

# International Petroleum Statistics Report

November 1998

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# International Petroleum Statistics Report

November 1998

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

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## Preface

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

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

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

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

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

## Oil Market Chronology - October 1998

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

- October 1** South Korea's oil refining sector fully deregulates, allowing for 100 percent foreign investment. Originally, South Korea had expected to fully deregulate its refining industry by January 1999, but it decided to move up the date in order to help reform its economy. (DJ)
- October 2** An underwater pipeline leaks an estimated 155,000 gallons of oil into the Gulf of Mexico, forming a slick about 100 miles south of the mouth of the Mississippi River. (DJ)
- October 4** Mexican Energy Minister Luis Tellez announces that his country will maintain oil export cuts for an additional six months, or until June 1999. As part of agreements earlier this year with producers from the Organization of Petroleum Exporting Countries, Mexico had already agreed to trim its exports by 200,000 barrels a day through the end of 1998. (DJ)
- October 5** China begins exploration at one of its largest gas fields in Chengdu, capital of Sichuan province. The field is estimated to contain approximately 3.5 trillion cubic feet of proved reserves. (DJ)
- October 7** European Union (EU) nations approve an accord in which European car makers will voluntarily agree to cut carbon dioxide emissions 25 percent by 2008. EU officials say they will seek similar deals with automakers in Asia and North America. (WP)
- China National Star Petroleum Corporation, the smallest of the country's three exploration companies, discovers 730 million barrels of crude oil reserves in the Tarim Basin. The oil field is located in the remote northwest province of Xinjiang. (DJ)
- Oil production at Shell Nigeria is cut by 269,000 barrels per day as a result of protests against Shell's activities in the region. (DJ)
- October 9** In a report to Congress, the U.S. Energy Information Administration (EIA) assessed the macroeconomic and energy market impacts of six energy-related, carbon-reduction scenarios in relation to a reference case. EIA undertook this study in response to a request from the Chairman and Ranking Minority Members of the House Committee on Science. (NYT)
- Phillips Petroleum Company and Ultramar Diamond Shamrock Corporation (UDS) agree to combine their gasoline stations and refineries into a joint-venture company to be called Diamond 66. The joint venture will be owned 55 percent by UDS and 45 percent by Phillips. Moody's Investor Services says Diamond 66 will be the largest independent refining and marketing company in North America. (DJ)
- French petroleum company Total SA starts oil production at the Sirri A field in the Persian Gulf near the coast of Iran. Total says production in the start-up phase will reach 7,000 barrels per day from three wells, with a goal of 20,000 barrels per day from 11 wells. Total heads the development of the two Sirri fields, along with Malaysia's Petronas. (DJ)
- October 12** The Paris-based International Energy Agency (IEA) estimates that the Organization of Petroleum Exporting Countries (OPEC) achieved 98 percent of its targeted production reduction in September. The IEA reports that OPEC's September crude oil output, excluding Iraq, was 24.44 million barrels a day, compared with its target of 24.387 million barrels per day. Meanwhile, *Dow Jones* reports that crude oil output from OPEC members, excluding Iraq, totaled 24.319 million barrels per day in September, down from 24.757 million barrels per day in August, and 68,000 barrels per day below the production level agreed to at the June OPEC meeting. (DJ)
- October 13** Russian crude oil exports soar to an average of 2.54 million barrels per day for the first eight months of 1998, up 10 percent from a rate of 2.3 million barrels per day during the same period last year. (DJ)

**October 13**

Chad's Minister of Oil and Mines Abdoulaye says the 621-mile Chad-Cameroon oil pipeline will definitely go ahead as planned. The pipeline will transport 225,000 barrels of crude oil per day from the Doba oil fields in eastern Chad to the port of Kribi in Cameroon. Work on the pipeline is expected to start in early 1999. (DJ)

**October 14**

China says it will give North Korea almost 600,000 barrels of crude oil. China cites "valuing the North Korea-China friendship and preserving the excellent traditions of helping each other in times of adversity" as reasons for the donation. Cash shortages have forced North Korea to cut its crude oil imports. (DJ)

China's Xinhua News Agency reports that three new medium-sized oilfields have been discovered at Shijiuji off Bohai Bay in northern China, with estimated proved reserves of 440 million barrels of oil and 300 billion cubic feet of natural gas. (DJ)

**October 15**

Japan's Ministry of International Trade and Industry changes its forecast for domestic oil consumption in Fiscal Year 1998 from a growth of 0.3 percent to a decline of 3.7 percent. (DJ)

The ITAR-Tass news agency reports that Russia's financial crisis has not affected foreign investment in Sakhalin Island's oil and gas projects. Sakhalin Island has attracted several joint ventures aiming to develop Sakhalin's eight onshore oil and gas fields. (DJ)

**October 18**

Villagers trying to tap into a trans-national oil products pipeline in Nigeria touch off a blazing inferno which razes several villages and destroys a swath of surrounding cropland. Hundreds of people are killed. (DJ)

Leftist rebels blow up an oil pipeline in Machuca, Colombia, a village 180 miles from Bogota, killing 45 villagers. President Andres Pastrana pleads for "gestures of peace" from the rebel group following the attack. The blast shuts down the Colombia Central pipeline, which transports 100,000 barrels per day from oil fields in east-central Colombia to the Caribbean coast. (DJ)

**October 19**

The *Middle East Economic Survey* (MEEES) reports that Iraq's methods for producing crude oil are causing permanent damage to the country's oil reservoirs. MEEES reports this damage has been underscored by a deterioration in the quality of Iraqi oil exports. (DJ)

The threat of confrontation between Iran and Afghanistan's ruling Taliban militia is defused after a series of diplomatic efforts by United Nations special envoys. Iran had sent more than 200,000 troops to its border with Afghanistan after Taliban troops killed eight Iranian diplomats and a journalist in northern Afghanistan in August 1998. (DJ)

**October 20**

Norway's state oil company Statoil says its natural gas commitments to Europe are being met by increased output from its North Sea Troll and Statfjord fields, after production in the Sleipner area was shut down as a result of fire damage. (DJ)

Turkish and Syrian officials sign a security agreement after several weeks of escalating tensions between the two countries. Turkey had threatened military action against Syria, claiming Syria was supporting Kurdish rebels. (DJ)

Turkey invites Russia to cooperate in the construction of the Ceyhan oil pipeline route, which would transport Caspian Sea oil from the Azerbaijani capital of Baku to the Turkish Mediterranean port of Ceyhan. (DJ)

**October 23**

Canada announces tough new rules aimed at cutting sulfur levels in gasoline by about 90 percent by the year 2005. (DJ)

Israeli Prime Minister Benjamin Netanyahu and Palestinian leader Yasser Arafat sign a land-for-peace West Bank accord at a White House ceremony. (DJ)

**October 25**

Turkey says it will limit oil tanker traffic through the Bosphorus Straits due to environmental concerns. According to Turkish Foreign Minister Ismail Cem, about 440 million barrels of crude oil pass through the Bosphorus each year on 4,500 oil tankers. Turkey is concerned about the potential for oil tanker accidents. (DJ)

- October 26** Peru and Ecuador sign a historic peace treaty, ending a 57-year dispute over a part of the Amazon jungle that had caused three wars between the two countries. The peace accord also outlines cooperation on several large projects, including the interconnection of oil pipelines. Peru and Ecuador are in the process of selecting an investment bank to work as an advisor for the project. (DJ)
- Georgia negotiates a \$200 million loan from the European Bank for Reconstruction and Development to help build an oil pipeline that would carry some of the early oil produced by an international consortium in Azerbaijan's Caspian Sea shelf through Georgia to the Black Sea. (DJ)
- October 27** The U.S.-led Korean Peninsula Energy Development Organization (KEDO) purchases 360,000 barrels of 2 percent sulfur fuel oil for delivery into North Korea in November 1998. (DI)
- October 28** South Korean Hyundai Oil Refining Company, a unit of the Hyundai Group, plans to open its first gasoline station in North Korea this year. (DI)
- Japan's Nippon Oil Company, the country's second largest petroleum distributor and Mitsubishi Oil Company, the sixth-ranking company in the industry, agree to merge as of April 1, 1999. The combined company will be the largest oil distributor in Japan. (WSJ)
- October 29** Turkey, Azerbaijan, Georgia, Kazakhstan, and Uzbekistan sign a declaration that declares the Baku-Tbilisi-Ceyhan pipeline project as the main oil export pipeline for Azerbaijan. U.S. Secretary of Energy Bill Richardson serves as an official witness at the ceremony. (WT)
- October 30** The presidents of Turkmenistan and Turkey sign an agreement under which Turkey would buy natural gas from Turkmenistan for 30 years. The gas would be shipped through a proposed trans-Caspian pipeline. Turkey would buy 565 billion cubic feet of gas annually, with the amount eventually ramping up to 1 trillion cubic feet per year. (NYT)



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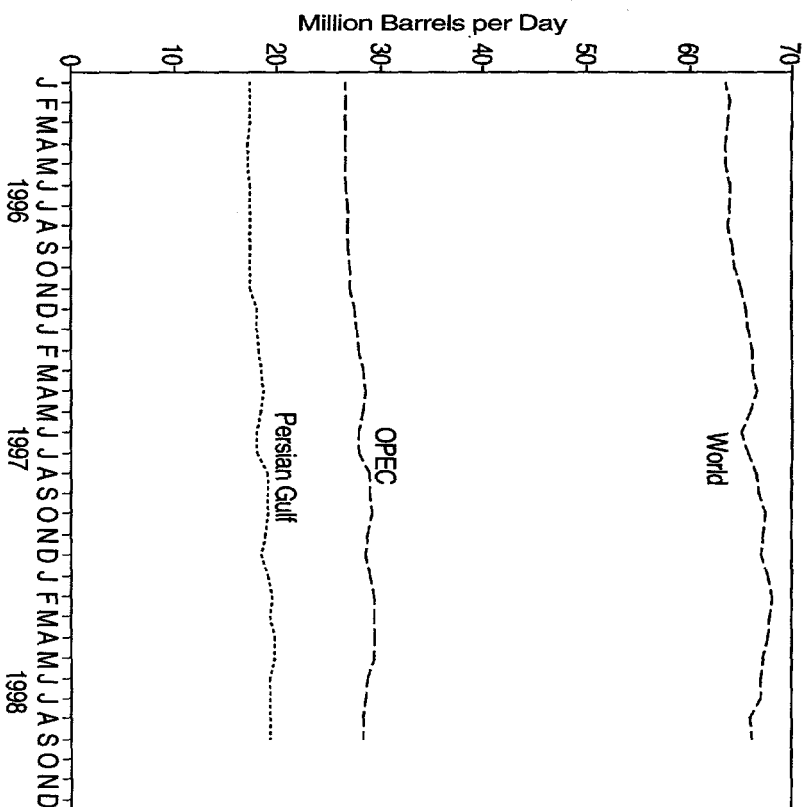
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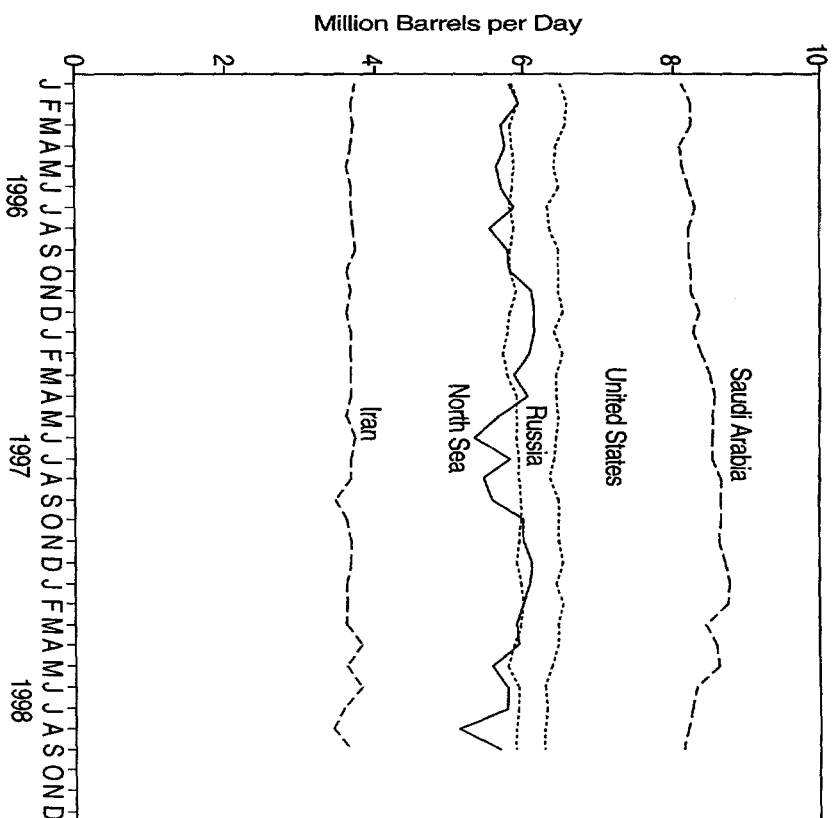
## 1. Annual and Monthly Oil Data

Figure 1. World Crude Oil Production, Monthly



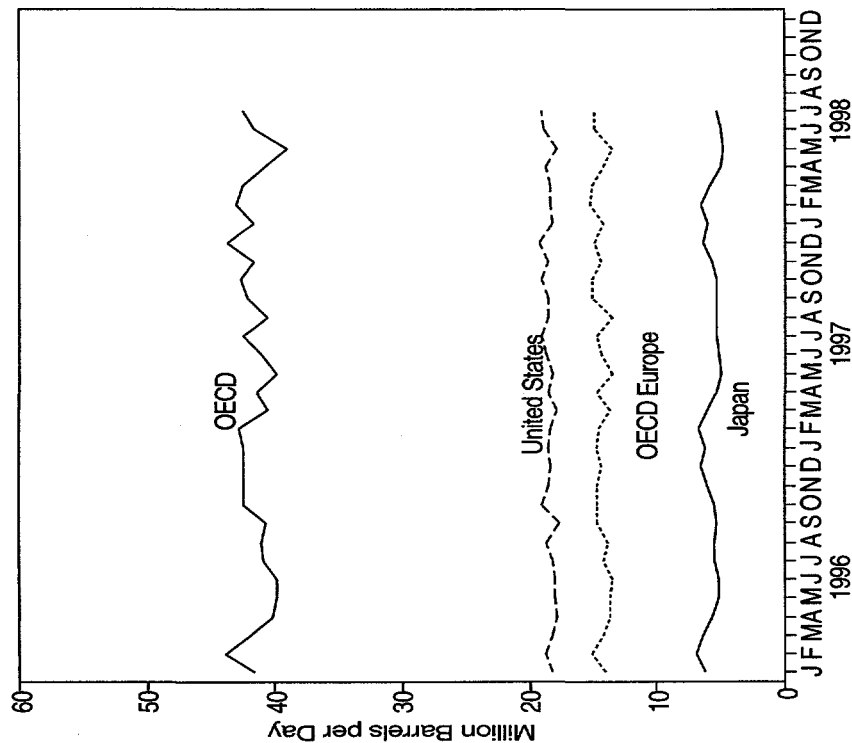
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Figure 2. Leading Crude Oil Producers, Monthly



