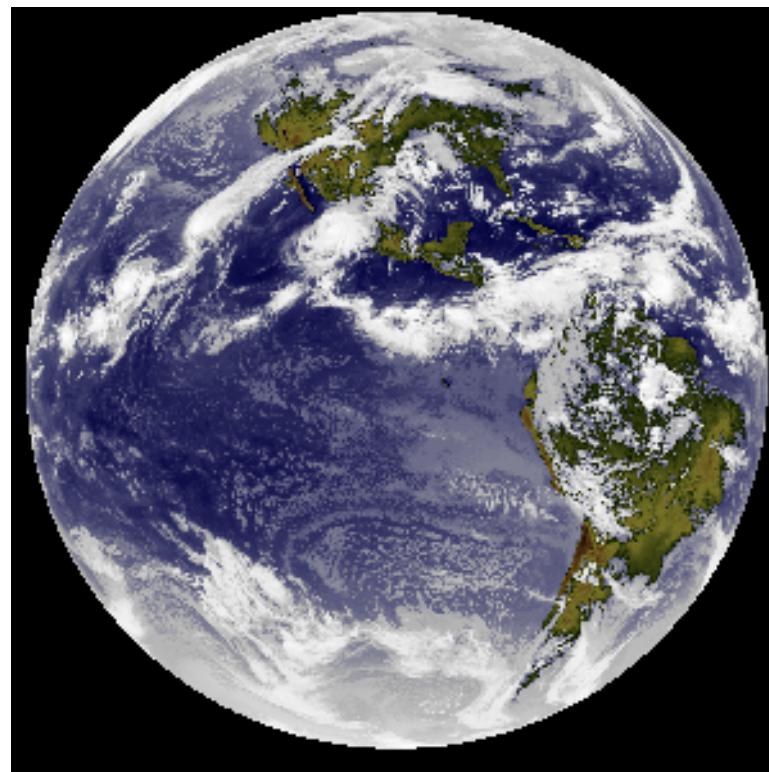


# **INTERNATIONAL PETROLEUM STATISTICS REPORT**

**October 1998**



**Energy Information Administration  
Energy Markets and Contingency Information Division**

## Preface

The International Petroleum Statistics Report is a monthly publication that provides current international oil data. This report is published for the use of Members of Congress, Federal agencies, State agencies, industry, and the general public. Publication of this report is in keeping with responsibilities given the Energy Information Administration in Public Law 95-91 (Section 205(a)(2)) 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 ..."

The International Petroleum Statistics Report presents data on international oil production, demand, imports, and stocks. The report has four sections. Section 1 contains time series data on world oil production, and on oil demand and stocks in the Organization for Economic Cooperation and Development (OECD). This section contains annual data beginning in 1985, and monthly data for the most recent two years. Section 2 presents an oil supply/demand balance for the world. This balance is presented in quarterly intervals for the most recent two years. Section 3 presents data on oil imports by OECD countries. This section contains annual data for the most recent year, quarterly data for the most recent two quarters, and monthly data for the most recent twelve months. Section 4 presents annual time series data on world oil production and oil stocks, demand, and trade in OECD countries. World oil production and OECD demand data are for the years 1970 through 1997; OECD stocks from 1973 through 1997; and OECD trade from 1987 through 1997.

Data for the United States are developed by the Energy Information Administration's (EIA) Office of Oil and Gas. Data for other countries are derived largely from published sources, including International Energy Agency publications, the EIA International Energy Annual, and the trade press. (See sources after each section.) All data are reviewed by the International Energy Statistics Team of EIA. All data have been converted to units of measurement familiar to the American public. Definitions of oil production and consumption are consistent with other EIA publications.

General information about this publication may be obtained from W. Calvin Kilgore, Director, Office of Energy Markets and End Use, (202) 586-1617, and from Louis D. DeMouy, Director, Integrated Energy Statistics Division, (202) 586-6557. Detailed questions and comments concerning the contents of the International Petroleum Statistics Report may be directed to Michael J. Grillot, Team Leader, International Energy Statistics Team, (202) 586-6577, Patricia A. Smith (202) 586-6925, or H. Vicky McLaine (202) 586-9412; Oil Market Chronology - Douglas MacIntyre (202) 586-1831.

## Oil Market Chronology - September 1998

The following chronology lists international events of potential significance for world petroleum markets. Sources include: Dow Jones (DJ), The New York Times (NYT), The Washington Post (WP), and The Wall Street Journal (WSJ).

- September 2** China discovers its first large coalbed methane gas field, located in northern China's Shanxi province. The field's proven reserves are estimated to be 1.9 trillion cubic feet, with annual production expected to reach 35 billion cubic feet by the end of 1998. (DJ)
- September 3** France's Elf Aquitaine discovers its fourth oil field in Block 17 offshore Angola. The discovery is located at the Lirio 1 well which tested at an initial rate of 11,000 barrels per day. Elf holds a 35 percent stake in Block 17 and is the block's operator for a consortium consisting of Esso Exploration, a unit of Exxon (20 percent); British Petroleum (16.67 percent); Den Norske Stats Ojeseskap (13.33 percent); Norsk Hydro (10 percent); and Petrofina (5 percent). (DJ)
- The U.S. Senate approves a spending bill providing the U.S. Department of Energy with \$420 million at current prices to buy oil for the Strategic Petroleum Reserve (SPR). If a joint House-Senate conference committee preserves the measure, it could add 29 million barrels of crude oil to the SPR, which currently contains 563 million barrels. (DJ)
- September 4** Royal Dutch/Shell and Texaco announce that they will combine their European refining and marketing activities. Shell and Texaco expect to save approximately \$200 million by joining operations. Shell will hold 88 percent of the venture, with Texaco holding 12 percent. Together, the two companies will control 19 refineries and process 2.1 million barrels per day of oil, or about 15 percent of European capacity. The companies say that the deal could be finalized by mid-1999. (NYT) (WSJ)
- September 7** Norway's Saga Petroleum signs a joint study agreement with the National Iranian Oil Company to develop an onshore/offshore area in the northern part of the Persian Gulf. The area to be studied includes the Dara Block and an undeveloped section of the Hendijan field. The agreement provides for a 12-month exploration study. (DJ)
- September 9** The United Nations (U.N.) Security Council unanimously agrees to a resolution suspending periodic reviews of economic sanctions imposed on Iraq. The resolution is in response to Iraq's August 5, 1998, decision to break off cooperation with U.N. arms inspectors. The Security Council has been conducting regular 60-day reviews and more comprehensive six-month reviews of the sanctions. (DJ) (WSJ)
- September 10** The U.S. Energy Information Administration (EIA) reports that in 1997, for the first time in 10 years, U.S. proved reserves of crude oil increased. Crude oil reserves reached 22.546 billion barrels, up 2.4 percent from 22.017 in 1996. In addition, EIA reports that natural gas reserves increased for the fourth year in a row. (DJ)
- September 11** The Paris-based International Energy Agency estimates that in August 1998, the Organization of Petroleum Exporting Countries (OPEC) implemented 83 percent of their pledged oil production cutbacks. OPEC production, excluding Iraq, fell to 24.83 million barrels per day. Total OPEC production for August 1998 declined to 27.26 million barrels per day from 27.65 million barrels per day in July 1998. Meanwhile a *Dow Jones* survey of oil market observers indicates that OPEC was 86 percent compliant with its oil production cutbacks. According to *Dow Jones*, OPEC's August production, excluding Iraq, fell to 24.757 million barrels per day. Total August output declined to 27.058 million barrels per day from 27.67 million barrels per day in July 1998. (DJ) (WSJ)
- September 14** Phillips Petroleum and Japanese-owned Indonesian Petroleum Company sign an exploration agreement with Kazakhstan to acquire stakes in 10 blocks totaling 2,000 square miles in the Kazakhstan sector of the Caspian Sea. The exploration area is said to contain an estimated 6 billion barrels of recoverable oil reserves. Other stakeholders include Royal Dutch/Shell, Mobil, British Petroleum, Statoil, Agip, Total, and British Gas. Over the next six years, the consortium will drill six wells and conduct seismic surveys. (NYT) (DJ)

- September 14** Anadarko Petroleum reports that its Tanzanite No. 1 well tested 21,917 barrels per day of oil and 29.7 million cubic feet per day of natural gas. The well is located in the Gulf of Mexico approximately 75 miles offshore Louisiana. (DJ)
- September 17** Lasmo announces that peak oil production from its Dacion development in eastern Venezuela will hit 120,000 barrels per day by the end of 2002. This is a 650 percent increase compared to the 16,000 barrels per day forecast for the end of 1998. The Dacion development contains estimated reserves of 550 million barrels of oil. Lasmo holds a 90 percent stake in the project, with Venezuelan state oil company Petroleos de Venezuela holding the remaining 10 percent. (DJ)
- September 18** Mobil's Canadian unit receives six oil and gas exploration licenses totaling more than one million acres on the Grand Banks, offshore Newfoundland. Two of the licenses are within the eastern edge of the Flemish Pas Basin, while the remaining four are within the Jeanne d'Arc basin. Mobil plans to invest \$100 million exploring these areas over the next five years. (DJ)
- Arco China (a unit of Atlantic Richfield), Texaco China, and Chinese National Offshore Oil agree to develop the Qinhuangdao 32-6 offshore oil field, located in China's Bohai Bay. Oil production is expected to begin in mid-2001 and to reach 60,000 barrels per day by 2002. Chinese National Offshore Oil will be the operator of the field with a 51 percent interest and Arco and Texaco will each hold a 24.5 percent interest. (DJ)
- September 23** Texaco acquires a 65 percent stake in the North Buzachi oil field in west Kazakhstan from Nimir Petroleum, a privately-owned Saudi Arabian oil company. Nimir will continue to hold the remaining 35 percent stake. North Buzachi is an undeveloped onshore oil field, located 120 miles north of the Caspian Sea port of Aktau. The field contains estimated reserves of 1 billion to 1.5 billion barrels of oil. Texaco reports that production could begin within two to four years. (DJ)
- September 25** Egypt and Jordan announce the testing of the linkage of their power systems as the first step toward a proposed electricity grid extending east to the Persian Gulf and west to Morocco and even Europe. The Egypt-Jordan link should begin commercial operation in October. The power is carried by cables that are lifted over the Suez Canal by 740 foot towers and then run along the floor of the Gulf of Aqaba between the two nations. (DJ)
- September 27** Chile switches to summer time three weeks earlier than in previous years, a move ordered by the government to save energy in the wake of a long drought. (DJ)
- Turkey restores full diplomatic ties with Iraq after nearly six years of all-but-frozen relations. Iraq's ambassador to Ankara left last year. It is not known whether Iraq's ambassador will now return. (DJ)
- September 28** Japan's Ministry of International Trade and Industry decides to liquidate 27 oil exploration companies affiliated with the debt-ridden, state-run Japan National Oil Corporation (JNOC) as part of the Ministry's restructuring scheme. The Ministry estimates JNOC's losses for fiscal year 1998-1999 will amount to approximately \$3 billion, some of which can be covered by proceeds from the sale of some of the subsidiaries. (DJ)
- India's Foreign Investment Promotion Board approves 23 project proposals, including a liquefied natural gas (LNG) terminal in Kakinada on the eastern coast. The board also gave the go-ahead for a disinvestment proposal by state-owned Bharat Petroleum in relation to its liquefied petroleum gas storing and marketing joint venture with Caltex Petroleum. (DJ)
- September 29** Finance Minister Mikhail Zadornov says that Russian oil companies' tax payments were 10 percent less than expected in September. Zardonov also indicates that natural gas monopoly Gazprom has not paid any taxes so far during September. (DJ)
- September 30** Saudi Arabia asks several U.S. oil companies for proposals to develop its oil reserves. The topic is raised in a meeting between Saudi Crown Prince Abdullah and top executives from Atlantic Richfield, Chevron, Conoco, Exxon, Mobil, Phillips, and Texaco. (DJ, WP)

# Contents

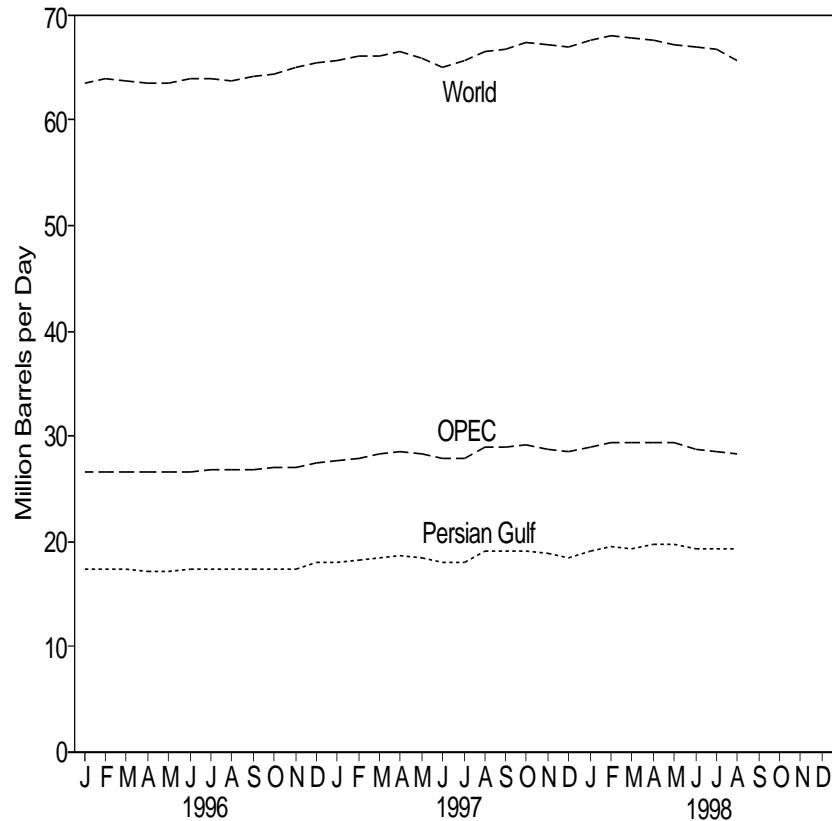
	Page
<b>Section 1. Annual and Monthly Oil Data</b>	
Table 1.1a World Crude Oil Production (Including Lease Condensate), 1990-Present .....	4
Table 1.1b World Crude Oil Production (Including Lease Condensate), 1990-Present .....	5
Table 1.1c World Crude Oil Production (Including Lease Condensate), 1990-Present .....	6
Table 1.2 OPEC Crude Oil Production (Excluding Condensate), 1990-Present .....	7
Table 1.3 World Natural Gas Plant Liquids Production, 1990-Present .....	8
Table 1.4 World Oil Supply, 1990-Present .....	9
Table 1.5 Oil Stocks in OECD Countries, End of Period .....	10
Table 1.6 Commercial and Government-Owned Oil Stocks in OECD Countries .....	11
Table 1.7 OECD Oil Demand, 1990-Present .....	12
<b>Section 2. International Oil Balance</b>	
Table 2.1 World Oil Balance, 1994-1998 .....	16
Table 2.2 World Oil Supply, 1994-1998 .....	17
Table 2.3 Oil Stocks, End of Period .....	18
Table 2.4 World Oil Demand, 1994-1998 .....	19
<b>Section 3. International Oil Imports</b>	
Table 3.1 Average Net Oil Imports Into OECD Countries (1997 Average) .....	22
Table 3.2 Net Oil Imports Into OECD Countries (2nd Quarter 1998) .....	23
Table 3.3 Net Oil Imports Into OECD Countries (1st Quarter 1998) .....	24
Table 3.4 OECD Total Net Imports (Most Recent 12 Months)....	25
Table 3.5 OECD Imports From OPEC (Most Recent 12 Months) .....	26
Table 3.6 OECD Imports From Persian Gulf (Most Recent 12 Months) .....	27
Table 3.7 United States--Net Oil Imports (Most Recent 12 Months) .....	28
Table 3.8 Japan--Net Oil Imports (Most Recent 12 Months) .....	29
Table 3.9 OECD Europe--Net Oil Imports (Most Recent 12 Months) .....	30
Table 3.10 France--Net Oil Imports (Most Recent 12 Months) .....	31
Table 3.11 Germany--Net Oil Imports (Most Recent 12 Months) .....	32
Table 3.12 Italy--Net Oil Imports (Most Recent 12 Months) .....	33
Table 3.13 OECD Imports from Iraq (Most Recent 12 Months) .....	34
Table 3.14 OECD Imports From Kuwait (Most Recent 12 Months) .....	35

## Contents - Continued

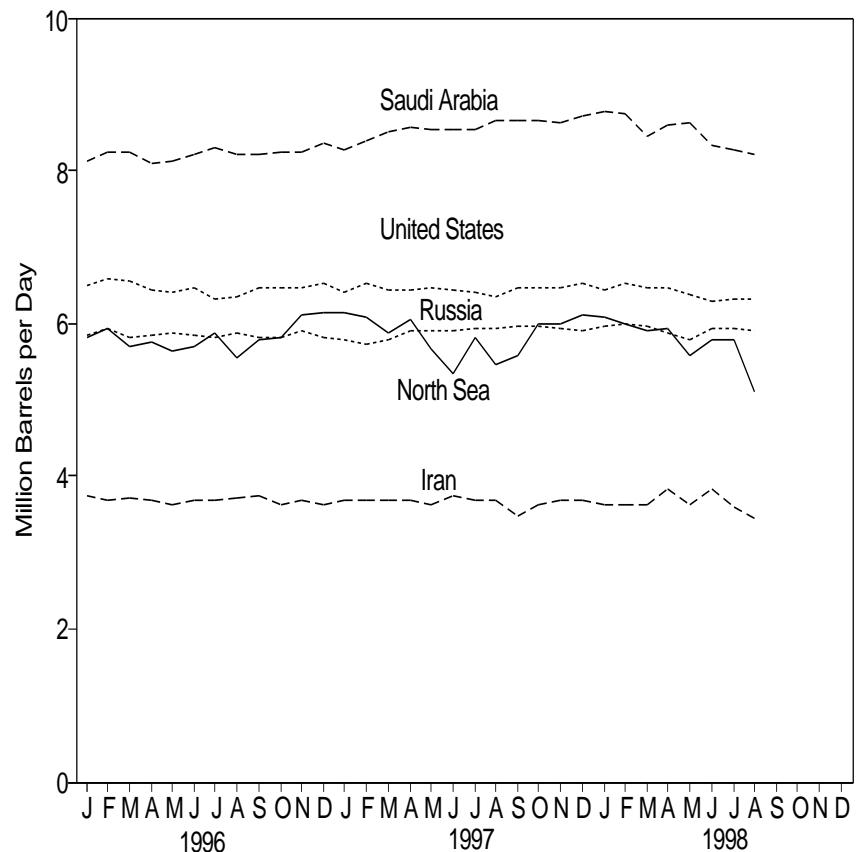
	Page
<b>Section 4. Historical Oil Data Series</b>	
Table 4.1a World Crude Oil Production (Including Lease Condensate), 1970-1997 .....	38
Table 4.1b World Crude Oil Production (Including Lease Condensate), 1970-1997 .....	39
Table 4.1c World Crude Oil Production (Including Lease Condensate), 1970-1997 .....	40
Table 4.2 OPEC Crude Oil Production (Excluding Condensate), 1980-1997 .....	41
Table 4.3 World Natural Gas Plant Liquids Production, 1970-1997 .....	42
Table 4.4 World Oil Supply, 1970-1997 .....	43
Table 4.5 Oil Stocks in OECD Countries, End of Year...	44
Table 4.6 World Oil Demand, 1970-1997 .....	45
Table 4.7 OECD Total Net Imports, 1987-1997....	46
Table 4.8 OECD Imports From OPEC, 1987-1997 .....	47
Table 4.9 OECD Imports From Persian Gulf, 1987-1997 .....	48
Table 4.10 United States--Net Oil Imports, 1987-1997 .....	49
Table 4.11 Japan--Net Oil Imports, 1987-1997 .....	50
Table 4.12 OECD Europe--Net Oil Imports, 1987-1997 .....	51
Table 4.13 France--Net Oil Imports, 1987-1997 .....	52
Table 4.14 Germany--Net Oil Imports, 1987-1997 .....	53
Table 4.15 Italy--Net Oil Imports, 1987-1997 .....	54
Table 4.16 OECD Imports From Iraq, 1987-1997 .....	55
Table 4.17 OECD Imports From Kuwait, 1987-1997 .....	56
<b>Appendix A. Organizational and Geographical Definitions</b> .....	59
<b>Appendix B. Explanatory Notes</b> .....	61
<b>Appendix C. Glossary</b> .....	65
<b>Appendix D. Estimation Procedures</b> .....	67
<b>Appendix E. Conversions</b>	
Table E1. Refined Petroleum Products Conversion Factors .....	70
Table E2. Barrels of Crude Oil per Metric Ton, 1987-1996 .....	71
<b>Figures</b>	
Figure 1. World Crude Oil Production, Monthly .....	2
Figure 2. Leading Crude Oil Producers, Monthly .....	2
Figure 3. OECD Oil Consumption, Monthly .....	3
Figure 4. OECD Oil Stocks, Monthly .....	3

## **1. Annual and Monthly Oil Data**

**Figure 1. World Crude Oil Production, Monthly**



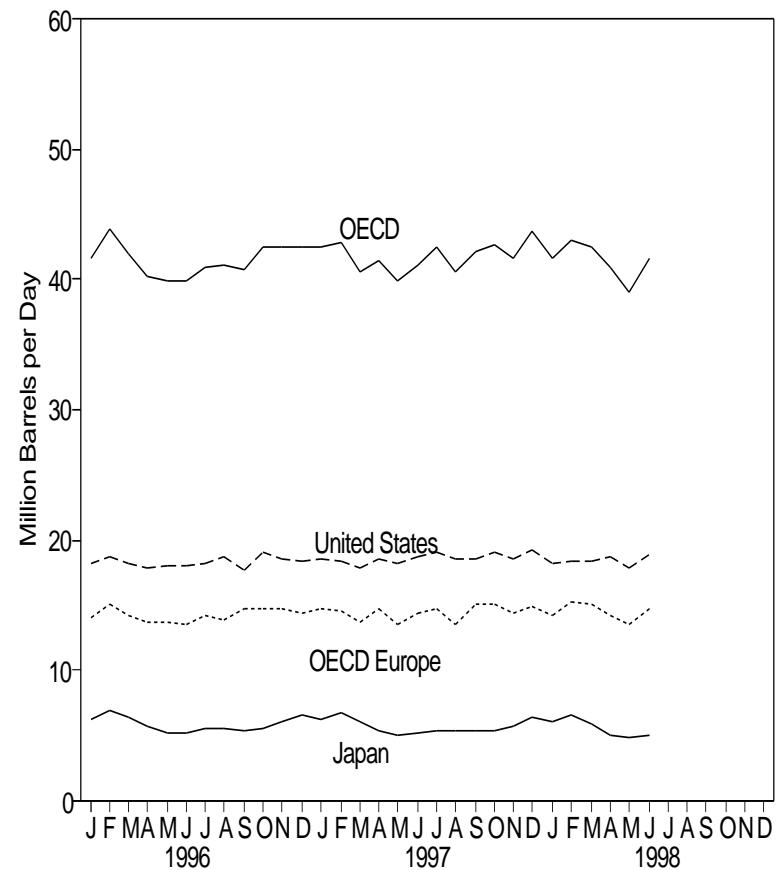
**Figure 2. Leading Crude Oil Producers, Monthly**



