

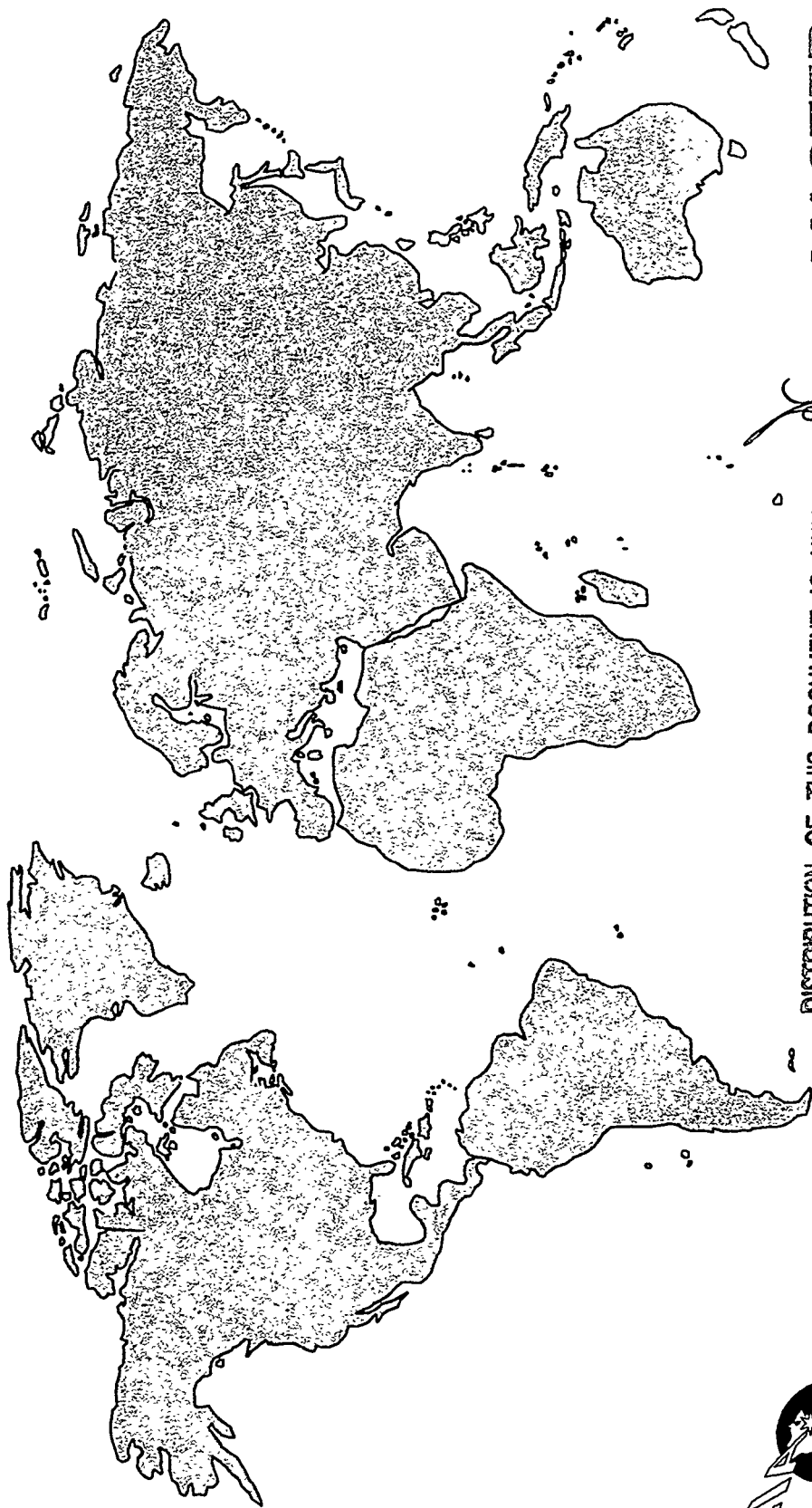
# International Petroleum Statistics Report

March 1999

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# **International Petroleum Statistics Report**

**March 1999**

**Energy Information Administration**  
Office of Energy Markets and End Use  
U.S. Department of Energy  
Washington, DC 20585

*This report was prepared by the Energy Information Administration, the independent statistical and analytical agency within the U.S. Department of Energy. The information contained herein should be attributed to the Energy Information Administration and should not be construed as advocating or reflecting any policy position of the Department of Energy or any other organization.*

## 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 1990, 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 and annually for the three years prior to that. 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) 586-8994. Detailed questions and comments concerning the contents of the International Petroleum Statistics Report may be directed to Michael J. Grillo, 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 MacInyre (202) 586-1831.

## Oil Market Chronology - February 1999

*The following chronology lists international events that hold significance for world petroleum markets. Sources include: Dow Jones (DJ), USA Today (USA), Wall Street Journal (WSJ), Washington Post (WP), and USA Today (USA).*

- February 1** In southern Nigeria, a clash between Nigerian youths demanding work at a Shell oil terminal and Nigerian soldiers trying to break up the protest results in approximately 19 casualties. Shell temporarily shuts down the oil terminal as a result. The terminal handles more than 40 percent of Nigeria's crude oil exports. Protests against Shell were first reported in the early 1990s. Nigerians have demanded employment in oil industry projects and development projects in their villages, and also compensation for use of their land, oil spills and other environmental damage. The number of protests has increased in recent years due to greater awareness of and discontent with the unequal distribution of wealth in the oil-based economy. (DJ)
- February 2** Arco Oriente Inc., a unit of U.S. Atlantic Richfield Company (ARCO) in Ecuador, temporarily halts operations in the Pastaza province, after about 1,200 residents in the area seize the company's oil installation. After several hours, the residents are forced to leave the company's compound by the Ecuadorian Army. The residents seized the installation in an effort to disburse around \$4 million to finish construction of a road linking the cities of Puyo and Banos in Pastaza. The remote eastern jungle region contains about 200 million barrels of oil reserves. (DJ)
- February 3** A senior Iraqi oil minister says Iraq boosted its oil exports via its pipeline through Turkey by 107 percent in 1998. The pipeline links northern Iraqi oil fields like Kirkuk with the Turkish terminal of Ceyhan on the Mediterranean. Under the U.N.-approved "oil-for-food" program, which allows Iraq to sell up to \$5.2 billion of oil every six months, Iraq must pump the largest portion of its exports through Turkey. (DJ)
- February 4** Italy's ENI SpA and Russia's RAO Gazprom, the world's largest natural gas producer, agree to build a natural gas pipeline from Russia to Turkey at a cost of nearly \$3 billion. Each project partner will hold a 50 percent stake in the project. The proposed pipeline, called the Blue Stream project, is expensive by industry standards partly because it would run at great depth under the waters of the Black Sea. (Asian WSJ)
- February 7** Jordan's King Hussein dies at the age of 63 from non-Hodgkins lymphoma. Hussein, who served as King of Jordan since May 2, 1953, had only a few days earlier appointed his eldest son, Abdullah, as his successor. Abdullah, 36, is a career army officer. Although containing almost no oil or gas resources of its own, Jordan is important to world oil markets because of its strategic location bordering Iraq, Saudi Arabia, Israel and Syria. Jordan also is an important trading partner of Iraq. (DJ)
- February 10** U.S. Energy Secretary Bill Richardson visits Saudi Arabia to discuss potential U.S. investment in the Kingdom's oil and gas sectors. Following his visit, Richardson says the Saudis are primarily interested in foreign investment in the natural gas sector and in the oil refining and marketing sectors, rather than in the upstream crude oil sector. Secretary Richardson's visit comes several months after a September 1998 meeting between several U.S. oil companies, Saudi Crown Prince Abdullah and Saudi Oil Minister Ali Naimi, in which Abdullah requested proposals from the companies on the development of Saudi oil reserves. (DJ), (USA), (WSJ)
- February 11** Bangladesh and the United States sign three agreements aimed at helping Bangladesh reorganize its energy sector to avoid power shortages and to improve the extraction and sale of natural gas. The two sides will work together to assess Bangladesh's energy resources and to prepare a comprehensive energy policy. The United States and Bangladesh also will examine U.S. foreign investment options in Bangladesh's energy sector. (WP)
- February 12** The U.S. government announces plans to purchase 28 million barrels of crude oil for placement in the federal Strategic Petroleum Reserve (SPR). The government announcement is aimed at helping small U.S. oil companies, which have been hurt due to the low oil price environment since late 1997. (DJ), (USA)

**February 15**

Turkmenistan awards a \$2.4 billion natural gas pipeline project to an American consortium including Amoco Corporation, and a new pipeline joint venture called PSG International, which is owned by affiliates of Bechtel Enterprises Inc. and General Electric Company's GE Capital Corporation. The consortium will construct a natural gas pipeline from fields in eastern Turkmenistan across the Caspian Sea through Azerbaijan and Georgia to the Erzurum in eastern Turkey. Issues the pipeline consortium will face include Turkmenistan's territorial dispute with Azerbaijan, and a determination by littoral states (those states touching the Caspian's shore) namely--Turkmenistan, Azerbaijan, Kazakhstan, Russia, and Iran-- on whether the Caspian Sea is a sea or a lake. The outcome of these issues will impact conflicting territorial claims, including the ownership of oil fields and fishing rights. (WSS)

**February 18**

Iraq announces that its section of a joint oil pipeline with Syria is almost ready. The pipeline links Iraqi oil fields located near the northern city of Kirkuk to Syria's Mediterranean terminal at Banias. A spur off of the main pipeline leads to the Lebanese port at Tripoli. In August 1998, Iraq and Syria signed an agreement to reopen the pipeline, which has been closed for more than 16 years. The pipeline was originally designed to handle 1.4 million barrels per day, but Iraqi oil officials believe that a lack of storage capacity and pumps will enable Iraq to reach an initial export rate of only around 400,000 barrels per day. Under existing sanctions, Iraq needs to obtain special permission from the United Nations to export oil through Syria. (DJ)

**February 22**

Kuwait Petroleum Corporation (KPC) confirms a new find of sweet (i.e. low sulfur) oil in the Kra al-Marow oilfield, located northwest of Kuwait City. According to KPC, preliminary results from the new field indicate a test production rate of 1,800 barrels per day. Kra al-Marow, according to KPC, could be as large as Burgan, Kuwait's largest oil field. (DJ)

Colombia's Cano Limon oil pipeline returns to normal operations after being shut down in a terrorist attack the previous week. The Cano Limon, with capacity to pump 175,000 barrels of oil per day, is a frequent target of leftist rebels who oppose foreign investment in the country's mineral resources. This marks the fourteenth such attack in 1999. (DJ)