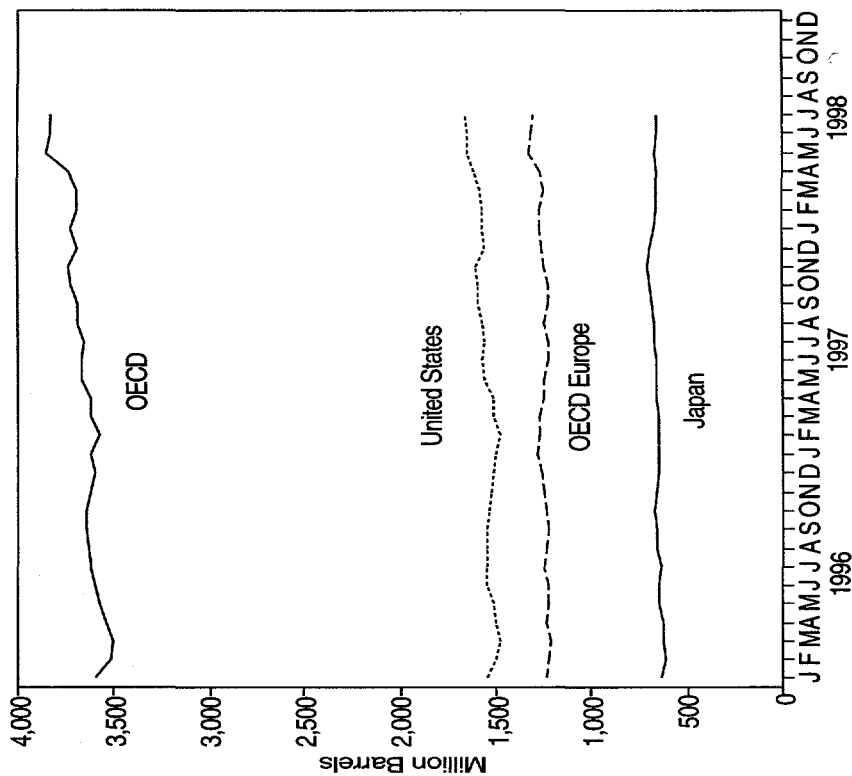
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Figure 3. OECD Oil Consumption, Monthly



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-<br>nesia | Iran  | Iraq  | Kuwait/<br>Libya | Nigeria | Qatar | Saudi<br>Arabia <sup>1</sup> /<br>Emirates | United<br>Arab<br>Emirates | Vene-<br>zuela | Total<br>OPEC |
|-------------------|---------|----------------|-------|-------|------------------|---------|-------|--------------------------------------------|----------------------------|----------------|---------------|
| 1990 Average..... | 1,175   | 1,462          | 3,088 | 2,040 | 1,175            | 1,810   | 406   | 6,410                                      | 2,117                      | 2,137          | 23,195        |
| 1991 Average..... | 1,230   | 1,592          | 3,312 | 305   | 1,90             | 1,892   | 395   | 8,115                                      | 2,386                      | 2,375          | 23,275        |
| 1992 Average..... | 1,214   | 1,504          | 3,429 | 425   | 1,058            | 1,943   | 423   | 8,332                                      | 2,266                      | 2,371          | 24,398        |
| 1993 Average..... | 1,162   | 1,511          | 3,540 | 512   | 1,852            | 1,960   | 413   | 8,198                                      | 2,159                      | 2,450          | 25,119        |
| 1994 Average..... | 1,180   | 1,510          | 3,618 | 553   | 2,025            | 1,931   | 415   | 8,120                                      | 2,193                      | 2,588          | 25,510        |
| 1995 Average..... | 1,202   | 1,503          | 3,643 | 560   | 2,057            | 1,993   | 442   | 8,231                                      | 2,233                      | 2,750          | 26,004        |
| 1996 Average..... | 1,242   | 1,547          | 3,686 | 579   | 2,062            | 2,188   | 510   | 8,218                                      | 2,278                      | 3,053          | 26,764        |
| 1997              |         |                |       |       |                  |         |       |                                            |                            |                |               |
| January.....      | 1,260   | 1,570          | 3,685 | 1,085 | 2,085            | 2,280   | 585   | 8,265                                      | 2,300                      | 3,190          | 27,735        |
| February.....     | 1,270   | 1,590          | 3,685 | 1,125 | 2,077            | 2,310   | 585   | 8,408                                      | 2,330                      | 3,190          | 28,000        |
| March.....        | 1,280   | 1,600          | 3,685 | 1,175 | 2,105            | 2,240   | 585   | 8,515                                      | 2,360                      | 3,200          | 28,185        |
| April.....        | 1,280   | 1,560          | 3,685 | 1,275 | 2,107            | 2,310   | 585   | 8,568                                      | 2,360                      | 3,220          | 28,400        |
| May.....          | 1,280   | 1,580          | 3,635 | 1,325 | 2,027            | 2,270   | 605   | 8,548                                      | 2,210                      | 3,240          | 28,170        |
| June.....         | 1,260   | 1,530          | 3,735 | 605   | 2,050            | 2,340   | 690   | 8,540                                      | 2,325                      | 3,260          | 27,785        |
| July.....         | 1,280   | 1,530          | 3,685 | 605   | 2,070            | 2,350   | 685   | 8,560                                      | 2,325                      | 3,270          | 27,790        |
| August.....       | 1,280   | 1,530          | 3,685 | 1,515 | 2,075            | 2,300   | 685   | 8,660                                      | 2,325                      | 3,390          | 28,940        |
| September.....    | 1,280   | 1,490          | 3,485 | 1,735 | 2,075            | 2,400   | 685   | 8,665                                      | 2,325                      | 3,430          | 28,920        |
| October.....      | 1,280   | 1,490          | 3,635 | 1,625 | 2,075            | 2,400   | 685   | 8,665                                      | 2,325                      | 3,430          | 29,060        |
| November.....     | 1,280   | 1,540          | 3,685 | 1,390 | 2,075            | 2,360   | 705   | 8,615                                      | 2,305                      | 3,460          | 28,865        |
| December.....     | 1,290   | 1,540          | 3,685 | 781   | 2,175            | 2,320   | 705   | 8,725                                      | 2,310                      | 3,490          | 28,471        |
| 1997 Average..... | 1,277   | 1,546          | 3,664 | 1,187 | 2,083            | 2,317   | 649   | 8,562                                      | 2,316                      | 3,315          | 28,362        |
| 1998              |         |                |       |       |                  |         |       |                                            |                            |                |               |
| January.....      | 1,290   | 1,520          | 3,635 | 1,261 | 2,215            | 2,218   | 715   | 8,765                                      | 2,435                      | 3,440          | 28,944        |
| February.....     | 1,290   | 1,520          | 3,635 | 1,703 | 2,210            | 2,263   | 735   | 8,760                                      | 2,435                      | 3,410          | 29,411        |
| March.....        | 1,290   | 1,520          | 3,635 | 1,825 | 2,210            | 2,380   | 735   | 8,460                                      | 2,480                      | 3,410          | 29,395        |
| April.....        | 1,270   | 1,520          | 3,835 | 1,985 | 2,115            | 2,238   | 705   | 8,585                                      | 2,420                      | 3,240          | 29,313        |
| May.....          | 1,250   | 1,520          | 3,635 | 2,245 | 2,105            | 2,230   | 705   | 8,625                                      | 2,330                      | 3,240          | 29,245        |
| June.....         | 1,240   | 1,490          | 3,835 | 1,920 | 2,105            | 2,210   | 705   | 8,325                                      | 2,300                      | 3,210          | 28,700        |
| July.....         | 1,230   | 1,490          | 3,585 | 2,355 | 2,075            | 2,160   | 685   | 8,275                                      | 2,280                      | 3,070          | 28,565        |
| August.....       | 1,220   | 1,510          | 3,435 | 2,555 | 2,025            | 2,010   | 675   | 8,225                                      | 2,300                      | 2,990          | 28,285        |
| September.....    | 1,220   | 1,510          | 3,685 | 2,555 | 1,972            | 2,010   | 665   | 8,173                                      | 2,300                      | 2,940          | 28,365        |
| 1998 Average..... | 1,255   | 1,511          | 3,656 | 2,047 | 2,114            | 2,191   | 703   | 8,464                                      | 2,364                      | 3,215          | 28,910        |

<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 September 1998, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 545 thousand barrels per day. Notes: \*OPEC-Organization of Petroleum Exporting Countries. \*Monthly data are often preliminary and also may not average to the annual totals due to rounding.

Sources: See end of Section 1.

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

|                   | Norway | United Kingdom | North Sea <sup>1</sup> | Angola | Argentina | Australia | Brazil | Canada | China  | Colombia | Ecuador |
|-------------------|--------|----------------|------------------------|--------|-----------|-----------|--------|--------|--------|----------|---------|
| 1990 Average..... | 1,704  | 1,820          | 3,667                  | 475    | 483       | 575       | 631    | 1,553  | 2,774  | 440      | 285     |
| 1991 Average..... | 1,890  | 1,797          | 3,811                  | 500    | 485       | 545       | 630    | 1,548  | 2,835  | 419      | 299     |
| 1992 Average..... | 2,229  | 1,825          | 4,182                  | 526    | 553       | 535       | 626    | 1,605  | 2,845  | 433      | 321     |
| 1993 Average..... | 2,350  | 1,915          | 4,403                  | 509    | 594       | 503       | 643    | 1,679  | 2,890  | 456      | 344     |
| 1994 Average..... | 2,521  | 2,375          | 5,058                  | 536    | 650       | 536       | 671    | 1,746  | 2,939  | 450      | 365     |
| 1995 Average..... | 2,768  | 2,489          | 5,400                  | 646    | 715       | 562       | 695    | 1,805  | 2,990  | 585      | 392     |
| 1996 Average..... | 3,104  | 2,568          | 5,822                  | 709    | 756       | 570       | 795    | 1,837  | 3,131  | 623      | 396     |
| 1997 January..... | 3,268  | 2,693          | 6,126                  | 700    | 820       | 565       | 840    | 1,874  | 3,210  | 650      | 385     |
| February.....     | 3,263  | 2,660          | 6,074                  | 715    | 820       | 561       | 830    | 1,920  | 3,240  | 640      | 385     |
| March.....        | 3,063  | 2,638          | 5,863                  | 720    | 830       | 594       | 830    | 1,900  | 3,215  | 620      | 380     |
| April.....        | 3,388  | 2,515          | 6,063                  | 720    | 840       | 594       | 830    | 1,823  | 3,230  | 650      | 390     |
| May.....          | 3,194  | 2,315          | 5,677                  | 720    | 840       | 576       | 830    | 1,737  | 3,275  | 650      | 380     |
| June.....         | 3,025  | 2,135          | 5,339                  | 710    | 815       | 574       | 830    | 1,835  | 3,220  | 640      | 360     |
| July.....         | 3,194  | 2,447          | 5,820                  | 715    | 820       | 584       | 860    | 1,889  | 3,190  | 605      | 360     |
| August.....       | 2,890  | 2,407          | 5,462                  | 720    | 840       | 605       | 845    | 1,895  | 3,190  | 635      | 370     |
| September.....    | 2,927  | 2,483          | 5,589                  | 717    | 845       | 626       | 830    | 1,930  | 3,195  | 660      | 390     |
| October.....      | 3,209  | 2,610          | 6,000                  | 725    | 850       | 616       | 740    | 1,956  | 3,195  | 715      | 385     |
| November.....     | 3,192  | 2,602          | 5,992                  | 725    | 850       | 565       | 810    | 1,970  | 3,158  | 745      | 395     |
| December.....     | 3,229  | 2,700          | 6,116                  | 750    | 845       | 590       | 920    | 1,985  | 3,090  | 730      | 390     |
| 1997 Average..... | 3,153  | 2,517          | 5,843                  | 720    | 835       | 588       | 833    | 1,893  | 3,200  | 662      | 381     |
| 1998 January..... | 3,293  | 2,597          | 6,082                  | 735    | 840       | 528       | 886    | 1,912  | 3,240  | 715      | 390     |
| February.....     | 3,230  | 2,583          | 5,989                  | 730    | 840       | 550       | 920    | 1,944  | 3,155  | 710      | 380     |
| March.....        | 3,123  | 2,600          | 5,908                  | 730    | 840       | 560       | 920    | 1,952  | 3,170  | 725      | 380     |
| April.....        | 3,160  | 2,602          | 5,928                  | 710    | 840       | 604       | 930    | 1,988  | 3,140  | 725      | 380     |
| May.....          | 2,917  | 2,499          | 5,589                  | 710    | 855       | 600       | 959    | 1,943  | 3,210  | 735      | 380     |
| June.....         | 3,140  | 2,495          | 5,797                  | 710    | 855       | 624       | 956    | 1,932  | 3,260  | 735      | 380     |
| July.....         | 3,120  | 2,525          | 5,801                  | 710    | 855       | R621      | 975    | 2,045  | 3,200  | 735      | 330     |
| August.....       | 2,440  | R2,536         | R5,133                 | R730   | R850      | R637      | 975    | R2,016 | R3,180 | R752     | R380    |
| September.....    | 2,896  | 2,632          | 5,689                  | 730    | 850       | 582       | 985    | 2,033  | 3,160  | 775      | 385     |
| 1998 Average..... | 3,033  | 2,563          | 5,766                  | 722    | 847       | 590       | 945    | 1,974  | 3,191  | 734      | 376     |