Source: Tables 1.1a-1.1c

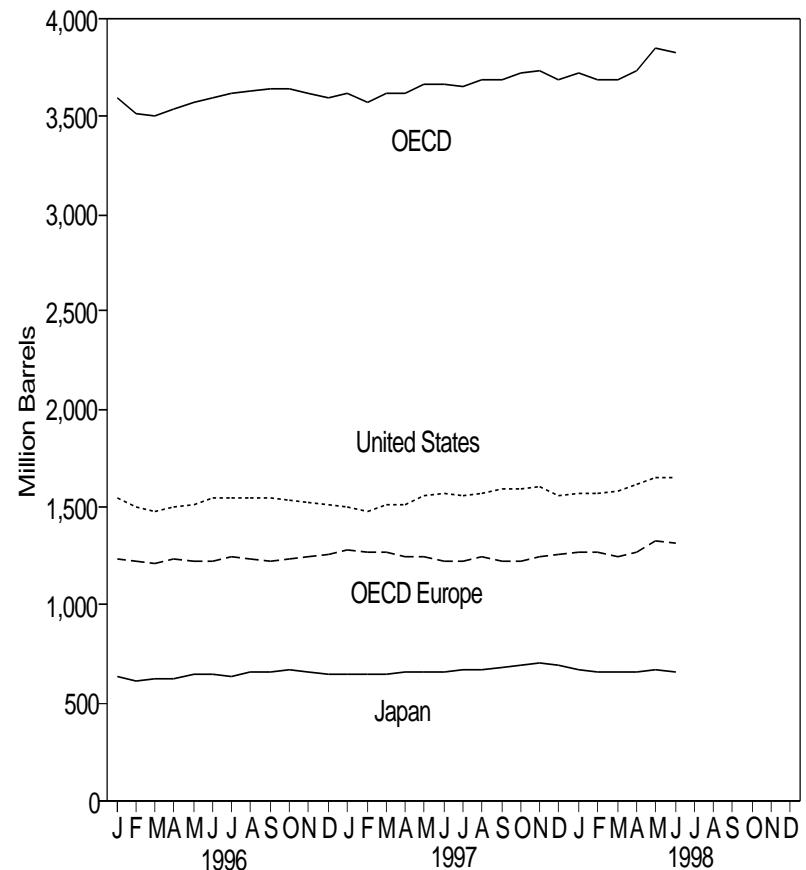
Source: Tables 1.1a-1.1c

**Figure 3. OECD Oil Consumption, Monthly**



Source: Table 1.7

**Figure 4. OECD Oil Stocks, Monthly**



Source: Table 1.5

**Table 1.1a World Crude Oil Production (Including Lease Condensate), 1990-Present**  
 (Thousand Barrels per Day)

	Algeria	Indo-nesia	Iran	Iraq	Kuwait <sup>1/</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>1/</sup>	United Arab Emirates	Vene-zuela	Total
1990 Average.....	1,175	1,462	3,088	2,040	1,175	1,375	1,810	406	6,410	2,117	2,137	23,195
1991 Average.....	1,230	1,592	3,312	305	190	1,483	1,892	395	8,115	2,386	2,375	23,275
1992 Average.....	1,214	1,504	3,429	425	1,058	1,433	1,943	423	8,332	2,266	2,371	24,398
1993 Average.....	1,162	1,511	3,540	512	1,852	1,361	1,960	413	8,198	2,159	2,450	25,119
1994 Average.....	1,180	1,510	3,618	553	2,025	1,378	1,931	415	8,120	2,193	2,588	25,510
1995 Average.....	1,202	1,503	3,643	560	2,057	1,390	1,993	442	8,231	2,233	2,750	26,004
1996 Average.....	1,242	1,547	3,686	579	2,062	1,401	2,188	510	8,218	2,278	3,053	26,764
1997 January.....	1,260	1,570	3,685	1,085	2,085	1,430	2,280	585	8,265	2,300	3,190	27,735
February.....	1,270	1,590	3,685	1,125	2,077	1,430	2,310	585	8,408	2,330	3,190	28,000
March.....	1,280	1,600	3,685	1,175	2,105	1,440	2,240	585	8,515	2,360	3,200	28,185
April.....	1,280	1,560	3,685	1,275	2,107	1,450	2,310	585	8,568	2,360	3,220	28,400
May.....	1,280	1,580	3,635	1,325	2,027	1,450	2,270	605	8,548	2,210	3,240	28,170
June.....	1,260	1,530	3,735	605	2,050	1,450	2,340	690	8,540	2,325	3,260	27,785
July.....	1,280	1,530	3,685	605	2,070	1,450	2,330	685	8,560	2,325	3,270	27,790
August.....	1,280	1,530	3,685	1,515	2,070	1,450	2,350	685	8,660	2,325	3,390	28,940
September.....	1,280	1,490	3,485	1,735	2,075	1,450	2,300	685	8,665	2,325	3,430	28,920
October.....	1,280	1,490	3,635	1,625	2,075	1,450	2,400	685	8,665	2,325	3,430	29,060
November.....	1,280	1,540	3,685	1,390	2,075	1,450	2,360	705	8,615	2,305	3,460	28,865
December.....	1,290	1,540	3,685	781	2,175	1,450	2,320	705	8,725	2,310	3,490	28,471
1997 Average.....	1,277	1,546	3,664	1,187	2,083	1,446	2,317	649	8,562	2,316	3,315	28,362
1998 January.....	1,290	1,520	3,635	1,261	2,215	1,450	R2,218	715	8,765	2,435	3,440	R28,944
February.....	1,290	1,520	3,635	1,703	2,210	1,450	R2,263	735	8,760	2,435	3,410	R29,411
March.....	1,290	1,520	3,635	1,825	2,210	1,450	R2,380	735	8,460	2,480	3,410	R29,395
April.....	1,270	1,520	3,835	1,985	2,115	1,400	R2,238	705	8,585	2,420	3,240	R29,313
May.....	1,250	1,520	3,635	2,245	2,105	1,360	R2,230	705	8,625	2,330	3,240	R29,245
June.....	1,240	1,490	3,835	1,920	2,105	1,360	R2,210	705	8,325	2,300	3,210	R28,700
July.....	1,230	1,490	3,585	2,355	2,075	1,360	R2,160	685	8,275	2,280	3,070	R28,565
August.....	1,220	1,510	3,435	2,555	2,025	1,340	2,010	675	8,225	2,300	2,990	28,285
1998 Average.....	1,260	1,511	3,652	1,985	2,132	1,396	2,213	707	8,500	2,372	3,250	28,977

<sup>1/</sup> Includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone from 1980 through July 1990 and beginning in June 1991. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. From August 1990 through May 1991, all production in the Neutral Zone was included in the data for Saudi Arabia. In August 1998, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 550 thousand barrels per day.

Notes: •OPEC=Organization of Petroleum Exporting Countries. •Monthly data are often preliminary and also may not average to the annual totals due to rounding.

Sources: See end of Section 1.

Table 1.1b World Crude Oil Production (Including Lease Condensate), 1990-Present  
(Thousand Barrels per Day)

	Norway	United Kingdom	North Seal/ <sup>1</sup>	Angola	Argentina	Australia	Brazil	Canada	China	Colombia	Ecuador
1990 Average.....	1,704	1,820	3,667	475	483	575	631	1,553	2,774	440	285
1991 Average.....	1,890	1,797	3,811	500	485	545	630	1,548	2,835	419	299
1992 Average.....	2,229	1,825	4,182	526	553	535	626	1,605	2,845	433	321
1993 Average.....	2,350	1,915	4,403	509	594	503	643	1,679	2,890	456	344
1994 Average.....	2,521	2,375	5,058	536	650	536	671	1,746	2,939	450	365
1995 Average.....	2,768	2,489	5,400	646	715	562	695	1,805	2,990	585	392
1996 Average.....	3,104	2,568	5,822	709	756	570	795	1,837	3,131	623	396
1997 January.....	3,268	2,693	6,126	700	820	565	840	1,874	3,210	650	385
February.....	3,263	2,660	6,074	715	820	561	830	1,920	3,240	640	385
March.....	3,063	2,638	5,863	720	830	594	830	1,900	3,215	620	380
April.....	3,388	2,515	6,063	720	840	594	830	1,823	3,230	650	390
May.....	3,194	2,315	5,677	720	840	576	830	1,737	3,275	650	380
June.....	3,025	2,135	5,339	710	815	574	830	1,835	3,220	640	360
July.....	3,194	2,447	5,820	715	820	584	860	1,889	3,190	605	360
August.....	2,890	2,407	5,462	720	840	605	845	1,895	3,190	635	370
September.....	2,927	2,483	5,589	717	845	626	830	1,930	3,195	660	390
October.....	3,209	2,610	6,000	725	850	616	740	1,956	3,195	715	385
November.....	3,192	2,602	5,992	725	850	565	810	1,970	3,158	745	395
December.....	3,229	2,700	6,116	750	845	590	920	1,985	3,090	730	390
1997 Average.....	3,153	2,517	5,843	720	835	588	833	1,893	3,200	662	381
1998 January.....	3,293	2,597	6,082	735	840	528	886	1,912	3,240	715	390
February.....	3,230	2,583	5,989	730	840	550	920	1,944	3,155	710	380
March.....	3,123	2,600	5,908	730	840	560	920	1,952	3,170	725	380
April.....	3,160	2,602	5,928	710	840	604	930	1,988	3,140	725	380
May.....	2,917	2,499	5,589	710	855	600	959	1,943	3,210	735	380
June.....	3,140	2,495	5,797	710	855	624	956	1,932	3,260	735	380
July.....	3,120	R2,525	R5,801	710	855	R550	R975	R2,045	3,200	735	R330
August.....	2,440	2,520	5,117	710	855	627	975	2,010	3,150	735	330
1998 Average.....	3,050	2,552	5,773	718	848	580	940	1,966	3,191	727	369

1/ North Sea includes the United Kingdom Offshore, Norway, Denmark, Netherlands Offshore, and Germany Offshore.

R=Revised data.

Notes: \*Monthly data are often preliminary and also may not average to the annual totals due to rounding. See Section 4 for historical series.

Sources: See end of Section 1.

Table 1.1c World Crude Oil Production (Including Lease Condensate), 1990-Present  
 (Thousand Barrels per Day)

	Egypt	Gabon	India	Malaysia	Mexico	Oman	Russia	Former U.S.S.R.	Syria	United States	Other <sup>1/</sup>	World
1990 Average.....	873	270	660	619	2,553	685	--	10,975	388	7,355	2,253	60,566
1991 Average.....	874	294	615	646	2,680	700	--	9,992	492	7,417	2,274	60,207
1992 Average.....	881	298	561	653	2,669	740	7,632	--	481	7,171	3,228	60,212
1993 Average.....	890	313	534	640	2,673	776	6,730	--	554	6,847	3,280	60,238
1994 Average.....	896	329	590	645	2,685	810	6,135	--	560	6,662	3,382	60,992
1995 Average.....	920	365	703	682	2,618	851	5,995	--	575	6,560	3,410	62,331
1996 Average.....	922	368	651	695	2,855	883	5,850	--	604	6,465	3,509	64,054
1997 January.....	885	370	650	730	2,940	890	5,789	--	565	6,402	3,715	65,676
February.....	885	370	650	730	2,970	900	5,729	--	565	6,514	3,694	66,041
March.....	890	370	660	730	2,970	900	5,772	--	565	6,452	3,734	66,018
April.....	890	370	685	750	2,945	900	5,893	--	560	6,441	3,756	66,571
May.....	880	370	685	750	2,990	890	5,902	--	560	6,474	3,720	65,908
June.....	870	370	685	740	3,005	900	5,902	--	560	6,442	3,725	65,128
July.....	880	370	685	740	3,035	840	5,923	--	560	6,409	3,679	65,576
August.....	870	370	685	740	3,080	870	5,945	--	560	6,347	3,669	66,474
September....	860	360	675	760	3,105	870	5,958	--	560	6,486	3,670	66,827
October.....	860	370	678	760	3,087	880	5,954	--	560	6,467	3,684	67,361
November....	860	370	681	760	3,085	890	5,945	--	560	6,459	3,720	67,207
December....	860	360	675	760	3,056	910	5,893	--	560	6,531	3,702	67,007
1997 Average.....	874	368	675	746	3,023	887	5,884	--	561	6,452	3,706	66,317
1998 January....	860	360	680	740	3,085	920	5,979	--	550	E6,438	3,765	R67,458
February....	860	370	685	730	3,140	920	5,997	--	550	E6,538	3,747	R67,989
March.....	860	370	685	740	3,160	930	5,962	--	550	E6,465	3,746	R67,863
April.....	860	370	635	740	3,140	920	5,876	--	550	E6,484	3,707	R67,674
May.....	870	370	670	750	3,149	910	5,789	--	560	E6,384	R3,663	R67,168
June.....	870	370	670	750	3,050	900	5,928	--	560	E6,290	R3,713	R66,888
July.....	R880	R360	676	R730	3,120	870	R5,928	--	560	RE6,322	R3,733	R66,789
August.....	880	360	676	730	3,055	870	5,910	--	560	PE6,331	3,731	65,740
1998 Average.....	868	366	672	739	3,112	905	5,920	--	555	PE6,405	3,726	67,186

<sup>1/</sup> Other is a calculated total derived from the difference between "World" and the sum of production in "Total OPEC" (Table 1.1a) and all other countries listed (Tables 1.1b and 1.1c). The total "North Sea" is not subtracted from the world total, though Norway and the United Kingdom have been subtracted.

-- = Not applicable. R=Revised data. E=Estimated. PE=Preliminary estimate. RE=Revised estimate.

Notes: •Monthly data are often preliminary and also may not average to the annual totals due to rounding. See Section 4 for historical series.

Sources: See end of Section 1.

Table 1.2 OPEC Crude Oil Production (Excluding Condensate), 1990-Present  
(Thousand Barrels per Day)

		Algeria	Indo-nesia	Iran	Iraq	Kuwait <sup>1/</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>1/</sup>	United Arab Emirates	Vene-zuela	Total OPEC
1990	Average...	765	1,281	3,088	2,040	1,175	1,375	1,755	406	6,410	2,066	2,097	22,458
1991	Average...	800	1,410	3,312	305	190	1,483	1,832	395	8,115	2,326	2,338	22,506
1992	Average...	772	1,326	3,429	425	1,058	1,433	1,820	423	8,332	2,206	2,334	23,558
1993	Average...	747	1,327	3,540	512	1,852	1,361	1,835	413	8,198	2,109	2,410	24,304
1994	Average...	750	1,334	3,600	548	2,034	1,378	1,887	409	8,147	2,183	2,542	24,812
1995	Average...	767	1,343	3,608	550	2,057	1,390	1,876	449	8,231	2,197	2,710	25,179
1996	Average...	812	1,367	3,651	579	2,062	1,401	2,051	475	8,218	2,198	3,013	25,826
1997	January...	830	1,390	3,650	1,080	2,085	1,430	2,180	550	8,265	2,220	3,150	26,830
	February...	840	1,410	3,650	1,120	2,077	1,430	2,210	550	8,408	2,250	3,150	27,095
	March ...	850	1,420	3,650	1,170	2,105	1,440	2,140	550	8,515	2,280	3,160	27,280
	April ...	850	1,380	3,650	1,270	2,107	1,450	2,210	550	8,568	2,280	3,180	27,495
	May ...	850	1,400	3,600	1,320	2,027	1,450	2,170	570	8,548	2,130	3,200	27,265
	June ...	830	1,350	3,700	600	2,050	1,450	2,240	655	8,540	2,245	3,220	26,880
	July ...	850	1,350	3,650	600	2,070	1,450	2,230	650	8,560	2,245	3,230	26,885
	August....	850	1,350	3,650	1,510	2,070	1,450	2,250	650	8,660	2,245	3,350	28,035
	September.	850	1,310	3,450	1,730	2,075	1,450	2,200	650	8,665	2,245	3,390	28,015
	October...	850	1,310	3,600	1,620	2,075	1,450	2,300	650	8,665	2,245	3,390	28,155
	November..	850	1,360	3,650	1,385	2,075	1,450	2,260	670	8,615	2,225	3,420	27,960
	December..	860	1,360	3,650	776	2,175	1,450	2,220	670	8,725	2,230	3,450	27,566
1997	Average...	847	1,366	3,629	1,182	2,083	1,446	2,217	614	8,562	2,236	3,275	27,457
1998	January...	860	1,340	3,600	1,256	2,215	1,450	2,108	680	8,765	2,355	3,400	28,029
	February..	860	1,340	3,600	1,698	2,210	1,450	2,153	700	8,760	2,355	3,370	28,496
	March...	860	1,340	3,600	1,820	2,210	1,450	2,270	700	8,460	2,400	3,370	28,480
	April.....	840	1,340	3,800	1,980	2,115	1,400	2,128	670	8,585	2,340	3,200	28,398
	May.....	820	1,340	3,600	2,240	2,105	1,360	2,120	670	8,625	2,250	3,200	28,330
	June.....	810	1,310	3,800	1,915	2,105	1,360	2,100	670	8,325	2,220	3,170	27,785
	July.....	800	1,310	3,550	2,350	2,075	1,360	2,050	650	8,275	2,220	3,030	27,650
	August....	790	1,330	3,400	2,550	2,025	1,340	1,900	640	8,225	2,220	2,950	27,370
1998	Average ..	830	1,331	3,617	1,980	2,132	1,396	2,103	672	8,500	2,292	3,210	28,062

<sup>1/</sup> Includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone from 1980 through July 1990 and beginning in June 1991. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. From August 1990 through May 1991, all production in the Neutral Zone was included in the data for Saudi Arabia. In August 1998, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 550 thousand barrels per day.

Notes: •OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

•Monthly data are often preliminary and also may not average to the annual totals due to rounding.

Sources: See end of Section 1.

Table 1.3 World Natural Gas Plant Liquids Production, 1990-Present  
(Thousand Barrels per Day)

	Algeria	Canada	Mexico	Saudi Arabia	Russia	Former USSR	United States <sup>1/</sup>	Persian Gulf <sup>2/</sup>	OAPEC <sup>3/</sup>	OPEC <sup>3/</sup>	World
1990 Average.....	130	426	428	620	--	425	1,559	930	1,107	1,281	4,632
1991 Average.....	140	431	457	680	--	420	1,659	931	1,113	1,299	4,827
1992 Average.....	140	460	454	713	230	--	1,697	1,003	1,185	1,364	4,975
1993 Average.....	145	506	459	704	220	--	1,736	1,040	1,238	1,435	5,181
1994 Average.....	140	529	461	698	200	--	1,727	1,071	1,267	1,465	5,293
1995 Average.....	145	581	447	701	180	--	1,762	1,106	1,301	1,506	5,485
1996 Average.....	150	596	423	697	185	--	1,830	1,082	1,295	1,501	5,582
1997 January.....	145	660	370	700	200	--	1,782	1,085	1,287	1,465	5,562
February.....	145	645	375	710	200	--	1,867	1,095	1,297	1,475	5,627
March.....	145	652	385	720	200	--	1,876	1,105	1,307	1,485	5,662
April.....	145	610	360	725	200	--	1,824	1,110	1,312	1,490	5,541
May.....	145	597	380	725	200	--	1,822	1,110	1,312	1,490	5,498
June.....	145	595	370	720	200	--	1,827	1,105	1,307	1,485	5,471
July.....	145	598	370	720	200	--	1,821	1,105	1,307	1,485	5,495
August.....	145	625	370	730	200	--	1,831	1,115	1,317	1,495	5,529
September.....	145	626	425	730	200	--	1,845	1,115	1,317	1,495	5,625
October.....	145	646	409	730	200	--	1,813	1,115	1,317	1,495	5,614
November.....	145	655	405	725	200	--	1,728	1,110	1,312	1,490	5,576
December.....	145	665	418	735	200	--	1,773	1,120	1,322	1,500	5,653
1997 Average.....	145	631	386	723	200	--	1,817	1,108	1,310	1,488	5,571
1998 January.....	145	665	385	735	230	--	1,826	R1,185	R1,409	R1,575	R5,835
February.....	145	680	420	735	230	--	1,870	R1,185	R1,409	R1,575	R5,931
March.....	145	645	425	735	230	--	1,846	R1,185	R1,409	R1,575	R5,878
April.....	145	645	425	725	230	--	1,859	R1,175	R1,399	R1,565	R5,882
May.....	145	580	430	725	230	--	1,808	R1,175	R1,399	R1,565	R5,733
June.....	145	610	420	705	230	--	1,734	R1,155	R1,379	R1,545	R5,649
July.....	145	R648	386	700	230	--	RE1,580	R1,150	R1,374	R1,540	R5,414
August.....	145	640	464	695	230	--	E1,798	1,145	1,369	1,535	5,673
1998 Average.....	145	639	419	719	230	--	E1,789	1,169	1,393	1,559	5,747

<sup>1/</sup> U.S. geographic coverage is the 50 States and the District of Columbia. Excludes fuel ethanol blended into finished motor gasoline.

<sup>2/</sup> See Appendix A for countries in this group.

<sup>3/</sup> OAPEC=Organization of Arab Petroleum Exporting Countries. OPEC=Organization of Petroleum Exporting Countries.