**February 28**

Turkish officials report that a U.S. bombing attack on Iraq damages communications at an oil-pumping facility in northern Iraq. Crude oil flows are temporarily disrupted on the line, which runs from Kirkuk in Iraq to Ceyhan in Turkey. (DJ), (NYT)

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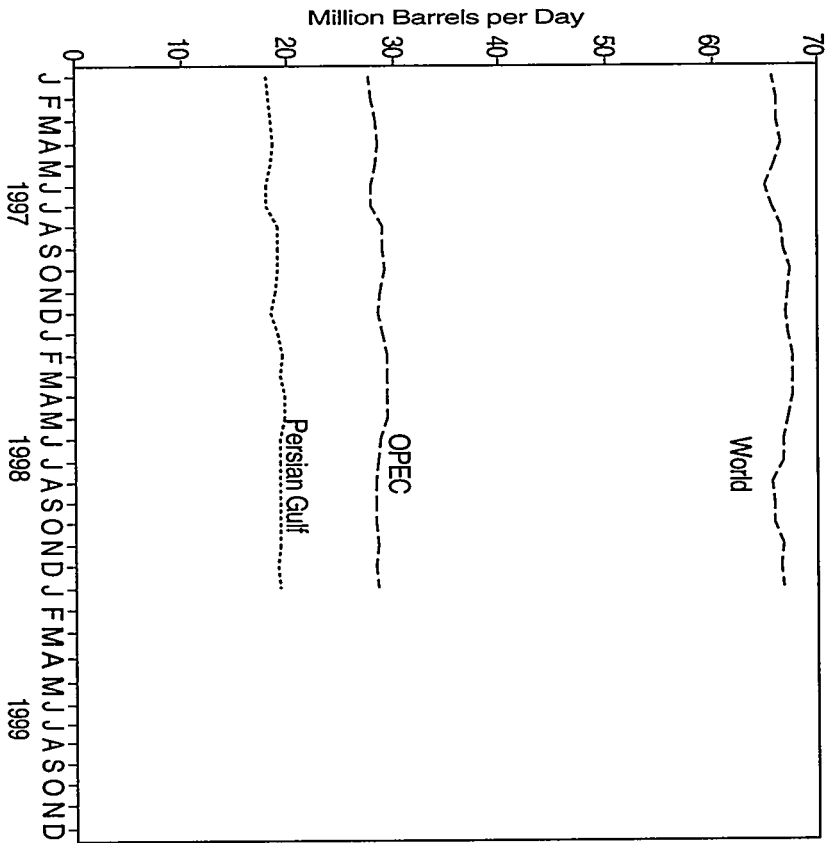
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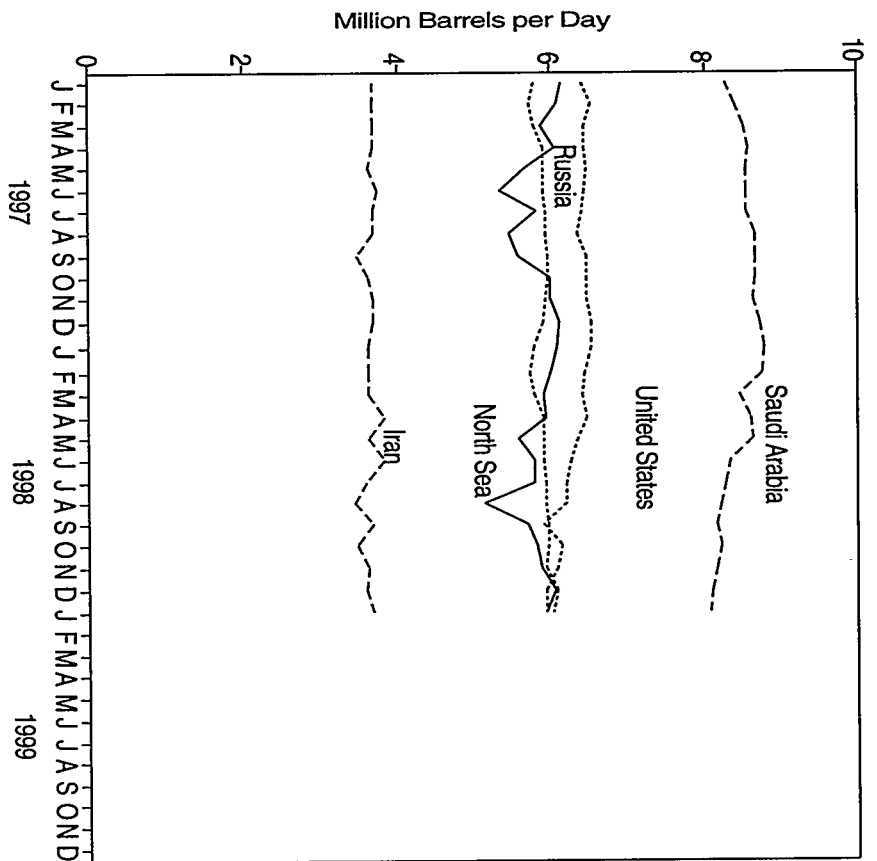
## **1. Annual and Monthly Oil Data**

Figure 1. World Crude Oil Production, Monthly



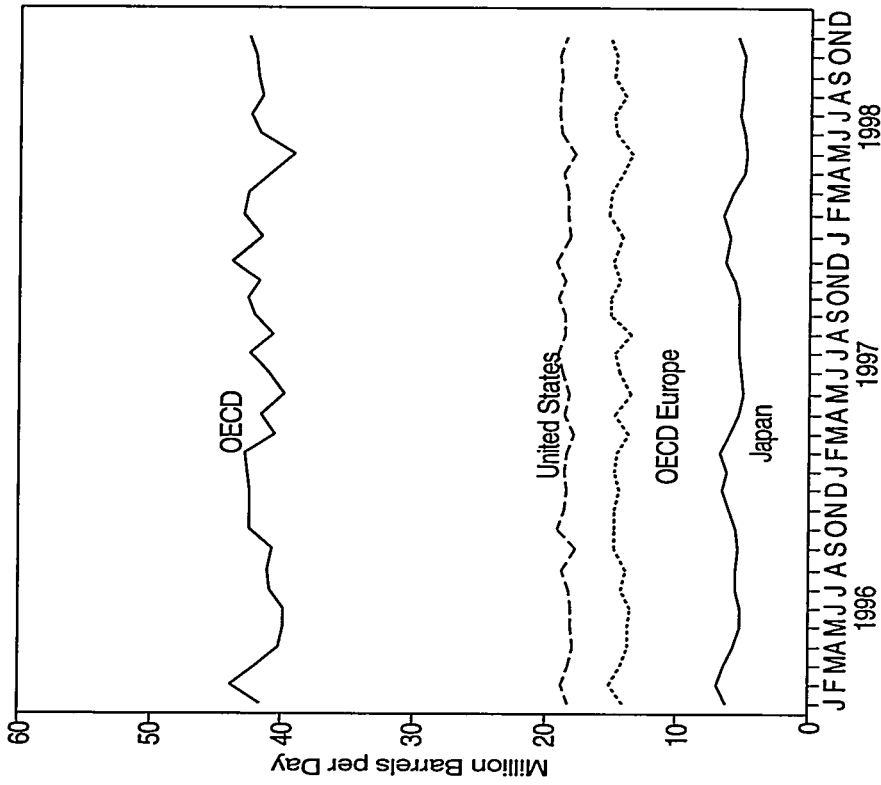
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Figure 2. Leading Crude Oil Producers, Monthly