<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<br>U.S.S.R. | Syria | United<br>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  | --     | --                 | 481   | 7,171            | 3,228              | 60,212  |
| 1993 Average..... | 890   | 313   | 534   | 640      | 2,673  | 776  | --     | --                 | 554   | 6,847            | 3,280              | 60,238  |
| 1994 Average..... | 896   | 329   | 590   | 645      | 2,685  | 810  | --     | --                 | 560   | 6,662            | 3,382              | 60,992  |
| 1995 Average..... | 920   | 365   | 703   | 682      | 2,618  | 851  | --     | --                 | 575   | 6,560            | 3,410              | 62,331  |
| 1996 Average..... | 922   | 368   | 651   | 695      | 2,855  | 883  | --     | --                 | 604   | 6,465            | 3,509              | 64,054  |
| 1997              |       |       |       |          |        |      |        |                    |       |                  |                    |         |
| January.....      | 885   | 370   | 650   | 730      | 2,940  | 890  | 5,789  | --                 | 565   | 6,402            | 3,715              | 65,676  |
| February....      | 885   | 370   | 650   | 730      | 2,970  | 900  | 5,729  | --                 | 565   | 6,514            | 3,694              | 66,041  |
| March.....        | 890   | 370   | 660   | 730      | 2,970  | 900  | 5,772  | --                 | 565   | 6,452            | 3,734              | 66,018  |
| April.....        | 890   | 370   | 685   | 750      | 2,945  | 900  | 5,893  | --                 | 560   | 6,441            | 3,756              | 66,571  |
| May.....          | 880   | 370   | 685   | 750      | 2,990  | 890  | 5,902  | --                 | 560   | 6,474            | 3,720              | 65,908  |
| June.....         | 870   | 370   | 685   | 740      | 3,005  | 900  | 5,902  | --                 | 560   | 6,442            | 3,725              | 65,128  |
| July.....         | 880   | 370   | 685   | 740      | 3,035  | 840  | 5,923  | --                 | 560   | 6,409            | 3,679              | 65,576  |
| August.....       | 870   | 370   | 685   | 740      | 3,080  | 870  | 5,945  | --                 | 560   | 6,347            | 3,669              | 66,474  |
| September...      | 860   | 360   | 675   | 760      | 3,105  | 870  | 5,958  | --                 | 560   | 6,486            | 3,670              | 66,827  |
| October.....      | 860   | 370   | 678   | 760      | 3,087  | 880  | 5,954  | --                 | 560   | 6,467            | 3,684              | 67,361  |
| November....      | 860   | 370   | 681   | 760      | 3,085  | 890  | 5,945  | --                 | 560   | 6,459            | 3,720              | 67,207  |
| December....      | 860   | 360   | 675   | 760      | 3,056  | 910  | 5,893  | --                 | 560   | 6,531            | 3,702              | 67,007  |
| 1997 Average..... | 874   | 368   | 675   | 746      | 3,023  | 887  | 5,884  | --                 | 561   | 6,452            | 3,706              | 66,317  |
| 1998              |       |       |       |          |        |      |        |                    |       |                  |                    |         |
| January.....      | 860   | 360   | 680   | 740      | 3,085  | 920  | 5,979  | --                 | 550   | 6,438            | 3,765              | 67,458  |
| February....      | 860   | 370   | 685   | 730      | 3,140  | 920  | 5,997  | --                 | 550   | 6,538            | 3,747              | 67,989  |
| March.....        | 860   | 370   | 685   | 740      | 3,160  | 930  | 5,962  | --                 | 550   | 6,465            | 3,746              | 67,863  |
| April.....        | 860   | 370   | 635   | 740      | 3,140  | 920  | 5,876  | --                 | 550   | 6,484            | 3,707              | 67,674  |
| May.....          | 870   | 370   | 670   | 750      | 3,149  | 910  | 5,789  | --                 | 560   | 6,384            | 3,663              | 67,168  |
| June.....         | 870   | 370   | 670   | 750      | 3,050  | 900  | 5,928  | --                 | 560   | 6,290            | 3,713              | 66,888  |
| July.....         | 880   | 360   | 676   | 730      | 3,120  | 870  | 5,923  | --                 | 560   | 6,322            | 3,733              | 66,855  |
| August.....       | R870  | 360   | R651  | 730      | 3,055  | R880 | 5,910  | --                 | 560   | RE6,276          | R3,699             | RE5,772 |
| September...      | 870   | 360   | 555   | 730      | 2,906  | 890  | 5,902  | --                 | 550   | PE6,299          | 3,708              | 66,162  |
| 1998 Average..... | 867   | 365   | 656   | 738      | 3,090  | 904  | 5,918  | --                 | 555   | PE6,387          | 3,720              | 67,084  |

<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 | Venezuela | Total OPEC |
|-----------------|---------|------------|-------|-------|----------------------|-------|---------|-------|----------------------------|----------------------|-----------|------------|
| 1990 Average... | 765     | 1,281      | 3,088 | 2,040 | 1,175                | 1,375 | 1,755   | 406   | 6,410                      | 2,066                | 2,097     | 22,458     |
| 1991 Average... | 800     | 1,410      | 3,312 | 305   | 190                  | 1,483 | 1,832   | 395   | 8,115                      | 2,326                | 2,338     | 22,506     |
| 1992 Average... | 772     | 1,326      | 3,429 | 425   | 1,058                | 1,433 | 1,820   | 423   | 8,332                      | 2,206                | 2,334     | 23,558     |
| 1993 Average... | 747     | 1,327      | 3,540 | 512   | 1,852                | 1,361 | 1,835   | 413   | 8,198                      | 2,109                | 2,410     | 24,304     |
| 1994 Average... | 750     | 1,334      | 3,600 | 548   | 2,034                | 1,378 | 1,887   | 409   | 8,147                      | 2,183                | 2,542     | 24,812     |
| 1995 Average... | 767     | 1,343      | 3,608 | 550   | 2,057                | 1,390 | 1,876   | 449   | 8,231                      | 2,197                | 2,710     | 25,179     |
| 1996 Average... | 812     | 1,367      | 3,651 | 579   | 2,062                | 1,401 | 2,051   | 475   | 8,218                      | 2,198                | 3,013     | 25,826     |
| 1997 January... | 830     | 1,390      | 3,650 | 1,080 | 2,085                | 1,430 | 2,180   | 550   | 8,265                      | 2,220                | 3,150     | 26,830     |
| February...     | 840     | 1,410      | 3,650 | 1,120 | 2,077                | 1,430 | 2,210   | 550   | 8,408                      | 2,250                | 3,150     | 27,095     |
| March .....     | 850     | 1,420      | 3,650 | 1,170 | 2,105                | 1,440 | 2,140   | 550   | 8,515                      | 2,280                | 3,160     | 27,280     |
| April .....     | 850     | 1,380      | 3,650 | 1,270 | 2,107                | 1,450 | 2,210   | 550   | 8,568                      | 2,280                | 3,180     | 27,495     |
| May .....       | 850     | 1,400      | 3,600 | 1,320 | 2,027                | 1,450 | 2,170   | 570   | 8,548                      | 2,130                | 3,200     | 27,265     |
| June .....      | 830     | 1,350      | 3,700 | 600   | 2,050                | 1,450 | 2,240   | 655   | 8,540                      | 2,245                | 3,220     | 26,880     |
| July .....      | 850     | 1,350      | 3,650 | 600   | 2,070                | 1,450 | 2,230   | 650   | 8,560                      | 2,245                | 3,230     | 26,885     |
| August...       | 850     | 1,350      | 3,650 | 1,510 | 2,070                | 1,450 | 2,250   | 650   | 8,660                      | 2,245                | 3,350     | 28,035     |
| September.      | 850     | 1,310      | 3,450 | 1,730 | 2,075                | 1,450 | 2,200   | 650   | 8,665                      | 2,245                | 3,390     | 28,015     |
| October...      | 850     | 1,310      | 3,600 | 1,620 | 2,075                | 1,450 | 2,300   | 650   | 8,665                      | 2,245                | 3,390     | 28,155     |
| November..      | 850     | 1,360      | 3,650 | 1,385 | 2,075                | 1,450 | 2,260   | 670   | 8,615                      | 2,225                | 3,420     | 27,960     |
| December..      | 860     | 1,360      | 3,650 | 776   | 2,175                | 1,450 | 2,220   | 670   | 8,725                      | 2,230                | 3,450     | 27,566     |
| 1997 Average... | 847     | 1,366      | 3,629 | 1,182 | 2,083                | 1,446 | 2,217   | 614   | 8,562                      | 2,236                | 3,275     | 27,457     |
| 1998 January... | 860     | 1,340      | 3,600 | 1,256 | 2,215                | 1,450 | 2,108   | 680   | 8,765                      | 2,355                | 3,400     | 28,029     |
| February...     | 860     | 1,340      | 3,600 | 1,698 | 2,210                | 1,450 | 2,153   | 700   | 8,760                      | 2,355                | 3,370     | 28,496     |
| March.....      | 860     | 1,340      | 3,600 | 1,820 | 2,210                | 1,450 | 2,270   | 700   | 8,460                      | 2,400                | 3,370     | 28,480     |
| April.....      | 840     | 1,340      | 3,800 | 1,980 | 2,115                | 1,400 | 2,128   | 670   | 8,585                      | 2,340                | 3,200     | 28,398     |
| May.....        | 820     | 1,340      | 3,600 | 2,240 | 2,105                | 1,360 | 2,120   | 670   | 8,625                      | 2,250                | 3,200     | 28,330     |
| June.....       | 810     | 1,310      | 3,800 | 1,915 | 2,105                | 1,360 | 2,100   | 670   | 8,325                      | 2,220                | 3,170     | 27,785     |
| July.....       | 800     | 1,310      | 3,550 | 2,350 | 2,075                | 1,360 | 2,050   | 650   | 8,275                      | 2,220                | 3,030     | 27,650     |
| August.....     | 790     | 1,330      | 3,400 | 2,550 | 2,025                | 1,340 | 1,900   | 640   | 8,225                      | 2,220                | 2,950     | 27,370     |
| September.      | 790     | 1,330      | 3,650 | 2,550 | 1,972                | 1,335 | 1,900   | 630   | 8,173                      | 2,220                | 2,900     | 27,450     |
| 1998 Average .. | 825     | 1,331      | 3,621 | 2,042 | 2,114                | 1,389 | 2,081   | 668   | 8,464                      | 2,284                | 3,175     | 27,995     |

<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 September 1998, Neutral Zone production by both Kuwait and Saudi Arabia totaled about 545 thousand barrels per day. Notes: •OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group. •Monthly data are often preliminary and also may not average to the annual totals due to rounding. Sources: See end of Section 1.

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

|                   | Algeria | Canada | Mexico | Saudi Arabia | Russia | Former USSR | United States <sup>1</sup> | Persian Gulf <sup>2</sup> | OAPEC <sup>3</sup> | OPEC <sup>3</sup> | World  |
|-------------------|---------|--------|--------|--------------|--------|-------------|----------------------------|---------------------------|--------------------|-------------------|--------|
| 1990 Average..... | 130     | 426    | 428    | 620          | --     | 425         | 1,559                      | 930                       | 1,107              | 1,281             | 4,632  |
| 1991 Average..... | 140     | 431    | 457    | 680          | --     | 420         | 1,659                      | 931                       | 1,113              | 1,299             | 4,827  |
| 1992 Average..... | 140     | 460    | 454    | 713          | 230    | --          | 1,697                      | 1,003                     | 1,185              | 1,364             | 4,975  |
| 1993 Average..... | 145     | 506    | 459    | 704          | 220    | --          | 1,736                      | 1,040                     | 1,238              | 1,435             | 5,181  |
| 1994 Average..... | 140     | 529    | 461    | 698          | 200    | --          | 1,727                      | 1,071                     | 1,267              | 1,465             | 5,293  |
| 1995 Average..... | 145     | 581    | 447    | 701          | 180    | --          | 1,762                      | 1,106                     | 1,301              | 1,506             | 5,485  |
| 1996 Average..... | 150     | 596    | 423    | 697          | 185    | --          | 1,830                      | 1,082                     | 1,295              | 1,501             | 5,582  |
| 1997              |         |        |        |              |        |             |                            |                           |                    |                   |        |
| January.....      | 145     | 660    | 370    | 700          | 200    | --          | 1,782                      | 1,085                     | 1,287              | 1,465             | 5,562  |
| February.....     | 145     | 645    | 375    | 710          | 200    | --          | 1,867                      | 1,095                     | 1,297              | 1,475             | 5,627  |
| March.....        | 145     | 652    | 385    | 720          | 200    | --          | 1,876                      | 1,105                     | 1,307              | 1,485             | 5,662  |
| April.....        | 145     | 610    | 360    | 725          | 200    | --          | 1,824                      | 1,110                     | 1,312              | 1,490             | 5,541  |
| May.....          | 145     | 597    | 380    | 725          | 200    | --          | 1,822                      | 1,110                     | 1,312              | 1,490             | 5,541  |
| June.....         | 145     | 595    | 370    | 720          | 200    | --          | 1,827                      | 1,105                     | 1,307              | 1,485             | 5,471  |
| July.....         | 145     | 598    | 370    | 720          | 200    | --          | 1,821                      | 1,105                     | 1,307              | 1,485             | 5,495  |
| August.....       | 145     | 625    | 370    | 730          | 200    | --          | 1,831                      | 1,115                     | 1,317              | 1,495             | 5,529  |
| September.....    | 145     | 626    | 425    | 730          | 200    | --          | 1,845                      | 1,115                     | 1,317              | 1,495             | 5,625  |
| October.....      | 145     | 646    | 409    | 730          | 200    | --          | 1,813                      | 1,115                     | 1,317              | 1,495             | 5,614  |
| November.....     | 145     | 655    | 405    | 725          | 200    | --          | 1,728                      | 1,110                     | 1,312              | 1,490             | 5,576  |
| December.....     | 145     | 665    | 418    | 735          | 200    | --          | 1,773                      | 1,120                     | 1,322              | 1,500             | 5,653  |
| 1997 Average..... | 145     | 631    | 386    | 723          | 200    | --          | 1,817                      | 1,108                     | 1,310              | 1,488             | 5,571  |
| 1998              |         |        |        |              |        |             |                            |                           |                    |                   |        |
| January.....      | 145     | 665    | 385    | 735          | 230    | --          | 1,826                      | 1,185                     | 1,409              | 1,575             | 5,835  |
| February.....     | 145     | 680    | 420    | 735          | 230    | --          | 1,870                      | 1,185                     | 1,409              | 1,575             | 5,931  |
| March.....        | 145     | 645    | 425    | 735          | 230    | --          | 1,846                      | 1,185                     | 1,409              | 1,575             | 5,878  |
| April.....        | 145     | 645    | 425    | 725          | 230    | --          | 1,859                      | 1,175                     | 1,399              | 1,565             | 5,882  |
| May.....          | 145     | 580    | 430    | 725          | 230    | --          | 1,808                      | 1,175                     | 1,399              | 1,565             | 5,733  |
| June.....         | 145     | 610    | 420    | 705          | 230    | --          | 1,734                      | 1,155                     | 1,379              | 1,545             | 5,649  |
| July.....         | 145     | 648    | 386    | 700          | 230    | --          | 1,580                      | 1,150                     | 1,374              | 1,540             | 5,414  |
| August.....       | 145     | R662   | 464    | 695          | 230    | --          | RE1,713                    | 1,145                     | 1,369              | 1,535             | R5,620 |
| September.....    | 145     | 640    | 435    | 695          | 230    | --          | E1,703                     | 1,145                     | 1,369              | 1,535             | 5,640  |
| 1998 Average..... | 145     | 641    | 421    | 717          | 230    | --          | E1,770                     | 1,167                     | 1,391              | 1,557             | 5,730  |

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

2/ See Appendix A for countries in this group.

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

R=Revised data. E=Estimated.

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

Sources: See end of Section 1.

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

|                   | United States <sup>1/</sup> | Persian Gulf <sup>2/</sup> | OAPEC <sup>3/</sup> | OPEC <sup>3/</sup> | World   |
|-------------------|-----------------------------|----------------------------|---------------------|--------------------|---------|
| 1990 Average..... | 9,677                       | 16,249                     | 17,232              | 24,536             | 66,754  |
| 1991 Average..... | 9,883                       | 15,704                     | 16,747              | 24,625             | 66,632  |
| 1992 Average..... | 9,768                       | 17,010                     | 17,871              | 25,818             | 66,960  |
| 1993 Average..... | 9,602                       | 17,792                     | 18,505              | 26,610             | 67,361  |
| 1994 Average..... | 9,413                       | 18,072                     | 18,745              | 27,031             | 68,250  |
| 1995 Average..... | 9,400                       | 18,351                     | 19,069              | 27,566             | 69,860  |
| 1996 Average..... | 9,445                       | 18,486                     | 19,259              | 28,321             | 71,764  |
| 1997 January..... | 9,234                       | 19,162                     | 19,898              | 29,256             | 73,299  |
| February.....     | 9,525                       | 19,377                     | 20,123              | 29,531             | 73,822  |
| March.....        | 9,428                       | 19,602                     | 20,373              | 29,726             | 73,791  |
| April.....        | 9,416                       | 19,762                     | 20,534              | 29,946             | 74,273  |
| May.....          | 9,497                       | 19,532                     | 20,344              | 29,716             | 73,617  |
| June.....         | 9,465                       | 19,122                     | 19,799              | 29,326             | 72,806  |
| July.....         | 9,465                       | 19,107                     | 19,859              | 29,331             | 73,316  |
| August.....       | 9,404                       | 20,127                     | 20,869              | 30,491             | 74,239  |
| September.....    | 9,560                       | 20,157                     | 21,089              | 30,471             | 74,692  |
| October.....      | 9,519                       | 20,197                     | 20,979              | 30,611             | 75,225  |
| November.....     | 9,457                       | 19,957                     | 20,689              | 30,411             | 75,063  |
| December.....     | 9,570                       | 19,573                     | 20,315              | 30,027             | 74,937  |
| 1997 Average..... | 9,461                       | 19,641                     | 20,407              | 29,905             | 74,091  |
| 1998 January..... | 9,462                       | 20,283                     | 21,087              | 30,575             | 75,506  |
| February.....     | 9,611                       | 20,735                     | 21,542              | 31,042             | 76,139  |
| March.....        | 9,442                       | 20,602                     | 21,411              | 31,026             | 75,888  |
| April.....        | 9,497                       | 20,892                     | 21,431              | 30,934             | 75,725  |
| May.....          | 9,340                       | 20,892                     | 21,591              | 30,866             | 75,065  |
| June.....         | 9,330                       | 20,417                     | 20,906              | 30,301             | 74,858  |
| July.....         | 9,171                       | 20,477                     | 21,216              | 30,161             | 74,554  |
| August.....       | RE9,284                     | 20,432                     | R21,276             | 29,876             | R73,702 |
| September.....    | PE9,360                     | 20,567                     | 21,146              | 29,956             | 74,176  |
| 1998 Average..... | PE9,386                     | 20,587                     | 21,288              | 30,522             | 75,058  |

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

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

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

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

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

Sources: See end of Section 1.