See Appendix A for countries in these groups.

R=Revised data. E=Estimated.

Notes: •Monthly data are often preliminary and also may not average to the annual totals due to rounding. See Section 4 for historical series.

Sources: See end of Section 1.

**Table 1.4 World Oil Supply, 1990-Present**  
 (Thousand Barrels per Day)

	United States <sup>1/</sup>	Persian Gulf <sup>2/</sup>	OAPEC <sup>3/</sup>	OPEC <sup>3/</sup>	World
1990 Average.....	9,677	16,249	17,232	24,536	66,754
1991 Average.....	9,883	15,704	16,747	24,625	66,632
1992 Average.....	9,768	17,010	17,871	25,818	66,960
1993 Average.....	9,602	17,792	18,505	26,610	67,361
1994 Average.....	9,413	18,072	18,745	27,031	68,250
1995 Average.....	9,400	18,351	19,069	27,566	69,860
1996 Average.....	9,445	18,486	19,259	28,321	71,764
1997 January.....	9,234	19,162	19,898	29,256	73,299
February.....	9,525	19,377	20,123	29,531	73,822
March.....	9,428	19,602	20,373	29,726	73,791
April.....	9,416	19,762	20,534	29,946	74,273
May.....	9,497	19,532	20,344	29,716	73,617
June.....	9,465	19,122	19,799	29,326	72,806
July.....	9,465	19,107	19,859	29,331	73,316
August.....	9,404	20,127	20,869	30,491	74,239
September.....	9,560	20,157	21,089	30,471	74,692
October.....	9,519	20,197	20,979	30,611	75,225
November.....	9,457	19,957	20,689	30,411	75,063
December.....	9,570	19,573	20,315	30,027	74,937
1997 Average.....	9,461	19,641	20,407	29,905	74,091
1998 January.....	9,462	R20,283	R21,087	R30,575	R75,506
February.....	9,611	R20,735	R21,542	R31,042	R76,139
March.....	9,442	R20,602	R21,411	R31,026	R75,888
April.....	9,497	R20,892	R21,431	R30,934	R75,725
May.....	9,340	R20,892	R21,591	R30,866	R75,065
June.....	9,330	R20,417	R20,906	R30,301	R74,858
July.....	RE9,171	R20,477	R21,216	R30,161	R74,488
August.....	PE9,369	20,432	21,291	29,876	73,669
1998 Average.....	PE9,400	20,589	21,308	30,592	75,154

<sup>1/</sup> U.S. geographic coverage is the 50 States and the District of Columbia. Beginning in 1993, includes fuel ethanol blended into finished motor gasoline and oxygenate production from merchant MTBE plants.

<sup>2/</sup> See Appendix A for countries in this group.

<sup>3/</sup> OAPEC=Organization of Arab Petroleum Exporting Countries. OPEC=Organization of Petroleum Exporting Countries.

See Appendix A for countries in these groups.

R=Revised data. E=Estimated. PE=Preliminary estimate. RE=Revised estimate.

Notes: •Oil Supply includes crude oil, natural gas plant liquids, other liquids, and refinery gain. See Explanatory Note 1 in Appendix B. •Monthly data are often preliminary and also may not average to the annual total due to rounding.

See Section 4 for historical series.

Sources: See end of Section 1.

Table 1.5 Oil Stocks in OECD Countries, End of Period  
(Million Barrels)

		France	Italy	Germany <sup>1/</sup>	United Kingdom	OECD Europe <sup>2/</sup>	United States <sup>3/</sup>	Canada	Japan	Other <sup>4/</sup>	Total OECD
1990	December.....	140	172	265	112	1,163	1,621	121	590	73	3,568
1991	December.....	153	160	288	119	1,181	1,617	119	606	65	3,588
1992	December.....	146	174	310	113	1,219	1,592	107	603	67	3,588
1993	December.....	158	163	309	118	1,221	1,647	105	618	69	3,661
1994	December.....	158	164	312	115	1,240	1,653	119	645	69	3,726
1995	December.....	159	162	301	107	1,228	1,563	109	630	71	3,601
1996	December.....	158	152	300	108	1,256	1,507	103	651	74	3,591
1997	January.....	156	158	306	107	1,280	1,501	106	650	80	3,617
	February.....	159	156	309	105	1,270	1,482	103	642	75	3,573
	March.....	160	160	312	109	1,273	1,512	107	650	76	3,617
	April.....	159	151	301	108	1,248	1,518	110	665	80	3,620
	May.....	163	150	311	108	1,248	1,561	106	664	81	3,660
	June.....	153	151	299	111	1,230	1,575	R107	662	83	R3,657
	July.....	153	150	303	112	1,230	1,559	R109	670	81	R3,649
	August.....	158	151	302	108	1,253	1,570	113	669	80	3,685
	September....	157	144	291	106	1,227	1,592	108	682	77	3,687
	October.....	152	144	289	106	1,231	1,598	111	693	83	3,716
	November....	163	150	291	106	1,251	1,600	111	699	76	3,736
1998	December.....	164	147	298	105	1,256	1,560	115	685	74	3,689
	January.....	163	154	298	111	R1,278	1,576	112	673	78	R3,716
	February....	161	155	290	108	R1,271	1,572	110	664	75	R3,692
	March.....	155	146	285	109	R1,251	1,588	R118	655	73	R3,685
	April.....	163	161	292	106	R1,276	1,614	116	658	75	R3,739
	May.....	171	168	306	111	R1,336	1,654	R115	667	R80	R3,852
	June.....	164	164	308	109	1,315	1,654	114	658	80	3,822

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

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ U.S. geographic coverage is the 50 States and the District of Columbia.

4/ "Other" consists of Australia, New Zealand, and the U.S. Territories.

R=Revised data.

Notes: •Oil Stocks - See Explanatory Note 2 in Appendix B. •See Section 4 for historical series.

Sources: See end of Section 1.

Table 1.6 Commercial and Government-Owned Oil Stocks in OECD Countries (End of June 1998)  
(Million Barrels)

Country	Commercial	Government Owned	Total
Canada.....	114	0	114
United States <sup>1/</sup> .....	1,091	563	1,654
United States Territories.....	28	0	28
Japan.....	343	315	658
Australia/New Zealand.....	52	NA	52
Austria.....	22	0	22
Belgium/Luxembourg.....	35	0	35
Denmark.....	27	0	27
Finland.....	25	0	25
France.....	164	0	164
Germany <sup>2/</sup> .....	253	55	308
Greece.....	33	NA	33
Ireland.....	8	2	10
Italy.....	158	6	164
Netherlands.....	102	0	102
Norway.....	53	0	53
Portugal.....	25	0	25
Spain.....	106	0	106
Sweden.....	35	0	35
Switzerland.....	46	0	46
Turkey.....	52	0	52
United Kingdom.....	109	0	109
OECD Europe.....	1,252	63	1,315
Total OECD.....	2,881	941	3,822

1/ U.S. geographic coverage is the 50 States and the District of Columbia.

2/ Data are for the unified Germany, i.e., the former East Germany and West Germany.

NA=Not Available.

Notes: •Sum of components may not equal total due to rounding. •Oil Stocks - See Explanatory Note 2 in Appendix B.

•OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group.

Sources: See end of Section 1.

Table 1.7. OECD Oil Demand, 1990-Present  
(Thousand Barrels per Day)

		France	Italy	Germany <sup>1/</sup>	United Kingdom	OECD Europe <sup>2/</sup>	United States <sup>3/</sup>	Canada	Japan	Other <sup>4/</sup>	Total OECD
1990	Average....	1,818	1,872	2,382	1,752	12,629	16,988	1,690	5,140	1,027	37,475
1991	Average....	1,935	1,863	2,828	1,801	13,391	16,714	1,622	5,284	1,056	38,067
1992	Average....	1,926	1,937	2,843	1,803	13,605	17,033	1,643	5,446	1,041	38,768
1993	Average....	1,875	1,852	2,900	1,815	13,523	17,237	1,688	5,401	1,118	38,967
1994	Average....	1,833	1,841	2,879	1,837	13,597	17,718	1,727	5,674	1,174	39,890
1995	Average....	1,896	2,048	2,875	1,845	14,120	17,725	1,755	5,711	1,243	40,553
1996	Average....	1,935	2,058	2,911	1,845	14,269	18,309	1,797	5,867	1,191	41,432
1997	January....	2,170	2,028	2,904	1,850	R14,689	18,554	1,836	6,294	1,145	R42,519
	February...	2,142	2,115	R2,652	1,933	14,618	18,398	1,857	6,756	R1,150	42,778
	March.....	1,801	1,919	2,692	1,754	R13,606	17,863	1,755	6,149	1,148	R40,521
	April.....	1,916	1,990	3,219	R1,804	R14,690	18,559	R1,724	5,306	1,181	R41,460
	May.....	1,712	1,888	R2,760	1,712	R13,524	18,293	R1,811	5,080	1,073	R39,782
	June.....	1,878	1,938	3,123	R1,781	14,382	18,617	R1,882	5,135	1,097	R41,113
	July.....	2,077	2,020	3,074	R1,757	R14,734	19,107	R1,983	5,450	1,150	R42,423
	August....	1,795	1,798	2,745	1,710	R13,530	18,565	R1,920	5,404	1,114	R40,533
	September..	1,999	2,171	3,163	1,821	R15,003	18,562	R1,872	5,422	1,166	R42,025
	October....	2,144	2,207	2,869	R1,845	R15,095	19,071	1,934	5,414	1,140	R42,654
	November...	1,731	2,174	2,882	1,805	R14,393	18,578	1,832	5,732	1,152	R41,688
	December...	2,107	2,299	2,761	R1,836	R14,972	19,250	1,876	6,453	1,146	R43,697
	Average....	1,955	2,045	R2,903	1,799	R14,433	18,620	R1,857	5,711	1,138	R41,760
1998	January....	2,040	2,030	2,734	1,779	R14,269	18,256	1,888	6,109	1,044	R41,567
	February...	2,160	2,150	2,950	1,831	R15,177	18,322	1,829	6,465	1,146	R42,941
	March.....	1,982	2,111	3,153	1,861	R15,149	18,393	1,861	5,905	1,228	R42,537
	April.....	1,999	2,016	2,840	1,709	R14,255	18,624	1,805	5,086	1,080	R40,850
	May.....	1,822	R1,892	R2,594	R1,693	R13,453	17,876	1,766	R4,806	R1,118	R39,018
	June.....	2,008	2,091	2,929	1,787	14,755	18,818	1,890	5,016	1,156	41,635

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

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ U.S. geographic coverage is the 50 States and the District of Columbia.

4/ "Other" consists of Australia, New Zealand, and the U.S. Territories.

R=Revised data.

Notes: •The term Demand is used interchangeably with Consumption and Petroleum Products Supplied. See Appendix C for definition. •See Section 4 for historical series.

Sources: See end of Section 1.

## Sources for Section 1 (Annual and Monthly Oil Data)

### Crude Oil Production, Natural Gas Liquids Production, Other Liquids, and Refinery Gain

United States: Energy Information Administration (EIA), Petroleum Supply Annual 1997 and Petroleum Supply Monthly, September 1998.

Other Countries: Annual data -- EIA, International Energy Annual, various issues. Monthly data -- Canada -- Maclean Hunter Publishing Company, Oilweek, various issues. Denmark, Mexico, Netherlands, Norway, Germany, and all OPEC countries -- Petroleum and Energy Intelligence Weekly, Inc., Petroleum Intelligence Weekly, various issues. All Other Countries -- PennWell Publishing Company, Oil and Gas Journal, various issues. Refinery Gains: National Petroleum Council, U.S. Petroleum Refinery Study, October 1986.

### Oil Stocks

United States: EIA, Petroleum Supply Annual 1997 and Petroleum Supply Monthly, September 1998.

Other OECD Countries: • Organization for Economic Cooperation and Development (OECD), Quarterly Oil Statistics and Energy Balances, various issues. • OECD, Monthly Oil Statistics data base, 1985-1998.

### Oil Demand

United States: EIA, Petroleum Supply Annual 1997 and Petroleum Supply Monthly, September 1998.

Other OECD Countries: • OECD, Quarterly Oil Statistics and Energy Balances, various issues. • OECD, Monthly Oil Statistics data base, 1985-1998.

## **2. International Oil Balance Data**

Table 2.1

**World Oil Balance, 1994-1998**  
 (Million Barrels Per Day)

	1994	1995	1996	1997				1998						
	Annual		Quarter		Annual		Quarter		Annual					
	Average		First	Second	Third	Fourth	Average	First	Second	Third	Fourth	Average		
<b>Supply<sup>1/</sup></b>														
OECD														
United States <sup>2/</sup> .....	9.41	9.40	9.44	9.39	9.46	9.48	9.52	9.46	9.50	9.39	NA	NA	NA	
Other OECD.....	9.25	9.80	10.29	10.67	10.15	10.22	10.78	10.46	10.66	10.43	NA	NA	NA	
Total OECD.....	18.66	19.20	19.74	20.06	19.61	19.69	20.30	19.92	20.17	19.82	NA	NA	NA	
Non-OECD														
OPEC.....	27.03	27.57	28.32	29.50	29.66	30.09	30.35	29.91	30.88	30.70	NA	NA	NA	
Former USSR.....	7.27	7.14	7.05	6.99	7.15	7.20	7.18	7.13	7.29	7.16	NA	NA	NA	
Other Non-OECD.....	15.29	15.95	16.65	17.07	17.15	17.09	17.24	17.14	17.50	17.54	NA	NA	NA	
Total Non-OECD.....	49.59	50.66	52.02	53.57	53.96	54.38	54.77	54.17	55.67	55.40	NA	NA	NA	
Total World Supply.....	68.25	69.86	71.76	73.63	73.57	74.08	75.08	74.09	75.83	75.21	NA	NA	NA	
<b>Demand<sup>3/</sup></b>														
OECD														
United States <sup>2/</sup> .....	17.72	17.72	18.31	18.27	18.49	18.75	18.97	18.62	18.32	18.43	NA	NA	NA	
Other OECD.....	22.17	22.83	23.12	23.64	22.29	22.91	23.72	23.14	24.00	22.05	NA	NA	NA	
Total OECD.....	39.89	40.55	41.43	41.91	40.77	41.66	42.69	41.76	42.33	40.48	NA	NA	NA	
Non-OECD														
China.....	3.14	3.33	3.55	3.81	3.86	3.90	4.59	3.88	4.03	4.10	NA	NA	NA	
Former USSR.....	4.85	4.62	4.38	4.69	4.22	4.22	4.59	4.43	4.83	4.30	NA	NA	NA	
Other Non-OECD.....	20.43	21.43	22.16	23.08	22.99	22.46	24.01	23.14	23.29	23.36	NA	NA	NA	
Total Non-OECD.....	28.42	29.38	30.09	31.58	31.07	30.58	33.19	31.45	32.15	31.76	NA	NA	NA	
Total World Demand.....	68.31	69.93	71.52	73.49	71.85	72.23	75.88	73.21	74.48	72.25	NA	NA	NA	
<b>Stock Draws / Discrepancy</b>														
Net Reported Stock Draws <sup>4/</sup>														
U. S. Commercial.....	.00	.25	.08	-.08	-.70	-.19	.35	-.15	-.32	-.72	NA	NA	NA	
U. S. Strategic.....	-.01	.00	.07	.03	.00	.00	.00	.01	.00	.00	NA	NA	NA	
Other OECD.....	-.16	.09	-.12	-.24	.26	-.13	-.38	-.13	.37	-.79	NA	NA	NA	
For Export & Afloat.....	.03	-.12	-.01	-.28	.27	-.49	.00	-.12	-.44	.22	NA	NA	NA	
Commr. Floating Storage....	.00	.00	.00	-.00	.00	.00	.00	-.11	-.11	NA	NA	NA	NA	
Total Reported Draws.....	-.15	.22	.01	-.57	-.16	-.81	-.03	-.39	-.50	-1.40	NA	NA	NA	
Other Stock Draws and Statistical Discrepancy <sup>5/</sup>	.21	-.15	-.26	.42	-1.56	-1.03	.84	-.49	-.85	-1.57	NA	NA	NA	

1/ Supply includes production of crude oil (including lease condensate), natural gas plant liquids, other hydrogen and hydrocarbons for refinery feedstocks, refinery gains, alcohol, and liquids produced from coal and other sources.

2/ U.S. geographical coverage is the 50 States and the District of Columbia. See Explanatory Note 1 in Appendix B.

3/ The term Demand is used interchangeably with the terms Consumption and Petroleum Products Supplied. See Appendix C for definition.

4/ Stock draws are positive numbers, stock additions are negative numbers.

5/ This is computed as Total Demand minus the sum of Total Supply and Total Reported Stock Draw.

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

Sources: See end of Section 2.

Table 2.2

**World Oil Supply, 1994-1998**  
 (Million Barrels Per Day)

	1994	1995	1996	1997				1998					
	Annual		Quarter				Annual		Quarter		Annual		
	Average		First	Second	Third	Fourth	Average		First	Second	Third	Fourth	Average
<b>OECD</b>													
United States <sup>1</sup> /...	9.41	9.40	9.44	9.39	9.46	9.48	9.52	9.46	9.50	9.39	NA	NA	NA
Canada.....	2.33	2.45	2.49	2.61	2.46	2.58	2.69	2.58	2.66	2.63	NA	NA	NA
North Sea <sup>2</sup> /.....	5.38	5.80	6.22	6.45	6.06	5.99	6.46	6.24	6.42	6.17	NA	NA	NA
Other OECD.....	1.54	1.55	1.58	1.61	1.63	1.65	1.64	1.63	1.58	1.63	NA	NA	NA
Total OECD.....	18.66	19.20	19.74	20.06	19.61	19.69	20.30	19.92	20.17	19.82	NA	NA	NA
<b>Non-OECD</b>													
<b>OPEC</b>													
Crude													
Algeria.....	1.18	1.20	1.24	1.27	1.27	1.28	1.28	1.28	1.29	1.25	NA	NA	NA
Indonesia.....	1.51	1.50	1.55	1.59	1.56	1.52	1.52	1.55	1.52	1.51	NA	NA	NA
Iran.....	3.62	3.64	3.69	3.68	3.68	3.62	3.67	3.66	3.63	3.77	NA	NA	NA
Iraq.....	.55	.56	.58	1.13	1.07	1.28	1.26	1.19	1.59	2.05	NA	NA	NA
Kuwait.....	2.02	2.06	2.06	2.09	2.06	2.07	2.11	2.08	2.21	2.11	NA	NA	NA
Libya.....	1.38	1.39	1.40	1.43	1.45	1.45	1.45	1.45	1.45	1.37	NA	NA	NA
Nigeria.....	1.93	1.99	2.19	2.28	2.31	2.33	2.36	2.32	2.29	2.23	NA	NA	NA
Qatar.....	.41	.44	.51	.58	.63	.68	.70	.65	.73	.70	NA	NA	NA
Saudi Arabia..	8.12	8.23	8.22	8.40	8.55	8.63	8.67	8.56	8.66	8.51	NA	NA	NA
United Arab Emirates...	2.19	2.23	2.28	2.33	2.30	2.32	2.31	2.32	2.45	2.35	NA	NA	NA
Venezuela.....	2.59	2.75	3.05	3.19	3.24	3.36	3.46	3.31	3.42	3.23	NA	NA	NA
Natural Gas													
Plant Liquids	1.46	1.51	1.50	1.47	1.49	1.49	1.50	1.49	1.57	1.56	NA	NA	NA
Processing Gain.	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	NA	NA	NA
Total OPEC.....	27.03	27.57	28.32	29.50	29.66	30.09	30.35	29.91	30.88	30.70	NA	NA	NA
Former USSR.....	7.27	7.14	7.05	6.99	7.15	7.20	7.18	7.13	7.29	7.16	NA	NA	NA
China.....	2.94	2.99	3.13	3.22	3.24	3.19	3.15	3.20	3.19	3.20	NA	NA	NA
Mexico.....	3.17	3.09	3.31	3.36	3.38	3.49	3.51	3.44	3.57	3.57	NA	NA	NA
Other Non-OECD....	9.17	9.86	10.21	10.49	10.52	10.41	10.58	10.50	10.75	10.77	NA	NA	NA
Total Non-OECD....	49.59	50.66	52.02	53.57	53.96	54.38	54.77	54.17	55.67	55.40	NA	NA	NA
Total Supply.....	68.25	69.86	71.76	73.63	73.57	74.08	75.08	74.09	75.83	75.21	NA	NA	NA

1/ U.S. geographic coverage is the 50 states and the District of Columbia.

2/ North Sea includes the United Kingdom Offshore, Norway, Denmark, Netherlands Offshore, and Germany Offshore.

Notes: •Supply includes crude oil (including lease condensate), natural gas plant liquids, (except for individual OPEC countries), other hydrogen and hydrocarbons for refinery feedstocks, alcohol, liquids produced from coal and other sources, and processing gain (except for individual OPEC countries). For OPEC, natural gas plant liquids production and processing gain are shown as separate lines. •Sum of components may not equal total due to rounding.

Sources: See end of Section 2.

Table 2.3

**Oil Stocks, End of Period**  
(Million Barrels)

	1994	1995	1996	1997				1998			
	Year End		Quarter				Quarter				
			First	Second	Third	Fourth	First	Second	Third	Fourth	
<b>OECD</b>											
United States <sup>1</sup> /											
Commercial.....	1,061	971	941	949	1,012	1,029	997	1,025	1,091	NA	NA
Strategic.....	592	592	566	563	563	563	563	563	563	NA	NA
U. S. Territories.....	26	24	25	23	27	27	23	25	28	NA	NA
Canada.....	119	109	103	107	107	108	115	118	114	NA	NA
Japan.....	645	630	651	650	662	682	685	655	658	NA	NA
OECD Europe											
France.....	158	159	158	160	153	157	164	155	164	NA	NA
Germany.....	312	301	300	312	299	291	298	285	308	NA	NA
Italy.....	164	162	152	160	151	144	147	146	164	NA	NA
United Kingdom.....	115	107	108	109	111	106	105	109	109	NA	NA
Other OECD Europe.....	490	499	537	532	516	528	542	556	571	NA	NA
Total.....	1,240	1,228	1,256	1,273	1,230	1,227	1,256	1,251	1,315	NA	NA
Australia & New Zealand	43	47	49	53	56	50	51	48	52	NA	NA
Total OECD.....	3,726	3,601	3,591	3,617	3,657	3,687	3,689	3,685	3,822	NA	NA
<b>Stocks for Export</b>											
and Afloat <sup>2</sup> /.....	935	980	985	1,010	985	1,030	1,030	1,070	1,050	NA	NA
Commercial Floating <sup>3</sup> /.....	70	70	70	70	70	70	70	80	90	NA	NA

<sup>1</sup>/ U.S. stock data include Alaskan crude oil in transit by water. These data were previously reported in stocks for export and afloat. U.S. geographic coverage is the 50 States and the District of Columbia.

