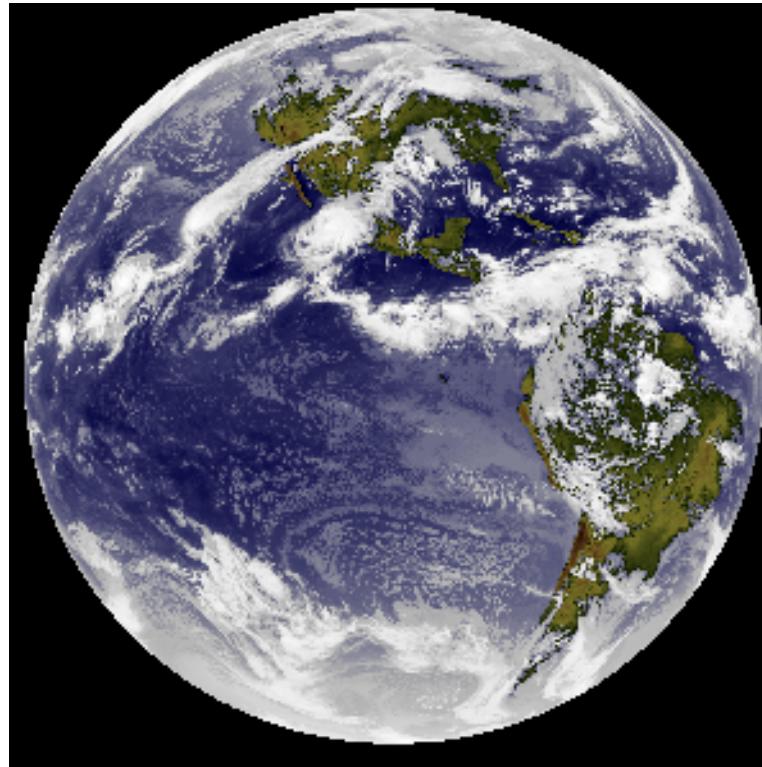


# **INTERNATIONAL PETROLEUM STATISTICS REPORT**

**June 1999**



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

## Preface

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

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

The International Petroleum Statistics Report presents data on international oil production, demand, imports, and stocks. The report has four sections. Section 1 contains time series data on world oil production, and on oil demand and stocks in the Organization for Economic Cooperation and Development (OECD). This section contains annual data beginning in 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 1998; OECD stocks from 1973 through 1998; and OECD trade from 1988 through 1998.

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. Grillot, Team Leader, International Energy Statistics Team, (202) 586-6577, Patricia A. Smith (202) 586-6925, or H. Vicky McLaine (202) 586-9412; Oil Market Chronology - Douglas MacIntyre (202) 586-1831.

**Historical revisions reflect changes to data that were published in the *International Energy Annual 1997*, which is also available on the EIA Home Page (<http://www.eia.doe.gov/iea>).**

## Oil Market Chronology -- May 1999

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

- May 1** A European Union (EU) ban on oil shipments to Yugoslavia takes effect in an effort to deny Yugoslav forces access to fuel. The ban calls on EU member nations to cease shipping oil to Yugoslavia. In addition, U.S. President Clinton signs an executive order imposing a U.S. embargo on trade with Serbia, that exempts the Yugoslav republic of Montenegro. A broader blockade of Yugoslavia by NATO is still being discussed. (DJ)
- U.S. President Clinton unveils a plan to apply the same standard for tailpipe emissions to cars, light-duty trucks, and most sport utility vehicles (SUVs). Based on current nitrogen oxides ( $\text{NO}_x$ ) emission levels, the proposed plan would result in a 77 percent reduction for cars and a 95 percent reduction for light-duty trucks and SUVs. The new standards would be phased in during the 2004 to 2007 model years. At the same time, the Environmental Protection Agency (EPA) proposes a rule that would require refiners to reduce gasoline sulfur content from a current average of nearly 330 parts per million (ppm) to 30 ppm. The new sulfur standard is being proposed in conjunction with the new tailpipe emission proposal since sulfur impedes catalytic converter efficiency, thus making it more difficult to reduce tailpipe emissions without reducing sulfur content in gasoline. Oil industry representatives have vowed to protest the proposed rule, claiming that it will cost refiners \$3 billion to \$6 billion. The EPA estimates that the cost of compliance for both the automobile and oil industries will be between \$3.4 billion and \$4.4 billion. (DJ)
- May 4** Japan signs a contract to lend \$1 billion to the Korean Peninsula Energy Development Organization, which is building two light-water nuclear reactors in North Korea as part of a 1994 agreement between the United States and North Korea. The money was delayed for several months as Japan was considering whether to continue funding some of the project after North Korea fired a missile through Japanese air space in 1998. (WP)
- May 5** General Abdulsalam Abubakar, Nigeria's current leader, signs a new constitution designed to ensure a smooth transition from military rule to civilian rule when President-elect Olusegun Obasanjo assumes office on May 29. *Dow Jones* reported that General Abubakar hinted that the constitution would encourage decentralization of the federal government. Nigeria has been governed by the military for all but 10 of the nearly 40 years since it became independent. (DJ)
- May 6** South Korea's Ministry of Commerce, Industry, and Energy reports that the country's energy consumption in the first quarter of 1999 rose by 11.4 percent compared to the same period in 1998. Oil consumption rose 11.5 percent over the same period, averaging 2.17 million barrels per day. The Ministry reported that the increase in oil consumption was a result of improving consumer confidence in the South Korean economy. (DJ)
- May 9** Elf Aquitaine, a major French oil company, submits a proposal to the Saudi Arabian government to set up a new natural gas and electricity project worth over \$1 billion. Elf is proposing to develop a natural gas field in central Saudi Arabia, and then to use the gas to fuel a new 1,500-megawatt electric power plant to be located near the gas field. This is the first firm proposal submitted to the Saudi Arabian government since Saudi Crown Prince Abdullah's recent invitation to major energy companies to invest in Saudi Arabia's oil and gas sectors. (DJ)
- May 10** The Board of Argentine oil company YPF unanimously approved a \$13.4 billion offer from Repsol, a Spanish company. Repsol, which already owns 14.99 percent of YPF, made an all cash offer to purchase the remaining 85.01 percent last month. The Board recommended to all shareholders to accept the Repsol offer. Two Argentine provinces, which own about five percent of YPF's shares, remain concerned about Repsol's intentions for their regions. (WSJ)
- Norsk Hydro, one of Norway's state-owned oil companies, offers to buy out privately-owned Norwegian oil and gas exploration company, Saga Petroleum for more than \$2.2 billion. Saga's board of directors will consider the offer before making a recommendation to their shareholders. (WSJ, DJ)
- May 11** The Independent Petroleum Association of America (IPAA) votes to be an "interested party" to a petition before the U.S. International Trade Commission to investigate dumping of crude oil into the United States by Mexico, Venezuela, Iraq, and Kuwait. By being an "interested party", the IPAA will be able to file briefs in the case, without being the initiator of the petition, according to IPAA vice chairman Jerry Jordan. The petition will be filed on May 28 by a group called "Save Domestic Oil", which is led by Oklahoma Basic Energy Corporation and Continental Resources, another Oklahoma-based company. (USA, DJ)

- May 12** The Caspian Pipeline Consortium (CPC) begins construction of a 981-mile pipeline that will carry crude oil from the Caspian Sea to the Russian port of Novorossisk for export to foreign markets. The pipeline's planned capacity is about 1.3 million barrels per day, and the CPC is expecting to load the first tanker in mid-2001. (DJ)
- May 13** Saudi Arabia notifies U.S. crude oil customers that state oil company Saudi Aramco will cut term-contracted volumes of crude delivered to them in June by 20 percent to 25 percent. Saudi Aramco had earlier notified European crude oil customers of cuts in volume averaging 35 percent, with cuts for Asian customers averaging 17 percent. (DJ)
- The U.S. special envoy for Caspian Sea energy issues, Ambassador Richard Morningstar, delivers a U.S. proposal to President Niyazov of Turkmenistan on the sharing of Caspian energy resources between Turkmenistan and Azerbaijan. The proposal was developed by a panel of U.S. advisors to the Turkmen-Azerbaijani commission on determining the sea boundary delineation between the two states. The same proposal was delivered to the government of Azerbaijan on May 12. Contents of the U.S. proposal are not made public. (DJ)
- May 17** The Environmental Protection Agency (EPA) states that it will not change its "Tier Two Plan" to cut gasoline sulfur content and tailpipe emissions, in response to a recent appellate court ruling that the EPA had overstepped its mandate in implementing some provisions of the Clean Air Act. Beginning in 2004, the Tier Two Plan would require refiners to cut gasoline sulfur content to an average of 30 parts per million, down more than 90 percent from the current national average. (DJ)
- May 18** Acting Russian Fuel and Energy Minister Sergei Generalov states that Russia plans to maintain cuts in oil exports made in the first quarter of 1999 in support of efforts by the Organization of Petroleum Exporting Countries to raise oil prices. Russia had cut exports by 100,000 barrels per day. (DJ)
- May 18** Ecuador's Energy Minister, Rene Ortiz, announces plans to privatize all of Ecuador's downstream operations, including the sale of four refineries. State oil company Petroecuador currently operates the refineries. (DJ)
- May 20** China announces it is speeding up plans for the construction of a crude oil pipeline linking oil deposits in Kazakhstan to refineries in north and central China. The pipeline is now planned for completion in 2007. China National Petroleum Corporation has a stake in Kazakhstan's Uzen oilfield near the Caspian Sea. (DJ)
- May 21** The United Nations Security Council, in a unanimous vote, extends the "oil-for-food" program, under which Iraqi oil sales finance imports of food and medicine, for another six-month period. The resolution renews the program under its current terms, but promises a review of the program's \$5.26 billion cap on exports if Iraq reaches the ceiling. (DJ)
- Venezuelan President Hugo Chavez states that a sharp increase in oil prices is not desirable. "If the price of a Venezuelan oil basket hovers around \$13 to \$14 per barrel, I will be happy," Chavez says. (DJ)
- May 24** Iraqi oil officials state that, despite a lack of spare parts, Iraq is capable of boosting output from its northern oil fields to 1.2 million barrels per day during the proposed sixth phase of the "oil-for-food" deal with the United Nations, from around 0.8 million barrels per day in the fifth phase. (DJ)
- May 25** Russian Prime Minister Sergei Stepashin signs a government decree doubling the tariff on oil exports to 5 euros (EUR) per metric ton. Earlier this year, the Russian government set out a schedule of tariffs based on export prices for Russian oil. The EUR 5 per ton tariff takes effect when the price of Russian oil rises above \$12 a barrel. (DJ)
- May 27** Exxon and Mobil shareholders approve an \$81.2 billion merger, in which Exxon will issue 1.32 shares for each share of Mobil's approximately 780.2 million shares outstanding. The merger still must receive regulatory approval from the U.S. government and the European Union. The chairmen of both companies state that they expect regulatory approvals to be obtained by the end of the third quarter of 1999. (DJ)

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

Figure 1. World Crude Oil Production, Monthly

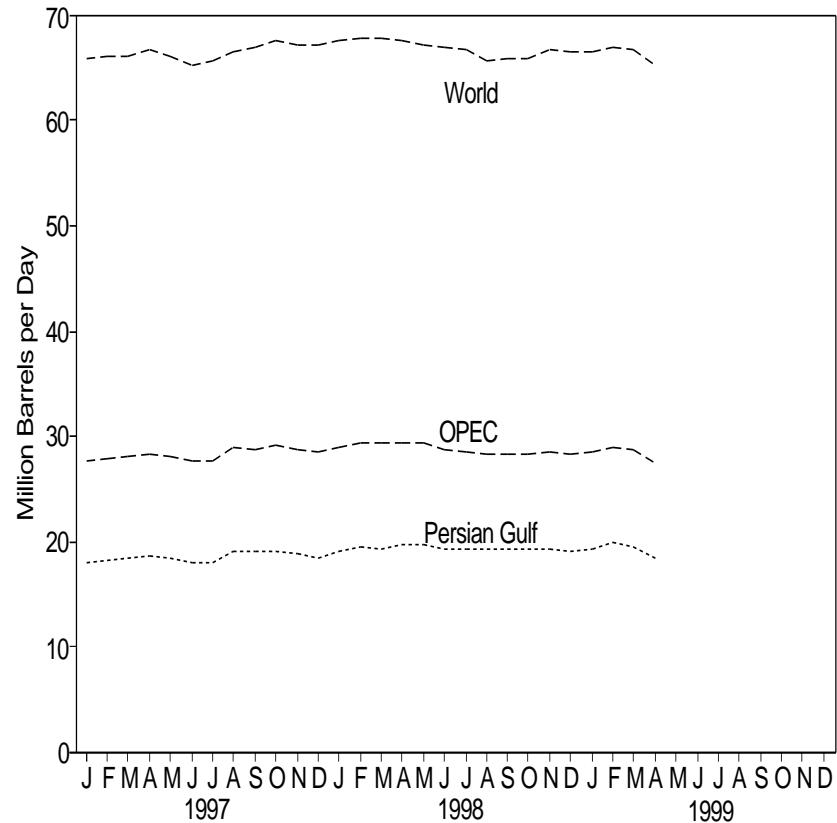
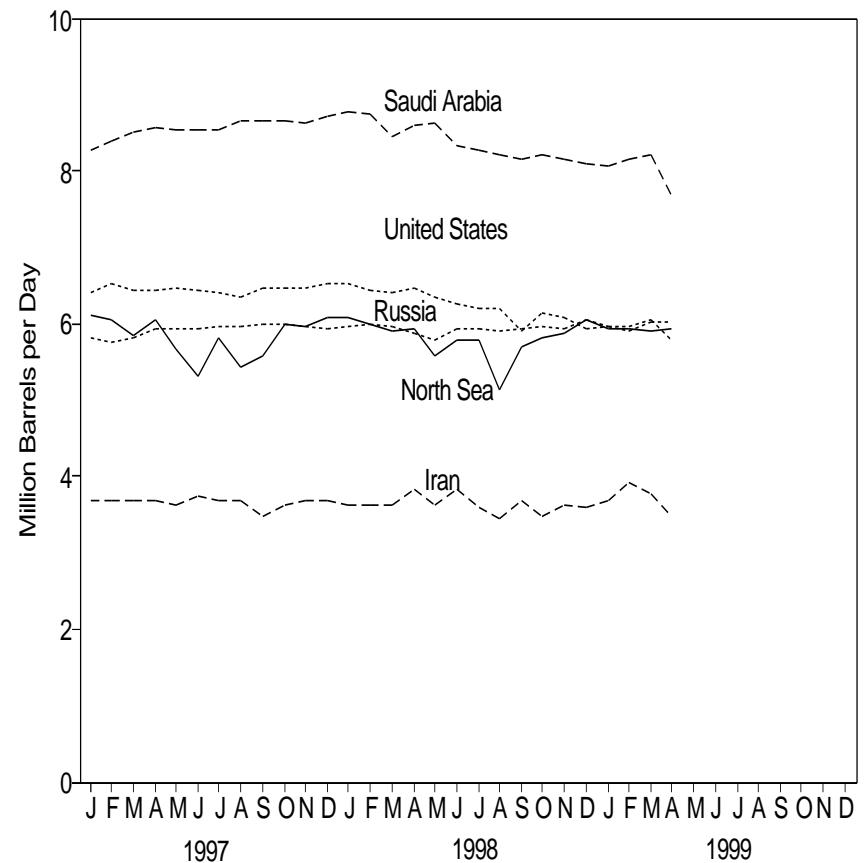


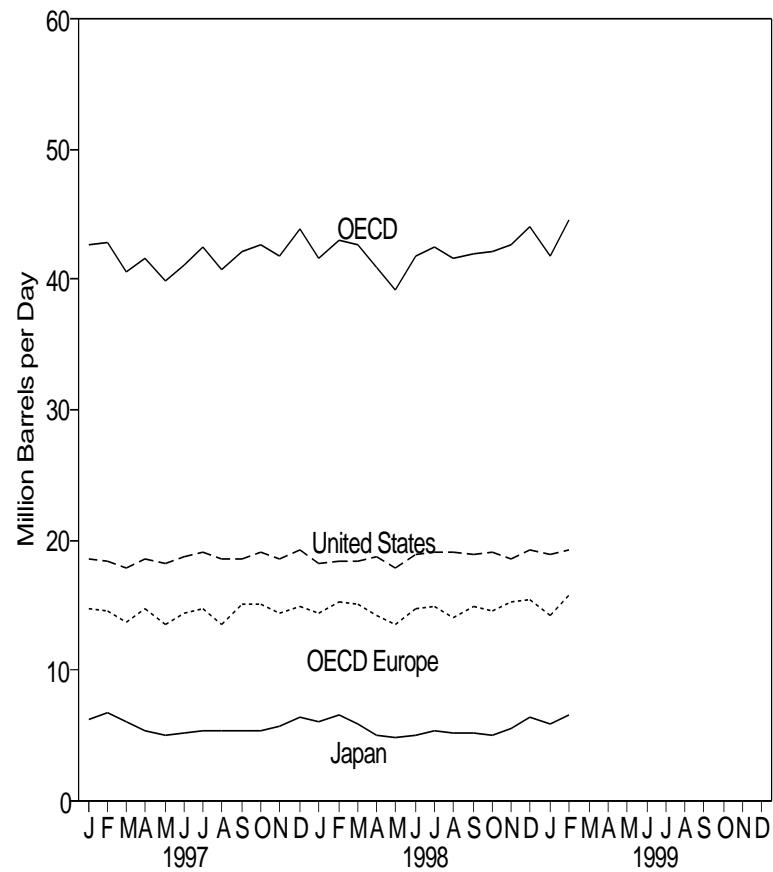
Figure 2. Leading Crude Oil Producers, Monthly