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

|                    | France | Italy | Germany <sup>1/</sup> | United Kingdom | OECD Europe <sup>2/</sup> | United States <sup>3/</sup> | Canada | Japan | Other <sup>4/</sup> | Total OECD |
|--------------------|--------|-------|-----------------------|----------------|---------------------------|-----------------------------|--------|-------|---------------------|------------|
| 1990 December..... | 140    | 172   | 265                   | 112            | 1,163                     | 1,621                       | 121    | 590   | 73                  | 3,568      |
| 1991 December..... | 153    | 160   | 288                   | 119            | 1,181                     | 1,617                       | 119    | 606   | 65                  | 3,588      |
| 1992 December..... | 146    | 174   | 310                   | 113            | 1,219                     | 1,592                       | 107    | 603   | 67                  | 3,588      |
| 1993 December..... | 158    | 163   | 309                   | 118            | 1,221                     | 1,647                       | 105    | 618   | 69                  | 3,661      |
| 1994 December..... | 158    | 164   | 312                   | 115            | 1,240                     | 1,653                       | 119    | 645   | 69                  | 3,726      |
| 1995 December..... | 159    | 162   | 301                   | 107            | 1,228                     | 1,563                       | 109    | 630   | 71                  | 3,601      |
| 1996 December..... | 158    | 152   | 300                   | 108            | 1,256                     | 1,507                       | 103    | 651   | 74                  | 3,591      |
| 1997               |        |       |                       |                |                           |                             |        |       |                     |            |
| January.....       | 156    | 158   | 306                   | 107            | 1,280                     | 1,501                       | 106    | 650   | 80                  | 3,617      |
| February.....      | 159    | 156   | 309                   | 105            | 1,270                     | 1,482                       | 103    | 642   | 75                  | 3,573      |
| March.....         | 160    | 160   | 312                   | 109            | 1,273                     | 1,512                       | 107    | 650   | 76                  | 3,617      |
| April.....         | 159    | 151   | 301                   | 108            | 1,248                     | 1,518                       | 110    | 665   | 80                  | 3,620      |
| May.....           | 163    | 150   | 311                   | 108            | 1,248                     | 1,561                       | 106    | 664   | 81                  | 3,660      |
| June.....          | 153    | 151   | 299                   | 111            | 1,230                     | 1,575                       | 107    | 662   | 83                  | 3,657      |
| July.....          | 153    | 150   | 302                   | 112            | 1,230                     | 1,559                       | 109    | 670   | 81                  | 3,649      |
| August.....        | 158    | 151   | 302                   | 108            | 1,253                     | 1,570                       | 113    | 669   | 80                  | 3,685      |
| September.....     | 157    | 144   | 291                   | 106            | 1,227                     | 1,592                       | 108    | 682   | 77                  | 3,687      |
| October.....       | 152    | 144   | 289                   | 106            | 1,231                     | 1,598                       | 111    | 693   | 83                  | 3,716      |
| November.....      | 163    | 150   | 291                   | 106            | 1,251                     | 1,600                       | 111    | 699   | 76                  | 3,736      |
| December.....      | 164    | 147   | 298                   | 105            | 1,256                     | 1,560                       | 115    | 685   | 74                  | 3,689      |
| 1998               |        |       |                       |                |                           |                             |        |       |                     |            |
| January.....       | 163    | 154   | 298                   | 111            | 1,278                     | 1,576                       | 112    | 673   | 78                  | 3,717      |
| February.....      | 161    | 155   | 290                   | 108            | 1,271                     | 1,572                       | 110    | 664   | 75                  | 3,692      |
| March.....         | 155    | 146   | 285                   | 109            | 1,251                     | 1,588                       | 118    | 655   | 73                  | 3,685      |
| April.....         | 163    | 161   | 292                   | 106            | 1,276                     | 1,614                       | 116    | 658   | 75                  | 3,739      |
| May.....           | 171    | 168   | 306                   | 111            | 1,336                     | 1,654                       | 115    | 667   | R79                 | 3,852      |
| June.....          | 164    | 164   | 308                   | 109            | R1,316                    | 1,654                       | 114    | 658   | 80                  | 3,822      |
| July.....          | 165    | 157   | 313                   | 109            | 1,310                     | 1,665                       | 113    | 660   | 76                  | 3,823      |

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

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

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

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

R=Revised data.

Notes: "Oil Stocks" - See Explanatory Note 2 in Appendix B. \*See Section 4 for historical series.  
Sources: See end of Section 1.

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

| Country                           | Commercial | Government<br>Owned | Total  |
|-----------------------------------|------------|---------------------|--------|
| Canada.....                       | 114        | 0                   | 114    |
| United States <sup>1/</sup> ..... | 1,091      | 563                 | 1,654  |
| United States Territories.....    | 28         | 0                   | 28     |
| Japan.....                        | 343        | 315                 | 658    |
| Australia/New Zealand.....        | 52         | NA                  | 52     |
| Austria.....                      | 22         | 0                   | 22     |
| Belgium/Luxembourg.....           | 35         | 0                   | 35     |
| Denmark.....                      | 27         | 0                   | 27     |
| Finland.....                      | 25         | 0                   | 25     |
| France.....                       | 164        | 0                   | 164    |
| Germany <sup>2/</sup> .....       | 253        | 55                  | 308    |
| Greece.....                       | 33         | NA                  | 33     |
| Ireland.....                      | 8          | 2                   | 10     |
| Italy.....                        | 158        | 6                   | 164    |
| Netherlands.....                  | 102        | 0                   | 102    |
| Norway.....                       | 53         | 0                   | 53     |
| Portugal.....                     | 25         | 0                   | 25     |
| Spain.....                        | 106        | 0                   | 106    |
| Sweden.....                       | 35         | 0                   | 35     |
| Switzerland.....                  | 46         | 0                   | 46     |
| Turkey.....                       | 52         | 0                   | 52     |
| United Kingdom.....               | 109        | 0                   | 109    |
| OECD Europe.....                  | R1,253     | 63                  | R1,316 |
| Total OECD.....                   | 2,881      | 941                 | 3,822  |

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

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

NA=Not Available. R=Revised data.

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

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

Sources: See end of Section 1.

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

|                  | France | Italy | Germany <sup>1/</sup> | United Kingdom | OECD Europe <sup>2/</sup> | United States <sup>3/</sup> | Canada | Japan | Other <sup>4/</sup> | Total OECD |
|------------------|--------|-------|-----------------------|----------------|---------------------------|-----------------------------|--------|-------|---------------------|------------|
| 1990 Average.... | 1,818  | 1,872 | 2,382                 | 1,752          | 12,629                    | 16,988                      | 1,690  | 5,140 | 1,027               | 37,475     |
| 1991 Average.... | 1,935  | 1,863 | 2,828                 | 1,801          | 13,391                    | 16,714                      | 1,622  | 5,284 | 1,056               | 38,067     |
| 1992 Average.... | 1,926  | 1,937 | 2,843                 | 1,803          | 13,605                    | 17,033                      | 1,643  | 5,446 | 1,041               | 38,768     |
| 1993 Average.... | 1,875  | 1,852 | 2,900                 | 1,815          | 13,523                    | 17,237                      | 1,688  | 5,401 | 1,118               | 38,967     |
| 1994 Average.... | 1,833  | 1,841 | 2,879                 | 1,837          | 13,597                    | 17,718                      | 1,727  | 5,674 | 1,174               | 39,890     |
| 1995 Average.... | 1,896  | 2,048 | 2,875                 | 1,845          | 14,120                    | 17,725                      | 1,755  | 5,711 | 1,243               | 40,553     |
| 1996 Average.... | 1,935  | 2,058 | 2,911                 | 1,845          | 14,269                    | 18,309                      | 1,797  | 5,867 | 1,191               | 41,432     |
| 1997             |        |       |                       |                |                           |                             |        |       |                     |            |
| January.....     | 2,170  | 2,028 | 2,904                 | 1,850          | 14,689                    | 18,554                      | 1,836  | 6,294 | 1,145               | 42,519     |
| February....     | 2,142  | 2,115 | 2,652                 | 1,933          | 14,618                    | 18,398                      | 1,857  | 6,756 | 1,150               | 42,778     |
| March.....       | 1,801  | 1,919 | 2,692                 | 1,754          | 13,606                    | 17,863                      | 1,755  | 6,149 | 1,148               | 40,521     |
| April.....       | 1,916  | 1,990 | 3,219                 | 1,804          | 14,690                    | 18,559                      | 1,724  | 5,306 | 1,181               | 41,460     |
| May.....         | 1,712  | 1,888 | 2,760                 | 1,712          | 13,524                    | 18,293                      | 1,811  | 5,080 | 1,073               | 39,782     |
| June.....        | 1,878  | 1,938 | 3,123                 | 1,781          | 14,382                    | 19,617                      | 1,882  | 5,135 | 1,097               | 41,113     |
| July.....        | 2,077  | 2,020 | 3,074                 | 1,757          | 14,734                    | 19,107                      | 1,983  | 5,450 | 1,150               | 42,423     |
| August.....      | 1,795  | 1,798 | 3,074                 | 1,710          | 13,530                    | 18,565                      | 1,920  | 5,404 | 1,114               | 40,533     |
| September..      | 1,999  | 2,171 | 3,163                 | 1,821          | 15,003                    | 18,562                      | 1,872  | 5,422 | 1,166               | 42,025     |
| October....      | 2,144  | 2,207 | 2,869                 | 1,845          | 15,095                    | 19,071                      | 1,934  | 5,414 | 1,140               | 42,654     |
| November...      | 1,731  | 2,174 | 2,882                 | 1,805          | 14,393                    | 18,578                      | 1,832  | 5,732 | 1,152               | 41,688     |
| December...      | 2,107  | 2,299 | 2,761                 | 1,836          | 14,972                    | 19,250                      | 1,876  | 6,453 | 1,146               | 43,697     |
| Average....      | 1,955  | 2,045 | 2,903                 | 1,799          | 14,433                    | 18,620                      | 1,857  | 5,711 | 1,138               | 41,760     |
| 1998             |        |       |                       |                |                           |                             |        |       |                     |            |
| January.....     | 2,040  | 2,030 | 2,734                 | R1,784         | R14,272                   | 18,256                      | 1,888  | 6,109 | R1,046              | R41,571    |
| February....     | 2,160  | 2,150 | 2,950                 | R1,832         | R15,175                   | 18,322                      | 1,829  | 6,465 | R1,148              | R42,940    |
| March.....       | 1,982  | 2,111 | 3,153                 | R1,854         | R15,148                   | 18,393                      | 1,861  | 5,905 | R1,225              | R42,532    |
| April.....       | 1,999  | 2,016 | 2,840                 | 1,709          | R14,220                   | 18,624                      | 1,805  | 5,086 | R1,073              | R40,808    |
| May.....         | 1,822  | 1,892 | 2,594                 | 1,693          | R13,437                   | 17,876                      | 1,766  | 4,806 | R1,129              | R39,013    |
| June.....        | 2,008  | 2,091 | 2,929                 | 1,787          | R14,795                   | 18,818                      | 1,890  | 5,016 | R1,151              | R41,671    |
| July.....        | 2,095  | 2,096 | 3,020                 | 1,770          | 14,940                    | 19,140                      | 1,955  | 5,316 | 1,156               | 42,506     |

<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, October 1998.

