku to Supsa, on the Black Sea. The pipeline will have a new capacity of 105,000 barrels per day and will be completed in 1998. It will be used to carry a fraction of the anticipated oil exports from AIOC's \$8-billion, 4-billion-barrel Azeri, Chirag, and Guneshli field development. AIOC still has not reached a decision on the route for the main 700,000-barrel-per-day export pipeline. (WSJ)
- Oct. 14** After months of protests by workers, Mexico's state-owned oil company, Pemex, cancels further plans to privatize its 61 state-owned petrochemical processing plants. Alternatively, Pemex plans to raise capital by creating subsidiaries to manage the 61 plants. Subsequently, it will sell off 49 percent of its ownership in the subsidiaries. A previous effort to sell the plants was canceled in 1992. (NYT)

- Oct. 16** In Geneva, the United Nations (U.N.) Compensation Committee rejects an Iraqi request to use revenues from the proposed oil sales under U.N. Resolution 986 to fund a legal defense against claims resulting from the 1991 Gulf War. Resolution 986 would allow Iraq to sell up to \$1 billion worth of oil every six months. The deal originally was delayed by Iraq's incursion into the Kurdish safe haven zone in September 1996. More recently, the United States has requested time to review the pricing structure for the Iraqi oil sales. (DJ)
- Oct. 18** After four years of development, U.S.-based Occidental writes off its \$105-million investment in an exploration and production joint venture in the Komi Republic in Russia's Arctic region. The move was made due to continued high taxes, tariffs, and transportation fees imposed by both the Russian National and local governments. In addition, the recent increase in world oil prices has resulted in decreased access to Russia's export pipeline network for foreign ventures. (PON)
- Oct. 24** The Latvian parliament ratifies the government's oil exploration deal with U.S.-based Amoco and Sweden's OPAB. The agreement covers exploration of the offshore Dalders prospect, which is located in territory claimed by neighboring Lithuania. Lithuania's government previously has stated that it will not respect the Amoco/OPAB agreement. If the dispute between the two countries is resolved, Amoco and OPAB plan to drill an exploratory well in early 1997. Exploration and appraisal costs could total from \$7 to \$30 million. (DJ)
- Oct. 27** The London press reports that the favored solution for disposal of the Brent Spar oil storage platform is to turn it into a tourist attraction within the Morecambe Bay wildlife resort in Cumbria, England. The 30 proposals now under review by the U.K. government mostly involve onshore disposal and recycling. However, a British company, Amec, proposes cutting the Spar in two and creating a wildlife viewing platform that would include glass elevators. In 1996, Shell's planned offshore disposal sparked controversy after Greenpeace claims, which were later retracted, that the buoy contained toxic waste. (DJ)
- Oct. 28** In the Falkland Islands, exploration licenses are awarded from the country's first bidding round that was launched in October 1995. While 19 offshore tracts located north and south of the Islands were on offer, companies only bid on seven northern concessions. Acreage was awarded to U.S.-based Murphy, Fina, International Petroleum Corporation, Clyde, Lasmco, and Sands Petroleum, among others. Neither British Gas or Argentina's YPF received acreage. The concessions offered in this bidding round are separate from the Special Area of Co-operation that recently was established between Britain and Argentina. This area lies to the west of the Falklands. (DJ, FT)
- Oct. 30** In Burma, a consortium comprising Texaco (50 percent), Premier (30 percent), and Nippon (20 percent) signs a memorandum of understanding (MOU) to supply Thailand with natural gas from Burma's offshore Yetagan field. Under the terms of the MOU, the Texaco-led consortium will supply Thailand with 200 million cubic feet per day of natural gas starting in 1999. Although the 1.5-trillion-cubic-foot Yetagan field is located to the southeast of Unocal/Total's Yadana development, the field's onshore pipeline segment will run in the vicinity of the Yadana pipeline. (FT)
- Oct. 30** Ukraine and Russia agree to negotiate a long-term natural gas deal that would fix supplies and prices over a 20-year period. At present, Ukraine owes Russia \$1.4 billion for past natural gas deliveries. A supply deal for 1997 also has not been reached. In 1997, Ukraine hopes to increase its purchases of Russian natural gas to 2.06 trillion cubic feet, up from 1.85 trillion cubic feet in 1996. (DJ)
- Oct. 30** Exxon confirms that it is in talks with state-owned Qatar General Petroleum Corporation concerning the application of new technology to convert natural gas to petroleum products. Exxon believes that technology developed in a successful 200-barrel-per-day "natural gas refinery" project in Texas would work in Qatar, where a proposed \$1-billion plant would be able to produce between 50,000 and 100,000 barrels per day of middle distillate products. Under the proposal, Qatar's 270-trillion-cubic-foot North field would supply between 0.5 and 1 billion cubic feet per day of natural gas for use as feedstock. In the past, technological barriers and high costs have precluded the development of natural gas refineries. (WSJ)
- Nov. 1** The \$2.3 billion Gazoduc Maghreb-Europe (GME) pipeline begins its first gas deliveries between Algeria's Hassi R'Mel gas field and Cordoba, Spain. By the end of 1998, Algeria is planning to boost the GME's capacity to 935 million cubic feet per day, up from 695 million cubic feet per day currently, in order to supply markets in Spain, Portugal, Morocco, France, and Germany. (FT)

- Nov. 4** Italy's state-owned ENI discloses that it signed a \$3-billion natural gas production and supply deal with Libya in June 1996. The deal covers development of the offshore NC-41 block and the onshore Wafra field. ENI plans to bring the areas online by 2000, with gas production flowing to Italy via a proposed underwater pipeline. Reserves in the two areas are estimated at 600 million barrels of oil equivalent. Production potential at the NC-41 block and Wafra field is estimated at 575 million cubic feet per day and 195 million cubic feet per day, respectively. The United States government recently implemented additional sanctions against Libya that bar new investments of more than \$40 million by non-U.S. companies. However, ENI representatives state in a *MEES* interview that U.S. sanctions will not have an "adverse material effect" on the project. (*DJ, MEES*)
- Nov. 4** Turkish Prime Minister Necmetten Erbakan states that Iranian natural gas shipments to Turkey will begin "within a year at the latest" under the recently signed 22-year, \$20-billion gas supply deal between the two countries. The agreement, which calls for delivery of up to 350 million cubic feet per day of Iranian natural gas to Turkey, has met with U.S. criticism for providing financial support to the Iranian economy. Turkey's demand for natural gas is expected to quintuple by 2010 to 2.9 billion cubic feet per day. (*DJ*)
- Nov. 5** British Petroleum Exploration (BPX) requests Colombia's Prosecutor General to investigate the source of recent media reports that accuse the company of violating human rights and supporting paramilitary groups in eastern Colombia. In October 1995, several London newspapers reported the accusations from an unofficial study purportedly conducted by the Colombian presidency's human rights office. BPX strongly denies the allegations. (*DJ*)
- Nov. 6** In Greece, government anti-terrorism units arrest 16 Greenpeace activists who block entry to Motor Oil's 100,000-barrel-per-day coastal refinery at Ayioi Theodori. The Greenpeace protest is in response to a large spill that occurred during loading operations in August and added to already high pollution levels in the Saronic Gulf. Motor Oil is owned jointly by Saudi Aramco and Greece's Vardinyannis. (*DJ*)
- Nov. 8** In Baku, officials from Azerbaijan, Ukraine, and Kazakhstan meet to discuss a possible export and refining deal for crude oil from Kazakhstan's Tengiz oil field. Under Ukrainian proposals, crude from Tengiz would be transported by tanker across the Caspian through Duybend, Azerbaijan to Batumi, Georgia. From there, tankers would carry the oil to Ukraine's 80,000-barrel-per-day refinery at Odessa. An alternate method under consideration would be to use rail transport through the Caucasus through Russia to Ukraine. (*PON*)
- Nov. 8** Namibian Minister for Trade and Industry Hidipo Hamutenya states that a well recently drilled by Royal Dutch/Shell proves that natural gas reserves at the offshore Kudu field are in excess of 3 trillion cubic feet and could be as large as 7 trillion cubic feet. Shell has declined to comment on the field's size. Both Namibia and Shell are hoping that Kudu's reserves are sizable enough to justify a \$670-million project to build a 250-million-cubic-feet-per-day pipeline to export natural gas to landfall at Oranjemund and eventually on to South Africa. (*WGI*)
- Nov. 12** The Algerian daily newspaper "Le Matin" reports that state-owned Sonatrach and British Petroleum (BP) are discussing the feasibility of a third Algerian natural gas export pipeline to Europe. Currently, Algeria exports natural gas to Europe through the newly inaugurated GME, the Transmed pipeline linking Algeria to Italy, and via liquefied natural gas tankers. BP is seeking an outlet for future production from its natural gas fields in the In Salah region, which contains proven reserves of at least 7 trillion cubic feet. Through 2000, Italy and France are expected to remain the largest purchasers of Algerian natural gas, with 47 percent and 20 percent shares of Algeria's natural gas exports, respectively. Through 2020, the European Commission has forecast that Algerian exports will not exceed a 25 percent share of the European natural gas market. (*DJ*)
- Nov. 14** In Abuja, Nigeria, officials from Benin, Togo, Ghana, and Nigeria meet to discuss a proposed \$260-million West Africa natural gas project which would supply Nigerian natural gas to regional markets. Chevron and Royal Dutch/Shell are in competition to construct the export pipeline associated with the project. The natural gas project would be aimed at lessening the region's dependence on oil imports and hydroelectric power. While Nigeria has insisted that its natural gas reserves be used, the Ivory Coast and Ghana have proposed using natural gas resources located in their offshore Foxtrot and Tano fields, respectively. (*DJ*)
- Nov. 14** In response to the slow pace of the Middle East peace process, Israel is cut out of two separate natural gas export pipeline proposals. In the first project, Italy's ENI decides to invest \$2 billion in the next 30 months to build a 960-million-cubic-foot-per-day underwater pipeline to carry natural gas from Egypt to Turkey. ENI's original "peace pipeline" would have run between Port Said, Egypt to Haifa, Israel, via the Gaza strip. In the second project, U.S.-

based Amoco signs an agreement with the governments of Egypt and Turkey to build a \$2 to \$4 billion liquefied natural gas export plant to transport Egyptian natural gas to Turkey. The liquefied natural gas plan replaces an earlier Amoco proposal to build an Egypt-Israel natural gas export pipeline that would have competed with ENI's peace pipeline. (WP, WSJ)

- Nov. 14** European Union (EU) trade counselor Bernd Langeheine states that the EU has legislation ready that would block implementation of U.S. sanctions on European companies which invest in expropriated U.S. property in Cuba or in Iran and Libya's oil sectors. The official says that if the United States invokes Article 21 (the national security exemption) under the General Agreement on Tariffs and Trade, the EU would easily win any subsequent challenge brought before the World Trade Organization. (DJ)
- Nov. 17** Iraq's National Assembly approves a proposal by the China National Oil and Gas Exploration and Development Corporation to develop the small al-Ahdab oil field, which is located near the giant East Baghdad field. While several French and Russian oil companies have conducted negotiations for the development of oil fields in Iraq, the deal for al-Ahdab is the first that has actually been signed. Existing U.N. sanctions forbid foreign investment in Iraq's oil sector. (DJ)
- Nov. 18** In Kazakhstan, the Caspian Pipeline Consortium (CPC) approves a \$1.5-billion plan to build an export pipeline linking Chevron's 10-billion barrel Tengiz oil field in western Kazakhstan with Novorossiisk, Russia's oil export terminal on the Black Sea. Under the plan, a 560,000-barrel-per-day pipeline would be built by 1999, with an expansion to 1.37 million barrels per day occurring at a later date. Until recently, Chevron restricted output at the field to 60,000 barrels per day because of lack of space on existing Russian export pipelines. Current production is around 120,000 barrels per day and soon will be lifted to 180,000 barrels per day. In 1996, Chevron has tested alternative methods of exporting Tengiz crude, including the use of a swap arrangement with Iran and tanker and rail shipments across the Caspian and through Georgia, respectively. After a corporate restructuring anticipated for April 1997, CPC will include the governments of Russia, Kazakhstan, Oman, and Chevron, Mobil, Oryx, British Gas, Agip, Lukoil, and Rosneft, among others. (DJ, FT)
- Nov. 25** An Exxon-led consortium signs a memorandum of understanding with the Chadian government to develop an estimated 900 million barrels of oil reserves in the Doba basin, located near Chad's southern border with the Central African Republic and Cameroon. The proposed \$3-billion development will include drilling 300 new wells and constructing a 650-mile, 30-inch pipeline across southern Chad to Kribi, Cameroon on the Atlantic coast. Peak production potential from the area is projected at 200,000 to 250,000 barrels per day. The development consortium comprises Exxon (through its affiliate Esso Exploration & Production Chad) (40 percent), Societe Shell Tchadienne de Recherches et d'Exploitation (40 percent), and Elf Hydrocarbures Tchad (20 percent). (POM)
- Nov. 26** The United Nations and Iraq announce a final agreement on the long-awaited deal that would allow Iraq to sell up to \$2 billion of oil every six months in exchange for food and other humanitarian supplies. Implementation of the deal recently has been delayed because of Iraq's invasion of Kurdish safe haven areas in September and the U.S. review of the pricing formula in October. Iraqi oil exports under U.N. Resolution 986, which would be between 500,000 and 550,000 barrels per day with current oil prices, are expected to begin in December 1996, after metering equipment is installed on the Kirkuk-Ceyhan pipeline and U.N.-approved observers are positioned in Iraq to monitor oil flows. (NYT, FT)
- Nov. 27** Russia's Interfax news agency reports that a \$1.5-billion oil development deal will be signed between the State-Owned Oil Company of Azerbaijan, Amoco, Unocal, Saudi Arabia's Delta Oil, and Japan's Itochu in mid-December 1996. The deal will include the development of the Caspian Sea's Dan Ulduzu and Ashrafi oil fields, which are estimated to contain combined oil and natural gas reserves of 730 million barrel and 3 trillion cubic feet, respectively. (DJ)
- Nov. 28** The Prime Ministers of Russia and Poland inaugurate the first 65-mile segment of the proposed 3,100-mile Yamal natural gas export pipeline. In August 1995, the Polish government gave approval for the \$2.5-billion, 400-mile Polish segment of the Yamal pipeline, which has an initial capacity of 475 million cubic feet per day. Ultimate Yamal pipeline natural gas shipments to Europe are expected to reach over 5.5 billion cubic feet per day by 2010. This natural gas is targeted for export in 1998 to European markets via seven parallel natural gas pipelines running from Yamal to Belarus, Poland, and Frankfurt/Oder, Germany. However, continuous permafrost conditions and environmental concerns have raised development costs, and total project investment may exceed \$12 billion. Russian natural gas exports now satisfy about 25 percent of European natural gas demand. (DJ)

- Nov. 29** France's nation-wide truckers' strike enters its twelfth day, causing up to 5,000 gas stations either to run out of or to run low on gasoline stocks. Consequently, half of France's 90 departments have put gasoline-rationing measures in place. Striking truckers also set up roughly 250 roadblocks on French highways, which lead to the disruption of agricultural shipments from neighboring countries. In order to end the strike, the government proposes to meet truckers' demands to lower the early retirement age to 55. (DJ)
- Nov. 29** In Vienna, the Organization of Petroleum Exporting Countries (OPEC) agrees to a rollover of its current quota of 25.33 million barrels per day. This quota was established at the Organization's last meeting in June 1996 and allows room for Iraq to produce 1.2 million barrels per day. Without Iraqi exports under U.N. Resolution 986, independent analysts have estimated that OPEC member countries are producing between 1.2 and 1.5 million barrels per day in excess of the aggregate quota. The majority of this overproduction comes from Venezuela. (WP)
- Dec. 1** The London press reports that the al-Yamamah oil-for-arms deal between British Petroleum (BP), Royal Dutch/Shell, and Saudi Arabia will not be renewed in 1997. Under the arrangement, BP and Shell earn roughly \$30 million per year in commission from their combined sales of 400,000 barrels per day of Saudi oil. During the past 10 years, Saudi Arabia deposited earnings from the oil sales in a Bank of England account to pay British Aerospace for weapons purchases. (DJ)
- Dec. 2** In northeastern India, a bomb blast damages two regional crude oil pipelines. The main line and a loop line have a combined throughput of 100,000 b/d. The United Liberation Front of Assam is believed responsible for the blast. The disruption of crude flows does not affect refinery operations in Assam. (DJ)
- Dec. 3** After bad weather causes high swells, Petroleos Mexicanos (Pemex) shuts its three largest ports on the Gulf of Mexico. The temporary closures of the ports at Cayo Arcas, Pajaritos, and Dos Bocas add pressure to already high world oil prices and aid in boosting crude oil futures for West Texas Intermediate to \$24.80/barrel. During the first 10 months of 1996, Mexican oil production averaged 2.85 million barrels per day. Roughly 1.5 million barrels per day of this output is exported through Pemex's ports on the Gulf of Mexico. Mexico currently is the third largest source of U.S. oil imports, behind only Venezuela and Saudi Arabia. (DMN, NYT)
- Dec. 3** Petroleos de Venezuela (PdVSA) decides to postpone the multi-billion dollar Cristobal Colon liquefied natural gas (LNG) project for at least five years. The project would have involved a consortium of companies comprising PdVSA's subsidiary Lagoven (33 percent), Exxon (29 percent), Shell (30 percent), and Mitsubishi (8 percent). The proposed LNG plant would have produced 1 billion cubic feet per day of gas from the 11-trillion-cubic-foot reserve in Venezuela's Paria Peninsula. The decision to postpone the project is made because of currently low world gas prices that make the project uneconomical. (PON)
- Dec. 5** Near Urkutsk in eastern Siberia, a distillation unit under repair at the 464,000-b/d Angarsk refinery explodes killing three and hospitalizing four workers. (DJ)
- Dec. 5** Saga Petroleum, Norway's largest independent oil company, purchases Kuwait Petroleum Company-owned Santa Fe Exploration for \$1.23 billion. Santa Fe has stakes in six producing North Sea oil fields, including Miller, Alba, and Gryphon. It also has a nine-percent share in the Britannia gas field development. The acquisition will raise Saga's North Sea oil production from current levels of 50,000 barrels per day to 190,000 barrels per day. (FT, WSJ)
- Dec. 6** Chevron and Mobil sign separate agreements to restructure the Caspian Pipeline Consortium (CPC) contract. Both of the companies agree to exercise their respective rights to boost their equity interest in CPC. After the contract revisions, Russia (24 percent) and Chevron (15 percent) will hold the largest stakes in CPC. Mobil will hold a 7.5 percent interest in the \$2-billion project to link Kazakhstan's Tengiz oil field to an export terminal near Russia's Black Sea port at Novorossiisk. (DJ)
- Dec. 6** Canada-based Arakis Energy states that a consortium has been formed to build a \$1-billion export pipeline linking oil fields in southern Sudan to Port Sudan on the Red Sea coast. The consortium will comprise China National Petroleum Corporation (40 percent), Malaysia's Petronas Carigali (30 percent), Arakis (25 percent), and a Sudanese government-owned company (5 percent). Assuming that financing can be obtained, Arakis hopes to begin initial exports of 150,000 barrels per day by 1999. (DJ)

- Dec. 6** Following a week-long strike by 400 employees of Shell Gas (Lanka) Limited last month in Sri Lanka, the company says that it has agreed to a wage supplement plan which will ensure continuous operations for the next three years. Prior to the deal, the strike had severely hurt liquefied petroleum gas production and distribution in Sri Lanka. (DJ)
- Dec. 9** The United Nations approves U.N. Resolution 986, which allows Iraq to export up to \$1 billion worth of oil every 90 days for an initial six-month period. Income from the oil sales will be used in part for food and other humanitarian supplies. Implementation of the deal recently has been delayed because of Iraq's invasion of Kurdish safe haven areas in September and the U.S. review of the pricing formula in October. (DJ)
- Dec. 10** Turkey's semi-official Anatolia news agency announces that Energy Minister Recai Kutan will soon sign a liquefied natural gas (LNG) purchase agreement with Yemen's Prime Minister Abdulaziz Abdulghani. The deal adds Turkey to the list of customers for the \$4.2-billion LNG plant proposed by a consortium comprising Total, U.S.-based Hunt Oil, Exxon, South Korea's Yukong, and the Yemeni government. The LNG plant will utilize the 16-trillion-cubic feet of reserves from the Marib and al-Jawf regions. The area's current oil production is approximately 170,000 barrels per day. (DJ)
- Dec. 14** Azerbaijan and a consortium of foreign oil companies sign a \$2-billion deal to develop the Dan Ulduzu and Ashrafi oil and gas fields in the Caspian Sea. The two fields hold estimated combined reserves of 1.1 billion barrels of oil and at least 1 trillion cubic feet of gas. The consortium comprises the state-owned oil company of Azerbaijan (SOCAR) (20 percent), Amoco (30 percent), Japan's Itochu (20 percent), and a partnership between Unocal and Saudi Arabia's Delta (30 percent). (DJ)
- Dec. 16** The U.S. Department of State releases the guidelines for non-U.S. companies to follow in order to comply with the Iran and Libya Sanctions Act, which penalizes foreign firms that invest in the oil and gas sectors of those two countries. Since the Act was passed in August 1996, several pertinent developments have occurred, including investments by Total and Petronas in Iran's offshore oil sector, ENI's planned investment in Libyan gas field development, and Turkey's recent signature of a long-term, \$22-billion gas purchase agreement with Iran. (DJ)
- Dec. 16** A consortium comprising Texaco (30 percent), Exxon (30 percent), Amoco (20 percent), and Norsk Hydro (20 percent) sign a protocol production sharing agreement (PSA) for development of an estimated 2.2 billion barrels of recoverable reserves in 11 area fields in Timan-Pechora's Varandey region near the Barents Sea coast. It is expected that a final agreement will be signed in early 1997. Current plans foresee investments of \$45 billion over the 50-year project life. Although stalled in mid-1996, talks that might allow Rosneft and another Russian partner to acquire a 20 percent stake in the project reportedly are continuing. (DJ)
- Dec. 17** A U.N. panel rules that Kuwait Oil Company will receive \$610 million, almost two-thirds of the \$951 million it claims to have spent while extinguishing oil fires left by the retreating Iraqi army in 1991. In addition, the United Nations has approved 862,000 claims amounting to \$3.2 billion for people forced to leave Kuwait because of the Iraqi occupation. (DJ)
- Dec. 17** Following the resignation of Petroperu head Armando Echeandia, Petroperu officials announce that key parts of the company, including the 62,000-barrel-per-day Talara refinery, will remain under government control. Originally one of the first targets for privatization, the Talara refinery has had its sale date pushed back three times. Until this announcement, roughly 60 percent of its shares were slated for auction in April 1997. While chief of Petroperu, Echeandia had been a supporter of the company's privatization efforts. (DJ)
- Dec. 18** Nigeria's Liquefied Natural Gas (NLNG) Company sues ENEL, Italy's state electricity utility, for withdrawing from a \$15-billion contract to purchase Nigerian LNG for a 20-year period. NLNG is planning to build a \$3.8-billion, 5.2-million-ton-per-year LNG plant at Finima, on Bonny Island. NLNG consortium members are NNPC (49 percent), Shell (25.6 percent), Elf (15 percent), and Agip (10.4 percent). Prior to its decision not to build a LNG receiving terminal at Montalto di Castro on the Tuscany coast for economic and environmental reasons, ENEL had agreed to purchase 2.75 million tons per year, or about half of NLNG's currently contracted future LNG sales. (FT, DJ)
- Dec. 18** During a press conference, Iranian Deputy Foreign Minister Abbas Maleki states that Iran supports "the free flow of oil" through the Strait of Hormuz, but reserves the option of closing off the shipping route if it is threatened. Iran recently has admitted deploying anti-aircraft and anti-ship missiles on Abu Musa, an island strategically located near the Strait of Hormuz's shipping lanes. (DJ)

- Dec. 19** After recently signing a large 20-year gas supply contract, Turkey and Iran announce plans to begin feasibility studies for the construction of a pipeline to carry Iranian crude oil for export from Iskenderun on Turkey's Mediterranean coast. The two countries also agree to renew their annual \$600-million oil sales agreement, which expires in April 1997. (DJ)
- Dec. 20** Clashes between the Front for the Liberation of the Enclave of Cabinda (FLEC) and Angolan government troops continue as the respective forces attempt to capture territory previously held by the National Union for the Total Independence of Angola (UNITA). According to a FLEC spokesman, a succession of recent clashes has resulted in more than five dozen deaths and has injured more than 100 combatants. About 60 percent of Angola's 700,000-barrel-per-day oil production occurs offshore Cabinda. (DJ)
- Dec. 23** After two years of discussions, Qatar Liquefied Gas Company (Qatargas) signs a 12-year, \$570-million loan arrangement with four international banks. The loan will be used to help finance a \$6-billion, 6-million-metric-ton-per-year LNG plant, which will consist of three LNG trains supplied by gas from the 270-trillion-cubic-foot North Field. Japan's Chubu Electric has contracted to receive 4 million metric tons per year of the project's anticipated LNG production. The Qatargas consortium partners are Qatar General Petroleum Corporation (QGPC) (65 percent), Mobil (10 percent), Total (10 percent), and a group of Japanese companies (15 percent). The Qatargas loan agreement follows a recent \$1.2-billion loan deal obtained by competitor Ras Laffan Liquefied Natural Gas Company (Rasgas), which also is planning to build a LNG plant in Qatar. (FT, DJ)
- Dec. 30** The United Nations announces that a total of 21 contracts have been approved for the limited Iraqi oil sales under U.N. Resolution 986. The approved contracts will allow for 43.68 million barrels of oil to be exported in the first 90 days of the sale. At present, exports of 26.37 million barrels have been approved for the second 90-day period of the sale, which allows Iraq to sell up to \$1 billion worth of oil every 90 days for an initial 6-month period. In mid-December 1996, Iraq restarted the Kirkuk-Ceyhan pipeline, which is expected to carry up to 450,000 barrels per day of oil under the sales agreements approved so far under U.N. Resolution 986. Iraq's remaining oil exports will flow through the Mina al-Bakr terminal. (NYT, DJ)

Appendix E

**World Energy
Consumption (Btu),
1987-1996**

Table E1 World Primary Energy Consumption (Btu), 1987 - 1996
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	10.13	10.87	11.13	10.88	10.82	11.06	11.37	11.68	11.79	12.20
Mexico.....	4.50	4.67	4.83	4.89	5.15	5.30	5.35	5.41	5.46	5.62
United States.....	76.91	80.26	81.84	84.16	83.98	85.18	87.05	88.57	90.37	93.36
Other.....	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.01
Total.....	91.55	95.82	97.82	99.95	99.96	101.55	103.78	105.67	107.62	111.19
Central & South America										
Argentina.....	1.97	1.96	1.89	1.84	1.90	2.15	2.30	2.37	2.48	2.60
Brazil.....	5.25	5.45	5.62	5.66	5.90	5.95	6.20	6.50	6.76	7.24
Chile.....	0.41	0.45	0.50	0.56	0.56	0.61	0.66	0.71	0.76	0.79
Colombia.....	0.82	0.92	0.95	0.96	1.00	1.00	1.05	1.09	1.12	1.27
Cuba.....	0.48	0.49	0.50	0.49	0.45	0.40	0.40	0.40	0.41	0.41
Venezuela.....	1.89	1.91	2.03	2.09	2.22	2.23	2.30	2.44	2.53	2.57
Other.....	2.43	2.44	2.49	2.55	2.63	2.70	2.85	3.06	3.23	3.34
Total.....	13.26	13.61	13.97	14.14	14.67	15.05	15.76	16.57	17.29	18.22
Western Europe										
Austria.....	1.06	1.14	1.15	1.19	1.23	1.21	1.25	1.24	1.27	1.28
Belgium.....	2.05	2.05	2.09	2.16	2.26	2.25	2.24	2.30	2.34	2.51
Denmark.....	0.84	0.83	0.82	0.80	0.83	0.82	0.85	0.84	0.86	0.91
Finland.....	1.09	1.11	1.13	1.14	1.14	1.11	1.14	1.16	1.06	1.06
France.....	8.49	8.35	8.63	8.84	9.41	9.41	9.34	9.20	9.46	9.87
Germany.....	--	--	--	--	14.33	14.03	14.18	14.05	14.25	14.44
Germany, East.....	3.94	3.86	3.71	3.31	--	--	--	--	--	--
Germany, West.....	11.41	11.46	11.16	11.43	--	--	--	--	--	--
Greece.....	0.90	0.97	0.99	1.05	1.07	1.04	1.09	1.11	1.12	1.18
Ireland.....	0.32	0.33	0.35	0.37	0.39	0.40	0.40	0.42	0.45	0.46
Italy.....	6.66	6.78	7.03	7.02	7.14	7.18	7.00	6.93	7.51	7.63
Netherlands.....	3.24	3.24	3.25	3.36	3.55	3.51	3.57	3.56	3.66	3.76
Norway.....	1.59	1.55	1.56	1.58	1.59	1.65	1.65	1.66	1.72	1.74
Portugal.....	0.64	0.67	0.70	0.74	0.74	0.75	0.77	0.81	0.84	0.86
Spain.....	3.62	3.92	4.09	3.93	4.14	4.11	4.05	4.24	4.55	4.50
Sweden.....	2.23	2.22	2.18	2.15	2.15	2.15	2.15	2.13	2.31	2.27
Switzerland.....	1.10	1.12	1.13	1.17	1.20	1.21	1.19	1.19	1.17	1.21
Turkey.....	1.67	1.83	1.78	1.97	2.08	2.10	2.33	2.23	2.47	2.67
United Kingdom.....	9.09	9.13	9.38	9.48	9.61	9.35	9.60	9.54	9.43	10.05
Former Yugoslavia.....	2.23	2.23	2.24	2.10	1.85	--	--	--	--	--
Croatia.....	--	--	--	--	--	0.32	0.32	0.35	0.37	0.40
Serbia and Montenegro.....	--	--	--	--	--	0.70	0.55	0.58	0.46	0.54
Other.....	0.26	0.28	0.29	0.30	0.31	0.87	0.86	0.82	0.83	0.88
Total.....	62.45	63.06	63.67	64.11	65.01	64.15	64.55	64.37	66.13	68.23
Eastern Europe & Former U.S.S.R.										
Bulgaria.....	1.56	1.55	1.45	1.27	1.00	1.00	0.95	0.95	0.98	1.03
Former Czechoslovakia.....	4.39	4.30	4.20	3.92	3.57	3.22	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	2.16	2.32	2.31	2.34
Slovakia.....	--	--	--	--	--	--	0.73	0.75	0.77	0.66
Hungary.....	1.43	1.43	1.41	1.25	1.16	1.07	1.09	1.08	1.11	1.14
Poland.....	5.24	5.17	4.96	3.91	3.85	3.84	3.98	3.78	3.80	3.77
Romania.....	3.14	3.11	3.25	2.88	2.14	1.97	1.95	1.86	2.07	2.10
Former U.S.S.R.....	56.16	57.96	57.45	58.12	54.93	--	--	--	--	--
Azerbaijan.....	--	--	--	--	--	0.92	0.79	0.72	0.69	0.71
Belarus.....	--	--	--	--	--	1.50	1.28	1.09	1.01	1.03
Kazakhstan.....	--	--	--	--	--	3.36	2.76	2.04	2.05	2.07
Lithuania.....	--	--	--	--	--	0.43	0.36	0.35	0.35	0.35
Russia.....	--	--	--	--	--	33.75	31.09	28.22	26.84	25.98
Turkmenistan.....	--	--	--	--	--	0.27	0.25	0.25	0.27	0.26
Ukraine.....	--	--	--	--	--	8.50	8.23	7.02	6.49	6.25
Uzbekistan.....	--	--	--	--	--	1.61	1.99	1.73	1.79	1.86
Other.....	0.16	0.16	0.15	0.11	0.09	1.92	1.44	1.26	1.28	1.27
Total.....	72.08	73.69	72.87	71.47	66.75	63.35	59.04	53.41	51.81	50.81

See footnotes at end of table.