Source: Tables 1.1a-1.1c

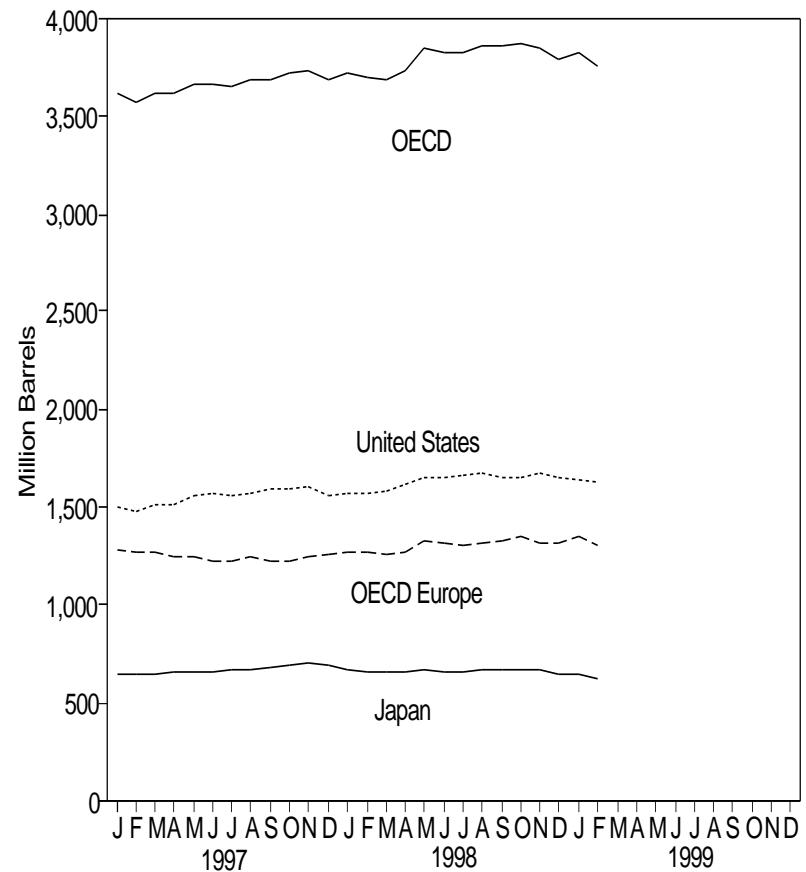
Source: Tables 1.1a-1.1c

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



Source: Table 1.7

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



Source: Table 1.5

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

	Algeria	Indo-nesia	Iran	Iraq	Kuwait <sup>1/</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>1/</sup>	United Arab Emirates	Vene-zuela	Total OPEC
1990 Average.....	1,175	1,462	3,088	2,040	1,175	1,375	1,810	406	6,410	2,117	2,137	23,195
1991 Average.....	1,230	1,592	3,312	305	190	1,483	1,892	395	8,115	2,386	2,375	23,275
1992 Average.....	1,214	1,504	3,429	425	1,058	1,433	1,943	423	8,332	2,266	2,371	24,398
1993 Average.....	1,162	1,511	3,540	512	1,852	1,361	1,960	413	8,198	2,159	2,450	25,119
1994 Average.....	1,180	1,510	3,618	553	2,025	1,378	1,931	415	8,120	2,193	2,588	25,510
1995 Average.....	1,202	1,503	3,643	560	2,057	1,390	1,993	442	8,231	2,233	2,750	26,004
1996 Average.....	1,242	1,547	3,686	579	2,062	1,401	R2,001	510	8,218	2,278	R2,938	R26,461
1997 Average.....	1,277	R1,520	3,664	R1,155	2,083	1,446	R2,332	649	8,562	2,316	3,315	R28,320
1998 January.....	1,290	1,520	3,635	1,261	2,215	1,450	2,218	715	8,765	2,435	3,440	28,944
February.....	1,290	1,520	3,635	1,703	2,210	1,450	2,263	735	8,760	2,435	3,410	29,411
March.....	1,290	1,520	3,635	1,825	2,210	1,450	2,380	735	8,460	2,480	3,410	29,395
April.....	1,270	1,520	3,835	1,985	2,115	1,400	2,238	705	8,585	2,420	3,240	29,313
May.....	1,250	1,520	3,635	2,245	2,105	1,360	2,230	705	8,625	2,330	3,240	29,245
June.....	1,240	1,490	3,835	1,920	2,105	1,360	2,210	705	8,325	2,300	3,210	28,700
July.....	1,230	1,490	3,585	2,355	2,075	1,360	2,160	685	8,275	2,280	3,070	28,565
August.....	1,220	1,510	3,435	2,555	2,025	1,340	2,010	675	8,225	2,300	2,990	28,285
September.....	1,220	1,510	3,685	2,555	1,972	1,335	2,010	665	8,173	2,300	2,940	28,365
October.....	1,220	1,540	3,485	2,555	1,970	1,335	1,960	670	8,220	2,290	2,990	28,235
November.....	1,220	1,540	3,635	2,505	2,020	1,350	2,060	675	8,170	2,290	3,040	28,505
December.....	1,220	1,540	3,585	2,305	2,010	1,350	2,110	680	8,110	2,290	3,040	28,240
1998 Average.....	1,246	1,518	3,634	2,150	2,085	1,378	2,153	696	8,389	2,345	3,167	28,762
1999 January.....	1,230	1,540	3,665	2,515	1,995	1,360	2,080	695	8,065	2,240	3,020	28,405
February.....	1,240	1,520	3,925	2,655	2,005	1,360	2,010	695	8,165	2,330	3,000	28,905
March.....	1,250	1,530	3,795	2,430	2,020	1,360	2,160	775	8,220	2,235	2,960	28,735
April.....	1,210	1,530	3,485	2,655	1,785	1,320	2,160	705	7,665	2,180	2,800	27,495
1999 Average.....	1,233	1,530	3,714	2,561	1,951	1,350	2,104	718	8,028	2,245	2,945	28,379

<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 April 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 Seal/ <sup>1/</sup>	Angola	Argen-tina	Austra- lia	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.....	R3,143	R2,518	R5,830	R714	R834	588	R841	R1,922	3,200	R652	R388
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.....	3,045	2,821	6,038	785	830	428	1,075	1,962	3,215	847	370
1998 Average.....	3,017	2,616	5,804	735	847	544	971	1,981	3,198	759	377
1999 January.....	3,002	2,721	5,922	780	815	509	1,128	1,892	3,230	843	370
February.....	3,004	2,728	5,937	780	820	555	1,090	1,878	3,235	830	380
March.....	R2,975	R2,708	R5,900	790	R810	R463	1,110	R1,835	3,215	830	R350
April.....	2,954	2,743	5,920	800	810	494	1,120	1,847	3,190	840	350
1999 Average.....	2,983	2,725	5,919	788	814	504	1,112	1,863	3,217	836	362

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

R=Revised data.

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

Sources: See end of Section 1.

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

	Egypt	Gabon	India	Malaysia	Mexico	Oman	Russia	Former U.S.S.R.	Syria	United States	Other <sup>1/</sup>	World
1990 Average.....	873	270	660	619	2,553	685	--	10,975	388	7,355	2,253	60,566
1991 Average.....	874	294	615	646	2,680	700	--	9,992	492	7,417	2,274	60,207
1992 Average.....	881	298	561	653	2,669	740	7,632	--	481	7,171	R3,229	R60,213
1993 Average.....	890	313	534	640	2,673	776	6,730	--	554	6,847	R3,279	R60,236
1994 Average.....	896	329	590	645	2,685	810	6,135	--	560	6,662	R3,380	R60,991
1995 Average.....	920	365	703	682	2,618	851	5,995	--	575	6,560	R3,414	R62,335
1996 Average.....	922	368	651	695	2,855	883	5,850	--	R582	6,465	R3,490	R63,711
1997 Average.....	R856	R370	675	746	3,023	R904	R5,920	--	561	6,452	R3,793	R66,420
1998 January....	860	360	680	740	3,085	920	5,979	--	550	6,515	3,765	67,535
February....	860	370	685	730	3,140	920	5,997	--	550	6,449	3,747	67,900
March.....	860	370	685	740	3,160	930	5,962	--	550	6,399	3,746	67,797
April.....	860	370	635	740	3,140	920	5,876	--	550	6,483	3,707	67,673
May.....	870	370	670	750	3,149	910	5,789	--	560	6,363	3,663	67,147
June.....	870	370	670	750	3,050	900	5,928	--	560	6,252	3,713	66,850
July.....	880	360	676	730	3,120	870	5,923	--	560	6,193	3,739	66,732
August.....	870	360	651	730	3,055	880	5,910	--	560	6,193	3,705	65,710
September...	870	350	625	720	2,906	890	5,936	--	550	5,918	3,723	65,947
October.....	870	350	638	720	2,792	890	5,979	--	550	6,152	3,745	65,950
November....	860	350	643	720	3,147	890	5,945	--	550	6,072	3,765	66,719
December....	860	350	679	720	3,107	880	6,040	--	550	5,938	3,765	66,507
1998 Average....	866	361	661	733	3,070	900	5,938	--	553	6,243	3,732	66,865
1999 January....	860	340	694	720	3,144	880	5,962	--	550	E5,954	3,798	66,597
February....	860	340	686	720	3,020	900	5,897	--	550	E5,984	3,789	66,952
March.....	R870	340	R645	720	3,053	R910	6,024	--	R540	RE6,048	R3,799	R66,770
April.....	870	340	645	720	2,893	910	6,021	--	540	PE5,798	3,790	65,170
1999 Average....	865	340	667	720	3,029	900	5,978	--	545	PE5,946	3,794	66,368

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

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

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

Sources: See end of Section 1.

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

		Algeria	Indo-nesia	Iran	Iraq	Kuwait <sup>1/</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>1/</sup>	United Arab Emirates	Vene-zuela	Total OPEC
1990	Average...	765	1,281	3,088	2,040	1,175	1,375	1,755	406	6,410	2,066	R2,100	R22,461
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	R1,885	475	8,218	2,198	R2,898	R25,541
1997	Average...	847	R1,355	3,629	R1,150	2,083	1,446	2,217	614	8,562	2,236	3,275	R27,414
1998	January...	860	1,340	3,600	1,256	2,215	1,450	2,108	680	8,765	2,355	3,400	28,029
	February..	860	1,340	3,600	1,698	2,210	1,450	2,153	700	8,760	2,355	3,370	28,496
	March.....	860	1,340	3,600	1,820	2,210	1,450	2,270	700	8,460	2,400	3,370	28,480
	April.....	840	1,340	3,800	1,980	2,115	1,400	2,128	670	8,585	2,340	3,200	28,398
	May.....	820	1,340	3,600	2,240	2,105	1,360	2,120	670	8,625	2,250	3,200	28,330
	June.....	810	1,310	3,800	1,915	2,105	1,360	2,100	670	8,325	2,220	3,170	27,785
	July.....	800	1,310	3,550	2,350	2,075	1,360	2,050	650	8,275	2,220	3,030	27,650
	August....	790	1,330	3,400	2,550	2,025	1,340	1,900	640	8,225	2,220	2,950	27,370
	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
	February..	810	1,340	3,890	2,650	2,005	1,360	1,900	660	8,165	2,250	2,960	27,990
	March.....	820	1,350	3,760	2,425	2,020	1,360	2,050	740	8,220	2,155	2,920	27,820
	April.....	780	1,350	3,450	2,650	1,785	1,320	2,050	670	7,665	2,100	2,760	26,580
	1999 Average...	803	1,350	3,679	2,556	1,951	1,350	1,994	683	8,028	2,165	2,905	27,464

<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 April 1999, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 530 thousand barrels per day.

R=Revised data.

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	R4,974
1993 Average.....	145	506	459	704	220	--	1,736	1,040	1,238	1,435	R5,180
1994 Average.....	140	529	461	698	200	--	1,727	1,071	1,267	1,465	R5,292
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	R5,580
1997 Average.....	R160	R636	R388	R712	R195	--	1,817	R1,158	R1,390	R1,614	R5,750
1998 January.....	R155	665	385	735	230	--	1,826	1,185	R1,419	R1,632	R5,903
February.....	R155	680	420	735	230	--	1,870	1,185	R1,419	R1,632	R5,999
March.....	R155	645	425	735	230	--	1,846	1,185	R1,419	R1,632	R5,946
April.....	R155	645	425	725	230	--	1,859	1,175	R1,409	R1,622	R5,950
May.....	R155	580	430	725	230	--	1,808	1,175	R1,409	R1,622	R5,801
June.....	R155	610	420	705	230	--	1,734	1,155	R1,389	R1,602	R5,717
July.....	R155	648	386	700	230	--	1,580	1,150	R1,384	R1,597	R5,482
August.....	R155	662	464	695	230	--	1,713	1,145	R1,379	R1,592	R5,688
September....	R155	625	435	695	230	--	1,716	1,145	R1,379	R1,592	R5,687
October.....	R155	667	415	695	230	--	1,736	1,145	R1,379	R1,592	R5,739
November....	R155	681	438	695	230	--	1,759	1,145	R1,379	R1,592	R5,776
December....	R155	705	447	690	230	--	1,604	1,140	R1,374	R1,587	R5,653
1998 Average.....	R155	651	424	711	230	--	1,753	1,161	R1,395	R1,608	R5,777
1999 January.....	R155	669	453	685	206	--	1,656	1,135	R1,369	R1,582	R5,628
February.....	R155	650	466	685	206	--	1,722	1,135	R1,369	R1,582	R5,742
March.....	R155	R632	469	695	206	--	RE1,779	1,145	R1,379	R1,592	R5,766
April.....	155	656	457	655	206	--	E1,655	1,105	1,339	1,552	5,621
1999 Average.....	155	652	461	680	206	--	E1,703	1,130	1,364	1,577	5,689

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

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

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

See Appendix A for countries in these groups.

R=Revised data. E=Estimated.

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

Sources: See end of Section 1.

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

	United States <sup>1/</sup>	Persian Gulf <sup>2/</sup>	OAPEC <sup>3/</sup>	OPEC <sup>3/</sup>	World
1990 Average.....	9,677	16,249	17,232	24,536	66,754
1991 Average.....	9,883	15,704	16,747	24,625	66,632
1992 Average.....	9,768	17,010	17,871	25,818	R66,961
1993 Average.....	9,602	17,792	18,505	26,610	R67,348
1994 Average.....	9,413	18,072	18,745	27,031	R68,228
1995 Average.....	9,400	18,351	19,069	27,566	R69,837
1996 Average.....	9,445	18,486	R19,237	R28,018	R71,394
1997 Average.....	9,461	R19,665	R20,453	R29,990	R74,343
1998 January.....	9,539	20,283	R21,097	R30,632	R75,651
February.....	9,522	20,735	R21,552	R31,099	R76,118
March.....	9,376	20,602	R21,421	R31,083	R75,890
April.....	9,496	20,892	R21,441	R30,991	R75,792
May.....	9,319	20,892	R21,601	R30,923	R75,112
June.....	9,292	20,417	R20,916	R30,358	R74,888
July.....	9,042	20,477	R21,226	R30,218	R74,499
August.....	9,201	20,432	R21,286	R29,933	R73,708
September.....	8,882	20,567	R21,164	R30,013	R73,898
October.....	9,175	20,407	R21,205	R29,883	R73,991
November.....	9,178	20,512	R21,165	R30,153	R74,857
December.....	8,892	20,192	R20,895	R29,883	R74,526
1998 Average.....	9,241	20,532	R21,246	R30,426	R74,902
1999 January.....	E8,916	20,382	R21,024	R30,043	R74,547
February.....	E9,021	20,982	R21,374	R30,543	R75,024
March.....	RE9,020	20,692	R21,221	R30,383	R74,745
April.....	PE8,727	19,652	20,411	29,103	73,081
1999 Average.....	PE8,920	20,420	21,003	30,013	74,343

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

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

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

See Appendix A for countries in these groups.

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

Notes: •Oil Supply includes crude oil, natural gas plant liquids, other liquids, and refinery gain. See Explanatory Note 1 in Appendix B. •Monthly data are often preliminary and also may not average to the annual total due to rounding. See Section 4 for historical series.

Sources: See end of Section 1.

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

		France	Italy	Germany <sup>1/</sup>	United Kingdom	OECD Europe <sup>2/</sup>	United States <sup>3/</sup>	Canada	Japan	Other <sup>4/</sup>	Total OECD
1990	December.....	140	172	265	112	1,163	1,621	121	590	73	3,568
1991	December.....	153	160	288	119	1,181	1,617	119	606	65	3,588
1992	December.....	146	174	310	113	1,219	1,592	107	603	67	3,588
1993	December.....	158	163	309	118	1,221	1,647	105	618	69	3,661
1994	December.....	158	164	312	115	1,240	1,653	119	645	69	3,726
1995	December.....	159	162	301	107	1,228	1,563	109	630	71	3,601
1996	December.....	158	152	300	108	1,256	1,507	103	651	74	3,591
1997	December.....	164	147	298	105	1,256	1,560	115	685	74	3,689
1998	January.....	163	154	298	111	1,277	1,576	118	673	78	3,722
	February.....	161	155	290	108	1,272	1,572	110	664	75	3,694
	March.....	155	146	285	109	1,254	1,588	118	655	73	3,688
	April.....	163	161	292	106	1,274	1,614	116	658	R76	3,737
	May.....	171	168	306	111	R1,336	1,654	115	667	79	3,852
	June.....	164	164	308	109	1,316	1,654	116	658	82	3,826
	July.....	164	157	313	109	R1,303	1,665	115	660	R76	R3,818
	August.....	168	161	319	106	R1,323	1,672	118	672	77	R3,863
	September....	170	158	317	107	1,335	1,653	120	676	79	3,863
	October.....	170	162	321	109	R1,345	1,654	121	676	R70	R3,865
	November....	161	157	320	99	R1,313	1,674	122	675	71	3,854
	December....	161	153	321	108	1,317	1,647	118	649	66	3,797
1999	January.....	R170	154	329	111	R1,345	1,639	R117	645	R72	R3,818
	February....	165	146	320	109	1,305	1,625	119	633	74	3,755

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

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

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

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

R=Revised data.