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

### Oil Stocks

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

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

### Oil Demand

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

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



## 2. International Oil Balance Data

**Table 2.1** **World Oil Balance, 1994-1998**  
(Million Barrels Per Day)

|                                                                                  | 1994    | 1995  | 1996  | 1997    |        |       |        | 1998    |       |        |       |        |         |
|----------------------------------------------------------------------------------|---------|-------|-------|---------|--------|-------|--------|---------|-------|--------|-------|--------|---------|
|                                                                                  | Annual  |       |       | Quarter |        |       |        | Quarter |       |        |       |        |         |
|                                                                                  | Average |       |       | First   | Second | Third | Fourth | Average | First | Second | Third | Fourth | Average |
| Supply1/<br>OECD                                                                 |         |       |       |         |        |       |        |         |       |        |       |        |         |
| United States2/.....                                                             | 9.41    | 9.40  | 9.44  | 9.39    | 9.46   | 9.48  | 9.52   | 9.46    | 9.50  | 9.39   | 9.27  | NA     | NA      |
| Other OECD.....                                                                  | 9.25    | 9.80  | 10.29 | 10.67   | 10.15  | 10.22 | 10.78  | 10.46   | 10.66 | 10.43  | 10.24 | NA     | NA      |
| Total OECD.....                                                                  | 18.66   | 19.20 | 19.74 | 20.06   | 19.61  | 19.69 | 20.30  | 19.92   | 20.17 | 19.82  | 19.51 | NA     | NA      |
| Non-OECD                                                                         |         |       |       |         |        |       |        |         |       |        |       |        |         |
| OPEC.....                                                                        | 27.03   | 27.57 | 28.32 | 29.50   | 29.66  | 30.09 | 30.35  | 29.91   | 30.88 | 30.70  | 30.00 | NA     | NA      |
| Former USSR.....                                                                 | 7.27    | 7.14  | 7.05  | 6.99    | 7.15   | 7.20  | 7.18   | 7.13    | 7.29  | 7.16   | 7.21  | NA     | NA      |
| Other Non-OECD.....                                                              | 15.29   | 15.95 | 16.65 | 17.07   | 17.15  | 17.09 | 17.24  | 17.14   | 17.50 | 17.54  | 17.42 | NA     | NA      |
| Total Non-OECD.....                                                              | 49.59   | 50.66 | 52.02 | 53.57   | 53.96  | 54.38 | 54.77  | 54.17   | 55.67 | 55.40  | 54.63 | NA     | NA      |
| Total World Supply.....                                                          | 68.25   | 69.86 | 71.76 | 73.63   | 73.57  | 74.08 | 75.08  | 74.09   | 75.83 | 75.21  | 74.14 | NA     | NA      |
| Demand3/<br>OECD                                                                 |         |       |       |         |        |       |        |         |       |        |       |        |         |
| United States2/.....                                                             | 17.72   | 17.72 | 18.31 | 18.27   | 18.49  | 18.75 | 18.97  | 18.62   | 18.32 | 18.43  | NA    | NA     | NA      |
| Other OECD.....                                                                  | 22.17   | 22.83 | 23.12 | 23.64   | 22.29  | 22.91 | 23.72  | 23.14   | 24.00 | 22.05  | NA    | NA     | NA      |
| Total OECD.....                                                                  | 39.89   | 40.55 | 41.43 | 41.91   | 40.77  | 41.66 | 42.69  | 41.76   | 42.33 | 40.48  | NA    | NA     | NA      |
| Non-OECD                                                                         |         |       |       |         |        |       |        |         |       |        |       |        |         |
| China.....                                                                       | 3.14    | 3.33  | 3.55  | 3.81    | 3.86   | 3.90  | 3.96   | 3.88    | 4.04  | 4.11   | NA    | NA     | NA      |
| Former USSR.....                                                                 | 4.85    | 4.62  | 4.38  | 4.69    | 4.22   | 4.22  | 4.59   | 4.43    | 4.73  | 4.26   | NA    | NA     | NA      |
| Other Non-OECD.....                                                              | 20.43   | 21.43 | 22.16 | 23.08   | 22.99  | 22.46 | 24.01  | 23.14   | 23.29 | 23.36  | NA    | NA     | NA      |
| Total Non-OECD.....                                                              | 28.42   | 29.38 | 30.09 | 31.58   | 31.07  | 30.58 | 32.56  | 31.45   | 32.07 | 31.73  | NA    | NA     | NA      |
| Total World Demand.....                                                          | 68.31   | 69.93 | 71.52 | 73.49   | 71.85  | 72.23 | 75.25  | 73.21   | 74.40 | 72.21  | NA    | NA     | NA      |
| Stock Draws / Discrepancy<br>Net Reported Stock Draws4/<br>U. S. Commercial..... | .00     | .25   | .08   | -.08    | -.70   | -.19  | .35    | -.15    | -.32  | -.72   | NA    | NA     | NA      |
| U. S. Strategic.....                                                             | -.01    | .00   | .07   | .03     | .00    | .00   | .00    | .01     | .00   | .00    | NA    | NA     | NA      |
| Other OECD.....                                                                  | -.16    | .09   | -.12  | -.24    | .26    | -.13  | -.38   | -.13    | .37   | -.79   | NA    | NA     | NA      |
| For Export & Afloat.....                                                         | .03     | -.12  | -.01  | -.28    | .27    | -.49  | .00    | -.12    | -.44  | .22    | NA    | NA     | NA      |
| Comm. Floating Storage...                                                        | .00     | .00   | .00   | .00     | .00    | .00   | .00    | .00     | -.11  | -.11   | NA    | NA     | NA      |
| Total Reported Draws.....                                                        | -.15    | .22   | .01   | -.57    | -.16   | -.81  | -.03   | -.39    | -.50  | -1.40  | NA    | NA     | NA      |
| Other Stock Draws and<br>Statistical Discrepancy5/                               | .21     | -.15  | -.26  | .42     | -1.56  | -1.03 | .21    | -.49    | -.94  | -1.60  | NA    | NA     | NA      |

- 1/ Supply includes production of crude oil (including lease condensate), natural gas plant liquids, other hydrogen and hydrocarbons for refinery feedstocks, refinery gains, alcohol, and liquids produced from coal and other sources.
- 2/ U.S. geographical coverage is the 50 States and the District of Columbia. See Explanatory Note 1 in Appendix B.
- 3/ The term Demand is used interchangeably with the terms Consumption and Petroleum Products Supplied. See Appendix C for definition.
- 4/ Stock draws are positive numbers, stock additions are negative numbers.
- 5/ This is computed as Total Demand minus the sum of Total Supply and Total Reported Stock Draw.
- Note: Sum of components may not equal total due to rounding.
- Sources: See end of Section 2.

Table 2.2

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

|                                 | 1994    |       |       | 1995    |       |       | 1996    |       |       | 1997                      |       |    | 1998                      |    |    |
|---------------------------------|---------|-------|-------|---------|-------|-------|---------|-------|-------|---------------------------|-------|----|---------------------------|----|----|
|                                 | Annual  |       |       | Annual  |       |       | Annual  |       |       | Quarter                   |       |    | Quarter                   |    |    |
|                                 | Average |       |       | Average |       |       | Average |       |       | First Second Third Fourth |       |    | First Second Third Fourth |    |    |
| OECD                            |         |       |       |         |       |       |         |       |       |                           |       |    |                           |    |    |
| United States <sup>1</sup> /... | 9.41    | 9.40  | 9.44  | 9.39    | 9.46  | 9.48  | 9.52    | 9.46  | 9.50  | 9.39                      | 9.27  | NA | NA                        | NA | NA |
| Canada.....                     | 2.33    | 2.45  | 2.49  | 2.61    | 2.46  | 2.58  | 2.69    | 2.58  | 2.66  | 2.63                      | 2.75  | NA | NA                        | NA | NA |
| North Sea <sup>2</sup> /.....   | 5.38    | 5.80  | 6.22  | 6.45    | 6.06  | 5.99  | 6.46    | 6.24  | 6.42  | 6.17                      | 5.86  | NA | NA                        | NA | NA |
| Other OECD.....                 | 1.54    | 1.55  | 1.58  | 1.61    | 1.63  | 1.65  | 1.64    | 1.63  | 1.58  | 1.63                      | 1.64  | NA | NA                        | NA | NA |
| Total OECD.....                 | 18.66   | 19.20 | 19.74 | 20.06   | 19.61 | 19.69 | 20.30   | 19.92 | 20.17 | 19.82                     | 19.51 | NA | NA                        | NA | NA |
| Non-OECD                        |         |       |       |         |       |       |         |       |       |                           |       |    |                           |    |    |
| OPEC                            |         |       |       |         |       |       |         |       |       |                           |       |    |                           |    |    |
| Crude                           |         |       |       |         |       |       |         |       |       |                           |       |    |                           |    |    |
| Algeria.....                    | 1.18    | 1.20  | 1.24  | 1.27    | 1.27  | 1.28  | 1.28    | 1.28  | 1.29  | 1.25                      | 1.22  | NA | NA                        | NA | NA |
| Indonesia.....                  | 1.51    | 1.50  | 1.55  | 1.59    | 1.56  | 1.52  | 1.52    | 1.55  | 1.52  | 1.51                      | 1.50  | NA | NA                        | NA | NA |
| Iran.....                       | 3.62    | 3.64  | 3.69  | 3.68    | 3.68  | 3.62  | 3.67    | 3.66  | 3.63  | 3.77                      | 3.57  | NA | NA                        | NA | NA |
| Iraq.....                       | .55     | .56   | .58   | 1.13    | 1.07  | 1.28  | 1.26    | 1.19  | 1.59  | 2.05                      | 2.49  | NA | NA                        | NA | NA |
| Kuwait.....                     | 2.02    | 2.06  | 2.06  | 2.09    | 2.06  | 2.07  | 2.11    | 2.08  | 2.21  | 2.11                      | 2.02  | NA | NA                        | NA | NA |
| Libya.....                      | 1.38    | 1.39  | 1.40  | 1.43    | 1.45  | 1.45  | 1.45    | 1.45  | 1.45  | 1.37                      | 1.35  | NA | NA                        | NA | NA |
| Nigeria.....                    | 1.93    | 1.99  | 2.19  | 2.28    | 2.31  | 2.33  | 2.36    | 2.32  | 2.29  | 2.23                      | 2.06  | NA | NA                        | NA | NA |
| Qatar.....                      | .41     | .44   | .51   | .58     | .63   | .68   | .70     | .65   | .73   | .70                       | .68   | NA | NA                        | NA | NA |
| Saudi Arabia..                  | 8.12    | 8.23  | 8.22  | 8.40    | 8.55  | 8.63  | 8.67    | 8.56  | 8.66  | 8.51                      | 8.22  | NA | NA                        | NA | NA |
| United Arab Emirates....        | 2.19    | 2.23  | 2.28  | 2.33    | 2.30  | 2.32  | 2.31    | 2.32  | 2.45  | 2.35                      | 2.29  | NA | NA                        | NA | NA |
| Venezuela.....                  | 2.59    | 2.75  | 3.05  | 3.19    | 3.24  | 3.36  | 3.46    | 3.31  | 3.42  | 3.23                      | 3.00  | NA | NA                        | NA | NA |
| Natural Gas                     |         |       |       |         |       |       |         |       |       |                           |       |    |                           |    |    |
| Plant Liquids                   | 1.46    | 1.51  | 1.50  | 1.47    | 1.49  | 1.49  | 1.50    | 1.49  | 1.57  | 1.56                      | 1.54  | NA | NA                        | NA | NA |
| Processing Gain.                | .06     | .06   | .06   | .06     | .06   | .06   | .06     | .06   | .06   | .06                       | .06   | NA | NA                        | NA | NA |
| Total OPEC.....                 | 27.03   | 27.57 | 28.32 | 29.50   | 29.66 | 30.09 | 30.35   | 29.91 | 30.88 | 30.70                     | 30.00 | NA | NA                        | NA | NA |
| Former USSR.....                | 7.27    | 7.14  | 7.05  | 6.99    | 7.15  | 7.20  | 7.18    | 7.13  | 7.29  | 7.16                      | 7.21  | NA | NA                        | NA | NA |
| China.....                      | 2.94    | 2.99  | 3.13  | 3.22    | 3.24  | 3.19  | 3.15    | 3.20  | 3.19  | 3.20                      | 3.18  | NA | NA                        | NA | NA |
| Mexico.....                     | 3.17    | 3.09  | 3.31  | 3.36    | 3.38  | 3.49  | 3.51    | 3.44  | 3.57  | 3.57                      | 3.48  | NA | NA                        | NA | NA |
| Other Non-OECD.....             | 9.17    | 9.86  | 10.21 | 10.49   | 10.52 | 10.41 | 10.58   | 10.50 | 10.75 | 10.77                     | 10.76 | NA | NA                        | NA | NA |
| Total Non-OECD.....             | 49.59   | 50.66 | 52.02 | 53.57   | 53.96 | 54.38 | 54.77   | 54.17 | 55.67 | 55.40                     | 54.63 | NA | NA                        | NA | NA |
| Total Supply.....               | 68.25   | 69.86 | 71.76 | 73.63   | 73.57 | 74.08 | 75.08   | 74.09 | 75.83 | 75.21                     | 74.14 | NA | NA                        | NA | NA |

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

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

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

Sources: See end of Section 2.

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

|                                        | Year End |       |       | Quarter |        |       |        | Quarter |        |       |        |
|----------------------------------------|----------|-------|-------|---------|--------|-------|--------|---------|--------|-------|--------|
|                                        | 1994     |       |       | 1997    |        |       |        | 1998    |        |       |        |
|                                        | 1995     |       |       | First   | Second | Third | Fourth | First   | Second | Third | Fourth |
| OECD                                   |          |       |       |         |        |       |        |         |        |       |        |
| United States <sup>1/</sup>            |          |       |       |         |        |       |        |         |        |       |        |
| Commercial.....                        | 1,061    | 971   | 941   | 949     | 1,012  | 1,029 | 997    | 1,025   | 1,091  | NA    | NA     |
| Strategic.....                         | 592      | 592   | 566   | 563     | 563    | 563   | 563    | 563     | 563    | NA    | NA     |
| U. S. Territories.....                 | 26       | 24    | 25    | 23      | 27     | 27    | 23     | 25      | 28     | NA    | NA     |
| Canada.....                            | 119      | 109   | 103   | 107     | 107    | 108   | 115    | 118     | 114    | NA    | NA     |
| Japan.....                             | 645      | 630   | 651   | 650     | 662    | 682   | 685    | 655     | 658    | NA    | NA     |
| OECD Europe                            |          |       |       |         |        |       |        |         |        |       |        |
| France.....                            | 158      | 159   | 158   | 160     | 153    | 157   | 164    | 155     | 164    | NA    | NA     |
| Germany.....                           | 312      | 301   | 300   | 312     | 299    | 291   | 298    | 285     | 308    | NA    | NA     |
| Italy.....                             | 164      | 162   | 152   | 160     | 151    | 144   | 147    | 146     | 164    | NA    | NA     |
| United Kingdom.....                    | 115      | 107   | 108   | 109     | 111    | 106   | 105    | 109     | 109    | NA    | NA     |
| Other OECD Europe....                  | 490      | 499   | 537   | 532     | 516    | 528   | 542    | 556     | 571    | NA    | NA     |
| Total.....                             | 1,240    | 1,228 | 1,256 | 1,273   | 1,230  | 1,227 | 1,256  | 1,251   | 1,316  | NA    | NA     |
| Australia & New Zealand                | 43       | 47    | 49    | 53      | 56     | 50    | 51     | 48      | 52     | NA    | NA     |
| Total OECD.....                        | 3,726    | 3,601 | 3,591 | 3,617   | 3,657  | 3,687 | 3,689  | 3,685   | 3,822  | NA    | NA     |
| Stocks for Export                      |          |       |       |         |        |       |        |         |        |       |        |
| and Afloat <sup>2/</sup> .....         | 935      | 980   | 985   | 1,010   | 985    | 1,030 | 1,030  | 1,070   | 1,050  | NA    | NA     |
| Commercial Floating <sup>3/</sup> .... | 70       | 70    | 70    | 70      | 70     | 70    | 70     | 80      | 90     | NA    | NA     |

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

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

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

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

Sources: See end of Section 2.