Table E1 World Primary Energy Consumption (Btu), 1987 - 1996 (Continued)
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Middle East										
Bahrain.....	0.27	0.23	0.24	0.27	0.30	0.25	0.31	0.32	0.30	0.31
Iran.....	2.53	2.70	2.97	3.10	3.24	3.35	3.47	3.66	3.81	4.03
Iraq.....	0.64	0.77	0.82	0.92	0.60	0.84	0.96	1.08	1.13	1.19
Israel.....	0.39	0.42	0.44	0.45	0.48	0.54	0.60	0.62	0.61	0.64
Kuwait.....	0.54	0.62	0.70	0.45	0.11	0.26	0.43	0.50	0.52	0.54
Oman.....	0.14	0.13	0.17	0.18	0.21	0.20	0.23	0.24	0.22	0.23
Qatar.....	0.27	0.27	0.29	0.36	0.42	0.49	0.57	0.57	0.57	0.58
Saudi Arabia.....	3.00	3.11	3.07	3.15	3.28	3.39	3.52	3.64	3.85	4.03
Syria.....	0.43	0.47	0.50	0.60	0.57	0.60	0.65	0.69	0.65	0.66
United Arab Emirates.....	1.07	1.17	1.26	1.23	1.49	1.55	1.48	1.49	1.60	1.79
Yemen.....	0.14	0.14	0.15	0.16	0.17	0.17	0.14	0.14	0.15	0.15
Other.....	0.30	0.29	0.28	0.29	0.33	0.36	0.40	0.45	0.47	0.48
Total.....	9.71	10.32	10.90	11.14	11.19	12.01	12.76	13.37	13.89	14.63
Africa										
Algeria.....	1.05	1.12	1.09	1.14	1.26	1.22	1.16	1.22	1.33	1.36
Angola.....	0.08	0.09	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Egypt.....	1.29	1.30	1.35	1.44	1.43	1.43	1.51	1.55	1.58	1.64
Gabon.....	0.03	0.04	0.04	0.04	0.04	0.05	0.04	0.05	0.05	0.05
Libya.....	0.45	0.46	0.48	0.51	0.53	0.49	0.51	0.53	0.54	0.57
Morocco.....	0.25	0.27	0.30	0.31	0.32	0.33	0.36	0.41	0.37	0.38
Nigeria.....	0.62	0.66	0.71	0.70	0.77	0.79	0.80	0.67	0.83	0.86
South Africa.....	3.53	3.66	3.40	3.36	3.52	3.45	3.49	3.71	4.18	4.26
Zimbabwe.....	0.20	0.21	0.22	0.23	0.23	0.24	0.22	0.24	0.15	0.16
Other.....	1.24	1.32	1.40	1.44	1.45	1.51	1.55	1.65	1.60	1.67
Total.....	8.76	9.12	9.08	9.24	9.65	9.59	9.73	10.12	10.73	11.05
Far East & Oceania										
Australia.....	3.27	3.38	3.55	3.70	3.69	3.85	3.92	3.95	4.13	4.08
Bangladesh.....	0.21	0.23	0.25	0.25	0.26	0.29	0.30	0.33	0.36	0.37
Brunei.....	0.08	0.07	0.08	0.07	0.04	0.05	0.05	0.05	0.06	0.06
China.....	24.74	26.45	26.94	26.99	28.24	29.30	31.34	33.97	36.35	37.04
Hong Kong.....	0.43	0.48	0.50	0.48	0.46	0.50	0.55	0.59	0.64	0.61
India.....	6.36	6.89	7.24	7.74	8.01	8.65	9.04	9.62	11.11	11.55
Indonesia.....	1.82	1.86	2.07	2.18	2.29	2.49	2.80	2.97	3.31	3.51
Japan.....	15.98	16.93	17.53	18.11	18.82	19.08	19.26	20.12	20.76	21.37
Korea, North.....	1.91	1.98	2.04	2.10	2.13	2.02	2.08	2.07	2.10	2.15
Korea, South.....	2.74	3.05	3.29	3.68	4.19	4.65	5.39	5.90	6.53	7.16
Malaysia.....	0.75	0.80	0.86	0.98	1.09	1.13	1.29	1.43	1.48	1.66
New Zealand.....	0.65	0.68	0.71	0.73	0.73	0.74	0.77	0.80	0.87	0.88
Pakistan.....	1.00	1.08	1.13	1.18	1.25	1.29	1.41	1.50	1.58	1.68
Philippines.....	0.60	0.64	0.71	0.73	0.74	0.79	0.86	0.90	0.95	0.98
Singapore.....	0.63	0.68	0.73	0.80	0.86	0.96	1.08	1.19	1.18	1.22
Taiwan.....	1.68	1.81	1.93	2.04	2.10	2.21	2.44	2.62	2.87	3.11
Thailand.....	0.79	0.92	1.08	1.25	1.37	1.47	1.68	1.82	2.24	2.33
Vietnam.....	0.26	0.25	0.23	0.28	0.27	0.29	0.40	0.44	0.48	0.49
Other.....	0.57	0.62	0.62	0.64	0.59	0.56	0.60	0.64	0.66	0.68
Total.....	64.46	68.81	71.47	73.93	77.10	80.34	85.24	90.91	97.66	100.93
World Total.....	322.27	334.42	339.78	343.97	344.34	346.04	350.85	354.41	365.13	375.07

¹ Preliminary.

-- Not applicable.

(s) = Value less than 5 trillion Btu.

Notes: Sum of components may not equal total due to independent rounding.

Primary energy consumption includes petroleum, natural gas, coal, and net hydroelectric, nuclear, geothermal, solar, and wind electric power. Data for United States include biofuels energy consumption and data for Brazil include consumption of biofuels electric power. United States apparent coal consumption is calculated as: production+imports-exports-stock builds. A different methodology for deriving coal consumption is used in the Monthly Energy Review.

Sources: See sources at the end of Sections 3, 4, 5, and 6.

Table E2 World Petroleum Consumption (Btu), 1987 - 1996
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	3.11	3.40	3.48	3.39	3.24	3.28	3.33	3.40	3.45	3.53
Mexico.....	3.20	3.27	3.36	3.44	3.45	3.47	3.58	3.72	3.68	3.76
United States.....	32.87	34.22	34.21	33.55	32.85	33.53	33.84	34.74	34.66	35.86
Other.....	0.01	0.01	0.02	0.01	0.01	0.02	0.01	0.01	0.01	0.01
Total.....	39.18	40.91	41.07	40.39	39.55	40.30	40.76	41.87	41.81	43.17
Central & South America										
Argentina.....	0.99	0.97	0.89	0.84	0.84	0.90	0.97	0.96	0.95	0.97
Bolivia.....	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.07
Brazil.....	2.57	2.65	2.68	2.71	2.73	2.77	2.82	2.97	3.02	3.10
Chile.....	0.21	0.22	0.25	0.27	0.29	0.30	0.34	0.36	0.39	0.40
Colombia.....	0.37	0.40	0.41	0.39	0.41	0.46	0.48	0.48	0.50	0.52
Costa Rica.....	0.03	0.04	0.04	0.04	0.04	0.05	0.06	0.06	0.07	0.07
Cuba.....	0.47	0.48	0.49	0.48	0.44	0.39	0.39	0.40	0.41	0.40
Dominican Republic.....	0.11	0.12	0.12	0.13	0.13	0.14	0.12	0.14	0.15	0.15
Ecuador.....	0.18	0.19	0.18	0.20	0.21	0.24	0.22	0.24	0.25	0.26
El Salvador.....	0.03	0.03	0.03	0.03	0.04	0.05	0.05	0.05	0.06	0.06
Guatemala.....	0.05	0.05	0.05	0.05	0.05	0.06	0.07	0.08	0.08	0.09
Honduras.....	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.05
Jamaica.....	0.07	0.08	0.09	0.10	0.10	0.11	0.11	0.12	0.13	0.13
Netherlands Antilles.....	0.15	0.14	0.15	0.16	0.14	0.14	0.16	0.17	0.15	0.15
Panama.....	0.06	0.06	0.05	0.06	0.07	0.09	0.09	0.09	0.09	0.09
Peru.....	0.29	0.30	0.25	0.25	0.23	0.25	0.26	0.27	0.30	0.32
Puerto Rico.....	0.34	0.31	0.30	0.29	0.37	0.32	0.33	0.35	0.32	0.33
Trinidad and Tobago.....	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.05
Uruguay.....	0.06	0.07	0.07	0.07	0.06	0.07	0.07	0.07	0.06	0.07
Venezuela.....	0.81	0.80	0.78	0.79	0.81	0.83	0.83	0.85	0.88	0.90
Virgin Islands, U.S.....	0.12	0.08	0.12	0.11	0.12	0.11	0.12	0.13	0.16	0.16
Other.....	0.21	0.22	0.24	0.25	0.24	0.24	0.26	0.27	0.30	0.31
Total.....	7.23	7.31	7.33	7.35	7.46	7.64	7.87	8.21	8.44	8.63
Western Europe										
Austria.....	0.46	0.44	0.45	0.45	0.49	0.48	0.48	0.49	0.49	0.48
Belgium.....	0.95	0.99	0.97	0.97	1.06	1.08	1.05	1.08	1.05	1.19
Denmark.....	0.45	0.43	0.41	0.40	0.41	0.40	0.41	0.44	0.47	0.50
Finland.....	0.48	0.48	0.48	0.47	0.48	0.46	0.44	0.46	0.38	0.40
France.....	3.67	3.69	3.81	3.73	3.99	3.96	3.85	3.77	3.90	4.00
Germany.....	--	--	--	--	5.85	5.87	5.97	5.92	5.92	5.98
Germany, East.....	0.72	0.67	0.62	0.58	--	--	--	--	--	--
Germany, West.....	5.00	5.01	4.69	4.90	--	--	--	--	--	--
Greece.....	0.57	0.60	0.62	0.67	0.68	0.70	0.72	0.74	0.74	0.77
Ireland.....	0.17	0.16	0.17	0.19	0.21	0.22	0.22	0.24	0.26	0.26
Italy.....	3.93	3.89	4.07	3.94	3.92	4.08	3.87	3.84	4.28	4.28
Luxembourg.....	0.06	0.06	0.06	0.07	0.08	0.08	0.08	0.08	0.08	0.08
Netherlands.....	1.40	1.49	1.47	1.52	1.57	1.59	1.58	1.59	1.65	1.61
Norway.....	0.42	0.37	0.38	0.38	0.37	0.37	0.37	0.37	0.39	0.43
Portugal.....	0.44	0.43	0.52	0.52	0.53	0.58	0.55	0.56	0.60	0.57
Spain.....	1.85	2.03	2.13	2.09	2.21	2.29	2.18	2.33	2.60	2.43
Sweden.....	0.77	0.74	0.69	0.65	0.66	0.70	0.68	0.72	0.84	0.82
Switzerland.....	0.54	0.54	0.53	0.56	0.58	0.59	0.57	0.58	0.53	0.56
Turkey.....	0.94	0.93	0.91	0.98	0.97	1.02	1.16	1.11	1.23	1.30
United Kingdom.....	3.26	3.46	3.55	3.59	3.68	3.67	3.70	3.72	3.72	3.72
Former Yugoslavia.....	0.66	0.67	0.66	0.67	0.53	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	0.07	0.05	0.04	0.04	0.04
Croatia.....	--	--	--	--	--	0.14	0.13	0.17	0.19	0.18
Macedonia, TFYR.....	--	--	--	--	--	0.04	0.05	0.04	0.04	0.04
Serbia and Montenegro.....	--	--	--	--	--	0.12	0.07	0.07	0.06	0.06
Slovenia.....	--	--	--	--	--	0.07	0.09	0.09	0.10	0.09
Other.....	0.06	0.07	0.06	0.07	0.07	0.09	0.09	0.09	0.09	0.10
Total.....	26.78	27.16	27.26	27.42	28.32	28.69	28.37	28.51	29.61	29.91

See footnotes at end of table.

Table E2 World Petroleum Consumption (Btu), 1987 - 1996 (Continued)

(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	0.07	0.07	0.06	0.04	0.04	0.04	0.04	0.03	0.03	0.03
Bulgaria.....	0.60	0.60	0.50	0.41	0.26	0.28	0.25	0.27	0.28	0.29
Former Czechoslovakia.....	0.69	0.67	0.67	0.60	0.49	0.45	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	0.31	0.32	0.33	0.34
Slovakia.....	--	--	--	--	--	--	0.13	0.14	0.14	0.15
Hungary.....	0.42	0.40	0.38	0.37	0.34	0.36	0.35	0.36	0.33	0.34
Poland.....	0.71	0.73	0.72	0.58	0.57	0.62	0.62	0.63	0.65	0.68
Romania.....	0.73	0.71	0.74	0.82	0.60	0.53	0.53	0.47	0.52	0.51
Former U.S.S.R.....	18.82	18.54	18.25	17.48	17.45	--	--	--	--	--
Armenia.....	--	--	--	--	--	0.07	0.03	0.02	0.05	0.06
Azerbaijan.....	--	--	--	--	--	0.43	0.41	0.39	0.38	0.39
Belarus.....	--	--	--	--	--	0.79	0.62	0.55	0.49	0.48
Estonia.....	--	--	--	--	--	0.06	0.06	0.05	0.05	0.06
Georgia.....	--	--	--	--	--	0.06	0.03	0.01	0.04	0.04
Kazakhstan.....	--	--	--	--	--	0.85	0.71	0.63	0.59	0.60
Kyrgyzstan.....	--	--	--	--	--	0.07	0.04	0.01	0.02	0.03
Latvia.....	--	--	--	--	--	0.11	0.09	0.08	0.09	0.09
Lithuania.....	--	--	--	--	--	0.18	0.16	0.17	0.16	0.17
Moldova.....	--	--	--	--	--	0.12	0.09	0.05	0.05	0.05
Russia.....	--	--	--	--	--	9.32	7.86	6.66	6.25	5.74
Tajikistan.....	--	--	--	--	--	0.04	0.04	0.01	0.02	0.02
Turkmenistan.....	--	--	--	--	--	0.16	0.14	0.13	0.13	0.12
Ukraine.....	--	--	--	--	--	1.74	1.22	1.06	1.01	0.97
Uzbekistan.....	--	--	--	--	--	0.40	0.37	0.35	0.38	0.37
Total.....	22.05	21.72	21.32	20.32	19.75	16.69	14.11	12.41	11.98	11.54
Middle East										
Bahrain.....	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.04	0.05
Cyprus.....	0.05	0.05	0.06	0.07	0.07	0.08	0.08	0.09	0.09	0.10
Iran.....	1.83	1.85	2.03	2.11	2.27	2.28	2.34	2.36	2.39	2.46
Iraq.....	0.59	0.67	0.72	0.83	0.56	0.73	0.86	0.95	1.00	1.06
Israel.....	0.30	0.34	0.35	0.35	0.37	0.43	0.42	0.42	0.44	0.47
Jordan.....	0.14	0.13	0.13	0.14	0.13	0.15	0.15	0.17	0.18	0.19
Kuwait.....	0.24	0.25	0.26	0.18	0.09	0.17	0.23	0.28	0.30	0.32
Lebanon.....	0.10	0.09	0.07	0.07	0.11	0.11	0.14	0.16	0.17	0.17
Oman.....	0.05	0.05	0.07	0.08	0.08	0.08	0.08	0.08	0.09	0.09
Qatar.....	0.06	0.05	0.06	0.07	0.08	0.07	0.07	0.07	0.08	0.08
Saudi Arabia.....	2.01	2.04	1.97	2.02	2.09	2.13	2.19	2.24	2.45	2.50
Syria.....	0.38	0.41	0.42	0.43	0.37	0.39	0.44	0.48	0.48	0.49
United Arab Emirates.....	0.46	0.52	0.53	0.53	0.67	0.60	0.65	0.69	0.69	0.70
Yemen.....	0.14	0.14	0.15	0.16	0.17	0.17	0.14	0.14	0.15	0.15
Total.....	6.40	6.62	6.88	7.09	7.12	7.46	7.86	8.20	8.54	8.82

See footnotes at end of table.

Table E2 World Petroleum Consumption (Btu), 1987 - 1996 (Continued)
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Africa										
Algeria.....	0.32	0.33	0.36	0.38	0.41	0.42	0.43	0.45	0.44	0.45
Angola.....	0.05	0.05	0.05	0.05	0.05	0.06	0.05	0.05	0.06	0.06
Cameroon.....	0.04	0.04	0.05	0.05	0.05	0.05	0.04	0.05	0.06	0.06
Congo (Brazzaville).....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01
Congo (Kinshasa).....	0.04	0.05	0.05	0.04	0.05	0.05	0.05	0.05	0.04	0.04
Cote d'Ivoire (Ivory Coast).....	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.11	0.11	0.12
Egypt.....	0.94	0.93	0.94	0.99	0.97	0.94	0.95	0.96	0.99	1.01
Ethiopia.....	0.04	0.04	0.04	0.04	0.03	0.05	0.05	0.03	0.03	0.03
Gabon.....	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04
Ghana.....	0.04	0.04	0.05	0.04	0.04	0.05	0.05	0.05	0.06	0.06
Kenya.....	0.07	0.08	0.09	0.09	0.08	0.09	0.09	0.09	0.10	0.10
Libya.....	0.28	0.30	0.31	0.33	0.35	0.31	0.34	0.35	0.36	0.38
Morocco.....	0.19	0.20	0.23	0.24	0.24	0.27	0.27	0.32	0.29	0.30
Nigeria.....	0.44	0.48	0.50	0.51	0.53	0.54	0.55	0.45	0.58	0.60
Senegal.....	0.04	0.03	0.04	0.04	0.03	0.04	0.04	0.05	0.05	0.05
South Africa.....	0.58	0.59	0.58	0.63	0.69	0.64	0.57	0.58	0.94	0.98
Sudan.....	0.06	0.06	0.06	0.05	0.08	0.07	0.07	0.06	0.06	0.06
Tunisia.....	0.11	0.13	0.13	0.13	0.15	0.15	0.15	0.17	0.14	0.15
Zimbabwe.....	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05
Other.....	0.30	0.32	0.34	0.38	0.37	0.40	0.41	0.46	0.44	0.44
Total.....	3.69	3.85	3.98	4.17	4.30	4.30	4.30	4.38	4.84	4.99
Far East & Oceania										
Australia.....	1.29	1.31	1.37	1.42	1.42	1.43	1.50	1.57	1.66	1.59
Bangladesh.....	0.07	0.08	0.08	0.08	0.08	0.08	0.09	0.10	0.11	0.11
Brunei.....	0.01	0.01	0.01	0.01	0.02	0.01	0.02	0.02	0.02	0.02
Burma.....	0.04	0.03	0.04	0.03	0.03	0.03	0.03	0.04	0.04	0.04
China.....	4.51	4.83	5.03	4.85	5.29	5.59	6.19	6.53	6.92	7.37
Guam.....	0.01	0.01	0.01	0.03	0.03	0.03	0.05	0.06	0.05	0.05
Hong Kong.....	0.25	0.26	0.26	0.27	0.28	0.32	0.33	0.38	0.39	0.41
India.....	2.07	2.29	2.40	2.44	2.49	2.66	2.73	2.94	3.27	3.45
Indonesia.....	1.03	1.10	1.22	1.36	1.45	1.48	1.59	1.61	1.70	1.77
Japan.....	9.08	9.69	10.14	10.44	10.76	11.10	10.95	11.56	11.63	11.92
Korea, North.....	0.14	0.14	0.13	0.15	0.16	0.15	0.15	0.14	0.13	0.12
Korea, South.....	1.34	1.54	1.77	2.15	2.53	3.05	3.54	3.88	4.23	4.51
Malaysia.....	0.41	0.43	0.46	0.55	0.58	0.62	0.70	0.79	0.83	0.86
Mongolia.....	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02
New Zealand.....	0.18	0.19	0.21	0.22	0.21	0.22	0.25	0.26	0.31	0.27
Pakistan.....	0.38	0.41	0.44	0.47	0.47	0.49	0.55	0.61	0.64	0.66
Papua New Guinea.....	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Philippines.....	0.40	0.42	0.49	0.50	0.50	0.55	0.60	0.64	0.69	0.72
Singapore.....	0.63	0.68	0.73	0.80	0.85	0.93	1.03	1.14	1.13	1.16
Sri Lanka.....	0.08	0.07	0.07	0.07	0.07	0.08	0.09	0.09	0.10	0.10
Taiwan.....	0.88	1.02	1.11	1.14	1.15	1.17	1.30	1.39	1.56	1.67
Thailand.....	0.53	0.58	0.72	0.84	0.91	1.00	1.14	1.26	1.42	1.43
Vietnam.....	0.07	0.09	0.10	0.11	0.12	0.13	0.16	0.18	0.20	0.20
Other.....	0.14	0.14	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.15
Total.....	23.62	25.37	26.99	28.15	29.64	31.33	33.18	35.37	37.24	38.64
World Total.....	128.95	132.96	134.82	134.89	136.13	136.40	136.45	138.95	142.47	145.71

¹ Preliminary.

--- Not applicable.

(s) = Value less than 5 trillion Btu.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Section 3.

Table E3 World Dry Natural Gas Consumption (Btu), 1987 - 1996
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	2.14	2.37	2.53	2.41	2.44	2.64	2.76	2.92	2.94	3.13
Mexico.....	0.87	0.94	0.96	0.96	1.21	1.24	1.14	1.16	1.09	1.10
United States.....	17.74	18.55	19.38	19.30	19.61	20.13	20.83	21.29	22.16	22.52
Total.....	20.76	21.87	22.88	22.67	23.26	24.01	24.73	25.37	26.19	26.75
Central & South America										
Argentina.....	0.56	0.67	0.75	0.67	0.73	0.85	0.90	0.93	1.03	1.18
Barbados.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Bolivia.....	0.01	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04
Brazil.....	0.11	0.10	0.13	0.11	0.14	0.15	0.17	0.18	0.19	0.24
Chile.....	0.03	0.04	0.06	0.07	0.05	0.05	0.06	0.07	0.07	0.06
Colombia.....	0.13	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.17
Cuba.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Ecuador.....	(s)	(s)	(s)	0.01	(s)	(s)	(s)	(s)	0.01	0.01
Peru.....	0.05	0.04	0.04	0.02	0.02	0.02	0.03	0.03	0.03	0.03
Trinidad and Tobago.....	0.15	0.16	0.17	0.18	0.21	0.20	0.23	0.26	0.28	0.32
Venezuela.....	0.75	0.75	0.88	0.91	0.95	0.91	0.97	1.04	1.06	1.06
Total.....	1.79	1.91	2.18	2.14	2.27	2.37	2.55	2.70	2.86	3.11
Western Europe										
Austria.....	0.21	0.20	0.21	0.23	0.24	0.24	0.26	0.26	0.28	0.30
Belgium.....	0.32	0.32	0.35	0.36	0.39	0.40	0.42	0.43	0.47	0.52
Denmark.....	0.06	0.06	0.07	0.08	0.09	0.09	0.11	0.12	0.14	0.18
Finland.....	0.06	0.06	0.08	0.10	0.11	0.11	0.11	0.13	0.13	0.14
France.....	1.10	1.06	1.08	1.12	1.26	1.26	1.23	1.19	1.23	1.43
Germany.....	--	--	--	--	2.57	2.55	2.72	2.76	3.01	3.28
Germany, East.....	0.21	0.23	0.23	0.13	--	--	--	--	--	--
Germany, West.....	1.93	1.88	2.00	2.05	--	--	--	--	--	--
Greece.....	(s)	0.01	0.01	0.01	0.01	0.01	(s)	(s)	(s)	(s)
Ireland.....	0.06	0.07	0.08	0.08	0.08	0.08	0.10	0.10	0.10	0.11
Italy.....	1.43	1.52	1.64	1.74	1.80	1.78	1.80	1.75	1.92	2.03
Luxembourg.....	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.02	0.02	0.03
Netherlands.....	1.49	1.35	1.39	1.37	1.53	1.49	1.52	1.47	1.51	1.66
Norway.....	0.08	0.08	0.08	0.09	0.08	0.14	0.10	0.10	0.11	0.11
Spain.....	0.11	0.15	0.20	0.22	0.25	0.26	0.27	0.31	0.34	0.37
Sweden.....	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03
Switzerland.....	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.09	0.10	0.10
Turkey.....	0.03	0.04	0.12	0.13	0.15	0.16	0.19	0.20	0.26	0.28
United Kingdom.....	2.15	2.04	2.02	2.25	2.22	2.21	2.53	2.65	2.83	3.35
Former Yugoslavia.....	0.29	0.29	0.32	0.24	0.24	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	0.02	0.01	0.01	0.08	0.11
Croatia.....	--	--	--	--	--	0.09	0.09	0.08	0.07	0.08
Macedonia, TFYR.....	--	--	--	--	--	0.01	0.01	0.00	0.00	0.00
Serbia and Montenegro.....	--	--	--	--	--	0.07	0.03	0.05	0.04	0.09
Slovenia.....	--	--	--	--	--	0.02	0.03	0.03	0.03	0.04
Total.....	9.64	9.44	9.97	10.30	11.14	11.12	11.70	11.78	12.71	14.27

See footnotes at end of table.

Table E3 World Dry Natural Gas Consumption (Btu), 1987 - 1996 (Continued)
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	0.02	0.03	0.03	0.01	0.01	(s)	(s)	(s)	(s)	(s)
Bulgaria.....	0.23	0.23	0.23	0.23	0.19	0.18	0.16	0.16	0.21	0.22
Former Czechoslovakia.....	0.46	0.44	0.47	0.48	0.44	0.36	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	0.23	0.21	0.28	0.33
Slovakia.....	--	--	--	--	--	--	0.15	0.18	0.24	0.23
Hungary.....	0.44	0.45	0.48	0.35	0.34	0.31	0.35	0.33	0.39	0.43
Poland.....	0.47	0.46	0.48	0.35	0.32	0.31	0.33	0.30	0.33	0.33
Romania.....	1.58	1.47	1.55	1.35	0.94	0.85	0.83	0.77	0.91	0.94
Former U.S.S.R.....	20.93	22.45	22.86	23.04	22.79	--	--	--	--	--
Armenia.....	--	--	--	--	--	0.06	0.05	0.05	0.05	0.06
Azerbaijan.....	--	--	--	--	--	0.48	0.35	0.30	0.29	0.30
Belarus.....	--	--	--	--	--	0.59	0.56	0.46	0.42	0.42
Estonia.....	--	--	--	--	--	0.05	0.02	0.02	0.02	0.03
Georgia.....	--	--	--	--	--	0.16	0.08	0.05	0.07	0.06
Kazakhstan.....	--	--	--	--	--	0.65	0.47	0.48	0.40	0.46
Kyrgyzstan.....	--	--	--	--	--	0.08	0.07	0.06	0.03	0.03
Latvia.....	--	--	--	--	--	0.05	0.03	0.02	0.04	0.03
Lithuania.....	--	--	--	--	--	0.13	0.08	0.07	0.09	0.08
Moldova.....	--	--	--	--	--	0.07	0.06	0.05	0.05	0.06
Russia.....	--	--	--	--	--	15.01	14.74	13.86	13.22	13.21
Tajikistan.....	--	--	--	--	--	0.06	0.05	0.05	0.03	0.03
Turkmenistan.....	--	--	--	--	--	0.13	0.13	0.14	0.15	0.15
Ukraine.....	--	--	--	--	--	3.19	3.53	3.03	2.71	2.67
Uzbekistan.....	--	--	--	--	--	1.00	1.40	1.12	1.23	1.31
Total.....	24.14	25.52	26.10	25.80	25.03	23.71	23.66	21.72	21.14	21.40
Middle East										
Bahrain.....	0.23	0.19	0.19	0.21	0.24	0.20	0.24	0.25	0.25	0.26
Iran.....	0.60	0.75	0.83	0.88	0.86	0.93	0.99	1.19	1.31	1.45
Iraq.....	0.04	0.09	0.09	0.08	0.04	0.11	0.09	0.12	0.12	0.12
Israel.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Jordan.....	0.00	0.00	(s)	(s)	(s)	0.01	0.01	0.01	0.01	0.01
Kuwait.....	0.30	0.37	0.43	0.27	0.02	0.10	0.20	0.22	0.22	0.22
Oman.....	0.08	0.08	0.10	0.10	0.13	0.12	0.15	0.15	0.14	0.14
Qatar.....	0.21	0.22	0.23	0.29	0.34	0.42	0.50	0.50	0.50	0.51
Saudi Arabia.....	0.99	1.08	1.10	1.13	1.18	1.26	1.33	1.39	1.41	1.53
Syria.....	0.02	0.02	0.04	0.11	0.13	0.13	0.14	0.14	0.10	0.10
United Arab Emirates.....	0.61	0.65	0.73	0.69	0.83	0.94	0.84	0.80	0.92	1.09
Total.....	3.07	3.44	3.76	3.78	3.78	4.21	4.48	4.78	4.97	5.43
Africa										
Algeria.....	0.70	0.76	0.70	0.72	0.82	0.78	0.70	0.73	0.87	0.89
Angola.....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Congo (Brazzaville).....	(s)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cote d'Ivoire (Ivory Coast).....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(s)	(s)
Egypt.....	0.23	0.26	0.29	0.30	0.34	0.37	0.42	0.44	0.46	0.50
Gabon.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Libya.....	0.17	0.16	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.19
Morocco.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Nigeria.....	0.14	0.14	0.17	0.14	0.18	0.18	0.19	0.17	0.19	0.19
Senegal.....	0.00	0.00	0.00	0.00	0.00	0.00	(s)	(s)	(s)	(s)
South Africa.....	0.00	0.00	0.00	0.00	0.00	(s)	0.07	0.07	0.07	0.07
Tunisia.....	0.06	0.05	0.07	0.07	0.05	0.04	0.07	0.09	0.07	0.09
Total.....	1.31	1.39	1.42	1.43	1.60	1.57	1.63	1.71	1.87	1.96

See footnotes at end of table.

Table E3 World Dry Natural Gas Consumption (Btu), 1987 - 1996 (Continued)

(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Far East & Oceania										
Afghanistan.....	0.02	0.07	0.07	0.07	0.01	0.01	0.01	0.01	0.01	0.01
Australia.....	0.56	0.58	0.59	0.65	0.61	0.64	0.67	0.69	0.75	0.75
Bangladesh.....	0.12	0.14	0.15	0.15	0.16	0.19	0.20	0.22	0.24	0.25
Brunei.....	0.07	0.06	0.07	0.06	0.02	0.04	0.03	0.03	0.04	0.04
Burma.....	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.06	0.06
China.....	0.55	0.56	0.56	0.56	0.58	0.59	0.62	0.65	0.70	0.77
Hong Kong.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
India.....	0.23	0.32	0.33	0.41	0.47	0.49	0.55	0.62	0.72	0.80
Indonesia.....	0.60	0.54	0.60	0.55	0.56	0.67	0.85	0.97	1.18	1.26
Japan.....	1.70	1.78	1.91	2.04	2.18	2.23	2.15	2.40	2.43	2.63
Korea, South.....	0.02	0.10	0.10	0.12	0.14	0.17	0.21	0.29	0.39	0.53
Malaysia.....	0.28	0.30	0.31	0.33	0.40	0.40	0.48	0.50	0.51	0.66
New Zealand.....	0.15	0.17	0.18	0.17	0.18	0.20	0.18	0.17	0.16	0.20
Pakistan.....	0.39	0.41	0.44	0.45	0.50	0.51	0.54	0.59	0.60	0.65
Papua New Guinea.....	0.00	0.00	0.00	0.00	0.00	(s)	(s)	(s)	(s)	(s)
Philippines.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(s)	(s)
Singapore.....	0.00	0.00	0.00	0.00	0.00	0.04	0.05	0.05	0.06	0.06
Taiwan.....	0.05	0.03	0.05	0.08	0.11	0.11	0.12	0.15	0.16	0.17
Thailand.....	0.13	0.20	0.19	0.21	0.24	0.25	0.31	0.30	0.37	0.43
Vietnam.....	(s)	(s)	(s)	(s)	(s)	0.01	0.01	0.01	0.03	0.03
Total.....	4.91	5.30	5.59	5.90	6.19	6.61	7.03	7.70	8.41	9.30
World Total.....	65.62	68.87	71.90	72.02	73.26	73.60	75.78	75.77	78.15	82.22

¹ Preliminary.