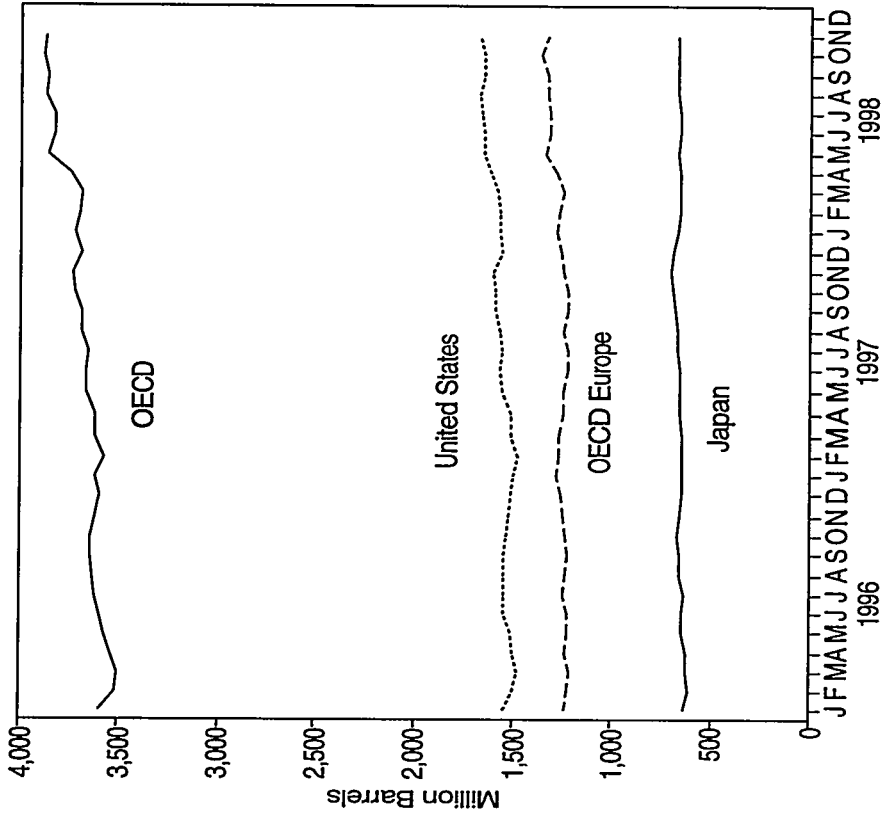
Source: Tables 1.1a-1.1c

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	Indonesia	Iran	Iraq	Kuwait <sup>1</sup> / Libya	Nigeria	Qatar	Saudi Arabia <sup>1</sup> / Emirates	United Arab Emirates	Vene- zuela	Total OPEC
1990 Average.....	1,175	1,462	3,088	2,040	1,175	1,810	406	6,410	2,117	2,137	23,195
1991 Average.....	1,230	1,592	3,312	305	190	1,892	395	8,115	2,386	2,375	23,275
1992 Average.....	1,214	1,504	3,429	425	1,058	1,943	423	8,332	2,266	2,371	24,398
1993 Average.....	1,162	1,511	3,540	512	1,852	1,960	413	8,198	2,159	2,450	25,119
1994 Average.....	1,180	1,510	3,618	553	2,025	1,378	415	8,120	2,193	2,588	25,510
1995 Average.....	1,202	1,503	3,643	560	2,057	1,993	442	8,231	2,233	2,750	26,004
1996 Average.....	1,242	1,547	3,686	579	2,062	2,188	510	8,218	2,278	3,053	26,764
1997 Average.....	1,277	1,546	3,664	1,187	2,083	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	715	8,765	2,435	3,440	28,944
February.....	1,290	1,520	3,635	1,703	2,210	1,450	735	8,760	2,435	3,410	29,411
March.....	1,290	1,520	3,635	1,825	2,210	1,450	735	8,460	2,480	3,410	29,395
April.....	1,270	1,520	3,835	1,985	2,115	1,400	705	8,585	2,420	3,240	29,313
May.....	1,250	1,520	3,635	2,245	2,105	1,360	705	8,625	2,330	3,240	29,245
June.....	1,240	1,490	3,835	1,920	2,105	1,360	705	8,325	2,300	3,210	28,700
July.....	1,230	1,490	3,585	2,355	2,075	1,360	685	8,275	2,280	3,070	28,565
August.....	1,220	1,510	3,435	2,555	2,025	1,340	675	8,225	2,300	2,990	28,285
September.....	1,220	1,510	3,685	2,555	1,972	1,335	665	8,173	2,300	2,990	28,365
October.....	1,220	1,540	3,485	2,555	1,970	1,335	670	8,220	2,290	2,990	28,235
November.....	1,220	1,540	3,635	2,505	2,020	1,350	675	8,170	2,290	3,040	28,505
December.....	1,220	1,540	3,585	2,305	2,010	1,350	680	8,110	2,290	3,040	28,240
1998 Average.....	1,246	1,518	3,634	2,150	2,085	1,378	696	8,389	2,345	3,167	28,762
1999 January.....	1,230	1,540	3,665	2,515	1,995	1,360	695	8,065	2,240	3,020	28,405

<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 January 1999, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 530 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 Sea/ Sea1/	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 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	2,525	5,801	710	855	621	975	2,045	3,200	735	330
August.....	2,440	2,536	5,133	730	850	637	990	2,016	3,180	752	380
September.....	2,863	2,690	5,712	735	855	541	970	2,064	3,216	775	385
October.....	2,920	2,718	5,807	765	850	406	995	2,024	3,150	810	390
November.....	2,978	2,720	5,881	770	850	430	1,070	1,989	3,240	845	380
December.....	R3,045	R2,821	R6,038	R785	R830	R428	R1,075	R1,962	R3,215	R847	R370
1998 Average.....	3,017	2,616	R5,804	R735	R847	R544	R971	R1,981	R3,198	759	R377
1999 January.....	3,015	2,719	5,933	785	830	520	1,100	1,953	3,230	845	370

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
1991 Average.....	874	294	615	646	2,680	700	--	9,992	492	7,417	2,274
1992 Average.....	881	298	561	653	2,669	740	7,632	--	481	7,171	3,228
1993 Average.....	890	313	534	640	2,673	776	6,730	--	554	6,847	3,280
1994 Average.....	896	329	590	645	2,685	810	6,135	--	560	6,662	3,382
1995 Average.....	920	365	703	682	2,618	851	5,995	--	575	6,560	3,410
1996 Average.....	922	368	651	695	2,855	883	5,850	--	604	6,465	3,509
1997 Average.....	874	368	675	746	3,023	887	5,884	--	561	6,452	3,706
1998											
January.....	860	360	680	740	3,085	920	5,979	--	550	RE6,515	3,765
February.....	860	370	685	730	3,140	920	5,997	--	550	RE6,449	3,747
March.....	860	370	685	740	3,160	930	5,962	--	550	RE6,399	3,746
April.....	860	370	635	740	3,140	920	5,876	--	550	RE6,483	3,707
May.....	870	370	670	750	3,149	910	5,789	--	560	RE6,363	3,663
June.....	870	370	670	750	3,050	900	5,928	--	560	RE6,252	3,713
July.....	880	360	676	730	3,120	870	5,923	--	560	RE6,193	3,739
August.....	870	360	651	730	3,055	880	5,910	--	560	RE6,193	3,705
September...	870	350	625	720	2,906	890	5,936	--	550	RE5,918	3,723
October.....	870	350	638	720	2,792	890	5,979	--	550	RE6,152	3,745
November.....	860	350	643	720	3,147	890	R5,945	--	550	RE6,072	3,765
December.....	860	350	679	720	3,107	R880	6,040	--	550	RE5,938	R3,765
1998 Average.....	866	361	661	733	3,070	R900	R5,938	--	553	RE6,243	R3,732
1999											
January.....	860	350	694	720	3,144	880	5,962	--	550	PE5,950	3,783

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. 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	Indonesia	Iran	Iraq	Kuwait <sup>1/</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>2/</sup>	United Arab Emirates	Venezuela	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	3,583	548	2,025	1,378	1,821	380	8,120	2,113	2,542	24,594
1995 Average...	767	1,343	3,608	555	2,057	1,390	1,878	407	8,231	2,148	2,710	25,094
1996 Average...	812	1,367	3,651	574	2,062	1,401	2,051	475	8,218	2,198	3,013	25,822
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	8,225	2,220	3,030	27,650
August...	790	1,330	3,400	2,550	2,025	1,340	1,900	640	8,275	2,220	2,950	27,370
September...	790	1,330	3,650	2,550	1,972	1,335	1,900	630	8,173	2,220	2,900	27,450
October...	790	1,360	3,450	2,550	1,970	1,335	1,850	635	8,220	2,210	2,950	27,320
November...	790	1,360	3,600	2,500	2,020	1,350	1,950	640	8,170	2,210	3,000	27,590
December...	790	1,360	3,550	2,300	2,020	1,350	2,000	645	8,110	2,210	3,000	27,325
1998 Average...	816	1,338	3,599	2,145	2,085	1,378	2,043	661	8,389	2,265	3,127	27,847
1999 January...	800	1,360	3,630	2,510	1,995	1,360	1,970	660	8,065	2,160	2,980	27,490

<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 January 1999, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 530 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 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	1,185	1,409	1,575	5,835
February.....	145	680	420	735	230	--	1,870	1,185	1,409	1,575	5,931
March.....	145	645	425	735	230	--	1,846	1,185	1,409	1,575	5,878
April.....	145	645	425	725	230	--	1,859	1,175	1,399	1,565	5,882
May.....	145	580	430	725	230	--	1,808	1,175	1,399	1,565	5,733
June.....	145	610	420	705	230	--	1,734	1,155	1,379	1,545	5,649
July.....	145	648	386	700	230	--	1,580	1,150	1,374	1,540	5,414
August.....	145	662	464	695	230	--	1,713	1,145	1,369	1,535	5,620
September.....	145	625	435	695	230	--	1,716	1,145	1,369	1,535	5,619
October.....	145	667	415	695	230	--	1,736	1,145	1,369	1,535	5,671
November.....	145	681	438	695	230	--	1,759	1,145	1,369	1,535	5,708
December.....	145	R705	447	690	230	--	REL,604	1,140	1,364	1,530	R5,585
1998 Average.....	145	R651	424	711	230	--	REL,753	1,161	1,385	1,551	R5,709
1999											
January.....	145	700	453	685	230	--	E1,738	1,135	1,359	1,525	5,767

1/ U.S. geographic coverage is the 50 States and the District of Columbia. Excludes fuel ethanol blended into finished motor gasoline.  
 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.  
 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 Average.....	9,461	19,641	20,407	29,905	74,091
1998 January.....	R9,539	20,283	21,087	30,575	R75,583
February.....	R9,522	20,735	21,542	31,042	R76,050
March.....	R9,376	20,602	21,411	31,026	R75,822
April.....	R9,496	20,892	21,431	30,934	R75,724
May.....	R9,319	20,892	21,591	30,866	R75,044
June.....	R9,292	20,417	20,906	30,301	R74,820
July.....	R9,042	20,477	21,216	30,161	R74,431
August.....	R9,201	20,432	21,276	29,876	R73,640
September.....	R8,882	20,567	21,154	29,956	R73,830
October.....	R9,175	20,407	21,195	29,826	R73,923
November.....	R9,178	20,512	21,155	30,096	R74,789
December.....	RE8,892	20,192	20,885	29,826	R74,458
1998 Average.....	RE9,241	20,532	21,236	30,369	R74,833
1999 January.....	PE8,920	20,382	21,015	29,986	74,680

<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.

Note: \*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	121	590	73	3,568
1991	December.....	153	160	288	119	1,181	119	606	65	3,588
1992	December.....	146	174	310	113	1,219	107	603	67	3,588
1993	December.....	158	163	309	118	1,247	105	618	69	3,661
1994	December.....	158	164	312	115	1,240	119	645	69	3,726
1995	December.....	159	162	301	107	1,228	109	630	71	3,601
1996	December.....	158	152	300	108	1,256	103	651	74	3,591
1997	January.....	156	158	306	107	1,280	106	650	80	3,617
	February.....	159	156	309	105	1,270	103	642	75	3,573
	March.....	160	160	312	109	1,273	107	650	76	3,617
	April.....	159	151	301	108	1,248	110	665	80	3,620
	May.....	163	150	311	108	1,248	106	664	81	3,660
	June.....	153	151	299	111	1,230	107	662	83	3,657
	July.....	153	150	303	112	1,230	109	670	81	3,649
	August.....	158	151	302	108	1,253	113	669	80	3,685
	September.....	157	144	291	106	1,227	108	682	77	3,687
	October.....	152	144	289	106	1,231	111	693	83	3,716
	November.....	163	150	291	106	1,251	111	699	76	3,736
	December.....	164	147	298	105	1,256	115	685	74	3,689
1998	January.....	163	154	298	111	1,281	112	673	78	3,720
	February.....	161	155	290	108	1,276	110	664	75	3,698
	March.....	155	146	285	109	1,251	118	655	73	3,684
	April.....	163	161	292	106	1,280	116	658	75	3,743
	May.....	171	168	306	111	1,343	115	667	79	3,858
	June.....	164	164	308	109	1,316	114	658	80	3,823
	July.....	164	157	313	109	1,313	115	660	75	3,827
	August.....	168	161	319	106	1,333	118	672	77	3,872
	September.....	170	158	317	107	1,332	117	676	79	3,857
	October.....	170	162	321	109	1,360	R121	676	69	R3,878
	November.....	161	157	320	99	1,330	119	675	69	3,867

<sup>1/</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.