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

|                                   | 1994    |       |       |       | 1995    |       |       |       | 1996    |       |    |    | 1997    |        |       |        | 1998    |        |       |        |
|-----------------------------------|---------|-------|-------|-------|---------|-------|-------|-------|---------|-------|----|----|---------|--------|-------|--------|---------|--------|-------|--------|
|                                   | Annual  |       |       |       | Annual  |       |       |       | Annual  |       |    |    | Quarter |        |       |        | Quarter |        |       |        |
|                                   | Average |       |       |       | Average |       |       |       | Average |       |    |    | First   | Second | Third | Fourth | First   | Second | Third | Fourth |
| OECD                              |         |       |       |       |         |       |       |       |         |       |    |    |         |        |       |        |         |        |       |        |
| United States <sup>1/</sup> ..... | 17.72   | 17.72 | 18.31 | 18.27 | 18.49   | 18.75 | 18.97 | 18.62 | 18.32   | 18.43 | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |
| U. S. Territories.....            | .26     | .25   | .26   | .20   | .17     | .19   | .20   | .19   | .21     | .17   | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |
| Canada.....                       | 1.73    | 1.76  | 1.80  | 1.81  | 1.81    | 1.93  | 1.88  | 1.86  | 1.86    | 1.82  | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |
| Japan.....                        | 5.67    | 5.71  | 5.87  | 6.39  | 5.17    | 5.43  | 5.87  | 5.71  | 6.15    | 4.97  | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |
| OECD Europe <sup>2/</sup>         |         |       |       |       |         |       |       |       |         |       |    |    |         |        |       |        |         |        |       |        |
| France.....                       | 1.83    | 1.90  | 1.93  | 2.03  | 1.83    | 1.96  | 2.00  | 1.96  | 2.06    | 1.94  | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |
| Italy.....                        | 1.84    | 2.05  | 2.06  | 2.02  | 1.94    | 1.99  | 2.23  | 2.04  | 2.10    | 2.00  | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |
| United Kingdom.....               | 1.84    | 1.84  | 1.85  | 1.84  | 1.76    | 1.76  | 1.83  | 1.80  | 1.82    | 1.73  | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |
| Germany <sup>3/</sup> .....       | 2.88    | 2.88  | 2.91  | 2.75  | 3.03    | 2.99  | 2.84  | 2.90  | 2.95    | 2.79  | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |
| Other OECD Europe.....            | 5.21    | 5.45  | 5.52  | 5.65  | 5.62    | 5.71  | 5.93  | 5.73  | 5.93    | 5.69  | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |
| Total OECD Europe.....            | 13.60   | 14.12 | 14.27 | 14.29 | 14.19   | 14.42 | 14.82 | 14.43 | 14.85   | 14.14 | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |
| Australia & New Zealand           | .92     | .99   | .93   | .95   | .94     | .96   | .94   | .95   | .93     | .94   | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |
| Total OECD.....                   | 39.89   | 40.55 | 41.43 | 41.91 | 40.77   | 41.66 | 42.69 | 41.76 | 42.33   | 40.48 | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |
| Non-OECD                          |         |       |       |       |         |       |       |       |         |       |    |    |         |        |       |        |         |        |       |        |
| China.....                        | 3.14    | 3.33  | 3.55  | 3.81  | 3.86    | 3.90  | 3.96  | 3.88  | 4.04    | 4.11  | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |
| Former USSR.....                  | 4.85    | 4.62  | 4.38  | 4.69  | 4.22    | 4.22  | 4.59  | 4.43  | 4.73    | 4.26  | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |
| Other Non-OECD.....               | 20.43   | 21.43 | 22.16 | 23.08 | 22.99   | 22.46 | 24.01 | 23.14 | 23.29   | 23.36 | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |
| Total Non-OECD.....               | 28.42   | 29.38 | 30.09 | 31.58 | 31.07   | 30.58 | 32.56 | 31.45 | 32.07   | 31.73 | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |
| Total World Demand.....           | 68.31   | 69.93 | 71.52 | 73.49 | 71.85   | 72.23 | 75.25 | 73.21 | 74.40   | 72.21 | NA | NA | NA      | NA     | NA    | NA     | NA      | NA     | NA    | NA     |

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

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

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

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

Sources: See end of Section 2.

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

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

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

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

### Oil Stocks

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

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

### Oil Demand

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Sources: See end of Section 3.

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

|                                         | Total  | OECD Europe |                |        |                       |       | OECD Outside Europe        |                             |        |       |                     |
|-----------------------------------------|--------|-------------|----------------|--------|-----------------------|-------|----------------------------|-----------------------------|--------|-------|---------------------|
|                                         |        | Total       | United Kingdom | France | Germany <sup>1/</sup> | Italy | Other Europe <sup>2/</sup> | United States <sup>3/</sup> | Canada | Japan | Other <sup>4/</sup> |
| Total Net Imports..                     | 22.357 | 8.126       | -0.886         | 1.906  | 2.950                 | 1.897 | 2.260                      | 9.656                       | -0.939 | 5.018 | 0.496               |
| Imports from OPEC <sup>5/</sup>         | 16.713 | 6.625       | .243           | 1.070  | .644                  | 1.456 | 3.212                      | 4.886                       | .342   | 4.213 | .646                |
| Imports from Persian Gulf <sup>6/</sup> |        |             |                |        |                       |       |                            |                             |        |       |                     |
| Total.....                              | 10.320 | 4.023       | .138           | .827   | .177                  | .683  | 2.199                      | 2.020                       | .126   | 3.927 | .223                |
| Bahrain.....                            | .020   | .000        | .000           | .000   | .000                  | .000  | .000                       | .004                        | -      | .014  | .003                |
| Iran.....                               | 1.359  | 1.013       | .024           | .165   | .014                  | .305  | .505                       | .000                        | .000   | .346  | .000                |
| Iraq.....                               | .917   | .675        | -              | .218   | .025                  | .106  | .327                       | .212                        | .022   | .000  | .007                |
| Kuwait.....                             | 1.015  | .232        | .040           | .023   | .024                  | .000  | .146                       | .313                        | .000   | .464  | .005                |
| U.A.E.....                              | 1.471  | .040        | .005           | .025   | .000                  | .000  | .009                       | .004                        | -      | 1.369 | .059                |
| Qatar.....                              | .460   | .000        | .000           | .000   | .000                  | .000  | .000                       | .005                        | -      | .435  | .020                |
| Saudi Arabia.....                       | 5.078  | 2.063       | .069           | .396   | .114                  | .272  | 1.211                      | 1.483                       | .105   | 1.299 | .129                |
| Imports from OPEC-Africa                |        |             |                |        |                       |       |                            |                             |        |       |                     |
| Total.....                              | 3.763  | 2.342       | .070           | .242   | .400                  | .716  | .913                       | 1.157                       | .097   | .017  | .150                |
| Algeria.....                            | 1.038  | .616        | .007           | .076   | .107                  | .068  | .358                       | .343                        | .065   | .017  | -.003               |
| Libya.....                              | 1.317  | 1.317       | .047           | .070   | .263                  | .643  | .293                       | .000                        | -      | -     | .000                |
| Nigeria.....                            | 1.408  | .409        | .016           | .096   | .030                  | .005  | .262                       | .815                        | .032   | .000  | .152                |
| Imports from OPEC-South America         |        |             |                |        |                       |       |                            |                             |        |       |                     |
| Total.....                              | 2.205  | .232        | .035           | .000   | .067                  | .030  | .100                       | 1.691                       | .119   | .000  | .163                |
| Venezuela.....                          | 2.205  | .232        | .035           | .000   | .067                  | .030  | .100                       | 1.691                       | .119   | .000  | .163                |
| Imports from OPEC-Far East              |        |             |                |        |                       |       |                            |                             |        |       |                     |
| Total.....                              | .445   | .028        | -              | .000   | .000                  | .027  | .000                       | .021                        | .000   | .283  | .112                |
| Indonesia.....                          | .445   | .028        | -              | .000   | .000                  | .027  | .000                       | .021                        | .000   | .283  | .112                |

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

|                                 | OECD Europe |                |        |           |       |                |                 |        |        |         | OECD Outside Europe |  |  |  |
|---------------------------------|-------------|----------------|--------|-----------|-------|----------------|-----------------|--------|--------|---------|---------------------|--|--|--|
| Total                           | Total       | United Kingdom | France | Germany1/ | Italy | Other Europe2/ | United States3/ | Canada | Japan  | Other4/ |                     |  |  |  |
| Total Net Imports..             | 21.819      | 7.589          | -0.994 | 1.811     | 2.729 | 1.849          | 2.195           | 8.739  | -0.899 | 5.777   | 0.612               |  |  |  |
| Imports from OPEC5/             | 16.667      | 6.505          | .205   | .942      | .589  | 1.388          | 3.381           | 4.411  | .260   | 4.746   | .746                |  |  |  |
| Imports from Persian Gulf6/     |             |                |        |           |       |                |                 |        |        |         |                     |  |  |  |
| Total.....                      | 10.178      | 3.610          | .107   | .647      | .113  | .531           | 2.212           | 1.797  | .048   | 4.441   | .282                |  |  |  |
| Bahrain.....                    | .026        | .011           | .000   | .004      | .000  | .007           | .000            | -.003  | -      | .015    | .003                |  |  |  |
| Iran.....                       | 1.352       | .828           | .000   | .158      | .011  | .192           | .467            | .000   | .000   | .514    | .010                |  |  |  |
| Iraq.....                       | .494        | .436           | -      | .085      | .000  | .044           | .307            | .056   | .000   | .000    | .002                |  |  |  |
| Kuwait.....                     | 1.158       | .298           | .025   | .032      | .013  | .002           | .227            | .261   | .000   | .591    | .009                |  |  |  |
| U.A.E.....                      | 1.527       | .002           | .000   | .002      | .000  | .000           | .000            | .002   | -      | 1.461   | .062                |  |  |  |
| Qatar.....                      | .520        | .000           | .000   | .000      | .000  | .000           | .000            | .006   | -      | .494    | .020                |  |  |  |
| Saudi Arabia.....               | 5.102       | 2.036          | .083   | .367      | .089  | .286           | 1.211           | 1.476  | .048   | 1.365   | .175                |  |  |  |
| Imports from OPEC-Africa        |             |                |        |           |       |                |                 |        |        |         |                     |  |  |  |
| Total.....                      | 3.902       | 2.672          | .074   | .298      | .447  | .792           | 1.061           | .931   | .113   | .005    | .181                |  |  |  |
| Algeria.....                    | 1.137       | .779           | .016   | .127      | .123  | .093           | .420            | .281   | .081   | .005    | -.009               |  |  |  |
| Libya.....                      | 1.268       | 1.268          | .042   | .040      | .259  | .614           | .313            | .000   | -      | -       | .000                |  |  |  |
| Nigeria.....                    | 1.498       | .625           | .016   | .132      | .064  | .085           | .328            | .650   | .032   | .000    | .190                |  |  |  |
| Imports from OPEC-South America |             |                |        |           |       |                |                 |        |        |         |                     |  |  |  |
| Total.....                      | 2.080       | .185           | .023   | .000      | .028  | .026           | .108            | 1.643  | .098   | .000    | .154                |  |  |  |
| Venezuela.....                  | 2.080       | .185           | .023   | .000      | .028  | .026           | .108            | 1.643  | .098   | .000    | .154                |  |  |  |
| Imports from OPEC-Far East      |             |                |        |           |       |                |                 |        |        |         |                     |  |  |  |
| Total.....                      | .532        | .048           | -      | .000      | .001  | .047           | .000            | .036   | .000   | .315    | .133                |  |  |  |
| Indonesia.....                  | .532        | .048           | -      | .000      | .001  | .047           | .000            | .036   | .000   | .315    | .133                |  |  |  |

- 1/ The data for Germany are for unified Germany, i.e., the former East Germany and West Germany.
  - 2/ "Other Europe" consists of Austria, Belgium, Denmark, Finland, Greece, Iceland, Ireland, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and Turkey.
  - 3/ U.S. geographic coverage is the 50 States and District of Columbia.
  - 4/ "Other" consists of Australia, New Zealand, and U. S. Territories.
  - 5/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.
  - 6/ The Persian Gulf countries are all members of OPEC, except for Bahrain.
- Notes: \*Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. \*OECD=Organization for Economic Cooperation and Development. See Appendix A for countries in this group. \*Negative numbers represent net exports. \*A dash (-) indicates no trade. \*Zeros (.000) indicate net imports of less than 0.0005 million barrels per day. \*See Section 4 for annual data.
- Sources: See end of Section 3.

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

|                                   | 1997   |        |        |        |        |        | 1998   |        |        |        |        |        |
|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                                   | August | Sept   | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | April  | May    | June   | July   |
| Total.....                        | 22.216 | 22.379 | 23.132 | 22.437 | 21.414 | 21.738 | 21.733 | 21.977 | 21.787 | 23.861 | 21.371 | 23.304 |
| United States <sup>1</sup> /..... | 9.390  | 9.540  | 9.726  | 9.014  | 8.130  | 8.811  | 8.620  | 8.775  | 9.369  | 9.876  | 9.715  | 10.152 |
| Canada.....                       | -860   | -896   | -719   | -1.020 | -964   | -985   | -991   | -729   | -930   | -911   | -977   | -877   |
| OECD Europe <sup>2</sup> /.....   | 7.521  | 7.414  | 7.890  | 7.923  | 7.741  | 7.450  | 7.908  | 7.441  | 7.812  | 9.157  | 7.368  | 7.989  |
| Main European Importers           |        |        |        |        |        |        |        |        |        |        |        |        |
| France.....                       | 1.695  | 1.663  | 1.977  | 1.865  | 1.837  | 1.738  | 2.034  | 1.682  | 2.116  | 1.980  | 1.618  | 1.966  |
| Germany <sup>3</sup> /.....       | 2.652  | 2.766  | 2.706  | 2.830  | 2.933  | 2.635  | 2.601  | 2.938  | 2.920  | 3.034  | 2.894  | 3.140  |
| Italy.....                        | 1.662  | 1.800  | 1.882  | 2.047  | 2.110  | 1.971  | 1.886  | 1.693  | 2.080  | 1.810  | 1.803  | 1.563  |
| Spain.....                        | 1.225  | 1.334  | 1.331  | 1.335  | 1.364  | 1.230  | 1.329  | 1.330  | 1.397  | 1.428  | 1.254  | 1.332  |
| Netherlands.....                  | .999   | .756   | .676   | .733   | .836   | .813   | .914   | .758   | .718   | .888   | .812   | .692   |
| European Net Exporters            |        |        |        |        |        |        |        |        |        |        |        |        |
| Norway.....                       | -2.731 | -3.224 | -2.810 | -3.149 | -3.306 | -3.429 | -2.954 | -3.334 | -3.436 | -2.685 | -3.233 | -2.965 |
| United Kingdom....                | -1.040 | -.950  | -1.114 | -.998  | -1.078 | -1.056 | -.993  | -.931  | -1.233 | -.631  | -.803  | -.852  |
| Smaller European Importers        |        |        |        |        |        |        |        |        |        |        |        |        |
| Austria.....                      | .241   | .234   | .216   | .240   | .221   | .229   | .213   | .230   | .221   | .228   | .202   | .256   |
| Belgium.....                      | .629   | .547   | .579   | .617   | .635   | .693   | .604   | .620   | .637   | .596   | .594   | .557   |
| Denmark.....                      | .014   | .021   | .016   | .009   | -.066  | -.044  | .030   | -.036  | .055   | .043   | .003   | -.035  |
| Ireland.....                      | .096   | .162   | .160   | .123   | .157   | .137   | .152   | .164   | .134   | .156   | .123   | .164   |
| Finland.....                      | .106   | .211   | .243   | .157   | .298   | .281   | .178   | .157   | .154   | .311   | .166   | .198   |
| Greece.....                       | .407   | .294   | .419   | .416   | .353   | .433   | .403   | .467   | .449   | .255   | .369   | .355   |
| Iceland.....                      | .020   | .023   | .023   | .014   | .006   | .026   | .010   | .017   | .011   | .018   | .005   | .033   |
| Luxembourg.....                   | .037   | .037   | .042   | .039   | .045   | .042   | .044   | .044   | .043   | .039   | .038   | .047   |
| Portugal.....                     | .246   | .380   | .304   | .215   | .358   | .305   | .374   | .314   | .290   | .354   | .344   | .294   |
| Sweden.....                       | .347   | .394   | .347   | .536   | .276   | .543   | .225   | .442   | .516   | .467   | .365   | .328   |
| Switzerland.....                  | .294   | .287   | .269   | .244   | .261   | .297   | .283   | .286   | .283   | .285   | .311   | .296   |
| Turkey.....                       | .623   | .678   | .623   | .650   | .502   | .606   | .574   | .602   | .458   | .580   | .503   | .621   |
| Japan.....                        | 5.592  | 5.807  | 5.759  | 5.912  | 6.069  | 5.721  | 5.857  | 5.760  | 5.160  | 5.142  | 4.748  | 5.420  |
| Other OECD.....                   | .573   | .513   | .476   | .608   | .438   | .741   | .338   | .730   | .376   | .598   | .517   | .620   |

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

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

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

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

Sources: See end of Section 3.