-- Not applicable.

(s) = Value less than 5 trillion Btu.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Section 4.

Table E4 World Coal Consumption (Btu), 1987 - 1996
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	1.24	1.34	1.35	1.24	1.26	1.28	1.21	1.26	1.28	1.30
Mexico.....	0.17	0.16	0.17	0.13	0.13	0.17	0.20	0.18	0.22	0.25
United States. ²	18.03	18.93	18.96	19.07	18.77	18.89	19.55	19.52	19.61	20.50
Total.....	19.44	20.43	20.49	20.44	20.15	20.35	20.95	20.96	21.11	22.04
Central & South America										
Argentina.....	0.04	0.04	0.04	0.03	0.03	0.04	0.02	0.04	0.04	0.03
Brazil.....	0.42	0.42	0.42	0.37	0.43	0.39	0.42	0.43	0.47	0.67
Chile.....	0.05	0.07	0.09	0.10	0.08	0.08	0.08	0.10	0.11	0.11
Colombia.....	0.10	0.13	0.12	0.14	0.17	0.17	0.13	0.12	0.11	0.14
Costa Rica.....	(s)	(s)	(s)	(s)	(s)	0.00	0.00	0.00	0.00	0.00
Cuba.....	0.01	0.01	0.01	0.01	(s)	0.01	0.01	0.01	0.01	0.01
Dominican Republic.....	0.01	(s)	0.01	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Haiti.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.00	0.00	0.00
Jamaica.....	0.00	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Panama.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Peru.....	0.01	0.01	0.01	(s)	0.01	0.01	0.02	0.02	0.02	0.01
Puerto Rico.....	0.01	0.01	0.01	0.01	0.01	(s)	0.01	0.01	0.01	0.01
Uruguay.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Venezuela.....	0.01	0.01	0.02	0.01	0.02	0.02	0.01	0.01	0.02	0.02
Virgin Islands, U.S.....	0.00	0.00	0.00	(s)	(s)	0.01	0.01	0.01	0.01	0.01
Other.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Total.....	0.64	0.69	0.72	0.68	0.75	0.74	0.72	0.75	0.79	1.01
Western Europe										
Austria.....	0.19	0.17	0.16	0.19	0.17	0.14	0.14	0.14	0.14	0.14
Belgium.....	0.38	0.33	0.38	0.43	0.41	0.33	0.33	0.36	0.36	0.33
Denmark.....	0.30	0.29	0.23	0.25	0.34	0.27	0.30	0.31	0.25	0.38
Finland.....	0.17	0.16	0.16	0.16	0.15	0.11	0.17	0.20	0.17	0.17
France.....	0.77	0.57	0.76	0.81	0.84	0.70	0.59	0.56	0.61	0.61
Germany.....	--	--	--	--	4.34	3.94	3.80	3.66	3.56	3.47
Germany, East.....	2.83	2.80	2.71	2.52	--	--	--	--	--	--
Germany, West.....	2.86	2.83	2.80	2.83	--	--	--	--	--	--
Greece.....	0.30	0.33	0.34	0.35	0.35	0.30	0.34	0.34	0.34	0.34
Iceland.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Ireland.....	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.07
Italy.....	0.60	0.56	0.56	0.60	0.57	0.45	0.42	0.42	0.45	0.42
Luxembourg.....	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02
Malta.....	(s)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Netherlands.....	0.27	0.30	0.30	0.35	0.32	0.30	0.33	0.34	0.34	0.33
Norway.....	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.04	0.04	0.04
Portugal.....	0.07	0.09	0.11	0.12	0.12	0.11	0.12	0.13	0.15	0.14
Spain.....	0.95	0.87	1.01	0.85	0.87	0.82	0.78	0.76	0.78	0.73
Sweden.....	0.11	0.11	0.11	0.10	0.09	0.08	0.10	0.07	0.10	0.10
Switzerland.....	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Turkey.....	0.51	0.56	0.56	0.62	0.72	0.64	0.63	0.61	0.62	0.67
United Kingdom.....	2.94	2.78	2.88	2.77	2.71	2.37	2.20	1.99	1.71	1.74
Former Yugoslavia.....	0.96	0.98	0.97	0.94	0.88	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	0.06	0.04	0.03	0.02	0.01
Croatia.....	--	--	--	--	--	0.02	0.02	0.01	0.01	0.02
Macedonia, TFYR.....	--	--	--	--	--	0.08	0.09	0.09	0.04	0.03
Serbia and Montenegro.....	--	--	--	--	--	0.38	0.34	0.34	0.25	0.24
Slovenia.....	--	--	--	--	--	0.07	0.06	0.06	0.07	0.06
Total.....	14.40	13.92	14.25	14.08	13.05	11.33	10.99	10.58	10.11	10.09

See footnotes at end of table.

Table E4 World Coal Consumption (Btu), 1987 - 1996 (Continued)
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	0.03	0.03	0.03	0.03	0.02	(s)	(s)	(s)	(s)	(s)
Bulgaria.....	0.53	0.48	0.48	0.42	0.37	0.38	0.37	0.34	0.29	0.31
Former Czechoslovakia.....	2.90	2.84	2.70	2.47	2.29	2.10	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	1.49	1.63	1.54	1.50
Slovakia.....	--	--	--	--	--	--	0.24	0.22	0.19	0.08
Hungary.....	0.33	0.31	0.29	0.26	0.27	0.24	0.23	0.23	0.22	0.20
Poland.....	4.00	3.89	3.70	2.96	2.96	2.91	3.01	2.83	2.81	2.75
Romania.....	0.67	0.72	0.74	0.50	0.40	0.42	0.44	0.47	0.47	0.47
Former U.S.S.R.....	12.46	12.66	11.99	13.24	10.17	--	--	--	--	--
Armenia.....	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Azerbaijan.....	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Belarus.....	--	--	--	--	--	0.05	0.04	0.03	0.03	0.03
Estonia.....	--	--	--	--	--	0.19	0.12	0.12	0.11	0.10
Georgia.....	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01
Kazakhstan.....	--	--	--	--	--	1.64	1.33	0.76	0.90	0.85
Kyrgyzstan.....	--	--	--	--	--	0.09	0.06	0.06	0.05	0.05
Latvia.....	--	--	--	--	--	0.02	0.01	0.01	0.01	(s)
Lithuania.....	--	--	--	--	--	0.02	0.02	0.02	0.01	0.01
Moldova.....	--	--	--	--	--	0.08	0.05	0.05	0.03	0.02
Russia.....	--	--	--	--	--	6.56	5.64	5.08	4.72	4.47
Tajikistan.....	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Turkmenistan.....	--	--	--	--	--	0.01	0.01	0.01	0.01	(s)
Ukraine.....	--	--	--	--	--	2.78	2.60	2.09	1.97	1.67
Uzbekistan.....	--	--	--	--	--	0.16	0.17	0.17	0.10	0.10
Total.....	20.92	20.94	19.94	19.87	16.47	17.67	15.84	14.14	13.45	12.63
Middle East										
Cyprus.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Iran.....	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Israel.....	0.09	0.09	0.10	0.10	0.11	0.11	0.18	0.19	0.17	0.17
Other.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.01	0.01
Total.....	0.13	0.13	0.14	0.15	0.15	0.15	0.22	0.24	0.21	0.22
Africa										
Algeria.....	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.02	0.02
Botswana.....	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Cameroon.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Congo (Kinshasa).....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Egypt.....	0.04	0.03	0.04	0.04	0.03	0.03	0.04	0.04	0.03	0.03
Ghana.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Kenya.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Libya.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Madagascar.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Malawi.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Mauritania.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Mauritius.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Morocco.....	0.05	0.05	0.05	0.05	0.06	0.04	0.07	0.07	0.07	0.07
Mozambique.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Niger.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Nigeria.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
South Africa.....	2.87	2.92	2.68	2.65	2.74	2.86	2.93	3.08	3.08	3.13
Swaziland.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Tanzania.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Tunisia.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Zambia.....	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Zimbabwe.....	0.13	0.14	0.14	0.13	0.14	0.15	0.14	0.15	0.06	0.06
Other.....	0.00	0.00	0.00	0.00	(s)	(s)	0.00	0.00	0.00	0.00
Total.....	3.17	3.23	2.99	2.96	3.06	3.18	3.27	3.43	3.31	3.37

See footnotes at end of table.

Table E4 World Coal Consumption (Btu), 1987 - 1996 (Continued)
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Far East & Oceania										
Afghanistan.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Australia.....	1.29	1.36	1.44	1.48	1.49	1.62	1.58	1.52	1.55	1.59
Bangladesh.....	0.01	0.01	(s)	0.02	0.01	(s)	(s)	0.00	0.00	0.00
Bhutan.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Burma.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
China.....	18.64	19.93	20.11	20.26	21.05	21.71	22.91	24.96	26.73	26.93
Fiji.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Hong Kong.....	0.20	0.24	0.26	0.23	0.21	0.23	0.26	0.19	0.20	0.14
India.....	3.51	3.62	3.82	4.08	4.23	4.69	4.95	5.27	6.28	6.45
Indonesia.....	0.10	0.11	0.14	0.14	0.15	0.19	0.21	0.25	0.29	0.34
Japan.....	2.40	2.65	2.65	2.70	2.77	2.70	2.72	2.81	2.95	3.04
Korea, North.....	1.46	1.52	1.58	1.62	1.64	1.62	1.68	1.68	1.73	1.79
Korea, South.....	0.94	0.99	0.91	0.83	0.93	0.84	1.01	1.12	1.21	1.36
Laos.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Macau.....	0.00	0.00	0.00	(s)	0.00	0.00	0.00	0.00	0.00	0.00
Malaysia.....	0.01	0.01	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.06
Mongolia.....	0.09	0.10	0.09	0.09	0.10	0.08	0.08	0.08	0.08	0.09
Nepal.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
New Caledonia.....	(s)	(s)	(s)	(s)	(s)	(s)	0.01	0.01	0.01	(s)
New Zealand.....	0.06	0.05	0.06	0.06	0.05	0.06	0.06	0.06	0.07	0.09
Pakistan.....	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.10	0.09	0.10
Papua New Guinea.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Philippines.....	0.05	0.06	0.05	0.06	0.06	0.06	0.08	0.08	0.07	0.07
Singapore.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Sri Lanka.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Taiwan.....	0.35	0.40	0.43	0.40	0.45	0.51	0.63	0.66	0.73	0.83
Thailand.....	0.08	0.09	0.11	0.14	0.17	0.18	0.19	0.21	0.38	0.40
Vietnam.....	0.16	0.14	0.09	0.11	0.09	0.09	0.13	0.14	0.12	0.12
Total.....	29.42	31.37	31.85	32.37	33.55	34.75	36.65	39.21	42.57	43.42
World Total.....	88.13	90.72	90.39	90.55	87.20	88.16	88.65	89.30	91.56	92.76

¹ Preliminary.

² United States apparent coal consumption is calculated as: production+imports-exports-stock builds. A different methodology for deriving coal consumption is used in the Monthly Energy Review.

-- Not applicable.

(s) = Value less than 5 trillion Btu.

Notes: Sum of components may not equal total due to independent rounding.

Coal includes anthracite, subanthracite, bituminous, subbituminous, lignite, and brown coal.

Sources: See sources at the end of Section 5.

Table E5 World Net Hydroelectric Power Consumption (Btu), 1987 - 1996

(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	3.26	3.16	2.99	3.06	3.17	3.26	3.33	3.38	3.44	3.63
Mexico.....	0.19	0.22	0.25	0.24	0.23	0.27	0.27	0.21	0.28	0.32
United States..2.....	3.12	2.66	2.88	3.10	3.18	2.85	3.14	2.96	3.47	3.91
Total.....	6.56	6.04	6.13	6.40	6.58	6.38	6.74	6.54	7.19	7.87
Central & South America										
Argentina.....	0.31	0.23	0.16	0.21	0.20	0.24	0.30	0.35	0.35	0.30
Bolivia.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
Brazil.....	1.91	2.05	2.11	2.13	2.24	2.30	2.42	2.50	2.61	2.74
Chile.....	0.13	0.12	0.10	0.12	0.14	0.17	0.18	0.17	0.19	0.22
Colombia.....	0.22	0.25	0.27	0.28	0.28	0.23	0.29	0.33	0.35	0.45
Costa Rica.....	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Dominican Republic.....	0.01	0.01	0.01	(s)	0.01	0.02	0.02	0.02	0.02	0.02
Ecuador.....	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.07
El Salvador.....	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.02	0.02	0.02
Guatemala.....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Haiti.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Honduras.....	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Jamaica.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Nicaragua.....	(s)	(s)	0.01	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Panama.....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03
Paraguay.....	0.19	0.21	0.25	0.28	0.30	0.28	0.32	0.37	0.43	0.47
Peru.....	0.11	0.11	0.11	0.11	0.12	0.10	0.12	0.13	0.14	0.14
Puerto Rico.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Suriname.....	(s)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Uruguay.....	0.07	0.06	0.04	0.07	0.06	0.08	0.08	0.08	0.08	0.08
Venezuela.....	0.32	0.35	0.36	0.38	0.46	0.48	0.49	0.53	0.57	0.60
Other.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Total.....	3.44	3.56	3.60	3.80	4.01	4.12	4.44	4.71	4.99	5.26
Western Europe										
Austria.....	0.26	0.37	0.36	0.32	0.32	0.36	0.38	0.37	0.38	0.35
Belgium.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Finland.....	0.14	0.14	0.13	0.11	0.14	0.16	0.14	0.12	0.13	0.12
France.....	0.71	0.77	0.48	0.55	0.59	0.70	0.66	0.80	0.73	0.65
Germany.....	--	--	--	--	0.15	0.18	0.18	0.19	0.20	0.19
Germany, East.....	0.02	0.02	0.02	0.01	--	--	--	--	--	--
Germany, West.....	0.21	0.22	0.20	0.19	--	--	--	--	--	--
Greece.....	0.03	0.02	0.02	0.02	0.03	0.02	0.02	0.03	0.04	0.04
Iceland.....	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05
Ireland.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Italy.....	0.41	0.42	0.35	0.33	0.43	0.43	0.43	0.46	0.39	0.43
Luxembourg.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Norway.....	1.06	1.12	1.22	1.25	1.13	1.20	1.23	1.15	1.25	1.07
Portugal.....	0.09	0.13	0.06	0.09	0.09	0.05	0.09	0.11	0.09	0.14
Spain.....	0.28	0.36	0.20	0.26	0.28	0.19	0.25	0.29	0.24	0.41
Sweden.....	0.74	0.72	0.74	0.75	0.65	0.77	0.77	0.61	0.69	0.53
Switzerland.....	0.36	0.37	0.31	0.31	0.33	0.34	0.37	0.40	0.36	0.30
Turkey.....	0.19	0.30	0.18	0.24	0.23	0.27	0.35	0.31	0.37	0.42
United Kingdom.....	0.04	0.05	0.05	0.05	0.05	0.06	0.04	0.05	0.05	0.04
Former Yugoslavia.....	0.27	0.27	0.24	0.20	0.20	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	0.03	0.02	0.01	0.01	0.02
Croatia.....	--	--	--	--	--	0.04	0.04	0.05	0.05	0.08
Macedonia, TFYR.....	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01
Serbia and Montenegro.....	--	--	--	--	--	0.12	0.10	0.11	0.12	0.14
Slovenia.....	--	--	--	--	--	0.04	0.03	0.03	0.03	0.04
Other.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Total.....	4.88	5.31	4.61	4.74	4.69	5.02	5.17	5.17	5.21	5.03

See footnotes at end of table.

Table E5 World Net Hydroelectric Power Consumption (Btu), 1987 - 1996 (Continued)
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	0.04	0.04	0.04	0.03	0.04	0.03	0.03	0.04	0.04	0.05
Bulgaria.....	0.03	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.02	0.03
Former Czechoslovakia.....	0.05	0.05	0.04	0.04	0.03	0.04	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	0.01	0.02	0.02	0.02
Slovakia.....	--	--	--	--	--	--	0.04	0.05	0.05	0.06
Hungary.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Poland.....	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.04	0.04	0.04
Romania.....	0.12	0.14	0.13	0.11	0.15	0.12	0.13	0.13	0.17	0.16
Former U.S.S.R.....	2.26	2.38	2.30	2.40	2.42	--	--	--	--	--
Armenia.....	--	--	--	--	--	0.03	0.04	0.04	0.02	0.02
Azerbaijan.....	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02
Georgia.....	--	--	--	--	--	0.07	0.07	0.05	0.05	0.05
Kazakhstan.....	--	--	--	--	--	0.07	0.08	0.09	0.09	0.08
Kyrgyzstan.....	--	--	--	--	--	0.10	0.09	0.12	0.11	0.13
Latvia.....	--	--	--	--	--	0.03	0.03	0.03	0.03	0.02
Lithuania.....	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Moldova.....	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Russia.....	--	--	--	--	--	1.78	1.79	1.81	1.82	1.59
Tajikistan.....	--	--	--	--	--	0.16	0.18	0.17	0.15	0.14
Ukraine.....	--	--	--	--	--	0.08	0.12	0.13	0.10	0.10
Uzbekistan.....	--	--	--	--	--	0.06	0.08	0.07	0.07	0.07
Other.....	0.00	0.00	0.00	0.00	0.00	(s)	(s)	(s)	(s)	(s)
Total.....	2.54	2.67	2.58	2.64	2.70	2.65	2.79	2.83	2.81	2.58
Middle East										
Iran.....	0.07	0.07	0.07	0.06	0.07	0.10	0.10	0.08	0.08	0.08
Iraq.....	0.01	0.01	0.01	0.01	(s)	0.01	0.01	0.01	0.01	0.01
Israel.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Jordan.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Lebanon.....	0.01	0.01	0.01	(s)	0.01	0.01	0.01	0.01	0.01	0.01
Syria.....	0.02	0.05	0.05	0.06	0.06	0.08	0.07	0.07	0.07	0.07
Total.....	0.10	0.13	0.13	0.13	0.15	0.19	0.19	0.16	0.16	0.16
Africa										
Algeria.....	0.01	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Angola.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cameroon.....	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Congo (Brazzaville).....	(s)	(s)	(s)	0.01	(s)	(s)	(s)	(s)	(s)	(s)
Congo (Kinshasa).....	0.05	0.05	0.07	0.06	0.05	0.06	0.06	0.06	0.06	0.06
Cote d'Ivoire (Ivory Coast).....	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Egypt.....	0.08	0.08	0.08	0.10	0.09	0.09	0.11	0.11	0.11	0.11
Ethiopia.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Gabon.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Ghana.....	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Kenya.....	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Madagascar.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Malawi.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Mali.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Morocco.....	0.01	0.01	0.01	0.01	0.01	0.01	(s)	0.01	0.01	0.01
Nigeria.....	0.03	0.04	0.04	0.05	0.06	0.06	0.06	0.06	0.06	0.06
Reunion.....	0.01	(s)	0.01	0.01	(s)	0.01	0.01	0.01	0.01	0.01
South Africa.....	0.02	0.03	0.03	0.01	0.02	0.01	(s)	0.01	0.01	0.01
Sudan.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Tanzania.....	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Uganda.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Zambia.....	0.09	0.09	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Zimbabwe.....	0.03	0.03	0.03	0.04	0.03	0.03	0.02	0.02	0.02	0.02
Other.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total.....	0.51	0.54	0.56	0.58	0.59	0.58	0.57	0.59	0.59	0.60

See footnotes at end of table.

Table E5 World Net Hydroelectric Power Consumption (Btu), 1987 - 1996 (Continued)
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Far East & Oceania										
Afghanistan.....	0.01	0.01	0.01	0.01	0.01	(s)	(s)	(s)	(s)	(s)
Australia.....	0.14	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.16	0.15
Bangladesh.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	(s)	(s)
Bhutan.....	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Burma.....	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
Cambodia.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
China.....	1.03	1.12	1.22	1.30	1.29	1.35	1.55	1.72	1.92	1.89
Fiji.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
French Polynesia.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
India.....	0.49	0.60	0.64	0.74	0.75	0.72	0.73	0.73	0.74	0.75
Indonesia.....	0.08	0.09	0.09	0.11	0.10	0.13	0.12	0.12	0.11	0.10
Japan.....	0.77	0.94	0.94	0.92	1.00	0.85	0.98	0.69	0.85	0.82
Korea, North.....	0.30	0.32	0.33	0.33	0.33	0.25	0.25	0.24	0.24	0.23
Korea, South.....	0.05	0.04	0.05	0.07	0.05	0.05	0.06	0.04	0.06	0.05
Laos.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Malaysia.....	0.05	0.06	0.05	0.04	0.05	0.04	0.05	0.07	0.08	0.08
Nepal.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
New Caledonia.....	(s)	0.01	0.01	(s)	(s)	(s)	(s)	(s)	(s)	(s)
New Zealand.....	0.23	0.24	0.23	0.24	0.24	0.21	0.24	0.27	0.28	0.28
Pakistan.....	0.16	0.17	0.17	0.17	0.19	0.19	0.22	0.20	0.24	0.26
Papua New Guinea.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.01	0.01
Philippines.....	0.05	0.06	0.07	0.06	0.06	0.06	0.06	0.07	0.07	0.07
Samoa.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Sri Lanka.....	0.02	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.05
Taiwan.....	0.07	0.06	0.07	0.09	0.06	0.09	0.07	0.09	0.09	0.09
Thailand.....	0.04	0.04	0.06	0.05	0.05	0.04	0.04	0.05	0.07	0.07
U.S. Pacific Islands.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Vietnam.....	0.02	0.02	0.04	0.06	0.06	0.06	0.09	0.10	0.13	0.13
Total.....	3.57	3.99	4.20	4.42	4.49	4.32	4.75	4.67	5.14	5.11
World Total.....	21.60	22.24	21.80	22.70	23.20	23.26	24.64	24.68	26.10	26.60

¹ Preliminary.

² There is a discontinuity in this time series between 1988 and 1989; beginning in 1989, pumped storage is removed, and expanded coverage of industrial use of hydroelectric power is included.

-- Not applicable.

(s) = Value less than 5 trillion Btu.

Notes: Sum of components may not equal total due to independent rounding.

Data are reported as net consumption as opposed to gross. Net consumption excludes the energy consumed by the generating units.

Consumption accounts for thermal equivalent conversion losses.

Sources: See sources at the end of Section 6.

Table E6 World Net Nuclear Electric Power Consumption (Btu), 1987 - 1996
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	0.84	0.90	0.87	0.79	0.93	0.88	1.02	1.17	1.06	1.00
Mexico.....	0.00	0.00	0.00	0.03	0.04	0.04	0.05	0.04	0.08	0.08
United States.....	4.91	5.66	5.68	6.16	6.58	6.61	6.52	6.84	7.18	7.17
Total.....	5.75	6.56	6.55	6.99	7.55	7.52	7.59	8.04	8.31	8.24
Central & South America										
Argentina.....	0.07	0.06	0.06	0.08	0.09	0.08	0.09	0.09	0.08	0.08
Brazil.....	0.01	(s)	0.02	0.02	0.01	0.02	(s)	(s)	0.02	0.02
Total.....	0.08	0.06	0.07	0.10	0.10	0.10	0.09	0.09	0.11	0.11
Western Europe										
Belgium.....	0.41	0.42	0.41	0.42	0.42	0.43	0.41	0.40	0.41	0.43
Finland.....	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
France.....	2.53	2.64	2.93	3.11	3.28	3.34	3.64	3.54	3.71	3.89
Germany.....	--	--	--	--	1.43	1.54	1.49	1.47	1.49	1.56
Germany, East.....	0.12	0.12	0.12	0.06	--	--	--	--	--	--
Germany, West.....	1.37	1.52	1.47	1.46	--	--	--	--	--	--
Italy.....	(s)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Netherlands.....	0.04	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.04	0.04
Spain.....	0.44	0.52	0.58	0.52	0.54	0.54	0.54	0.53	0.53	0.54
Sweden.....	0.64	0.66	0.63	0.65	0.74	0.61	0.59	0.70	0.67	0.72
Switzerland.....	0.22	0.23	0.23	0.24	0.23	0.23	0.23	0.24	0.25	0.25
United Kingdom.....	0.57	0.66	0.76	0.70	0.78	0.86	0.96	0.95	0.95	1.01
Former Yugoslavia.....	0.05	0.04	0.05	0.05	0.04	--	--	--	--	--
Slovenia.....	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04
Total.....	6.59	7.05	7.40	7.43	7.67	7.82	8.13	8.11	8.29	8.69
Eastern Europe & Former U.S.S.R.										
Bulgaria.....	0.13	0.17	0.16	0.15	0.14	0.12	0.15	0.16	0.18	0.20
Former Czechoslovakia.....	0.26	0.27	0.28	0.29	0.28	0.29	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	0.15	0.15	0.14	0.15
Slovakia.....	--	--	--	--	--	--	0.14	0.14	0.13	0.14
Hungary.....	0.12	0.14	0.15	0.15	0.13	0.13	0.13	0.13	0.13	0.14
Romania.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Former U.S.S.R.....	2.03	2.33	2.43	2.31	2.31	--	--	--	--	--
Armenia.....	--	--	--	--	--	0.00	0.00	0.00	0.00	0.02
Kazakhstan.....	--	--	--	--	--	0.01	(s)	(s)	(s)	(s)
Lithuania.....	--	--	--	--	--	0.15	0.13	0.08	0.11	0.14
Russia.....	--	--	--	--	--	1.25	1.25	1.02	1.04	1.14
Ukraine.....	--	--	--	--	--	0.76	0.78	0.71	0.73	0.83
Total.....	2.53	2.91	3.03	2.89	2.86	2.71	2.73	2.41	2.47	2.76
Africa										
South Africa.....	0.06	0.11	0.11	0.09	0.09	0.09	0.07	0.10	0.11	0.12
Total.....	0.06	0.11	0.11	0.09	0.09	0.09	0.07	0.10	0.11	0.12
Far East & Oceania										
China.....	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.14	0.13	0.14
India.....	0.06	0.06	0.04	0.07	0.06	0.07	0.07	0.06	0.08	0.09
Japan.....	2.01	1.85	1.86	1.97	2.08	2.17	2.42	2.61	2.83	2.89
Korea, South.....	0.39	0.39	0.47	0.51	0.54	0.54	0.56	0.56	0.64	0.70
Pakistan.....	0.01	(s)	(s)	(s)	(s)	0.01	(s)	0.01	0.01	(s)
Taiwan.....	0.33	0.30	0.28	0.32	0.33	0.32	0.33	0.33	0.34	0.36
Total.....	2.78	2.61	2.65	2.87	3.01	3.12	3.41	3.70	4.02	4.19
World Total.....	17.80	19.30	19.82	20.37	21.29	21.36	22.02	22.46	23.31	24.10

¹ Preliminary.

-- Not applicable.

(s) = Value less than 5 trillion Btu.

Notes: Sum of components may not equal total due to independent rounding.

Data are reported as net consumption as opposed to gross. Net consumption excludes the energy consumed by the generating units.

Consumption accounts for thermal equivalent conversion losses.

No consumption is reported for Middle East.

Sources: See sources at the end of Section 6.

Table E7 World Net Geothermal, Solar, and Wind Electric Power Consumption (Btu), 1987 - 1996
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Mexico.....	0.09	0.10	0.10	0.10	0.11	0.12	0.12	0.11	0.11	0.11
United States.. ²	0.24	0.23	0.73	2.32	2.32	2.44	2.50	2.55	2.54	2.68
Total.....	0.34	0.33	0.82	2.42	2.43	2.56	2.62	2.66	2.66	2.79
Central & South America										
Brazil..... ³	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.07	0.08	0.08
Costa Rica.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
El Salvador.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Nicaragua.....	(s)	(s)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total.....	0.06	0.06	0.06	0.07	0.08	0.09	0.09	0.10	0.11	0.11
Western Europe										
Belgium.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Denmark.....	(s)	(s)	(s)	0.01	0.01	0.01	0.01	0.01	0.01	0.01
France.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Germany.....	--	--	--	--	(s)	(s)	0.01	0.02	0.03	0.03
Germany, West.....	0.00	(s)	(s)	(s)	--	--	--	--	--	--
Greece.....	(s)	(s)	0.00	(s)	0.00	(s)	(s)	(s)	(s)	(s)
Iceland.....	(s)	0.01	0.01	0.01	0.01	(s)	0.01	0.01	0.01	0.01
Ireland.....	0.00	0.00	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Italy.....	0.06	0.06	0.06	0.06	0.06	0.07	0.08	0.07	0.07	0.08
Netherlands.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Norway.....	0.00	0.00	0.00	0.00	0.00	(s)	(s)	(s)	(s)	(s)
Portugal.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Spain.....	0.00	0.00	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Sweden.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Switzerland.....	0.00	0.00	0.00	0.00	(s)	(s)	(s)	(s)	(s)	(s)
Turkey.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
United Kingdom.....	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Total.....	0.07	0.08	0.08	0.09	0.09	0.10	0.11	0.12	0.14	0.15
Eastern Europe & Former U.S.S.R.										
Romania.....	(s)	(s)	(s)	(s)	0.00	0.00	0.00	0.00	0.00	0.00
Former U.S.S.R.....	0.00	0.00	(s)	(s)	(s)	--	--	--	--	--
Russia.....	--	--	--	--	--	(s)	(s)	(s)	(s)	0.01
Total.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.01
Middle East										
Jordan.....	0.00	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Total.....	0.00	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Africa										
Ethiopia.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Kenya.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Far East & Oceania										
Australia.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(s)	(s)	(s)
India.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Indonesia.....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.04
Japan.....	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.06	0.07
New Zealand.....	0.02	0.03	0.04	0.04	0.04	0.05	0.04	0.04	0.04	0.04
Philippines.....	0.09	0.10	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.12
Vietnam.....	(s)	(s)	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
Total.....	0.16	0.18	0.19	0.21	0.22	0.22	0.23	0.25	0.27	0.28
World Total.....	0.65	0.66	1.17	2.79	2.82	2.97	3.05	3.14	3.18	3.35

¹ Preliminary.

² There is a discontinuity in this time series between 1988 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1989 and biofuels electric power beginning in 1990.

³ Data are for consumption of biofuels electric power.

-- Not applicable.

(s) = Value less than 5 trillion Btu.

Notes: Sum of components may not equal total due to independent rounding.

Data are reported as net consumption as opposed to gross. Net consumption excludes the energy consumed by the generating units.

Consumption accounts for thermal equivalent conversion losses.

Sources: See sources at the end of Section 6.