<sup>2</sup>/ Stocks held at export terminals of major crude oil producing countries and commercial oil afloat based on quarterly analysis of world seaborne movements.

<sup>3</sup>/ Stocks stored by industry in tankers moored offshore. Excludes strategic storage.

Notes: •Oil Stocks - See Note 2 in Appendix B. •Sum of components may not equal total due to rounding.

Sources: See end of Section 2.

Table 2.4

**World Oil Demand, 1994-1998**  
 (Million Barrels Per Day)

	1994	1995	1996	1997				1998						
	Annual		Quarter				Annual		Quarter					
	Average		First	Second	Third	Fourth	Average	First	Second	Third	Fourth	Average		
<b>OECD</b>														
United States <sup>1/</sup> .....	17.72	17.72	18.31	18.27	18.49	18.75	18.97	18.62	18.32	18.43	NA	NA	NA	
U. S. Territories.....	.26	.25	.26	.20	.17	.19	.20	.19	.21	.17	NA	NA	NA	
Canada.....	1.73	1.76	1.80	1.81	1.81	1.93	1.88	1.86	1.86	1.82	NA	NA	NA	
Japan.....	5.67	5.71	5.87	6.39	5.17	5.43	5.87	5.71	6.15	4.97	NA	NA	NA	
OECD Europe <sup>2/</sup> .....														
France.....	1.83	1.90	1.93	2.03	1.83	1.96	2.00	1.96	2.06	1.94	NA	NA	NA	
Italy.....	1.84	2.05	2.06	2.02	1.94	1.99	2.23	2.04	2.10	2.00	NA	NA	NA	
United Kingdom.....	1.84	1.84	1.85	1.84	1.76	1.76	1.83	1.80	1.82	1.73	NA	NA	NA	
Germany <sup>3/</sup> .....	2.88	2.88	2.91	2.75	3.03	2.99	2.84	2.90	2.95	2.79	NA	NA	NA	
Other OECD Europe....	5.21	5.45	5.52	5.65	5.62	5.71	5.93	5.73	5.93	5.69	NA	NA	NA	
Total OECD Europe....	13.60	14.12	14.27	14.29	14.19	14.42	14.82	14.43	14.85	14.15	NA	NA	NA	
Australia & New Zealand.....	.92	.99	.93	.95	.94	.96	.94	.95	.93	.94	NA	NA	NA	
Total OECD.....	39.89	40.55	41.43	41.91	40.77	41.66	42.69	41.76	42.33	40.48	NA	NA	NA	
<b>Non-OECD</b>														
China.....	3.14	3.33	3.55	3.81	3.86	3.90	4.59	3.88	4.03	4.10	NA	NA	NA	
Former USSR.....	4.85	4.62	4.38	4.69	4.22	4.22	4.59	4.43	4.83	4.30	NA	NA	NA	
Other Non-OECD.....	20.43	21.43	22.16	23.08	22.99	22.46	24.01	23.14	23.29	23.36	NA	NA	NA	
Total Non-OECD.....	28.42	29.38	30.09	31.58	31.07	30.58	33.19	31.45	32.15	31.76	NA	NA	NA	
Total World Demand.....	68.31	69.93	71.52	73.49	71.85	72.23	75.88	73.21	74.48	72.25	NA	NA	NA	

<sup>1/</sup> U.S. geographic coverage is the 50 States and the District of Columbia.

<sup>2/</sup> "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

<sup>3/</sup> Through December 1990, the data for Germany are for the former West Germany only. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

Notes: •Oil demand includes bunkers and refinery fuel. The term Demand is used interchangeably with the terms Consumption and Petroleum Products Supplied. See Appendix C for definition. •Sum of components may not equal total due to rounding.

Sources: See end of Section 2.

## Sources for Section 2 (International Oil Balance Data)

### Crude Oil Production, Natural Gas Liquids Production, Other Liquids, and Refinery Gain

United States: Energy Information Administration (EIA), Petroleum Supply Annual 1997 and Petroleum Supply Monthly, September 1998.

Other Countries: Annual data -- EIA, International Energy Annual, various issues. Monthly data -- Canada -- Maclean Hunter Publishing Company, Oilweek, various issues. Denmark, Mexico, Netherlands, Norway, Germany, and all OPEC countries -- Petroleum and Energy Intelligence Weekly, Inc., Petroleum Intelligence Weekly, various issues. Other Countries -- PennWell Publishing Company, Oil and Gas Journal, various issues. Refinery Gains: National Petroleum Council, U.S. Petroleum Refinery Study, October 1986.

### Oil Stocks

United States: EIA, Petroleum Supply Annual 1997 and Petroleum Supply Monthly, September 1998.

Other OECD Countries: • Organization for Economic Cooperation and Development (OECD), Quarterly Oil Statistics and Energy Balances, various issues.  
• OECD, Monthly Oil Statistics data base, 1990-1998. Stocks for Export and Afloat and Commercial Floating Stocks -- Petroleum Economics Limited, Oil Industry Developments, various issues.

### Oil Demand

United States: EIA, Petroleum Supply Annual 1997 and Petroleum Supply Monthly, September 1998.

Other OECD Countries: • OECD, Quarterly Oil Statistics and Energy Balances, various issues. • OECD, Monthly Oil Statistics data base, 1990-1998.

OPEC Countries: EIA, International Energy Annual, various issues and Short-Term Energy Outlook, various issues.

Other countries: EIA, International Energy Annual, various issues and Short-Term Energy Outlook, various issues.

### **3. International Oil Imports**

Table 3.1 Average Net Oil Imports into OECD Countries, (1997 Average)  
(Million Barrels per Day)

	Total	OECD Europe						OECD Outside Europe			
		Total	United Kingdom	France	Germany <sup>1/</sup>	Italy	Other Europe <sup>2/</sup>	United States <sup>3/</sup>	Canada	Japan	Other <sup>4/</sup>
Total Net Imports..	22.080	7.340	-0.968	1.769	2.804	1.795	1.940	9.158	-0.819	5.819	0.582
Imports from OPEC <sup>5/</sup>	16.540	6.260	.199	.899	.645	1.353	3.164	4.542	.312	4.699	.727
Imports from Persian Gulf <sup>6/</sup>											
Total.....	9.952	3.469	.094	.617	.157	.583	2.018	1.747	.120	4.304	.311
Bahrain.....	.025	.001	.000	.000	.000	.000	.000	-.002	-.002	.023	.002
Iran.....	1.436	.942	.000	.127	.023	.258	.533	.000	.032	.461	.000
Iraq.....	.458	.336	.000	.078	.001	.033	.223	.089	.014	.015	.005
Kuwait.....	1.065	.249	.031	.017	.012	.000	.189	.253	.000	.557	.006
U.A.E.....	1.523	.009	.001	.000	.001	.000	.007	-.003	.000	1.441	.076
Qatar.....	.377	.000	.000	.000	.000	.000	.000	.004	-.002	.364	.008
Saudi Arabia.....	5.068	1.932	.062	.394	.120	.291	1.066	1.406	.074	1.441	.215
Imports from OPEC-Africa											
Total.....	3.842	2.569	.074	.282	.442	.745	1.027	.979	.083	.036	.176
Algeria.....	1.042	.681	.019	.131	.095	.086	.351	.285	.059	.014	.003
Libya.....	1.268	1.268	.051	.060	.246	.609	.303	.000	.000	-.001	.000
Nigeria.....	1.533	.620	.004	.091	.101	.050	.373	.694	.024	.023	.172
Imports from OPEC-South America											
Total.....	2.199	.206	.031	.000	.046	.012	.117	1.758	.109	.003	.124
Venezuela.....	2.199	.206	.031	.000	.046	.012	.117	1.758	.109	.003	.124
Imports from OPEC-Far East											
Total.....	.572	.017	.000	.000	.000	.014	.002	.057	.000	.380	.118
Indonesia.....	.572	.017	.000	.000	.000	.014	.002	.057	.000	.380	.118

1/ The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

2/ "Other Europe" consists of Austria, Belgium, Denmark, Finland, Greece, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and Turkey.

3/ U.S. geographic coverage is the 50 States and District of Columbia.

4/ "Other" consists of Australia, New Zealand, and U. S. Territories.

5/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

6/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports.

•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.2 Net Oil Imports into OECD Countries, (2nd Quarter 1998)  
(Million Barrels per Day)

	Total	OECD Europe						OECD Outside Europe			
		Total	United Kingdom	France	Germany <sup>1/</sup>	Italy	Other Europe <sup>2/</sup>	United States <sup>3/</sup>	Canada	Japan	Other <sup>4/</sup>
Total Net Imports..	22.359	8.126	-0.886	1.906	2.950	1.897	2.260	9.329	-0.939	5.018	0.824
Imports from OPEC <sup>5/</sup>	16.713	6.625	.243	1.070	.644	1.456	3.212	4.942	.342	4.213	.590
Imports from Persian Gulf <sup>6/</sup>											
Total.....	10.320	4.023	.138	.827	.177	.683	2.199	2.078	.126	3.927	.166
Bahrain.....	.020	.000	.000	.000	.000	.000	.000	-.002	-.002	.014	.008
Iran.....	1.359	1.013	.024	.165	.014	.305	.505	.000	.000	.346	.000
Iraq.....	.917	.675	-	.218	.025	.106	.327	.260	.022	.000	-.041
Kuwait.....	1.015	.232	.040	.023	.024	.000	.146	.323	.000	.464	-.005
U.A.E.....	1.471	.040	.005	.025	.000	.000	.009	.004	-.004	1.369	.059
Qatar.....	.460	.000	.000	.000	.000	.000	.000	.010	-.010	.435	.015
Saudi Arabia.....	5.078	2.063	.069	.396	.114	.272	1.211	1.483	.105	1.299	.129
Imports from OPEC-Africa											
Total.....	3.763	2.342	.070	.242	.400	.716	.913	1.157	.097	.017	.150
Algeria.....	1.038	.616	.007	.076	.107	.068	.358	.343	.065	.017	-.003
Libya.....	1.317	1.317	.047	.070	.263	.643	.293	.000	-.000	-.000	.000
Nigeria.....	1.408	.409	.016	.096	.030	.005	.262	.814	.032	.000	.152
Imports from OPEC-South America											
Total.....	2.205	.232	.035	.000	.067	.030	.100	1.684	.119	.000	.171
Venezuela.....	2.205	.232	.035	.000	.067	.030	.100	1.684	.119	.000	.171
Imports from OPEC-Far East											
Total.....	.445	.028	-	.000	.000	.027	.000	.021	.000	.283	.112
Indonesia.....	.445	.028	-	.000	.000	.027	.000	.021	.000	.283	.112

1/ The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

2/ "Other Europe" consists of Austria, Belgium, Denmark, Finland, Greece, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and Turkey.

3/ U.S. geographic coverage is the 50 States and District of Columbia.

4/ "Other" consists of Australia, New Zealand, and U. S. Territories.

5/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

6/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports.

•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.3 Net Oil Imports into OECD Countries, (1st Quarter 1998)  
(Million Barrels per Day)

	Total	OECD Europe						OECD Outside Europe			
		Total	United Kingdom	France	Germany <sup>1/</sup>	Italy	Other Europe <sup>2/</sup>	United States <sup>3/</sup>	Canada	Japan	Other <sup>4/</sup>
Total Net Imports..	21.819	7.589	-0.994	1.811	2.729	1.849	2.195	9.022	-0.899	5.777	0.329
Imports from OPEC <sup>5/</sup>	16.665	6.502	.205	.942	.589	1.388	3.378	4.405	.260	4.746	.752
Imports from Persian Gulf <sup>6/</sup>											
Total.....	10.178	3.610	.107	.647	.113	.531	2.212	1.792	.048	4.441	.287
Bahrain.....	.026	.011	.000	.004	.000	.007	.000	-.003	-.003	.015	.003
Iran.....	1.352	.828	.000	.158	.011	.192	.467	.000	.000	.514	.010
Iraq.....	.494	.436	-	.085	.000	.044	.307	.056	.000	.000	.002
Kuwait.....	1.158	.298	.025	.032	.013	.002	.227	.261	.000	.591	.009
U.A.E.....	1.527	.002	.000	.002	.000	.000	.000	.002	-.001	1.461	.062
Qatar.....	.520	.000	.000	.000	.000	.000	.000	.000	-.000	.494	.026
Saudi Arabia.....	5.102	2.036	.083	.367	.089	.286	1.211	1.476	.048	1.365	.175
Imports from OPEC-Africa											
Total.....	3.900	2.669	.074	.298	.447	.792	1.058	.931	.113	.005	.181
Algeria.....	1.137	.779	.016	.127	.123	.093	.420	.281	.081	.005	-.009
Libya.....	1.265	1.265	.042	.040	.259	.614	.310	.000	-.000	-.000	
Nigeria.....	1.498	.625	.016	.132	.064	.085	.328	.650	.032	.000	.190
Imports from OPEC-South America											
Total.....	2.080	.185	.023	.000	.028	.026	.108	1.643	.098	.000	.154
Venezuela.....	2.080	.185	.023	.000	.028	.026	.108	1.643	.098	.000	.154
Imports from OPEC-Far East											
Total.....	.532	.048	-	.000	.001	.047	.000	.036	.000	.315	.133
Indonesia.....	.532	.048	-	.000	.001	.047	.000	.036	.000	.315	.133

1/ The data for Germany are for unified Germany, i.e., the former East Germany and West Germany.

2/ "Other Europe" consists of Austria, Belgium, Denmark, Finland, Greece, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and Turkey.

3/ U.S. geographic coverage is the 50 States and District of Columbia.

4/ "Other" consists of Australia, New Zealand, and U. S. Territories.

5/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

6/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports.

•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.4 OECD Total Net Imports (Most Recent 12 Months)  
(Million Barrels per Day)

	1997						1998					
	July	August	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
Total.....	22.001	22.216	22.379	23.132	22.437	21.414	21.706	21.711	22.029	21.779	23.826	21.414
United States <sup>1/</sup> .....	8.996	9.390	9.540	9.726	9.014	8.130	8.811	9.530	8.775	9.369	9.876	8.725
Canada.....	-.650	-.860	-.896	-.719	-1.020	-.964	-1.041	-1.052	-.618	-.930	-.911	-.977
OECD Europe <sup>2/</sup> .....	7.577	7.521	7.414	7.890	7.923	7.741	7.475	7.951	7.377	7.804	9.145	7.389
<b>Main European Importers</b>												
France.....	1.785	1.695	1.663	1.977	1.865	1.837	1.738	2.034	1.682	2.116	1.980	1.618
Germany <sup>3/</sup> .....	3.123	2.652	2.766	2.706	2.830	2.933	2.635	2.601	2.938	2.920	3.034	2.894
Italy.....	1.666	1.662	1.800	1.882	2.047	2.110	1.971	1.886	1.693	2.080	1.810	1.803
Spain.....	1.443	1.225	1.334	1.331	1.335	1.364	1.230	1.329	1.330	1.397	1.428	1.254
Netherlands.....	.755	.999	.756	.676	.733	.836	.813	.914	.758	.718	.888	.812
<b>European Net Exporters</b>												
Norway.....	-3.353	-2.731	-3.224	-2.810	-3.149	-3.306	-3.429	-2.954	-3.334	-3.436	-2.685	-3.233
United Kingdom.....	-.950	-1.040	-.950	-1.114	-.998	-1.078	-1.032	-.949	-.995	-1.233	-.631	-.803
<b>Smaller European Importers</b>												
Austria.....	.256	.241	.234	.216	.240	.221	.229	.212	.231	.221	.228	.202
Belgium.....	.523	.629	.547	.579	.617	.635	.693	.604	.620	.637	.596	.594
Denmark.....	-.026	.014	.021	.016	.009	-.066	-.044	.030	-.036	.055	.043	.003
Ireland.....	.129	.096	.162	.160	.123	.157	.137	.152	.164	.134	.156	.123
Finland.....	.214	.106	.211	.243	.157	.298	.281	.178	.157	.146	.307	.178
Greece.....	.355	.407	.294	.419	.416	.353	.433	.403	.467	.461	.276	.335
Iceland.....	.020	.020	.023	.023	.014	.006	.026	.010	.017	.011	.018	.005
Luxembourg.....	.039	.037	.037	.042	.039	.045	.042	.044	.044	.043	.039	.038
Portugal.....	.318	.246	.380	.304	.215	.358	.305	.374	.314	.290	.354	.344
Sweden.....	.328	.347	.394	.347	.536	.276	.543	.225	.442	.516	.467	.365
Switzerland.....	.301	.294	.287	.269	.244	.261	.297	.283	.286	.283	.285	.311
Turkey.....	.651	.623	.678	.623	.650	.502	.605	.575	.603	.446	.551	.545
Japan.....	5.588	5.592	5.807	5.759	5.912	6.069	5.721	5.857	5.760	5.160	5.142	4.748
Other OECD.....	.490	.573	.513	.476	.608	.438	.740	-.577	.735	.376	.575	1.530

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.5 OECD Imports from OPEC (Most Recent 12 Months)  
(Million Barrels per Day)

	1997						1998					
	July	August	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
Total.....	15.952	16.574	17.090	17.341	16.945	16.891	16.464	16.699	16.835	16.492	17.387	16.237
United States <sup>1/</sup> .....	4.411	4.804	4.841	4.880	4.378	4.140	4.268	4.217	4.712	4.756	5.044	5.022
Canada.....	.295	.459	.282	.409	.260	.362	.223	.289	.269	.304	.365	.356
OECD Europe <sup>2/</sup> .....	6.259	6.245	6.716	6.682	6.722	6.532	6.400	6.903	6.242	6.585	6.893	6.388
Main European Importers												
France.....	1.020	.797	1.084	1.131	.846	.826	.887	1.071	.881	1.171	1.092	.945
Germany <sup>3/</sup> .....	.657	.698	.636	.649	.647	.627	.601	.595	.571	.601	.732	.595
Italy.....	1.379	1.276	1.379	1.353	1.491	1.535	1.336	1.624	1.228	1.518	1.429	1.423
Spain.....	.764	.722	.864	.820	.794	1.032	.873	.917	.872	.868	.811	.826
Netherlands.....	.732	.943	.708	.806	.829	.861	.835	.896	.854	.643	.761	.748
European Net Exporters												
Norway.....	.000	.000	.000	.007	.008	.005	.000	.000	.000	.000	.000	.000
United Kingdom.....	.277	.190	.239	.170	.219	.129	.176	.140	.293	.153	.280	.294
Smaller European Importers												
Austria.....	.176	.130	.133	.161	.154	.130	.102	.132	.111	.157	.148	.058
Belgium.....	.244	.326	.352	.351	.318	.314	.338	.276	.257	.326	.381	.424
Denmark.....	.006	.027	.067	.024	.049	.024	.024	.027	.024	.033	.068	.003
Ireland.....	.000	.000	.000	.000	.000	.000	-	-	-	-	-	-
Finland.....	.000	.000	.008	.007	.007	.032	.000	.000	.010	.000	.006	.000
Greece.....	.295	.329	.326	.360	.391	.312	.401	.351	.343	.414	.286	.294
Portugal.....	.207	.159	.291	.135	.164	.208	.147	.248	.154	.153	.225	.178
Sweden.....	.067	.089	.025	.086	.170	.008	.147	.077	.127	.126	.120	.102
Switzerland.....	.094	.101	.107	.111	.098	.093	.102	.108	.082	.102	.098	.107
Turkey.....	.342	.458	.497	.511	.536	.394	.430	.442	.434	.320	.457	.390
Japan.....	4.366	4.417	4.553	4.775	4.799	5.112	4.732	4.589	4.902	4.277	4.367	3.992
Other OECD.....	.621	.648	.698	.595	.786	.744	.841	.701	.709	.570	.718	.480

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development; OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in these groups. •Negative numbers represent net exports. •A dash (-) indicates no trade.

•Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.6 OECD Imports from Persian Gulf (Most Recent 12 Months)  
(Million Barrels per Day)

	1997						1998					
	July	August	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
Total.....	9.438	9.946	10.379	10.804	10.428	10.196	10.014	10.304	10.229	10.371	10.803	9.771
United States <sup>1/</sup> .....	1.740	1.851	1.915	1.913	1.745	1.749	1.724	1.691	1.950	1.979	1.905	2.355
Canada.....	.066	.198	.071	.168	.065	.128	.007	.074	.067	.070	.139	.170
OECD Europe <sup>2/</sup> .....	3.333	3.641	3.962	3.994	3.808	3.349	3.494	3.916	3.449	4.081	4.416	3.560
Main European Importers												
France.....	.640	.644	.857	.842	.525	.503	.671	.769	.513	.851	.913	.712
Germany <sup>3/</sup> .....	.177	.202	.164	.205	.155	.131	.101	.124	.115	.178	.202	.150
Italy.....	.618	.571	.629	.645	.603	.645	.476	.686	.446	.688	.740	.619
Spain.....	.318	.358	.425	.411	.336	.373	.410	.394	.370	.471	.487	.387
Netherlands.....	.562	.679	.488	.640	.739	.636	.574	.702	.679	.496	.601	.487
European Net Exporters												
Norway.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
United Kingdom.....	.123	.091	.115	.081	.129	.069	.078	.060	.180	.102	.177	.135
Smaller European Importers												
Austria.....	.080	.019	.063	.047	.083	.039	.022	.053	.055	.072	.057	.015
Belgium.....	.228	.292	.331	.331	.302	.288	.326	.251	.239	.311	.353	.359
Denmark.....	.000	.000	.023	.000	.000	.000	.000	.000	.000	.008	.021	.003
Finland.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Greece.....	.264	.287	.292	.328	.358	.299	.369	.301	.311	.399	.254	.243
Portugal.....	.069	.094	.190	.051	.085	.121	.078	.173	.136	.121	.151	.102
Sweden.....	.067	.065	.000	.066	.136	.000	.129	.067	.108	.111	.103	.089
Switzerland.....	.009	.009	.005	.014	.005	.000	.004	.000	.009	.017	.017	.010
Turkey.....	.178	.330	.378	.332	.353	.245	.257	.336	.289	.257	.341	.249
Japan.....	3.909	3.972	4.147	4.518	4.526	4.705	4.453	4.312	4.545	4.032	4.084	3.659
Other OECD.....	.390	.283	.284	.212	.284	.264	.336	.312	.217	.209	.259	.028

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •"Persian Gulf" consists of Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.7 United States--Net Oil Imports (Most Recent 12 Months)  
(Million Barrels per Day)

	1997						1998					
	July	August	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
Total Net Imports..	8.996	9.390	9.540	9.726	9.014	8.130	8.811	9.530	8.775	9.369	9.876	8.725
Imports from OPEC <sup>1/</sup>	4.411	4.804	4.841	4.880	4.378	4.140	4.268	4.217	4.712	4.756	5.044	5.022
Imports from Persian Gulf <sup>2/</sup>												
Total.....	1.740	1.851	1.915	1.913	1.745	1.749	1.724	1.691	1.950	1.979	1.905	2.355
Bahrain.....	-.003	-.003	-.003	-.003	.000	.000	-.003	-.004	-.003	-.003	-.003	.000
Iran.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Iraq.....	.088	.000	.000	.177	.220	.240	.036	.000	.127	.233	.270	.277
Kuwait.....	.331	.229	.322	.349	.220	.188	.194	.283	.307	.262	.275	.435
U.A.E.....	.011	-.009	-.003	-.002	-.003	-.003	-.003	-.003	.011	.017	-.003	-.003
Qatar.....	.000	.000	.000	.016	.000	.015	.000	.000	.000	.000	.015	.015
Saudi Arabia.....	1.313	1.634	1.599	1.376	1.308	1.309	1.500	1.415	1.508	1.470	1.351	1.631
Imports from OPEC-Africa												
Total.....	.871	1.143	1.026	.949	.891	.622	.919	.807	1.056	1.108	1.228	1.132
Algeria.....	.291	.261	.259	.272	.267	.208	.306	.295	.244	.336	.330	.362
Libya.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Nigeria.....	.580	.882	.767	.677	.624	.414	.613	.512	.812	.772	.898	.770
Imports from OPEC-South America												
Total.....	1.724	1.786	1.807	1.973	1.666	1.685	1.586	1.694	1.653	1.622	1.888	1.535
Venezuela.....	1.724	1.786	1.807	1.973	1.666	1.685	1.586	1.694	1.653	1.622	1.888	1.535
Imports from OPEC-Far East												
Total.....	.073	.021	.090	.042	.076	.084	.036	.021	.050	.044	.020	.000
Indonesia.....	.073	.021	.090	.042	.076	.084	.036	.021	.050	.044	.020	.000

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •U.S. geographic coverage is the 50 States and District of Columbia. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.8 Japan--Net Oil Imports (Most Recent 12 Months)  
(Million Barrels per Day)

	1997						1998					
	July	August	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
Total Net Imports..	5.588	5.592	5.807	5.759	5.912	6.069	5.721	5.857	5.760	5.160	5.142	4.748
Imports from OPEC <sup>1/</sup>	4.366	4.417	4.553	4.775	4.799	5.112	4.732	4.589	4.902	4.277	4.367	3.992
Imports from Persian Gulf <sup>2/</sup>												
Total.....	3.909	3.972	4.147	4.518	4.526	4.705	4.453	4.312	4.545	4.032	4.084	3.659
Bahrain.....	.017	.015	.037	.014	.007	.031	.028	.017	.000	.013	.012	.017
Iran.....	.466	.319	.464	.401	.505	.546	.550	.453	.532	.282	.302	.454
Iraq.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Kuwait.....	.473	.515	.578	.541	.557	.630	.583	.578	.611	.437	.531	.421
U.A.E.....	1.366	1.420	1.428	1.390	1.606	1.475	1.545	1.507	1.336	1.606	1.341	1.161
Qatar.....	.319	.410	.316	.426	.406	.467	.469	.438	.571	.482	.487	.334
Saudi Arabia.....	1.267	1.294	1.323	1.745	1.445	1.556	1.278	1.318	1.496	1.211	1.409	1.272
Imports from OPEC-Africa												
Total.....	.073	.032	.074	.000	.000	.062	.000	.017	.000	.019	.000	.034
Algeria.....	.013	.032	.018	.000	.000	.000	.000	.017	.000	.019	.000	.034
Nigeria.....	.060	.000	.057	.000	.000	.062	.000	.000	.000	.000	.000	.000
Imports from OPEC-South America												
Total.....	.000	.000	.000	.000	.000	.001	.000	.000	.000	.000	.000	.000
Venezuela.....	.000	.000	.000	.000	.000	.001	.000	.000	.000	.000	.000	.000
Imports from OPEC-Far East												
Total.....	.401	.428	.369	.272	.279	.376	.307	.278	.356	.239	.295	.316
Indonesia.....	.401	.428	.369	.272	.279	.376	.307	.278	.356	.239	.295	.316

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis.

•Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.9 OECD Europe--Net Oil Imports (Most Recent 12 Months)  
(Million Barrels per Day)

	1997						1998					
	July	August	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
Total Net Imports <sup>1/</sup>	7.577	7.521	7.414	7.890	7.923	7.741	7.475	7.951	7.377	7.804	9.145	7.389
Imports from OPEC <sup>1/</sup>	6.259	6.245	6.716	6.682	6.722	6.532	6.400	6.903	6.242	6.585	6.893	6.388
Imports from Persian Gulf <sup>2/</sup>												
Total.....	3.333	3.641	3.962	3.994	3.808	3.349	3.494	3.916	3.449	4.081	4.416	3.560
Bahrain.....	.000	.001	.000	.000	.001	.001	.000	.034	.000	.000	.000	.000
Iran.....	.913	1.169	1.028	.971	.935	.842	.806	.889	.794	.888	1.105	1.043
Iraq.....	.000	.186	.611	.620	.376	.265	.249	.520	.547	.814	.825	.383
Kuwait.....	.248	.210	.343	.251	.215	.174	.205	.332	.360	.151	.271	.275
U.A.E.....	.056	.004	.001	.005	.000	.000	.001	.005	.000	.051	.003	.066
Qatar.....	.000	.000	.000	.000	.005	.000	.000	.000	.000	.000	.000	.000
Saudi Arabia.....	2.115	2.073	1.979	2.145	2.281	2.062	2.233	2.137	1.749	2.178	2.213	1.792
Imports from OPEC-Africa												
Total.....	2.699	2.338	2.491	2.531	2.710	2.936	2.720	2.760	2.537	2.304	2.214	2.512
Algeria.....	.685	.678	.585	.665	.735	.745	.894	.587	.838	.532	.636	.679
Libya.....	1.309	1.276	1.248	1.218	1.238	1.305	1.213	1.335	1.255	1.358	1.321	1.272
Nigeria.....	.705	.383	.658	.648	.738	.885	.613	.838	.445	.414	.257	.560
Imports from OPEC-South America												
Total.....	.216	.250	.226	.155	.171	.214	.156	.198	.202	.163	.242	.291
Venezuela.....	.216	.250	.226	.155	.171	.214	.156	.198	.202	.163	.242	.291
Imports from OPEC-Far East												
Total.....	.011	.017	.037	.003	.032	.034	.030	.063	.054	.037	.021	.026
Indonesia.....	.011	.017	.037	.003	.032	.034	.030	.063	.054	.037	.021	.026

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •"OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom. •Negative numbers represent net exports.

•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day.

•See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.10 France--Net Oil Imports (Most Recent 12 Months)  
(Million Barrels per Day)

	1997						1998					
	July	August	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
Total Net Imports <sup>1/</sup>	1.785	1.695	1.663	1.977	1.865	1.837	1.738	2.034	1.682	2.116	1.980	1.618
Imports from OPEC <sup>1/</sup>	1.020	.797	1.084	1.131	.846	.826	.887	1.071	.881	1.171	1.092	.945
Imports from Persian Gulf <sup>2/</sup>												
Total.....	.640	.644	.857	.842	.525	.503	.671	.769	.513	.851	.913	.712
Bahrain.....	.000	.001	.000	.000	.001	.001	.000	.012	.000	.000	.000	.000
Iran.....	.127	.206	.166	.172	.104	.079	.171	.142	.159	.099	.229	.164
Iraq.....	.000	.064	.133	.149	.033	.002	.120	.073	.062	.294	.193	.167
Kuwait.....	.063	.003	.069	.000	.000	.000	.003	.093	.006	.000	.066	.000
U.A.E.....	.000	.000	.000	.000	.000	.000	.000	.005	.000	.016	.000	.061
Qatar.....	.000	.000	.000	.000	.005	.000	.000	.000	.000	.000	.000	.000
Saudi Arabia.....	.450	.370	.489	.521	.388	.416	.376	.444	.287	.442	.424	.321
Imports from OPEC-Africa												
Total.....	.379	.153	.227	.288	.321	.323	.216	.313	.368	.320	.178	.232
Algeria.....	.195	.091	.065	.060	.116	.092	.129	.053	.191	.120	.062	.048
Libya.....	.110	.027	.066	.058	.060	.043	.000	.062	.059	.103	.085	.020
Nigeria.....	.074	.035	.096	.170	.146	.189	.087	.197	.118	.096	.031	.164
Imports from OPEC-South America												
Total.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Venezuela.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Imports from OPEC-Far East												
Total.....	.000	.000	.000	.000	.000	.001	.000	.000	.000	.000	.001	.001
Indonesia.....	.000	.000	.000	.000	.000	.001	.000	.000	.000	.000	.001	.001

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.11 Germany--Net Oil Imports (Most Recent 12 Months)  
(Million Barrels per Day)

	1997						1998					
	July	August	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
Total Net Imports..	3.123	2.652	2.766	2.706	2.830	2.933	2.635	2.601	2.938	2.920	3.034	2.894
Imports from OPEC <sup>1/</sup>	.657	.698	.636	.649	.647	.627	.601	.595	.571	.601	.732	.595
Imports from Persian Gulf <sup>2/</sup>												
Total.....	.177	.202	.164	.205	.155	.131	.101	.124	.115	.178	.202	.150
Bahrain.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Iran.....	.022	.037	.017	.041	.019	.010	.004	.000	.027	.014	.017	.011
Iraq.....	.000	.000	.000	.000	.009	.000	.000	.000	.000	.034	.027	.013
Kuwait.....	.014	.009	.016	.012	.014	.013	.004	.020	.016	.021	.024	.027
U.A.E.....	.005	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Qatar.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Saudi Arabia.....	.136	.156	.130	.152	.113	.108	.093	.104	.072	.109	.135	.099
Imports from OPEC-Africa												
Total.....	.378	.459	.431	.401	.449	.446	.490	.439	.410	.368	.429	.402
Algeria.....	.061	.092	.091	.106	.087	.146	.125	.091	.150	.050	.139	.131
Libya.....	.252	.273	.267	.215	.261	.172	.241	.288	.252	.275	.260	.256
Nigeria.....	.066	.095	.073	.080	.102	.128	.124	.059	.008	.043	.030	.015
Imports from OPEC-South America												
Total.....	.101	.036	.041	.043	.043	.051	.006	.032	.046	.055	.100	.044
Venezuela.....	.101	.036	.041	.043	.043	.051	.006	.032	.046	.055	.100	.044
Imports from OPEC-Far East												
Total.....	.001	.000	.000	.000	.000	.000	.004	.000	.000	.000	.000	.000
Indonesia.....	.001	.000	.000	.000	.000	.000	.004	.000	.000	.000	.000	.000

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.12 Italy--Net Oil Imports (Most Recent 12 Months)  
(Million Barrels per Day)

	1997						1998					
	July	August	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
Total Net Imports <sup>1/</sup>	1.666	1.662	1.800	1.882	2.047	2.110	1.971	1.886	1.693	2.080	1.810	1.803
Imports from OPEC <sup>1/</sup>	1.379	1.276	1.379	1.353	1.491	1.535	1.336	1.624	1.228	1.518	1.429	1.423
Imports from Persian Gulf <sup>2/</sup>												
Total.....	.618	.571	.629	.645	.603	.645	.476	.686	.446	.688	.740	.619
Bahrain.....	.000	.000	.000	.000	.000	.000	.000	.022	.000	.000	.000	.000
Iran.....	.232	.259	.272	.261	.242	.316	.185	.195	.197	.252	.333	.329
Iraq.....	.000	.021	.062	.095	.022	.063	.000	.067	.068	.108	.133	.075
Kuwait.....	.000	.000	.000	.001	.000	.000	.000	.005	.000	.000	.000	.000
U.A.E.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Qatar.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Saudi Arabia.....	.386	.291	.295	.288	.338	.266	.291	.397	.181	.328	.273	.216
Imports from OPEC-Africa												
Total.....	.699	.670	.723	.705	.850	.851	.787	.878	.719	.778	.662	.711
Algeria.....	.058	.073	.104	.056	.128	.049	.135	.086	.057	.080	.048	.076
Libya.....	.612	.597	.588	.600	.611	.725	.595	.617	.629	.698	.607	.626
Nigeria.....	.030	.000	.031	.048	.111	.077	.056	.175	.032	.000	.006	.010
Imports from OPEC-South America												
Total.....	.051	.018	.013	.000	.006	.007	.048	.020	.010	.016	.007	.067
Venezuela.....	.051	.018	.013	.000	.006	.007	.048	.020	.010	.016	.007	.067
Imports from OPEC-Far East												
Total.....	.010	.017	.013	.003	.032	.032	.025	.062	.054	.037	.020	.025
Indonesia.....	.010	.017	.013	.003	.032	.032	.025	.062	.054	.037	.020	.025

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.13 OECD Imports from Iraq (Most Recent 12 Months)  
(Million Barrels per Day)

	1997						1998					
	July	August	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
Total.....	0.097	0.186	0.682	0.836	0.668	0.527	0.286	0.520	0.679	1.054	1.016	0.676
United States <sup>1/</sup> ....	.088	.000	.000	.177	.220	.240	.036	.000	.127	.233	.270	.277
Canada.....	.000	.000	.071	.033	.065	.000	.000	.000	.000	.000	.050	.014
OECD Europe <sup>2/</sup> .....	.000	.186	.611	.620	.376	.265	.249	.520	.547	.814	.825	.383
Main European Importers												
France.....	.000	.064	.133	.149	.033	.002	.120	.073	.062	.294	.193	.167
Germany <sup>3/</sup> .....	.000	.000	.000	.000	.009	.000	.000	.000	.000	.034	.027	.013
Italy.....	.000	.021	.062	.095	.022	.063	.000	.067	.068	.108	.133	.075
Spain.....	.000	.066	.135	.150	.030	.058	.080	.111	.129	.102	.099	.097
Netherlands.....	.000	.017	.000	.063	.072	.000	.000	.128	.088	.129	.168	.000
European Net Exporters												
United Kingdom....	.000	.000	.000	.000	.000	.000	-	-	-	-	-	-
Smaller European Importers												
Austria.....	.000	.000	.033	.027	.056	.019	.014	.023	.028	.023	.024	.000
Belgium.....	.000	.000	.000	.000	.000	.000	.000	.014	.049	.050	.005	.000
Denmark.....	.000	.000	.000	.000	.000	.000	-	-	-	-	-	-
Greece.....	.000	.000	.032	.000	.049	.067	.032	.000	.016	.000	.030	.000
Portugal.....	.000	.000	.063	.000	.000	.000	.000	.037	.053	.000	.032	.032
Sweden.....	.000	.000	.000	.000	.000	.000	-	-	-	-	-	-
Switzerland.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Turkey.....	.000	.017	.152	.136	.105	.056	.004	.067	.055	.074	.112	.000
Japan.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Other OECD.....	.009	.000	.000	.006	.007	.022	.001	.000	.005	.008	-.129	.002

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and Germany.

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

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

Table 3.14 OECD Imports from Kuwait (Most Recent 12 Months)  
(Million Barrels per Day)

	1997						1998					
	July	August	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June
Total.....	1.054	0.955	1.244	1.144	0.994	1.003	0.984	1.207	1.289	0.862	1.204	0.973
United States <sup>1/</sup> ....	.331	.229	.322	.349	.220	.188	.194	.283	.307	.262	.275	.435
Canada.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
OECD Europe <sup>2/</sup> .....	.248	.210	.343	.251	.215	.174	.205	.332	.360	.151	.271	.275
Main European Importers												
France.....	.063	.003	.069	.000	.000	.000	.003	.093	.006	.000	.066	.000
Germany <sup>3/</sup> .....	.014	.009	.016	.012	.014	.013	.004	.020	.016	.021	.024	.027
Italy.....	.000	.000	.000	.001	.000	.000	.000	.005	.000	.000	.000	.000
Spain.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Netherlands.....	.117	.156	.205	.194	.149	.117	.183	.194	.253	.102	.081	.181
European Net Exporters												
Norway.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
United Kingdom....	.028	.027	.029	.029	.036	.028	.000	.002	.070	.008	.064	.048
Smaller European Importers												
Austria.....	.000	.000	.000	.000	.000	.000	-	-	-	-	-	-
Belgium.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Denmark.....	.000	.000	.023	.000	.000	.000	.000	.000	.000	.008	.021	.003
Greece.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Portugal.....	.000	.000	.000	.000	.000	.000	-	-	-	-	-	-
Sweden.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Switzerland.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Turkey.....	.025	.014	.001	.015	.016	.016	.015	.017	.015	.011	.015	.016
Japan.....	.473	.515	.578	.541	.557	.630	.583	.578	.611	.437	.531	.421
Other OECD.....	.002	.002	.002	.003	.002	.011	.001	.014	.012	.011	.127	-.158

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and Germany.

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

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

## **Sources for Section 3 (International Oil Imports)**

### **Oil Imports**

United States: • Energy Information Administration (EIA), Petroleum Supply Annual 1997 and Petroleum Supply Monthly, September 1998. Other OECD Countries: • Organization for Economic Cooperation and Development (OECD), Quarterly Oil Statistics and Energy Balances, various issues. • OECD, Monthly Oil Statistics data base, 1991-1998.

## **4. Historical Oil Data Series**

**1970-1997**

Table 4.1a World Crude Oil Production (Including Lease Condensate), 1970-1997  
 (Thousands Barrels per Day)

	Algeria	Indo-nesia	Iran	Iraq	Kuwait <sup>1/</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>1/</sup>	United Arab Emirates	Vene-zuela	Total OPEC
1970 Average.....	1,029	854	3,829	1,549	2,990	3,318	1,083	362	3,799	780	3,708	23,301
1971 Average.....	785	892	4,540	1,694	3,197	2,761	1,531	431	4,769	1,060	3,549	25,209
1972 Average.....	1,062	1,081	5,023	1,466	3,283	2,239	1,816	482	6,016	1,203	3,220	26,891
1973 Average.....	1,097	1,339	5,861	2,018	3,020	2,175	2,054	570	7,596	1,533	3,366	30,629
1974 Average.....	1,009	1,375	6,022	1,971	2,546	1,521	2,255	518	8,480	1,679	2,976	30,351
1975 Average.....	983	1,307	5,350	2,262	2,084	1,480	1,783	438	7,075	1,664	2,346	26,771
1976 Average.....	1,075	1,504	5,883	2,415	2,145	1,933	2,067	497	8,577	1,936	2,294	30,327
1977 Average.....	1,152	1,686	5,663	2,348	1,969	2,063	2,085	445	9,245	1,999	2,238	30,893
1978 Average.....	1,231	1,635	5,242	2,563	2,131	1,983	1,897	487	8,301	1,831	2,165	29,464
1979 Average.....	1,224	1,591	3,168	3,477	2,500	2,092	2,302	508	9,532	1,831	2,356	30,581
1980 Average.....	1,106	1,577	1,662	2,514	1,656	1,787	2,055	472	9,900	1,709	2,168	26,606
1981 Average.....	1,002	1,605	1,380	1,000	1,125	1,140	1,433	405	9,815	1,474	2,102	22,481
1982 Average.....	987	1,339	2,214	1,012	823	1,150	1,295	330	6,483	1,250	1,895	18,778
1983 Average.....	968	1,343	2,440	1,005	1,064	1,105	1,241	295	5,086	1,149	1,801	17,497
1984 Average.....	1,014	1,412	2,174	1,209	1,157	1,087	1,388	394	4,663	1,146	1,798	17,442
1985 Average.....	1,037	1,325	2,250	1,433	1,023	1,059	1,495	301	3,388	1,193	1,677	16,181
1986 Average.....	945	1,390	2,035	1,690	1,419	1,034	1,467	308	4,870	1,330	1,787	18,275
1987 Average.....	1,048	1,343	2,298	2,079	1,585	972	1,341	293	4,265	1,541	1,752	18,517
1988 Average.....	1,040	1,342	2,240	2,685	1,492	1,175	1,450	346	5,086	1,565	1,903	20,324
1989 Average.....	1,095	1,409	2,810	2,897	1,783	1,150	1,716	380	5,064	1,860	1,907	22,071
1990 Average.....	1,175	1,462	3,088	2,040	1,175	1,375	1,810	406	6,410	2,117	2,137	23,195
1991 Average.....	1,230	1,592	3,312	305	190	1,483	1,892	395	8,115	2,386	2,375	23,275
1992 Average.....	1,214	1,504	3,429	425	1,058	1,433	1,943	423	8,332	2,266	2,371	24,398
1993 Average.....	1,162	1,511	3,540	512	1,852	1,361	1,960	413	8,198	2,159	2,450	25,119
1994 Average.....	1,180	1,510	3,618	553	2,025	1,378	1,931	415	8,120	2,193	2,588	25,510
1995 Average .....	1,202	1,503	3,643	560	2,057	1,390	1,993	442	8,231	2,233	2,750	26,004
1996 Average .....	1,242	1,547	3,686	579	2,062	1,401	2,188	510	8,218	2,278	3,053	26,764
1997 Average P.....	1,277	1,546	3,664	1,187	2,083	1,446	2,317	649	8,562	2,316	3,315	28,362

<sup>1/</sup> Includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone from 1970 through 1989 and beginning in June 1991. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. From August 1990 through May 1991, all production in the Neutral Zone was included in the data for Saudi Arabia.