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

<sup>4/</sup> "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 September 1998)  
(Million Barrels)

Country	Commercial	Government Owned	Total
Canada.....	117	0	117
United States <sup>1</sup> /.....	1,090	563	1,653
United States Territories.....	29	0	29
Japan.....	361	315	676
Australia/New Zealand.....	50	NA	50
Austria.....	24	0	24
Belgium/Luxembourg.....	37	0	37
Denmark.....	28	0	28
Finland.....	25	0	25
France.....	170	0	170
Germany <sup>2</sup> /.....	262	55	317
Greece.....	34	NA	34
Ireland.....	8	2	10
Italy.....	152	6	158
Netherlands.....	100	0	100
Norway.....	60	0	60
Portugal.....	24	0	24
Spain.....	109	0	109
Sweden.....	32	0	32
Switzerland.....	47	0	47
Turkey.....	52	0	52
United Kingdom.....	107	0	107
OECD Europe.....	1,269	63	1,332
Total OECD.....	2,916	941	3,857

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

<sup>2</sup>/ Data are for the unified Germany, i.e., the former East Germany and West Germany. NA=Not Available. R=Revised data.

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										
1998										
January.....	2,170	2,028	2,904	1,850	14,689	18,554	1,836	6,294	R1,225	R42,599
February.....	2,142	2,115	2,652	1,933	14,618	18,398	1,857	6,756	R1,240	R42,868
March.....	1,801	1,919	2,692	1,754	13,606	17,863	1,755	6,149	R1,238	R40,611
April.....	1,916	1,990	3,219	1,804	14,690	18,559	1,724	5,306	R1,272	R41,550
May.....	1,712	1,888	2,760	1,712	13,524	18,293	1,811	5,080	R1,212	R39,920
June.....	1,878	1,938	3,123	1,781	14,382	18,617	1,882	5,135	R1,187	R41,202
July.....	2,077	2,020	3,074	1,757	14,734	19,107	1,983	5,450	R1,239	R40,513
August.....	1,795	1,798	2,745	1,710	13,530	18,565	1,920	5,404	R1,204	R40,623
September.....	1,999	2,171	3,163	1,821	15,003	18,562	1,872	5,422	R1,245	R42,105
October.....	2,144	2,207	2,869	1,845	15,095	19,071	1,934	5,414	R1,231	R42,745
November.....	1,731	2,174	2,882	1,805	14,393	18,578	1,832	5,732	R1,242	R41,778
December.....	2,107	2,299	2,761	1,836	14,972	19,250	1,876	6,453	R1,211	R43,763
Average.....	1,955	2,045	2,903	1,799	14,433	18,620	1,857	5,711	R1,229	R41,850
1999										
January.....	2,040	2,030	2,734	1,784	14,278	18,256	1,888	6,109	R1,135	R41,667
February.....	2,160	2,150	2,950	1,832	15,178	18,322	1,829	6,465	R1,238	R43,033
March.....	1,982	2,111	3,153	1,854	15,141	18,393	R1,862	5,905	R1,315	R40,615
April.....	1,999	2,016	2,840	1,716	14,236	18,624	1,805	5,086	R1,163	R40,914
May.....	1,822	1,891	2,594	1,689	13,454	17,876	1,766	4,806	R1,219	R39,119
June.....	2,008	2,091	2,929	1,784	14,776	18,818	1,890	5,016	R1,241	R41,741
July.....	2,095	2,096	3,020	1,770	14,845	19,140	1,955	5,316	R1,208	R42,464
August.....	1,859	1,878	2,836	1,761	R14,002	19,108	1,910	5,282	R1,214	R41,516
September.....	2,051	2,033	3,019	1,798	R14,861	18,837	1,937	5,097	R1,177	R41,909
October.....	1,990	2,021	2,865	1,811	R14,712	19,086	1,933	5,089	R1,305	R42,126
November.....	2,078	2,211	2,986	1,861	15,309	18,515	1,906	5,612	R1,245	42,588

<sup>1/</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.

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

<sup>4/</sup> "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, February 1999.

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, December 1986.

Oil Stocks

United States: EIA, Petroleum Supply Annual 1997 and Petroleum Supply Monthly, February 1999.

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, February 1999.

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	Annual	Quarter	Annual	Annual	Quarter	Annual	Quarter	Annual	Quarter	Annual	Quarter	Annual	
<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	9.48	9.37	9.04	9.08	9.24			
Other OECD.....	9.25	9.80	10.29	10.67	10.15	10.22	10.78	10.46	10.66	10.43	10.24	10.44	10.44			
Total OECD.....	18.66	19.20	19.74	20.06	19.61	19.69	20.30	19.92	20.14	19.80	19.28	19.52	19.68			
Non-OECD																
OPEC.....	27.03	27.57	28.32	29.50	29.66	30.09	30.35	29.91	30.88	30.70	30.00	29.91	30.37			
Former USSR.....	7.27	7.14	7.05	6.99	7.15	7.20	7.18	7.13	7.29	7.16	7.22	7.30	7.24			
Other Non-OECD.....	15.29	15.95	16.65	17.07	17.15	17.09	17.24	17.14	17.50	17.54	17.47	17.65	17.54			
Total Non-OECD.....	49.59	50.66	52.02	53.57	53.96	54.38	54.77	54.17	55.67	55.40	54.69	54.86	55.15			
Total World Supply.....	68.25	69.86	71.76	73.63	73.57	74.08	75.08	74.09	75.81	75.19	73.97	74.39	74.83			
<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	19.03	19.03	19.03			
Other OECD.....	22.17	22.83	23.12	23.73	22.39	23.00	23.80	23.23	24.09	22.14	22.93	22.93	22.93			
Total OECD.....	39.89	40.55	41.43	42.00	40.88	41.74	42.77	41.85	42.42	40.58	41.96	41.96	41.96			
Non-OECD																
China.....	3.14	3.33	3.55	3.71	3.77	3.81	3.86	3.79	3.90	3.96	4.00	4.00	4.00			
Former USSR.....	4.85	4.62	4.38	4.51	4.06	4.06	4.42	4.26	4.54	4.09	4.09	4.09	4.09			
Other Non-OECD.....	20.43	21.43	22.16	23.04	22.90	22.46	24.02	23.11	23.52	23.37	22.93	22.93	22.93			
Total Non-OECD.....	28.42	29.38	30.09	31.27	30.73	30.33	32.30	31.16	31.97	31.42	31.02	31.02	31.02			
Total World Demand.....	68.31	69.93	71.52	73.27	71.61	72.07	75.07	73.01	74.38	72.00	72.98	72.98	72.98			
<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	.08	NA	NA			
U. S. Strategic.....	-.01	.00	.07	.03	.00	.00	.00	.01	.00	.00	-.07	NA	NA			
Other OECD.....	-.16	.09	-.12	-.24	.26	-.13	-.38	-.13	.38	-.80	-.39	NA	NA			
For Export & Afloat.....	.03	-.12	-.01	-.28	.27	-.49	.00	-.12	-.44	.22	.22	NA	NA			
Commr. Floating Storage...	.00	.00	.00	.00	.00	.00	.00	.00	.00	-.11	-.22	NA	NA			
Total Reported Draws.....	-.15	.22	.01	-.57	-.16	-.81	-.03	-.39	-.50	-1.41	-.37	NA	NA			
Other Stock Draws and																
Statistical Discrepancy <sup>5/</sup>	.21	-.15	-.26	.20	-1.80	-1.19	.03	-.69	-.93	-1.79	-.61	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				Annual				Annual				Quarter				Quarter					
	Average	First	Second	Third	Fourth	Average	First	Second	Third	Fourth	Average	First	Second	Third	Fourth	Average	First	Second	Third	Fourth	Average	
OECD																						
United States <sup>1</sup> /...	9.41	9.40	9.44	9.39	9.46	9.48	9.52	9.46	9.48	9.52	9.48	9.46	9.48	9.52	9.46	9.48	9.37	9.04	9.08	9.24		
Canada.....	2.33	2.45	2.49	2.61	2.46	2.58	2.69	2.58	2.59	2.69	2.58	2.66	2.63	2.75	2.74	2.70						
North Sea <sup>2</sup> /.....	5.38	5.80	6.22	6.45	6.06	6.46	6.46	6.24	5.99	6.46	6.24	6.42	6.17	5.86	6.26							
Other OECD/.....	1.54	1.55	1.58	1.61	1.63	1.65	1.64	1.63	1.65	1.63	1.58	1.63	1.63	1.63	1.44							
Total OECD.....	18.66	19.20	19.74	20.06	19.61	19.69	20.30	19.92	19.69	20.30	19.92	20.14	19.80	19.28	19.52							
Non-OECD																						
OPEC																						
Crude																						
Algeria.....	1.18	1.20	1.24	1.27	1.27	1.28	1.28	1.28	1.28	1.28	1.28	1.29	1.25	1.22	1.22							
Indonesia.....	1.51	1.50	1.55	1.59	1.56	1.52	1.52	1.55	1.52	1.52	1.52	1.52	1.51	1.50	1.54							
Iran.....	3.62	3.64	3.69	3.68	3.68	3.62	3.67	3.66	3.62	3.67	3.66	3.63	3.77	3.57	3.57							
Iraq.....	.55	.56	.58	1.13	1.07	1.28	1.26	1.19	1.28	1.26	1.28	1.59	2.05	2.49	2.45							
Kuwait.....	2.02	2.06	2.06	2.09	2.06	2.07	2.11	2.08	2.07	2.11	2.08	2.21	2.11	2.02	2.00							
Libya.....	1.38	1.39	1.40	1.43	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.37	1.35	1.34							
Nigeria.....	1.93	1.99	2.19	2.28	2.31	2.33	2.36	2.32	2.33	2.36	2.29	2.23	2.06	2.04	2.15							
Qatar.....	.41	.44	.51	.58	.63	.68	.70	.65	.68	.70	.73	.70	.68	.67	.70							
Saudi Arabia..	8.12	8.23	8.22	8.40	8.55	8.63	8.67	8.56	8.63	8.67	8.66	8.51	8.22	8.17	8.39							
United Arab Emirates....	2.19	2.23	2.28	2.33	2.30	2.32	2.31	2.32	2.32	2.31	2.45	2.35	2.29	2.29	2.35							
Venezuela.....	2.59	2.75	3.05	3.19	3.24	3.36	3.46	3.31	3.36	3.46	3.42	3.23	3.00	3.02	3.17							
Natural Gas																						
Plant Liquids	1.46	1.51	1.50	1.47	1.49	1.49	1.50	1.49	1.49	1.50	1.49	1.57	1.56	1.54	1.53							
Processing Gain.	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06	.06							
Total OPEC.....	27.03	27.57	28.32	29.50	29.66	30.09	30.35	29.91	30.09	30.35	30.88	30.70	30.00	29.91	30.37							
Former USSR.....	7.27	7.14	7.05	6.99	7.15	7.20	7.18	7.13	7.20	7.18	7.29	7.16	7.22	7.30	7.24							
China.....	2.94	2.99	3.13	3.22	3.24	3.19	3.15	3.20	3.19	3.15	3.19	3.20	3.20	3.20	3.20							
Mexico.....	3.17	3.09	3.31	3.36	3.38	3.49	3.51	3.44	3.49	3.51	3.57	3.57	3.48	3.48	3.52							
Other Non-OECD....	9.17	9.86	10.21	10.49	10.52	10.41	10.58	10.50	10.41	10.58	10.75	10.77	10.78	10.97	10.82							
Total Non-OECD....	49.59	50.66	52.02	53.57	53.96	54.38	54.77	54.17	54.38	54.77	55.67	55.40	54.69	54.86	55.15							
Total Supply.....	68.25	69.86	71.76	73.63	73.57	74.08	75.08	74.09	74.08	75.08	75.81	75.19	73.97	74.39	74.83							