Appendix F

**World Energy
Production (Btu),
1987-1996**

Table F1 World Primary Energy Production (Btu), 1987 - 1996
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	12.54	13.41	13.36	13.36	13.91	14.43	15.36	16.29	16.83	17.29
Mexico.....	7.36	7.43	7.49	7.63	8.12	8.15	8.15	8.13	7.99	8.59
United States.....	64.95	66.11	66.68	70.72	70.39	69.94	68.29	70.65	71.08	72.58
Total.....	84.85	86.94	87.53	91.71	92.41	92.53	91.80	95.07	95.89	98.46
Central & South America										
Argentina.....	1.87	1.92	1.94	1.98	2.06	2.35	2.56	2.78	3.02	3.21
Bolivia.....	0.15	0.16	0.17	0.17	0.17	0.18	0.17	0.18	0.20	0.20
Brazil.....	3.48	3.59	3.75	3.80	3.95	4.01	4.17	4.33	4.57	4.96
Chile.....	0.27	0.27	0.27	0.31	0.30	0.33	0.34	0.33	0.33	0.35
Colombia.....	1.55	1.82	1.78	1.93	1.96	1.95	2.00	2.06	2.47	2.78
Ecuador.....	0.43	0.72	0.67	0.68	0.71	0.76	0.83	0.88	0.95	0.96
Paraguay.....	0.19	0.21	0.25	0.28	0.30	0.28	0.32	0.37	0.43	0.47
Peru.....	0.51	0.46	0.43	0.40	0.38	0.37	0.43	0.44	0.45	0.43
Trinidad and Tobago.....	0.49	0.51	0.51	0.51	0.55	0.51	0.53	0.55	0.57	0.60
Venezuela.....	5.17	5.59	5.77	6.31	6.97	6.98	7.29	7.74	8.15	8.84
Other.....	0.27	0.26	0.26	0.30	0.28	0.33	0.34	0.37	0.39	0.41
Total.....	14.39	15.28	15.79	16.67	17.64	18.05	18.98	20.04	21.51	23.21
Western Europe										
Austria.....	0.43	0.52	0.52	0.49	0.49	0.51	0.53	0.50	0.52	0.49
Belgium.....	0.56	0.49	0.46	0.47	0.46	0.45	0.43	0.42	0.42	0.44
Denmark.....	0.30	0.31	0.37	0.38	0.46	0.51	0.55	0.58	0.60	0.70
Finland.....	0.33	0.33	0.32	0.30	0.33	0.34	0.33	0.31	0.32	0.32
France.....	4.01	4.07	4.05	4.26	4.46	4.61	4.83	4.84	4.91	4.97
Germany.....	--	--	--	--	6.30	6.11	5.78	5.61	5.54	5.53
Germany, East.....	2.85	2.88	2.79	2.48	--	--	--	--	--	--
Germany, West.....	5.18	5.23	5.10	5.03	--	--	--	--	--	--
Greece.....	0.36	0.37	0.38	0.37	0.39	0.33	0.35	0.35	0.36	0.38
Italy.....	1.23	1.31	1.23	1.23	1.31	1.35	1.39	1.46	1.40	1.46
Netherlands.....	2.72	2.41	2.59	2.62	2.94	2.92	2.96	2.89	2.88	3.23
Norway.....	4.40	4.77	5.71	5.94	6.22	7.08	7.28	7.65	8.35	9.28
Spain.....	1.51	1.66	1.58	1.43	1.43	1.34	1.33	1.32	1.26	1.49
Sweden.....	1.38	1.37	1.37	1.39	1.39	1.38	1.36	1.31	1.36	1.25
Switzerland.....	0.58	0.60	0.54	0.55	0.56	0.57	0.60	0.65	0.61	0.55
Turkey.....	0.77	0.80	0.81	0.85	0.87	0.95	0.99	0.95	0.99	1.06
United Kingdom.....	10.32	9.99	9.02	9.11	9.29	9.05	9.33	10.09	10.66	11.49
Former Yugoslavia.....	1.43	1.45	1.43	1.38	1.28	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	0.09	0.06	0.04	0.06	0.05
Croatia.....	--	--	--	--	--	0.19	0.20	0.21	0.20	0.21
Serbia and Montenegro.....	--	--	--	--	--	0.57	0.51	0.51	0.43	0.43
Other.....	0.21	0.26	0.20	0.24	0.24	0.42	0.46	0.50	0.43	0.49
Total.....	38.59	38.82	38.46	38.53	38.41	38.77	39.28	40.19	41.30	43.81
Eastern Europe & Former U.S.S.R.										
Bulgaria.....	0.54	0.55	0.54	0.48	0.44	0.42	0.46	0.46	0.46	0.48
Former Czechoslovakia.....	3.25	3.21	3.09	2.78	2.59	2.45	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	1.78	1.90	1.82	1.79
Slovakia.....	--	--	--	--	--	--	0.26	0.26	0.23	0.24
Hungary.....	0.69	0.71	0.68	0.62	0.58	0.58	0.58	0.58	0.58	0.55
Poland.....	5.00	5.01	4.64	3.89	3.75	3.69	3.71	3.76	3.78	3.76
Romania.....	2.49	2.48	2.30	1.88	1.54	1.42	1.44	1.43	1.51	1.51
Former U.S.S.R.....	67.10	69.48	68.99	69.15	63.54	--	--	--	--	--
Azerbaijan.....	--	--	--	--	--	0.74	0.68	0.63	0.61	0.62
Kazakhstan.....	--	--	--	--	--	3.73	3.36	2.54	2.25	2.23
Lithuania.....	--	--	--	--	--	0.15	0.14	0.09	0.12	0.15
Russia.....	--	--	--	--	--	46.77	43.40	40.86	39.98	39.68
Tajikistan.....	--	--	--	--	--	0.17	0.18	0.17	0.16	0.14
Turkmenistan.....	--	--	--	--	--	2.07	2.27	1.32	1.21	1.37
Ukraine.....	--	--	--	--	--	4.27	4.13	3.60	3.48	3.28
Uzbekistan.....	--	--	--	--	--	1.62	1.73	1.86	1.97	1.97
Other.....	0.21	0.19	0.20	0.13	0.10	0.63	0.57	0.56	0.51	0.53
Total.....	79.28	81.62	80.43	78.93	72.53	68.73	64.68	60.04	58.68	58.29

See footnotes at end of table.

Table F1 World Primary Energy Production (Btu), 1987 - 1996 (Continued)

(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Middle East										
Bahrain.....	0.33	0.30	0.30	0.31	0.33	0.29	0.35	0.36	0.36	0.36
Iran.....	5.67	5.71	7.02	7.67	8.27	8.53	8.83	9.15	9.35	9.60
Iraq.....	4.58	5.97	6.47	4.54	0.69	1.02	1.21	1.33	1.35	1.39
Israel.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Kuwait.....	3.77	3.63	4.32	2.83	0.43	2.44	4.28	4.73	4.81	4.82
Oman.....	1.34	1.41	1.49	1.59	1.64	1.72	1.82	1.90	1.99	2.07
Qatar.....	0.86	0.99	1.06	1.20	1.25	1.39	1.45	1.44	1.51	1.66
Saudi Arabia.....	10.84	12.86	12.81	15.92	19.75	20.39	20.11	20.00	20.25	20.39
Syria.....	0.56	0.67	0.85	1.04	1.30	1.30	1.46	1.48	1.48	1.55
United Arab Emirates.....	4.21	4.22	4.99	5.51	6.24	6.11	5.78	5.84	6.14	6.43
Yemen.....	0.04	0.36	0.41	0.40	0.41	0.38	0.46	0.70	0.72	0.71
Other.....	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
Total.....	32.21	36.12	39.73	41.03	40.32	43.58	45.78	46.95	47.98	48.99
Africa										
Algeria.....	4.01	4.08	4.28	4.52	4.81	4.82	4.65	4.57	5.11	5.37
Angola.....	0.80	1.00	1.00	1.04	1.10	1.16	1.12	1.17	1.41	1.55
Cameroon.....	0.40	0.38	0.40	0.38	0.36	0.33	0.30	0.26	0.24	0.23
Congo (Brazzaville).....	0.26	0.31	0.35	0.35	0.33	0.37	0.39	0.38	0.40	0.45
Congo (Kinshasa).....	0.13	0.12	0.13	0.12	0.12	0.12	0.12	0.11	0.13	0.13
Egypt.....	2.30	2.24	2.32	2.36	2.40	2.44	2.55	2.59	2.67	2.73
Gabon.....	0.34	0.35	0.46	0.59	0.64	0.65	0.68	0.72	0.80	0.81
Libya.....	2.29	2.73	2.70	3.18	3.43	3.34	3.17	3.21	3.23	3.28
Nigeria.....	3.05	3.30	3.90	4.07	4.30	4.43	4.45	4.37	4.53	4.96
South Africa.....	4.07	4.23	4.12	4.05	4.12	4.26	4.41	4.61	4.85	4.87
Tunisia.....	0.24	0.24	0.24	0.22	0.23	0.25	0.23	0.21	0.20	0.21
Zambia.....	0.10	0.10	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Zimbabwe.....	0.16	0.16	0.17	0.17	0.18	0.18	0.16	0.17	0.08	0.09
Other.....	0.27	0.26	0.25	0.26	0.26	0.27	0.27	0.29	0.30	0.38
Total.....	18.42	19.51	20.39	21.40	22.38	22.73	22.58	22.77	24.03	25.13
Far East & Oceania										
Australia.....	5.59	5.33	5.58	6.14	6.28	6.57	6.60	6.90	7.42	7.58
Bangladesh.....	0.13	0.15	0.17	0.16	0.17	0.20	0.21	0.23	0.25	0.26
Brunei.....	0.69	0.68	0.67	0.72	0.68	0.70	0.71	0.72	0.75	0.73
Burma.....	0.09	0.08	0.09	0.08	0.09	0.08	0.09	0.10	0.11	0.11
China.....	25.92	27.14	28.75	29.37	29.66	30.31	31.83	34.05	36.81	37.41
India.....	5.60	5.93	6.21	6.53	6.81	7.12	7.31	7.67	9.11	9.33
Indonesia.....	4.46	4.56	4.96	5.12	5.67	5.84	6.18	6.43	7.03	7.50
Japan.....	3.22	3.21	3.20	3.27	3.44	3.36	3.73	3.63	4.00	4.05
Korea, North.....	1.69	1.78	1.84	1.88	1.91	1.80	1.87	1.87	1.91	1.96
Korea, South.....	0.87	0.86	0.89	0.88	0.86	0.81	0.79	0.73	0.84	0.88
Malaysia.....	1.68	1.81	1.92	2.03	2.19	2.26	2.34	2.40	2.61	2.93
Mongolia.....	0.09	0.10	0.10	0.10	0.10	0.08	0.08	0.08	0.08	0.09
New Zealand.....	0.53	0.57	0.59	0.61	0.63	0.62	0.63	0.65	0.65	0.68
Pakistan.....	0.69	0.74	0.78	0.82	0.89	0.91	0.96	0.98	1.04	1.11
Papua New Guinea.....	(s)	(s)	(s)	(s)	0.01	0.12	0.27	0.23	0.21	0.22
Philippines.....	0.19	0.21	0.21	0.21	0.21	0.23	0.24	0.23	0.23	0.23
Taiwan.....	0.49	0.43	0.43	0.51	0.44	0.45	0.44	0.47	0.47	0.50
Thailand.....	0.35	0.42	0.45	0.52	0.57	0.59	0.65	0.68	0.94	1.03
Vietnam.....	0.22	0.24	0.21	0.29	0.35	0.43	0.56	0.63	0.75	0.77
Other.....	0.17	0.19	0.19	0.19	0.10	0.09	0.10	0.10	0.10	0.11
Total.....	52.69	54.43	57.24	59.43	61.04	62.59	65.58	68.79	75.32	77.48
World Total.....	320.42	332.74	339.58	347.71	344.74	346.97	348.69	353.85	364.71	375.37

¹ Preliminary.

-- Not applicable.

(s) = Value less than 5 trillion Btu.

Notes: Sum of components may not equal total due to independent rounding.

Primary energy production includes petroleum, natural gas, coal, and net hydroelectric, nuclear, geothermal, solar, and wind electric power. Data for United States include biofuels energy production and data for Brazil include biofuels electric power generation.

Sources: See sources at the end of Sections 3, 4, 5, and 6.

Table F2 World Crude Oil Production (Btu), 1987 - 1996
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada ²	3.26	3.44	3.31	3.29	3.28	3.41	3.56	3.70	3.83	3.91
Mexico	5.59	5.53	5.53	5.60	5.88	5.87	5.86	5.89	5.74	6.28
United States	17.68	17.28	16.12	15.57	15.70	15.22	14.49	14.10	13.89	13.72
Total	26.52	26.24	24.95	24.47	24.86	24.51	23.92	23.70	23.46	23.91
Central & South America										
Argentina	0.94	0.98	1.01	1.06	1.06	1.21	1.30	1.42	1.56	1.66
Bolivia	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.06	0.06
Brazil	1.22	1.20	1.29	1.36	1.36	1.35	1.39	1.45	1.50	1.72
Chile	0.06	0.05	0.05	0.04	0.04	0.03	0.03	0.03	0.02	0.02
Colombia	0.85	0.83	0.89	0.97	0.92	0.95	1.00	0.99	1.29	1.37
Cuba	0.04	0.04	0.04	0.03	0.03	0.04	0.05	0.06	0.06	0.07
Ecuador	0.38	0.66	0.61	0.62	0.65	0.70	0.75	0.80	0.86	0.87
Peru	0.35	0.30	0.28	0.27	0.24	0.25	0.27	0.27	0.28	0.26
Trinidad and Tobago	0.35	0.35	0.34	0.33	0.33	0.30	0.30	0.29	0.29	0.29
Venezuela	3.92	4.27	4.27	4.79	5.32	5.32	5.49	5.80	6.16	6.86
Other	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.05
Total	8.16	8.74	8.82	9.53	10.02	10.24	10.64	11.18	12.11	13.21
Western Europe										
Austria	0.05	0.05	0.05	0.05	0.06	0.05	0.05	0.05	0.05	0.05
Denmark	0.20	0.21	0.24	0.25	0.30	0.34	0.36	0.38	0.39	0.43
France	0.14	0.14	0.14	0.13	0.13	0.12	0.12	0.12	0.11	0.09
Germany	--	--	--	--	0.15	0.14	0.13	0.13	0.13	0.13
Germany, East	(s)	(s)	(s)	(s)	--	--	--	--	--	--
Germany, West	0.16	0.17	0.16	0.15	--	--	--	--	--	--
Greece	0.05	0.05	0.04	0.03	0.03	0.03	0.02	0.02	0.02	0.02
Italy	0.15	0.20	0.18	0.20	0.18	0.19	0.19	0.19	0.21	0.23
Netherlands	0.20	0.17	0.14	0.16	0.17	0.12	0.11	0.18	0.15	0.13
Norway	2.10	2.38	3.19	3.50	3.88	4.59	4.82	5.17	5.68	6.39
Spain	0.07	0.06	0.04	0.03	0.05	0.05	0.04	0.03	0.03	0.03
Sweden	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Turkey	0.11	0.11	0.12	0.16	0.19	0.18	0.17	0.16	0.15	0.15
United Kingdom	5.10	4.74	3.82	3.85	3.81	3.88	4.06	5.03	5.27	5.45
Former Yugoslavia	0.17	0.16	0.15	0.14	0.13	--	--	--	--	--
Croatia	--	--	--	--	--	0.08	0.08	0.08	0.07	0.06
Serbia and Montenegro	--	--	--	--	--	0.05	0.05	0.05	0.05	0.05
Slovenia	--	--	--	--	--	0.00	(s)	(s)	(s)	(s)
Total	8.49	8.45	8.28	8.65	9.06	9.80	10.19	11.60	12.29	13.20
Eastern Europe & Former U.S.S.R.										
Albania	0.12	0.10	0.11	0.07	0.04	0.02	0.03	0.03	0.02	0.02
Bulgaria	0.01	0.01	0.01	0.01	(s)	(s)	(s)	(s)	(s)	(s)
Former Czechoslovakia	0.01	0.01	0.01	0.01	0.01	0.01	--	--	--	--
Czech Republic	--	--	--	--	--	--	(s)	0.01	0.01	0.01
Slovakia	--	--	--	--	--	--	(s)	(s)	(s)	(s)
Hungary	0.08	0.09	0.08	0.09	0.08	0.08	0.08	0.09	0.08	0.07
Poland	0.01	0.01	0.01	(s)	0.01	0.01	0.01	0.01	0.01	0.01
Romania	0.45	0.41	0.38	0.34	0.30	0.29	0.28	0.29	0.28	0.29
Former U.S.S.R.	25.86	25.94	25.14	23.55	21.44	--	--	--	--	--
Azerbaijan	--	--	--	--	--	0.46	0.43	0.39	0.38	0.38
Belarus	--	--	--	--	--	0.09	0.09	0.09	0.08	0.08
Georgia	--	--	--	--	--	0.01	(s)	(s)	(s)	(s)
Kazakhstan	--	--	--	--	--	0.96	0.88	0.76	0.78	0.87
Kyrgyzstan	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Lithuania	--	--	--	--	--	0.00	(s)	0.01	0.01	0.01
Russia	--	--	--	--	--	16.42	14.44	13.17	12.87	12.59
Tajikistan	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Turkmenistan	--	--	--	--	--	0.21	0.17	0.17	0.15	0.16
Ukraine	--	--	--	--	--	0.15	0.14	0.14	0.14	0.14
Uzbekistan	--	--	--	--	--	0.08	0.10	0.16	0.25	0.25
Total	26.55	26.56	25.74	24.08	21.88	18.78	16.66	15.31	15.06	14.89

See footnotes at end of table.

Table F2 World Crude Oil Production (Btu), 1987 - 1996 (Continued)

(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Middle East										
Bahrain.....	0.09	0.09	0.09	0.09	0.08	0.08	0.09	0.09	0.09	0.08
Iran.....	4.94	4.83	6.04	6.64	7.12	7.39	7.61	7.78	7.83	7.94
Iraq.....	4.42	5.72	6.15	4.33	0.65	0.91	1.09	1.17	1.19	1.23
Israel.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Jordan.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Kuwait.....	3.43	3.23	3.85	2.54	0.41	2.29	4.00	4.38	4.45	4.47
Oman.....	1.25	1.33	1.37	1.47	1.50	1.59	1.66	1.74	1.82	1.90
Qatar.....	0.62	0.73	0.80	0.86	0.83	0.89	0.87	0.88	0.93	1.08
Saudi Arabia.....	9.20	11.00	10.92	13.83	17.51	18.02	17.68	17.52	17.76	17.78
Syria.....	0.52	0.60	0.76	0.87	1.11	1.08	1.25	1.26	1.29	1.36
United Arab Emirates.....	3.26	3.32	3.93	4.47	5.04	4.80	4.56	4.63	4.72	4.82
Yemen.....	0.04	0.36	0.41	0.40	0.41	0.38	0.46	0.70	0.72	0.71
Total.....	27.75	31.21	34.34	35.50	34.65	37.44	39.27	40.13	40.80	41.37
Africa										
Algeria.....	2.12	2.11	2.22	2.38	2.49	2.47	2.36	2.39	2.44	2.53
Angola.....	0.77	0.96	0.97	1.01	1.06	1.12	1.08	1.14	1.37	1.51
Benin.....	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	(s)
Cameroon.....	0.38	0.35	0.37	0.35	0.33	0.31	0.28	0.23	0.22	0.20
Congo (Brazzaville).....	0.26	0.30	0.35	0.35	0.33	0.37	0.38	0.38	0.40	0.44
Congo (Kinshasa).....	0.07	0.06	0.06	0.06	0.06	0.06	0.05	0.06	0.06	0.06
Cote d'Ivoire (Ivory Coast).....	0.04	0.03	(s)	(s)	(s)	(s)	(s)	0.01	0.02	0.03
Egypt.....	1.94	1.84	1.87	1.89	1.89	1.91	1.92	1.94	1.99	2.00
Equatorial Guinea.....	0.00	0.00	0.00	0.00	(s)	(s)	0.01	0.01	0.01	0.04
Gabon.....	0.33	0.34	0.45	0.58	0.63	0.64	0.67	0.71	0.78	0.79
Ghana.....	0.00	0.00	0.00	0.00	0.00	(s)	(s)	(s)	0.01	0.01
Libya.....	2.05	2.48	2.42	2.90	3.13	3.03	2.87	2.90	2.93	2.96
Morocco.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Nigeria.....	2.88	3.12	3.68	3.88	4.06	4.18	4.21	4.14	4.28	4.71
Sudan.....	0.00	0.00	0.00	0.00	0.00	(s)	(s)	(s)	(s)	0.02
Tunisia.....	0.22	0.21	0.22	0.19	0.22	0.23	0.20	0.19	0.18	0.18
Total.....	11.07	11.84	12.62	13.61	14.22	14.33	14.05	14.12	14.70	15.50
Far East & Oceania										
Australia.....	1.11	1.10	1.00	1.17	1.11	1.09	1.02	1.09	1.14	1.16
Bangladesh.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Brunei.....	0.30	0.29	0.28	0.32	0.35	0.35	0.35	0.36	0.35	0.33
Burma.....	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.03
China.....	5.77	5.87	5.91	5.95	6.08	6.12	6.20	6.31	6.42	6.74
India.....	1.27	1.33	1.46	1.38	1.29	1.18	1.12	1.23	1.47	1.37
Indonesia.....	2.81	2.82	2.95	3.06	3.34	3.16	3.17	3.16	3.15	3.25
Japan.....	0.03	0.03	0.02	0.02	0.03	0.04	0.03	0.02	0.02	0.03
Malaysia.....	1.03	1.13	1.22	1.29	1.34	1.36	1.33	1.34	1.42	1.45
New Zealand.....	0.06	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.06	0.07
Pakistan.....	0.09	0.10	0.10	0.13	0.13	0.13	0.13	0.12	0.12	0.12
Papua New Guinea.....	0.00	0.00	0.00	0.00	(s)	0.11	0.26	0.23	0.20	0.21
Philippines.....	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	(s)
Taiwan.....	0.01	(s)	(s)	0.01	0.01	(s)	(s)	(s)	(s)	(s)
Thailand.....	0.08	0.08	0.09	0.10	0.11	0.12	0.12	0.13	0.12	0.14
Vietnam.....	0.01	0.03	0.07	0.11	0.18	0.23	0.26	0.31	0.38	0.39
Total.....	12.62	12.89	13.24	13.67	14.08	14.02	14.13	14.43	14.91	15.30
World Total.....	121.16	125.93	127.98	129.50	128.77	129.13	128.86	130.46	133.32	137.39

¹ Preliminary.

² Includes oil processed from Athabasca Tar Sands.

--- Not applicable.

(s) = Value less than 5 trillion Btu.

Notes: Sum of components may not equal total due to independent rounding.

Crude oil includes lease condensate.

Sources: See sources at the end of Section 3.

Table F3 World Natural Gas Plant Liquids Production (Btu), 1987 - 1996
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	0.53	0.55	0.60	0.62	0.63	0.67	0.74	0.77	0.84	0.87
Mexico.....	0.45	0.49	0.51	0.57	0.60	0.60	0.61	0.61	0.59	0.56
United States.....	2.22	2.26	2.16	2.17	2.31	2.36	2.41	2.39	2.44	2.53
Total.....	3.19	3.31	3.26	3.36	3.54	3.63	3.75	3.77	3.87	3.96
Central & South America										
Argentina.....	0.05	0.05	0.04	0.04	0.04	0.04	0.05	0.06	0.06	0.06
Bolivia.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Brazil.....	0.04	0.04	0.03	0.03	0.03	0.04	0.04	0.05	0.06	0.05
Chile.....	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Colombia.....	0.01	(s)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cuba.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Ecuador.....	(s)	(s)	(s)	(s)	(s)	(s)	0.01	0.01	0.01	0.01
Peru.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Trinidad and Tobago.....	0.00	0.00	0.00	0.00	(s)	0.01	(s)	(s)	(s)	(s)
Venezuela.....	0.14	0.15	0.17	0.17	0.18	0.17	0.22	0.22	0.23	0.23
Total.....	0.27	0.27	0.28	0.29	0.30	0.31	0.36	0.39	0.41	0.40
Western Europe										
Austria.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
France.....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Greece.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Italy.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Netherlands.....	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.03	0.04
Norway.....	0.09	0.12	0.12	0.12	0.15	0.15	0.16	0.16	0.22	0.22
Spain.....	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01
United Kingdom.....	0.27	0.26	0.23	0.18	0.23	0.26	0.28	0.36	0.44	0.43
Former Yugoslavia.....	0.02	0.02	0.01	0.02	0.01	--	--	--	--	--
Croatia.....	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01
Total.....	0.42	0.45	0.42	0.38	0.45	0.48	0.51	0.60	0.73	0.73
Eastern Europe & Former U.S.S.R.										
Former Czechoslovakia.....	(s)	(s)	(s)	(s)	(s)	(s)	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	(s)	(s)	(s)	(s)
Hungary.....	0.04	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Poland.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Romania.....	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Former U.S.S.R.....	0.65	0.68	0.64	0.64	0.64	--	--	--	--	--
Azerbaijan.....	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01
Kazakhstan.....	--	--	--	--	--	0.13	0.12	0.10	0.08	0.08
Kyrgyzstan.....	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Russia.....	--	--	--	--	--	0.35	0.33	0.30	0.27	0.28
Tajikistan.....	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Turkmenistan.....	--	--	--	--	--	0.02	0.02	0.01	0.02	0.02
Ukraine.....	--	--	--	--	--	0.03	0.03	0.03	0.03	0.02
Uzbekistan.....	--	--	--	--	--	0.05	0.06	0.06	0.07	0.08
Total.....	0.71	0.74	0.69	0.68	0.67	0.63	0.60	0.54	0.51	0.52
Middle East										
Bahrain.....	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
Iran.....	0.03	0.03	0.04	0.06	0.08	0.08	0.09	0.09	0.10	0.10
Iraq.....	0.02	0.03	0.09	0.05	0.00	(s)	0.02	0.03	0.04	0.03
Kuwait.....	0.15	0.15	0.16	0.10	0.00	0.05	0.08	0.13	0.15	0.13
Oman.....	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.02	0.02
Qatar.....	0.03	0.04	0.03	0.06	0.07	0.08	0.08	0.07	0.08	0.07
Saudi Arabia.....	0.65	0.78	0.78	0.97	1.06	1.11	1.10	1.09	1.09	1.09
Syria.....	(s)	(s)	(s)	(s)	(s)	(s)	0.01	0.01	0.01	0.01
United Arab Emirates.....	0.24	0.22	0.22	0.22	0.24	0.24	0.24	0.25	0.26	0.27
Total.....	1.14	1.28	1.35	1.47	1.47	1.58	1.65	1.70	1.76	1.72

See footnotes at end of table.

Table F3 World Natural Gas Plant Liquids Production (Btu), 1987 - 1996 (Continued)

(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Africa										
Algeria.....	0.26	0.22	0.24	0.24	0.26	0.26	0.27	0.26	0.27	0.28
Egypt.....	0.05	0.06	0.08	0.07	0.08	0.08	0.10	0.10	0.11	0.12
Libya.....	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.06	0.08
South Africa.....	0.00	0.00	0.00	0.00	0.00	(s)	0.02	0.02	0.02	0.02
Tunisia.....	(s)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	(s)	(s)
Total.....	0.36	0.34	0.39	0.38	0.41	0.42	0.46	0.45	0.46	0.49
Far East & Oceania ²										
Australia.....	0.10	0.11	0.10	0.10	0.10	0.09	0.09	0.09	0.08	0.10
Bangladesh.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Brunei.....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Burma.....	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
India.....	0.01	0.02	0.02	0.02	0.02	0.05	0.05	0.08	0.08	0.13
Indonesia.....	0.04	0.04	0.11	0.11	0.11	0.11	0.12	0.12	0.11	0.12
Japan.....	(s)	(s)	(s)	(s)	(s)	(s)	0.01	0.01	0.01	0.01
Malaysia.....	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03
New Zealand.....	(s)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Pakistan.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.01	(s)
Taiwan.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Thailand.....	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.03	0.06	0.06
Total.....	0.22	0.24	0.29	0.30	0.30	0.33	0.35	0.39	0.41	0.48
World Total.....	6.32	6.63	6.67	6.85	7.13	7.38	7.67	7.84	8.14	8.30

¹ Preliminary.

² Does not include China for which data are unavailable.

--- Not applicable.

(s) = Value less than 5 trillion Btu.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Section 3.

Table F4 World Dry Natural Gas Production (Btu), 1987 - 1996
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	3.15	3.63	3.85	3.90	4.12	4.60	4.99	5.45	5.77	5.97
Mexico.....	0.87	0.94	0.94	0.96	1.14	1.13	1.10	1.11	1.03	1.08
United States.....	17.14	17.60	17.85	18.36	18.23	18.38	18.58	19.35	19.10	19.54
Total.....	21.16	22.17	22.64	23.23	23.49	24.10	24.67	25.91	25.90	26.59
Central & South America										
Argentina.....	0.49	0.59	0.67	0.59	0.66	0.77	0.82	0.85	0.96	1.11
Barbados.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Bolivia.....	0.09	0.10	0.11	0.11	0.10	0.11	0.10	0.10	0.11	0.11
Brazil.....	0.12	0.11	0.14	0.11	0.14	0.15	0.17	0.18	0.19	0.24
Chile.....	0.03	0.04	0.06	0.07	0.05	0.06	0.06	0.07	0.07	0.06
Colombia.....	0.13	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.17
Cuba.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Ecuador.....	(s)	(s)	(s)	0.01	(s)	(s)	(s)	(s)	0.01	0.01
Peru.....	0.04	0.04	0.04	0.02	0.02	0.02	0.03	0.03	0.03	0.03
Trinidad and Tobago.....	0.15	0.16	0.17	0.18	0.21	0.20	0.23	0.26	0.28	0.32
Venezuela.....	0.78	0.78	0.92	0.91	0.95	0.91	0.97	1.04	1.06	1.06
Total.....	1.83	1.96	2.24	2.13	2.27	2.36	2.54	2.70	2.85	3.10
Western Europe										
Austria.....	0.04	0.05	0.05	0.05	0.05	0.05	0.06	0.05	0.06	0.06
Belgium.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.00	(s)
Denmark.....	0.10	0.10	0.12	0.12	0.15	0.16	0.17	0.19	0.21	0.25
France.....	0.14	0.12	0.12	0.11	0.13	0.12	0.12	0.13	0.12	0.10
Germany.....	--	--	--	--	0.60	0.60	0.61	0.60	0.63	0.70
Germany, East.....	0.11	0.12	0.11	0.05	--	--	--	--	--	--
Germany, West.....	0.56	0.52	0.52	0.51	--	--	--	--	--	--
Greece.....	(s)	0.01	0.01	0.01	0.01	0.01	(s)	(s)	(s)	(s)
Ireland.....	0.06	0.07	0.08	0.08	0.08	0.08	0.10	0.10	0.10	0.10
Italy.....	0.60	0.61	0.62	0.63	0.62	0.65	0.69	0.73	0.72	0.72
Netherlands.....	2.47	2.19	2.39	2.41	2.72	2.73	2.78	2.63	2.66	3.01
Norway.....	1.14	1.14	1.18	1.06	1.05	1.14	1.06	1.16	1.20	1.61
Spain.....	0.03	0.04	0.06	0.06	0.05	0.05	0.03	0.01	0.02	0.02
Switzerland.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.00	0.00
Turkey.....	0.01	(s)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
United Kingdom.....	1.73	1.67	1.64	1.92	2.01	2.01	2.40	2.57	2.80	3.34
Former Yugoslavia.....	0.07	0.10	0.10	0.09	0.09	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	(s)	0.00	0.00	0.03	0.02
Croatia.....	--	--	--	--	--	0.06	0.07	0.06	0.06	0.06
Serbia and Montenegro.....	--	--	--	--	--	0.03	0.03	0.03	0.03	0.02
Slovenia.....	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Total.....	7.09	6.74	6.99	7.11	7.57	7.70	8.13	8.26	8.65	10.02

See footnotes at end of table.