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

Sources: See end of Section 1.

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

Country	Commercial	Government Owned	Total
Canada.....	118	0	118
United States <sup>1/</sup> .....	1,076	571	1,647
United States Territories.....	22	0	22
Japan.....	334	315	649
Australia/New Zealand.....	44	NA	44
Austria.....	24	0	24
Belgium/Luxembourg.....	35	0	35
Denmark.....	26	0	26
Finland.....	25	0	25
France.....	161	0	161
Germany <sup>2/</sup> .....	266	55	321
Greece.....	33	NA	33
Ireland.....	8	2	10
Italy.....	147	6	153
Netherlands.....	94	0	94
Norway.....	67	0	67
Portugal.....	21	0	21
Spain.....	109	0	109
Sweden.....	32	0	32
Switzerland.....	45	0	45
Turkey.....	52	0	52
United Kingdom.....	108	0	108
OECD Europe.....	1,254	63	1,317
Total OECD.....	2,848	949	3,797

<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.

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	Average....	1,955	2,045	2,903	1,799	14,433	18,620	1,857	5,711	1,229	41,850
1998	January....	2,040	2,030	2,734	1,797	R14,294	18,256	1,854	6,109	R1,150	R41,664
	February...	2,160	2,150	2,950	1,846	R15,202	18,322	1,829	6,465	R1,238	R43,056
	March.....	1,982	2,111	3,153	1,867	15,159	18,393	1,861	5,905	R1,311	R42,630
	April.....	1,999	2,016	2,840	1,718	R14,287	18,624	1,805	5,086	R1,165	R40,967
	May.....	1,822	1,891	2,594	1,693	R13,492	17,876	1,766	4,806	R1,232	R39,172
	June.....	2,008	2,091	2,929	1,787	R14,771	18,818	1,890	5,016	R1,258	R41,753
	July.....	2,095	2,096	3,020	1,770	R14,875	19,140	1,955	5,316	R1,211	R42,496
	August....	1,859	1,877	2,835	1,761	R14,044	19,108	1,910	5,282	R1,221	R41,563
	September..	2,051	2,033	3,019	1,798	R14,897	18,837	1,937	5,097	R1,164	R41,933
	October....	1,990	2,021	2,865	1,811	R14,630	19,086	1,933	5,089	R1,272	R42,010
	November...	2,078	2,209	2,985	1,861	R15,274	18,515	1,906	5,612	R1,308	R42,614
	December...	2,164	2,231	2,979	1,799	R15,424	19,198	1,915	6,379	R1,213	R44,130
	Average....	2,019	2,062	2,908	1,792	14,690	18,684	1,881	5,509	1,229	41,992
1999	January....	R1,987	2,067	2,557	1,699	R14,117	18,850	1,822	5,881	R1,100	R41,770
	February...	2,201	2,129	3,152	1,893	15,705	19,240	1,925	6,464	1,132	44,466

<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, May 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, May 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, 1985-1999.

### Oil Demand

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

Other OECD Countries: • OECD, Quarterly Oil Statistics and Energy Balances, various issues. • OECD, Monthly Oil Statistics data base, 1985-1999.



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

**Table 2.1 World Oil Balance, 1995-1999**  
 (Million Barrels Per Day)

	1995	1996	1997	1998				1999			
	Annual		Quarter		Annual		Quarter		Annual		
	Average		First	Second	Third	Fourth	Average	First	Second	Third	Fourth
<b>Supply<sup>1</sup>/</b>											
OECD											
United States <sup>2</sup> /.....	9.40	9.44	9.46	9.48	9.37	9.04	9.08	9.24	8.98	NA	NA
Other OECD.....	9.78	10.26	10.41	10.66	10.43	10.24	10.44	10.44	10.38	NA	NA
Total OECD.....	19.18	19.71	19.88	20.14	19.80	19.28	19.52	19.68	19.36	NA	NA
Non-OECD											
OPEC.....	27.57	28.02	29.99	30.93	30.76	30.06	29.97	30.43	30.32	NA	NA
Former USSR.....	7.14	7.05	7.22	7.29	7.16	7.22	7.30	7.24	7.23	NA	NA
Other Non-OECD.....	15.95	16.62	17.25	17.52	17.55	17.48	17.66	17.55	17.85	NA	NA
Total Non-OECD.....	50.66	51.69	54.47	55.74	55.46	54.76	54.93	55.22	55.40	NA	NA
Total World Supply.....	69.84	71.39	74.34	75.88	75.26	74.04	74.45	74.90	74.76	NA	NA
<b>Demand<sup>3</sup>/</b>											
OECD											
United States <sup>2</sup> /.....	17.72	18.31	18.62	18.32	18.43	19.03	18.94	18.68	NA	NA	NA
Other OECD.....	22.83	23.12	23.23	24.11	22.18	22.97	23.98	23.31	NA	NA	NA
Total OECD.....	40.55	41.43	41.85	42.43	40.61	42.00	42.92	41.99	NA	NA	NA
Non-OECD											
China.....	3.32	3.52	3.79	3.90	3.96	4.00	4.06	3.98	NA	NA	NA
Former USSR.....	4.60	4.03	4.26	4.54	4.09	4.09	4.45	4.29	NA	NA	NA
Other Non-OECD.....	21.40	22.34	23.11	23.52	23.37	22.93	24.50	23.58	NA	NA	NA
Total Non-OECD.....	29.32	29.89	31.16	31.97	31.42	31.02	33.01	31.85	NA	NA	NA
Total World Demand.....	69.88	71.32	73.01	74.40	72.04	73.02	75.93	73.85	NA	NA	NA
<b>Stock Draws / Discrepancy</b>											
Net Reported Stock Draws <sup>4</sup> /											
U. S. Commercial.....	.25	.08	-.15	-.32	-.72	.01	.15	-.22	NA	NA	NA
U. S. Strategic.....	.00	.07	.01	.00	.00	-.09	-.02	NA	NA	NA	NA
Other OECD.....	.09	-.12	-.13	.34	-.81	-.41	.65	-.06	NA	NA	NA
For Export & Afloat.....	-.12	-.01	-.12	-.44	.22	.22	-.05	-.01	NA	NA	NA
Commr. Floating Storage...	.00	.00	.00	-.11	-.11	-.22	.11	-.08	NA	NA	NA
Total Reported Draws.....	.22	.01	-.39	-.54	-1.41	-.39	.77	-.39	NA	NA	NA
Other Stock Draws and Statistical Discrepancy <sup>5</sup> /	-.18	-.09	-.94	-.95	-1.81	-.63	.71	-.66	NA	NA	NA

<sup>1</sup>/ 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.

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

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

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

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

NA=Not available.

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

Sources: See end of Section 2.

**Table 2.2 World Oil Supply, 1995-1999**  
(Million Barrels Per Day)

	1995	1996	1997	1998				1999					
	Annual		Quarter				Annual		Quarter		Annual		
	Average		First	Second	Third	Fourth	Average		First	Second	Third	Fourth	Average
<b>OECD</b>													
United States <sup>1/</sup> ...	9.40	9.44	9.46	9.48	9.37	9.04	9.08	9.24	8.98	NA	NA	NA	NA
Canada.....	2.45	2.49	2.62	2.66	2.63	2.75	2.74	2.70	2.58	NA	NA	NA	NA
North Sea <sup>2/</sup> .....	5.80	6.22	6.20	6.42	6.17	5.86	6.26	6.18	6.29	NA	NA	NA	NA
Other OECD.....	1.53	1.55	1.59	1.58	1.63	1.63	1.44	1.57	1.51	NA	NA	NA	NA
Total OECD.....	19.18	19.71	19.88	20.14	19.80	19.28	19.52	19.68	19.36	NA	NA	NA	NA
<b>Non-OECD</b>													
<b>OPEC</b>													
Crude													
Algeria.....	1.20	1.24	1.28	1.29	1.25	1.22	1.22	1.25	1.24	NA	NA	NA	NA
Indonesia.....	1.50	1.55	1.52	1.52	1.51	1.50	1.54	1.52	1.53	NA	NA	NA	NA
Iran.....	3.64	3.69	3.66	3.63	3.77	3.57	3.57	3.63	3.79	NA	NA	NA	NA
Iraq.....	.56	.58	1.15	1.59	2.05	2.49	2.45	2.15	2.53	NA	NA	NA	NA
Kuwait.....	2.06	2.06	2.08	2.21	2.11	2.02	2.00	2.09	2.01	NA	NA	NA	NA
Libya.....	1.39	1.40	1.45	1.45	1.37	1.35	1.34	1.38	1.36	NA	NA	NA	NA
Nigeria.....	1.99	2.00	2.33	2.29	2.23	2.06	2.04	2.15	2.09	NA	NA	NA	NA
Qatar.....	.44	.51	.65	.73	.70	.68	.67	.70	.72	NA	NA	NA	NA
Saudi Arabia..	8.23	8.22	8.56	8.66	8.51	8.22	8.17	8.39	8.15	NA	NA	NA	NA
United Arab Emirates...	2.23	2.28	2.32	2.45	2.35	2.29	2.29	2.35	2.27	NA	NA	NA	NA
Venezuela.....	2.75	2.94	3.31	3.42	3.23	3.00	3.02	3.17	2.99	NA	NA	NA	NA
Natural Gas													
Plant Liquids	1.51	1.50	1.61	1.63	1.62	1.59	1.59	1.61	1.59	NA	NA	NA	NA
Processing Gain.	.06	.06	.06	.06	.06	.06	.06	.06	.06	NA	NA	NA	NA
Total OPEC.....	27.57	28.02	29.99	30.93	30.76	30.06	29.97	30.43	30.32	NA	NA	NA	NA
Former USSR.....	7.14	7.05	7.22	7.29	7.16	7.22	7.30	7.24	7.23	NA	NA	NA	NA
China.....	2.99	3.13	3.20	3.19	3.20	3.20	3.20	3.20	3.23	NA	NA	NA	NA
Mexico.....	3.09	3.31	3.44	3.57	3.57	3.48	3.48	3.52	3.56	NA	NA	NA	NA
Other Non-OECD....	9.87	10.18	10.62	10.76	10.78	10.79	10.98	10.83	11.06	NA	NA	NA	NA
Total Non-OECD....	50.66	51.69	54.47	55.74	55.46	54.76	54.93	55.22	55.40	NA	NA	NA	NA
Total Supply.....	69.84	71.39	74.34	75.88	75.26	74.04	74.45	74.90	74.76	NA	NA	NA	NA

<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.

NA=Not available.

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

Sources: See end of Section 2.

**Table 2.3 Oil Stocks, End of Period**  
(Million Barrels)

	1994	1995	1996	1997				1998			
	Year End		Quarter				Quarter				
			First	Second	Third	Fourth	First	Second	Third	Fourth	
<b>OECD</b>											
United States <sup>1/</sup>											
Commercial.....	1,061	971	941	949	1,012	1,029	997	1,025	1,091	1,090	1,076
Strategic.....	592	592	566	563	563	563	563	563	563	563	571
U. S. Territories.....	26	24	25	23	27	27	23	25	28	29	22
Canada.....	119	109	103	107	107	108	115	118	116	120	118
Japan.....	645	630	651	650	662	682	685	655	658	676	649
OECD Europe											
France.....	158	159	158	160	153	157	164	155	164	170	161
Germany.....	312	301	300	312	299	291	298	285	308	317	321
Italy.....	164	162	152	160	151	144	147	146	164	158	153
United Kingdom.....	115	107	108	109	111	106	105	109	109	107	108
Other OECD Europe....	490	499	537	532	516	528	542	560	572	584	573
Total.....	1,240	1,228	1,256	1,273	1,230	1,227	1,256	1,254	1,316	1,335	1,317
Australia & New Zealand	43	47	49	53	56	50	51	48	54	50	44
Total OECD.....	3,726	3,601	3,591	3,617	3,657	3,687	3,689	3,688	3,826	3,863	3,797
<b>Stocks for Export</b>											
and Afloat <sup>2/</sup> .....	935	980	985	1,010	985	1,030	1,030	1,070	1,050	1,030	1,035
Commercial Floating <sup>3/</sup> ....	70	70	70	70	70	70	70	80	90	110	100

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

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

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

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

Sources: See end of Section 2.

**Table 2.4 World Oil Demand, 1994-1998**  
 (Million Barrels Per Day)

	1994	1995	1996	1997						1998					
	Annual		Quarter				Annual		Quarter				Annual		
	Average		First	Second	Third	Fourth	Average		First	Second	Third	Fourth	Average		
<b>OECD</b>															
United States <sup>1</sup> /.....	17.72	17.72	18.31	18.27	18.49	18.75	18.97	18.62	18.32	18.43	19.03	18.94	18.68		
U. S. Territories.....	.26	.25	.26	.29	.28	.27	.28	.28	.30	.26	.27	.29	.28		
Canada.....	1.73	1.76	1.80	1.81	1.81	1.93	1.88	1.86	1.85	1.82	1.93	1.92	1.88		
Japan.....	5.67	5.71	5.87	6.39	5.17	5.43	5.87	5.71	6.15	4.97	5.23	5.69	5.51		
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	2.08	2.02		
Italy.....	1.84	2.05	2.06	2.02	1.94	1.99	2.23	2.04	2.10	2.00	2.00	2.15	2.06		
United Kingdom.....	1.84	1.84	1.85	1.84	1.76	1.76	1.83	1.80	1.84	1.73	1.78	1.82	1.79		
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	2.94	2.91		
Other OECD Europe....	5.21	5.45	5.52	5.65	5.62	5.71	5.93	5.73	5.94	5.72	5.87	6.11	5.91		
Total OECD Europe....	13.60	14.12	14.27	14.29	14.19	14.42	14.82	14.43	14.87	14.18	14.60	15.11	14.69		
Australia & New Zealand	.92	.99	.93	.95	.94	.96	.94	.95	.94	.96	.93	.97	.95		
Total OECD.....	39.89	40.55	41.43	42.00	40.88	41.74	42.77	41.85	42.43	40.61	42.00	42.92	41.99		
<b>Non-OECD</b>															
China.....	3.14	3.32	3.52	3.71	3.77	3.81	3.86	3.79	3.90	3.96	4.00	4.06	3.98		
Former USSR.....	4.85	4.60	4.03	4.51	4.06	4.06	4.42	4.26	4.54	4.09	4.09	4.45	4.29		
Other Non-OECD.....	20.42	21.40	22.34	23.04	22.90	22.46	24.02	23.11	23.52	23.37	22.93	24.50	23.58		
Total Non-OECD.....	28.41	29.32	29.89	31.27	30.73	30.33	32.30	31.16	31.97	31.42	31.02	33.01	31.85		
Total World Demand.....	68.30	69.88	71.32	73.27	71.61	72.07	75.07	73.01	74.40	72.04	73.02	75.93	73.85		

1/ U.S. geographic coverage is the 50 States and the 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/ 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, May 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, May 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, 1990-1999. 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, May 1999.

Other OECD Countries: • OECD, Quarterly Oil Statistics and Energy Balances, various issues. • OECD, Monthly Oil Statistics data base, 1990-1999.

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, (1998 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..	22.435	7.919	-0.969	1.878	2.888	1.831	2.290	9.452	-0.900	5.406	0.558
Imports from OPEC <sup>5/</sup>	16.938	6.697	.212	1.029	.656	1.421	3.378	4.789	.294	4.467	.690
Imports from Persian Gulf <sup>6/</sup>											
Total.....	10.516	3.953	.107	.730	.163	.658	2.296	2.091	.097	4.132	.243
Bahrain.....	.021	.004	.000	.002	.000	.002	.000	.000	-	.016	.002
Iran.....	1.482	1.006	.009	.157	.020	.273	.547	.000	.000	.473	.003
Iraq.....	1.116	.733	-	.171	.020	.108	.435	.334	.014	.017	.018
Kuwait.....	1.070	.275	.025	.019	.016	.000	.215	.281	.000	.507	.006
U.A.E.....	1.473	.020	.001	.012	.000	.000	.007	.000	-	1.402	.051
Qatar.....	.468	.000	.000	.000	.000	.000	.000	.004	-	.450	.014
Saudi Arabia.....	4.887	1.915	.073	.369	.106	.274	1.093	1.472	.084	1.268	.149
Imports from OPEC-Africa											
Total.....	3.744	2.512	.077	.301	.447	.723	.963	.971	.094	.025	.143
Algeria.....	1.078	.711	.021	.115	.127	.083	.365	.288	.071	.012	-.004
Libya.....	1.296	1.296	.046	.061	.277	.601	.311	.000	-	-	.000
Nigeria.....	1.371	.505	.011	.126	.043	.039	.287	.683	.023	.013	.147
Imports from OPEC-South America											
Total.....	2.139	.213	.028	.000	.046	.020	.119	1.671	.103	.000	.152
Venezuela.....	2.139	.213	.028	.000	.046	.020	.119	1.671	.103	.000	.152
Imports from OPEC-Far East											
Total.....	.560	.024	-	.000	.000	.023	.000	.056	.000	.326	.154
Indonesia.....	.560	.024	-	.000	.000	.023	.000	.056	.000	.326	.154

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

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

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

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

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

<sup>6/</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. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports.

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

Sources: See end of Section 3.