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

|                                  | August | Sept   | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | April  | May    | June   | July   |
|----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                                  | 1997   |        |        |        |        |        |        |        |        |        |        |        |
|                                  | 1998   |        |        |        |        |        |        |        |        |        |        |        |
| Total.....                       | 16.574 | 17.090 | 17.341 | 16.945 | 16.891 | 16.444 | 16.693 | 16.867 | 16.484 | 17.354 | 16.278 | 17.369 |
| United States <sup>1</sup> /.... | 4.804  | 4.841  | 4.880  | 4.378  | 4.140  | 4.268  | 4.235  | 4.712  | 4.756  | 5.029  | 4.869  | 5.305  |
| Canada.....                      | .459   | .282   | .409   | .260   | .362   | .223   | .289   | .269   | .304   | .365   | .356   | .292   |
| OECD Europe <sup>2</sup> /.....  | 6.245  | 6.716  | 6.682  | 6.722  | 6.532  | 6.388  | 6.906  | 6.258  | 6.571  | 6.877  | 6.418  | 6.617  |
| Main European Importers          |        |        |        |        |        |        |        |        |        |        |        |        |
| France.....                      | .797   | 1.084  | 1.131  | .846   | .836   | .887   | 1.071  | .881   | 1.171  | 1.092  | .945   | 1.098  |
| Germany <sup>3</sup> /.....      | .698   | .636   | .649   | .647   | .627   | .601   | .595   | .571   | .601   | .732   | .595   | .722   |
| Italy.....                       | 1.276  | 1.379  | 1.353  | 1.491  | 1.535  | 1.336  | 1.624  | 1.228  | 1.518  | 1.429  | 1.423  | 1.437  |
| Spain.....                       | .722   | .864   | .820   | .794   | 1.032  | .873   | .917   | .872   | .868   | .811   | .826   | .870   |
| Netherlands.....                 | .943   | .708   | .806   | .829   | .861   | .835   | .896   | .854   | .643   | .761   | .748   | .626   |
| European Net Exporters           |        |        |        |        |        |        |        |        |        |        |        |        |
| Norway.....                      | .000   | .000   | .007   | .008   | .005   | .000   | .000   | .000   | .000   | .000   | .000   | .000   |
| United Kingdom....               | .190   | .239   | .170   | .219   | .129   | .176   | .140   | .293   | .153   | .280   | .294   | .304   |
| Smaller European Importers       |        |        |        |        |        |        |        |        |        |        |        |        |
| Austria.....                     | .130   | .133   | .161   | .154   | .130   | .088   | .132   | .125   | .157   | .148   | .058   | .176   |
| Belgium.....                     | .326   | .352   | .351   | .318   | .314   | .338   | .276   | .257   | .326   | .381   | .424   | .319   |
| Denmark.....                     | .027   | .067   | .024   | .049   | .024   | .024   | .027   | .024   | .033   | .068   | .003   | .031   |
| Ireland.....                     | .000   | .000   | .000   | .000   | .000   | -      | -      | -      | -      | -      | -      | -      |
| Finland.....                     | .000   | .008   | .007   | .007   | .032   | .000   | .000   | .010   | .000   | .003   | .003   | .018   |
| Greece.....                      | .329   | .326   | .360   | .391   | .312   | .401   | .351   | .343   | .393   | .266   | .336   | .295   |
| Portugal.....                    | .159   | .291   | .135   | .164   | .208   | .147   | .248   | .154   | .153   | .225   | .178   | .231   |
| Sweden.....                      | .089   | .025   | .086   | .170   | .008   | .147   | .077   | .127   | .126   | .120   | .102   | .067   |
| Switzerland.....                 | .101   | .107   | .111   | .098   | .093   | .102   | .108   | .082   | .102   | .098   | .107   | .111   |
| Turkey.....                      | .458   | .497   | .511   | .536   | .394   | .432   | .445   | .437   | .327   | .465   | .375   | .311   |
| Japan.....                       | 4.417  | 4.553  | 4.775  | 4.799  | 5.112  | 4.732  | 4.589  | 4.902  | 4.277  | 4.367  | 3.992  | 4.440  |
| Other OECD.....                  | .648   | .698   | .595   | .786   | .744   | .833   | .674   | .726   | .576   | .716   | .643   | .715   |

1/ U.S. geographic coverage is the 50 States and District of Columbia.  
 2/ "OECD Europe" consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, and the United Kingdom.  
 3/ The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany.  
 Notes: \*Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. \*OECD=Organization for Economic Cooperation and Development; OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in these groups. \*Negative numbers represent net exports. \*A dash (-) indicates no trade.  
 \*Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. \*See Section 4 for annual data.  
 Sources: See end of Section 3.

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

|                                   | 1997   |        |        |        |        |       | 1998   |        |        |        |       |        |
|-----------------------------------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|-------|--------|
|                                   | August | Sept   | Oct    | Nov    | Dec    | Jan   | Feb    | Mar    | April  | May    | June  | July   |
| Total.....                        | 9.946  | 10.379 | 10.804 | 10.428 | 10.196 | 9.992 | 10.295 | 10.260 | 10.346 | 10.756 | 9.845 | 10.678 |
| United States <sup>1</sup> /..... | 1.851  | 1.915  | 1.913  | 1.745  | 1.749  | 1.724 | 1.709  | 1.950  | 1.979  | 1.902  | 2.184 | 2.331  |
| Canada.....                       | .198   | .071   | .168   | .065   | .128   | .007  | .074   | .067   | .070   | .139   | .170  | .107   |
| OECD Europe <sup>2</sup> /.....   | 3.641  | 3.962  | 3.994  | 3.808  | 3.349  | 3.481 | 3.916  | 3.464  | 4.050  | 4.386  | 3.622 | 3.943  |
| Main European Importers           |        |        |        |        |        |       |        |        |        |        |       |        |
| France.....                       | .644   | .857   | .842   | .525   | .503   | .671  | .769   | .513   | .851   | .913   | .712  | .824   |
| Germany <sup>3</sup> /.....       | .202   | .164   | .205   | .155   | .131   | .101  | .124   | .115   | .178   | .202   | .150  | .193   |
| Italy.....                        | .571   | .629   | .645   | .603   | .645   | .476  | .686   | .446   | .688   | .740   | .619  | .714   |
| Spain.....                        | .358   | .425   | .411   | .336   | .373   | .410  | .394   | .370   | .471   | .487   | .387  | .502   |
| Netherlands.....                  | .679   | .488   | .640   | .739   | .636   | .574  | .702   | .679   | .496   | .601   | .487  | .458   |
| European Net Exporters            |        |        |        |        |        |       |        |        |        |        |       |        |
| Norway.....                       | .000   | .000   | .000   | .000   | .000   | .000  | .000   | .000   | .000   | .000   | .000  | .000   |
| United Kingdom....                | .091   | .115   | .081   | .129   | .069   | .078  | .060   | .180   | .102   | .177   | .135  | .139   |
| Smaller European Importers        |        |        |        |        |        |       |        |        |        |        |       |        |
| Austria.....                      | .019   | .063   | .047   | .083   | .039   | .008  | .052   | .069   | .072   | .057   | .015  | .080   |
| Belgium.....                      | .292   | .331   | .331   | .302   | .288   | .326  | .251   | .239   | .311   | .353   | .359  | .294   |
| Denmark.....                      | .000   | .023   | .000   | .000   | .000   | .000  | .000   | .000   | .008   | .021   | .003  | .000   |
| Finland.....                      | .000   | .000   | .000   | .000   | .000   | .000  | .000   | .000   | .000   | .000   | .000  | .018   |
| Greece.....                       | .287   | .292   | .328   | .358   | .299   | .369  | .301   | .311   | .370   | .226   | .301  | .264   |
| Portugal.....                     | .094   | .190   | .051   | .085   | .121   | .078  | .173   | .136   | .121   | .151   | .102  | .195   |
| Sweden.....                       | .065   | .000   | .066   | .136   | .000   | .129  | .067   | .108   | .111   | .103   | .089  | .067   |
| Switzerland.....                  | .009   | .005   | .014   | .005   | .000   | .004  | .000   | .009   | .017   | .017   | .010  | .018   |
| Turkey.....                       | .330   | .378   | .332   | .353   | .245   | .257  | .336   | .289   | .255   | .339   | .254  | .178   |
| Japan.....                        | 3.972  | 4.147  | 4.518  | 4.526  | 4.705  | 4.453 | 4.312  | 4.545  | 4.032  | 4.084  | 3.659 | 4.073  |
| Other OECD.....                   | .283   | .284   | .212   | .284   | .264   | .327  | .284   | .234   | .215   | .245   | .209  | .224   |

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

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

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

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

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

Sources: See end of Section 3.

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

|                     | 1997   |       |       |       |       |       | 1998  |       |       |       |       |        |
|---------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
|                     | August | Sept  | Oct   | Nov   | Dec   | Jan   | Feb   | Mar   | April | May   | June  | July   |
| Total Net Imports.. | 9.390  | 9.540 | 9.726 | 9.014 | 8.130 | 8.811 | 8.620 | 8.775 | 9.369 | 9.876 | 9.715 | 10.152 |
| Imports from OPEC1/ | 4.804  | 4.841 | 4.880 | 4.378 | 4.140 | 4.268 | 4.235 | 4.712 | 4.756 | 5.029 | 4.869 | 5.305  |
| Imports from        |        |       |       |       |       |       |       |       |       |       |       |        |
| Persian Gulf2/      |        |       |       |       |       |       |       |       |       |       |       |        |
| Total.....          | 1.851  | 1.915 | 1.913 | 1.745 | 1.749 | 1.724 | 1.709 | 1.950 | 1.979 | 1.902 | 2.184 | 2.331  |
| Bahrain.....        | -.003  | -.003 | -.003 | .000  | .000  | -.003 | -.004 | -.003 | -.003 | .017  | -.003 | .000   |
| Iran.....           | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000   |
| Iraq.....           | .000   | .000  | .177  | .220  | .240  | .036  | .000  | .127  | .233  | .137  | .270  | .277   |
| Kuwait.....         | .229   | .322  | .349  | .220  | .188  | .194  | .283  | .307  | .262  | .399  | .275  | .435   |
| U.A.E.....          | -.009  | -.003 | -.002 | -.003 | -.003 | -.003 | -.003 | .011  | .017  | -.003 | -.003 | -.003  |
| Qatar.....          | .000   | .000  | .016  | .000  | .015  | .000  | .018  | .000  | .000  | .000  | .015  | .015   |
| Saudi Arabia.....   | 1.634  | 1.599 | 1.376 | 1.308 | 1.309 | 1.500 | 1.415 | 1.508 | 1.470 | 1.352 | 1.630 | 1.607  |
| Imports from        |        |       |       |       |       |       |       |       |       |       |       |        |
| OPEC-Africa         |        |       |       |       |       |       |       |       |       |       |       |        |
| Total.....          | 1.143  | 1.026 | .949  | .891  | .622  | .919  | .807  | 1.056 | 1.108 | 1.229 | 1.132 | 1.180  |
| Algeria.....        | .261   | .259  | .272  | .267  | .208  | .306  | .295  | .244  | .336  | .330  | .362  | .308   |
| Libya.....          | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000   |
| Nigeria.....        | .882   | .767  | .677  | .624  | .414  | .613  | .512  | .812  | .772  | .899  | .770  | .872   |
| Imports from        |        |       |       |       |       |       |       |       |       |       |       |        |
| OPEC-South America  |        |       |       |       |       |       |       |       |       |       |       |        |
| Total.....          | 1.786  | 1.807 | 1.973 | 1.666 | 1.685 | 1.586 | 1.694 | 1.653 | 1.622 | 1.894 | 1.551 | 1.698  |
| Venezuela.....      | 1.786  | 1.807 | 1.973 | 1.666 | 1.685 | 1.586 | 1.694 | 1.653 | 1.622 | 1.894 | 1.551 | 1.698  |
| Imports from        |        |       |       |       |       |       |       |       |       |       |       |        |
| OPEC-Far East       |        |       |       |       |       |       |       |       |       |       |       |        |
| Total.....          | .021   | .090  | .042  | .076  | .084  | .036  | .021  | .050  | .044  | .021  | -.001 | .096   |
| Indonesia.....      | .021   | .090  | .042  | .076  | .084  | .036  | .021  | .050  | .044  | .021  | -.001 | .096   |

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.  
\*Zeros (.000) indicate net imports of less than 0.0005 million barrels per day. \*See Section 4 for annual data.  
Sources: See end of Section 3.

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

|                     | 1997   |       |       |       |       |       | 1998  |       |       |       |       |       |
|---------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                     | August | Sept  | Oct   | Nov   | Dec   | Jan   | Feb   | Mar   | April | May   | June  | July  |
| Total Net Imports.. | 5.592  | 5.807 | 5.759 | 5.912 | 6.069 | 5.721 | 5.857 | 5.760 | 5.160 | 5.142 | 4.748 | 5.420 |
| Imports from OPEC1/ | 4.417  | 4.553 | 4.775 | 4.799 | 5.112 | 4.732 | 4.589 | 4.902 | 4.277 | 4.367 | 3.992 | 4.440 |
| Imports from        |        |       |       |       |       |       |       |       |       |       |       |       |
| Persian Gulf2/      | 3.972  | 4.147 | 4.518 | 4.526 | 4.705 | 4.453 | 4.312 | 4.545 | 4.032 | 4.084 | 3.659 | 4.073 |
| Total.....          | .015   | .037  | .014  | .007  | .031  | .028  | .017  | .000  | .013  | .012  | .017  | .008  |
| Bahrain.....        | .319   | .464  | .401  | .505  | .546  | .550  | .453  | .532  | .282  | .302  | .454  | .424  |
| Iraq.....           | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Kuwait.....         | .515   | .578  | .541  | .557  | .630  | .583  | .578  | .611  | .437  | .531  | .421  | .443  |
| U.A.E.....          | 1.420  | 1.428 | 1.390 | 1.606 | 1.475 | 1.545 | 1.507 | 1.336 | 1.606 | 1.341 | 1.161 | 1.459 |
| Qatar.....          | .410   | .316  | .426  | .406  | .467  | .469  | .438  | .571  | .482  | .487  | .334  | .474  |
| Saudi Arabia.....   | 1.294  | 1.323 | 1.745 | 1.445 | 1.556 | 1.278 | 1.318 | 1.496 | 1.211 | 1.409 | 1.272 | 1.265 |
| Imports from        |        |       |       |       |       |       |       |       |       |       |       |       |
| OPEC-Africa         |        |       |       |       |       |       |       |       |       |       |       |       |
| Total.....          | .032   | .074  | .000  | .000  | .062  | .000  | .017  | .000  | .019  | .000  | .034  | .017  |
| Algeria.....        | .032   | .018  | .000  | .000  | .000  | .000  | .017  | .000  | .019  | .000  | .034  | .017  |
| Nigeria.....        | .000   | .057  | .000  | .000  | .062  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Imports from        |        |       |       |       |       |       |       |       |       |       |       |       |
| OPEC-South America  |        |       |       |       |       |       |       |       |       |       |       |       |
| Total.....          | .000   | .000  | .000  | .000  | .001  | .000  | .000  | .000  | .000  | .000  | .000  | .001  |
| Venezuela.....      | .000   | .000  | .000  | .000  | .001  | .000  | .000  | .000  | .000  | .000  | .000  | .001  |
| Imports from        |        |       |       |       |       |       |       |       |       |       |       |       |
| OPEC-Far East       |        |       |       |       |       |       |       |       |       |       |       |       |
| Total.....          | .428   | .369  | .272  | .279  | .376  | .307  | .278  | .356  | .239  | .295  | .316  | .357  |
| Indonesia.....      | .428   | .369  | .272  | .279  | .376  | .307  | .278  | .356  | .239  | .295  | .316  | .357  |

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

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

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

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

Sources: See end of Section 3.