Table F4 World Dry Natural Gas Production (Btu), 1987 - 1996 (Continued)
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	0.02	0.03	0.03	0.01	0.01	(s)	(s)	(s)	(s)	(s)
Bulgaria.....	(s)	(s)	(s)	0.00	0.00	(s)	(s)	(s)	(s)	(s)
Former Czechoslovakia.....	0.02	0.03	0.03	0.02	0.02	0.01	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	0.01	0.01	0.01	0.01
Slovakia.....	--	--	--	--	--	--	0.01	0.01	0.01	0.01
Hungary.....	0.19	0.20	0.19	0.15	0.16	0.16	0.18	0.16	0.17	0.16
Poland.....	0.17	0.17	0.16	0.12	0.12	0.12	0.15	0.13	0.13	0.13
Romania.....	1.41	1.37	1.21	1.07	0.80	0.71	0.68	0.63	0.69	0.67
Former U.S.S.R.....	23.41	25.10	25.95	26.57	26.08	--	--	--	--	--
Azerbaijan.....	--	--	--	--	--	0.25	0.22	0.21	0.21	0.22
Belarus.....	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01
Georgia.....	--	--	--	--	--	(s)	0.00	0.00	0.00	0.00
Kazakhstan.....	--	--	--	--	--	0.26	0.21	0.14	0.15	0.14
Kyrgyzstan.....	--	--	--	--	--	(s)	0.00	(s)	(s)	(s)
Russia.....	--	--	--	--	--	20.60	19.87	19.54	19.14	19.35
Tajikistan.....	--	--	--	--	--	(s)	0.00	(s)	(s)	(s)
Turkmenistan.....	--	--	--	--	--	1.84	2.08	1.15	1.04	1.19
Ukraine.....	--	--	--	--	--	0.67	0.62	0.59	0.56	0.59
Uzbekistan.....	--	--	--	--	--	1.38	1.45	1.52	1.55	1.55
Total.....	25.22	26.89	27.56	27.94	27.17	26.02	25.48	24.09	23.67	24.01
Middle East										
Bahrain.....	0.23	0.19	0.19	0.21	0.24	0.20	0.24	0.25	0.25	0.26
Iran.....	0.60	0.75	0.83	0.88	0.97	0.93	1.01	1.19	1.32	1.45
Iraq.....	0.14	0.21	0.23	0.15	0.04	0.11	0.09	0.12	0.12	0.12
Israel.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Jordan.....	0.00	0.00	(s)	(s)	(s)	0.01	0.01	0.01	0.01	0.01
Kuwait.....	0.20	0.24	0.30	0.19	0.02	0.10	0.20	0.22	0.22	0.22
Oman.....	0.08	0.08	0.10	0.10	0.13	0.12	0.15	0.16	0.15	0.16
Qatar.....	0.21	0.22	0.23	0.29	0.34	0.42	0.50	0.50	0.50	0.51
Saudi Arabia.....	0.99	1.08	1.10	1.13	1.18	1.26	1.33	1.39	1.41	1.53
Syria.....	0.02	0.02	0.04	0.11	0.13	0.13	0.14	0.14	0.10	0.10
United Arab Emirates.....	0.71	0.69	0.85	0.82	0.96	1.07	0.98	0.95	1.16	1.34
Total.....	3.18	3.47	3.87	3.90	4.02	4.34	4.65	4.93	5.24	5.70
Africa										
Algeria.....	1.62	1.74	1.82	1.90	2.05	2.09	2.02	1.92	2.40	2.56
Angola.....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Congo (Brazzaville).....	(s)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cote d'Ivoire (Ivory Coast).....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(s)	0.01
Egypt.....	0.23	0.26	0.29	0.30	0.34	0.37	0.42	0.44	0.46	0.50
Gabon.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Libya.....	0.20	0.20	0.22	0.23	0.24	0.25	0.24	0.24	0.23	0.24
Morocco.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Nigeria.....	0.14	0.14	0.17	0.14	0.18	0.18	0.19	0.17	0.19	0.19
Senegal.....	0.00	0.00	0.00	0.00	0.00	0.00	(s)	(s)	(s)	(s)
South Africa.....	0.00	0.00	0.00	0.00	0.00	(s)	0.07	0.07	0.07	0.07
Tunisia.....	0.02	0.02	0.02	0.01	0.01	0.02	0.02	0.02	0.01	0.03
Total.....	2.23	2.37	2.53	2.60	2.84	2.93	2.97	2.88	3.40	3.64

See footnotes at end of table.

Table F4 World Dry Natural Gas Production (Btu), 1987 - 1996 (Continued)
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Far East & Oceania										
Afghanistan.....	0.10	0.11	0.11	0.11	0.01	0.01	0.01	0.01	0.01	0.01
Australia.....	0.56	0.58	0.59	0.76	0.79	0.87	0.92	0.98	1.10	1.12
Bangladesh.....	0.12	0.14	0.15	0.15	0.16	0.19	0.20	0.22	0.24	0.25
Brunei.....	0.37	0.37	0.37	0.39	0.32	0.33	0.34	0.34	0.38	0.38
Burma.....	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.06	0.06
China.....	0.55	0.55	0.56	0.56	0.58	0.59	0.62	0.65	0.70	0.78
India.....	0.23	0.32	0.33	0.41	0.47	0.49	0.55	0.62	0.72	0.80
Indonesia.....	1.42	1.47	1.57	1.53	1.72	1.79	1.97	2.21	2.49	2.65
Japan.....	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09
Malaysia.....	0.57	0.61	0.63	0.68	0.78	0.83	0.92	0.96	1.07	1.36
New Zealand.....	0.15	0.17	0.17	0.17	0.19	0.20	0.18	0.17	0.17	0.20
Pakistan.....	0.39	0.42	0.44	0.45	0.50	0.51	0.54	0.59	0.60	0.65
Papua New Guinea.....	0.00	0.00	0.00	0.00	0.00	(s)	(s)	(s)	(s)	(s)
Philippines.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(s)	(s)
Taiwan.....	0.05	0.03	0.05	0.08	0.03	0.03	0.03	0.03	0.04	0.04
Thailand.....	0.13	0.19	0.18	0.21	0.24	0.25	0.31	0.30	0.37	0.43
Vietnam.....	(s)	(s)	(s)	(s)	(s)	0.01	0.01	0.01	0.03	0.03
Total.....	4.78	5.07	5.29	5.62	5.91	6.24	6.73	7.24	8.06	8.85
World Total.....	65.50	68.67	71.12	72.53	73.29	73.70	75.17	76.01	77.77	81.90

¹ Preliminary.

-- Not applicable.

(s) = Value less than 5 trillion Btu.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Section 4.

Table F5 World Coal Production (Btu), 1987 - 1996

(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	1.50	1.73	1.74	1.70	1.78	1.62	1.71	1.83	1.89	1.90
Mexico.....	0.17	0.15	0.16	0.13	0.12	0.13	0.15	0.15	0.15	0.16
United States.....	20.14	20.74	21.35	22.46	21.59	21.59	20.22	22.07	21.98	22.64
Total.....	21.81	22.62	23.25	24.28	23.49	23.34	22.08	24.05	24.02	24.70
Central & South America										
Argentina.....	0.01	0.01	0.01	0.01	0.01	0.01	(s)	0.01	0.01	0.01
Brazil.....	0.13	0.14	0.13	0.09	0.10	0.08	0.08	0.08	0.10	0.11
Chile.....	0.04	0.05	0.05	0.06	0.06	0.05	0.04	0.04	0.03	0.03
Colombia.....	0.35	0.39	0.47	0.53	0.61	0.61	0.56	0.58	0.67	0.78
Peru.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Venezuela.....	0.01	0.03	0.06	0.06	0.07	0.09	0.13	0.15	0.13	0.10
Total.....	0.54	0.63	0.73	0.74	0.85	0.84	0.82	0.86	0.94	1.02
Western Europe										
Austria.....	0.07	0.06	0.05	0.06	0.06	0.05	0.04	0.04	0.03	0.03
Belgium.....	0.14	0.06	0.05	0.05	0.04	0.02	0.02	0.01	0.01	0.01
France.....	0.46	0.37	0.36	0.34	0.32	0.30	0.27	0.23	0.21	0.22
Germany.....	--	--	--	--	3.96	3.65	3.37	3.21	3.05	2.92
Germany, East.....	2.60	2.61	2.54	2.36	--	--	--	--	--	--
Germany, West.....	2.88	2.80	2.76	2.71	--	--	--	--	--	--
Greece.....	0.27	0.29	0.31	0.31	0.32	0.27	0.30	0.30	0.30	0.31
Ireland.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Italy.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	(s)	(s)	(s)
Norway.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Portugal.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Spain.....	0.68	0.67	0.68	0.53	0.50	0.50	0.47	0.45	0.43	0.48
Sweden.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.00	0.00
Turkey.....	0.45	0.39	0.50	0.45	0.43	0.49	0.47	0.47	0.47	0.48
United Kingdom.....	2.61	2.60	2.53	2.40	2.42	1.98	1.59	1.12	1.13	1.21
Former Yugoslavia.....	0.85	0.86	0.88	0.88	0.81	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	0.06	0.04	0.03	0.02	0.01
Croatia.....	--	--	--	--	--	(s)	0.01	0.01	(s)	(s)
Macedonia, TFYR.....	--	--	--	--	--	0.08	0.09	0.09	0.03	0.03
Serbia and Montenegro.....	--	--	--	--	--	0.37	0.32	0.32	0.23	0.22
Slovenia.....	--	--	--	--	--	0.06	0.06	0.05	0.06	0.06
Total.....	11.05	10.73	10.68	10.13	8.88	7.84	7.06	6.33	6.00	6.00
Eastern Europe & Former U.S.S.R.										
Albania.....	0.02	0.02	0.02	0.02	0.01	(s)	(s)	(s)	(s)	(s)
Bulgaria.....	0.37	0.34	0.34	0.30	0.27	0.28	0.29	0.29	0.25	0.25
Former Czechoslovakia.....	2.91	2.86	2.73	2.43	2.26	2.12	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	1.61	1.72	1.65	1.61
Slovakia.....	--	--	--	--	--	--	0.06	0.06	0.03	0.03
Hungary.....	0.26	0.24	0.23	0.20	0.19	0.19	0.17	0.18	0.18	0.16
Poland.....	4.78	4.78	4.43	3.74	3.59	3.53	3.51	3.58	3.60	3.57
Romania.....	0.48	0.54	0.56	0.34	0.29	0.29	0.34	0.37	0.36	0.37
Former U.S.S.R.....	12.89	13.06	12.53	13.67	10.65	--	--	--	--	--
Estonia.....	--	--	--	--	--	0.17	0.11	0.11	0.10	0.08
Georgia.....	--	--	--	--	--	0.01	(s)	(s)	(s)	(s)
Kazakhstan.....	--	--	--	--	--	2.31	2.06	1.45	1.16	1.06
Kyrgyzstan.....	--	--	--	--	--	0.05	0.04	0.04	0.03	0.02
Moldova.....	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Russia.....	--	--	--	--	--	6.36	5.71	5.01	4.85	4.73
Tajikistan.....	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Ukraine.....	--	--	--	--	--	2.56	2.45	2.00	1.91	1.61
Uzbekistan.....	--	--	--	--	--	0.06	0.05	0.05	0.03	0.03
Total.....	21.73	21.85	20.83	20.70	17.26	17.93	16.41	14.86	14.15	13.53

See footnotes at end of table.

Table F5 World Coal Production (Btu), 1987 - 1996 (Continued)
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Middle East										
Iran.....	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Total.....	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Africa										
Algeria.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Botswana.....	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Cameroon.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Congo (Kinshasa).....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Malawi.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Morocco.....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Mozambique.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Niger.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Nigeria.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
South Africa.....	3.99	4.09	3.98	3.95	4.01	4.15	4.25	4.41	4.64	4.64
Swaziland.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Tanzania.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Zambia.....	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Zimbabwe.....	0.13	0.14	0.14	0.13	0.15	0.15	0.14	0.15	0.06	0.06
Total.....	4.18	4.30	4.17	4.14	4.22	4.37	4.45	4.63	4.76	4.77
Far East & Oceania										
Afghanistan.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Australia.....	3.68	3.41	3.74	3.97	4.13	4.37	4.40	4.57	4.93	5.05
Bhutan.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Burma.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
China.....	18.56	19.59	21.06	21.55	21.71	22.24	23.43	25.23	27.65	27.87
India.....	3.54	3.60	3.72	3.91	4.23	4.61	4.79	4.96	6.03	6.19
Indonesia.....	0.09	0.11	0.23	0.29	0.37	0.62	0.78	0.80	1.14	1.34
Japan.....	0.31	0.29	0.26	0.24	0.20	0.18	0.17	0.16	0.14	0.15
Korea, North.....	1.39	1.46	1.52	1.55	1.58	1.56	1.62	1.63	1.67	1.73
Korea, South.....	0.43	0.43	0.37	0.31	0.27	0.21	0.17	0.13	0.14	0.12
Laos.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Malaysia.....	(s)	(s)	(s)	(s)	(s)	(s)	0.01	(s)	(s)	(s)
Mongolia.....	0.09	0.10	0.10	0.10	0.10	0.08	0.08	0.08	0.08	0.09
Nepal.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
New Zealand.....	0.07	0.06	0.07	0.07	0.07	0.08	0.08	0.07	0.09	0.08
Pakistan.....	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.06	0.07
Philippines.....	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.03	0.03
Taiwan.....	0.04	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	(s)
Thailand.....	0.08	0.08	0.10	0.14	0.16	0.16	0.16	0.18	0.32	0.33
Vietnam.....	0.18	0.19	0.10	0.12	0.12	0.13	0.19	0.19	0.21	0.21
Total.....	28.54	29.46	31.38	32.35	33.03	34.34	35.99	38.11	42.51	43.28
World Total.....	87.89	89.62	91.08	92.38	87.76	88.70	86.85	88.87	92.41	93.33

¹ Preliminary.

-- Not applicable.

(s) = Value less than 5 trillion Btu.

Notes: Sum of components may not equal total due to independent rounding.

Coal includes anthracite, subanthracite, bituminous, subbituminous, lignite, and brown coal.

Sources: See sources at the end of Section 5.

Table F6 World Net Hydroelectric Power Generation (Btu), 1987 - 1996

(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	3.26	3.16	2.99	3.06	3.17	3.26	3.33	3.38	3.44	3.63
Mexico.....	0.19	0.22	0.25	0.24	0.23	0.27	0.27	0.21	0.28	0.32
United States. ²	2.63	2.33	2.81	3.01	2.98	2.61	2.88	2.67	3.20	3.59
Total.....	6.08	5.71	6.06	6.31	6.38	6.13	6.49	6.26	6.93	7.54
Central & South America										
Argentina.....	0.31	0.23	0.16	0.21	0.20	0.24	0.30	0.35	0.35	0.30
Bolivia.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
Brazil.....	1.91	2.05	2.11	2.13	2.24	2.30	2.42	2.50	2.61	2.74
Chile.....	0.13	0.12	0.10	0.12	0.14	0.17	0.18	0.17	0.19	0.22
Colombia.....	0.22	0.25	0.27	0.28	0.28	0.23	0.29	0.33	0.35	0.45
Costa Rica.....	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Dominican Republic.....	0.01	0.01	0.01	(s)	0.01	0.02	0.02	0.02	0.02	0.02
Ecuador.....	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.07
El Salvador.....	0.01	0.01	0.01	0.02	0.01	0.01	0.02	0.02	0.02	0.02
Guatemala.....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Haiti.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Honduras.....	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Jamaica.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Nicaragua.....	(s)	(s)	0.01	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Panama.....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03
Paraguay.....	0.19	0.21	0.25	0.28	0.30	0.28	0.32	0.37	0.43	0.47
Peru.....	0.11	0.11	0.11	0.11	0.12	0.10	0.12	0.13	0.14	0.14
Puerto Rico.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Suriname.....	(s)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Uruguay.....	0.07	0.06	0.04	0.07	0.06	0.08	0.08	0.08	0.08	0.08
Venezuela.....	0.32	0.35	0.36	0.38	0.46	0.48	0.49	0.53	0.57	0.60
Other.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Total.....	3.44	3.56	3.60	3.80	4.01	4.12	4.44	4.71	4.99	5.26
Western Europe										
Austria.....	0.26	0.37	0.36	0.32	0.32	0.36	0.38	0.37	0.38	0.35
Belgium.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Finland.....	0.14	0.14	0.13	0.11	0.14	0.16	0.14	0.12	0.13	0.12
France.....	0.71	0.77	0.48	0.55	0.59	0.70	0.66	0.80	0.73	0.65
Germany.....	--	--	--	--	0.15	0.18	0.18	0.19	0.20	0.19
Germany, East.....	0.02	0.02	0.02	0.01	--	--	--	--	--	--
Germany, West.....	0.21	0.22	0.20	0.19	--	--	--	--	--	--
Greece.....	0.03	0.02	0.02	0.02	0.03	0.02	0.02	0.03	0.04	0.04
Iceland.....	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05
Ireland.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Italy.....	0.41	0.42	0.35	0.33	0.43	0.43	0.43	0.46	0.39	0.43
Luxembourg.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Norway.....	1.06	1.12	1.22	1.25	1.13	1.20	1.23	1.15	1.25	1.07
Portugal.....	0.09	0.13	0.06	0.09	0.09	0.05	0.09	0.11	0.09	0.14
Spain.....	0.28	0.36	0.20	0.26	0.28	0.19	0.25	0.29	0.24	0.41
Sweden.....	0.74	0.72	0.74	0.75	0.65	0.77	0.77	0.61	0.69	0.53
Switzerland.....	0.36	0.37	0.31	0.31	0.33	0.34	0.37	0.40	0.36	0.30
Turkey.....	0.19	0.30	0.18	0.24	0.23	0.27	0.35	0.31	0.37	0.42
United Kingdom.....	0.04	0.05	0.05	0.05	0.05	0.06	0.04	0.05	0.05	0.04
Former Yugoslavia.....	0.27	0.27	0.24	0.20	0.20	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	0.03	0.02	0.01	0.01	0.02
Croatia.....	--	--	--	--	--	0.04	0.04	0.05	0.05	0.08
Macedonia, TFYR.....	--	--	--	--	--	0.01	0.01	0.01	0.01	0.01
Serbia and Montenegro.....	--	--	--	--	--	0.12	0.10	0.11	0.12	0.14
Slovenia.....	--	--	--	--	--	0.04	0.03	0.03	0.03	0.04
Other.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Total.....	4.88	5.31	4.61	4.74	4.69	5.02	5.17	5.17	5.21	5.03

See footnotes at end of table.

Table F6 World Net Hydroelectric Power Generation (Btu), 1987 - 1996 (Continued)
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	0.04	0.04	0.04	0.03	0.04	0.03	0.03	0.04	0.04	0.05
Bulgaria.....	0.03	0.03	0.03	0.02	0.03	0.02	0.02	0.02	0.02	0.03
Former Czechoslovakia.....	0.05	0.05	0.04	0.04	0.03	0.04	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	0.01	0.02	0.02	0.02
Slovakia.....	--	--	--	--	--	--	0.04	0.05	0.05	0.06
Hungary.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Poland.....	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.04	0.04	0.04
Romania.....	0.12	0.14	0.13	0.11	0.15	0.12	0.13	0.13	0.17	0.16
Former U.S.S.R.....	2.26	2.38	2.30	2.40	2.42	--	--	--	--	--
Armenia.....	--	--	--	--	--	0.03	0.04	0.04	0.02	0.02
Azerbaijan.....	--	--	--	--	--	0.02	0.02	0.02	0.02	0.02
Georgia.....	--	--	--	--	--	0.07	0.07	0.05	0.05	0.05
Kazakhstan.....	--	--	--	--	--	0.07	0.08	0.09	0.09	0.08
Kyrgyzstan.....	--	--	--	--	--	0.10	0.09	0.12	0.11	0.13
Latvia.....	--	--	--	--	--	0.03	0.03	0.03	0.03	0.02
Lithuania.....	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Moldova.....	--	--	--	--	--	(s)	(s)	(s)	(s)	(s)
Russia.....	--	--	--	--	--	1.78	1.79	1.81	1.82	1.59
Tajikistan.....	--	--	--	--	--	0.16	0.18	0.17	0.15	0.14
Ukraine.....	--	--	--	--	--	0.08	0.12	0.13	0.10	0.10
Uzbekistan.....	--	--	--	--	--	0.06	0.08	0.07	0.07	0.07
Other.....	0.00	0.00	0.00	0.00	0.00	(s)	(s)	(s)	(s)	(s)
Total.....	2.54	2.67	2.58	2.64	2.70	2.65	2.79	2.83	2.81	2.58
Middle East										
Iran.....	0.07	0.07	0.07	0.06	0.07	0.10	0.10	0.08	0.08	0.08
Iraq.....	0.01	0.01	0.01	0.01	(s)	0.01	0.01	0.01	0.01	0.01
Israel.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Jordan.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Lebanon.....	0.01	0.01	0.01	(s)	0.01	0.01	0.01	0.01	0.01	0.01
Syria.....	0.02	0.05	0.05	0.06	0.06	0.08	0.07	0.07	0.07	0.07
Total.....	0.10	0.13	0.13	0.13	0.15	0.19	0.19	0.16	0.16	0.16
Africa										
Algeria.....	0.01	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Angola.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Cameroon.....	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Congo (Brazzaville).....	(s)	(s)	(s)	0.01	(s)	(s)	(s)	(s)	(s)	(s)
Congo (Kinshasa).....	0.05	0.05	0.07	0.06	0.05	0.06	0.06	0.06	0.06	0.06
Cote d'Ivoire (Ivory Coast).....	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Egypt.....	0.08	0.08	0.08	0.10	0.09	0.09	0.11	0.11	0.11	0.11
Ethiopia.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Gabon.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Ghana.....	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Kenya.....	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Madagascar.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Malawi.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Mali.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Morocco.....	0.01	0.01	0.01	0.01	0.01	0.01	(s)	0.01	0.01	0.01
Nigeria.....	0.03	0.04	0.04	0.05	0.06	0.06	0.06	0.06	0.06	0.06
Reunion.....	0.01	(s)	0.01	0.01	(s)	0.01	0.01	0.01	0.01	0.01
South Africa.....	0.02	0.03	0.03	0.01	0.02	0.01	(s)	0.01	0.01	0.01
Sudan.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Tanzania.....	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Uganda.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Zambia.....	0.09	0.09	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Zimbabwe.....	0.03	0.03	0.03	0.04	0.03	0.03	0.02	0.02	0.02	0.02
Other.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total.....	0.51	0.54	0.56	0.58	0.59	0.58	0.57	0.59	0.59	0.60

See footnotes at end of table.

Table F6 World Net Hydroelectric Power Generation (Btu), 1987 - 1996 (Continued)
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Far East & Oceania										
Afghanistan.....	0.01	0.01	0.01	0.01	0.01	(s)	(s)	(s)	(s)	(s)
Australia.....	0.14	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.16	0.15
Bangladesh.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	(s)	(s)
Bhutan.....	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Burma.....	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
Cambodia.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
China.....	1.03	1.12	1.22	1.30	1.29	1.35	1.55	1.72	1.92	1.89
Fiji.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
French Polynesia.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
India.....	0.49	0.60	0.64	0.74	0.75	0.72	0.73	0.73	0.74	0.75
Indonesia.....	0.08	0.09	0.09	0.11	0.10	0.13	0.12	0.12	0.11	0.10
Japan.....	0.77	0.94	0.94	0.92	1.00	0.85	0.98	0.69	0.85	0.82
Korea, North.....	0.30	0.32	0.33	0.33	0.33	0.25	0.25	0.24	0.24	0.23
Korea, South.....	0.05	0.04	0.05	0.07	0.05	0.05	0.06	0.04	0.06	0.05
Laos.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Malaysia.....	0.05	0.06	0.05	0.04	0.05	0.04	0.05	0.07	0.08	0.08
Nepal.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
New Caledonia.....	(s)	0.01	0.01	(s)	(s)	(s)	(s)	(s)	(s)	(s)
New Zealand.....	0.23	0.24	0.23	0.24	0.24	0.21	0.24	0.27	0.28	0.28
Pakistan.....	0.16	0.17	0.17	0.17	0.19	0.19	0.22	0.20	0.24	0.26
Papua New Guinea.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.01	0.01
Philippines.....	0.05	0.06	0.07	0.06	0.06	0.06	0.06	0.07	0.07	0.07
Samoa.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Sri Lanka.....	0.02	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.05
Taiwan.....	0.07	0.06	0.07	0.09	0.06	0.09	0.07	0.09	0.09	0.09
Thailand.....	0.04	0.04	0.06	0.05	0.05	0.04	0.04	0.05	0.07	0.07
U.S. Pacific Islands.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Vietnam.....	0.02	0.02	0.04	0.06	0.06	0.06	0.09	0.10	0.13	0.13
Total.....	3.57	3.99	4.20	4.42	4.49	4.32	4.75	4.67	5.14	5.11
World Total.....	21.12	21.92	21.73	22.61	23.00	23.01	24.39	24.39	25.83	26.28

¹ Preliminary.

² There is a discontinuity in this time series between 1988 and 1989; beginning in 1989, pumped storage is removed, and expanded coverage of industrial use of hydroelectric power is included.

--- Not applicable.

(s) = Value less than 5 trillion Btu.

Notes: Sum of components may not equal total due to independent rounding.

Generation data consist of both utility and nonutility sources. Data are reported as net generation as opposed to gross. Net generation excludes the energy consumed by the generating unit and excludes generation from pumped storage.

Sources: See sources at the end of Section 6.

Table F7 World Net Nuclear Electric Power Generation (Btu), 1987 - 1996
(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	0.84	0.90	0.87	0.79	0.93	0.88	1.02	1.17	1.06	1.00
Mexico.....	0.00	0.00	0.00	0.03	0.04	0.04	0.05	0.04	0.08	0.08
United States.....	4.91	5.66	5.68	6.16	6.58	6.61	6.52	6.84	7.18	7.17
Total.....	5.75	6.56	6.55	6.99	7.55	7.52	7.59	8.04	8.31	8.24
Central & South America										
Argentina.....	0.07	0.06	0.06	0.08	0.09	0.08	0.09	0.09	0.08	0.08
Brazil.....	0.01	(s)	0.02	0.02	0.01	0.02	(s)	(s)	0.02	0.02
Total.....	0.08	0.06	0.07	0.10	0.10	0.10	0.09	0.09	0.11	0.11
Western Europe										
Belgium.....	0.41	0.42	0.41	0.42	0.42	0.43	0.41	0.40	0.41	0.43
Finland.....	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
France.....	2.53	2.64	2.93	3.11	3.28	3.34	3.64	3.54	3.71	3.89
Germany.....	--	--	--	--	1.43	1.54	1.49	1.47	1.49	1.56
Germany, East.....	0.12	0.12	0.12	0.06	--	--	--	--	--	--
Germany, West.....	1.37	1.52	1.47	1.46	--	--	--	--	--	--
Italy.....	(s)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Netherlands.....	0.04	0.04	0.04	0.04	0.03	0.04	0.04	0.04	0.04	0.04
Spain.....	0.44	0.52	0.58	0.52	0.54	0.54	0.54	0.53	0.53	0.54
Sweden.....	0.64	0.66	0.63	0.65	0.74	0.61	0.59	0.70	0.67	0.72
Switzerland.....	0.22	0.23	0.23	0.24	0.23	0.23	0.23	0.24	0.25	0.25
United Kingdom.....	0.57	0.66	0.76	0.70	0.78	0.86	0.96	0.95	0.95	1.01
Former Yugoslavia.....	0.05	0.04	0.05	0.05	0.04	--	--	--	--	--
Slovenia.....	--	--	--	--	--	0.04	0.04	0.04	0.04	0.04
Total.....	6.59	7.05	7.40	7.43	7.67	7.82	8.13	8.11	8.29	8.69
Eastern Europe & Former U.S.S.R.										
Bulgaria.....	0.13	0.17	0.16	0.15	0.14	0.12	0.15	0.16	0.18	0.20
Former Czechoslovakia.....	0.26	0.27	0.28	0.29	0.28	0.29	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	0.15	0.15	0.14	0.15
Slovakia.....	--	--	--	--	--	--	0.14	0.14	0.13	0.14
Hungary.....	0.12	0.14	0.15	0.15	0.13	0.13	0.13	0.13	0.13	0.14
Romania.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Former U.S.S.R.....	2.03	2.33	2.43	2.31	2.31	--	--	--	--	--
Armenia.....	--	--	--	--	--	0.00	0.00	0.00	0.00	0.02
Kazakhstan.....	--	--	--	--	--	0.01	(s)	(s)	(s)	(s)
Lithuania.....	--	--	--	--	--	0.15	0.13	0.08	0.11	0.14
Russia.....	--	--	--	--	--	1.25	1.25	1.02	1.04	1.14
Ukraine.....	--	--	--	--	--	0.76	0.78	0.71	0.73	0.83
Total.....	2.53	2.91	3.03	2.89	2.86	2.71	2.73	2.41	2.47	2.76
Africa										
South Africa.....	0.06	0.11	0.11	0.09	0.09	0.09	0.07	0.10	0.11	0.12
Total.....	0.06	0.11	0.11	0.09	0.09	0.09	0.07	0.10	0.11	0.12
Far East & Oceania										
China.....	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.14	0.13	0.14
India.....	0.06	0.06	0.04	0.07	0.06	0.07	0.07	0.06	0.08	0.09
Japan.....	2.01	1.85	1.86	1.97	2.08	2.17	2.42	2.61	2.83	2.89
Korea, South.....	0.39	0.39	0.47	0.51	0.54	0.54	0.56	0.56	0.64	0.70
Pakistan.....	0.01	(s)	(s)	(s)	(s)	0.01	(s)	0.01	0.01	(s)
Taiwan.....	0.33	0.30	0.28	0.32	0.33	0.32	0.33	0.33	0.34	0.36
Total.....	2.78	2.61	2.65	2.87	3.01	3.12	3.41	3.70	4.02	4.19
World Total.....	17.80	19.30	19.82	20.37	21.29	21.36	22.02	22.46	23.31	24.10

¹ Preliminary.

-- Not applicable.

(s) = Value less than 5 trillion Btu.

Notes: Sum of components may not equal total due to independent rounding.

Generation data consist of both utility and nonutility sources. Data are reported as net generation as opposed to gross. Net generation excludes the energy consumed by the generating unit.

No generation is reported for Middle East.

Sources: See sources at the end of Section 6.

Table F8 World Net Geothermal, Solar, and Wind Electric Power Generation (Btu), 1987 - 1996

(Quadrillion (10¹⁵) Btu)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Mexico.....	0.09	0.10	0.10	0.10	0.11	0.12	0.12	0.11	0.11	0.11
United States. ²	0.24	0.23	0.73	2.32	2.32	2.44	2.50	2.55	2.54	2.68
Total.....	0.34	0.33	0.82	2.42	2.43	2.56	2.62	2.66	2.66	2.79
Central & South America										
Brazil..... ³	0.05	0.05	0.05	0.05	0.06	0.07	0.07	0.07	0.08	0.08
Costa Rica.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
El Salvador.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Nicaragua.....	(s)	(s)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total.....	0.06	0.06	0.06	0.07	0.08	0.09	0.09	0.10	0.11	0.11
Western Europe										
Belgium.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Denmark.....	(s)	(s)	(s)	0.01	0.01	0.01	0.01	0.01	0.01	0.01
France.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Germany.....	--	--	--	--	(s)	(s)	0.01	0.02	0.03	0.03
Germany, West.....	0.00	(s)	(s)	(s)	--	--	--	--	--	--
Greece.....	(s)	(s)	0.00	(s)	0.00	(s)	(s)	(s)	(s)	(s)
Iceland.....	(s)	0.01	0.01	0.01	0.01	(s)	0.01	0.01	0.01	0.01
Ireland.....	0.00	0.00	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Italy.....	0.06	0.06	0.06	0.06	0.06	0.07	0.08	0.07	0.07	0.08
Netherlands.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Norway.....	0.00	0.00	0.00	0.00	0.00	(s)	(s)	(s)	(s)	(s)
Portugal.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Spain.....	0.00	0.00	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Sweden.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Switzerland.....	0.00	0.00	0.00	0.00	(s)	(s)	(s)	(s)	(s)	(s)
Turkey.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
United Kingdom.....	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Total.....	0.07	0.08	0.08	0.09	0.09	0.10	0.11	0.12	0.14	0.15
Eastern Europe & Former U.S.S.R.										
Romania.....	(s)	(s)	(s)	(s)	0.00	0.00	0.00	0.00	0.00	0.00
Former U.S.S.R.....	0.00	0.00	(s)	(s)	(s)	--	--	--	--	--
Russia.....	--	--	--	--	--	(s)	(s)	(s)	(s)	0.01
Total.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	0.01
Middle East										
Jordan.....	0.00	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Total.....	0.00	0.00	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Africa										
Ethiopia.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Kenya.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Far East & Oceania										
Australia.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	(s)	(s)	(s)
India.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Indonesia.....	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.04	0.04
Japan.....	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.06	0.07
New Zealand.....	0.02	0.03	0.04	0.04	0.04	0.05	0.04	0.04	0.04	0.04
Philippines.....	0.09	0.10	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.12
Vietnam.....	(s)	(s)	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
Total.....	0.16	0.18	0.19	0.21	0.22	0.22	0.23	0.25	0.27	0.28
World Total.....	0.65	0.66	1.17	2.79	2.82	2.97	3.05	3.14	3.18	3.35

¹ Preliminary.

² There is a discontinuity in this time series between 1988 and 1990 due to the expanded coverage of non-electric utility use of renewable energy beginning in 1989 and biofuels electric power beginning in 1990.

³ Data are for biofuels electric power generation.

-- Not applicable.

(s) = Value less than 5 trillion Btu.

Notes: Sum of components may not equal total due to independent rounding.

Generation data consist of both utility and nonutility sources. Data are reported as net generation as opposed to gross. Net generation excludes the energy consumed by the generating unit.