P=Preliminary.

Notes: \*OPEC=Organization of Petroleum Exporting Countries.

Sources: See end of Section 4.

Table 4.1b World Crude Oil Production (Including Lease Condensate), 1970-1997  
 (Thousand Barrels per Day)

	Norway	United Kingdom	North Seal/	Angola	Argen-tina	Austra- lia	Brazil	Canada	China	Colombia	Ecuador
1970 Average.....	0	2	0	112	393	178	167	1,263	600	219	4
1971 Average.....	6	2	6	93	423	309	174	1,348	780	214	4
1972 Average.....	33	2	35	140	433	327	167	1,532	900	196	78
1973 Average.....	32	2	36	162	420	369	169	1,798	1,090	184	209
1974 Average.....	35	2	38	169	414	388	176	1,551	1,315	168	177
1975 Average.....	189	12	202	165	395	409	177	1,430	1,490	157	161
1976 Average.....	279	245	525	108	398	426	167	1,314	1,670	146	188
1977 Average.....	280	768	1,055	194	431	431	161	1,321	1,874	138	183
1978 Average.....	356	1,082	1,446	131	453	432	160	1,316	2,082	131	202
1979 Average.....	403	1,568	1,976	147	473	441	166	1,500	2,122	124	214
1980 Average.....	528	1,622	2,151	150	491	380	182	1,435	2,114	126	204
1981 Average.....	501	1,811	2,322	130	496	394	213	1,285	2,012	125	211
1982 Average.....	520	2,065	2,617	122	491	370	260	1,271	2,045	141	211
1983 Average.....	614	2,291	2,965	177	491	416	339	1,356	2,120	152	237
1984 Average.....	697	2,480	3,250	208	478	492	475	1,438	2,296	168	258
1985 Average.....	788	2,530	3,417	231	460	575	564	1,471	2,505	176	281
1986 Average.....	870	2,539	3,547	282	434	520	572	1,474	2,620	305	293
1987 Average.....	1,022	2,406	3,584	360	428	547	566	1,535	2,690	385	174
1988 Average.....	1,158	2,232	3,540	452	449	538	554	1,616	2,730	378	302
1989 Average.....	1,554	1,802	3,515	455	460	490	596	1,560	2,757	403	279
1990 Average.....	1,704	1,820	3,667	475	483	575	631	1,553	2,774	440	285
1991 Average.....	1,890	1,797	3,811	500	485	545	630	1,548	2,835	419	299
1992 Average.....	2,229	1,825	4,182	526	553	535	626	1,605	2,845	433	321
1993 Average.....	2,350	1,915	4,403	509	594	503	643	1,679	2,890	456	344
1994 Average.....	2,521	2,375	5,058	536	650	536	671	1,746	2,939	450	365
1995 Average .....	2,768	2,489	5,400	646	715	562	695	1,805	2,990	585	392
1996 Average .....	3,104	2,568	5,822	709	756	570	795	1,837	3,131	623	396
1997 Average P.....	3,153	2,517	5,843	720	835	588	833	1,893	3,200	662	381

1/ North Sea includes the United Kingdom Offshore, Norway, Denmark, Netherlands Offshore, and Germany Offshore.

P=Preliminary.

Sources: See end of Section 4.

Table 4.1c World Crude Oil Production (Including Lease Condensate), 1970-1997  
 (Thousands Barrels per Day)

	Egypt	Gabon	India	Malaysia	Mexico	Oman	Russia	Former U.S.S.R.	Syria	United States	Other <sup>1</sup> / World	
1970 Average.....	326	109	144	18	487	332	--	6,985	80	9,637	1,529	45,886
1971 Average.....	293	115	143	69	486	294	--	7,475	100	9,463	1,518	48,518
1972 Average.....	231	125	156	93	505	282	--	7,890	124	9,441	1,592	51,138
1973 Average.....	165	150	147	91	465	293	--	8,324	105	9,208	1,667	55,679
1974 Average.....	150	202	156	81	571	290	--	8,912	124	8,774	1,711	55,716
1975 Average.....	235	223	165	98	705	343	--	9,523	170	8,375	1,636	52,828
1976 Average.....	330	223	175	165	831	366	--	10,060	175	8,132	1,620	57,344
1977 Average.....	415	222	199	184	981	341	--	10,603	188	8,245	1,655	59,707
1978 Average.....	485	209	226	217	1,209	315	--	11,105	170	8,707	1,706	60,158
1979 Average.....	525	203	245	283	1,461	295	--	11,384	166	8,552	1,821	62,674
1980 Average.....	595	175	182	283	1,936	282	--	11,706	164	8,597	1,842	59,600
1981 Average.....	598	151	325	264	2,313	319	--	11,850	166	8,572	1,859	56,076
1982 Average.....	670	156	390	306	2,748	324	--	11,912	160	8,649	1,892	53,481
1983 Average.....	727	157	480	365	2,689	375	--	11,972	167	8,688	1,946	53,256
1984 Average.....	822	157	519	440	2,780	414	--	11,861	170	8,879	2,015	54,489
1985 Average.....	887	172	620	440	2,745	498	--	11,585	178	8,971	2,124	53,982
1986 Average.....	813	166	630	504	2,435	560	--	11,895	194	8,680	2,166	56,227
1987 Average.....	896	155	609	497	2,548	582	--	12,050	230	8,349	2,120	56,666
1988 Average.....	848	159	635	540	2,512	617	--	12,053	265	8,140	2,235	58,737
1989 Average.....	865	208	700	585	2,520	641	--	11,715	340	7,613	2,249	59,863
1990 Average.....	873	270	660	619	2,553	685	--	10,975	388	7,355	2,253	60,566
1991 Average.....	874	294	615	646	2,680	700	--	9,992	492	7,417	2,274	60,207
1992 Average.....	881	298	561	653	2,669	740	7,632	--	481	7,171	3,228	60,212
1993 Average.....	890	313	534	640	2,673	776	6,730	--	554	6,847	3,280	60,238
1994 Average.....	896	329	590	645	2,685	810	6,135	--	560	6,662	3,382	60,992
1995 Average .....	920	365	703	682	2,618	851	5,995	--	575	6,560	3,410	62,331
1996 Average .....	922	368	651	695	2,855	883	5,850	--	604	6,465	3,509	64,054
1997 Average P....	874	368	675	746	3,023	887	5,884	--	561	6,452	3,706	66,317

1/ Other is a calculated total derived from the difference between "World" and the sum of production in "Total OPEC" (Table 1.1a) and all other countries listed (Tables 1.1b and 1.1c). The total "North Sea" is not subtracted from the world total, though Norway and the United Kingdom have been subtracted.

-- = Not applicable. P=Preliminary.

Sources: See end of Section 4.

Table 4.2 OPEC Crude Oil Production (Excluding Condensate), 1980-1997  
 (Thousand Barrels per Day)

	Algeria	Indo- nesia	Iran	Iraq	Kuwait <sup>1/</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>1/</sup>	United Arab Emirates	Vene- zuela	Total OPEC
1980 Average...	1,006	1,497	1,662	2,514	1,656	1,787	2,045	472	9,900	1,704	2,147	26,390
1981 Average...	802	1,513	1,380	1,000	1,125	1,140	1,423	405	9,815	1,469	2,083	22,155
1982 Average...	712	1,247	2,214	1,012	823	1,150	1,285	330	6,483	1,215	1,878	18,349
1983 Average...	648	1,245	2,440	1,005	1,064	1,105	1,231	295	5,086	1,109	1,768	16,996
1984 Average...	694	1,279	2,174	1,209	1,157	1,087	1,368	394	4,663	1,091	1,689	16,805
1985 Average...	702	1,181	2,250	1,433	1,023	1,059	1,475	301	3,388	1,133	1,558	15,503
1986 Average...	600	1,257	2,035	1,690	1,419	1,034	1,447	308	4,870	1,270	1,645	17,575
1987 Average...	648	1,189	2,298	2,079	1,585	972	1,291	293	4,265	1,441	1,587	17,648
1988 Average...	640	1,177	2,240	2,685	1,492	1,175	1,400	346	5,086	1,465	1,715	19,421
1989 Average...	690	1,231	2,810	2,897	1,783	1,150	1,666	380	5,064	1,783	1,747	21,201
1990 Average...	765	1,281	3,088	2,040	1,175	1,375	1,755	406	6,410	2,066	2,097	22,458
1991 Average...	800	1,410	3,312	305	190	1,483	1,832	395	8,115	2,326	2,338	22,506
1992 Average...	772	1,326	3,429	425	1,058	1,433	1,820	423	8,332	2,206	2,334	23,558
1993 Average...	747	1,327	3,540	512	1,852	1,361	1,835	413	8,198	2,109	2,410	24,304
1994 Average...	750	1,334	3,600	548	2,034	1,378	1,887	409	8,147	2,183	2,542	24,812
1995 Average ..	767	1,343	3,608	550	2,057	1,390	1,876	449	8,231	2,197	2,710	25,179
1996 Average ..	812	1,367	3,651	579	2,062	1,401	2,051	475	8,218	2,198	3,013	25,826
1997 Average P.	847	1,366	3,629	1,182	2,083	1,446	2,217	614	8,562	2,236	3,275	27,457

<sup>1/</sup> Includes about one-half of the production in the Kuwait-Saudi Arabia Neutral Zone from 1980 through July 1990 and beginning in June 1991. Kuwaiti Neutral Zone output was discontinued following Iraq's invasion of Kuwait on August 2, 1990, but was resumed in June 1991. From August 1990 through May 1991, all production in the Neutral Zone was included in the data for Saudi Arabia.

P=Preliminary.

Note: OPEC=Organization of Petroleum Exporting Countries. See Appendix A for Countries in this group.

Sources: See end of Section 4.

**Table 4.3 World Natural Gas Plant Liquids Production, 1970-1997**  
 (Thousand Barrels per Day)

	Algeria	Canada	Mexico	Saudi Arabia	Russia	Former USSR	United States <sup>1/</sup>	Persian Gulf <sup>2/</sup>	OAPEC <sup>3/</sup>	OPEC <sup>3/</sup>	World
1970 Average.....	3	200	58	50	--	120	1,660	119	137	205	2,383
1971 Average.....	4	234	59	50	--	135	1,693	138	147	243	2,508
1972 Average.....	4	293	61	55	--	155	1,744	155	159	275	2,676
1973 Average.....	9	314	75	90	--	170	1,738	191	196	324	2,785
1974 Average.....	12	314	80	130	--	190	1,688	231	219	347	2,789
1975 Average.....	20	309	80	140	--	205	1,633	246	252	372	2,790
1976 Average.....	24	289	95	185	--	220	1,603	291	313	442	2,865
1977 Average.....	19	290	105	215	--	235	1,618	335	366	482	2,982
1978 Average.....	25	281	115	250	--	255	1,567	410	447	566	3,078
1979 Average.....	30	331	150	303	--	270	1,584	458	535	637	3,285
1980 Average.....	36	331	193	369	--	285	1,573	534	618	732	3,444
1981 Average.....	49	330	241	433	--	300	1,609	599	691	825	3,625
1982 Average.....	58	318	255	430	--	315	1,550	612	721	842	3,626
1983 Average.....	56	309	265	330	--	330	1,559	552	655	780	3,635
1984 Average.....	105	336	257	355	--	340	1,630	604	761	869	3,869
1985 Average.....	120	337	271	375	--	350	1,609	645	808	892	3,938
1986 Average.....	120	328	352	385	--	440	1,551	700	860	969	4,150
1987 Average.....	140	367	338	418	--	430	1,595	721	900	1,006	4,279
1988 Average.....	120	381	370	499	--	450	1,625	808	979	1,077	4,481
1989 Average.....	130	410	384	503	--	425	1,546	851	1,041	1,188	4,502
1990 Average.....	130	426	428	620	--	425	1,559	930	1,107	1,281	4,632
1991 Average.....	140	431	457	680	--	420	1,659	931	1,113	1,299	4,827
1992 Average.....	140	460	454	713	230	--	1,697	1,003	1,185	1,364	4,975
1993 Average.....	145	506	459	704	220	--	1,736	1,040	1,238	1,435	5,181
1994 Average.....	140	529	461	698	200	--	1,727	1,071	1,267	1,465	5,293
1995 Average .....	145	581	447	701	180	--	1,762	1,106	1,301	1,506	5,485
1996 Average .....	150	596	423	697	185	--	1,830	1,082	1,295	1,501	5,582
1997 Average P....	145	631	386	723	200	--	1,817	1,108	1,310	1,488	5,571

<sup>1/</sup> U.S. geographic coverage is the 50 States and the District of Columbia.

<sup>2/</sup> See Appendix A for countries in this group.

<sup>3/</sup> OAPEC=Organization of Arab Petroleum Exporting Countries. OPEC=Organization of Petroleum Exporting Countries.

See Appendix A for countries in these groups.

P=Preliminary.

Sources: See end of Section 4.

**Table 4.4 World Oil Supply, 1970-1997**  
 (Thousand Barrels per Day)

	United States <sup>1/</sup>	Persian Gulf <sup>2/</sup>	OAPEC <sup>3/</sup>	OPEC <sup>3/</sup>	World
1970 Average.....	11,673	13,541	14,571	23,567	48,986
1971 Average.....	11,554	15,940	15,427	25,514	51,766
1972 Average.....	11,601	17,734	16,451	27,228	54,574
1973 Average.....	11,428	20,895	18,656	31,015	59,300
1974 Average.....	10,978	21,550	18,399	30,762	59,391
1975 Average.....	10,505	19,223	16,831	27,218	56,511
1976 Average.....	10,251	21,847	19,563	30,841	61,121
1977 Average.....	10,437	22,098	20,372	31,443	63,665
1978 Average.....	10,820	21,067	19,819	30,120	64,225
1979 Average.....	10,707	21,569	22,575	31,300	66,973
1980 Average.....	10,809	18,541	20,715	27,419	64,152
1981 Average.....	10,739	15,894	17,619	23,393	60,761
1982 Average.....	10,783	12,815	13,786	19,702	58,225
1983 Average.....	10,788	11,676	12,416	18,352	58,054
1984 Average.....	11,107	11,433	12,619	18,389	59,644
1985 Average.....	11,192	10,320	11,498	17,151	59,262
1986 Average.....	10,905	12,441	13,653	19,310	61,769
1987 Average.....	10,648	12,869	13,992	19,589	62,427
1988 Average.....	10,473	14,310	15,662	21,465	64,705
1989 Average.....	9,880	15,733	16,658	23,323	65,892
1990 Average.....	9,677	16,249	17,232	24,536	66,754
1991 Average.....	9,883	15,704	16,747	24,625	66,632
1992 Average.....	9,768	17,010	17,871	25,818	66,960
1993 Average.....	9,602	17,792	18,505	26,610	67,361
1994 Average.....	9,413	18,072	18,745	27,031	68,250
1995 Average .....	9,400	18,351	19,069	27,566	69,860
1996 Average .....	9,445	18,486	19,259	28,321	71,764
1997 Average P.....	9,461	19,641	20,407	29,905	74,091

1/ U.S. geographic coverage is the 50 States and the District of Columbia.

2/ See Appendix A for countries in this group.

3/ OAPEC=Organization of Arab Petroleum Exporting Countries. OPEC=Organization of Petroleum Exporting Countries.  
 See Appendix A for countries in these groups.

P=Preliminary.

Note: Oil Supply includes crude oil, natural gas plant liquids, other liquids, and refinery gain. See Explanatory Note 1 in Appendix B.

Sources: See end of Section 4.

Table 4.5 Oil Stocks in OECD Countries, End of Year  
(Million Barrels)

		France	Italy	Germany <sup>1/</sup>	United Kingdom	OECD Europe <sup>2/</sup>	United States <sup>3/</sup>	Canada	Japan	Other <sup>4/</sup>	Total OECD
1973	December.....	201	152	181	156	1,070	1,008	140	303	67	2,588
1974	December.....	249	167	213	191	1,227	1,074	145	370	64	2,880
1975	December.....	225	143	187	165	1,154	1,133	174	375	67	2,903
1976	December.....	234	143	208	165	1,205	1,112	153	380	68	2,918
1977	December.....	239	161	225	148	1,268	1,312	167	409	68	3,224
1978	December.....	201	154	238	157	1,219	1,278	144	413	68	3,122
1979	December.....	226	163	272	169	1,353	1,341	150	460	75	3,379
1980	December.....	243	170	319	168	1,464	1,392	164	495	72	3,587
1981	December.....	214	167	297	143	1,337	1,484	161	482	67	3,531
1982	December.....	193	179	272	125	1,258	1,430	136	484	68	3,376
1983	December.....	153	149	249	118	1,142	1,454	121	470	68	3,255
1984	December.....	152	159	239	112	1,130	1,556	128	479	69	3,362
1985	December.....	139	157	233	123	1,092	1,519	113	494	66	3,284
1986	December.....	127	155	252	124	1,133	1,593	111	509	72	3,418
1987	December.....	127	169	259	121	1,130	1,607	126	540	71	3,474
1988	December.....	140	155	266	112	1,118	1,597	116	538	71	3,440
1989	December.....	138	164	271	118	1,133	1,581	114	577	71	3,476
1990	December.....	140	172	265	112	1,163	1,621	121	590	73	3,568
1991	December.....	153	160	288	119	1,181	1,617	119	606	65	3,588
1992	December.....	146	174	310	113	1,219	1,592	107	603	67	3,588
1993	December.....	158	163	309	118	1,221	1,647	105	618	69	3,661
1994	December .....	158	164	312	115	1,240	1,653	119	645	69	3,726
1995	December .....	159	162	301	107	1,228	1,563	109	630	71	3,601
1996	December .....	158	152	300	108	1,256	1,507	103	651	74	3,591
1997	December P....	164	147	298	105	1,256	1,560	115	685	74	3,689

1/ Data through December 1990 are for the former West Germany. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ U.S. geographic coverage is the 50 States and the District of Columbia. In the United States in January 1975, 1981, and 1983, numerous respondents were added to bulk terminal and pipeline surveys affecting subsequent stocks reported. Using the new basis, the end-of-year U.S. stocks, in million barrels, would have been 1,121 in 1974, 1,425 in 1980, and 1,461 in 1982.

4/ "Other" consists of Australia, New Zealand, and the U.S. Territories.

P=Preliminary.

Note: Oil Stocks - See Explanatory Note 2 in Appendix B.

Sources: See end of Section 4.

Table 4.6 World Oil Demand, 1970-1997  
(Thousand Barrels per Day)

	France	Italy	Germany <sup>1/</sup>	United Kingdom	OECD Europe <sup>2/</sup>	United States <sup>3/</sup>	Canada	Japan	Other <sup>4/</sup>	OECD Excluding East Germany	OECD Including East Germany	World Total	
1970 Average...	1,937	1,710	2,607	2,096	12,404	14,697	1,516	3,817	836	33,270	223	33,493	46,808
1971 Average...	2,115	1,838	2,702	2,141	13,005	15,213	1,565	4,142	831	34,755	238	34,993	49,416
1972 Average...	2,322	1,947	2,859	2,284	13,934	16,367	1,664	4,363	948	37,275	270	37,545	53,094
1973 Average...	2,601	2,068	3,055	2,341	14,925	17,308	1,729	4,949	988	39,900	282	40,182	57,237
1974 Average...	2,447	2,004	2,748	2,210	13,988	16,653	1,779	4,864	1,095	38,379	307	38,686	56,677
1975 Average...	2,252	1,855	2,650	1,911	13,217	16,322	1,779	4,621	1,041	36,980	307	37,287	56,198
1976 Average...	2,420	1,971	2,877	1,892	14,124	17,461	1,818	4,837	1,119	39,358	329	39,687	59,673
1977 Average...	2,294	1,897	2,865	1,905	13,916	18,431	1,850	4,880	1,160	40,237	347	40,584	61,826
1978 Average...	2,408	1,952	2,927	1,938	14,290	18,847	1,902	4,945	1,204	41,187	363	41,550	64,158
1979 Average...	2,463	2,039	3,003	1,971	14,667	18,513	1,971	5,050	1,178	41,379	369	41,748	65,220
1980 Average...	2,256	1,934	2,707	1,725	13,634	17,056	1,873	4,960	1,072	38,595	375	38,970	63,067
1981 Average...	2,023	1,874	2,449	1,590	12,515	16,058	1,768	4,848	1,080	36,269	355	36,624	60,903
1982 Average...	1,880	1,781	2,372	1,590	12,053	15,296	1,578	4,582	1,008	34,517	371	34,888	59,503
1983 Average...	1,835	1,750	2,324	1,531	11,765	15,231	1,448	4,395	953	33,793	336	34,129	58,739
1984 Average...	1,754	1,646	2,322	1,849	11,736	15,726	1,472	4,576	990	34,500	340	34,840	59,831
1985 Average...	1,775	1,717	2,338	1,634	11,681	15,726	1,504	4,384	976	34,271	362	34,633	60,091
1986 Average...	1,772	1,738	2,498	1,649	12,102	16,281	1,506	4,439	951	35,279	362	35,641	61,759
1987 Average...	1,789	1,855	2,424	1,603	12,255	16,665	1,548	4,484	959	35,911	342	36,253	62,999
1988 Average...	1,797	1,836	2,422	1,697	12,427	17,283	1,693	4,752	939	37,093	322	37,415	64,819
1989 Average...	1,857	1,930	2,280	1,738	12,531	17,325	1,733	4,983	998	37,570	300	37,871	65,917
1990 Average...	1,818	1,872	2,382	1,752	12,629	16,988	1,690	5,140	1,027	37,475	282	37,758	65,985
1991 Average...	1,935	1,863	2,828	1,801	13,391	16,714	1,622	5,284	1,056	--	--	38,067	66,577
1992 Average...	1,926	1,937	2,843	1,803	13,605	17,033	1,643	5,446	1,041	--	--	38,768	66,742
1993 Average...	1,875	1,852	2,900	1,815	13,523	17,237	1,688	5,401	1,118	--	--	38,967	67,043
1994 Average...	1,833	1,841	2,879	1,837	13,597	17,718	1,727	5,674	1,174	--	--	39,890	68,313
1995 Average...	1,896	2,048	2,875	1,845	14,120	17,725	1,755	5,711	1,243	--	--	40,553	69,926
1996 Average...	1,935	2,058	2,911	1,845	14,269	18,309	1,797	5,867	1,191	--	--	41,432	71,524
1997 Average P.	1,955	2,045	R2,903	1,799	R14,433	18,620	R1,857	5,711	1,138	--	--	R41,760	R73,207

1/ Data through 1990 are for the former West Germany. Beginning with January 1991, the data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ U.S. geographic coverage is the 50 States and the District of Columbia.