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

<sup>2</sup>/ 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 2.4 World Oil Demand, 1994-1998  
(Million Barrels Per Day)

	1994		1995		1996		1997		1998		Annual Average	
	Annual		Annual		Annual		Annual		Annual			
	First	Second	First	Second	First	Second	Third	Fourth	First	Second		Third
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	19.03	NA
U. S. Territories.....	.26	.25	.26	.29	.28	.27	.28	.28	.30	.26	.27	NA
Canada.....	1.73	1.76	1.80	1.81	1.81	1.93	1.88	1.86	1.86	1.82	1.93	NA
Japan.....	5.67	5.71	5.87	6.39	5.17	5.43	5.87	5.71	6.15	4.97	5.23	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	2.00	NA
Italy.....	1.84	2.05	2.06	2.02	1.94	1.99	2.23	2.04	2.10	2.00	2.00	NA
United Kingdom.....	1.84	1.84	1.85	1.84	1.76	1.76	1.83	1.80	1.82	1.73	1.78	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	2.96	NA
Other OECD Europe.....	5.21	5.45	5.52	5.65	5.62	5.71	5.93	5.73	5.93	5.69	5.83	NA
Total OECD Europe.....	13.60	14.12	14.27	14.29	14.19	14.42	14.82	14.43	14.86	14.15	14.57	NA
Australia & New Zealand	.92	.99	.93	.95	.94	.96	.94	.95	.93	.94	.93	NA
Total OECD.....	39.89	40.55	41.43	42.00	40.88	41.74	42.77	41.85	42.42	40.58	41.96	NA
Non-OECD												
China.....	3.14	3.33	3.55	3.71	3.77	3.81	3.86	3.79	3.90	3.96	4.00	NA
Former USSR.....	4.85	4.62	4.38	4.51	4.06	4.06	4.42	4.26	4.54	4.09	4.09	NA
Other Non-OECD.....	20.43	21.43	22.16	23.04	22.90	22.46	24.02	23.11	23.52	23.37	22.93	NA
Total Non-OECD.....	28.42	29.38	30.09	31.27	30.73	30.33	32.30	31.16	31.97	31.42	31.02	NA
Total World Demand.....	68.31	69.93	71.52	73.27	71.61	72.07	75.07	73.01	74.38	72.00	72.98	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, February 1999.

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, December 1986.

Oil Stocks

United States: EIA, Petroleum Supply Annual 1997 and Petroleum Supply Monthly, February 1999.

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, February 1999.

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)

	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>	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	-	.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	-	.364	.008			
Saudi Arabia.....	5.068	1.932	.062	.394	.120	.291	1.066	1.406	.074	1.441	.215			
Imports from														
OPEC-Africa	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	-	.000			
Nigeria.....	1.533	.620	.004	.091	.101	.050	.373	.694	.024	.023	.172			
Imports from														
OPEC-South America	2.199	.206	.031	.000	.046	.012	.117	1.758	.109	.003	.124			
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	.572	.017	.000	.000	.000	.014	.002	.057	.000	.380	.118			
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. \*Zeros (.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, (3rd Quarter 1998)  
(Million Barrels per Day)

	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...	23.271	-0.891	1.918	2.969	1.717	2.551	9.881	-0.803	5.396	0.534				
Imports from OPEC <sup>5/</sup>	17.252	.215	1.130	.678	1.397	3.344	5.084	.300	4.452	.652				
Imports from Persian Gulf <sup>6/</sup>														
Total.....	10.829	.103	.787	.175	.681	2.289	2.399	.106	4.052	.236				
Bahrain.....	.015	.000	.004	.000	.000	.000	.000	-	.012	.000				
Iran.....	1.638	.011	.170	.031	.268	.661	.000	.000	.494	.002				
Iraq.....	1.454	-	.238	.014	.163	.497	.502	.000	.024	.016				
Kuwait.....	1.035	.022	.021	.017	.000	.179	.323	.000	.467	.005				
U.A.E.....	1.437	.000	.000	.000	.000	.009	-.002	-	1.382	.047				
Qatar.....	.489	.000	.000	.000	.000	.000	.005	-	.469	.015				
Saudi Arabia.....	4.761	.070	.354	.113	.251	.943	1.570	.106	1.204	.151				
Imports from OPEC-Africa														
Total.....	3.750	.085	.345	.456	.699	.943	.998	.082	.034	.106				
Algeria.....	1.060	.021	.116	.119	.090	.347	.293	.064	.014	-.003				
Libya.....	1.302	.052	.057	.305	.582	.306	.000	-	-	.000				
Nigeria.....	1.387	.011	.172	.033	.027	.291	.706	.019	.020	.110				
Imports from OPEC-South America														
Total.....	2.056	.026	.000	.047	.003	.112	1.612	.111	.000	.144				
Venezuela.....	2.056	.026	.000	.047	.003	.112	1.612	.111	.000	.144				
Imports from OPEC-Far East														
Total.....	.633	-	.000	.000	.014	.000	.076	.000	.377	.166				
Indonesia.....	.633	-	.000	.000	.014	.000	.076	.000	.377	.166				

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. \*Zeros (.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, (2nd Quarter 1998)  
(Million Barrels per Day)

	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...	22.366	8.134	-0.886	1.906	2.950	1.897	2.267	9.656	-0.939	5.018	0.498
Imports from OPEC <sup>5/</sup> ...	16.747	6.657	.243	1.070	.644	1.456	3.245	4.886	.342	4.213	.648
Imports from Persian Gulf <sup>6/</sup>											
Total.....	10.325	4.028	.138	.827	.177	.683	2.203	2.020	.126	3.927	.223
Bahrain.....	.020	.000	.000	.000	.000	.000	.000	.004	-	.014	.003
Iran.....	1.359	1.013	.024	.165	.014	.305	.505	.000	.000	.346	.000
Iraq.....	.917	.675	-	.218	.025	.106	.327	.212	.022	.000	.007
Kuwait.....	1.015	.233	.040	.023	.024	.000	.146	.313	.000	.464	.005
U.A.E.....	1.471	.040	.005	.025	.000	.000	.009	.004	-	1.369	.059
Qatar.....	.460	.000	.000	.000	.000	.000	.000	.005	-	.435	.020
Saudi Arabia.....	5.082	2.067	.069	.396	.114	.272	1.216	1.483	.105	1.299	.129
Imports from OPEC-Africa											
Total.....	3.791	2.370	.070	.242	.400	.716	.941	1.157	.097	.017	.150
Algeria.....	1.044	.622	.007	.076	.107	.068	.363	.343	.065	.017	-.003
Libya.....	1.318	1.318	.047	.070	.263	.643	.294	.000	-	-	.000
Nigeria.....	1.429	.431	.016	.096	.030	.005	.284	.815	.032	.000	.152
Imports from OPEC-South America											
Total.....	2.205	.232	.035	.000	.067	.030	.100	1.691	.119	.000	.163
Venezuela.....	2.205	.232	.035	.000	.067	.030	.100	1.691	.119	.000	.163
Imports from OPEC-Far East											
Total.....	.447	.028	-	.000	.000	.027	.000	.021	.000	.283	.114
Indonesia.....	.447	.028	-	.000	.000	.027	.000	.021	.000	.283	.114

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. \*Zeros (.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)

1998

	1997	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total.....	21.414	21.851	21.697	21.927	21.726	23.875	21.447	23.093	24.172	22.525	23.003	22.537	
United States <sup>1</sup> /.....	8.130	8.811	8.620	8.775	9.369	9.876	9.715	10.152	10.049	9.426	9.680	9.792	
Canada.....	-964	-985	-991	-729	-930	-911	-977	-877	-777	-753	-867	-861	
OECD Europe <sup>2</sup> /.....	7.741	7.564	7.872	7.391	7.751	9.171	7.444	7.778	8.959	8.047	8.437	7.834	
Main European Importers													
France.....	1.837	1.738	2.034	1.682	2.116	1.980	1.618	1.966	1.875	1.915	1.838	1.923	
Germany <sup>3</sup> /.....	2.933	2.635	2.601	2.938	2.920	3.034	2.894	3.140	2.909	2.855	2.904	2.845	
Italy.....	2.110	1.971	1.886	1.693	2.080	1.810	1.803	1.563	1.902	1.684	1.901	1.885	
Spain.....	1.364	1.230	1.329	1.330	1.397	1.428	1.254	1.332	1.355	1.398	1.341	1.394	
Netherlands.....	.836	.813	.914	.758	.716	.885	.818	.679	.850	.710	.871	.728	
European Net Exporters													
Norway.....	-3.306	-3.327	-3.002	-3.392	-3.439	-2.688	-3.227	-2.976	-2.329	-2.939	-2.655	-3.006	
United Kingdom.....	-1.078	-1.056	-993	-931	-1.253	-621	-793	-852	-914	-908	-962	-1.167	
Smaller European Importers													
Austria.....	.221	.236	.223	.243	.221	.220	.226	.250	.225	.245	.216	.240	
Belgium.....	.635	.693	.604	.620	.637	.596	.594	.557	.612	.617	.603	.595	
Denmark.....	-.066	-.044	.030	-.036	.055	.043	.003	-.038	.004	.016	-.025	-.008	
Ireland.....	.157	.137	.152	.164	.134	.156	.123	.164	.138	.138	.142	.179	
Finland.....	.298	.281	.178	.157	.154	.311	.167	.198	.227	.256	.277	.184	
Greece.....	.353	.433	.403	.467	.449	.255	.369	.238	.422	.410	.377	.416	
Iceland.....	.006	.026	.010	.017	.011	.018	.005	.033	.015	.021	.017	.021	
Luxembourg.....	.045	.042	.044	.044	.043	.039	.038	.047	.037	.044	.045	.042	
Portugal.....	.358	.305	.374	.314	.290	.354	.344	.294	.364	.320	.330	.359	
Sweden.....	.276	.547	.227	.437	.481	.486	.393	.340	.364	.375	.388	.382	
Switzerland.....	.261	.297	.283	.286	.283	.285	.311	.296	.258	.255	.271	.237	
Turkey.....	.502	.606	.574	.602	.458	.580	.504	.548	.646	.635	.557	.583	
Japan.....	6.069	5.721	5.857	5.760	5.160	5.142	4.748	5.420	5.456	5.309	5.306	5.297	
Other OECD.....	.438	.741	.338	.730	.376	.598	.517	.620	.485	.495	.448	.475	