Sources: See sources at the end of Section 6.

Appendix G

**World Production of Crude Oil,
Natural Gas Plant Liquids (NGPL),
Other Liquids, and
Refinery Processing Gain**

Table G1 World Production of Crude Oil, NGPL, and Other Liquids, 1987 - 1996
(Thousand Barrels per Day)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	1,902	1,997	1,970	1,979	1,979	2,065	2,186	2,275	2,386	2,432
Mexico.....	2,886	2,882	2,904	2,981	3,137	3,123	3,132	3,146	3,064	3,278
United States.....	10,009	9,818	9,219	8,994	9,168	8,996	8,836	8,645	8,626	8,607
Total.....	14,797	14,697	14,093	13,955	14,284	14,185	14,154	14,066	14,076	14,318
Central & South America										
Argentina.....	464	484	487	510	515	583	629	694	757	800
Barbados.....	1	1	1	1	1	1	1	1	1	1
Bolivia.....	23	24	25	26	26	28	29	30	34	37
Brazil.....	741	718	761	790	808	793	806	858	890	1,001
Chile.....	40	34	32	32	28	26	26	24	23	21
Colombia.....	391	382	411	448	425	439	461	455	593	631
Cuba.....	20	17	17	16	16	18	22	26	28	32
Ecuador.....	176	304	281	287	301	324	353	374	401	405
Guatemala.....	4	3	4	4	4	5	7	8	10	13
Peru.....	165	142	130	130	116	117	127	129	131	121
Suriname.....	2	3	4	4	4	5	5	6	7	7
Trinidad and Tobago.....	157	157	154	150	154	142	135	132	131	130
Venezuela.....	1,846	2,001	2,015	2,251	2,492	2,484	2,593	2,734	2,899	3,203
Total.....	4,030	4,271	4,323	4,649	4,890	4,967	5,195	5,472	5,906	6,402
Western Europe										
Austria.....	22	24	24	23	27	24	22	22	24	22
Denmark.....	97	99	117	121	143	163	174	185	186	208
France.....	77	79	77	72	69	70	68	69	62	55
Germany.....	--	--	--	--	95	85	81	79	78	78
Germany, East.....	1	1	1	1	--	--	--	--	--	--
Germany, West.....	104	112	104	104	--	--	--	--	--	--
Greece.....	26	23	19	17	17	14	12	11	10	9
Italy.....	69	92	84	89	82	86	86	89	97	105
Netherlands.....	98	88	77	84	84	67	67	103	87	81
Norway.....	1,077	1,233	1,628	1,782	1,984	2,324	2,450	2,624	2,905	3,242
Spain.....	40	37	30	27	33	31	24	21	17	20
Sweden.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Turkey.....	51	50	56	73	88	84	76	72	67	67
United Kingdom.....	2,568	2,391	1,942	1,928	1,938	1,986	2,084	2,593	2,756	2,827
Former Yugoslavia.....	90	86	78	74	68	--	--	--	--	--
Croatia.....	--	--	--	--	--	42	43	46	40	36
Serbia and Montenegro.....	--	--	--	--	--	23	23	24	22	22
Total.....	4,320	4,316	4,238	4,395	4,629	4,999	5,210	5,938	6,350	6,773
Eastern Europe & Former U.S.S.R.										
Albania.....	54	44	47	30	19	11	11	12	10	10
Bulgaria.....	6	4	5	4	1	1	1	1	1	1
Former Czechoslovakia.....	3	3	3	2	3	2	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	2	3	3	4
Slovakia.....	--	--	--	--	--	--	1	1	1	2
Hungary.....	57	62	51	55	47	46	45	50	46	42
Poland.....	4	4	3	2	3	3	5	5	5	5
Romania.....	230	206	193	171	148	143	137	142	141	142
Former U.S.S.R.....	12,480	12,503	12,140	11,400	10,412	--	--	--	--	--
Azerbaijan.....	--	--	--	--	--	222	208	192	182	182
Belarus.....	--	--	--	--	--	40	40	40	38	36
Georgia.....	--	--	--	--	--	3	2	2	1	1
Kazakhstan.....	--	--	--	--	--	530	490	415	414	457
Kyrgyzstan.....	--	--	--	--	--	2	2	2	2	2
Lithuania.....	--	--	--	--	--	0	2	3	3	3
Russia.....	--	--	--	--	--	7,862	6,950	6,335	6,175	6,035
Tajikistan.....	--	--	--	--	--	1	1	1	2	2
Turkmenistan.....	--	--	--	--	--	110	90	85	81	88
Ukraine.....	--	--	--	--	--	95	87	85	85	81
Uzbekistan.....	--	--	--	--	--	66	85	115	160	165
Total.....	12,834	12,827	12,442	11,664	10,633	9,137	8,159	7,487	7,350	7,257

See footnotes at end of table.

Table G1 World Production of Crude Oil, NGPL, and Other Liquids, 1987 - 1996 (Continued)
(Thousand Barrels per Day)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Middle East										
Bahrain.....	51	52	51	47	43	44	53	54	51	45
Iran.....	2,318	2,260	2,837	3,123	3,362	3,479	3,595	3,673	3,703	3,746
Iraq.....	2,089	2,705	2,951	2,070	305	425	527	573	585	599
Israel.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Jordan.....	1	1	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Kuwait.....	1,680	1,592	1,888	1,240	190	1,092	1,905	2,110	2,152	2,147
Oman.....	588	623	651	695	708	746	781	816	861	893
Qatar.....	317	376	404	446	445	478	468	465	497	560
Saudi Arabia.....	4,683	5,585	5,567	7,030	8,795	9,045	8,902	8,818	8,933	8,915
Syria.....	231	266	342	390	494	483	562	568	584	612
United Arab Emirates.....	1,686	1,695	1,990	2,252	2,532	2,410	2,305	2,343	2,393	2,438
Yemen.....	20	173	194	193	197	182	220	335	345	340
Total.....	13,664	15,328	16,876	17,487	17,071	18,384	19,318	19,754	20,104	20,295
Africa										
Algeria.....	1,188	1,160	1,225	1,305	1,370	1,354	1,307	1,320	1,347	1,392
Angola.....	360	452	455	475	500	526	509	536	646	709
Benin.....	7	5	4	4	4	6	6	6	3	2
Cameroon.....	174	163	170	161	153	140	127	108	100	93
Congo (Brazzaville).....	123	144	164	165	156	174	181	180	188	210
Congo (Kinshasa).....	32	30	28	29	28	26	25	26	30	30
Cote d'Ivoire (Ivory Coast).....	18	12	2	2	2	2	1	7	8	16
Egypt.....	921	883	910	913	919	926	945	954	980	987
Equatorial Guinea.....	0	0	0	0	(s)	2	5	5	5	20
Gabon.....	155	159	208	270	294	298	313	329	365	368
Ghana.....	0	0	0	0	0	1	2	1	4	6
Libya.....	1,002	1,205	1,185	1,410	1,523	1,473	1,402	1,419	1,430	1,450
Morocco.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Nigeria.....	1,341	1,450	1,716	1,810	1,892	1,943	1,960	1,931	1,993	2,188
South Africa.....	65	60	70	70	70	129	183	183	192	195
Sudan.....	0	0	0	0	0	(s)	(s)	(s)	(s)	12
Tunisia.....	109	108	110	98	109	114	102	96	90	88
Total.....	5,495	5,831	6,247	6,712	7,021	7,113	7,067	7,100	7,381	7,766
Far East & Oceania										
Australia.....	612	605	555	638	606	591	558	592	614	632
Bangladesh.....	1	1	1	1	1	1	1	2	1	2
Brunei.....	150	148	142	160	171	177	178	180	176	166
Burma.....	17	14	16	14	16	15	16	16	17	16
China.....	2,690	2,730	2,757	2,774	2,835	2,845	2,890	2,939	2,990	3,131
India.....	816	644	710	670	625	589	564	635	750	731
Indonesia.....	1,373	1,372	1,481	1,539	1,668	1,579	1,589	1,590	1,579	1,627
Japan.....	14	14	13	14	18	20	19	18	18	18
Malaysia.....	508	551	596	631	658	666	657	662	702	715
New Zealand.....	42	50	54	56	56	55	68	74	71	70
Pakistan.....	42	45	48	62	64	64	63	58	62	58
Papua New Guinea.....	0	0	0	0	(s)	53	126	110	100	103
Philippines.....	6	6	5	5	3	8	9	6	3	2
Taiwan.....	5	4	4	4	3	3	2	2	2	2
Thailand.....	47	52	51	57	59	65	67	78	89	96
Vietnam.....	5	15	32	50	80	106	120	141	173	175
Total.....	6,129	6,251	6,465	6,675	6,863	6,838	6,928	7,103	7,348	7,546
World Total.....	61,269	63,521	64,683	65,537	65,390	65,624	66,031	66,921	68,515	70,357

¹ Preliminary.

-- Not applicable.

(s) = Value less than 500 barrels per day.

Notes: NGPL are natural gas plant liquids. Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Section 3.

Table G2 World Production of Crude Oil, NGPL, Other Liquids, and Refinery Processing Gain, 1987 - 1996
(Thousand Barrels per Day)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	1,950	2,042	2,027	2,025	2,032	2,125	2,241	2,328	2,448	2,494
Mexico.....	2,914	2,910	2,932	3,009	3,165	3,151	3,160	3,174	3,092	3,306
United States.....	10,648	10,473	9,880	9,677	9,883	9,768	9,602	9,413	9,400	9,445
Total.....	15,512	15,425	14,839	14,712	15,080	15,045	15,003	14,915	14,940	15,245
Central & South America										
Argentina.....	469	489	492	515	520	588	634	699	762	805
Barbados.....	1	1	1	1	1	1	1	1	1	1
Bolivia.....	23	24	25	26	26	28	29	30	34	37
Brazil.....	754	731	774	803	821	806	819	871	903	1,014
Chile.....	41	35	33	33	29	27	27	25	24	22
Colombia.....	393	384	413	450	427	441	463	457	595	633
Cuba.....	20	17	17	16	16	18	22	26	28	32
Dominican Republic.....	1	1	1	1	1	1	1	1	1	1
Ecuador.....	177	305	282	288	302	325	354	375	402	406
Guatemala.....	4	3	4	4	4	5	7	8	10	13
Netherlands Antilles.....	6	6	6	6	6	6	6	6	6	6
Panama.....	1	1	1	1	1	1	1	1	1	1
Peru.....	167	144	132	132	118	119	129	131	133	123
Puerto Rico.....	0	0	0	0	0	0	0	0	0	0
Suriname.....	2	3	4	4	4	5	5	6	7	7
Trinidad and Tobago.....	160	160	157	153	157	145	138	135	134	133
Venezuela.....	1,863	2,018	2,032	2,268	2,509	2,501	2,610	2,751	2,916	3,220
Virgin Islands, U.S.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Total.....	4,082	4,323	4,375	4,702	4,942	5,019	5,247	5,524	5,958	6,454
Western Europe										
Austria.....	24	26	26	25	29	26	24	24	26	24
Belgium.....	12	12	12	12	12	12	12	12	12	12
Denmark.....	101	103	121	125	147	167	178	189	190	212
France.....	117	119	120	115	113	112	111	112	105	98
Germany.....	--	--	--	--	141	132	137	135	134	134
Germany, East.....	1	1	1	1	--	--	--	--	--	--
Germany, West.....	147	158	156	151	--	--	--	--	--	--
Greece.....	29	26	22	20	20	17	15	14	13	12
Ireland.....	1	1	1	1	1	1	1	1	1	1
Italy.....	107	130	122	133	124	155	147	150	158	166
Netherlands.....	132	122	111	118	118	101	101	137	121	115
Norway.....	1,080	1,236	1,631	1,785	1,987	2,327	2,453	2,627	2,908	3,245
Portugal.....	2	2	2	2	2	2	2	2	2	2
Spain.....	54	51	44	41	47	45	38	35	31	34
Sweden.....	4	4	4	4	4	4	4	4	4	4
Switzerland.....	1	1	1	1	1	1	1	1	1	1
Turkey.....	55	54	60	77	92	88	80	76	71	71
United Kingdom.....	2,611	2,440	1,991	1,977	1,986	2,032	2,129	2,638	2,801	2,872
Former Yugoslavia.....	90	86	78	74	68	--	--	--	--	--
Croatia.....	--	--	--	--	--	42	43	46	40	36
Serbia and Montenegro.....	--	--	--	--	--	23	23	24	22	22
Slovenia.....	--	--	--	--	--	0	(s)	(s)	(s)	(s)
Total.....	4,568	4,573	4,504	4,662	4,893	5,287	5,499	6,227	6,639	7,062

See footnotes at end of table.

Table G2 World Production of Crude Oil, NGPL, Other Liquids, and Refinery Processing Gain, 1987 - 1996 (Cont.)
(Thousand Barrels per Day)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	54	44	47	30	19	11	11	12	10	10
Bulgaria.....	6	4	5	4	1	1	1	1	1	1
Former Czechoslovakia.....	3	3	3	2	3	2	-	-	-	-
Czech Republic.....	-	-	-	-	-	-	2	3	3	4
Slovakia.....	-	-	-	-	-	-	1	1	1	2
Hungary.....	57	62	51	55	47	46	45	50	46	42
Poland.....	4	4	3	2	3	3	5	5	5	5
Romania.....	230	206	193	171	148	143	137	142	141	142
Former U.S.S.R.....	12,480	12,503	12,140	11,400	10,412	-	-	-	-	-
Azerbaijan.....	-	-	-	-	-	222	208	192	182	182
Belarus.....	-	-	-	-	-	40	40	40	38	36
Georgia.....	-	-	-	-	-	3	2	2	1	1
Kazakhstan.....	-	-	-	-	-	530	490	415	414	457
Kyrgyzstan.....	-	-	-	-	-	2	2	2	2	2
Lithuania.....	-	-	-	-	-	0	2	3	3	3
Russia.....	-	-	-	-	-	7,862	6,950	6,335	6,175	6,035
Tajikistan.....	-	-	-	-	-	1	1	1	2	2
Turkmenistan.....	-	-	-	-	-	110	90	85	81	88
Ukraine.....	-	-	-	-	-	95	87	85	85	81
Uzbekistan.....	-	-	-	-	-	66	85	115	160	165
Total.....	12,834	12,827	12,442	11,664	10,633	9,137	8,159	7,487	7,350	7,257
Middle East										
Bahrain.....	52	53	52	48	44	45	54	55	52	46
Iran.....	2,330	2,272	2,849	3,135	3,374	3,491	3,607	3,685	3,715	3,758
Iraq.....	2,093	2,709	2,955	2,074	305	426	528	574	586	600
Israel.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Jordan.....	1	1	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Kuwait.....	1,689	1,601	1,897	1,245	190	1,096	1,909	2,114	2,156	2,151
Oman.....	588	623	651	695	708	746	781	816	861	893
Qatar.....	318	377	405	447	446	479	469	466	498	561
Saudi Arabia.....	4,698	5,600	5,582	7,045	8,810	9,060	8,917	8,833	8,948	8,930
Syria.....	231	266	342	390	494	483	562	568	584	612
United Arab Emirates.....	1,689	1,698	1,993	2,255	2,535	2,413	2,308	2,346	2,396	2,441
Yemen.....	20	173	194	193	197	182	220	335	345	340
Total.....	13,709	15,373	16,921	17,528	17,103	18,421	19,355	19,791	20,141	20,332
Africa										
Algeria.....	1,189	1,161	1,226	1,306	1,371	1,355	1,308	1,321	1,348	1,393
Angola.....	360	452	455	475	500	526	509	536	646	709
Benin.....	7	5	4	4	4	6	6	6	3	2
Cameroon.....	174	163	170	161	153	140	127	108	100	93
Congo (Brazzaville).....	123	144	164	165	156	174	181	180	188	210
Congo (Kinshasa).....	32	30	28	29	28	26	25	26	30	30
Cote d'Ivoire (Ivory Coast).....	19	13	3	3	3	3	2	8	9	17
Egypt.....	922	884	911	914	920	927	946	955	981	988
Equatorial Guinea.....	0	0	0	0	(s)	2	5	5	5	20
Gabon.....	156	160	209	271	295	299	314	330	366	369
Ghana.....	0	0	0	0	0	1	2	1	4	6
Kenya.....	1	1	1	1	1	1	1	1	1	1
Libya.....	1,002	1,205	1,185	1,410	1,523	1,473	1,402	1,419	1,430	1,450
Morocco.....	1	1	1	1	1	1	1	1	1	1
Nigeria.....	1,346	1,455	1,721	1,815	1,897	1,948	1,965	1,936	1,998	2,193
South Africa.....	65	60	70	70	70	129	183	183	192	195
Sudan.....	0	0	0	0	0	(s)	(s)	(s)	(s)	12
Tunisia.....	109	108	110	98	109	114	102	96	90	88
Total.....	5,506	5,842	6,258	6,723	7,032	7,124	7,078	7,111	7,392	7,777

See footnotes at end of table.

Table G2 World Production of Crude Oil, NGPL, Other Liquids, and Refinery Processing Gain, 1987 - 1996 (Cont.)
(Thousand Barrels per Day)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Far East & Oceania										
Australia.....	625	618	568	651	619	604	572	606	627	645
Bangladesh.....	1	1	1	1	1	1	1	2	1	2
Brunei.....	150	148	142	160	171	177	178	180	176	166
Burma.....	17	14	16	14	16	15	16	16	17	16
China.....	2,690	2,730	2,757	2,774	2,835	2,845	2,890	2,939	2,990	3,131
India.....	620	648	714	674	629	593	568	639	754	735
Indonesia.....	1,372	1,369	1,478	1,536	1,665	1,576	1,586	1,587	1,576	1,624
Japan.....	70	76	73	74	76	79	82	81	81	81
Korea, South.....	3	3	3	3	3	3	3	3	3	3
Malaysia.....	509	552	597	632	659	667	658	663	703	716
New Zealand.....	43	51	55	57	57	56	70	76	72	71
Pakistan.....	43	46	49	63	65	65	64	59	63	59
Papua New Guinea.....	0	0	0	0	(s)	53	126	110	100	103
Philippines.....	7	7	6	6	4	9	10	7	4	3
Singapore.....	4	4	4	4	4	4	4	4	4	4
Taiwan.....	7	6	6	6	5	5	4	4	4	4
Thailand.....	48	53	52	58	60	66	68	79	90	97
Vietnam.....	5	15	32	50	80	106	120	141	173	175
Total.....	6,215	6,342	6,553	6,763	6,950	6,926	7,020	7,195	7,440	7,638
World Total.....	62,427	64,705	65,892	66,754	66,632	66,960	67,361	68,250	69,860	71,764

¹ Preliminary.

-- Not applicable.

(s) = Value less than 500 barrels per day.

Notes: NGPL are natural gas plant liquids. Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Section 3.

Table G3 World Oil Supply From Refinery Processing Gain and Other Liquids, 1995
(Thousand Barrels per Day)

Region Country	Refinery Processing Gain	Other Liquids
North America		
Canada.....	62	0
Mexico.....	28	0
United States.....	774	304
Total.....	865	304
Central & South America		
Argentina.....	5	0
Brazil.....	13	155
Chile.....	1	0
Colombia.....	2	0
Dominican Republic.....	1	0
Ecuador.....	1	0
Netherlands Antilles.....	6	0
Panama.....	1	0
Peru.....	2	0
Trinidad and Tobago.....	3	0
Venezuela.....	17	0
Virgin Islands, U.S.....	(s)	0
Total.....	52	155
Western Europe		
Austria.....	2	0
Belgium.....	12	0
Denmark.....	4	0
France.....	43	0
Germany.....	56	20
Greece.....	3	0
Ireland.....	1	0
Italy.....	61	3
Netherlands.....	34	0
Norway.....	3	0
Portugal.....	2	0
Spain.....	14	0
Sweden.....	4	0
Switzerland.....	1	0
Turkey.....	4	0
United Kingdom.....	45	0
Total.....	289	23
Middle East		
Bahrain.....	1	0
Iran.....	12	0
Iraq.....	1	0
Kuwait.....	4	0
Qatar.....	1	0
Saudi Arabia.....	15	0
United Arab Emirates.....	3	0
Total.....	37	0
Africa		
Algeria.....	1	0
Cote d'Ivoire (Ivory Coast).....	1	0
Egypt.....	1	0
Gabon.....	1	0
Kenya.....	1	0
Morocco.....	1	0
Nigeria.....	5	0
South Africa.....	0	181
Total.....	11	181

See footnotes at end of table.

Table G3 World Oil Supply From Refinery Processing Gain and Other Liquids, 1995 (Continued)
(Thousand Barrels per Day)

Region Country	Refinery Processing Gain	Other Liquids
Far East & Oceania		
Australia.....	13	0
India.....	4	0
Indonesia.....	-3	0
Japan.....	63	3
Korea, South.....	3	0
Malaysia.....	1	0
New Zealand.....	1	34
Pakistan.....	1	0
Philippines.....	1	0
Singapore.....	4	0
Taiwan.....	2	0
Thailand.....	1	0
Total.....	92	36
World Total.....	1,345	699

(s) = Value less than 500 barrels per day.

Note: Sum of components may not equal total due to independent rounding.

Sources: See sources at the end of Section 3.

Appendix H

**World Carbon
Dioxide Emissions,
1987-1996**

Table H1 World Carbon Dioxide Emissions from the Consumption and Flaring of Fossil Fuels, 1987 - 1996

(Million Metric Tons of Carbon)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	119.71	129.53	133.59	127.08	124.46	128.49	127.19	132.29	136.70	141.35
Mexico.....	76.17	77.05	79.11	78.81	82.69	87.71	88.75	90.08	82.91	86.32
United States.....	1,288.42	1,350.52	1,362.50	1,347.61	1,332.67	1,353.52	1,383.76	1,404.21	1,415.10	1,466.32
Other.....	0.26	0.28	0.33	0.25	0.22	0.19	0.18	0.17	0.16	0.18
Total.....	1,484.56	1,557.38	1,575.54	1,553.76	1,540.04	1,569.90	1,599.88	1,626.75	1,634.86	1,694.16
Central & South America										
Argentina.....	29.25	29.72	29.62	27.17	28.33	30.95	33.45	32.31	32.78	35.08
Brazil.....	57.45	57.74	59.61	57.77	60.42	60.83	65.41	64.17	64.25	71.22
Chile.....	5.40	6.41	7.82	8.26	8.06	8.50	9.05	10.11	10.72	11.00
Colombia.....	11.64	12.91	12.97	13.09	13.95	15.14	14.37	13.85	13.03	14.10
Cuba.....	9.86	10.01	10.24	9.96	9.24	8.21	8.04	7.90	7.38	7.29
Venezuela.....	28.25	28.01	28.79	29.23	29.97	29.90	30.63	31.73	31.02	31.13
Other.....	41.47	41.13	42.00	42.36	43.29	45.38	47.08	49.18	49.25	50.62
Total.....	183.34	185.93	191.06	187.85	193.26	198.90	208.03	209.25	208.44	220.43
Western Europe										
Austria.....	17.12	16.03	16.25	17.30	17.59	16.52	16.25	16.14	15.75	15.75
Belgium.....	31.98	31.43	32.80	34.20	35.41	34.09	33.26	34.41	34.23	36.35
Denmark.....	17.47	16.08	16.07	15.34	17.52	16.66	16.00	17.49	18.69	19.89
Finland.....	14.10	13.71	14.49	14.94	14.49	13.11	14.17	15.51	12.47	13.70
France.....	99.32	93.87	101.71	103.07	108.50	104.15	98.13	94.45	97.15	101.50
Germany.....	--	--	--	--	252.93	242.47	241.72	236.40	235.37	237.85
Germany, East.....	90.80	89.36	85.19	78.23	--	--	--	--	--	--
Germany, West.....	191.24	189.47	183.56	188.97	--	--	--	--	--	--
Greece.....	19.18	20.76	21.19	22.34	22.42	21.92	22.78	23.19	22.96	23.90
Ireland.....	6.19	6.23	6.48	6.95	7.20	7.45	7.47	7.72	8.33	8.39
Italy.....	109.86	108.36	113.31	113.27	112.98	112.87	107.96	106.11	115.78	116.16
Netherlands.....	55.69	56.27	55.90	59.23	61.13	60.11	58.69	58.85	57.32	58.31
Norway.....	10.46	9.04	9.78	9.47	8.89	9.66	9.10	9.52	10.37	11.15
Portugal.....	9.24	9.44	11.96	12.15	12.25	13.02	12.34	12.42	13.03	12.35
Spain.....	58.91	59.37	66.40	62.13	64.64	65.66	62.03	63.95	66.97	63.17
Sweden.....	17.12	16.86	15.55	14.89	14.55	14.77	14.88	15.06	15.91	15.65
Switzerland.....	11.67	11.62	11.53	12.11	12.54	12.58	12.07	12.25	11.38	12.12
Turkey.....	30.13	31.53	32.34	35.10	37.47	36.57	38.57	37.32	40.18	42.80
United Kingdom.....	164.00	162.17	166.47	168.25	166.91	157.06	157.06	153.64	146.17	154.52
Former Yugoslavia.....	40.36	41.11	41.11	40.27	35.94	--	--	--	--	--
Croatia.....	--	--	--	--	--	4.39	4.33	4.47	4.61	4.55
Serbia and Montenegro.....	--	--	--	--	--	13.18	10.70	10.80	8.06	8.77
Other.....	3.92	4.29	4.32	4.59	4.69	14.31	14.49	13.25	12.50	12.92
Total.....	998.74	987.02	1,006.39	1,012.80	1,008.04	970.55	952.00	942.95	947.23	969.79
Eastern Europe & Former U.S.S.R.										
Bulgaria.....	28.36	27.13	24.42	21.27	17.03	17.27	16.68	15.87	15.15	15.83
Former Czechoslovakia.....	90.59	88.76	84.87	78.73	71.96	65.12	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	46.13	49.39	47.04	46.99
Slovakia.....	--	--	--	--	--	--	10.87	10.48	9.98	7.14
Hungary.....	21.18	20.36	19.66	18.35	17.90	17.22	17.81	17.20	17.75	18.07
Poland.....	119.11	116.51	111.86	89.81	89.05	89.29	91.55	86.17	85.44	84.40
Romania.....	53.31	52.79	55.09	48.74	35.69	33.16	33.18	31.77	33.53	33.79
Former U.S.S.R.....	968.96	994.14	970.25	992.78	912.37	--	--	--	--	--
Azerbaijan.....	--	--	--	--	--	15.14	13.06	11.95	7.20	7.46
Belarus.....	--	--	--	--	--	23.88	20.98	17.69	15.28	15.25
Kazakhstan.....	--	--	--	--	--	66.69	53.88	38.27	38.62	38.43
Lithuania.....	--	--	--	--	--	5.98	4.65	4.78	4.44	4.66
Russia.....	--	--	--	--	--	558.90	511.35	450.61	416.78	401.47
Turkmenistan.....	--	--	--	--	--	4.91	4.86	4.62	4.51	4.38
Ukraine.....	--	--	--	--	--	147.63	139.55	117.99	106.47	97.90
Uzbekistan.....	--	--	--	--	--	26.03	31.71	27.24	27.04	27.86
Other.....	2.39	2.52	2.27	1.69	1.15	28.98	19.64	16.13	16.01	16.34
Total.....	1,283.91	1,302.20	1,268.42	1,251.38	1,145.15	1,100.19	1,015.91	900.16	845.24	819.97

See footnotes at end of table.

Table H1 World Carbon Dioxide Emissions from the Consumption and Flaring of Fossil Fuels, 1987 - 1996 (Cont.)
(Million Metric Tons of Carbon)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Middle East										
Bahrain.....	4.00	3.53	3.71	4.08	4.57	3.96	4.71	4.65	4.21	4.39
Iran.....	48.07	50.04	53.72	55.70	62.40	63.88	64.83	66.29	69.63	72.92
Iraq.....	14.56	16.50	17.54	18.89	11.61	15.63	18.39	20.48	20.02	21.05
Israel.....	8.58	9.33	9.59	9.88	10.20	11.79	12.68	12.98	12.30	12.85
Kuwait.....	8.91	10.06	11.32	7.25	9.75	4.75	7.59	8.19	8.38	8.72
Oman.....	2.47	2.20	2.83	3.39	3.87	3.66	4.01	4.08	3.61	3.70
Qatar.....	3.69	3.64	3.97	4.84	5.83	6.53	7.44	7.63	7.65	7.79
Saudi Arabia.....	54.27	56.73	55.97	56.61	61.55	62.59	64.75	61.04	67.26	69.78
Syria.....	7.95	8.40	8.91	10.46	9.50	10.08	10.89	11.33	10.49	10.65
United Arab Emirates.....	19.44	21.36	22.33	21.55	25.80	27.76	25.96	25.50	26.91	29.70
Yemen.....	2.57	2.70	2.98	3.14	3.23	3.32	2.75	2.67	2.76	2.86
Other.....	5.97	5.58	5.43	5.59	6.36	7.10	7.48	8.43	8.69	8.90
Total.....	180.49	190.08	198.29	201.39	214.66	221.04	231.48	233.26	241.93	253.32
Africa										
Algeria.....	19.66	20.57	20.46	21.47	22.43	21.82	21.91	22.17	23.12	23.47
Angola.....	1.32	1.37	1.34	2.01	2.09	2.12	2.10	2.00	3.18	3.16
Egypt.....	23.46	23.39	23.97	25.86	26.32	25.90	25.71	26.22	24.91	25.79
Gabon.....	1.06	1.14	1.57	1.57	1.57	1.66	1.63	1.62	1.63	1.68
Libya.....	7.47	8.61	9.14	11.12	10.91	9.41	9.57	9.56	9.83	10.25
Morocco.....	5.06	5.24	5.80	6.00	6.18	6.30	6.77	7.61	6.68	6.85
Nigeria.....	16.33	17.31	20.74	22.34	24.09	25.40	26.30	25.88	25.27	25.86
South Africa.....	85.15	86.54	80.50	80.66	84.04	87.74	90.10	94.04	93.94	96.00
Zimbabwe.....	3.98	4.05	4.20	4.11	4.35	4.48	4.25	4.57	2.42	2.58
Other.....	18.21	19.74	20.63	21.08	21.10	22.24	23.81	24.81	23.34	24.15
Total.....	181.70	187.98	188.33	196.21	203.09	207.08	212.14	218.48	214.33	219.78
Far East & Oceania										
Australia.....	64.38	66.71	70.52	74.22	73.91	77.53	76.72	76.95	79.57	79.13
Bangladesh.....	3.34	3.65	3.82	4.06	4.02	4.47	4.63	5.06	5.35	5.53
Brunei.....	1.41	1.26	1.43	1.24	0.77	1.00	1.00	0.95	0.94	0.93
China.....	573.76	612.80	620.34	619.87	649.02	671.77	709.93	759.17	792.32	804.82
Hong Kong.....	9.68	10.81	11.17	10.68	11.25	11.83	12.75	11.87	12.11	11.34
India.....	131.02	139.46	146.25	155.03	160.79	175.16	184.29	192.80	223.57	231.81
Indonesia.....	31.43	32.66	36.70	38.73	40.50	45.13	51.29	51.93	57.25	60.91
Japan.....	239.93	257.13	265.65	274.09	281.62	286.76	279.10	295.92	280.79	290.69
Korea, North.....	42.57	44.02	45.45	46.79	47.56	46.87	48.42	48.44	49.43	50.99
Korea, South.....	47.68	53.53	56.01	60.92	70.14	73.64	96.31	94.66	102.30	112.50
Malaysia.....	12.37	12.63	14.16	17.58	19.06	19.60	22.69	23.37	23.30	25.74
New Zealand.....	6.91	7.03	7.55	7.74	7.81	8.53	8.43	8.45	9.47	9.77
Pakistan.....	14.91	15.65	16.42	17.77	18.06	18.93	20.22	22.40	22.97	24.26
Philippines.....	9.15	9.73	10.85	11.22	11.28	12.39	13.69	13.97	14.51	15.00
Singapore.....	13.25	14.19	15.34	16.66	17.64	19.85	21.51	22.97	21.03	21.62
Taiwan.....	24.66	28.77	31.71	32.01	33.74	35.33	42.43	43.38	46.72	51.24
Thailand.....	14.28	16.29	19.27	23.03	25.47	27.47	31.34	34.00	42.13	43.54
Vietnam.....	5.95	5.60	4.32	5.29	4.90	5.21	7.26	7.92	7.69	7.78
Other.....	10.36	11.07	10.73	11.10	10.39	9.64	10.24	10.84	10.98	11.19
Total.....	1,257.06	1,343.01	1,387.70	1,428.04	1,487.93	1,551.11	1,642.25	1,725.03	1,802.45	1,858.79
World Total.....	5,569.79	5,753.60	5,815.73	5,831.44	5,792.16	5,818.78	5,861.70	5,855.88	5,894.48	6,036.24

¹ Preliminary.