Table 3.2 Net Oil Imports into OECD Countries, (4th 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	Japan		
Total Net Imports..	22.531	7.899	-1.025	1.876	2.903	1.863	2.283	9.518	-0.904	5.436	0.582
Imports from OPEC <sup>5/</sup>	16.922	6.717	.186	.975	.712	1.443	3.401	4.765	.275	4.460	.705
Imports from Persian Gulf <sup>6/</sup>											
Total.....	10.523	3.945	.080	.657	.184	.733	2.290	2.139	.108	4.114	.218
Bahrain.....	.022	.000	.000	.000	.000	.000	.000	.000	-	.022	.000
Iran.....	1.481	.943	.000	.135	.025	.327	.456	.000	.000	.538	.000
Iraq.....	1.514	.833	-	.140	.040	.117	.536	.559	.032	.045	.045
Kuwait.....	1.036	.297	.011	.001	.012	.000	.272	.227	.002	.505	.005
U.A.E.....	1.457	.028	.000	.020	.000	.000	.008	-.004	-	1.395	.038
Qatar.....	.403	.000	.000	.000	.000	.000	.000	.000	-	.403	.000
Saudi Arabia.....	4.610	1.843	.069	.361	.107	.289	1.018	1.357	.074	1.206	.130
Imports from OPEC-Africa											
Total.....	3.600	2.539	.080	.319	.484	.686	.971	.800	.085	.041	.135
Algeria.....	1.106	.784	.039	.140	.159	.079	.367	.236	.075	.011	.000
Libya.....	1.290	1.290	.041	.075	.280	.567	.327	.000	-	-	.000
Nigeria.....	1.204	.466	.000	.104	.045	.040	.277	.564	.010	.030	.134
Imports from OPEC-South America											
Total.....	2.196	.229	.026	.000	.044	.020	.139	1.734	.082	.000	.151
Venezuela.....	2.196	.229	.026	.000	.044	.020	.139	1.734	.082	.000	.151
Imports from OPEC-Far East											
Total.....	.625	.004	-	.000	.000	.004	.001	.092	.000	.327	.202
Indonesia.....	.625	.004	-	.000	.000	.004	.001	.092	.000	.327	.202

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

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

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

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

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

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

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

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

Sources: See end of Section 3.

Table 3.3 Net Oil Imports into OECD Countries, (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	United Kingdom						United States <sup>3/</sup>	Canada		
Total Net Imports..	23.222	8.214	-0.891	1.918	2.969	1.717	2.501	9.881	-0.803	5.396	0.535
Imports from OPEC <sup>5/</sup>	17.331	6.843	.215	1.130	.678	1.397	3.423	5.084	.300	4.452	.652
Imports from Persian Gulf <sup>6/</sup>											
Total.....	10.924	4.131	.103	.787	.175	.681	2.384	2.399	.106	4.052	.236
Bahrain.....	.015	.004	.000	.004	.000	.000	.000	.000	-	.012	.000
Iran.....	1.629	1.132	.011	.170	.031	.268	.652	.000	.000	.494	.002
Iraq.....	1.491	.949	-	.238	.014	.163	.533	.502	.000	.024	.016
Kuwait.....	1.061	.265	.022	.021	.017	.000	.205	.323	.000	.467	.005
U.A.E.....	1.437	.009	.000	.000	.000	.000	.009	-.002	-	1.382	.047
Qatar.....	.489	.000	.000	.000	.000	.000	.000	.005	-	.469	.015
Saudi Arabia.....	4.802	1.771	.070	.354	.113	.251	.984	1.570	.106	1.204	.151
Imports from OPEC-Africa											
Total.....	3.730	2.509	.085	.345	.456	.699	.923	.998	.082	.034	.106
Algeria.....	1.061	.694	.021	.116	.119	.090	.347	.293	.064	.014	-.003
Libya.....	1.300	1.300	.052	.057	.305	.582	.303	.000	-	-	.000
Nigeria.....	1.369	.515	.011	.172	.033	.027	.273	.706	.019	.020	.110
Imports from OPEC-South America											
Total.....	2.060	.192	.026	.000	.047	.003	.116	1.612	.111	.000	.144
Venezuela.....	2.060	.192	.026	.000	.047	.003	.116	1.612	.111	.000	.144
Imports from OPEC-Far East											
Total.....	.633	.014	-	.000	.000	.014	.000	.076	.000	.377	.166
Indonesia.....	.633	.014	-	.000	.000	.014	.000	.076	.000	.377	.166

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

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

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

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

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

<sup>6/</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. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

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

	1998											1999	
	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	
Total.....	21.648	21.854	23.831	21.320	23.025	24.080	22.540	22.863	22.607	22.125	23.882	22.229	
United States <sup>1/</sup> .....	8.775	9.369	9.876	9.715	10.152	10.049	9.426	9.680	9.792	9.091	9.285	9.580	
Canada.....	-.785	-.930	-.911	-.977	-.877	-.777	-.753	-.867	-.861	-.982	-.737	-1.090	
OECD Europe <sup>2/</sup> .....	7.173	7.873	9.120	7.313	7.709	8.866	8.062	8.308	7.671	7.711	8.874	7.143	
Main European Importers													
France.....	1.682	2.116	1.980	1.618	1.965	1.875	1.915	1.838	1.923	1.867	2.007	1.991	
Germany <sup>3/</sup> .....	2.938	2.920	3.034	2.894	3.140	2.909	2.855	2.904	2.845	2.957	2.792	2.698	
Italy.....	1.693	2.080	1.810	1.803	1.563	1.902	1.684	1.901	1.885	1.805	2.067	1.618	
Spain.....	1.330	1.397	1.428	1.254	1.332	1.355	1.398	1.341	1.394	1.587	1.425	1.324	
Netherlands.....	.757	.719	.887	.820	.694	.862	.724	.848	.727	.610	1.027	.636	
European Net Exporters													
Norway.....	-3.528	-3.284	-2.701	-3.270	-3.063	-2.445	-2.939	-2.806	-2.974	-3.088	-2.827	-3.225	
United Kingdom.....	-.999	-1.264	-.629	-.804	-.848	-.910	-.915	-.962	-.1167	-.951	-1.046	-1.042	
Smaller European Importers													
Austria.....	.236	.244	.243	.249	.250	.226	.245	.221	.236	.220	.229	.215	
Belgium.....	.620	.637	.596	.594	.557	.612	.617	.603	.595	.641	.562	.685	
Denmark.....	-.036	.055	.043	.003	-.035	.007	.019	-.025	-.008	-.033	.007	-.071	
Ireland.....	.164	.134	.156	.123	.164	.138	.138	.142	.179	.147	.167	.163	
Finland.....	.157	.146	.307	.152	.198	.227	.256	.277	.184	.166	.307	.175	
Greece.....	.467	.461	.276	.385	.247	.430	.427	.364	.299	.374	.408	.406	
Iceland.....	.017	.011	.018	.005	.033	.015	.021	.017	.021	.009	.018	.011	
Luxembourg.....	.044	.043	.039	.038	.047	.037	.044	.045	.042	.050	.041	.043	
Portugal.....	.314	.290	.354	.344	.292	.368	.317	.332	.360	.215	.409	.313	
Sweden.....	.433	.440	.444	.351	.331	.355	.366	.388	.382	.336	.417	.377	
Switzerland.....	.286	.283	.285	.311	.296	.258	.255	.271	.237	.275	.258	.251	
Turkey.....	.602	.446	.551	.443	.548	.646	.635	.608	.510	.522	.606	.574	
Japan.....	5.760	5.160	5.142	4.748	5.420	5.456	5.309	5.306	5.297	5.702	5.777	5.960	
Other OECD.....	.725	.382	.605	.522	.621	.487	.495	.437	.707	.604	.683	.636	

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

Sources: See end of Section 3.

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

	1998											1999	
	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	
Total.....	16.862	16.542	17.374	16.592	17.554	17.807	16.610	17.075	16.832	16.857	16.201	15.305	
United States <sup>1/</sup> ....	4.712	4.756	5.029	4.869	5.305	5.208	4.728	5.044	4.777	4.474	4.713	5.043	
Canada.....	.269	.304	.365	.356	.292	.333	.273	.312	.302	.212	.419	.000	
OECD Europe <sup>2/</sup> ....	6.245	6.624	6.886	6.726	6.802	7.106	6.613	6.753	6.705	6.694	5.858	4.806	
Main European Importers													
France.....	.881	1.171	1.092	.945	1.098	1.177	1.113	.840	.976	1.109	NA	NA	
Germany <sup>3/</sup> .....	.571	.601	.732	.595	.722	.690	.620	.701	.668	.765	.699	.557	
Italy.....	1.228	1.518	1.429	1.423	1.437	1.490	1.260	1.525	1.494	1.311	1.560	1.195	
Spain.....	.872	.868	.811	.826	.870	.881	.789	.928	.870	.904	.879	.804	
Netherlands.....	.854	.643	.761	.920	.757	.884	.988	.896	.828	.934	.961	.716	
European Net Exporters													
Norway.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
United Kingdom....	.293	.156	.280	.294	.304	.167	.171	.160	.211	.189	.152	.110	
Smaller European Importers													
Austria.....	.130	.150	.133	.124	.103	.125	.141	.158	.158	.129	.088	.132	
Belgium.....	.257	.326	.381	.424	.319	.426	.348	.354	.309	.336	.241	.157	
Denmark.....	.024	.033	.068	.003	.031	.040	.032	.048	.033	.032	.031	.027	
Finland.....	.010	.000	.006	.009	.018	.000	.000	.001	.000	.001	.000	.000	
Greece.....	.343	.416	.288	.358	.326	.349	.431	.278	.322	.336	.374	.351	
Portugal.....	.154	.153	.225	.178	.231	.214	.145	.157	.225	.099	.150	.134	
Sweden.....	.108	.167	.126	.151	.118	.103	.024	.091	.091	.058	.158	.090	
Switzerland.....	.082	.102	.098	.107	.111	.106	.097	.113	.093	.109	.095	.090	
Turkey.....	.437	.320	.457	.368	.356	.453	.452	.501	.426	.381	.430	.442	
Japan.....	4.902	4.277	4.367	3.992	4.440	4.532	4.383	4.358	4.344	4.675	4.573	4.809	
Other OECD.....	.734	.581	.727	.649	.715	.628	.612	.608	.704	.803	.638	.646	

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.

NA=Not available.

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

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

Sources: See end of Section 3.

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

	1998											1999	
	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	
Total.....	10.232	10.392	10.802	10.161	10.894	11.129	10.743	10.270	10.762	10.543	9.725	9.840	
United States <sup>1/</sup> ....	1.950	1.979	1.902	2.184	2.331	2.482	2.382	2.154	2.149	2.114	2.111	2.393	
Canada.....	.067	.070	.139	.170	.107	.185	.024	.140	.151	.034	.165	.000	
OECD Europe <sup>2/</sup> ....	3.427	4.091	4.427	3.933	4.159	4.157	4.075	3.799	4.134	3.907	3.093	2.735	
<b>Main European Importers</b>													
France.....	.513	.851	.913	.712	.824	.734	.805	.571	.706	.694	NA	NA	
Germany <sup>3/</sup> .....	.115	.178	.202	.150	.193	.154	.177	.206	.141	.204	.171	.151	
Italy.....	.446	.688	.740	.619	.714	.694	.635	.778	.764	.658	.616	.598	
Spain.....	.370	.471	.487	.387	.502	.454	.324	.367	.458	.404	.390	.398	
Netherlands.....	.679	.496	.601	.729	.602	.747	.825	.696	.685	.785	.805	.571	
<b>European Net Exporters</b>													
Norway.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	-	-	
United Kingdom....	.180	.102	.177	.135	.139	.082	.089	.056	.123	.064	.082	.028	
<b>Smaller European Importers</b>													
Austria.....	.069	.057	.089	.035	.044	.023	.054	.049	.061	.058	.008	.052	
Belgium.....	.239	.311	.353	.359	.294	.373	.316	.289	.267	.307	.191	.093	
Denmark.....	.000	.008	.021	.003	.000	.015	.013	.024	.001	.000	.000	.000	
Finland.....	.000	.000	.000	.000	.018	.000	.000	.000	.000	.000	.000	.000	
Greece.....	.311	.399	.254	.330	.311	.300	.395	.275	.320	.302	.356	.301	
Portugal.....	.136	.121	.151	.102	.195	.157	.114	.096	.194	.099	.084	.133	
Sweden.....	.072	.136	.081	.106	.068	.062	.000	.063	.070	.058	.131	.075	
Switzerland.....	.009	.017	.017	.010	.018	.013	.006	.010	.005	.000	.000	.000	
Turkey.....	.289	.257	.341	.256	.238	.349	.322	.319	.337	.273	.257	.336	
Japan.....	4.545	4.032	4.084	3.659	4.073	4.067	4.015	4.030	3.985	4.322	4.163	4.522	
Other OECD.....	.242	.220	.250	.215	.224	.238	.247	.147	.343	.167	.193	.190	

<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.

NA=Not available.

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. •"Persian Gulf" consists of Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. •Negative numbers represent net exports.

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

Sources: See end of Section 3.

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

	1998											1999	
	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	
Total Net Imports..	8.775	9.369	9.876	9.715	10.152	10.049	9.426	9.680	9.792	9.091	9.285	9.580	
Imports from OPEC <sup>1</sup> /	4.712	4.756	5.029	4.869	5.305	5.208	4.728	5.044	4.777	4.474	4.713	5.043	
Imports from Persian Gulf <sup>2</sup> /													
Total.....	1.950	1.979	1.902	2.184	2.331	2.482	2.382	2.154	2.149	2.114	2.111	2.393	
Bahrain.....	-.003	-.003	.017	-.003	.000	.000	.000	.000	.000	.000	.000	.000	
Iran.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
Iraq.....	.127	.233	.137	.270	.277	.713	.517	.647	.542	.486	.471	.681	
Kuwait.....	.307	.262	.399	.275	.435	.273	.259	.230	.224	.228	.132	.205	
U.A.E.....	.011	.017	-.003	-.003	-.003	-.002	.000	-.006	-.003	-.002	-.003	-.003	
Qatar.....	.000	.000	.000	.015	.015	.000	.000	.000	.000	.000	.000	.000	
Saudi Arabia.....	1.508	1.470	1.352	1.630	1.607	1.498	1.606	1.283	1.386	1.402	1.511	1.510	
Imports from OPEC-Africa													
Total.....	1.056	1.108	1.229	1.132	1.180	1.000	.808	.917	.793	.690	.919	.890	
Algeria.....	.244	.336	.330	.362	.308	.264	.306	.289	.219	.200	.240	.203	
Libya.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
Nigeria.....	.812	.772	.899	.770	.872	.736	.502	.628	.574	.490	.679	.687	
Imports from OPEC-South America													
Total.....	1.653	1.622	1.894	1.551	1.698	1.668	1.465	1.890	1.670	1.639	1.604	1.694	
Venezuela.....	1.653	1.622	1.894	1.551	1.698	1.668	1.465	1.890	1.670	1.639	1.604	1.694	
Imports from OPEC-Far East													
Total.....	.050	.044	.021	-.001	.096	.058	.073	.083	.165	.031	.079	.066	
Indonesia.....	.050	.044	.021	-.001	.096	.058	.073	.083	.165	.031	.079	.066	

<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.

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

Sources: See end of Section 3.

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

	1998											1999	
	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	
Total Net Imports..	5.760	5.160	5.142	4.748	5.420	5.456	5.309	5.306	5.297	5.702	5.777	5.960	
Imports from OPEC <sup>1/</sup>	4.902	4.277	4.367	3.992	4.440	4.532	4.383	4.358	4.344	4.675	4.573	4.809	
Imports from Persian Gulf <sup>2/</sup>													
Total.....	4.545	4.032	4.084	3.659	4.073	4.067	4.015	4.030	3.985	4.322	4.163	4.522	
Bahrain.....	.000	.013	.012	.017	.008	.016	.010	.028	.022	.015	.020	.031	
Iran.....	.532	.282	.302	.454	.424	.581	.477	.432	.416	.761	.418	.584	
Iraq.....	.000	.000	.000	.000	.000	.000	.073	.103	.032	.000	.000	.036	
Kuwait.....	.611	.437	.531	.421	.443	.478	.482	.501	.505	.510	.492	.602	
U.A.E.....	1.336	1.606	1.341	1.161	1.459	1.338	1.349	1.395	1.297	1.488	1.502	1.411	
Qatar.....	.571	.482	.487	.334	.474	.504	.428	.387	.462	.361	.457	.422	
Saudi Arabia.....	1.496	1.211	1.409	1.272	1.265	1.149	1.196	1.184	1.250	1.185	1.273	1.436	
Imports from OPEC-Africa													
Total.....	.000	.019	.000	.034	.017	.041	.045	.096	.028	.000	.138	.014	
Algeria.....	.000	.019	.000	.034	.017	.000	.025	.006	.028	.000	.050	.000	
Nigeria.....	.000	.000	.000	.000	.000	.041	.020	.090	.000	.000	.088	.014	
Imports from OPEC-South America													
Total.....	.000	.000	.000	.000	.001	.001	.000	.000	.000	.000	.000	.000	
Venezuela.....	.000	.000	.000	.000	.001	.001	.000	.000	.000	.000	.000	.000	
Imports from OPEC-Far East													
Total.....	.356	.239	.295	.316	.357	.439	.334	.260	.353	.369	.292	.305	
Indonesia.....	.356	.239	.295	.316	.357	.439	.334	.260	.353	.369	.292	.305	

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

Sources: See end of Section 3.