4/ "Other" consists of Australia, New Zealand, and the U.S. Territories.

P=Preliminary. --=Not Applicable. R=Revised.

Note: The term Demand is used interchangeably with Consumption and Petroleum Products Supplied. See Appendix C for definition.

Sources: See end of Section 4.

Table 4.7 OECD Total Net Imports, 1987-1997  
(Million Barrels per Day)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Average										
Total.....	18.008	18.706	20.082	20.456	20.414	20.783	21.226	21.133	20.717	21.455	22.080
United States <sup>1/</sup> .....	5.914	6.587	7.202	7.161	6.626	6.938	7.618	8.054	7.886	8.498	9.158
Canada.....	-.358	-.585	-.462	-.425	-.479	-.546	-.586	-.623	-.756	-.803	-.819
OECD Europe <sup>2/</sup> .....	7.742	7.774	7.994	8.210	8.588	8.459	8.127	7.355	7.226	7.339	7.340
Main European Importers											
France.....	1.742	1.718	1.711	1.750	1.869	1.784	1.761	1.615	1.721	1.738	1.769
Germany <sup>3/</sup> .....	2.281	2.279	2.112	2.202	2.664	2.739	2.723	2.731	2.699	2.793	2.804
Italy.....	1.718	1.590	1.716	1.788	1.769	1.839	1.747	1.778	1.820	1.791	1.795
Netherlands.....	.562	.646	.635	.677	.690	.713	.688	.720	.700	.763	.773
Spain.....	.803	.869	.952	.950	.951	.998	1.066	1.119	1.202	1.183	1.273
European Net Exporters											
Norway.....	-.866	-1.036	-1.420	-1.543	-1.825	-2.102	-2.254	-2.586	-2.794	-3.150	-3.176
United Kingdom.....	-1.015	-.760	-.200	-.214	-.158	-.221	-.355	-.850	-.969	-.839	-.968
Smaller European Importers											
Austria.....	.194	.185	.191	.201	.212	.209	.205	.210	.194	.213	.223
Belgium.....	.443	.451	.454	.442	.506	.517	.503	.517	.495	.572	.590
Denmark.....	.122	.107	.078	.063	.048	.032	.023	.027	.039	.028	-.006
Ireland.....	.081	.076	.079	.095	.094	.097	.102	.109	.116	.124	.133
Finland.....	.242	.200	.220	.208	.211	.188	.182	.234	.145	.180	.186
Greece.....	.230	.242	.252	.273	.297	.326	.327	.292	.343	.350	.361
Iceland.....	.013	.012	.011	.011	.012	.011	.014	.015	.015	.015	.016
Luxembourg.....	.028	.028	.031	.034	.039	.040	.039	.040	.036	.039	.040
Portugal.....	.199	.198	.246	.250	.258	.279	.272	.270	.291	.274	.296
Sweden.....	.309	.313	.290	.324	.312	.320	.335	.362	.356	.405	.371
Switzerland.....	.254	.258	.254	.273	.273	.277	.250	.262	.248	.260	.269
Turkey.....	.402	.397	.384	.425	.366	.413	.500	.490	.569	.600	.589
Japan.....	4.418	4.680	5.035	5.239	5.286	5.464	5.467	5.766	5.716	5.790	5.819
Other OECD.....	.291	.250	.313	.270	.392	.467	.599	.580	.644	.632	.582

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ Data through 1990 are for the former West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports.

•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day.

•Data for 1997 are preliminary.

Sources: See end of Section 4.

Table 4.8 OECD Imports from OPEC, 1987-1997  
(Million Barrels per Day)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Average										
Total.....	12.327	13.049	14.521	15.576	15.360	15.567	16.018	15.765	15.469	15.630	16.540
United States <sup>1/</sup> .....	2.988	3.439	3.986	4.172	3.918	3.888	4.103	4.036	3.979	4.194	4.542
Canada.....	.154	.161	.205	.199	.210	.210	.268	.285	.257	.261	.312
OECD Europe <sup>2/</sup> .....	5.597	5.842	6.188	6.633	6.728	6.758	6.794	6.385	6.154	6.053	6.260
Main European Importers											
France.....	.684	.737	.875	1.101	1.021	.932	1.006	.956	.911	.897	.899
Germany <sup>3/</sup> .....	.675	.761	.739	.771	.859	.957	.948	.838	.711	.660	.645
Italy.....	1.307	1.191	1.260	1.375	1.393	1.343	1.222	1.117	1.203	1.244	1.353
Netherlands.....	.767	.850	.892	.850	.900	.914	.982	.906	.791	.779	.774
Spain.....	.543	.604	.686	.652	.700	.632	.582	.668	.781	.775	.789
European Net Exporters											
Norway.....	.002	.002	.003	.007	.014	.004	.005	.003	.003	.001	.003
United Kingdom.....	.277	.322	.342	.406	.377	.390	.439	.306	.254	.234	.199
Smaller European Importers											
Austria.....	.087	.082	.086	.097	.108	.115	.128	.119	.057	.023	.130
Belgium.....	.257	.302	.353	.313	.362	.359	.359	.284	.276	.284	.292
Denmark.....	.053	.067	.069	.044	.006	.001	.006	.008	.022	.027	.031
Ireland.....	.001	-	-	.000	.000	.000	.000	.000	.000	.000	.000
Finland.....	.023	.011	.013	.013	.029	.033	.007	.004	.004	.001	.006
Greece.....	.279	.233	.244	.340	.298	.346	.303	.266	.263	.280	.317
Portugal.....	.101	.118	.156	.166	.139	.152	.166	.227	.209	.177	.188
Sweden.....	.062	.074	.064	.073	.105	.116	.123	.126	.109	.091	.096
Switzerland.....	.069	.051	.021	.036	.052	.051	.063	.082	.083	.098	.096
Turkey.....	.411	.439	.384	.388	.365	.412	.452	.475	.477	.483	.442
Japan.....	3.198	3.309	3.788	4.062	4.026	4.198	4.245	4.495	4.467	4.470	4.699
Other OECD.....	.389	.298	.355	.510	.478	.512	.609	.563	.612	.653	.727

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ Data through 1990 are for the former West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in these groups. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

Table 4.9 OECD Imports from Persian Gulf, 1987-1997  
(Million Barrels per Day)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Average										
<b>Imports from Persian Gulf</b>											
Total.....	7.392	7.941	9.121	9.667	9.249	9.456	10.029	9.609	9.310	9.215	9.952
United States <sup>1/</sup> ....	1.072	1.526	1.857	1.961	1.835	1.774	1.775	1.722	1.563	1.594	1.747
Canada.....	.054	.056	.069	.081	.084	.092	.105	.119	.070	.111	.120
OECD Europe <sup>2/</sup> ....	3.330	3.428	3.754	3.908	3.660	3.666	4.048	3.506	3.365	3.171	3.469
<b>Main European Importers</b>											
France.....	.459	.484	.647	.864	.708	.640	.757	.651	.647	.573	.617
Germany <sup>3/</sup> .....	.187	.197	.216	.217	.227	.215	.250	.217	.172	.145	.157
Italy.....	.782	.643	.619	.626	.595	.573	.548	.430	.494	.502	.583
Netherlands.....	.516	.587	.663	.647	.609	.650	.744	.662	.563	.566	.584
Spain.....	.295	.306	.352	.291	.281	.231	.287	.275	.324	.304	.359
<b>European Net Exporters</b>											
Norway.....	.002	-	-	.000	.011	.000	.000	.000	.000	.000	.000
United Kingdom...	.164	.212	.240	.250	.222	.220	.303	.174	.135	.102	.094
<b>Smaller European Importers</b>											
Austria.....	.026	.025	.022	.016	.021	.031	.036	.038	.035	.004	.045
Belgium.....	.162	.224	.277	.250	.279	.292	.291	.232	.252	.263	.259
Denmark.....	.047	.063	.067	.043	.004	.000	.002	.000	.000	.000	.002
Finland.....	.022	.011	.012	.011	.021	.023	.002	.002	.002	.000	.000
Greece.....	.211	.146	.181	.268	.219	.291	.253	.214	.223	.235	.282
Portugal.....	.069	.066	.085	.073	.067	.074	.050	.117	.107	.083	.106
Sweden..	.029	.045	.043	.039	.064	.068	.088	.076	.068	.067	.073
Switzerland.....	.008	.007	.007	.007	.007	.007	.008	.012	.007	.006	.008
Turkey.....	.348	.411	.323	.307	.324	.349	.429	.405	.336	.320	.301
Japan.....	2.637	2.691	3.173	3.394	3.370	3.586	3.721	3.946	3.979	4.025	4.304
Other OECD.....	.299	.241	.267	.322	.300	.338	.381	.316	.334	.313	.311

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ Data through 1990 are for the former West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •"Persian Gulf" consists of Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day.

•Data for 1997 are preliminary.

Sources: See end of Section 4.

Table 4.10 United States--Net Oil Imports, 1987-1997  
(Million Barrels per Day)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Average										
Total Net Imports..	5.914	6.587	7.202	7.161	6.626	6.938	7.618	8.054	7.886	8.498	9.158
Imports from OPEC <sup>1/</sup>	2.988	3.439	3.986	4.172	3.918	3.888	4.103	4.036	3.979	4.194	4.542
Imports from Persian Gulf <sup>2/</sup>											
Total.....	1.072	1.526	1.857	1.961	1.835	1.774	1.775	1.722	1.563	1.594	1.747
Bahrain.....	-.001	.000	-.001	-.001	-.001	-.002	-.002	-.002	-.003	-.002	-.002
Iran.....	.098	.000	.000	.000	.032	.000	.000	.000	.000	.000	.000
Iraq.....	.083	.343	.449	.518	.000	.000	.000	.000	.000	.001	.089
Kuwait.....	.082	.092	.157	.086	.006	.051	.353	.312	.218	.236	.253
U.A.E.....	.059	.028	.027	.016	.001	.004	.009	.011	.004	-.003	-.003
Qatar.....	.000	.000	.002	.004	.000	.001	.001	.000	.000	.000	.004
Saudi Arabia.....	.751	1.063	1.224	1.339	1.797	1.720	1.414	1.402	1.344	1.363	1.406
Imports from OPEC-Africa											
Total.....	.830	.918	1.084	1.080	.956	.876	.956	.880	.859	.872	.979
Algeria.....	.295	.300	.269	.280	.253	.196	.220	.243	.234	.256	.285
Libya.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Nigeria.....	.535	.618	.815	.800	.703	.680	.736	.637	.625	.616	.694
Imports from OPEC-South America											
Total.....	.801	.790	.861	1.016	1.020	1.161	1.295	1.322	1.468	1.667	1.758
Venezuela.....	.801	.790	.861	1.016	1.020	1.161	1.295	1.322	1.468	1.667	1.758
Imports from OPEC-Far East											
Total.....	.284	.205	.182	.113	.106	.075	.074	.109	.087	.058	.057
Indonesia.....	.284	.205	.182	.113	.106	.075	.074	.109	.087	.058	.057

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •U.S. geographic coverage is the 50 States and District of Columbia. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

Table 4.11 Japan--Net Oil Imports, 1987-1997  
(Million Barrels per Day)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Average										
Total Net Imports..	4.418	4.680	5.035	5.239	5.286	5.464	5.467	5.766	5.716	5.790	5.819
Imports from OPEC <sup>1/</sup>	3.198	3.309	3.788	4.062	4.026	4.198	4.245	4.495	4.467	4.470	4.699
Imports from Persian Gulf <sup>2/</sup>											
Total.....	2.637	2.691	3.173	3.394	3.370	3.586	3.721	3.946	3.979	4.025	4.304
Bahrain.....	.037	.036	.042	.037	.037	.029	.025	.028	.029	.033	.023
Iran.....	.230	.187	.291	.385	.383	.362	.384	.459	.399	.451	.461
Iraq.....	.105	.173	.219	.146	.000	.000	.000	.000	.000	.000	.015
Kuwait.....	.347	.341	.458	.291	.014	.220	.368	.430	.501	.500	.557
U.A.E.....	.773	.822	.929	1.032	1.285	1.256	1.287	1.398	1.420	1.396	1.441
Qatar.....	.139	.203	.250	.263	.285	.300	.330	.328	.335	.335	.364
Saudi Arabia.....	1.005	.930	.984	1.240	1.367	1.420	1.327	1.303	1.296	1.310	1.441
Imports from OPEC-Africa											
Total.....	.023	.044	.015	.011	.011	.007	.008	.017	.026	.032	.036
Algeria.....	.023	.044	.015	.010	.010	.007	.008	.012	.011	.012	.014
Nigeria.....	-	-	-	.001	.001	.000	.000	.005	.016	.020	.023
Imports from OPEC-South America											
Total.....	.012	.011	.011	.011	.010	.010	.009	.009	.002	.003	.003
Venezuela.....	.012	.011	.011	.011	.010	.010	.009	.009	.002	.003	.003
Imports from OPEC-Far East											
Total.....	.563	.599	.631	.682	.673	.624	.533	.551	.488	.442	.380
Indonesia.....	.563	.599	.631	.682	.673	.624	.533	.551	.488	.442	.380

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include Crude Oil, Natural Gas Liquids, and Refined Products, and are on a direct basis. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

Table 4.12 OECD Europe--Net Oil Imports, 1987-1997  
(Million Barrels per Day)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Average										
Total Net Imports..	7.742	7.774	7.994	8.210	8.588	8.459	8.127	7.355	7.226	7.339	7.340
Imports from OPEC <sup>1/</sup>	5.597	5.842	6.188	6.633	6.728	6.758	6.794	6.385	6.154	6.053	6.260
Imports from Persian Gulf <sup>2/</sup>											
Total.....	3.330	3.428	3.754	3.908	3.660	3.666	4.048	3.506	3.365	3.171	3.469
Bahrain.....	.001	.009	.005	.020	.002	.003	.004	.003	.000	.001	.001
Iran.....	.732	.850	1.076	1.190	1.132	1.113	1.253	1.074	1.149	1.059	.942
Iraq.....	.905	.959	.897	.591	.000	.000	.001	.000	.000	.006	.336
Kuwait.....	.469	.474	.452	.346	.019	.142	.461	.302	.269	.288	.249
U.A.E.....	.206	.134	.214	.446	.281	.199	.092	.067	.011	.004	.009
Qatar.....	.040	.021	.024	.026	.009	.006	.000	.000	.002	.002	.000
Saudi Arabia.....	.978	.981	1.086	1.290	2.217	2.203	2.237	2.060	1.933	1.811	1.932
Imports from OPEC-Africa											
Total.....	2.058	2.198	2.224	2.509	2.818	2.818	2.491	2.644	2.500	2.644	2.569
Algeria.....	.627	.646	.648	.683	.757	.772	.693	.690	.724	.746	.681
Libya.....	.962	1.071	1.044	1.267	1.332	1.361	1.193	1.233	1.201	1.204	1.268
Nigeria.....	.469	.481	.532	.559	.729	.686	.605	.721	.575	.694	.620
Imports from OPEC-South America											
Total.....	.208	.220	.212	.227	.249	.268	.240	.219	.273	.206	.206
Venezuela.....	.208	.220	.212	.227	.249	.268	.240	.219	.273	.206	.206
Imports from OPEC-Far East											
Total.....	.002	.005	.004	.008	.002	.009	.019	.019	.017	.033	.017
Indonesia.....	.002	.005	.004	.008	.002	.009	.019	.019	.017	.033	.017

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •"OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom. •Negative numbers represent net exports.

•A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

Table 4.13 France--Net Oil Imports, 1987-1997  
(Million Barrels per Day)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Average										
Total Net Imports..	1.742	1.718	1.711	1.750	1.869	1.784	1.761	1.615	1.721	1.738	1.769
Imports from OPEC <sup>1/</sup>	.684	.737	.875	1.101	1.021	.932	1.006	.956	.911	.897	.899
Imports from Persian Gulf <sup>2/</sup>											
Total.....	.459	.484	.647	.864	.708	.640	.757	.651	.647	.573	.617
Bahrain.....	-	.007	.002	.011	.000	.001	.002	.000	.000	.001	.000
Iran.....	.088	.012	.158	.182	.171	.151	.243	.156	.208	.172	.127
Iraq.....	.151	.143	.128	.062	.000	.000	.000	.000	.000	.000	.078
Kuwait.....	.044	.017	.021	.015	.011	.029	.032	.016	.022	.017	.017
U.A.E.....	-	.017	.040	.233	.064	.033	.025	.003	.002	.001	.000
Qatar.....	.002	.017	.009	.022	.003	.002	.000	.000	.000	.000	.000
Saudi Arabia.....	.175	.271	.288	.339	.459	.424	.454	.477	.416	.381	.394
Imports from OPEC-Africa											
Total.....	.212	.249	.218	.233	.296	.281	.242	.301	.262	.323	.282
Algeria.....	.072	.079	.089	.092	.107	.105	.066	.089	.103	.105	.131
Libya.....	.064	.090	.065	.079	.104	.087	.063	.059	.043	.051	.060
Nigeria.....	.076	.079	.064	.062	.084	.090	.112	.153	.115	.168	.091
Imports from OPEC-South America											
Total.....	.012	.011	.012	.015	.017	.011	.010	.003	.002	.001	.000
Venezuela.....	.012	.011	.012	.015	.017	.011	.010	.003	.002	.001	.000
Imports from OPEC-Far East											
Total.....	-	-	.000	.000	.001	.001	.000	.000	.000	.000	.000
Indonesia.....	-	-	.000	.000	.001	.001	.000	.000	.000	.000	.000

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include Crude Oil, Natural Gas Liquids, and Refined Products, and are on a direct basis. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

Table 4.14 Germany--Net Oil Imports, 1987-1997  
(Million Barrels per Day)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Average										
Total Net Imports..	2.281	2.279	2.112	2.202	2.664	2.739	2.723	2.731	2.699	2.793	2.804
Imports from OPEC <sup>1/</sup>	.675	.761	.739	.771	.859	.957	.948	.838	.711	.660	.645
Imports from Persian Gulf <sup>2/</sup>											
Total.....	.187	.197	.216	.217	.227	.215	.250	.217	.172	.145	.157
Bahrain.....	-	-	-	-	-	-	.000	.001	.000	.000	.000
Iran.....	.020	.051	.041	.055	.053	.021	.053	.040	.031	.018	.023
Iraq.....	.052	.032	.009	.004	.000	.000	.000	.000	.000	.000	.001
Kuwait.....	.017	.013	.022	.013	.000	.009	.022	.026	.015	.016	.012
U.A.E.....	.024	.006	.023	.016	.012	.002	.002	.001	.000	.000	.001
Qatar.....	.001	.001	.002	.003	.002	.001	.000	.000	.000	.000	.000
Saudi Arabia.....	.072	.095	.119	.125	.161	.182	.173	.149	.125	.111	.120
Imports from OPEC-Africa											
Total.....	.401	.472	.436	.465	.524	.614	.594	.543	.461	.462	.442
Algeria.....	.146	.141	.106	.098	.126	.183	.195	.161	.135	.125	.095
Libya.....	.160	.237	.235	.244	.262	.252	.244	.244	.234	.258	.246
Nigeria.....	.095	.095	.095	.123	.136	.179	.154	.139	.093	.079	.101
Imports from OPEC-South America											
Total.....	.086	.091	.086	.088	.107	.128	.105	.079	.078	.053	.046
Venezuela.....	.086	.091	.086	.088	.107	.128	.105	.079	.078	.053	.046
Imports from OPEC-Far East											
Total.....	.002	-	-	.002	.000	.000	.000	.000	.000	.000	.000
Indonesia.....	.002	-	-	.002	.000	.000	.000	.000	.000	.000	.000

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •Data through 1990 are for the former West Germany. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

Table 4.15 Italy--Net Oil Imports, 1987-1997  
(Million Barrels per Day)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Average										
Total Net Imports..	1.718	1.590	1.716	1.788	1.769	1.839	1.747	1.778	1.820	1.791	1.795
Imports from OPEC <sup>1/</sup>	1.307	1.191	1.260	1.375	1.393	1.343	1.222	1.117	1.203	1.244	1.353
Imports from Persian Gulf <sup>2/</sup>											
Total.....	.782	.643	.619	.626	.595	.573	.548	.430	.494	.502	.583
Bahrain.....	.000	-	.001	.000	.001	.001	.000	.000	.000	.001	.000
Iran.....	.141	.093	.124	.192	.231	.239	.221	.143	.233	.263	.258
Iraq.....	.167	.198	.138	.079	.000	.000	.000	.000	.000	.000	.033
Kuwait.....	.142	.118	.093	.063	.000	.007	.012	.001	.000	.000	.000
U.A.E.....	.109	.060	.085	.075	.044	.013	.002	.000	.000	.000	.000
Qatar.....	.029	.002	.008	.000	.004	.001	.000	.000	.002	.002	.000
Saudi Arabia.....	.194	.171	.171	.216	.315	.312	.313	.286	.260	.236	.291
Imports from OPEC-Africa											
Total.....	.489	.516	.626	.740	.793	.757	.653	.660	.679	.714	.745
Algeria.....	.109	.108	.150	.155	.155	.140	.096	.099	.100	.110	.086
Libya.....	.342	.389	.430	.556	.581	.584	.542	.543	.562	.580	.609
Nigeria.....	.038	.019	.045	.029	.057	.034	.015	.018	.017	.025	.050
Imports from OPEC-South America											
Total.....	.037	.029	.014	.007	.004	.005	.002	.007	.014	.008	.012
Venezuela.....	.037	.029	.014	.007	.004	.005	.002	.007	.014	.008	.012
Imports from OPEC-Far East											
Total.....	-	.002	.002	.003	.001	.009	.019	.019	.015	.021	.014
Indonesia.....	-	.002	.002	.003	.001	.009	.019	.019	.015	.021	.014

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.