-- Not applicable.

Notes: Sum of components may not equal total due to independent rounding.

Includes carbon dioxide emissions from the consumption of petroleum, natural gas, and coal, and the flaring of natural gas.

Tons of carbon can be converted to tons of carbon dioxide gas by multiplying by 3.667. One ton of carbon = 3.667 tons of carbon dioxide gas.

Source: Office of Energy Markets and End Use, Energy Information Administration.

Table H2 World Carbon Dioxide Emissions from the Consumption of Petroleum, 1987 - 1996
(Million Metric Tons of Carbon)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	57.71	61.59	63.36	61.13	57.90	58.32	57.30	58.81	62.43	64.04
Mexico.....	59.12	59.61	61.13	61.85	62.31	65.75	67.22	68.58	61.03	62.34
United States.....	581.34	606.72	606.57	591.09	576.76	587.11	590.38	603.52	599.52	620.84
Other.....	0.26	0.28	0.33	0.25	0.22	0.19	0.18	0.17	0.16	0.18
Total.....	698.42	728.20	731.39	714.32	697.19	711.36	715.07	731.09	723.15	747.39
Central & South America										
Argentina.....	19.11	18.43	16.73	15.77	16.16	16.71	18.83	16.94	15.90	16.25
Bolivia.....	0.73	0.81	0.87	0.89	0.91	0.93	0.91	1.02	0.95	0.96
Brazil.....	45.08	45.43	46.98	46.44	47.33	48.31	52.11	50.57	49.46	50.77
Chile.....	3.83	4.15	4.76	5.06	5.40	5.61	6.28	6.73	7.28	7.45
Colombia.....	7.17	7.71	8.01	7.49	7.76	8.74	8.97	8.83	8.00	8.22
Costa Rica.....	0.65	0.76	0.81	0.76	0.81	1.02	1.09	1.08	1.27	1.29
Cuba.....	9.73	9.88	10.02	9.79	9.10	8.05	7.88	7.75	7.22	7.13
Dominican Republic.....	2.10	2.27	2.20	2.44	2.36	2.68	2.32	2.60	2.87	2.87
Ecuador.....	3.72	3.77	3.71	3.86	4.22	4.85	4.16	4.43	4.39	4.52
El Salvador.....	0.61	0.66	0.65	0.70	0.78	0.90	0.88	0.97	1.23	1.19
Guatemala.....	0.89	0.98	0.99	1.04	0.99	1.19	1.30	1.46	1.42	1.45
Honduras.....	0.46	0.54	0.65	0.75	0.73	0.74	0.73	0.81	0.93	0.94
Jamaica.....	1.48	1.54	1.94	2.06	2.14	2.32	2.31	2.35	2.63	2.68
Netherlands Antilles.....	3.35	3.15	3.32	3.41	3.05	3.02	3.14	3.05	2.48	2.50
Panama.....	1.23	1.07	1.00	1.09	1.37	1.77	1.70	1.80	1.27	1.34
Peru.....	5.65	5.76	4.94	4.92	4.53	4.79	5.05	5.33	5.48	5.86
Puerto Rico.....	6.35	5.65	5.29	5.33	6.30	6.02	6.57	6.34	5.27	5.39
Trinidad and Tobago.....	0.84	0.73	0.90	0.85	0.87	0.87	0.83	0.89	0.77	0.82
Uruguay.....	1.12	1.35	1.36	1.26	1.19	1.26	1.40	1.24	1.19	1.23
Venezuela.....	15.06	14.95	14.39	14.60	14.67	15.00	15.14	15.42	14.21	14.41
Virgin Islands, U.S.....	2.30	1.56	2.36	2.14	2.20	2.06	2.34	2.33	2.96	2.99
Other.....	4.16	4.35	4.72	4.83	4.63	4.72	5.08	5.24	5.77	5.97
Total.....	135.63	135.48	136.59	135.47	137.53	141.56	149.02	147.17	142.93	146.21
Western Europe										
Austria.....	9.36	9.06	9.20	9.20	9.96	9.74	8.95	9.04	8.12	8.05
Belgium.....	18.00	18.82	18.38	18.44	19.91	20.33	19.33	19.56	18.56	20.98
Denmark.....	8.83	8.45	7.99	7.83	7.98	7.91	8.01	8.58	8.83	9.34
Finland.....	9.36	9.36	9.32	9.23	9.28	9.03	8.14	8.41	6.78	7.48
France.....	64.92	65.11	67.60	67.39	70.06	69.26	66.22	64.02	64.95	66.29
Germany.....	--	--	--	--	105.33	105.79	105.62	103.31	101.11	102.34
Germany, East.....	13.81	12.88	11.07	10.48	--	--	--	--	--	--
Germany, West.....	92.26	91.51	84.57	88.70	--	--	--	--	--	--
Greece.....	11.28	12.00	12.24	13.23	13.40	13.82	13.95	14.34	14.23	15.01
Ireland.....	3.29	3.14	3.26	3.68	3.98	4.20	4.15	4.54	5.08	5.08
Italy.....	75.10	73.29	76.56	74.07	73.61	76.62	71.88	70.93	76.50	76.83
Luxembourg.....	1.10	1.16	1.23	1.36	1.58	1.61	1.60	1.57	1.51	1.51
Netherlands.....	26.86	28.95	28.54	29.27	30.21	30.78	27.93	28.04	25.99	25.36
Norway.....	8.14	6.80	6.83	6.86	6.63	6.61	6.59	6.78	7.44	8.24
Portugal.....	7.40	7.24	9.33	9.11	9.31	10.28	9.28	9.17	9.36	8.91
Spain.....	33.06	35.14	38.14	37.44	38.99	41.17	38.21	40.36	42.16	39.41
Sweden.....	14.16	13.80	12.45	12.00	11.86	12.51	12.05	12.86	13.07	12.84
Switzerland.....	10.32	10.34	10.24	10.79	11.16	11.31	10.74	10.94	9.88	10.57
Turkey.....	16.71	16.59	16.24	17.34	16.94	17.86	19.88	19.03	20.68	21.78
United Kingdom.....	59.67	63.23	65.42	66.39	67.03	66.86	65.23	65.09	62.53	62.56
Former Yugoslavia.....	12.75	12.99	12.68	13.03	10.09	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	1.38	0.92	0.83	0.73	0.76
Croatia.....	--	--	--	--	--	2.88	2.70	3.14	3.31	3.18
Macedonia, TFYR.....	--	--	--	--	--	0.75	0.88	0.75	0.77	0.83
Serbia and Montenegro.....	--	--	--	--	--	2.18	1.36	1.16	0.95	1.06
Slovenia.....	--	--	--	--	--	1.36	1.63	1.61	1.78	1.73
Other.....	1.22	1.39	1.25	1.38	1.34	1.68	1.82	1.82	1.81	1.89
Total.....	497.62	501.23	502.56	507.24	518.65	525.92	507.09	505.90	506.13	512.04

See footnotes at end of table.

Table H2 World Carbon Dioxide Emissions from the Consumption of Petroleum, 1987 - 1996 (Continued)
(Million Metric Tons of Carbon)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	1.37	1.31	1.14	0.86	0.67	0.82	0.70	0.53	0.41	0.45
Bulgaria.....	11.93	11.95	9.33	7.46	4.93	5.13	4.96	4.96	4.88	5.08
Former Czechoslovakia.....	13.32	13.16	12.37	11.09	9.22	8.16	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	6.20	6.08	5.03	5.17
Slovakia.....	--	--	--	--	--	--	2.62	2.49	1.95	2.05
Hungary.....	7.98	7.49	7.16	6.95	6.31	6.76	7.03	6.57	6.54	6.72
Poland.....	14.74	15.14	14.94	12.01	11.69	12.69	12.16	11.80	11.51	11.96
Romania.....	15.19	14.68	15.39	17.25	12.26	10.87	10.44	8.94	8.79	8.64
Former U.S.S.R.....	359.64	353.59	341.41	334.73	330.51	--	--	--	--	--
Armenia.....	--	--	--	--	--	1.52	0.64	0.32	1.00	1.15
Azerbaijan.....	--	--	--	--	--	7.84	7.96	7.58	7.20	7.46
Belarus.....	--	--	--	--	--	14.61	12.37	10.65	8.86	8.74
Estonia.....	--	--	--	--	--	1.08	1.20	1.09	1.03	1.21
Georgia.....	--	--	--	--	--	1.06	0.67	0.25	0.74	0.85
Kazakhstan.....	--	--	--	--	--	16.50	13.89	12.35	10.24	10.49
Kyrgyzstan.....	--	--	--	--	--	1.31	0.78	0.28	0.46	0.55
Latvia.....	--	--	--	--	--	2.17	1.69	1.68	1.77	1.88
Lithuania.....	--	--	--	--	--	3.53	3.31	3.39	3.10	3.31
Moldova.....	--	--	--	--	--	2.34	1.80	0.96	0.92	0.92
Russia.....	--	--	--	--	--	173.09	153.31	122.86	111.13	101.97
Tajikistan.....	--	--	--	--	--	0.83	0.68	0.29	0.44	0.43
Turkmenistan.....	--	--	--	--	--	2.70	2.65	2.35	2.13	2.08
Ukraine.....	--	--	--	--	--	33.18	24.47	20.85	17.81	17.21
Uzbekistan.....	--	--	--	--	--	7.73	7.26	6.83	6.70	6.51
Total.....	424.17	417.33	401.76	390.35	375.58	313.93	276.77	233.10	212.62	204.83
Middle East										
Bahrain.....	0.74	0.79	0.90	0.99	1.06	1.13	1.19	1.00	0.57	0.59
Cyprus.....	1.05	1.09	1.32	1.38	1.39	1.70	1.62	1.83	1.79	1.87
Iran.....	36.11	36.36	40.15	41.41	43.78	44.23	45.69	44.31	44.82	46.19
Iraq.....	11.27	12.65	13.54	15.48	10.67	14.06	17.01	18.77	18.31	19.31
Israel.....	6.16	6.90	7.14	7.14	7.51	8.74	8.35	8.05	8.01	8.49
Jordan.....	2.88	2.67	2.66	2.83	2.64	3.10	2.97	3.26	3.33	3.43
Kuwait.....	4.27	4.32	4.51	3.04	1.79	3.10	4.45	4.76	4.96	5.29
Lebanon.....	1.97	1.78	1.36	1.27	2.26	2.21	2.68	3.09	3.27	3.29
Oman.....	1.11	1.04	1.26	1.54	1.56	1.59	1.60	1.64	1.55	1.61
Qatar.....	1.10	0.81	1.01	1.04	1.12	1.03	0.90	1.00	1.02	1.06
Saudi Arabia.....	39.23	39.83	38.41	38.03	38.25	38.90	40.98	36.23	41.03	41.97
Syria.....	7.62	8.13	8.38	8.65	7.38	7.68	8.73	9.11	8.85	9.00
United Arab Emirates.....	9.55	10.75	10.95	10.97	13.64	13.75	13.68	13.77	13.53	13.80
Yemen.....	2.57	2.70	2.98	3.14	3.23	3.32	2.75	2.67	2.76	2.86
Total.....	125.63	129.82	134.58	136.91	136.26	144.53	152.59	149.49	153.78	158.76

See footnotes at end of table.

Table H2 World Carbon Dioxide Emissions from the Consumption of Petroleum, 1987 - 1996 (Continued)
(Million Metric Tons of Carbon)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Africa										
Algeria.....	6.00	6.21	6.75	7.10	7.67	7.85	7.45	7.50	6.47	6.68
Angola.....	1.08	1.10	1.11	1.09	1.13	1.18	1.09	1.06	1.11	1.09
Cameroon.....	0.77	0.75	0.88	0.94	0.95	0.97	0.83	0.87	0.97	0.96
Congo (Brazzaville).....	0.26	0.23	0.26	0.28	0.25	0.24	0.26	0.28	0.24	0.22
Congo (Kinshasa).....	0.76	0.97	0.90	0.84	0.90	1.04	1.05	1.06	0.77	0.79
Cote d'Ivoire (Ivory Coast).....	1.44	1.53	1.65	1.56	1.62	1.66	1.86	2.22	1.99	2.13
Egypt.....	19.28	19.13	19.19	20.27	19.86	19.19	18.63	18.82	17.62	18.02
Ethiopia.....	0.78	0.73	0.81	0.82	0.67	0.98	0.90	0.59	0.63	0.61
Gabon.....	0.42	0.47	0.66	0.65	0.64	0.66	0.64	0.68	0.69	0.74
Ghana.....	0.73	0.82	0.94	0.78	0.80	0.91	0.94	1.04	0.98	1.03
Kenya.....	1.42	1.57	1.69	1.70	1.48	1.65	1.70	1.81	1.80	1.87
Libya.....	5.60	5.89	6.02	6.39	6.89	6.16	6.64	6.54	6.83	7.08
Morocco.....	3.67	3.90	4.39	4.61	4.58	5.16	5.07	5.75	4.99	5.11
Nigeria.....	8.44	9.18	9.56	9.87	10.23	10.37	10.78	10.06	9.45	9.81
Senegal.....	0.81	0.69	0.72	0.70	0.65	0.79	0.80	0.94	0.99	0.98
South Africa.....	13.58	13.57	13.69	14.72	15.87	16.42	16.09	16.24	16.22	16.97
Sudan.....	1.15	1.25	1.17	1.07	1.54	1.41	1.33	1.17	0.98	1.04
Tunisia.....	2.10	2.46	2.49	2.52	2.93	2.83	2.90	3.12	2.53	2.60
Zimbabwe.....	0.69	0.68	0.76	0.82	0.89	0.80	0.89	0.90	0.98	1.03
Other.....	5.85	6.56	6.73	7.45	7.09	7.74	7.95	8.17	8.09	8.23
Total.....	74.84	77.70	80.38	84.15	86.65	88.02	87.79	88.82	84.33	86.98
Far East & Oceania										
Australia.....	24.18	24.50	26.11	27.67	27.71	27.83	27.55	28.86	29.65	28.48
Bangladesh.....	1.40	1.47	1.56	1.47	1.56	1.57	1.68	1.87	1.83	1.90
Brunei.....	0.23	0.24	0.26	0.26	0.38	0.27	0.37	0.37	0.37	0.38
Burma.....	0.63	0.63	0.65	0.61	0.64	0.67	0.68	0.70	0.72	0.74
China.....	91.77	97.96	102.09	98.37	106.92	112.73	120.78	117.46	106.27	113.19
Guam.....	0.21	0.22	0.20	0.51	0.57	0.60	0.91	1.18	1.04	0.96
Hong Kong.....	4.79	5.16	5.11	5.13	5.38	6.13	6.50	7.40	7.30	7.65
India.....	38.82	43.12	44.54	45.44	46.16	49.15	52.09	52.13	55.63	58.68
Indonesia.....	20.25	21.47	23.57	26.54	28.22	29.06	31.16	30.59	31.68	32.87
Japan.....	157.21	167.13	173.65	178.80	182.60	188.94	181.90	193.03	173.97	178.75
Korea, North.....	2.85	2.71	2.66	3.05	3.16	3.04	2.96	2.86	2.56	2.43
Korea, South.....	23.05	26.53	31.30	37.85	44.71	50.06	67.91	62.34	66.35	70.69
Malaysia.....	7.92	8.25	8.78	10.76	11.20	11.66	13.56	13.81	14.55	15.13
Mongolia.....	0.72	0.74	0.66	0.63	0.59	0.53	0.51	0.52	0.46	0.48
New Zealand.....	3.41	3.42	3.72	3.98	3.81	4.08	4.34	4.55	5.34	4.62
Pakistan.....	7.70	8.29	8.75	9.32	9.50	10.04	10.95	12.09	12.58	13.00
Papua New Guinea.....	0.70	0.65	0.67	0.68	0.67	0.67	0.66	0.65	0.65	0.69
Philippines.....	7.94	8.18	9.57	9.75	9.66	10.81	11.71	11.99	12.74	13.18
Singapore.....	13.24	14.18	15.32	16.63	17.62	19.28	20.73	22.19	20.20	20.78
Sri Lanka.....	1.54	1.44	1.31	1.43	1.44	1.52	1.71	1.79	1.87	1.91
Taiwan.....	15.38	18.60	20.47	20.88	21.17	21.07	25.33	25.00	26.54	28.42
Thailand.....	10.24	11.21	13.90	16.30	17.69	19.34	22.00	24.22	26.99	27.17
Vietnam.....	1.43	1.67	1.91	2.17	2.32	2.55	3.20	3.52	3.91	3.86
Other.....	2.81	2.80	2.89	2.92	2.93	2.71	2.73	2.74	2.79	2.88
Total.....	438.41	470.57	499.64	521.15	546.62	574.30	611.93	621.87	605.99	628.84
World Total.....	2,394.72	2,460.34	2,486.91	2,489.59	2,498.47	2,499.63	2,500.26	2,477.43	2,428.93	2,485.05

¹ Preliminary.

-- Not applicable.

Notes: Sum of components may not equal total due to independent rounding.

Tons of carbon can be converted to tons of carbon dioxide gas by multiplying by 3.667. One ton of carbon = 3.667 tons of carbon dioxide gas.

Source: Office of Energy Markets and End Use, Energy Information Administration.

Table H3 World Carbon Dioxide Emissions from the Consumption and Flaring of Natural Gas, 1987 - 1996
(Million Metric Tons of Carbon)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	31.08	34.31	36.52	34.84	35.18	38.12	39.71	41.94	42.26	44.91
Mexico.....	12.88	13.47	13.64	13.65	17.23	17.61	16.64	17.03	16.29	17.77
United States.....	253.05	264.74	276.28	275.08	280.22	288.34	299.01	305.14	317.34	321.78
Total.....	297.01	312.52	326.45	323.56	332.62	344.07	355.36	364.11	375.89	384.46
Central & South America										
Argentina.....	9.27	10.42	12.05	10.74	11.54	13.30	14.07	14.44	15.92	18.05
Barbados.....	0.01	0.01	0.02	0.02	0.01	0.01	0.02	0.01	0.01	0.01
Bolivia.....	0.28	0.33	0.43	0.49	0.43	0.75	0.91	1.17	0.86	0.76
Brazil.....	2.03	1.92	2.13	2.17	2.28	2.73	2.75	2.86	2.97	3.72
Chile.....	0.32	0.48	0.73	0.68	0.68	0.91	0.71	0.79	0.76	0.73
Colombia.....	1.98	1.97	1.96	2.02	2.07	2.17	2.08	2.15	2.25	2.52
Cuba.....	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Ecuador.....	0.23	0.44	0.40	0.42	0.39	0.43	0.39	0.39	0.60	0.60
Peru.....	0.81	0.72	0.68	0.39	0.31	0.34	0.56	0.57	0.54	0.56
Trinidad and Tobago.....	3.91	4.07	4.09	4.30	4.39	3.89	4.47	5.05	5.33	5.80
Venezuela.....	12.86	12.77	13.94	14.36	14.89	14.42	15.16	15.93	16.35	16.29
Total.....	31.71	33.15	36.44	35.60	37.00	38.98	41.14	43.38	45.61	49.06
Western Europe										
Austria.....	2.84	2.70	2.88	3.20	3.36	3.32	3.65	3.63	3.93	4.22
Belgium.....	4.53	4.42	4.95	5.09	5.41	5.55	5.81	5.94	6.58	7.30
Denmark.....	0.99	1.07	1.26	1.20	1.41	1.47	1.73	1.85	2.07	2.70
Finland.....	0.83	0.88	1.18	1.43	1.50	1.57	1.62	1.79	1.85	1.95
France.....	15.23	14.57	15.02	15.46	17.49	17.41	17.12	16.51	17.08	19.89
Germany.....	--	--	--	--	36.87	36.23	38.76	39.72	43.04	46.63
Germany, East.....	3.02	3.28	3.20	1.77	--	--	--	--	--	--
Germany, West.....	27.35	26.56	28.25	28.95	--	--	--	--	--	--
Greece.....	0.04	0.05	0.06	0.06	0.06	0.05	0.03	0.03	0.03	0.03
Ireland.....	0.72	0.90	1.03	1.07	1.08	1.07	1.24	1.25	1.32	1.47
Italy.....	19.96	21.26	22.98	24.45	25.31	25.17	25.66	24.90	27.38	28.87
Luxembourg.....	0.22	0.23	0.26	0.27	0.28	0.30	0.38	0.31	0.35	0.39
Netherlands.....	20.81	18.76	19.25	19.11	21.34	20.76	21.13	20.51	21.05	23.05
Norway.....	1.32	1.20	1.88	1.67	1.41	2.30	1.60	1.68	1.84	1.87
Spain.....	1.64	2.09	2.65	3.06	3.42	3.60	3.82	4.23	4.78	5.20
Sweden.....	0.13	0.18	0.25	0.33	0.33	0.37	0.43	0.39	0.39	0.45
Switzerland.....	0.92	0.93	1.01	0.98	1.10	1.16	1.23	1.20	1.33	1.44
Turkey.....	0.39	0.62	1.64	1.75	2.10	2.19	2.52	2.70	3.49	3.89
United Kingdom.....	31.21	29.79	29.49	33.08	32.54	31.24	37.10	39.01	41.15	48.63
Former Yugoslavia.....	3.25	3.22	3.62	3.19	3.23	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	0.24	0.20	0.20	1.19	1.59
Croatia.....	--	--	--	--	--	1.12	1.24	1.08	0.95	1.02
Macedonia, TFYR.....	--	--	--	--	--	0.14	0.14	0.00	0.00	0.00
Serbia and Montenegro.....	--	--	--	--	--	0.98	0.47	0.79	0.54	1.35
Slovenia.....	--	--	--	--	--	0.33	0.41	0.40	0.47	0.61
Total.....	135.40	132.70	140.89	146.13	158.23	156.59	166.29	168.12	180.84	202.53

See footnotes at end of table.

Table H3 World Carbon Dioxide Emissions from the Consumption and Flaring of Natural Gas, 1987 - 1996 (Cont.)
(Million Metric Tons of Carbon)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	0.24	0.37	0.37	0.14	0.08	0.05	0.01	0.03	0.02	0.01
Bulgaria.....	3.03	3.00	2.85	3.11	2.62	2.45	2.26	2.13	2.81	2.94
Former Czechoslovakia.....	5.61	5.25	5.68	6.63	6.21	5.07	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	3.21	2.97	3.92	4.67
Slovakia.....	--	--	--	--	--	--	2.19	2.44	3.27	3.17
Hungary.....	4.78	4.94	5.20	4.85	4.84	4.34	4.93	4.64	5.55	6.14
Poland.....	5.05	4.88	5.08	4.51	4.09	4.03	4.44	3.93	4.24	4.29
Romania.....	20.98	19.50	20.58	18.66	13.00	11.65	11.41	10.88	12.86	13.35
Former U.S.S.R.....	295.06	321.10	326.28	324.82	325.07	--	--	--	--	--
Armenia.....	--	--	--	--	--	0.86	0.65	0.74	0.74	0.83
Azerbaijan.....	--	--	--	--	--	7.28	5.10	4.35	0.00	0.00
Belarus.....	--	--	--	--	--	8.12	7.71	6.49	5.73	5.73
Estonia.....	--	--	--	--	--	0.61	0.25	0.25	0.29	0.32
Georgia.....	--	--	--	--	--	2.32	1.11	0.74	0.97	0.83
Kazakhstan.....	--	--	--	--	--	9.31	6.83	6.92	5.78	6.66
Kyrgyzstan.....	--	--	--	--	--	1.11	1.02	0.83	0.41	0.40
Latvia.....	--	--	--	--	--	0.73	0.37	0.32	0.50	0.46
Lithuania.....	--	--	--	--	--	1.80	1.09	0.98	1.16	1.08
Moldova.....	--	--	--	--	--	1.02	0.83	0.65	0.65	0.93
Russia.....	--	--	--	--	--	220.05	215.21	199.30	186.37	186.32
Tajikistan.....	--	--	--	--	--	0.88	0.65	0.74	0.37	0.42
Turkmenistan.....	--	--	--	--	--	1.85	1.89	1.95	2.22	2.22
Ukraine.....	--	--	--	--	--	44.11	48.74	43.63	38.96	38.49
Uzbekistan.....	--	--	--	--	--	14.36	20.21	16.14	17.71	18.83
Total.....	334.75	359.04	366.03	362.71	355.90	342.02	340.10	311.05	294.54	298.12
Middle East										
Bahrain.....	3.26	2.74	2.81	3.09	3.51	2.83	3.52	3.65	3.65	3.80
Iran.....	10.96	12.67	12.54	13.21	17.58	18.75	18.23	21.08	23.90	25.80
Iraq.....	3.29	3.85	4.00	3.41	0.94	1.57	1.38	1.71	1.71	1.75
Israel.....	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Jordan.....	0.00	0.00	0.04	0.07	0.07	0.08	0.11	0.15	0.15	0.14
Kuwait.....	4.64	5.74	6.81	4.21	7.96	1.64	3.13	3.43	3.43	3.43
Oman.....	1.36	1.16	1.57	1.84	2.31	2.07	2.41	2.44	2.07	2.09
Qatar.....	2.59	2.83	2.95	3.80	4.72	5.50	6.54	6.63	6.63	6.73
Saudi Arabia.....	15.05	16.90	17.56	18.58	23.30	23.69	23.77	24.81	26.23	27.81
Syria.....	0.33	0.27	0.53	1.81	2.12	2.39	2.17	2.22	1.64	1.64
United Arab Emirates.....	9.89	10.62	11.38	10.58	12.16	14.01	12.28	11.73	13.38	15.90
Total.....	51.38	56.78	60.20	60.62	74.67	72.55	73.56	77.85	82.80	89.11
Africa										
Algeria.....	12.88	13.59	12.93	13.59	13.97	13.10	13.39	13.64	16.04	16.18
Angola.....	0.24	0.27	0.23	0.92	0.96	0.94	1.00	0.94	2.06	2.07
Congo (Brazzaville).....	0.03	0.00	0.00	0.00	0.00	0.00	0.65	0.65	0.65	0.65
Cote d'Ivoire (Ivory Coast).....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02
Egypt.....	3.29	3.47	3.90	4.57	5.65	6.00	6.20	6.58	6.75	7.21
Gabon.....	0.64	0.67	0.91	0.92	0.93	0.99	0.99	0.94	0.94	0.94
Libya.....	1.87	2.72	3.12	4.73	4.01	3.25	2.93	3.02	3.00	3.17
Morocco.....	0.03	0.03	0.03	0.03	0.02	0.01	0.02	0.02	0.01	0.01
Nigeria.....	7.83	8.09	11.13	12.43	13.78	14.97	15.48	15.78	15.78	16.00
Senegal.....	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03	0.03
South Africa.....	0.00	0.00	0.00	0.00	0.00	0.02	0.96	1.04	1.04	1.04
Tunisia.....	0.80	0.70	0.99	0.96	0.73	0.56	1.17	1.44	1.23	1.54
Total.....	27.62	29.54	33.24	38.15	40.05	39.83	42.80	44.05	47.55	48.87

See footnotes at end of table.

Table H3 World Carbon Dioxide Emissions from the Consumption and Flaring of Natural Gas, 1987 - 1996 (Cont.)
(Million Metric Tons of Carbon)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Far East & Oceania										
Afghanistan.....	0.41	1.17	1.13	1.10	0.24	0.17	0.16	0.16	0.11	0.11
Australia.....	7.87	8.19	8.41	9.38	8.82	9.15	9.58	9.96	10.83	10.68
Bangladesh.....	1.78	2.03	2.22	2.19	2.34	2.79	2.92	3.18	3.53	3.63
Brunei.....	1.18	1.02	1.17	0.98	0.39	0.72	0.63	0.58	0.57	0.55
Burma.....	0.58	0.53	0.56	0.58	0.56	0.52	0.56	0.73	0.85	0.82
China.....	7.91	8.06	7.11	7.14	7.35	7.40	7.70	8.40	9.02	9.93
Hong Kong.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
India.....	5.09	6.45	6.92	8.30	9.37	9.38	9.04	9.68	11.67	12.67
Indonesia.....	8.74	8.37	9.57	8.82	9.02	11.40	15.01	15.19	18.45	19.57
Japan.....	24.32	25.47	27.28	29.19	31.17	31.94	30.52	34.14	34.58	37.45
Korea, South.....	0.27	1.42	1.42	1.75	2.00	2.44	3.09	4.21	5.58	7.59
Malaysia.....	4.09	4.01	4.22	5.43	6.42	6.39	7.53	7.69	7.02	9.09
New Zealand.....	2.05	2.25	2.33	2.35	2.62	2.83	2.54	2.48	2.36	2.79
Pakistan.....	5.54	5.44	5.76	6.36	6.47	6.66	6.96	7.86	8.12	8.76
Papua New Guinea.....	0.00	0.00	0.00	0.00	0.00	0.03	0.04	0.03	0.05	0.07
Philippines.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
Singapore.....	0.00	0.00	0.00	0.00	0.00	0.55	0.74	0.74	0.80	0.80
Taiwan.....	0.58	0.32	0.70	1.15	1.52	1.57	1.60	2.05	2.18	2.29
Thailand.....	1.89	2.78	2.61	2.96	3.35	3.54	4.42	4.21	5.20	6.06
Vietnam.....	0.02	0.02	0.02	0.02	0.04	0.11	0.51	0.51	0.51	0.59
Total.....	72.32	77.52	81.45	87.70	91.68	97.60	103.56	111.82	121.42	133.57
World Total.....	950.18	1,001.24	1,044.70	1,054.46	1,090.16	1,091.64	1,122.80	1,120.39	1,148.64	1,205.71

¹ Preliminary.

-- Not applicable.

Notes: Sum of components may not equal total due to independent rounding.

Tons of carbon can be converted to tons of carbon dioxide gas by multiplying by 3.667. One ton of carbon = 3.667 tons of carbon dioxide gas.

Source: Office of Energy Markets and End Use, Energy Information Administration.