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

	1998											1999	
	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	
Total Net Imports..	7.173	7.873	9.120	7.313	7.709	8.866	8.062	8.308	7.671	7.711	8.874	7.143	
Imports from OPEC <sup>1</sup> /	6.245	6.624	6.886	6.726	6.802	7.106	6.613	6.753	6.705	6.694	5.858	4.806	
Imports from Persian Gulf <sup>2</sup> /													
Total.....	3.427	4.091	4.427	3.933	4.159	4.157	4.075	3.799	4.134	3.907	3.093	2.735	
Bahrain.....	.000	.000	.000	.000	.000	.001	.011	.001	.000	.000	.000	.000	
Iran.....	.861	.958	1.173	1.151	1.250	1.089	1.056	.950	1.044	.839	.881	.983	
Iraq.....	.562	.835	.837	.451	.884	1.057	.904	.764	.762	.969	.512	.493	
Kuwait.....	.364	.151	.272	.297	.145	.265	.391	.305	.188	.395	.269	.197	
U.A.E.....	.000	.042	.009	.070	.022	.000	.004	.000	.000	.084	.000	.000	
Qatar.....	.000	.000	.000	.000	.001	.000	.000	.000	.000	.000	.000	.000	
Saudi Arabia.....	1.640	2.105	2.136	1.965	1.857	1.746	1.709	1.780	2.139	1.620	1.431	1.063	
Imports from OPEC-Africa													
Total.....	2.566	2.341	2.161	2.453	2.440	2.729	2.354	2.645	2.327	2.639	2.566	1.771	
Algeria.....	.836	.535	.598	.623	.675	.699	.709	.752	.751	.848	.749	.402	
Libya.....	1.256	1.379	1.307	1.290	1.329	1.354	1.214	1.330	1.235	1.302	1.287	1.129	
Nigeria.....	.474	.427	.256	.541	.436	.676	.432	.563	.341	.489	.530	.240	
Imports from OPEC-South America													
Total.....	.198	.154	.277	.313	.180	.202	.195	.305	.236	.146	.198	.300	
Venezuela.....	.198	.154	.277	.313	.180	.202	.195	.305	.236	.146	.198	.300	
Imports from OPEC-Far East													
Total.....	.054	.037	.021	.026	.024	.018	.000	.004	.008	.001	.001	.000	
Indonesia.....	.054	.037	.021	.026	.024	.018	.000	.004	.008	.001	.001	.000	

<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. Data for France in January and February 1999 are not available. •"OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands,

Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom. •Negative numbers represent net exports.

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

•See Section 4 for annual data.

Sources: See end of Section 3.

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

	1998											1999	
	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	
Total Net Imports..	1.682	2.116	1.980	1.618	1.965	1.875	1.915	1.838	1.923	1.867	2.007	1.991	
Imports from OPEC <sup>1/</sup>	.881	1.171	1.092	.945	1.098	1.177	1.113	.840	.976	1.109	NA	NA	
Imports from Persian Gulf <sup>2/</sup>													
Total.....	.513	.851	.913	.712	.824	.734	.805	.571	.706	.694	NA	NA	
Bahrain.....	.000	.000	.000	.000	.000	.001	.011	.001	.000	.000	NA	NA	
Iran.....	.159	.099	.229	.164	.261	.148	.100	.118	.155	.132	NA	NA	
Iraq.....	.062	.294	.193	.167	.214	.247	.254	.125	.104	.189	NA	NA	
Kuwait.....	.006	.000	.066	.000	.000	.000	.065	.003	.000	.000	NA	NA	
U.A.E.....	.000	.016	.000	.061	.000	.000	.000	.000	.000	.059	NA	NA	
Qatar.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	NA	NA	
Saudi Arabia.....	.287	.442	.424	.321	.349	.339	.375	.324	.447	.313	NA	NA	
Imports from OPEC-Africa													
Total.....	.368	.320	.178	.232	.274	.443	.319	.269	.269	.416	NA	NA	
Algeria.....	.191	.120	.062	.048	.093	.137	.120	.124	.174	.122	NA	NA	
Libya.....	.059	.103	.085	.020	.047	.061	.063	.025	.060	.141	NA	NA	
Nigeria.....	.118	.096	.031	.164	.134	.245	.136	.121	.035	.153	NA	NA	
Imports from OPEC-South America													
Total.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	-	-	
Venezuela.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	-	-	
Imports from OPEC-Far East													
Total.....	.000	.000	.001	.001	.001	.001	.000	.001	.000	.000	.000	.000	
Indonesia.....	.000	.000	.001	.001	.001	.001	.000	.001	.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.

NA=Not available.

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

Sources: See end of Section 3.

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

	1998											1999	
	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	
Total Net Imports..	2.938	2.920	3.034	2.894	3.140	2.909	2.855	2.904	2.845	2.957	2.792	2.698	
Imports from OPEC <sup>1/</sup>	.571	.601	.732	.595	.722	.690	.620	.701	.668	.765	.699	.557	
Imports from Persian Gulf <sup>2/</sup>													
Total.....	.115	.178	.202	.150	.193	.154	.177	.206	.141	.204	.171	.151	
Bahrain.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	-	-	
Iran.....	.027	.014	.017	.011	.045	.021	.026	.046	.020	.010	.000	.006	
Iraq.....	.000	.034	.027	.013	.018	.011	.014	.023	.018	.078	.085	.036	
Kuwait.....	.016	.021	.024	.027	.014	.014	.022	.016	.005	.016	.010	.012	
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	-	-	
Saudi Arabia.....	.072	.109	.135	.099	.116	.109	.115	.122	.098	.100	.076	.097	
Imports from OPEC-Africa													
Total.....	.410	.368	.429	.402	.479	.483	.405	.403	.519	.531	.514	.368	
Algeria.....	.150	.050	.139	.131	.120	.158	.077	.097	.214	.169	.122	.079	
Libya.....	.252	.275	.260	.256	.333	.290	.292	.287	.240	.311	.333	.270	
Nigeria.....	.008	.043	.030	.015	.026	.035	.037	.019	.065	.050	.059	.019	
Imports from OPEC-South America													
Total.....	.046	.055	.100	.044	.050	.053	.038	.092	.008	.030	.015	.039	
Venezuela.....	.046	.055	.100	.044	.050	.053	.038	.092	.008	.030	.015	.039	
Imports from OPEC-Far East													
Total.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
Indonesia.....	.000	.000	.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. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •See Section 4 for annual data.

Sources: See end of Section 3.

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

	1998											1999	
	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	
Total Net Imports..	1.693	2.080	1.810	1.803	1.563	1.902	1.684	1.901	1.885	1.805	2.067	1.618	
Imports from OPEC <sup>1/</sup>	1.228	1.518	1.429	1.423	1.437	1.490	1.260	1.525	1.494	1.311	1.560	1.195	
Imports from Persian Gulf <sup>2/</sup>													
Total.....	.446	.688	.740	.619	.714	.694	.635	.778	.764	.658	.616	.598	
Bahrain.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
Iran.....	.197	.252	.333	.329	.273	.256	.276	.394	.279	.306	.332	.356	
Iraq.....	.068	.108	.133	.075	.149	.153	.187	.130	.123	.099	.082	.080	
Kuwait.....	.000	.000	.000	.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	-	-	
Saudi Arabia.....	.181	.328	.273	.216	.293	.285	.171	.254	.362	.253	.203	.162	
Imports from OPEC-Africa													
Total.....	.719	.778	.662	.711	.700	.778	.617	.737	.678	.642	.936	.597	
Algeria.....	.057	.080	.048	.076	.091	.100	.079	.072	.062	.102	.185	.105	
Libya.....	.629	.698	.607	.626	.567	.647	.530	.618	.578	.505	.627	.485	
Nigeria.....	.032	.000	.006	.010	.042	.031	.007	.047	.038	.035	.124	.008	
Imports from OPEC-South America													
Total.....	.010	.016	.007	.067	.000	.000	.009	.007	.044	.011	.007	.000	
Venezuela.....	.010	.016	.007	.067	.000	.000	.009	.007	.044	.011	.007	.000	
Imports from OPEC-Far East													
Total.....	.054	.037	.020	.025	.023	.018	.000	.003	.007	.000	.000	.000	
Indonesia.....	.054	.037	.020	.025	.023	.018	.000	.003	.007	.000	.000	.000	

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

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

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

	1998											1999	
	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	
Total.....	0.693	1.076	1.029	0.744	1.170	1.793	1.510	1.597	1.408	1.533	1.030	1.252	
United States <sup>1/</sup> .....	.127	.233	.137	.270	.277	.713	.517	.647	.542	.486	.471	.681	
Canada.....	.000	.000	.050	.014	.000	.000	.000	.062	.000	.034	.032	.000	
OECD Europe <sup>2/</sup> .....	.562	.835	.837	.451	.884	1.057	.904	.764	.762	.969	.512	.493	
<b>Main European Importers</b>													
France.....	.062	.294	.193	.167	.214	.247	.254	.125	.104	.189	NA	NA	
Germany <sup>3/</sup> .....	.000	.034	.027	.013	.018	.011	.014	.023	.018	.078	.085	.036	
Italy.....	.068	.108	.133	.075	.149	.153	.187	.130	.123	.099	.082	.080	
Spain.....	.129	.102	.099	.097	.223	.195	.097	.125	.165	.134	.129	.144	
Netherlands.....	.088	.129	.168	.015	.082	.143	.136	.162	.112	.197	.143	.107	
<b>Smaller European Importers</b>													
Austria.....	.043	.044	.037	.013	.022	.000	.046	.003	.050	.049	.000	.022	
Belgium.....	.049	.050	.005	.000	.076	.127	.083	.041	.055	.055	.068	.001	
Greece.....	.016	.000	.030	.000	.000	.032	.011	.011	.011	.045	.000	.000	
Portugal.....	.053	.000	.032	.032	.065	.030	.000	.000	.030	.064	.000	.037	
Switzerland.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
Turkey.....	.055	.074	.112	.040	.036	.118	.075	.144	.093	.060	.004	.067	
Japan.....	.000	.000	.000	.000	.000	.000	.073	.103	.032	.000	.000	.036	
Other OECD.....	.005	.008	.004	.009	.009	.023	.017	.021	.072	.044	.015	.042	

<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.

NA=Not available.

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

Sources: See end of Section 3.

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

	1998											1999	
	Mar	April	May	June	July	August	Sept	Oct	Nov	Dec	Jan	Feb	
Total.....	1.293	0.862	1.205	0.996	1.026	1.018	1.142	1.036	0.934	1.136	0.894	1.006	
United States <sup>1/</sup> .....	.307	.262	.399	.275	.435	.273	.259	.230	.224	.228	.132	.205	
Canada.....	.000	.000	.000	.000	.000	.000	.000	.000	.005	.000	.000	.000	
OECD Europe <sup>2/</sup> .....	.364	.151	.272	.297	.145	.265	.391	.305	.188	.395	.269	.197	
Main European Importers													
France.....	.006	.000	.066	.000	.000	.000	.065	.003	.000	.000	NA	NA	
Germany <sup>3/</sup> .....	.016	.021	.024	.027	.014	.014	.022	.016	.005	.016	.010	.012	
Italy.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
Spain.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.003	.000	.000	
Netherlands.....	.253	.102	.082	.199	.082	.209	.205	.199	.106	.301	.229	.168	
European Net Exporters													
Norway.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	-	-	
United Kingdom.....	.070	.008	.064	.048	.031	.020	.015	.006	.028	.000	.000	.000	
Smaller European Importers													
Belgium.....	.000	.000	.000	.000	.000	.000	.031	.045	.029	.059	.015	.000	
Denmark.....	.000	.008	.021	.003	.000	.015	.012	.022	.001	.000	.000	.000	
Finland.....	.000	.000	.000	.000	.018	.000	.000	.000	.000	.000	.000	.000	
Greece.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	-	-	
Sweden.....	.004	.000	.001	.000	.000	.000	.000	.000	.000	.000	.000	.000	
Switzerland.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	-	-	
Turkey.....	.015	.011	.015	.020	.000	.008	.040	.014	.018	.016	.015	.017	
Japan.....	.611	.437	.531	.421	.443	.478	.482	.501	.505	.510	.492	.602	
Other OECD.....	.012	.011	.003	.002	.003	.002	.011	.001	.011	.002	.001	.002	

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

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

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

NA=Not available.

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

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

Sources: See end of Section 3.

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

### **Oil Imports**

United States: • Energy Information Administration (EIA), Petroleum Supply Annual 1997 and Petroleum Supply Monthly, May 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, 1991-1999.

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

**1970-1998**

**Table 4.1a World Crude Oil Production (Including Lease Condensate), 1970-1998**  
 (Thousands Barrels per Day)

	Algeria	Indo-nesia	Iran	Iraq	Kuwait <sup>1/</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>1/</sup>	United Arab Emirates	Vene-zuela	Total OPEC
1970 Average.....	1,029	854	3,829	1,549	2,990	3,318	1,083	362	3,799	780	3,708	23,301
1971 Average.....	785	892	4,540	1,694	3,197	2,761	1,531	431	4,769	1,060	3,549	25,209
1972 Average.....	1,062	1,081	5,023	1,466	3,283	2,239	1,816	482	6,016	1,203	3,220	26,891
1973 Average.....	1,097	1,339	5,861	2,018	3,020	2,175	2,054	570	7,596	1,533	3,366	30,629
1974 Average.....	1,009	1,375	6,022	1,971	2,546	1,521	2,255	518	8,480	1,679	2,976	30,351
1975 Average.....	983	1,307	5,350	2,262	2,084	1,480	1,783	438	7,075	1,664	2,346	26,771
1976 Average.....	1,075	1,504	5,883	2,415	2,145	1,933	2,067	497	8,577	1,936	2,294	30,327
1977 Average.....	1,152	1,686	5,663	2,348	1,969	2,063	2,085	445	9,245	1,999	2,238	30,893
1978 Average.....	1,231	1,635	5,242	2,563	2,131	1,983	1,897	487	8,301	1,831	2,165	29,464
1979 Average.....	1,224	1,591	3,168	3,477	2,500	2,092	2,302	508	9,532	1,831	2,356	30,581
1980 Average.....	1,106	1,577	1,662	2,514	1,656	1,787	2,055	472	9,900	1,709	2,168	26,606
1981 Average.....	1,002	1,605	1,380	1,000	1,125	1,140	1,433	405	9,815	1,474	2,102	22,481
1982 Average.....	987	1,339	2,214	1,012	823	1,150	1,295	330	6,483	1,250	1,895	18,778
1983 Average.....	968	1,343	2,440	1,005	1,064	1,105	1,241	295	5,086	1,149	1,801	17,497
1984 Average.....	1,014	1,412	2,174	1,209	1,157	1,087	1,388	394	4,663	1,146	1,798	17,442
1985 Average.....	1,037	1,325	2,250	1,433	1,023	1,059	1,495	301	3,388	1,193	1,677	16,181
1986 Average.....	945	1,390	2,035	1,690	1,419	1,034	1,467	308	4,870	1,330	1,787	18,275
1987 Average.....	1,048	1,343	2,298	2,079	1,585	972	1,341	293	4,265	1,541	1,752	18,517
1988 Average.....	1,040	1,342	2,240	2,685	1,492	1,175	1,450	346	5,086	1,565	1,903	20,324
1989 Average.....	1,095	1,409	2,810	2,897	1,783	1,150	1,716	380	5,064	1,860	1,907	22,071
1990 Average.....	1,175	1,462	3,088	2,040	1,175	1,375	1,810	406	6,410	2,117	2,137	23,195
1991 Average.....	1,230	1,592	3,312	305	190	1,483	1,892	395	8,115	2,386	2,375	23,275
1992 Average.....	1,214	1,504	3,429	425	1,058	1,433	1,943	423	8,332	2,266	2,371	24,398
1993 Average.....	1,162	1,511	3,540	512	1,852	1,361	1,960	413	8,198	2,159	2,450	25,119
1994 Average.....	1,180	1,510	3,618	553	2,025	1,378	1,931	415	8,120	2,193	2,588	25,510
1995 Average.....	1,202	1,503	3,643	560	2,057	1,390	1,993	442	8,231	2,233	2,750	26,004
1996 Average.....	1,242	1,547	3,686	579	2,062	1,401	R2,001	510	8,218	2,278	R2,938	R26,461
1997 Average .....	1,277	R1,520	3,664	R1,155	2,083	1,446	R2,332	649	8,562	2,316	3,315	R28,320
1998 Average P.....	1,246	1,518	3,634	2,150	2,085	1,378	2,153	696	8,389	2,345	3,167	28,762

<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. R=Revised data.

Notes: •OPEC=Organization of Petroleum Exporting Countries.

Sources: See end of Section 4.

Table 4.1b World Crude Oil Production (Including Lease Condensate), 1970-1998  
 (Thousand Barrels per Day)

	Norway	United Kingdom	North Sea <sup>1/</sup>	Angola	Argen-tina	Austra- lia	Brazil	Canada	China	Colombia	Ecuador
1970 Average.....	0	2	0	112	393	178	167	1,263	600	219	4
1971 Average.....	6	2	6	93	423	309	174	1,348	780	214	4
1972 Average.....	33	2	35	140	433	327	167	1,532	900	196	78
1973 Average.....	32	2	36	162	420	369	169	1,798	1,090	184	209
1974 Average.....	35	2	38	169	414	388	176	1,551	1,315	168	177
1975 Average.....	189	12	202	165	395	409	177	1,430	1,490	157	161
1976 Average.....	279	245	525	108	398	426	167	1,314	1,670	146	188
1977 Average.....	280	768	1,055	194	431	431	161	1,321	1,874	138	183
1978 Average.....	356	1,082	1,446	131	453	432	160	1,316	2,082	131	202
1979 Average.....	403	1,568	1,976	147	473	441	166	1,500	2,122	124	214
1980 Average.....	528	1,622	2,151	150	491	380	182	1,435	2,114	126	204
1981 Average.....	501	1,811	2,322	130	496	394	213	1,285	2,012	125	211
1982 Average.....	520	2,065	2,617	122	491	370	260	1,271	2,045	141	211
1983 Average.....	614	2,291	2,965	177	491	416	339	1,356	2,120	152	237
1984 Average.....	697	2,480	3,250	208	478	492	475	1,438	2,296	168	258
1985 Average.....	788	2,530	3,417	231	460	575	564	1,471	2,505	176	281
1986 Average.....	870	2,539	3,547	282	434	520	572	1,474	2,620	305	293
1987 Average.....	1,022	2,406	3,584	360	428	547	566	1,535	2,690	385	174
1988 Average.....	1,158	2,232	3,540	452	449	538	554	1,616	2,730	378	302
1989 Average.....	1,554	1,802	3,515	455	460	490	596	1,560	2,757	403	279
1990 Average.....	1,704	1,820	3,667	475	483	575	631	1,553	2,774	440	285
1991 Average.....	1,890	1,797	3,811	500	485	545	630	1,548	2,835	419	299
1992 Average.....	2,229	1,825	4,182	526	553	535	626	1,605	2,845	433	321
1993 Average.....	2,350	1,915	4,403	509	594	503	643	1,679	2,890	456	344
1994 Average.....	2,521	2,375	5,058	536	650	536	671	1,746	2,939	450	365
1995 Average.....	2,768	2,489	5,400	646	715	562	695	1,805	2,990	585	392
1996 Average.....	3,104	2,568	5,822	709	756	570	795	1,837	3,131	623	396
1997 Average .....	R3,143	R2,518	R5,830	R714	R834	588	R841	R1,922	3,200	R652	R388
1998 Average P.....	3,017	2,616	5,804	735	847	544	971	1,981	3,198	759	377

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

P=Preliminary. R=Revised data.