<sup>1</sup>/ U.S. geographic coverage is the 50 States and 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>/ 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. \*Zeros (.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					
	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total.....	16.891	16.511	16.697	16.853	16.447	17.263	16.515	17.489	17.722	16.523	17.053	16.869
United States <sup>1</sup> /.....	4.140	4.268	4.235	4.712	4.756	5.029	4.869	5.305	5.208	4.728	5.044	4.777
Canada.....	.362	.223	.289	.269	.304	.365	.356	.292	.333	.273	.312	.302
OECD Europe <sup>2</sup> /.....	6.532	6.455	6.910	6.244	6.534	6.780	6.655	6.737	7.021	6.526	6.712	6.800
Main European Importers												
France.....	.826	.887	1.071	.881	1.171	1.092	.945	1.098	1.177	1.113	.840	.976
Germany <sup>3</sup> /.....	.627	.601	.595	.571	.601	.732	.595	.722	.690	.620	.701	.668
Italy.....	1.535	1.336	1.624	1.228	1.518	1.429	1.423	1.437	1.490	1.260	1.525	1.494
Spain.....	1.032	.873	.917	.872	.868	.811	.826	.870	.881	.789	.928	.870
Netherlands.....	.861	.835	.896	.854	.593	.716	.850	.738	.853	.951	.896	.815
European Net Exporters												
Norway.....	.005	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
United Kingdom.....	.129	.176	.140	.293	.154	.280	.294	.304	.167	.171	.160	.211
Smaller European Importers												
Austria.....	.130	.093	.139	.136	.135	.121	.124	.103	.125	.141	.161	.154
Belgium.....	.314	.338	.276	.257	.326	.381	.424	.319	.426	.348	.354	.309
Denmark.....	.024	.024	.027	.024	.033	.068	.003	.031	.040	.032	.048	.033
Ireland.....	.000	-	-	-	-	-	-	-	-	-	-	-
Finland.....	.032	.000	.000	.010	.000	.003	.005	.018	.000	.000	.001	.000
Greece.....	.312	.401	.351	.343	.393	.266	.336	.280	.295	.381	.290	.391
Portugal.....	.208	.147	.248	.154	.153	.225	.178	.231	.214	.145	.157	.225
Sweden.....	.008	.208	.074	.102	.158	.094	.170	.118	.104	.024	.091	.091
Switzerland.....	.093	.102	.108	.082	.102	.098	.107	.111	.106	.097	.113	.093
Turkey.....	.394	.432	.445	.437	.327	.465	.375	.356	.453	.452	.445	.470
Japan.....	5.112	4.732	4.589	4.902	4.277	4.367	3.992	4.440	4.532	4.383	4.358	4.344
Other OECD.....	.744	.833	.674	.726	.576	.722	.643	.715	.628	.612	.627	.647

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. \*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.

\*Zeros (.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)

1998

1997

	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total.....	10.196	10.048	10.290	10.212	10.247	10.662	10.054	10.804	11.030	10.647	10.302	10.840
United States <sup>1</sup> /.....	1.749	1.724	1.709	1.950	1.979	1.902	2.184	2.331	2.482	2.382	2.154	2.149
Canada.....	.128	.007	.074	.067	.070	.139	.170	.107	.185	.024	.140	.151
OECD Europe <sup>2</sup> /.....	3.349	3.537	3.911	3.416	3.951	4.292	3.832	4.069	4.059	3.979	3.812	4.223
Main European Importers												
France.....	.503	.671	.769	.513	.851	.913	.712	.824	.734	.805	.571	.706
Germany <sup>3</sup> /.....	.131	.101	.124	.115	.178	.202	.150	.193	.154	.177	.206	.141
Italy.....	.645	.476	.686	.446	.688	.740	.619	.714	.694	.635	.778	.764
Spain.....	.373	.410	.394	.370	.471	.487	.387	.502	.454	.324	.367	.458
Netherlands.....	.636	.574	.702	.679	.420	.525	.641	.560	.706	.782	.696	.699
European Net Exporters												
Norway.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
United Kingdom.....	.069	.078	.060	.180	.102	.177	.135	.139	.082	.089	.056	.123
Smaller European Importers												
Austria.....	.039	.008	.052	.069	.038	.074	.032	.044	.023	.054	.047	.083
Belgium.....	.288	.326	.251	.239	.311	.353	.359	.294	.373	.316	.289	.267
Denmark.....	.000	.000	.000	.000	.008	.021	.003	.000	.015	.013	.024	.001
Finland.....	.000	.000	.000	.000	.000	.000	.000	.018	.000	.000	.000	.000
Greece.....	.299	.369	.301	.311	.370	.226	.301	.263	.243	.342	.277	.358
Portugal.....	.121	.078	.173	.136	.121	.151	.102	.195	.157	.114	.096	.194
Sweden.....	.000	.185	.063	.061	.122	.068	.127	.068	.062	.000	.063	.070
Switzerland.....	.000	.004	.000	.009	.017	.017	.010	.018	.013	.006	.010	.005
Turkey.....	.245	.257	.336	.289	.255	.339	.254	.238	.349	.322	.332	.353
Japan.....	4.705	4.453	4.312	4.545	4.032	4.084	3.659	4.073	4.067	4.015	4.030	3.985
Other OECD.....	.264	.327	.284	.234	.215	.245	.209	.224	.238	.247	.166	.332

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. \*Zeros (.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											
	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total Net Imports...	8.130	8.811	8.620	8.775	9.369	9.876	9.715	10.152	10.049	9.426	9.680	9.792	8.140	4.268	4.235	4.712	4.756	5.029	4.869	5.305	5.208	4.728	5.044	4.777
Imports from OPEC <sup>1</sup> /																								
Imports from																								
Persian Gulf <sup>2</sup> /	1.749	1.724	1.709	1.950	1.979	1.902	2.184	2.331	2.482	2.382	2.154	2.149												
Bahrain.....	.000	-.003	-.004	-.003	-.003	.017	-.003	.000	.000	.000	.000	.000												
Iran.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000												
Iraq.....	.240	.036	.000	.127	.233	.137	.270	.277	.713	.517	.647	.542												
Kuwait.....	.188	.194	.283	.307	.262	.399	.275	.435	.273	.259	.230	.224												
U.A.E.....	-.003	-.003	-.003	.011	.017	-.003	-.003	-.003	-.002	.000	-.006	-.003												
Qatar.....	.015	.000	.018	.000	.000	.000	.015	.015	.000	.000	.000	.000												
Saudi Arabia.....	1.309	1.500	1.415	1.508	1.470	1.352	1.630	1.607	1.498	1.606	1.283	1.386												
Imports from																								
OPEC-Africa																								
Total.....	.622	.919	.807	1.056	1.108	1.229	1.132	1.180	1.000	.808	.917	.793												
Algeria.....	.208	.306	.295	.244	.336	.330	.362	.308	.264	.306	.289	.219												
Libya.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000												
Nigeria.....	.414	.613	.512	.812	.772	.899	.770	.872	.736	.502	.628	.574												
Imports from																								
OPEC-South America																								
Total.....	1.685	1.586	1.694	1.653	1.622	1.894	1.551	1.698	1.668	1.465	1.890	1.670												
Venezuela.....	1.685	1.586	1.694	1.653	1.622	1.894	1.551	1.698	1.668	1.465	1.890	1.670												
Imports from																								
OPEC-Far East																								
Total.....	.084	.036	.021	.050	.044	.021	-.001	.096	.058	.073	.083	.165												
Indonesia.....	.084	.036	.021	.050	.044	.021	-.001	.096	.058	.073	.083	.165												

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

<sup>2</sup>/ 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. \*Zeros (.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)

1998

1997

	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total Net Imports...	6.069	5.721	5.857	5.760	5.160	5.142	4.748	5.420	5.456	5.309	5.306	5.297
Imports from OPEC <sup>1</sup> /.	5.112	4.732	4.589	4.902	4.277	4.367	3.992	4.440	4.532	4.383	4.358	4.344
Imports from Persian Gulf <sup>2</sup> /	4.705	4.453	4.312	4.545	4.032	4.084	3.659	4.073	4.067	4.015	4.030	3.985
Total.....	.031	.028	.017	.000	.013	.012	.017	.008	.016	.010	.028	.022
Bahrain.....	.546	.550	.453	.532	.282	.302	.454	.424	.581	.477	.432	.416
Iran.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.073	.103	.032
Kuwait.....	.630	.583	.578	.611	.437	.531	.421	.443	.478	.482	.501	.505
U.A.E.....	1.475	1.545	1.507	1.336	1.606	1.341	1.161	1.459	1.338	1.349	1.395	1.297
Qatar.....	.467	.469	.438	.571	.482	.487	.334	.474	.504	.428	.387	.462
Saudi Arabia.....	1.556	1.278	1.318	1.496	1.211	1.409	1.272	1.265	1.149	1.196	1.184	1.250
Imports from OPEC-Africa	.062	.000	.017	.000	.019	.000	.034	.017	.041	.045	.096	.028
Total.....	.000	.000	.017	.000	.019	.000	.034	.017	.000	.025	.006	.028
Algeria.....	.062	.000	.000	.000	.000	.000	.000	.000	.041	.020	.090	.000
Nigeria.....	.001	.000	.000	.000	.000	.000	.000	.001	.001	.000	.000	.000
Venezuela.....	.001	.000	.000	.000	.000	.000	.000	.001	.001	.000	.000	.000
Imports from OPEC-Far East	.376	.307	.278	.356	.239	.295	.316	.357	.439	.334	.260	.353
Total.....	.376	.307	.278	.356	.239	.295	.316	.357	.439	.334	.260	.353
Indonesia.....												