Table H4 World Carbon Dioxide Emissions from the Consumption of Coal, 1987 - 1996
(Million Metric Tons of Carbon)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
North America										
Canada.....	30.92	33.62	33.71	31.12	31.38	32.05	30.19	31.54	32.00	32.40
Mexico.....	4.17	3.97	4.34	3.32	3.15	4.35	4.89	4.47	5.59	6.21
United States.....	454.03	479.07	479.66	481.44	475.69	478.07	494.37	495.55	498.23	523.70
Total.....	489.13	516.66	517.70	515.88	510.23	514.47	529.45	531.55	535.82	562.31
Central & South America										
Argentina.....	0.87	0.88	0.85	0.65	0.64	0.94	0.55	0.93	0.96	0.77
Brazil.....	10.34	10.39	10.50	9.16	10.81	9.78	10.54	10.74	11.83	16.73
Chile.....	1.26	1.77	2.33	2.52	1.98	1.97	2.07	2.58	2.68	2.82
Colombia.....	2.50	3.22	3.00	3.58	4.12	4.23	3.32	2.87	2.78	3.36
Costa Rica.....	(s)	(s)	(s)	(s)	(s)	0.00	0.00	0.00	0.00	0.00
Cuba.....	0.12	0.12	0.21	0.15	0.11	0.14	0.14	0.14	0.13	0.14
Dominican Republic.....	0.16	0.07	0.19	0.01	0.04	0.10	0.09	0.08	0.08	0.09
Haiti.....	0.01	0.03	(s)	0.01	0.02	0.02	0.01	0.00	0.00	0.00
Jamaica.....	0.00	0.00	0.03	0.04	0.04	0.03	0.03	0.04	0.04	0.04
Panama.....	0.02	0.01	0.01	0.02	0.03	0.04	0.04	0.04	0.04	0.04
Peru.....	0.18	0.28	0.24	0.13	0.28	0.34	0.40	0.53	0.53	0.37
Puerto Rico.....	0.19	0.24	0.20	0.14	0.13	0.10	0.13	0.14	0.14	0.14
Uruguay.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Venezuela.....	0.33	0.29	0.47	0.28	0.41	0.47	0.32	0.38	0.46	0.43
Virgin Islands, U.S.....	0.00	0.00	0.00	0.05	0.09	0.15	0.18	0.20	0.17	0.18
Other.....	0.03	0.01	0.01	0.03	0.04	0.05	0.05	0.04	0.04	0.04
Total.....	16.00	17.31	18.04	16.77	18.72	18.36	17.87	18.70	19.89	25.17
Western Europe										
Austria.....	4.92	4.27	4.17	4.90	4.26	3.46	3.65	3.46	3.69	3.48
Belgium.....	9.45	8.19	9.46	10.67	10.09	8.22	8.12	8.90	9.09	8.07
Denmark.....	7.66	6.56	6.82	6.31	8.13	7.28	6.27	7.06	7.79	7.85
Finland.....	3.91	3.47	4.00	4.27	3.71	2.51	4.40	5.31	3.83	4.27
France.....	19.18	14.19	19.08	20.22	20.95	17.48	14.79	13.91	15.12	15.32
Germany.....	--	--	--	--	110.74	100.45	97.34	93.37	91.21	88.88
Germany, East.....	73.96	73.20	70.91	65.98	--	--	--	--	--	--
Germany, West.....	71.63	71.41	70.75	71.31	--	--	--	--	--	--
Greece.....	7.86	8.72	8.90	9.04	8.96	8.04	8.80	8.82	8.70	8.86
Iceland.....	0.07	0.07	0.07	0.07	0.07	0.05	0.05	0.07	0.06	0.07
Ireland.....	2.18	2.19	2.19	2.20	2.14	2.18	2.09	1.94	1.93	1.84
Italy.....	14.79	13.81	13.76	14.75	14.05	11.08	10.42	10.28	11.90	10.46
Luxembourg.....	1.20	1.28	1.30	1.31	1.21	1.13	1.30	1.05	0.59	0.54
Malta.....	0.12	0.16	0.20	0.20	0.20	0.16	0.18	0.18	0.18	0.18
Netherlands.....	8.02	8.56	8.11	10.85	9.58	8.58	9.62	10.30	10.28	9.90
Norway.....	1.00	1.04	1.07	0.94	0.85	0.74	0.91	1.06	1.09	1.04
Portugal.....	1.83	2.20	2.63	3.04	2.94	2.74	3.06	3.25	3.68	3.45
Spain.....	24.20	22.14	25.60	21.62	22.23	20.89	19.99	19.36	20.02	18.56
Sweden.....	2.82	2.89	2.84	2.57	2.37	1.89	2.40	1.81	2.45	2.36
Switzerland.....	0.42	0.35	0.28	0.34	0.27	0.10	0.09	0.10	0.17	0.11
Turkey.....	13.04	14.32	14.46	16.01	18.44	16.51	16.17	15.59	16.01	17.12
United Kingdom.....	73.12	69.15	71.56	68.78	67.34	58.96	54.73	49.54	42.49	43.33
Former Yugoslavia.....	24.37	24.90	24.80	24.05	22.62	--	--	--	--	--
Bosnia and Herzegovina.....	--	--	--	--	--	1.41	1.13	0.67	0.43	0.36
Croatia.....	--	--	--	--	--	0.39	0.39	0.25	0.34	0.35
Macedonia, TFYR.....	--	--	--	--	--	2.11	2.27	2.36	0.97	0.81
Serbia and Montenegro.....	--	--	--	--	--	10.02	8.88	8.85	6.58	6.36
Slovenia.....	--	--	--	--	--	1.67	1.58	1.44	1.67	1.65
Total.....	365.73	353.09	362.94	359.44	331.15	288.04	278.62	268.93	260.27	255.22

See footnotes at end of table.

Table H4 World Carbon Dioxide Emissions from the Consumption of Coal, 1987 - 1996 (Continued)

(Million Metric Tons of Carbon)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Eastern Europe & Former U.S.S.R.										
Albania.....	0.78	0.83	0.75	0.70	0.41	0.11	0.05	0.05	0.03	0.03
Bulgaria.....	13.40	12.17	12.23	10.69	9.48	9.69	9.46	8.78	7.47	7.81
Former Czechoslovakia.....	71.66	70.35	66.82	61.02	56.53	51.89	--	--	--	--
Czech Republic.....	--	--	--	--	--	--	36.72	40.34	38.09	37.14
Slovakia.....	--	--	--	--	--	--	6.06	5.55	4.77	1.92
Hungary.....	8.42	7.92	7.31	6.55	6.75	6.12	5.85	5.98	5.66	5.20
Poland.....	99.32	96.49	91.84	73.30	73.27	72.56	74.96	70.45	69.69	68.14
Romania.....	17.15	18.61	19.12	12.83	10.44	10.63	11.32	11.95	11.88	11.81
Former U.S.S.R.....	314.26	319.45	302.56	333.24	256.78	--	--	--	--	--
Armenia.....	--	--	--	--	--	0.10	(s)	0.02	(s)	(s)
Azerbaijan.....	--	--	--	--	--	0.02	(s)	0.01	0.01	(s)
Belarus.....	--	--	--	--	--	1.15	0.91	0.55	0.69	0.77
Estonia.....	--	--	--	--	--	4.90	3.14	3.16	2.97	2.59
Georgia.....	--	--	--	--	--	0.33	0.13	0.16	0.15	0.14
Kazakhstan.....	--	--	--	--	--	40.88	33.17	19.01	22.59	21.28
Kyrgyzstan.....	--	--	--	--	--	2.15	1.54	1.41	1.21	1.25
Latvia.....	--	--	--	--	--	0.58	0.31	0.26	0.14	0.08
Lithuania.....	--	--	--	--	--	0.66	0.24	0.41	0.18	0.28
Moldova.....	--	--	--	--	--	1.87	1.33	1.27	0.74	0.58
Russia.....	--	--	--	--	--	165.76	142.83	128.45	119.28	113.17
Tajikistan.....	--	--	--	--	--	0.20	0.09	0.08	0.04	0.04
Turkmenistan.....	--	--	--	--	--	0.36	0.32	0.32	0.16	0.08
Ukraine.....	--	--	--	--	--	70.34	66.35	53.51	49.70	42.20
Uzbekistan.....	--	--	--	--	--	3.94	4.24	4.27	2.63	2.52
Total.....	524.99	525.83	500.63	498.32	413.67	444.25	399.04	356.00	338.08	317.02
Middle East										
Cyprus.....	0.07	0.04	0.05	0.05	(s)	0.01	0.03	0.02	0.02	0.02
Iran.....	1.00	1.02	1.02	1.09	1.04	0.90	0.90	0.90	0.91	0.93
Israel.....	2.40	2.42	2.43	2.73	2.68	3.04	4.32	4.92	4.28	4.35
Other.....	(s)	(s)	(s)	(s)	0.01	(s)	0.08	0.08	0.13	0.14
Total.....	3.48	3.48	3.50	3.87	3.73	3.95	5.34	5.93	5.35	5.45
Africa										
Algeria.....	0.77	0.77	0.78	0.79	0.79	0.88	1.07	1.03	0.61	0.61
Botswana.....	0.35	0.37	0.40	0.49	0.49	0.49	0.49	0.51	0.61	0.60
Cameroon.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Congo (Kinshasa).....	0.19	0.21	0.18	0.16	0.17	0.17	0.18	0.16	0.18	0.18
Egypt.....	0.89	0.78	0.87	1.02	0.81	0.72	0.87	0.83	0.54	0.56
Ghana.....	(s)	(s)	(s)	(s)	0.07	(s)	(s)	(s)	(s)	(s)
Kenya.....	0.07	0.08	0.09	0.11	0.09	0.11	0.11	0.09	0.07	0.06
Libya.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Madagascar.....	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Malawi.....	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.05
Mauritania.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Mauritius.....	0.02	0.03	0.05	0.05	0.04	0.04	0.05	0.03	0.04	0.04
Morocco.....	1.35	1.31	1.38	1.36	1.58	1.13	1.69	1.84	1.68	1.73
Mozambique.....	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Niger.....	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Nigeria.....	0.05	0.04	0.04	0.03	0.07	0.06	0.03	0.04	0.04	0.04
South Africa.....	71.57	72.96	66.80	65.95	68.17	71.30	73.05	76.76	76.68	77.99
Swaziland.....	0.11	0.11	0.11	0.11	0.08	0.07	0.03	0.03	0.04	0.04
Tanzania.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Tunisia.....	0.08	0.10	0.10	0.09	0.09	0.10	0.11	0.10	0.08	0.08
Zambia.....	0.29	0.40	0.25	0.24	0.24	0.26	0.27	0.29	0.21	0.21
Zimbabwe.....	3.29	3.38	3.44	3.29	3.46	3.68	3.35	3.67	1.44	1.55
Other.....	0.00	0.00	0.00	0.00	(s)	(s)	0.00	0.00	0.00	0.00
Total.....	79.24	80.73	74.71	73.91	76.40	79.22	81.55	85.60	82.45	83.93

See footnotes at end of table.

Table H4 World Carbon Dioxide Emissions from the Consumption of Coal, 1987 - 1996 (Continued)
(Million Metric Tons of Carbon)

Region Country	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996 ¹
Far East & Oceania										
Afghanistan.....	0.10	0.08	0.08	0.06	0.06	(s)	(s)	(s)	(s)	(s)
Australia.....	32.33	34.02	35.99	37.17	37.38	40.55	39.60	38.13	39.09	39.98
Bangladesh.....	0.16	0.14	0.04	0.39	0.13	0.11	0.03	0.00	0.00	0.00
Bhutan.....	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
Burma.....	0.04	0.03	0.05	0.04	0.04	0.04	0.04	0.04	0.05	0.05
China.....	474.07	506.78	511.14	514.36	534.75	551.64	581.44	633.31	677.04	681.70
Fiji.....	(s)	(s)	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01
Hong Kong.....	4.89	5.65	6.06	5.54	5.87	5.70	6.25	4.46	4.81	3.58
India.....	87.11	89.90	94.79	101.29	105.26	116.63	123.15	130.98	156.27	160.46
Indonesia.....	2.45	2.83	3.56	3.37	3.26	4.67	5.12	6.15	7.13	8.47
Japan.....	58.40	64.52	64.73	66.11	67.84	65.88	66.69	68.75	72.24	74.50
Korea, North.....	39.72	41.31	42.78	43.74	44.40	43.83	45.46	45.57	46.87	48.56
Korea, South.....	24.37	25.58	23.29	21.31	23.42	21.13	25.31	28.11	30.37	34.22
Laos.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Macau.....	0.00	0.00	0.00	(s)	0.00	0.00	0.00	0.00	0.00	0.00
Malaysia.....	0.36	0.38	1.15	1.39	1.44	1.55	1.60	1.87	1.73	1.53
Mongolia.....	2.38	2.60	2.35	2.39	2.48	1.99	1.98	2.03	2.15	2.24
Nepal.....	0.06	0.06	0.06	0.04	0.05	0.06	0.08	0.10	0.08	0.08
New Caledonia.....	0.09	0.10	0.12	0.09	0.10	0.10	0.14	0.13	0.13	0.11
New Zealand.....	1.44	1.36	1.49	1.42	1.38	1.62	1.56	1.42	1.77	2.36
Pakistan.....	1.67	1.92	1.91	2.10	2.09	2.22	2.31	2.45	2.27	2.50
Papua New Guinea.....	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Philippines.....	1.22	1.55	1.28	1.47	1.62	1.59	1.98	1.98	1.77	1.81
Singapore.....	0.02	0.02	0.02	0.03	0.02	0.02	0.03	0.04	0.03	0.04
Sri Lanka.....	0.08	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)	(s)
Taiwan.....	8.70	9.85	10.55	9.97	11.05	12.69	15.50	16.33	18.00	20.53
Thailand.....	2.15	2.31	2.76	3.78	4.43	4.58	4.92	5.56	9.94	10.31
Vietnam.....	4.50	3.91	2.40	3.09	2.54	2.55	3.55	3.89	3.27	3.33
Total.....	746.33	794.92	806.60	819.19	849.63	879.21	926.77	991.34	1,075.04	1,096.38
World Total.....	2,224.89	2,292.02	2,284.13	2,287.39	2,203.53	2,227.50	2,238.64	2,258.06	2,316.91	2,345.48

¹ Preliminary.

-- Not applicable.

(s) = Value less than 5,000 metric tons.

Notes: Sum of components may not equal total due to independent rounding.

Tons of carbon can be converted to tons of carbon dioxide gas by multiplying by 3.667. One ton of carbon = 3.667 tons of carbon dioxide gas.

Source: Office of Energy Markets and End Use, Energy Information Administration.

Glossary

Glossary

Alcohol: The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The series of molecules vary in chain length and are composed of a hydrocarbon plus a hydroxyl group, $\text{CH}(\text{CH}_3)_n\text{-OH}$. Alcohol includes methanol and ethanol.

Anthracite Coal: Anthracite, or hard coal, is the highest rank of economically usable coal. It is jet black with a high luster. The moisture content generally is less than 15 percent. It usually has a high fixed carbon and ash content and is low in volatile matter. It is a non-coking coal.

API: The American Petroleum Institute, a trade association.

API Gravity: An arbitrary scale expressing the gravity or density of liquid petroleum products. The measuring scale is calibrated in terms of degrees API. A lighter, less dense product has a higher API gravity.

Apparent Consumption (Coal): Primary coal production plus imports of coal and coke, minus exports of coal and coke plus or minus stock changes of coal and coke. Note: In the United States apparent consumption is reported data by major end-use sectors.

Apparent Consumption (Natural Gas): Dry natural gas production plus imports minus exports plus or minus stock changes.

Apparent Consumption (Petroleum): Includes internal consumption, refinery fuel and loss, and bunkering. Also included, where available, are liquefied petroleum gases sold directly from natural gas processing plants for fuel or chemical uses.

Asphalt (Natural): A natural mineral pitch, tar, or bitumen composed principally of hydrocarbons, a natural bituminous rock of dark color comparatively hard and nonvolatile. Does not include asphalt, bitumen, tar, etc., derived from petroleum processing.

Asphalt (Refined): A dark brown to black solid or semi-solid material obtained from petroleum processing in which the predominant component is bitumen. Used mainly in road construction.

Associated Gas: Gas produced in a field containing both oil and gas. The field is developed primarily for extraction of crude oil.

ASTM: The American Society for Testing and Materials.

Barrel (Petroleum): A unit of volume equal to 42 U.S. gallons.

Bitumen: A naturally occurring viscous mixture, mainly of hydrocarbons heavier than pentane, that may contain sulfur compounds and that, in its natural occurring viscous state, is not recoverable at a commercial rate through a well.

Bituminous Coal: Bituminous coal is the most common coal. It is dense, black, often with well-defined bands of bright and dull materials. Its moisture content usually is less than 20 percent. It is used for generating electricity, making coke, and space heating.

British Thermal Unit (Btu): The quantity of heat needed to raise the temperature of 1 pound of water by 1 degree Fahrenheit at or near 39.2 degrees Fahrenheit.

Bunkers: Fuels supplied to ships and aircraft in international transportation, irrespective of the flag of the carrier, consisting primarily of residual, distillate, and jet fuel oils.

Butane: A normally gaseous straight-chain or branch-chain hydrocarbon, (C_4H_{10}). It is extracted from natural gas or refinery gas streams. It includes isobutane and normal butane and is covered by ASTM Specification D1835 and Gas Processors Association Specifications for commercial butane.

Coal: A black or brownish-black solid, combustible substance formed by the partial decomposition of vegetable matter without access to air. The rank of coal, which includes anthracite, subanthracite, bituminous, subbituminous, and lignite, is based on fixed carbon, volatile matter, coking and coking properties, and heating value. Coal rank includes the progressive alteration, or coalification, from lignite to anthracite.

Coal Briquets: Anthracite, bituminous, and lignite briquets comprise the secondary solid fuels manufactured from coal by a process in which the coal is partly dried, warmed to expel excess moisture, and then compressed into briquets, usually without the use of a binding substance. In the reduction of briquets to coal equivalent, different conversion factors are applied according to their origin from hard coal, peat, brown coal, or lignite.

Coal Production: The sum of sales, mine consumption, issues to miners, and issues to coking, briquetting, and other ancillary plants at mines. Production data include quantities extracted from surface and underground working, and normally exclude wastes removed at mines or associated preparation plants.

Coke (Coal): In general, coke is made from bituminous coal (or blends of bituminous coal) from which the volatile constituents are driven off by baking in an oven at temperatures as high as 2,000 degrees Fahrenheit, so that the fixed carbon and ash are fused together. Coke is hard and porous, has gray submetallic luster, and is strong enough to support a load of iron ore in a blast furnace. It is used both as a fuel and a reducing agent in smelting iron ore in a blast furnace.

Conventional Thermal Electricity Generation: Electricity generated by an electric power plant using coal, petroleum, or gas as its source of energy.

Conversion Factor: A number that translates units of one system into corresponding values of another system. Conversion factors can be used to translate physical units of measure for various fuels into Btu equivalents.

Crude Oil (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) and other unfinished oils are excluded. Liquids produced at natural gas processing plants and mixed with crude oil are likewise excluded where identifiable.

Crude Oil Production: The volume of crude oil produced from oil reservoirs during given periods of time. The amount of such production for a given period is measured as volumes delivered from lease storage tanks (i.e., the point of custody transfer) to pipelines, trucks, or other media for transport to refineries or terminals with, adjustments for (1) net differences between opening and closing lease inventories, and (2) basic sediment and water.

Distillate Fuel Oil: A general classification for one of the petroleum fractions produced in conventional distillation

operations. It is used primarily for space heating, on-and-off-highway diesel engine fuel (including railroad engine fuel and fuel for agricultural machinery), and electric power generation. Included are products known as No. 1, No. 2, and No. 4 fuel oils; and No. 1, No. 2, and No. 4 diesel fuels.

Domestic Inland Consumption (Petroleum): Domestic inland consumption is the sum of all refined petroleum products supplied for domestic use (excludes international marine bunkers). Consumption is calculated by product by adding production, imports, crude oil burned directly, and refinery fuel and losses, and then subtracting exports and changes in primary stocks (net withdrawals is a plus quantity and net additions is a minus quantity).

Electricity Installed Capacity: The maximum load that a generating unit, generating station, or other electrical apparatus can carry under specified conditions for a given period of time and not limited by existing service conditions.

Ethane: A normally gaseous straight-chain hydrocarbon, (C_2H_6). It is a colorless paraffinic gas that boils at a temperature of -127.48 degrees Fahrenheit. It is extracted from natural gas and refinery gas streams.

Gasohol: A blend of finished motor gasoline (leaded or unleaded) and alcohol (generally ethanol but sometimes methanol) in which 10 percent or more of the product is alcohol.

Gasoline, Aviation: All special grades of gasoline for use in aviation reciprocating engines, as given in ASTM Specification D910 and Military Specification MIL-G5572. Excludes blending components that will be used in blending or compounding into finished aviation gasoline.

Gasoline Blending Components: Finished components in the gasoline range that will be used for blending or compounding into finished aviation or motor gasoline.

Gasoline, Motor (Leaded): Contains more than 0.05 grams of lead per gallon or more than 0.005 grams of phosphorus per gallon. The actual lead content of any given gallon may vary. Premium and regular grades are included, depending on the octane rating. Includes leaded gasohol. Blendstock is excluded until blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Gasoline, Motor (Unleaded): Contains not more than 0.05 grams of lead per gallon and not more than 0.005 grams of phosphorus per gallon. Premium and regular grades are included, depending on the octane rating. Includes unleaded gasohol. Blendstock is excluded until

blending has been completed. Alcohol that is to be used in the blending of gasohol is also excluded.

Geothermal Electric Power Generation: Electricity derived from heat found under the earth's surface. Within the earth, there are vast amounts of molten rock and metal, covered by succeeding layers of cooler material, up to the crust of the earth's surface. Underground rivers generate steam that is liberated in the form of geysers through fissures in the earth's surface.

Gross Electricity Generation: The total amount of electric energy produced by a generating facility, as measured at the generator terminals.

Hydroelectric Power Generation: Electricity generated by an electric power plant whose turbines are driven by falling water. It includes electric utility and industrial generation of hydroelectricity, unless otherwise specified. Generation is reported on a net basis, i. e., on the amount of electric energy generated after the electric energy consumed by station auxiliaries and the losses in the transformers that are considered integral parts of the station are deducted.

Jet Fuel (Kerosene-type): A quality kerosene product with an average gravity of 40.7 degrees API, and a 10 percent distillation temperature of 400 degrees Fahrenheit. It is covered by ASTM Specification D1655 and Military Specification MIL-T-5G24L (Grades JP-5 and JP-8). A relatively low-freezing point distillate of the kerosene type; 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 and 20 to 90 percent distillation temperatures of 290 degrees to 470 degrees Fahrenheit, meeting Military Specification MIL-T-5624L (Grade JP-4). JP-4 is used for turbojet and turboprop aircraft engines, primarily by the military. Excludes ram-jet and petroleum rocket fuels.

Joule: The meter-kilogram-second unit of work or energy, equal to the work done by a force of one newton when its point of application moves through a distance of one meter in the direction of the force; equivalent to 10^7 and one watt-second.

Kerosene: Light hydrocarbon distillates in the 150 degrees to 280 degrees Centigrade (300 degrees to 550 degrees Fahrenheit) distillation range. Includes vaporizing oil for use in reciprocating engines (primarily tractors), lamp oil, and kerosene and heating oil.

Kilowatt (kW): One thousand watts.

Kilowatthour (kWh): One thousand watthours.

Lease Condensate: A liquid recovered from natural gas at the well or at small gas/oil separators in the field. Consists primarily of pentanes and heavier hydrocarbons. Also called field condensate. Does not include plant condensate.

Lignite: Lignite, the lowest rank of coal, is a young coal. It is brownish black in color and has high moisture content, sometimes as high as 45 percent, and a high ash content. It tends to disintegrate when exposed to the weather. The heat content of lignite is one of the lower coals, usually less than 5700 Kcal/kg.

Liquefied Natural Gas (LNG): Conventional natural gas that is liquefied by reducing its temperature to minus 260 degrees Fahrenheit at atmospheric pressure. The volume of the LNG is 1/600 that of the gas in its vapor state.

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 raw natural gas plant liquids.

Liquefied Refinery Gases (LRG): Liquefied petroleum fractionated from refinery or still gases. Through compression and/or refrigeration, they are retained in the liquid state. The reported categories are ethane/ethylene, propane/propylene, normal butane/butylene, and isobutane. Excludes still gas used for chemical or rubber manufacture, which is reported as petrochemical feedstock, and also excludes liquefied petroleum gases intended for blending into gasoline, which are reported as gasoline blending components.

Lubricants (Greases): Mixtures of lubricating oils that contain substances that reduce their ability to flow.

Lubricants (Lubricating Oils): Substances used to reduce friction between bearing surfaces. Petroleum lubricants may be produced either from distillates or residues. Other substances may be added to impart or improve certain required properties. "Lubricants" include all grades of lubricating oils from spindle oil to cylinder oil and those used in greases.

Metallurgical Coke: A strong, hard coke produced mainly for use in the iron and steel industry, where it serves as a chemical agent and source of energy. It is used mainly in blast furnaces to absorb the oxygen contained in iron oxides and provide energy for smelting. A portion of its potential energy is captured in the gases generated in the smelting process, then recycled in the form of blast furnace gas to provide additional energy inside or outside the smelting process. Metallurgical coke is also used to some extent as a domestic fuel and as a raw material for the manufacture of gas.

Naphthas: Refined or partly refined light distillates with an approximate boiling point range of 27 degrees to 221 degrees Centigrade. Blended further or mixed with other materials, they make high-grade motor gasoline or jet fuel. Also used as solvents, petrochemical feedstocks, or as raw materials for the production of town gas.

Natural Gas: A mixture of hydrocarbon compounds, primarily methane and small quantities of various nonhydrocarbons existing in gaseous phase or in solution with crude oil in natural underground reservoirs at reservoir conditions.

Natural Gas Dry Production: Gross withdrawals of natural gas from reservoirs less gas used for reinjection into reservoirs for repressuring, gas which is flared or vented, gas lost in transmission, and shrinkage. Derived by subtracting shrinkage or extraction loss from marketed production. It represents the amount of natural gas that can be marketed and consumed as a gas.

Natural Gas Gross Production: Total withdrawals of natural gas from oil/gas and gas reservoirs.

Natural Gas Liquids (NGL): Those portions of reservoir gas that are liquefied at the surface in lease separators, field facilities, or natural gas processing plants. Natural gas liquids include natural gas plant liquids and lease condensate.

Natural Gas Marketed Production: Gross withdrawals of natural gas from reservoirs less gas used for reinjection into reservoirs for repressuring, gas that is flared and/or vented, and gas that is lost in transmission before the natural gas liquids have been extracted.

Natural Gas Plant Liquids (NGPL): Products obtained from processing natural gas at natural gas processing plants, including natural gasoline plants, cycling plants, and fractionators. Products obtained include ethane, liquefied petroleum gases, (propane, butane, propane-butane mixtures, and ethane-propane mixtures), isopentane, natural gasoline, unfractionated streams, plant condensate, and other minor quantities of finished products, such as motor gasoline, special naphthas, jet fuel, kerosene, and distillate fuel oil.

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, (C_5H_{12}), obtained by fractionation of natural gasoline or isomerization of normal pentane.

Net Electricity Consumption: Consumption of electricity computed as generation, plus imports, minus exports, minus transmission and distribution losses.

Net Electricity Generation: Gross generation less the electric energy consumed at the generating station for station use.

Nuclear Electric Power Generation: Electricity generated by nuclear reactors of various types such as heavy water, light water, and boiling water. Generation is reported on a net basis and excludes energy that is generally used by the electric power plant for its own operating purposes and not for commercial use.

Other Hydrocarbons: Materials received by a refinery and consumed as raw materials. Includes hydrogen, coal tar derivatives, Gilsonite, and natural gas received by the refinery for reforming into hydrogen. Natural gas to be used as fuel is excluded.

Paraffin (Oil): A light-colored, wax-free oil obtained by pressing paraffin distillate.

Paraffin (Wax): The wax removed from paraffin distillates by chilling and pressing. When separating from solutions, it is a colorless, more or less translucent, crystalline mass, without odor and taste, slightly greasy to touch, and consisting of a mixture of solid hydrocarbons in which the paraffin series predominates.

Petrochemical Feedstocks: Products from petroleum refineries and natural gas liquids processing plants to be processed further at a petrochemical plant. Includes products primarily in the naphtha range, still gas (refinery gas), and liquefied gases for petrochemical use.

Petroleum: A generic term applied to oil and oil products in all forms, such as crude oil, lease condensate, unfinished oils, refined petroleum products, natural gas plant liquids, and nonhydrocarbon compounds blended into finished petroleum products.

Petroleum Coke: A solid refinery residue; the final product of the condensation process in cracking. Includes green or calcined petroleum coke and coke deposited on catalysts.

Petroleum Jelly: A semi-solid oily product produced from de-waxing lubricating oil basestocks.

Petroleum Products: Products obtained from the processing of crude oil, unfinished oils, natural gas liquids, and other miscellaneous hydrocarbon compounds. Includes aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, ethane, liquefied petroleum gases, petrochemical feedstocks, special naphthas, lubricants,

paraffin wax, petroleum coke, asphalt and road oil, still gas, and other miscellaneous products.

Petroleum Stocks: Primary stocks of crude oil and petroleum products held in storage at (or in) leases, refineries, natural gas processing plants, pipelines, tankfarms, and bulk terminals that can store at least 50,000 barrels of petroleum products or that can receive petroleum products by tanker, barge, or pipeline. Crude oil that is in-transit by water from Alaska or that is stored on Federal leases or in the Strategic Petroleum Reserve is included. Primary stocks exclude stocks of foreign origin that are held in bonded warehouse storage.

Plant Condensate (Petroleum): Mixture of hydrocarbons, mostly pentanes and heavier hydrocarbons, recovered at natural gas liquids processing plants. Does not include field or lease condensate.

Primary Coal: All coal milled and, when necessary, washed and sorted.

Propane: A normally gaseous straight-chain hydrocarbon, (C_3H_8). It is a colorless paraffinic gas that boils at a temperature of -43.67 degrees Fahrenheit. It is extracted from natural gas or refinery gas streams. It includes all products covered by Gas Processors Association Specifications for commercial propane and HD-5 propane and ASTM Specification D1835.

Proved Reserves of Coal: Proved reserves of coal are the estimated quantities, which analysis of geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions.

Proved Reserves of Crude Oil: Proved reserves of crude oil are the estimated quantities of all liquids defined as crude oil, which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions.

Proved Reserves of Natural Gas: Proved reserves of natural gas are the estimated quantities which analysis of geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions.

Refinery Fuel: Crude oil and petroleum products consumed at the refinery for all purposes.

Refinery Losses and Gains (Petroleum): Processing gain and loss that takes place during the refining process itself. Excludes losses that do not take place during the refining process, e.g., spills, fire losses, and contamination during blending, transportation, or storage.

Refinery Processing Gain: The volumetric amount by which total refinery output is greater than input for a given period of time. This difference is due to the processing of crude oil into products that, in total, have a higher specific gravity than the crude oil processed.

Reinjected (Natural Gas): The forcing of gas under pressure into an oil reservoir in an attempt to increase recovery.

Residual Fuel Oil: The topped crude of refinery operations which includes No. 5 and No. 6 fuel oils as defined in ASTM Specification D396 and Federal Specification VV-F-815C, Navy Special fuel oil as defined in Military Specification MIL-F-859E including Amendment 2 (NATO Symbol F-77), and Bunker C fuel oil. Residual fuel oil is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes. Imports of residual fuel oil include "Imported Crude Oil Burned Directly 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.

Secondary Coal: (e.g. coke, briquets) is derived from primary coal.

Short Ton (coal): A unit of weight equal to 2,000 pounds.

Shrinkage (Natural Gas): The volume of natural gas that is transformed into liquid products during processing, primarily at natural gas liquids processing plants.

Special Naphthas: All finished products within the gasoline range that are used as paint thinners, cleaners, or solvents. These products are refined to a specified flash point and have a boiling range of 90 degrees to 220 degrees Fahrenheit. "Special Naphthas" include all commercial hexane and cleaning solvents conforming to ASTM Specification 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.

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, propylene, etc. Still gas is reported for petrochemical feedstock use and/or refinery fuel use. The conversion factor from gas to barrels is 6.000 million Btu per fuel oil equivalent barrel.

Subbituminous Coal: Similar to the poorer grades of bituminous coal; low in carbon, high in volatile matter and moisture. Its energy value is somewhat below that of bituminous coal.

Transmission and Distribution Loss: Electric energy lost due to the transmission and distribution of electricity. Much of the loss is thermal in nature.

Unfinished Oils: Includes all oils requiring further processing, except those requiring only mechanical blending.

Vented/Flared (Natural Gas): The release (venting) or burning (flaring) of associated gas as a means of disposal.

Watt: The electrical unit of power. The rate of energy transfer equivalent to one ampere flowing under a pressure of one volt at unity power factor.

Watt-hour (Wh): An electrical energy unit of measure equal to 1 watt of power supplied to, or taken from, an electric circuit steadily for 1 hour.

Wax: A solid or semi-solid material derived from petroleum distillates or residues by such treatments as chilling, precipitating with a solvent, or de-oiling. It is a light-colored, more-or-less translucent crystalline mass, slightly greasy to the touch, consisting of a mixture of solid hydrocarbons in which the paraffin series predominates. Includes all marketable wax whether crude scale or fully refined. The three grades included are microcrystalline, crystalline fully refined, and crystalline-other.

White Spirit: A highly refined distillate with a boiling point range of about 150 degrees to 200 degrees Centigrade. It is used as a paint solvent and for dry-cleaning purposes.