Sources: See end of Section 4.

Table 4.1c World Crude Oil Production (Including Lease Condensate), 1970-1998  
 (Thousands Barrels per Day)

	Egypt	Gabon	India	Malaysia	Mexico	Oman	Russia	Former U.S.S.R.	Syria	United States	Other <sup>1</sup> / World
1970 Average.....	326	109	144	18	487	332	--	6,985	80	9,637	1,529
1971 Average.....	293	115	143	69	486	294	--	7,475	100	9,463	1,518
1972 Average.....	231	125	156	93	505	282	--	7,890	124	9,441	1,592
1973 Average.....	165	150	147	91	465	293	--	8,324	105	9,208	1,667
1974 Average.....	150	202	156	81	571	290	--	8,912	124	8,774	1,711
1975 Average.....	235	223	165	98	705	343	--	9,523	170	8,375	1,636
1976 Average.....	330	223	175	165	831	366	--	10,060	175	8,132	1,620
1977 Average.....	415	222	199	184	981	341	--	10,603	188	8,245	1,655
1978 Average.....	485	209	226	217	1,209	315	--	11,105	170	8,707	1,706
1979 Average.....	525	203	245	283	1,461	295	--	11,384	166	8,552	1,821
1980 Average.....	595	175	182	283	1,936	282	--	11,706	164	8,597	1,842
1981 Average.....	598	151	325	264	2,313	319	--	11,850	166	8,572	1,859
1982 Average.....	670	156	390	306	2,748	324	--	11,912	160	8,649	1,892
1983 Average.....	727	157	480	365	2,689	375	--	11,972	167	8,688	1,946
1984 Average.....	822	157	519	440	2,780	414	--	11,861	170	8,879	2,015
1985 Average.....	887	172	620	440	2,745	498	--	11,585	178	8,971	2,124
1986 Average.....	813	166	630	504	2,435	560	--	11,895	194	8,680	2,166
1987 Average.....	896	155	609	497	2,548	582	--	12,050	230	8,349	2,120
1988 Average.....	848	159	635	540	2,512	617	--	12,053	265	8,140	2,235
1989 Average.....	865	208	700	585	2,520	641	--	11,715	340	7,613	2,249
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	R3,229
1993 Average.....	890	313	534	640	2,673	776	6,730	--	554	6,847	R3,279
1994 Average.....	896	329	590	645	2,685	810	6,135	--	560	6,662	R3,380
1995 Average.....	920	365	703	682	2,618	851	5,995	--	575	6,560	R3,414
1996 Average.....	922	368	651	695	2,855	883	5,850	--	R582	6,465	R3,490
1997 Average .....	R856	R370	675	746	3,023	R904	R5,920	--	561	6,452	R3,793
1998 Average P....	866	361	661	733	3,070	900	5,938	--	553	6,243	3,732
											66,865

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

-- = Not applicable. P=Preliminary. R=Revised data.

Sources: See end of Section 4.

Table 4.2 OPEC Crude Oil Production (Excluding Condensate), 1980-1998  
 (Thousand Barrels per Day)

	Algeria	Indo-nesia	Iran	Iraq	Kuwait <sup>1/</sup>	Libya	Nigeria	Qatar	Saudi Arabia <sup>1/</sup>	United Arab Emirates	Vene-zuela	Total OPEC
1980 Average...	1,006	1,497	1,662	2,514	1,656	1,787	2,045	472	9,900	1,704	2,147	26,390
1981 Average...	802	1,513	1,380	1,000	1,125	1,140	1,423	405	9,815	1,469	2,083	22,155
1982 Average...	712	1,247	2,214	1,012	823	1,150	1,285	330	6,483	1,215	1,878	18,349
1983 Average...	648	1,245	2,440	1,005	1,064	1,105	1,231	295	5,086	1,109	1,768	16,996
1984 Average...	694	1,279	2,174	1,209	1,157	1,087	1,368	394	4,663	1,091	1,689	16,805
1985 Average...	702	1,181	2,250	1,433	1,023	1,059	1,475	301	3,388	1,133	1,558	15,503
1986 Average...	600	1,257	2,035	1,690	1,419	1,034	1,447	308	4,870	1,270	1,645	17,575
1987 Average...	648	1,189	2,298	2,079	1,585	972	1,291	293	4,265	1,441	1,587	17,648
1988 Average...	640	1,177	2,240	2,685	1,492	1,175	1,400	346	5,086	1,465	1,715	19,421
1989 Average...	690	1,231	2,810	2,897	1,783	1,150	1,666	380	5,064	1,783	1,747	21,201
1990 Average...	765	1,281	3,088	2,040	1,175	1,375	1,755	406	6,410	2,066	R2,100	R22,461
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	R1,885	475	8,218	2,198	R2,898	R25,541
1997 Average...	847	R1,355	3,629	R1,150	2,083	1,446	2,217	614	8,562	2,236	3,275	R27,414
1998 Average P.	816	1,338	3,599	2,145	2,085	1,378	2,043	661	8,389	2,265	3,127	27,847

<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. R=Revised data.

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, 1970-1998**  
 (Thousand Barrels per Day)

	Algeria	Canada	Mexico	Saudi Arabia	Russia	Former USSR	United States <sup>1/</sup>	Persian Gulf <sup>2/</sup>	OAPEC <sup>3/</sup>	OPEC <sup>3/</sup>	World
1970 Average.....	3	200	58	50	--	120	1,660	119	137	205	2,383
1971 Average.....	4	234	59	50	--	135	1,693	138	147	243	2,508
1972 Average.....	4	293	61	55	--	155	1,744	155	159	275	2,676
1973 Average.....	9	314	75	90	--	170	1,738	191	196	324	2,785
1974 Average.....	12	314	80	130	--	190	1,688	231	219	347	2,789
1975 Average.....	20	309	80	140	--	205	1,633	246	252	372	2,790
1976 Average.....	24	289	95	185	--	220	1,603	291	313	442	2,865
1977 Average.....	19	290	105	215	--	235	1,618	335	366	482	2,982
1978 Average.....	25	281	115	250	--	255	1,567	410	447	566	3,078
1979 Average.....	30	331	150	303	--	270	1,584	458	535	637	3,285
1980 Average.....	36	331	193	369	--	285	1,573	534	618	732	3,444
1981 Average.....	49	330	241	433	--	300	1,609	599	691	825	3,625
1982 Average.....	58	318	255	430	--	315	1,550	612	721	842	3,626
1983 Average.....	56	309	265	330	--	330	1,559	552	655	780	3,635
1984 Average.....	105	336	257	355	--	340	1,630	604	761	869	3,869
1985 Average.....	120	337	271	375	--	350	1,609	645	808	892	3,938
1986 Average.....	120	328	352	385	--	440	1,551	700	860	969	4,150
1987 Average.....	140	367	338	418	--	430	1,595	721	900	1,006	4,279
1988 Average.....	120	381	370	499	--	450	1,625	808	979	1,077	4,481
1989 Average.....	130	410	384	503	--	425	1,546	851	1,041	1,188	4,502
1990 Average.....	130	426	428	620	--	425	1,559	930	1,107	1,281	4,632
1991 Average.....	140	431	457	680	--	420	1,659	931	1,113	1,299	4,827
1992 Average.....	140	460	454	713	230	--	1,697	1,003	1,185	1,364	R4,974
1993 Average.....	145	506	459	704	220	--	1,736	1,040	1,238	1,435	R5,180
1994 Average.....	140	529	461	698	200	--	1,727	1,071	1,267	1,465	R5,292
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	R5,580
1997 Average.....	R160	R636	R388	R712	R195	--	1,817	R1,158	R1,390	R1,614	R5,750
1998 Average P....	R155	651	424	711	230	--	1,753	1,161	R1,395	R1,608	R5,777

<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. R=Revised data.

Sources: See end of Section 4.

**Table 4.4 World Oil Supply, 1970-1998**  
 (Thousand Barrels per Day)

	United States <sup>1/</sup>	Persian Gulf <sup>2/</sup>	OAPEC <sup>3/</sup>	OPEC <sup>3/</sup>	World
1970 Average.....	11,673	13,541	14,571	23,567	48,986
1971 Average.....	11,554	15,940	15,427	25,514	51,766
1972 Average.....	11,601	17,734	16,451	27,228	54,574
1973 Average.....	11,428	20,895	18,656	31,015	59,300
1974 Average.....	10,978	21,550	18,399	30,762	59,391
1975 Average.....	10,505	19,223	16,831	27,218	56,511
1976 Average.....	10,251	21,847	19,563	30,841	61,121
1977 Average.....	10,437	22,098	20,372	31,443	63,665
1978 Average.....	10,820	21,067	19,819	30,120	64,225
1979 Average.....	10,707	21,569	22,575	31,300	66,973
1980 Average.....	10,809	18,541	20,715	27,419	64,152
1981 Average.....	10,739	15,894	17,619	23,393	60,761
1982 Average.....	10,783	12,815	13,786	19,702	58,225
1983 Average.....	10,788	11,676	12,416	18,352	58,054
1984 Average.....	11,107	11,433	12,619	18,389	59,644
1985 Average.....	11,192	10,320	11,498	17,151	59,262
1986 Average.....	10,905	12,441	13,653	19,310	61,769
1987 Average.....	10,648	12,869	13,992	19,589	62,427
1988 Average.....	10,473	14,310	15,662	21,465	64,705
1989 Average.....	9,880	15,733	16,658	23,323	65,892
1990 Average.....	9,677	16,249	17,232	24,536	66,754
1991 Average.....	9,883	15,704	16,747	24,625	66,632
1992 Average.....	9,768	17,010	17,871	25,818	R66,961
1993 Average.....	9,602	17,792	18,505	26,610	R67,348
1994 Average.....	9,413	18,072	18,745	27,031	R68,228
1995 Average.....	9,400	18,351	19,069	27,566	R69,837
1996 Average.....	9,445	18,486	R19,237	R28,018	R71,394
1997 Average .....	9,461	R19,665	R20,453	R29,990	R74,343
1998 Average P.....	9,241	20,532	R21,246	R30,426	R74,902

<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. R=Revised data.

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

Sources: See end of Section 4.

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

		France	Italy	Germany <sup>1/</sup>	United Kingdom	OECD Europe <sup>2/</sup>	United States <sup>3/</sup>	Canada	Japan	Other <sup>4/</sup>	Total OECD
1973	December.....	201	152	181	156	1,070	1,008	140	303	67	2,588
1974	December.....	249	167	213	191	1,227	1,074	145	370	64	2,880
1975	December.....	225	143	187	165	1,154	1,133	174	375	67	2,903
1976	December.....	234	143	208	165	1,205	1,112	153	380	68	2,918
1977	December.....	239	161	225	148	1,268	1,312	167	409	68	3,224
1978	December.....	201	154	238	157	1,219	1,278	144	413	68	3,122
1979	December.....	226	163	272	169	1,353	1,341	150	460	75	3,379
1980	December.....	243	170	319	168	1,464	1,392	164	495	72	3,587
1981	December.....	214	167	297	143	1,337	1,484	161	482	67	3,531
1982	December.....	193	179	272	125	1,258	1,430	136	484	68	3,376
1983	December.....	153	149	249	118	1,142	1,454	121	470	68	3,255
1984	December.....	152	159	239	112	1,130	1,556	128	479	69	3,362
1985	December.....	139	157	233	123	1,092	1,519	113	494	66	3,284
1986	December.....	127	155	252	124	1,133	1,593	111	509	72	3,418
1987	December.....	127	169	259	121	1,130	1,607	126	540	71	3,474
1988	December.....	140	155	266	112	1,118	1,597	116	538	71	3,440
1989	December.....	138	164	271	118	1,133	1,581	114	577	71	3,476
1990	December.....	140	172	265	112	1,163	1,621	121	590	73	3,568
1991	December.....	153	160	288	119	1,181	1,617	119	606	65	3,588
1992	December.....	146	174	310	113	1,219	1,592	107	603	67	3,588
1993	December.....	158	163	309	118	1,221	1,647	105	618	69	3,661
1994	December.....	158	164	312	115	1,240	1,653	119	645	69	3,726
1995	December.....	159	162	301	107	1,228	1,563	109	630	71	3,601
1996	December.....	158	152	300	108	1,256	1,507	103	651	74	3,591
1997	December .....	164	147	298	105	1,256	1,560	115	685	74	3,689
1998	December P...	161	153	321	108	1,317	1,647	118	649	66	3,797

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

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

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

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

P=Preliminary.

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

Sources: See end of Section 4.

Table 4.6 World Oil Demand, 1970-1998  
(Thousand Barrels per Day)

	France	Italy	Germany <sup>1/</sup>	United Kingdom	OECD Europe <sup>2/</sup>	United States <sup>3/</sup>	Canada	Japan	Other <sup>4/</sup>	OECD Excluding East Germany	East Germany	OECD Including East Germany	World Total
1970 Average...	1,937	1,710	2,607	2,096	12,404	14,697	1,516	3,817	836	33,270	223	33,493	46,808
1971 Average...	2,115	1,838	2,702	2,141	13,005	15,213	1,565	4,142	831	34,755	238	34,993	49,416
1972 Average...	2,322	1,947	2,859	2,284	13,934	16,367	1,664	4,363	948	37,275	270	37,545	53,094
1973 Average...	2,601	2,068	3,055	2,341	14,925	17,308	1,729	4,949	988	39,900	282	40,182	57,237
1974 Average...	2,447	2,004	2,748	2,210	13,988	16,653	1,779	4,864	1,095	38,379	307	38,686	56,677
1975 Average...	2,252	1,855	2,650	1,911	13,217	16,322	1,779	4,621	1,041	36,980	307	37,287	56,198
1976 Average...	2,420	1,971	2,877	1,892	14,124	17,461	1,818	4,837	1,119	39,358	329	39,687	59,673
1977 Average...	2,294	1,897	2,865	1,905	13,916	18,431	1,850	4,880	1,160	40,237	347	40,584	61,826
1978 Average...	2,408	1,952	2,927	1,938	14,290	18,847	1,902	4,945	1,204	41,187	363	41,550	64,158
1979 Average...	2,463	2,039	3,003	1,971	14,667	18,513	1,971	5,050	1,178	41,379	369	41,748	65,220
1980 Average...	2,256	1,934	2,707	1,725	13,634	17,056	1,873	4,960	1,072	38,595	375	38,970	63,067
1981 Average...	2,023	1,874	2,449	1,590	12,515	16,058	1,768	4,848	1,080	36,269	355	36,624	60,903
1982 Average...	1,880	1,781	2,372	1,590	12,053	15,296	1,578	4,582	1,008	34,517	371	34,888	59,503
1983 Average...	1,835	1,750	2,324	1,531	11,765	15,231	1,448	4,395	953	33,793	336	34,129	58,739
1984 Average...	1,754	1,646	2,322	1,849	11,736	15,726	1,472	4,576	990	34,500	340	34,840	59,831
1985 Average...	1,775	1,717	2,338	1,634	11,681	15,726	1,504	4,384	976	34,271	362	34,633	60,091
1986 Average...	1,772	1,738	2,498	1,649	12,102	16,281	1,506	4,439	951	35,279	362	35,641	61,759
1987 Average...	1,789	1,855	2,424	1,603	12,255	16,665	1,548	4,484	959	35,911	342	36,253	62,999
1988 Average...	1,797	1,836	2,422	1,697	12,427	17,283	1,693	4,752	939	37,093	322	37,415	64,819
1989 Average...	1,857	1,930	2,280	1,738	12,531	17,325	1,733	4,983	998	37,570	300	37,871	65,917
1990 Average...	1,818	1,872	2,382	1,752	12,629	16,988	1,690	5,140	1,027	37,475	282	37,758	R65,977
1991 Average...	1,935	1,863	2,828	1,801	13,391	16,714	1,622	5,284	1,056	--	--	38,067	R66,567
1992 Average...	1,926	1,937	2,843	1,803	13,605	17,033	1,643	5,446	1,041	--	--	38,768	R66,736
1993 Average...	1,875	1,852	2,900	1,815	13,523	17,237	1,688	5,401	1,118	--	--	38,967	R66,988
1994 Average...	1,833	1,841	2,879	1,837	13,597	17,718	1,727	5,674	1,174	--	--	39,890	R68,302
1995 Average...	1,896	2,048	2,875	1,845	14,120	17,725	1,755	5,711	1,243	--	--	40,553	R69,888
1996 Average...	1,935	2,058	2,911	1,845	14,269	18,309	1,797	5,867	1,191	--	--	41,432	R71,322
1997 Average ..	1,955	2,045	2,903	1,799	14,433	18,620	1,857	5,711	1,229	--	--	41,850	73,008
1998 Average P.	2,019	2,062	2,908	1,792	14,690	18,684	1,881	5,509	1,229	--	--	41,992	73,847

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

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

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

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

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

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, 1988-1998  
(Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
	Average										
Total.....	18.707	20.082	20.456	20.414	20.783	21.226	21.133	20.717	21.456	22.081	22.435
United States <sup>1/</sup> ....	6.587	7.202	7.161	6.626	6.938	7.618	8.054	7.886	8.498	9.158	9.452
Canada.....	-.585	-.462	-.425	-.479	-.546	-.586	-.623	-.756	-.803	-.819	-.900
OECD Europe <sup>2/</sup> ....	7.774	7.994	8.210	8.588	8.459	8.127	7.355	7.226	7.339	7.340	7.919
Main European Importers											
France.....	1.718	1.711	1.750	1.869	1.784	1.761	1.615	1.721	1.738	1.769	1.878
Germany <sup>3/</sup> .....	2.278	2.112	2.202	2.664	2.739	2.723	2.731	2.699	2.793	2.804	2.888
Italy.....	1.590	1.716	1.788	1.769	1.839	1.747	1.778	1.820	1.791	1.795	1.831
Netherlands.....	.646	.635	.677	.690	.713	.688	.720	.700	.763	.773	.781
Spain.....	.869	.952	.950	.951	.998	1.066	1.119	1.202	1.183	1.273	1.365
European Net Exporters											
Norway.....	-1.036	-1.420	-1.543	-1.825	-2.102	-2.254	-2.586	-2.794	-3.150	-3.176	-3.043
United Kingdom....	-.760	-.200	-.214	-.158	-.221	-.355	-.850	-.969	-.839	-.968	-.969
Smaller European Importers											
Austria.....	.185	.191	.201	.212	.209	.205	.210	.194	.213	.223	.235
Belgium.....	.451	.454	.442	.506	.517	.503	.517	.495	.572	.590	.614
Denmark.....	.107	.078	.063	.048	.032	.023	.027	.039	.028	-.006	-.003
Ireland.....	.076	.079	.095	.094	.097	.102	.109	.116	.124	.133	.148
Finland.....	.200	.220	.208	.211	.188	.182	.234	.145	.180	.186	.211
Greece.....	.242	.252	.273	.297	.326	.327	.292	.343	.350	.361	.380
Iceland.....	.012	.011	.011	.012	.011	.014	.015	.015	.015	.016	.017
Luxembourg.....	.028	.031	.034	.039	.040	.039	.040	.036	.039	.040	.043
Portugal.....	.198	.246	.250	.258	.279	.272	.270	.291	.274	.296	.322
Sweden.....	.313	.290	.324	.312	.320	.335	.362	.356	.405	.371	.384
Switzerland.....	.258	.254	.273	.273	.277	.250	.262	.248	.260	.269	.278
Turkey.....	.397	.384	.425	.366	.413	.500	.490	.569	.600	.589	.558
Japan.....	4.680	5.035	5.239	5.286	5.464	5.467	5.766	5.716	5.790	5.819	5.406
Other OECD.....	.250	.313	.270	.392	.467	.599	.581	.644	.632	.583	.558

<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. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day.