<sup>1</sup>/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.  
<sup>2</sup>/ 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. \*Zerces (.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											
	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total Net Imports...	7.741	7.564	7.872	7.391	7.751	9.171	7.444	7.778	8.959	8.047	8.437	7.834	6.532	6.455	6.910	6.244	6.534	6.780	6.655	6.737	7.021	6.526	6.712	6.800
Imports from OPEC1/.																								
Imports from Persian Gulf2/	3.349	3.537	3.911	3.416	3.951	4.292	3.832	4.069	4.059	3.979	3.812	4.223												
Bahrain.....	.001	.000	.034	.000	.000	.000	.000	.000	.001	.011	.001	.000												
Iran.....	.842	.806	.889	.794	.864	1.082	1.091	1.260	1.098	1.066	1.006	1.041												
Iraq.....	.265	.235	.520	.562	.795	.801	.426	.851	1.016	.867	.769	.778												
Kuwait.....	.174	.205	.332	.364	.144	.264	.289	.119	.239	.364	.306	.229												
U.A.E.....	.000	.001	.005	.000	.042	.009	.070	.022	.000	.004	.000	.000												
Qatar.....	.005	.000	.000	.000	.000	.000	.000	.001	.000	.000	.000	.000												
Saudi Arabia.....	2.062	2.289	2.133	1.697	2.106	2.136	1.956	1.816	1.705	1.667	1.731	2.176												
Imports from OPEC-Africa																								
Total.....	2.936	2.730	2.775	2.573	2.397	2.214	2.503	2.465	2.748	2.370	2.592	2.317												
Algeria.....	.745	.902	.598	.843	.574	.634	.656	.680	.697	.704	.747	.766												
Libya.....	1.305	1.215	1.339	1.256	1.371	1.300	1.282	1.331	1.357	1.216	1.262	1.235												
Nigeria.....	.885	.613	.838	.474	.452	.280	.565	.454	.694	.450	.583	.317												
Imports from OPEC-South America																								
Total.....	.214	.160	.195	.201	.149	.253	.294	.180	.196	.188	.305	.252												
Venezuela.....	.214	.160	.195	.201	.149	.253	.294	.180	.196	.188	.305	.252												
Imports from OPEC-Far East																								
Total.....	.034	.030	.063	.054	.037	.021	.026	.024	.018	.000	.004	.007												
Indonesia.....	.034	.030	.063	.054	.037	.021	.026	.024	.018	.000	.004	.007												

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. \*Zeros (.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)

1998

1997

	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total Net Imports...	1.837	1.738	2.034	1.682	2.116	1.980	1.618	1.966	1.875	1.915	1.838	1.923
Imports from OPEC <sup>1</sup> /	.826	.887	1.071	.881	1.171	1.092	.945	1.098	1.177	1.113	.840	.976
Imports from Persian Gulf <sup>2</sup> /												
Total.....	.503	.671	.769	.513	.851	.913	.712	.824	.734	.805	.571	.706
Bahrain.....	.001	.000	.012	.000	.000	.000	.000	.000	.001	.011	.001	.000
Iran.....	.079	.171	.142	.159	.099	.229	.164	.261	.148	.100	.118	.155
Iraq.....	.002	.120	.073	.062	.294	.193	.167	.214	.247	.254	.125	.104
Kuwait.....	.000	.003	.093	.006	.000	.066	.000	.000	.000	.065	.003	.000
U.A.E.....	.000	.000	.005	.000	.016	.000	.061	.000	.000	.000	.000	.000
Qatar.....	.005	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Saudi Arabia.....	.416	.376	.444	.287	.442	.424	.321	.349	.339	.375	.324	.447
Imports from OPEC-Africa												
Total.....	.323	.216	.313	.368	.320	.178	.232	.274	.443	.319	.269	.269
Algeria.....	.092	.129	.053	.191	.120	.062	.048	.093	.137	.120	.124	.174
Libya.....	.043	.000	.062	.059	.103	.085	.020	.047	.061	.063	.025	.060
Nigeria.....	.189	.087	.197	.118	.096	.031	.164	.134	.245	.136	.121	.035
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.....	.001	.000	.000	.000	.000	.001	.001	.001	.001	.000	.001	.000
Indonesia.....	.001	.000	.000	.000	.000	.001	.001	.001	.001	.000	.001	.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. •Zeros (.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					
	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total Net Imports...	2.933	2.635	2.601	2.938	2.920	3.034	2.894	3.140	2.909	2.855	2.904	2.845
Imports from OPEC <sup>1</sup> /.	.627	.601	.595	.571	.601	.732	.595	.722	.690	.620	.701	.668
Imports from												
Persian Gulf <sup>2</sup> /												
Total.....	.131	.101	.124	.115	.178	.202	.150	.193	.154	.177	.206	.141
Bahrain.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Iran.....	.010	.004	.000	.027	.014	.017	.011	.045	.021	.026	.046	.020
Iraq.....	.000	.000	.000	.000	.034	.027	.013	.018	.011	.014	.023	.018
Kuwait.....	.013	.004	.020	.016	.021	.024	.027	.014	.014	.022	.016	.005
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.....	.108	.093	.104	.072	.109	.135	.099	.116	.109	.115	.122	.098
Imports from												
OPEC-Africa												
Total.....	.446	.490	.439	.410	.368	.429	.402	.479	.483	.405	.403	.519
Algeria.....	.146	.125	.091	.150	.050	.139	.131	.120	.158	.077	.097	.214
Libya.....	.172	.241	.288	.252	.275	.260	.256	.333	.290	.292	.287	.240
Nigeria.....	.128	.124	.059	.008	.043	.030	.015	.026	.035	.037	.019	.065
Imports from												
OPEC-South America												
Total.....	.051	.006	.032	.046	.055	.100	.044	.050	.053	.038	.092	.008
Venezuela.....	.051	.006	.032	.046	.055	.100	.044	.050	.053	.038	.092	.008
Imports from												
OPEC-Far East												
Total.....	.000	.004	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Indonesia.....	.000	.004	.000	.000	.000	.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. \*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. \*Zeros (.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)

	1998											
	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total Net Imports...	2.110	1.971	1.886	1.693	2.080	1.810	1.803	1.563	1.902	1.684	1.901	1.885
Imports from OPEC <sup>1/</sup>	1.535	1.336	1.624	1.228	1.518	1.429	1.423	1.437	1.490	1.260	1.525	1.494
Imports from Persian Gulf <sup>2/</sup>												
Total.....	.645	.476	.686	.446	.688	.740	.619	.714	.694	.635	.778	.764
Bahrain.....	.000	.000	.022	.000	.000	.000	.000	.000	.000	.000	.000	.000
Iran.....	.316	.185	.195	.197	.252	.333	.329	.273	.256	.276	.394	.279
Iraq.....	.063	.000	.067	.068	.108	.133	.075	.149	.153	.187	.130	.123
Kuwait.....	.000	.000	.005	.000	.000	.000	.000	.000	.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.....	.266	.291	.397	.181	.328	.273	.216	.293	.285	.171	.254	.362
Imports from OPEC-Africa												
Total.....	.851	.787	.878	.719	.778	.662	.711	.700	.778	.617	.737	.678
Algeria.....	.049	.135	.086	.057	.080	.048	.076	.091	.100	.079	.072	.062
Libya.....	.725	.595	.617	.629	.698	.607	.626	.567	.647	.530	.618	.578
Nigeria.....	.077	.056	.175	.032	.000	.006	.010	.042	.031	.007	.047	.038
Imports from OPEC-South America												
Total.....	.007	.048	.020	.010	.016	.007	.067	.000	.000	.009	.007	.044
Venezuela.....	.007	.048	.020	.010	.016	.007	.067	.000	.000	.009	.007	.044
Imports from OPEC-Far East												
Total.....	.032	.025	.062	.054	.037	.020	.025	.023	.018	.000	.003	.007
Indonesia.....	.032	.025	.062	.054	.037	.020	.025	.023	.018	.000	.003	.007

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. \*Zeros (.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					
	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total.....	0.527	0.272	0.520	0.693	1.036	0.993	0.719	1.137	1.752	1.474	1.602	1.370
United States <sup>1</sup> /.....	.240	.036	.000	.127	.233	.137	.270	.277	.713	.517	.647	.542
Canada.....	.000	.000	.000	.000	.000	.050	.014	.000	.000	.000	.062	.000
OECD Europe <sup>2</sup> /.....	.265	.235	.520	.562	.795	.801	.426	.851	1.016	.867	.769	.778
Main European Importers												
France.....	.002	.120	.073	.062	.294	.193	.167	.214	.247	.254	.125	.104
Germany <sup>3</sup> /.....	.000	.000	.000	.000	.034	.027	.013	.018	.011	.014	.023	.018
Italy.....	.063	.000	.067	.068	.108	.133	.075	.149	.153	.187	.130	.123
Spain.....	.058	.080	.111	.129	.102	.099	.097	.223	.195	.097	.125	.165
Netherlands.....	.000	.000	.128	.088	.124	.163	.010	.049	.111	.102	.162	.072
European Net Exporters												
United Kingdom.....	.000	-	-	-	-	-	-	-	-	-	-	-
Smaller European Importers												
Austria.....	.019	.000	.022	.043	.022	.018	.006	.022	.000	.046	.027	.056
Belgium.....	.000	.000	.014	.049	.050	.005	.000	.076	.127	.083	.041	.055
Denmark.....	.000	-	-	-	-	-	-	-	-	-	-	-
Greece.....	.067	.032	.000	.016	.000	.030	.000	.000	.024	.008	.000	.049
Portugal.....	.000	.000	.037	.053	.000	.032	.032	.065	.030	.000	.000	.030
Sweden.....	.000	-	-	-	-	-	-	-	-	-	-	-
Switzerland.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Turkey.....	.056	.004	.067	.055	.061	.099	.026	.036	.118	.075	.136	.105
Japan.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.073	.103	.032
Other OECD.....	.022	.001	.000	.005	.008	.004	.009	.009	.023	.017	.021	.018

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

<sup>2</sup>/ "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.