2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: •Imports include Crude Oil, Natural Gas Liquids, and Refined Products, and are on a direct basis. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

Table 4.16 OECD Imports from Iraq, 1987-1997  
(Million Barrels per Day)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Average										
Total.....	1.103	1.489	1.581	1.276	0.000	0.000	0.001	0.000	0.000	0.007	0.458
United States <sup>1</sup> /....	.083	.343	.449	.518	.000	.000	.000	.000	.000	.001	.089
Canada.....	.010	.001	.013	.011	.000	.000	.000	.000	.000	.000	.014
OECD Europe <sup>2</sup> /....	.905	.959	.897	.591	.000	.000	.001	.000	.000	.006	.336
Main European Importers											
France.....	.151	.143	.128	.062	.000	.000	.000	.000	.000	.000	.078
Germany <sup>3</sup> /.....	.052	.032	.009	.004	.000	.000	.000	.000	.000	.000	.001
Italy.....	.167	.198	.138	.079	.000	.000	.000	.000	.000	.000	.033
Netherlands.....	.034	.039	.101	.117	.000	.000	.000	.000	.000	.000	.024
Spain.....	.080	.092	.109	.063	.000	.000	.000	.000	.000	.002	.074
European Net Exporters											
United Kingdom....	.082	.070	.034	.027	.000	.000	.000	.000	.000	.000	.000
Smaller European Importers											
Austria.....	.015	.007	.000	.000	.000	.000	.001	.000	.000	.000	.017
Belgium.....	.049	.037	.047	.029	.000	.000	.000	.000	.000	.000	.010
Denmark.....	.001	-	-	.000	.000	.000	.000	.000	.000	.000	.000
Greece.....	.065	.059	.052	.044	.000	.000	.000	.000	.000	.000	.013
Portugal.....	.019	.029	.024	.019	.000	.000	.000	.000	.000	.000	.011
Sweden.....	.003	.003	.005	.000	.000	.000	.000	.000	.000	.000	.000
Switzerland.....	.000	-	.000	.000	.000	.000	.000	.000	.000	.000	.001
Turkey.....	.188	.250	.250	.146	.000	.000	.000	.000	.000	.003	.074
Japan.....	.105	.173	.219	.146	.000	.000	.000	.000	.000	.000	.015
Other OECD.....	.000	.013	.003	.011	.000	.000	.000	.000	.000	.000	.005

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ Data through 1990 are for the former West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

Table 4.17 OECD Imports from Kuwait, 1987-1997  
(Million Barrels per Day)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	Average										
Total.....	0.925	0.936	1.084	0.740	0.039	0.414	1.191	1.081	0.997	1.034	1.065
United States <sup>1/</sup> .....	.082	.092	.157	.086	.006	.051	.353	.312	.218	.236	.253
Canada.....	-	-	-	.004	-	-	.000	.027	.000	.000	.000
OECD Europe <sup>2/</sup> .....	.469	.474	.452	.346	.019	.142	.461	.302	.269	.288	.249
Main European Importers											
France.....	.044	.017	.021	.015	.011	.029	.032	.016	.022	.017	.017
Germany <sup>3/</sup> .....	.017	.013	.022	.013	.000	.009	.022	.026	.015	.016	.012
Italy.....	.142	.118	.093	.063	.000	.007	.012	.001	.000	.000	.000
Netherlands.....	.150	.189	.194	.151	.002	.052	.254	.179	.176	.193	.168
Spain.....	.015	.030	.015	.010	.003	.000	.015	.000	.000	.000	.000
European Net Exporters											
Norway.....	-	-	-	-	-	-	.000	.000	.000	.000	.000
United Kingdom.....	.011	.006	.006	.045	.002	.027	.049	.058	.039	.032	.031
Smaller European Importers											
Austria.....	-	.004	.002	.000	.000	.000	.000	.000	.000	.000	.000
Belgium.....	.000	-	-	.000	.001	.006	.056	.005	.004	.015	.004
Denmark.....	.045	.060	.066	.034	.000	.000	.000	.000	.000	.000	.002
Finland.....	-	-	-	-	.000	-	-	-	-	-	-
Greece.....	.030	.015	.009	.000	.000	.002	.005	.001	.000	.000	.000
Portugal.....	.001	.003	.003	.002	.000	.000	.000	.000	.000	.000	.000
Sweden.....	-	-	.001	.001	.000	.000	.002	.000	.000	.000	.000
Switzerland.....	-	-	-	-	.000	.000	.000	.000	.000	.000	.000
Turkey.....	.013	.019	.019	.011	.000	.010	.016	.016	.014	.015	.014
Japan.....	.347	.341	.458	.291	.014	.220	.368	.430	.501	.500	.557
Other OECD.....	.026	.029	.017	.013	.000	.000	.009	.011	.009	.010	.006

1/ U.S. geographic coverage is the 50 States and District of Columbia.

2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.

3/ Data through 1990 are for the former West Germany.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

## Sources for Section 4 (Historical Oil Data)

### Crude Oil Production, Natural Gas Liquids Production, Other Liquids, and Refinery Gain

United States: • Energy Information Administration (EIA), Petroleum Supply Annual 1997; • Bureau of Mines, Mineral Industry Surveys, Petroleum Statement, Annual, various issues.

Other Countries: • EIA, International Energy Annual, various issues. • EIA, International Petroleum Annual, 1978. • United Nations, Yearbook of World Energy Statistics, 1979. Refinery Gains: National Petroleum Council, U.S. Petroleum Refinery Study, October 1986.

### Oil Stocks

United States: EIA, Petroleum Supply Annual 1997.

Other OECD Countries: • 1973-1982: Organization for Economic Cooperation and Development (OECD), Quarterly Oil Statistics and Energy Balances, various issues. • 1983-1997: OECD, Monthly Oil Statistics in the EIA, International Energy Database.

### Oil Demand

United States: EIA, Petroleum Supply Annual 1997.

Other OECD Countries: • 1973-1981: OECD, Quarterly Oil Statistics and Energy Balances, various issues. • OECD, Annual Oil Statistics data base, 1970-1979. • 1982-1997: OECD, Monthly Oil Statistics in the EIA International Energy Database.

### Oil Imports

United States: Energy Information Administration (EIA), Petroleum Supply Annual 1997.

Other OECD Countries: • Organization for Economic Cooperation and Development (OECD), Quarterly Oil Statistics and Energy Balances, various issues. • OECD Monthly Oil Statistics database, 1991-1998.



## **Appendix A**

### **Organizational and Geographical Definitions**

## Appendix A. Organizational and Geographical Definitions

**International Energy Agency (IEA)** countries are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States.

**Organization for Economic Cooperation and Development (OECD)** countries are: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, South Korea, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States. Total OECD includes the United States Territories (Guam, Puerto Rico, and the U.S. Virgin Islands). Total OECD excludes data for Czech Republic, Hungary, Mexico, Poland, and South Korea which are not yet available.

**OECD Europe** countries are: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Spain, Sweden, Switzerland, Turkey, and United Kingdom. OECD Europe excludes data for Czech Republic, Hungary, and Poland which are not yet available.

**Organization of Petroleum Exporting Countries (OPEC)** members are: Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela. As of December 31, 1992, Ecuador withdrew its membership in OPEC, and as of December 31, 1994, Gabon withdrew its membership. For consistency, Ecuador and Gabon are excluded in the historical series of OPEC totals.

**Arab members of OPEC** are: Algeria, Iraq, Kuwait, Libya, Qatar, Saudi Arabia and the United Arab Emirates.

**Organization of Arab Petroleum Exporting Countries (OAPEC)** are: Algeria, Bahrain, Egypt, Iraq, Kuwait, Libya, Neutral Zone, Qatar, Saudi Arabia, Syria, Tunisia, and the United Arab Emirates. In April 1979 Egypt was suspended from OAPEC membership. In May 1989 Egypt rejoined OAPEC. For consistency, Egypt is included in the historical series of the OAPEC totals.

**Persian (Arabian) Gulf countries** are: Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates.

The term "Former USSR" is being used in the International Petroleum Statistics Report as a purely geographical expression, referring to the Commonwealth of Independent States (CIS), Georgia, and the three Baltic States (Estonia, Latvia, and Lithuania).

## **Appendix B**

### **Explanatory Notes**

## Appendix B. Explanatory Notes

### Note 1: World Oil Supply

Supply includes production of crude oil (including lease condensate), natural gas plant liquids, other hydrogen and hydrocarbons for refinery feedstocks, refinery gain, alcohol, and liquids produced from coal and other sources. Beginning in 1993, U.S. data includes fuel ethanol blended into finished motor gasoline and oxygenate production from merchant MTBE plants.

### Note 2: Oil Stocks

The International Energy Agency (IEA) assembles and reports total oil stock data for the member countries of the Organization for Economic Cooperation and Development (OECD). Oil stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined petroleum products. In its report titled Quarterly Oil Statistics and Energy Balances of OECD Countries, the IEA defines oil stocks as follows: "All non-military stocks held by importers (including all final consumers directly), refiners, Governments, major non-importing final consumers eligible under IEA/OECD commitments and by foreign entities in the following facilities: bulk terminals, refinery tanks, pipeline tankage, barges, intercoastal tankers (when port of departure and destination are in the reporting country), tankers in port (to the extent that their cargo is to be unloaded in the reporting country), and inland ship bunkers. Oil is reported regardless of the ownership of such storage facilities." IEA data exclude "oil held in pipelines, rail and truck tank cars, sea-going ships' bunkers, service stations, retail stores and tankers at sea." Also the IEA defines the United States to be the 50 States and the District of Columbia, and the U.S. Territories (Guam, Puerto Rico, and the U.S. Virgin Islands). The Energy Information Administration (EIA) does not include the United States Territories in its statistical definition of the United States. Further, the EIA includes oil in oil pipelines as part of its stock data. Tables 1.5, 1.6, 2.3, and 4.4 include oil stocks for the United States according to EIA definitions. Using IEA definitions, at the end of June 1998 United States (including territories) oil stocks totaled 1,501 million barrels.

### Note 3: A Change to the Oil Balance in Section 2.

Prior to August 1992, Section 2 of the International Petroleum Statistics Report presented a balance of oil supply, demand, and stock change for the Market Economies, at quarterly time intervals. The communist countries, or Centrally Planned Economies (CPEs) were not included in the balance, mainly because good quarterly data for oil demand in these countries were not available. Net imports from the CPEs were included in the balance as part of total Market Economies supply. At present, the former Soviet Union and most of the countries of Eastern Europe are in transition from communism to market economies; because of this there are no longer good political or economic reasons to publish an oil balance only for the countries that have traditionally been market economies. Beginning with the August 1992 edition, Section 2 of the International Petroleum Statistics Report was changed from a Market Economies oil balance to a world oil balance.

The main data issues related to this change may be summarized as follows:

Supply Data. Monthly oil supply data are available for all countries of the world. These data are used to generate Tables 1.1 to 1.4; they were used to expand the Section 2 supply table (Table 2.2) to the whole world.

Demand Data. EIA has now developed quarterly figures for world oil demand, including demand in the former CPEs; these are published in Table 4 of EIA's Short-Term Energy Outlook. The procedures involved in developing quarterly world demand numbers may be summarized as follows:

Complete monthly data are available for the 24 OECD countries. Annual demand data for all countries (about 200 countries) are presented in EIA's International Energy Annual. In 1993, the OECD accounted for about three-fifths of total world demand, the 25 largest consumers outside of the OECD accounted for about one-third of the world total, and the remaining countries (about 150 countries) accounted for less than one-tenth of the total. The key problem, therefore, is to develop good figures for the 25 largest consumers outside the OECD.

Of these 25 countries, by far the largest consumer is Russia, which in 1993 accounted for about one-sixth of the demand in the group of 25. The next largest consumer is China, which in 1993 accounted for about one-seventh of the demand in the group. Thus in 1993 Russia and China accounted for one-third of the demand in the group of 25. For these 2 countries, data are available on oil production and net exports. The demand numbers shown in Section 2 are computed as production minus net exports. This is the same procedure used in the EIA Short-Term Energy Outlook, by the International Energy Agency in their Monthly Oil Market Report, and in other respected publications that deal with international oil markets. Note, however, that this method of computing demand ignores both refinery gain and stock changes.

For other major consuming countries outside of the OECD, quarterly demand data are developed based upon the latest available annual data, analytic judgment about current trends, and some seasonal adjustments. These are the same procedures used for the Short-Term Energy Outlook.

Stocks Data. Reliable stocks data are available for the OECD countries. Estimates of stocks for export and afloat, and of commercial floating stocks, are available. (See sources at the end of Section 2.)

For on-land stocks outside the OECD, there is little reliable data. Most estimates of on-land stocks outside the OECD are based on the theory that stocks are approximately equal to some number of days of demand. Demand figures (which themselves involve some degree of estimation) are then used to compute estimates of stock levels.

In the International Petroleum Statistics Report, it had been the practice for some time to estimate that on-land stocks in the traditional market economies outside of the OECD were equal to 55 days of demand. This was acceptable, mainly because the rule was used only to estimate a relatively small part of total stocks (about 16 percent).

When Section 2 was converted from a Market Economies oil balance to a world oil balance, there were important changes in the conditions that made it reasonable to estimate on-land stocks outside of the OECD using the rule of 55 days of demand. When the CPEs are included, the stocks that must be estimated are a considerably larger part of the total. In 1990, total oil demand in the former CPEs was more than 80 percent as large as demand in all of the non-OECD traditional market economies. Thus the quantity of stocks that would have to be estimated using a 55-day rule would nearly double, and the estimated components of stock levels and stock changes would become relatively large parts of the total. One consequence of this is that the statistical discrepancy (as shown in Table 2.1) would become less useful as an indicator of the overall consistency of the data. The statistical discrepancy is computed from supply, demand, and stock change. If a large part of the stock change is estimated, then the statistical discrepancy loses much of its significance.

As already noted, quarterly demands in the former Soviet Union and in China are computed as production minus net exports. This computation implicitly assumes a zero stock change. Demand in the former Soviet Union is falling. If we were to use a 55-day rule to compute stock levels, falling demand would imply falling stock levels. This would contradict the assumption of zero stock change which was used in computing demand.

In view of all this, the following approach has been adopted. Table 2.3 now shows levels of stocks for the OECD countries, levels of stocks for export and afloat, and levels of commercial floating storage. Stock changes based on these stock levels are shown in Table 2.1. At this time, no other stock levels are shown. Table 2.1 now has a single line labelled "Other Stock Draw and Statistical Discrepancy", which contains the computed values needed to make the table balance.

It may become possible in the future to obtain reliable information on certain categories of on-land stocks outside the OECD. If such data become available, they will be added to Table 2.3, and the corresponding stock change information will be added to Table 2.1.

Changes in Formats and Sign Conventions. There were several changes in Section 2 to make the International Petroleum Statistics Report more consistent with other EIA publications, especially with the Short-Term Energy Outlook. The numbers were changed from 1 decimal place to 2 decimal places. The word "consumption", as used before August 1992, was changed to "demand". The sign convention for stock changes in Table 2.1 was changed. Stock draws are now indicated by positive numbers, and stock additions are indicated by negative numbers. Table 2.1 also uses a new sign convention for the line labelled "Other Stock Draw and Statistical Discrepancy". The values in this line are now computed as Total Demand minus the sum of Total Supply and Total Reported Stock Draw. This is the reverse of the sign convention used before August 1992.

Summary. Section 2 was expanded from a Market Economies oil balance to a world oil balance. Supply data are tracked for all producing countries. Demand data are tracked for the 24 OECD countries, and for 25 large consumers outside of the OECD. Demand for the remaining countries (less than 10 percent of total demand) is estimated, for years that are not yet available in the International Energy Annual. The stock levels in these tables are based on reported data for the OECD and for stocks at sea. The line in Table 2.1 labelled "Other Stock Draw and Statistical Discrepancy" is a balancing item.

## **Appendix C**

### **Glossary**

## Appendix C. Glossary

**Alcohol.** The family name of a group of organic chemical compounds composed of carbon, hydrogen, and oxygen. The molecules in the series vary in chain length and are composed of a hydrocarbon plus a hydroxyl group. Alcohol includes methanol and ethanol.

**Demand (Consumption/Petroleum Products Supplied).** Total petroleum products supplied is the sum of all petroleum products supplied. For each product, the amount supplied is calculated by summing production, crude oil burned directly, imports, and net withdrawals from primary stocks and subtracting exports.

**Crude Oil.** A mixture of hydrocarbons that existed in liquid phase in underground reservoirs and remains liquid at atmospheric pressure after passing through surface-separating facilities. Crude oil production is measured at the wellhead and includes lease condensate.

**Government-Owned Stocks.** Oil stocks owned by the national government and held for national security. In the United States these stocks are known as the Strategic Petroleum Reserve.

**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).

**Natural Gas Plant Liquids.** 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, (propanes, 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.

**Oil Stocks.** Oil stocks include crude oil (including strategic reserves), unfinished oils, natural gas plant liquids, and refined petroleum products. See Explanatory Note 2.

**Other Hydrocarbons.** Other materials processed at refineries. Includes coal tar derivatives, hydrogen, gilsonite, and natural gas received by the refinery for reforming into hydrogen.

**Oxygenates.** Any substance which, when added to gasoline, increases the amount of oxygen in that gasoline blend. They include: Fuel Ethanol, Methanol, and MTBE (Methyl tertiary butyl ether).

**Petroleum Products.** Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, 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 road oil, still gas, and other miscellaneous products.

**Processing Gain.** The amount by which the total volume of refinery output is greater than the volume of input for given period of time. The processing gain arises when crude oil and other hydrocarbons are processed into products that are, on average, less dense than the input.

**Processing Loss.** The amount by which the total volume of refinery output is less than the volume of input for given period of time. The processing loss arises when crude oil and other hydrocarbons are processed into products that are, on average, more dense than the input.

## **Appendix D**

### **Estimation Procedures**

## Appendix D. Estimation Procedures

Estimation procedures are used for demand numbers in many of the countries outside of the OECD, in cases where data from EIA's International Energy Annual are not yet available. Demand numbers for 1996 and earlier years, for all countries, may be found in EIA's International Energy Annual 1996, published in February 1998, which is the most recent published edition of the International Energy Annual. EIA's WORLD ENERGY database contains final demand data for all countries of the world for 1995, and preliminary demand data for all countries for 1996. Instructions for downloading this database may be found on EIA's home page (<http://www.eia.doe.gov/emeu/world/main1.html>). The status of the demand numbers shown in Section 2 of this current International Petroleum Statistics Report may be summarized as follows.

The OECD demand numbers are, as usual, based on the latest Quarterly Oil Statistics and Monthly Oil Statistics data from the International Energy Agency.

For countries outside of the OECD, the following approach is used. The numbers for 1996 and earlier years match the demand numbers in the WORLD ENERGY database on EIA's home page. Numbers for 1997 forward are the best available EIA estimates, based upon the best annual data currently available, analytic judgment about current trends, and some seasonal adjustments. These are the same numbers that appear in the international oil balance table in EIA's Short-Term Energy Outlook.

The two largest non-OECD oil consumers are the former Soviet Union and China. For these two countries, published data are available on production and net exports. Demand is computed as production minus net exports. This is the same approach used in the Short-Term Energy Outlook, by the International Energy Agency in their Monthly Oil Market Report, and in other major publications dealing with international oil data. Note, however, that because of this computation, the demand numbers for the former Soviet Union and China implicitly exclude stock draw and refinery gain.

## **Appendix E**

### **Conversions**

**Table E1. Refined Petroleum Products Conversion Factors**

Product	Barrels per Metric Ton
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, Naptha-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

Table E2. Barrels of Crude Oil per Metric Ton, 1987-1996

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
North America										
Canada . . . . .	7.453	7.453	7.453	7.453	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	7.149	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	7.268	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	7.084	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	6.880	6.890	6.890	6.890	6.890	6.890	6.890
Western Europe										
Austria . . . . .	7.082	7.082	7.082	7.082	7.200	7.200	7.200	7.200	7.200	7.200
Denmark . . . . .	7.689	7.689	7.689	7.689	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 . . . . .	--	--	--	--	7.300	7.300	7.300	7.300	7.300	7.300
Germany, East . . . . .	7.340	7.340	7.340	7.340	--	--	--	--	--	--
Germany, West . . . . .	7.247	7.247	7.247	7.247	7.247	--	--	--	--	--
Greece . . . . .	7.178	7.178	7.178	7.178	7.231	7.231	7.231	7.231	7.231	7.231
Italy . . . . .	6.853	6.853	6.853	6.853	7.300	7.300	7.300	7.300	7.300	7.300
Netherlands . . . . .	6.853	6.853	6.853	6.853	7.239	7.239	7.239	7.239	7.239	7.239
Norway . . . . .	7.810	7.810	7.810	7.810	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	7.150	7.200	7.200	7.200	7.200	7.200	7.200
United Kingdom . . . . .	7.466	7.466	7.466	7.466	7.523	7.523	7.523	7.523	7.523	7.523
Former Yugoslavia . . . . .	7.418	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

-- = No Production of this form of energy.

Sources: International Energy Annual 1996. DOE/EIA-0219(96) (February 1998).

Table E2. Barrels of Crude Oil per Metric Ton, 1987-1996 (continued)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
<b>Eastern Europe &amp; Former U.S.S.R.</b>										
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	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
Kazakstan . . . . .	--	--	--	--	--	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
<b>Middle East</b>										
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	7.305	7.305	7.305	7.305	7.305	7.305	7.305
Iraq . . . . .	7.426	7.426	7.426	7.426	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	7.245	7.250	7.250	7.250	7.250	7.250	7.250
Oman . . . . .	7.332	7.332	7.332	7.332	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	7.268	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 . . . . .	7.627	7.636	7.632	7.632	7.631	7.631	7.631	7.631	7.631	7.631

-- = No Production of this form of energy.

Sources: International Energy Annual 1996. DOE/EIA-0219(96) (February 1998).

Table E2. Barrels of Crude Oil per Metric Ton, 1987-1996 (continued)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996
<b>Africa</b>										
Algeria	7.936	7.936	7.936	7.936	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	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
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	7.285
Libya	7.515	7.515	7.515	7.515	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
Zaire	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320
<b>Far East &amp; Oceania</b>										
Australia	7.855	7.855	7.855	7.855	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	7.600	7.600	7.600	7.600	7.600	7.600	7.600
Indonesia	7.558	7.558	7.558	7.558	7.558	7.558	7.558	7.558	7.558	7.558
Japan	7.285	7.285	7.285	7.285	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

-- = No Production of this form of energy.

Sources: International Energy Annual 1996. DOE/EIA-0219(96) (February 1998).