•Data for 1997 are preliminary.

Sources: See end of Section 4.

Table 4.8 OECD Imports from OPEC, 1988-1998  
(Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average											
Total.....	13.049	14.521	15.576	15.360	15.567	16.018	15.765	15.469	15.630	16.540	16.938
United States <sup>1/</sup> ....	3.439	3.986	4.172	3.918	3.888	4.103	4.036	3.979	4.194	4.542	4.789
Canada.....	.161	.205	.199	.210	.210	.268	.285	.257	.261	.312	.294
OECD Europe <sup>2/</sup> ....	5.842	6.188	6.633	6.728	6.758	6.794	6.385	6.154	6.053	6.260	6.697
<b>Main European Importers</b>											
France.....	.737	.875	1.101	1.021	.932	1.006	.956	.911	.897	.899	1.029
Germany <sup>3/</sup> .....	.761	.739	.771	.859	.957	.948	.838	.711	.660	.645	.656
Italy.....	1.191	1.260	1.375	1.393	1.343	1.222	1.117	1.203	1.244	1.353	1.421
Netherlands.....	.850	.892	.850	.900	.914	.982	.906	.791	.779	.774	.849
Spain.....	.604	.686	.652	.700	.632	.582	.668	.781	.775	.789	.867
<b>European Net Exporters</b>											
Norway.....	.002	.003	.007	.014	.004	.005	.003	.003	.001	.003	.000
United Kingdom....	.322	.342	.406	.377	.390	.439	.306	.254	.234	.199	.212
<b>Smaller European Importers</b>											
Austria.....	.082	.086	.097	.108	.115	.128	.119	.057	.023	.130	.131
Belgium.....	.302	.353	.313	.362	.359	.359	.284	.276	.284	.292	.341
Denmark.....	.067	.069	.044	.006	.001	.006	.008	.022	.027	.031	.033
Ireland.....	-	-	.000	.000	.000	.000	.000	.000	.000	.000	-
Finland.....	.011	.013	.013	.029	.033	.007	.004	.004	.001	.006	.004
Greece.....	.233	.244	.340	.298	.346	.303	.266	.263	.280	.317	.350
Portugal.....	.118	.156	.166	.139	.152	.166	.227	.209	.177	.188	.181
Sweden.....	.074	.064	.073	.105	.116	.123	.126	.109	.091	.096	.100
Switzerland.....	.051	.021	.036	.052	.051	.063	.082	.083	.098	.096	.102
Turkey.....	.439	.384	.388	.365	.412	.452	.475	.477	.483	.442	.419
Japan.....	3.309	3.788	4.062	4.026	4.198	4.245	4.495	4.467	4.470	4.699	4.467
Other OECD.....	.298	.355	.510	.478	.512	.609	.563	.612	.653	.727	.690

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

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

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

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

Sources: See end of Section 4.

Table 4.9 OECD Imports from Persian Gulf, 1988-1998  
 (Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average											
<b>Imports from Persian Gulf</b>											
Total.....	7.941	9.121	9.667	9.249	9.456	10.029	9.609	9.310	9.215	9.952	10.516
United States <sup>1/</sup> ....	1.526	1.857	1.961	1.835	1.774	1.775	1.722	1.563	1.594	1.747	2.091
Canada.....	.056	.069	.081	.084	.092	.105	.119	.070	.111	.120	.097
OECD Europe <sup>2/</sup> ....	3.428	3.754	3.908	3.660	3.666	4.048	3.506	3.365	3.171	3.469	3.953
<b>Main European Importers</b>											
France.....	.484	.647	.864	.708	.640	.757	.651	.647	.573	.617	.730
Germany <sup>3/</sup> .....	.197	.216	.217	.227	.215	.250	.217	.172	.145	.157	.163
Italy.....	.643	.619	.626	.595	.573	.548	.430	.494	.502	.583	.658
Netherlands.....	.587	.663	.647	.609	.650	.744	.662	.563	.566	.584	.676
Spain.....	.306	.352	.291	.281	.231	.287	.275	.324	.304	.359	.419
<b>European Net Exporters</b>											
Norway.....	-	-	.000	.011	.000	.000	.000	.000	.000	.000	.000
United Kingdom...	.212	.240	.250	.222	.220	.303	.174	.135	.102	.094	.107
<b>Smaller European Importers</b>											
Austria.....	.025	.022	.016	.021	.031	.036	.038	.035	.004	.045	.050
Belgium.....	.224	.277	.250	.279	.292	.291	.232	.252	.263	.259	.307
Denmark.....	.063	.067	.043	.004	.000	.002	.000	.000	.000	.002	.007
Finland.....	.011	.012	.011	.021	.023	.002	.002	.002	.000	.000	.001
Greece.....	.146	.181	.268	.219	.291	.253	.214	.223	.235	.282	.322
Portugal.....	.066	.085	.073	.067	.074	.050	.117	.107	.083	.106	.134
Sweden.....	.045	.043	.039	.064	.068	.088	.076	.068	.067	.073	.071
Switzerland.....	.007	.007	.007	.007	.007	.008	.012	.007	.006	.008	.009
Turkey.....	.411	.323	.307	.324	.349	.429	.405	.336	.320	.301	.298
Japan.....	2.691	3.173	3.394	3.370	3.586	3.721	3.946	3.979	4.025	4.304	4.132
Other OECD.....	.241	.267	.322	.300	.338	.381	.316	.334	.313	.311	.243

<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. •"Persian Gulf" consists of Bahrain, Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day.

•Data for 1997 are preliminary.

Sources: See end of Section 4.

**Table 4.10 United States--Net Oil Imports, 1988-1998**  
 (Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average											
Total Net Imports..	6.587	7.202	7.161	6.626	6.938	7.618	8.054	7.886	8.498	9.158	9.452
Imports from OPEC <sup>1/</sup>	3.439	3.986	4.172	3.918	3.888	4.103	4.036	3.979	4.194	4.542	4.789
Imports from Persian Gulf <sup>2/</sup>											
Total.....	1.526	1.857	1.961	1.835	1.774	1.775	1.722	1.563	1.594	1.747	2.091
Bahrain.....	.000	-.001	-.001	-.001	-.002	-.002	-.002	-.003	-.002	-.002	.000
Iran.....	.000	.000	.000	.032	.000	.000	.000	.000	.000	.000	.000
Iraq.....	.343	.449	.518	.000	.000	.000	.000	.000	.001	.089	.334
Kuwait.....	.092	.157	.086	.006	.051	.353	.312	.218	.236	.253	.281
U.A.E.....	.028	.027	.016	.001	.004	.009	.011	.004	-.003	-.003	.000
Qatar.....	.000	.002	.004	.000	.001	.001	.000	.000	.000	.004	.004
Saudi Arabia.....	1.063	1.224	1.339	1.797	1.720	1.414	1.402	1.344	1.363	1.406	1.472
Imports from OPEC-Africa											
Total.....	.918	1.084	1.080	.956	.876	.956	.880	.859	.872	.979	.971
Algeria.....	.300	.269	.280	.253	.196	.220	.243	.234	.256	.285	.288
Libya.....	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
Nigeria.....	.618	.815	.800	.703	.680	.736	.637	.625	.616	.694	.683
Imports from OPEC-South America											
Total.....	.790	.861	1.016	1.020	1.161	1.295	1.322	1.468	1.667	1.758	1.671
Venezuela.....	.790	.861	1.016	1.020	1.161	1.295	1.322	1.468	1.667	1.758	1.671
Imports from OPEC-Far East											
Total.....	.205	.182	.113	.106	.075	.074	.109	.087	.058	.057	.056
Indonesia.....	.205	.182	.113	.106	.075	.074	.109	.087	.058	.057	.056

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

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

Notes: •Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. •U.S. geographic coverage is the 50 States and District of Columbia. •Negative numbers represent net exports. •A dash (-) indicates no trade.

•Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

Table 4.11 Japan--Net Oil Imports, 1988-1998  
(Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average											
Total Net Imports..	4.680	5.035	5.239	5.286	5.464	5.467	5.766	5.716	5.790	5.819	5.406
Imports from OPEC <sup>1/</sup>	3.309	3.788	4.062	4.026	4.198	4.245	4.495	4.467	4.470	4.699	4.467
Imports from Persian Gulf <sup>2/</sup>											
Total.....	2.691	3.173	3.394	3.370	3.586	3.721	3.946	3.979	4.025	4.304	4.132
Bahrain.....	.036	.042	.037	.037	.029	.025	.028	.029	.033	.023	.016
Iran.....	.187	.291	.385	.383	.362	.384	.459	.399	.451	.461	.473
Iraq.....	.173	.219	.146	.000	.000	.000	.000	.000	.000	.015	.017
Kuwait.....	.341	.458	.291	.014	.220	.368	.430	.501	.500	.557	.507
U.A.E.....	.822	.929	1.032	1.285	1.256	1.287	1.398	1.420	1.396	1.441	1.402
Qatar.....	.203	.250	.263	.285	.300	.330	.328	.335	.335	.364	.450
Saudi Arabia.....	.930	.984	1.240	1.367	1.420	1.327	1.303	1.296	1.310	1.441	1.268
Imports from OPEC-Africa											
Total.....	.044	.015	.011	.011	.007	.008	.017	.026	.032	.036	.025
Algeria.....	.044	.015	.010	.010	.007	.008	.012	.011	.012	.014	.012
Nigeria.....	-	-	.001	.001	.000	.000	.005	.016	.020	.023	.013
Imports from OPEC-South America											
Total.....	.011	.011	.011	.010	.010	.009	.009	.002	.003	.003	.000
Venezuela.....	.011	.011	.011	.010	.010	.009	.009	.002	.003	.003	.000
Imports from OPEC-Far East											
Total.....	.599	.631	.682	.673	.624	.533	.551	.488	.442	.380	.326
Indonesia.....	.599	.631	.682	.673	.624	.533	.551	.488	.442	.380	.326

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

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

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

Sources: See end of Section 4.

**Table 4.12 OECD Europe--Net Oil Imports, 1988-1998**  
 (Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average											
Total Net Imports..	7.774	7.994	8.210	8.588	8.459	8.127	7.355	7.226	7.339	7.340	7.919
Imports from OPEC <sup>1/</sup>	5.842	6.188	6.633	6.728	6.758	6.794	6.385	6.154	6.053	6.260	6.697
Imports from Persian Gulf <sup>2/</sup>											
Total.....	3.428	3.754	3.908	3.660	3.666	4.048	3.506	3.365	3.171	3.469	3.953
Bahrain.....	.009	.005	.020	.002	.003	.004	.003	.000	.001	.001	.004
Iran.....	.850	1.076	1.190	1.132	1.113	1.253	1.074	1.149	1.059	.942	1.006
Iraq.....	.959	.897	.591	.000	.000	.001	.000	.000	.006	.336	.733
Kuwait.....	.474	.452	.346	.019	.142	.461	.302	.269	.288	.249	.275
U.A.E.....	.134	.214	.446	.281	.199	.092	.067	.011	.004	.009	.020
Qatar.....	.021	.024	.026	.009	.006	.000	.000	.002	.002	.000	.000
Saudi Arabia.....	.981	1.086	1.290	2.217	2.203	2.237	2.060	1.933	1.811	1.932	1.915
Imports from OPEC-Africa											
Total.....	2.198	2.224	2.509	2.818	2.818	2.491	2.644	2.500	2.644	2.569	2.512
Algeria.....	.646	.648	.683	.757	.772	.693	.690	.724	.746	.681	.711
Libya.....	1.071	1.044	1.267	1.332	1.361	1.193	1.233	1.201	1.204	1.268	1.296
Nigeria.....	.481	.532	.559	.729	.686	.605	.721	.575	.694	.620	.505
Imports from OPEC-South America											
Total.....	.220	.212	.227	.249	.268	.240	.219	.273	.206	.206	.213
Venezuela.....	.220	.212	.227	.249	.268	.240	.219	.273	.206	.206	.213
Imports from OPEC-Far East											
Total.....	.005	.004	.008	.002	.009	.019	.019	.017	.033	.017	.024
Indonesia.....	.005	.004	.008	.002	.009	.019	.019	.017	.033	.017	.024

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

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

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

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

Sources: See end of Section 4.

**Table 4.13 France--Net Oil Imports, 1988-1998**  
 (Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average											
Total Net Imports..	1.718	1.711	1.750	1.869	1.784	1.761	1.615	1.721	1.738	1.769	1.878
Imports from OPEC <sup>1/</sup>	.737	.875	1.101	1.021	.932	1.006	.956	.911	.897	.899	1.029
Imports from Persian Gulf <sup>2/</sup>											
Total.....	.484	.647	.864	.708	.640	.757	.651	.647	.573	.617	.730
Bahrain.....	.007	.002	.011	.000	.001	.002	.000	.000	.001	.000	.002
Iran.....	.012	.158	.182	.171	.151	.243	.156	.208	.172	.127	.157
Iraq.....	.143	.128	.062	.000	.000	.000	.000	.000	.000	.078	.171
Kuwait.....	.017	.021	.015	.011	.029	.032	.016	.022	.017	.017	.019
U.A.E.....	.017	.040	.233	.064	.033	.025	.003	.002	.001	.000	.012
Qatar.....	.017	.009	.022	.003	.002	.000	.000	.000	.000	.000	.000
Saudi Arabia.....	.271	.288	.339	.459	.424	.454	.477	.416	.381	.394	.369
Imports from OPEC-Africa											
Total.....	.249	.218	.233	.296	.281	.242	.301	.262	.323	.282	.301
Algeria.....	.079	.089	.092	.107	.105	.066	.089	.103	.105	.131	.115
Libya.....	.090	.065	.079	.104	.087	.063	.059	.043	.051	.060	.061
Nigeria.....	.079	.064	.062	.084	.090	.112	.153	.115	.168	.091	.126
Imports from OPEC-South America											
Total.....	.011	.012	.015	.017	.011	.010	.003	.002	.001	.000	.000
Venezuela.....	.011	.012	.015	.017	.011	.010	.003	.002	.001	.000	.000
Imports from OPEC-Far East											
Total.....	-	.000	.000	.001	.001	.000	.000	.000	.000	.000	.000
Indonesia.....	-	.000	.000	.001	.001	.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. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

**Table 4.14 Germany--Net Oil Imports, 1988-1998**  
 (Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average											
Total Net Imports..	2.278	2.112	2.202	2.664	2.739	2.723	2.731	2.699	2.793	2.804	2.888
Imports from OPEC <sup>1/</sup>	.761	.739	.771	.859	.957	.948	.838	.711	.660	.645	.656
Imports from Persian Gulf <sup>2/</sup>											
Total.....	.197	.216	.217	.227	.215	.250	.217	.172	.145	.157	.163
Bahrain.....	-	-	-	-	-	.000	.001	.000	.000	.000	.000
Iran.....	.051	.041	.055	.053	.021	.053	.040	.031	.018	.023	.020
Iraq.....	.032	.009	.004	.000	.000	.000	.000	.000	.000	.001	.020
Kuwait.....	.013	.022	.013	.000	.009	.022	.026	.015	.016	.012	.016
U.A.E.....	.006	.023	.016	.012	.002	.002	.001	.000	.000	.001	.000
Qatar.....	.001	.002	.003	.002	.001	.000	.000	.000	.000	.000	.000
Saudi Arabia.....	.095	.119	.125	.161	.182	.173	.149	.125	.111	.120	.106
Imports from OPEC-Africa											
Total.....	.472	.436	.465	.524	.614	.594	.543	.461	.462	.442	.447
Algeria.....	.141	.106	.098	.126	.183	.195	.161	.135	.125	.095	.127
Libya.....	.237	.235	.244	.262	.252	.244	.244	.234	.258	.246	.277
Nigeria.....	.095	.095	.123	.136	.179	.154	.139	.093	.079	.101	.043
Imports from OPEC-South America											
Total.....	.091	.086	.088	.107	.128	.105	.079	.078	.053	.046	.046
Venezuela.....	.091	.086	.088	.107	.128	.105	.079	.078	.053	.046	.046
Imports from OPEC-Far East											
Total.....	-	-	.002	.000	.000	.000	.000	.000	.000	.000	.000
Indonesia.....	-	-	.002	.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. •Data through 1990 are for the former West Germany. •Negative numbers represent net exports. •A dash (-) indicates no trade. •Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. •Data for 1997 are preliminary.