<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: \*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. \*Zeros (.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

	Dec	Jan	Feb	Mar	April	May	June	July	August	Sept	Oct	Nov
Total.....	1.003	0.984	1.207	1.293	0.855	1.197	0.988	1.000	0.992	1.116	1.037	0.965
United States <sup>1</sup> /.....	.188	.194	.283	.307	.262	.399	.275	.435	.273	.259	.230	.224
Canada.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.005
OECD Europe <sup>2</sup> /.....	.174	.205	.332	.364	.144	.264	.289	.119	.239	.364	.306	.229
Main European Importers												
France.....	.000	.003	.093	.006	.000	.066	.000	.000	.000	.065	.003	.000
Germany <sup>3</sup> /.....	.013	.004	.020	.016	.021	.024	.027	.014	.014	.022	.016	.005
Italy.....	.000	.000	.005	.000	.000	.000	.000	.000	.000	.000	.000	.000
Spain.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Netherlands.....	.117	.183	.194	.253	.097	.075	.193	.056	.183	.178	.199	.149
European Net Exporters												
Norway.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
United Kingdom.....	.028	.000	.002	.070	.008	.064	.048	.031	.020	.015	.006	.028
Smaller European Importers												
Austria.....	.000	-	-	-	-	-	-	-	-	-	-	-
Belgium.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.031	.045	.029
Denmark.....	.000	.000	.000	.000	.008	.021	.003	.000	.015	.012	.022	.001
Finland.....	-	.000	.000	.000	.000	.000	.000	.018	.000	.000	.000	.000
Greece.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Portugal.....	.000	-	-	-	-	-	-	-	-	-	-	-
Sweden.....	.000	.000	.000	.004	.000	.001	.000	.000	.000	.000	.000	.000
Switzerland.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Turkey.....	.016	.015	.017	.015	.010	.014	.019	.000	.008	.040	.015	.016
Japan.....	.630	.583	.578	.611	.437	.531	.421	.443	.478	.482	.501	.505
Other OECD.....	.011	.001	.014	.012	.011	.003	.002	.003	.002	.011	.001	.002

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

<sup>2</sup>/ "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.

<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: 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. \*Zeros (.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, February 1999. 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  
(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
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	2,500	1,983	1,897	487	8,301	1,831	2,165	29,464
1979 Average.....	1,224	1,591	5,242	2,563	2,500	2,092	2,302	508	9,532	1,831	2,356	30,581
1980 Average.....	1,106	1,577	3,168	3,477	2,500	1,787	2,055	472	9,900	1,709	2,168	26,606
1981 Average.....	1,106	1,577	1,662	2,514	1,656	1,787	1,433	405	9,815	1,474	2,102	22,481
1982 Average.....	1,002	1,605	1,380	1,000	1,125	1,140	1,295	330	6,483	1,250	1,895	17,497
1983 Average.....	987	1,339	2,214	1,012	823	1,150	1,241	295	5,086	1,149	1,801	18,778
1984 Average.....	968	1,343	2,440	1,005	1,064	1,105	1,241	394	4,663	1,146	1,798	17,442
1985 Average.....	1,014	1,412	2,174	1,209	1,157	1,087	1,388	301	3,388	1,193	1,677	16,181
1986 Average.....	1,037	1,325	2,250	1,433	1,023	1,059	1,495	308	4,870	1,330	1,787	18,275
1987 Average.....	945	1,390	2,035	1,690	1,419	1,034	1,467	308	4,265	1,541	1,752	18,517
1988 Average.....	1,048	1,343	2,298	2,079	1,585	972	1,341	293	5,086	1,565	1,903	20,324
1989 Average.....	1,040	1,342	2,240	2,685	1,492	1,175	1,450	346	5,064	1,860	1,907	22,071
1990 Average.....	1,095	1,409	2,810	2,897	1,783	1,150	1,716	380	6,410	2,117	2,137	23,195
1991 Average.....	1,175	1,462	3,088	2,040	1,175	1,375	1,810	406	6,410	2,386	2,375	23,275
1992 Average.....	1,230	1,592	3,312	305	1,90	1,483	1,892	395	8,115	2,386	2,375	23,275
1993 Average.....	1,214	1,504	3,429	425	1,058	1,433	1,943	423	8,332	2,266	2,371	24,398
1994 Average.....	1,162	1,511	3,540	512	1,852	1,361	1,960	413	8,198	2,159	2,450	25,119
1995 Average.....	1,180	1,510	3,618	553	2,025	1,378	1,931	415	8,120	2,193	2,588	25,510
1996 Average.....	1,202	1,503	3,643	560	2,057	1,390	1,993	442	8,231	2,233	2,750	26,004
1997 Average P.....	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 Sea/ Sea1/	Angola	Argentina	Australia	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  
(Thousand 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	--	--	481	7,171	3,228	60,212
1993 Average.....	890	313	534	640	2,673	776	--	--	554	6,847	3,280	60,238
1994 Average.....	896	329	590	645	2,685	810	--	--	560	6,662	3,382	60,992
1995 Average.....	920	365	703	682	2,618	851	--	--	575	6,560	3,410	62,331
1996 Average.....	922	368	651	695	2,855	883	--	--	604	6,465	3,509	64,054
1997 Average P.....	874	368	675	746	3,023	887	--	--	561	6,452	3,706	66,317

<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. P=Preliminary.  
Sources: See end of Section 4.

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

	Algeria	Indonesia	Iran	Iraq	Kuwait <sup>1</sup> / LIBYA	Libya	Nigeria	Qatar	Saudi Arabia <sup>1</sup> / Emirates	United Arab Emirates	Venezuela	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	3,583	548	2,025	1,378	1,821	380	8,120	2,113	2,542	24,594
1995 Average...	767	1,343	3,608	555	2,057	1,390	1,878	407	8,231	2,148	2,710	25,094
1996 Average...	812	1,367	3,651	574	2,062	1,401	2,051	475	8,218	2,198	3,013	25,822
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	1,603	246	252	372	2,790
1976 Average.....	24	289	95	185	--	220	1,633	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>	OAEPC <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

<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> OAEPC=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	232	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	1,607	111	509	72	3,418
1987	December.....	127	169	259	121	1,130	1,593	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

<sup>1/</sup> 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.

<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> 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.

<sup>4/</sup> "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)

	United Kingdom		OECD Europe <sup>2/</sup>		United States <sup>3/</sup>		Japan		OECD Excluding East Germany		OECD Including East Germany		World Total
	France	Italy	Germany <sup>1/</sup>	United Kingdom	OECD Europe <sup>2/</sup>	United States <sup>3/</sup>	Canada	Japan	Other <sup>4/</sup>	East Germany	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	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	34,993	49,416	
1972 Average...	2,322	1,947	2,859	2,384	13,934	16,367	1,664	4,363	948	37,275	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	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	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	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	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	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	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	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	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	36,624	60,903	
1982 Average...	1,880	1,781	2,372	1,531	12,053	15,231	1,578	4,582	1,008	34,517	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	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	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	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	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	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	37,415	64,819	
1989 Average...	1,857	1,930	2,280	1,738	12,531	17,531	1,733	4,983	998	37,570	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	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	2,903	1,799	14,433	18,620	1,857	5,711	R1,229	--	R41,850	R73,008	

<sup>1/</sup> 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.

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

<sup>4/</sup> "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
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 <sub>1</sub> /.....	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 <sub>2</sub> /.....	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 <sub>3</sub> /.....	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
Average											

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. \*Zeros (.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
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

<sup>1</sup>/ U.S. geographic coverage is the 50 States and 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>/ 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. \*Zeros (.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
Imports from											
Persian Gulf											
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
Main European Importers											
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
European Net Exporters											
Norway.....	.002	-	-	.000	.011	.000	.000	.000	.000	.000	.000
United Kingdom....	.164	.212	.240	.250	.222	.220	.303	.174	.135	.102	.094
Smaller European Importers											
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
Average											

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. \*Zeros (.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
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

Average

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

<sup>2/</sup> 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. \*Zeros (0.000) 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
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>	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	.023	.044	.015	.011	.011	.007	.008	.017	.026	.032	.036
Total.....	.023	.044	.015	.010	.010	.007	.008	.012	.011	.012	.014
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	.012	.011	.011	.011	.010	.010	.009	.009	.002	.003	.003
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	.563	.599	.631	.682	.673	.624	.533	.551	.488	.442	.380
Total.....	.563	.599	.631	.682	.673	.624	.533	.551	.488	.442	.380
Indonesia.....	.563	.599	.631	.682	.673	.624	.533	.551	.488	.442	.380

Average

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. \*Zeros (.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
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. \*Zeroces (.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
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 OPEC1/.	.684	.737	.875	1.101	1.021	.932	1.006	.956	.911	.897	.899
Imports from Persian Gulf2/	.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	.212	.249	.218	.233	.296	.281	.242	.301	.262	.323	.282
Total.....	.072	.079	.089	.092	.107	.105	.066	.089	.103	.105	.131
Algeria.....	.064	.090	.065	.079	.104	.087	.063	.059	.043	.051	.060
Libya.....	.076	.079	.064	.062	.084	.090	.112	.153	.115	.168	.091
Imports from OPEC-South America	.012	.011	.012	.015	.017	.011	.010	.003	.002	.001	.000
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	-	-	.000	.000	.001	.001	.000	.000	.000	.000	.000
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. \*Zeros (.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
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. \*Zeros (.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
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
Average											

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. \*Zeros (.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
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

<sup>1</sup>/ U.S. geographic coverage is the 50 States and 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>/ 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. \*Zeros (.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
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	.000	.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

Average

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, November 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, Hungary, 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 September 1998 United States (including territories) oil stocks totaled 1,507 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 affloat, 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
<b>North America</b>										
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
<b>Central &amp; South America</b>										
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
<b>Western Europe</b>										
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	7.330	7.330	7.330	7.330	7.330
Germany, East . . . . .	7.340	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	--	--	--	--	--
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

-- = 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
Eastern Europe & Former U.S.S.R.										
Albania . . . . .	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.594
Bulgaria . . . . .	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Former Czechoslovakia . . . . .	6.780	6.780	6.780	6.780	6.780	6.780	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	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
Kazakhstan . . . . .	--	--	--	--	--	--	7.270	7.270	7.270	7.270
Kyrgyzstan . . . . .	--	--	--	--	--	--	7.270	7.270	7.270	7.270
Russia . . . . .	--	--	--	--	--	--	7.270	7.270	7.270	7.270
Tajikistan . . . . .	--	--	--	--	--	--	7.270	7.270	7.270	7.270
Turkmenistan . . . . .	--	--	--	--	--	--	7.270	7.270	7.270	7.270
Ukraine . . . . .	--	--	--	--	--	--	7.270	7.270	7.270	7.270
Uzbekistan . . . . .	--	--	--	--	--	--	7.270	7.270	7.270	7.270
Middle East										
Bahrain . . . . .	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320
Iran . . . . .	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305
Iraq . . . . .	7.426	7.426	7.426	7.426	7.426	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
Gabon . . . . .	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305
Ghana . . . . .	7.285	--	--	--	--	--	7.285	7.285	7.285	7.285
Libya . . . . .	7.515	7.515	7.515	7.515	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
Sudan . . . . .	--	--	--	--	--	--	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
Peapua New Guinea . . . . .	--	--	--	--	--	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
Raiwan . . . . .	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).