Sources: See end of Section 4.

**Table 4.15 Italy--Net Oil Imports, 1988-1998**  
 (Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Average											
Total Net Imports..	1.590	1.716	1.788	1.769	1.839	1.747	1.778	1.820	1.791	1.795	1.831
Imports from OPEC <sup>1/</sup>	1.191	1.260	1.375	1.393	1.343	1.222	1.117	1.203	1.244	1.353	1.421
Imports from Persian Gulf <sup>2/</sup>											
Total.....	.643	.619	.626	.595	.573	.548	.430	.494	.502	.583	.658
Bahrain.....	-	.001	.000	.001	.001	.000	.000	.000	.001	.000	.002
Iran.....	.093	.124	.192	.231	.239	.221	.143	.233	.263	.258	.273
Iraq.....	.198	.138	.079	.000	.000	.000	.000	.000	.000	.033	.108
Kuwait.....	.118	.093	.063	.000	.007	.012	.001	.000	.000	.000	.000
U.A.E.....	.060	.085	.075	.044	.013	.002	.000	.000	.000	.000	.000
Qatar.....	.002	.008	.000	.004	.001	.000	.000	.002	.002	.000	.000
Saudi Arabia.....	.171	.171	.216	.315	.312	.313	.286	.260	.236	.291	.274
Imports from OPEC-Africa											
Total.....	.516	.626	.740	.793	.757	.653	.660	.679	.714	.745	.723
Algeria.....	.108	.150	.155	.155	.140	.096	.099	.100	.110	.086	.083
Libya.....	.389	.430	.556	.581	.584	.542	.543	.562	.580	.609	.601
Nigeria.....	.019	.045	.029	.057	.034	.015	.018	.017	.025	.050	.039
Imports from OPEC-South America											
Total.....	.029	.014	.007	.004	.005	.002	.007	.014	.008	.012	.020
Venezuela.....	.029	.014	.007	.004	.005	.002	.007	.014	.008	.012	.020
Imports from OPEC-Far East											
Total.....	.002	.002	.003	.001	.009	.019	.019	.015	.021	.014	.023
Indonesia.....	.002	.002	.003	.001	.009	.019	.019	.015	.021	.014	.023

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

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

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

Sources: See end of Section 4.

Table 4.16 OECD Imports from Iraq, 1988-1998  
(Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
	Average										
Total.....	1.489	1.581	1.276	0.000	0.000	0.001	0.000	0.000	0.007	0.458	1.116
United States <sup>1/</sup> ....	.343	.449	.518	.000	.000	.000	.000	.000	.001	.089	.334
Canada.....	.001	.013	.011	.000	.000	.000	.000	.000	.000	.014	.014
OECD Europe <sup>2/</sup> ....	.959	.897	.591	.000	.000	.001	.000	.000	.006	.336	.733
Main European Importers											
France.....	.143	.128	.062	.000	.000	.000	.000	.000	.000	.078	.171
Germany <sup>3/</sup> .....	.032	.009	.004	.000	.000	.000	.000	.000	.000	.001	.020
Italy.....	.198	.138	.079	.000	.000	.000	.000	.000	.000	.033	.108
Netherlands.....	.039	.101	.117	.000	.000	.000	.000	.000	.000	.024	.113
Spain.....	.092	.109	.063	.000	.000	.000	.000	.000	.002	.074	.130
European Net Exporters											
United Kingdom....	.070	.034	.027	.000	.000	.000	.000	.000	.000	.000	-
Smaller European Importers											
Austria.....	.007	.000	.000	.000	.000	.001	.000	.000	.000	.017	.027
Belgium.....	.037	.047	.029	.000	.000	.000	.000	.000	.000	.010	.047
Denmark.....	-	-	.000	.000	.000	.000	.000	.000	.000	.000	-
Greece.....	.059	.052	.044	.000	.000	.000	.000	.000	.000	.013	.016
Portugal.....	.029	.024	.019	.000	.000	.000	.000	.000	.000	.011	.029
Sweden.....	.003	.005	.000	.000	.000	.000	.000	.000	.000	.000	-
Switzerland.....	-	.000	.000	.000	.000	.000	.000	.000	.000	.001	.000
Turkey.....	.250	.250	.146	.000	.000	.000	.000	.000	.003	.074	.073
Japan.....	.173	.219	.146	.000	.000	.000	.000	.000	.000	.015	.017
Other OECD.....	.013	.003	.011	.000	.000	.000	.000	.000	.000	.005	.018

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

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

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

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

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

Sources: See end of Section 4.

Table 4.17 OECD Imports from Kuwait, 1988-1998  
(Million Barrels per Day)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
	Average										
Total.....	0.936	1.084	0.740	0.039	0.414	1.191	1.081	0.997	1.034	1.065	1.070
United States <sup>1/</sup> ....	.092	.157	.086	.006	.051	.353	.312	.218	.236	.253	.281
Canada.....	-	-	.004	-	-	.000	.027	.000	.000	.000	.000
OECD Europe <sup>2/</sup> ....	.474	.452	.346	.019	.142	.461	.302	.269	.288	.249	.275
Main European Importers											
France.....	.017	.021	.015	.011	.029	.032	.016	.022	.017	.017	.019
Germany <sup>3/</sup> .....	.013	.022	.013	.000	.009	.022	.026	.015	.016	.012	.016
Italy.....	.118	.093	.063	.000	.007	.012	.001	.000	.000	.000	.000
Netherlands.....	.189	.194	.151	.002	.052	.254	.179	.176	.193	.168	.176
Spain.....	.030	.015	.010	.003	.000	.015	.000	.000	.000	.000	.000
European Net Exporters											
Norway.....	-	-	-	-	-	.000	.000	.000	.000	.000	.000
United Kingdom....	.006	.006	.045	.002	.027	.049	.058	.039	.032	.031	.025
Smaller European Importers											
Austria.....	.004	.002	.000	.000	.000	.000	.000	.000	.000	.000	-
Belgium.....	-	-	.000	.001	.006	.056	.005	.004	.015	.004	.014
Denmark.....	.060	.066	.034	.000	.000	.000	.000	.000	.000	.002	.007
Finland.....	-	-	-	.000	-	-	-	-	-	-	.001
Greece.....	.015	.009	.000	.000	.002	.005	.001	.000	.000	.000	.000
Portugal.....	.003	.003	.002	.000	.000	.000	.000	.000	.000	.000	-
Sweden.....	-	.001	.001	.000	.000	.002	.000	.000	.000	.000	.000
Switzerland.....	-	-	-	.000	.000	.000	.000	.000	.000	.000	.000
Turkey.....	.019	.019	.011	.000	.010	.016	.016	.014	.015	.014	.016
Japan.....	.341	.458	.291	.014	.220	.368	.430	.501	.500	.557	.507
Other OECD.....	.029	.017	.013	.000	.000	.009	.011	.009	.010	.006	.006

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

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

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

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

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

Sources: See end of Section 4.

## Sources for Section 4 (Historical Oil Data)

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

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

Other Countries: • EIA, International Energy Annual, various issues. • EIA, International Petroleum Annual, 1978. • United Nations, Yearbook of World Energy Statistics, 1979. Refinery Gains: National Petroleum Council, U.S. Petroleum Refinery Study, 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. • 1983-1998: 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. • 1982-1998: 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, 1991-1999.



## **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 December 1998 United States (including territories) oil stocks totaled 1,487 million barrels.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



## **Appendix C**

### **Glossary**

## Appendix C. Glossary

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

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

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

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

**Lease Condensate.** A liquid recovered from natural gas at the well or at small gas/oil separators in the field. Consists primarily of pentanes and heavier hydrocarbons (also called field condensate).

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

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

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

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

**Petroleum Products.** Petroleum products are obtained from the processing of crude oil (including lease condensate), natural gas, and other hydrocarbon compounds. Petroleum products include unfinished oils, aviation gasoline, motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, ethane, liquefied petroleum gases, petrochemical feedstocks, special naphthas, lubricants, paraffin wax, petroleum coke, asphalt road oil, still gas, and other miscellaneous products.

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

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

## **Appendix D**

### **Estimation Procedures**

## Appendix D. Estimation Procedures

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

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

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

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

## **Appendix E**

### **Conversions**

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

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

Table E2. Barrels of Crude Oil per Metric Ton, 1988-1997

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>North America</b>										
Canada . . . . .	7.453	7.453	7.186	7.186	7.186	7.186	7.186	7.186	7.186	7.186
Mexico . . . . .	6.965	6.965	6.965	6.965	6.965	6.965	6.965	6.965	6.965	6.965
United States . . . . .	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333	7.333
<b>Central &amp; South America</b>										
Argentina . . . . .	7.149	7.149	7.120	7.120	7.120	7.120	7.120	7.120	7.120	7.120
Bolivia . . . . .	7.881	7.881	7.881	7.881	7.881	7.881	7.881	7.881	7.881	7.881
Brazil . . . . .	7.268	7.268	7.056	7.056	7.056	7.056	7.056	7.056	7.056	7.056
Chile . . . . .	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Colombia . . . . .	7.084	7.084	7.080	7.080	7.080	7.080	7.080	7.080	7.080	7.080
Cuba . . . . .	6.449	6.449	6.449	6.449	6.449	6.449	6.449	6.449	6.449	6.449
Ecuador . . . . .	7.130	7.130	7.130	7.130	7.130	7.130	7.130	7.130	7.130	7.130
Peru . . . . .	7.407	7.407	7.407	7.407	7.407	7.407	7.407	7.407	7.407	7.407
Trinidad and Tobago . . . . .	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084
Venezuela . . . . .	6.880	6.880	6.890	6.890	6.890	6.890	6.890	6.890	6.890	6.890
<b>Western Europe</b>										
Austria . . . . .	7.082	7.082	7.200	7.200	7.200	7.200	7.200	7.200	7.200	7.200
Denmark . . . . .	7.689	7.689	7.405	7.405	7.405	7.405	7.405	7.405	7.405	7.405
France . . . . .	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Germany . . . . .	--	--	--	7.330	7.330	7.330	7.330	7.330	7.330	7.330
Germany, East . . . . .	7.340	7.340	7.340	--	--	--	--	--	--	--
Germany, West . . . . .	7.247	7.247	7.247	--	--	--	--	--	--	--
Greece . . . . .	7.178	7.178	7.231	7.231	7.231	7.231	7.231	7.231	7.231	7.231
Italy . . . . .	6.853	6.853	7.300	7.300	7.300	7.300	7.300	7.300	7.300	7.300
Netherlands . . . . .	6.853	6.853	7.239	7.239	7.239	7.239	7.239	7.239	7.239	7.239
Norway . . . . .	7.810	7.810	7.644	7.644	7.644	7.644	7.644	7.644	7.644	7.644
Spain . . . . .	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Sweden . . . . .	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247
Turkey . . . . .	7.150	7.150	7.200	7.200	7.200	7.200	7.200	7.200	7.200	7.200
United Kingdom . . . . .	7.466	7.466	7.523	7.523	7.523	7.523	7.523	7.523	7.523	7.523
Former Yugoslavia . . . . .	7.418	7.418	7.418	7.418	--	--	--	--	--	--
Croatia . . . . .	--	--	--	--	7.418	7.418	7.418	7.418	7.418	7.418
Serbia and Montenegro . . . . .	--	--	--	--	7.418	7.418	7.418	7.418	7.418	7.418
Slovenia . . . . .	--	--	--	--	--	7.418	7.418	7.418	7.418	7.418

-- = No Production of this form of energy.

Sources: International Energy Annual 1997. DOE/EIA-0219(97) (April 1999).

Table E2. Barrels of Crude Oil per Metric Ton, 1988-1997 (continued)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Eastern Europe &amp; Former U.S.S.R.</b>										
Albania . . . . .	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.594	6.594
Bulgaria . . . . .	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332	7.332
Former Czechoslovakia . . . . .	6.780	6.780	6.780	6.780	--	--	--	--	--	--
Czech Republic . . . . .	--	--	--	--	--	6.780	6.780	6.780	6.780	6.780
Slovakia . . . . .	--	--	--	--	--	6.780	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	--	--	--	--	--	--
Azerbaijan . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Belarus . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Georgia . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Lithuania . . . . .	--	--	--	--	--	7.270	7.270	7.270	7.270	7.270
Kazakhstan . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Kyrgyzstan . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Russia . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Tajikistan . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Turkmenistan . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Ukraine . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
Uzbekistan . . . . .	--	--	--	--	7.270	7.270	7.270	7.270	7.270	7.270
<b>Middle East</b>										
Bahrain . . . . .	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320
Iran . . . . .	7.305	7.305	7.350	7.350	7.350	7.350	7.350	7.350	7.350	7.350
Iraq . . . . .	7.426	7.426	7.430	7.430	7.430	7.430	7.430	7.430	7.430	7.430
Israel . . . . .	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247	7.247
Jordan . . . . .	7.190	7.190	7.190	7.190	7.190	7.190	7.190	7.190	7.190	7.190
Kuwait . . . . .	7.245	7.245	7.250	7.250	7.250	7.250	7.250	7.250	7.250	7.250
Oman . . . . .	7.332	7.332	7.330	7.330	7.330	7.330	7.330	7.330	7.330	7.330
Qatar . . . . .	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500
Saudi Arabia . . . . .	7.268	7.268	7.323	7.323	7.323	7.323	7.323	7.323	7.323	7.323
Syria . . . . .	6.836	6.836	6.836	6.836	6.836	6.836	6.836	6.836	6.836	6.836
United Arab Emirates . . . . .	7.480	7.480	7.480	7.480	7.480	7.480	7.480	7.480	7.480	7.480
Yemen . . . . .	7.632	7.632	7.631	7.631	7.631	7.631	7.631	7.631	7.631	7.631

-- = No Production of this form of energy.

Sources: International Energy Annual 1997. DOE/EIA-0219(97) (April 1999).

Table E2. Barrels of Crude Oil per Metric Ton, 1988-1997 (continued)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
<b>Africa</b>										
Algeria . . . . .	7.936	7.936	8.130	8.130	8.130	8.130	8.130	8.130	8.130	8.130
Angola . . . . .	7.409	7.409	7.409	7.409	7.409	7.409	7.409	7.409	7.409	7.410
Benin . . . . .	6.870	6.870	6.870	6.870	6.870	6.870	6.870	6.870	6.870	6.870
Cameroon . . . . .	7.205	7.205	7.205	7.205	7.205	7.205	7.205	7.205	7.205	7.205
Congo (Brazzaville) . . . . .	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506	7.506
Congo (Kinshasa) . . . . .	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320
Cote d'Ivoire (Ivory Coast) . . . . .	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285
Egypt . . . . .	7.256	7.256	7.256	7.256	7.256	7.256	7.256	7.256	7.256	7.260
Equatorial Guinea . . . . .	--	--	--	8.077	8.077	8.077	8.077	8.077	8.077	8.077
Gabon . . . . .	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305	7.305
Ghana . . . . .	--	--	--	--	7.285	7.285	7.285	7.285	7.285	7.285
Libya . . . . .	7.515	7.515	7.580	7.580	7.580	7.580	7.580	7.580	7.580	7.580
Morocco . . . . .	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600	7.600
Nigeria . . . . .	7.315	7.315	7.315	7.315	7.315	7.315	7.315	7.315	7.315	7.500
Sudan . . . . .	--	--	--	--	7.452	7.452	7.452	7.452	7.452	7.452
Tunisia . . . . .	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689	7.689
<b>Far East &amp; Oceania</b>										
Australia . . . . .	7.855	7.855	7.868	7.868	7.868	7.868	7.868	7.868	7.868	7.868
Bangladesh . . . . .	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453	7.453
Brunei . . . . .	7.340	7.340	7.340	7.340	7.340	7.340	7.340	7.340	7.340	7.340
Burma . . . . .	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084	7.084
China . . . . .	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.320	7.300
India . . . . .	7.600	7.600	7.440	7.440	7.440	7.440	7.440	7.440	7.440	7.330
Indonesia . . . . .	7.558	7.558	7.360	7.360	7.360	7.360	7.360	7.360	7.360	7.360
Japan . . . . .	7.285	7.285	7.357	7.357	7.357	7.357	7.357	7.357	7.357	7.357
Malaysia . . . . .	7.641	7.641	7.641	7.641	7.641	7.641	7.641	7.641	7.641	7.641
New Zealand . . . . .	8.127	8.127	8.127	8.127	8.127	8.127	8.127	8.127	8.127	8.127
Pakistan . . . . .	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500	7.500
Papua New Guinea . . . . .	--	--	--	7.809	7.809	7.809	7.809	7.809	7.809	7.809
Philippines . . . . .	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285	7.285
Taiwan . . . . .	6.568	6.568	6.568	6.568	6.568	6.568	6.568	6.568	6.568	6.568
Thailand . . . . .	6.758	6.758	6.758	6.758	6.758	6.758	6.758	6.758	6.758	6.758
Vietnam . . . . .	7.082	7.082	7.082	7.082	7.082	7.082	7.082	7.082	7.082	7.082

-- = No Production of this form of energy.

Sources: International Energy Annual 1997. DOE/EIA-0219(97) (April 1999).