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

|                                 | 1997   |       |       |       |       |       |       |       |       |       |       |       | 1998   |      |     |     |     |     |     |     |       |     |      |      |
|---------------------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|------|-----|-----|-----|-----|-----|-----|-------|-----|------|------|
|                                 | August | Sept  | Oct   | Nov   | Dec   | Jan   | Feb   | Mar   | April | May   | June  | July  | August | Sept | Oct | Nov | Dec | Jan | Feb | Mar | April | May | June | July |
| Total Net Imports..             | 7.521  | 7.414 | 7.890 | 7.923 | 7.741 | 7.450 | 7.908 | 7.441 | 7.812 | 9.157 | 7.368 | 7.989 |        |      |     |     |     |     |     |     |       |     |      |      |
| Imports from OPEC1/             | 6.245  | 6.716 | 6.682 | 6.722 | 6.532 | 6.388 | 6.906 | 6.258 | 6.571 | 6.877 | 6.418 | 6.617 |        |      |     |     |     |     |     |     |       |     |      |      |
| Imports from Persian Gulf2/     |        |       |       |       |       |       |       |       |       |       |       |       |        |      |     |     |     |     |     |     |       |     |      |      |
| Total.....                      | 3.641  | 3.962 | 3.994 | 3.808 | 3.349 | 3.481 | 3.916 | 3.464 | 4.050 | 4.386 | 3.622 | 3.943 |        |      |     |     |     |     |     |     |       |     |      |      |
| Bahrain.....                    | .001   | .000  | .000  | .001  | .001  | .000  | .034  | .000  | .000  | .000  | .000  | .000  |        |      |     |     |     |     |     |     |       |     |      |      |
| Iran.....                       | 1.169  | 1.028 | .971  | .935  | .842  | .806  | .889  | .794  | .878  | 1.095 | 1.063 | 1.196 |        |      |     |     |     |     |     |     |       |     |      |      |
| Iraq.....                       | .186   | .611  | .620  | .376  | .265  | .235  | .520  | .562  | .801  | .812  | .410  | .744  |        |      |     |     |     |     |     |     |       |     |      |      |
| Kuwait.....                     | .210   | .343  | .251  | .215  | .174  | .205  | .332  | .360  | .149  | .269  | .278  | .205  |        |      |     |     |     |     |     |     |       |     |      |      |
| U.A.E.....                      | .004   | .001  | .005  | .000  | .000  | .001  | .005  | .000  | .051  | .003  | .066  | .050  |        |      |     |     |     |     |     |     |       |     |      |      |
| Qatar.....                      | .000   | .000  | .000  | .000  | .005  | .000  | .000  | .000  | .000  | .000  | .000  | .001  |        |      |     |     |     |     |     |     |       |     |      |      |
| Saudi Arabia.....               | 2.073  | 1.979 | 2.145 | 2.281 | 2.062 | 2.233 | 2.137 | 1.749 | 2.171 | 2.207 | 1.806 | 1.747 |        |      |     |     |     |     |     |     |       |     |      |      |
| Imports from OPEC-Africa        |        |       |       |       |       |       |       |       |       |       |       |       |        |      |     |     |     |     |     |     |       |     |      |      |
| Total.....                      | 2.338  | 2.491 | 2.531 | 2.710 | 2.936 | 2.722 | 2.764 | 2.538 | 2.322 | 2.229 | 2.479 | 2.498 |        |      |     |     |     |     |     |     |       |     |      |      |
| Algeria.....                    | .678   | .585  | .665  | .735  | .745  | .894  | .587  | .838  | .541  | .642  | .665  | .645  |        |      |     |     |     |     |     |     |       |     |      |      |
| Libya.....                      | 1.276  | 1.248 | 1.218 | 1.238 | 1.305 | 1.215 | 1.339 | 1.256 | 1.367 | 1.330 | 1.254 | 1.346 |        |      |     |     |     |     |     |     |       |     |      |      |
| Nigeria.....                    | .383   | .658  | .648  | .738  | .885  | .613  | .838  | .445  | .414  | .257  | .560  | .507  |        |      |     |     |     |     |     |     |       |     |      |      |
| Imports from OPEC-South America |        |       |       |       |       |       |       |       |       |       |       |       |        |      |     |     |     |     |     |     |       |     |      |      |
| Total.....                      | .250   | .226  | .155  | .171  | .214  | .156  | .198  | .202  | .163  | .242  | .291  | .152  |        |      |     |     |     |     |     |     |       |     |      |      |
| Venezuela.....                  | .250   | .226  | .155  | .171  | .214  | .156  | .198  | .202  | .163  | .242  | .291  | .152  |        |      |     |     |     |     |     |     |       |     |      |      |
| Imports from OPEC-Far East      |        |       |       |       |       |       |       |       |       |       |       |       |        |      |     |     |     |     |     |     |       |     |      |      |
| Total.....                      | .017   | .037  | .003  | .032  | .034  | .030  | .063  | .054  | .037  | .021  | .026  | .024  |        |      |     |     |     |     |     |     |       |     |      |      |
| Indonesia.....                  | .017   | .037  | .003  | .032  | .034  | .030  | .063  | .054  | .037  | .021  | .026  | .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. \*Zeros (.000) indicate net imports of less than 0.0005 million barrels per day.

\*See Section 4 for annual data.

Sources: See end of Section 3.

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

|                                          | 1997   |       |       |       |       |       | 1998  |       |       |       |       |       |
|------------------------------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                          | August | Sept  | Oct   | Nov   | Dec   | Jan   | Feb   | Mar   | April | May   | June  | July  |
| Total Net Imports...                     | 1.695  | 1.663 | 1.977 | 1.865 | 1.837 | 1.738 | 2.034 | 1.682 | 2.116 | 1.980 | 1.618 | 1.966 |
| Imports from OPEC <sup>1</sup> /         | .797   | 1.084 | 1.131 | .846  | .826  | .887  | 1.071 | .881  | 1.171 | 1.092 | .945  | 1.098 |
| Imports from Persian Gulf <sup>2</sup> / |        |       |       |       |       |       |       |       |       |       |       |       |
| Total.....                               | .644   | .857  | .842  | .525  | .503  | .671  | .769  | .513  | .851  | .913  | .712  | .824  |
| Bahrain.....                             | .001   | .000  | .000  | .001  | .001  | .000  | .012  | .000  | .000  | .000  | .000  | .000  |
| Iran.....                                | .206   | .166  | .172  | .104  | .079  | .171  | .142  | .159  | .099  | .229  | .164  | .261  |
| Iraq.....                                | .064   | .133  | .149  | .033  | .002  | .120  | .073  | .062  | .294  | .193  | .167  | .214  |
| Kuwait.....                              | .003   | .069  | .000  | .000  | .000  | .003  | .093  | .006  | .000  | .066  | .000  | .000  |
| U.A.E.....                               | .000   | .000  | .000  | .000  | .000  | .000  | .005  | .000  | .016  | .000  | .061  | .000  |
| Qatar.....                               | .000   | .000  | .000  | .000  | .005  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Saudi Arabia.....                        | .370   | .489  | .521  | .388  | .416  | .376  | .444  | .287  | .442  | .424  | .321  | .349  |
| Imports from OPEC-Africa                 |        |       |       |       |       |       |       |       |       |       |       |       |
| Total.....                               | .153   | .227  | .288  | .321  | .323  | .216  | .313  | .368  | .320  | .178  | .232  | .274  |
| Algeria.....                             | .091   | .065  | .060  | .116  | .092  | .129  | .053  | .191  | .120  | .062  | .048  | .093  |
| Libya.....                               | .027   | .066  | .058  | .060  | .043  | .000  | .062  | .059  | .103  | .085  | .020  | .047  |
| Nigeria.....                             | .035   | .096  | .170  | .146  | .189  | .087  | .197  | .118  | .096  | .031  | .164  | .134  |
| Imports from OPEC-South America          |        |       |       |       |       |       |       |       |       |       |       |       |
| Total.....                               | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Venezuela.....                           | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Imports from OPEC-Far East               |        |       |       |       |       |       |       |       |       |       |       |       |
| Total.....                               | .000   | .000  | .000  | .000  | .001  | .000  | .000  | .000  | .000  | .001  | .001  | .001  |
| Indonesia.....                           | .000   | .000  | .000  | .000  | .001  | .000  | .000  | .000  | .000  | .001  | .001  | .001  |

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

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

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

Sources: See end of Section 3.

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

|                                 | 1997   |       |       |       |       |       | 1998  |       |       |       |       |       |
|---------------------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                 | August | Sept  | Oct   | Nov   | Dec   | Jan   | Feb   | Mar   | April | May   | June  | July  |
| Total Net Imports...            | 2.652  | 2.766 | 2.706 | 2.830 | 2.933 | 2.635 | 2.601 | 2.938 | 2.920 | 3.034 | 2.894 | 3.140 |
| Imports from OPEC1/             | .698   | .636  | .649  | .647  | .627  | .601  | .595  | .571  | .601  | .732  | .595  | .722  |
| Imports from Persian Gulf2/     |        |       |       |       |       |       |       |       |       |       |       |       |
| Total.....                      | .202   | .164  | .205  | .155  | .131  | .101  | .124  | .115  | .178  | .202  | .150  | .193  |
| Bahrain.....                    | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Iran.....                       | .037   | .017  | .041  | .019  | .010  | .004  | .000  | .027  | .014  | .017  | .011  | .045  |
| Iraq.....                       | .000   | .000  | .000  | .009  | .000  | .000  | .000  | .000  | .034  | .027  | .013  | .018  |
| Kuwait.....                     | .009   | .016  | .012  | .014  | .013  | .004  | .020  | .016  | .021  | .024  | .027  | .014  |
| U.A.E.....                      | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Qatar.....                      | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Saudi Arabia.....               | .156   | .130  | .152  | .113  | .108  | .093  | .104  | .072  | .109  | .135  | .099  | .116  |
| Imports from OPEC-Africa        |        |       |       |       |       |       |       |       |       |       |       |       |
| Total.....                      | .459   | .431  | .401  | .449  | .446  | .490  | .439  | .410  | .368  | .429  | .402  | .479  |
| Algeria.....                    | .092   | .091  | .106  | .087  | .146  | .125  | .091  | .150  | .050  | .139  | .131  | .120  |
| Libya.....                      | .273   | .267  | .215  | .261  | .172  | .241  | .288  | .252  | .275  | .260  | .256  | .333  |
| Nigeria.....                    | .095   | .073  | .080  | .102  | .128  | .124  | .059  | .008  | .043  | .030  | .015  | .026  |
| Imports from OPEC-South America |        |       |       |       |       |       |       |       |       |       |       |       |
| Total.....                      | .036   | .041  | .043  | .043  | .051  | .006  | .032  | .046  | .055  | .100  | .044  | .050  |
| Venezuela.....                  | .036   | .041  | .043  | .043  | .051  | .006  | .032  | .046  | .055  | .100  | .044  | .050  |
| Imports from OPEC-Far East      |        |       |       |       |       |       |       |       |       |       |       |       |
| Total.....                      | .000   | .000  | .000  | .000  | .000  | .004  | .000  | .000  | .000  | .000  | .000  | .000  |
| Indonesia.....                  | .000   | .000  | .000  | .000  | .000  | .004  | .000  | .000  | .000  | .000  | .000  | .000  |

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

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

Notes: \*Imports include crude oil, natural gas liquids, and refined products, and are on a direct basis. \*The data for Germany are for the unified Germany, i.e., the former East Germany and West Germany. \*Negative numbers represent net exports.

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

Sources: See end of Section 3.

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

|                                  | 1997   |       |       |       |       |       | 1998  |       |       |       |       |       |
|----------------------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                  | August | Sept  | Oct   | Nov   | Dec   | Jan   | Feb   | Mar   | April | May   | June  | July  |
| Total Net Imports..              | 1.662  | 1.800 | 1.882 | 2.047 | 2.110 | 1.971 | 1.886 | 1.693 | 2.080 | 1.810 | 1.803 | 1.563 |
| Imports from OPEC <sup>1</sup> / | 1.276  | 1.379 | 1.353 | 1.491 | 1.535 | 1.336 | 1.624 | 1.228 | 1.518 | 1.429 | 1.423 | 1.437 |
| Imports from                     |        |       |       |       |       |       |       |       |       |       |       |       |
| Persian Gulf <sup>2</sup> /      |        |       |       |       |       |       |       |       |       |       |       |       |
| Total.....                       | .571   | .629  | .645  | .603  | .645  | .476  | .686  | .446  | .688  | .740  | .619  | .714  |
| Bahrain.....                     | .000   | .000  | .000  | .000  | .000  | .000  | .022  | .000  | .000  | .000  | .000  | .000  |
| Iran.....                        | .259   | .272  | .261  | .242  | .316  | .185  | .195  | .197  | .252  | .333  | .329  | .273  |
| Iraq.....                        | .021   | .062  | .095  | .022  | .063  | .000  | .067  | .068  | .108  | .133  | .075  | .149  |
| Kuwait.....                      | .000   | .000  | .001  | .000  | .000  | .000  | .005  | .000  | .000  | .000  | .000  | .000  |
| U.A.E.....                       | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Qatar.....                       | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Saudi Arabia.....                | .291   | .295  | .288  | .338  | .266  | .291  | .397  | .181  | .328  | .273  | .216  | .293  |
| Imports from                     |        |       |       |       |       |       |       |       |       |       |       |       |
| OPEC-Africa                      |        |       |       |       |       |       |       |       |       |       |       |       |
| Total.....                       | .670   | .723  | .705  | .850  | .851  | .787  | .878  | .719  | .778  | .662  | .711  | .700  |
| Algeria.....                     | .073   | .104  | .056  | .128  | .049  | .135  | .086  | .057  | .080  | .048  | .076  | .091  |
| Libya.....                       | .597   | .588  | .600  | .611  | .725  | .595  | .617  | .629  | .698  | .607  | .626  | .567  |
| Nigeria.....                     | .000   | .031  | .048  | .111  | .077  | .056  | .175  | .032  | .000  | .006  | .010  | .042  |
| Imports from                     |        |       |       |       |       |       |       |       |       |       |       |       |
| OPEC-South America               |        |       |       |       |       |       |       |       |       |       |       |       |
| Total.....                       | .018   | .013  | .000  | .006  | .007  | .048  | .020  | .010  | .016  | .007  | .067  | .000  |
| Venezuela.....                   | .018   | .013  | .000  | .006  | .007  | .048  | .020  | .010  | .016  | .007  | .067  | .000  |
| Imports from                     |        |       |       |       |       |       |       |       |       |       |       |       |
| OPEC-Far East                    |        |       |       |       |       |       |       |       |       |       |       |       |
| Total.....                       | .017   | .013  | .003  | .032  | .032  | .025  | .062  | .054  | .037  | .020  | .025  | .023  |
| Indonesia.....                   | .017   | .013  | .003  | .032  | .032  | .025  | .062  | .054  | .037  | .020  | .025  | .023  |

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

Sources: See end of Section 3.

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

|                                   | 1997   |       |       |       |       |       | 1998  |       |       |       |       |       |
|-----------------------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                   | August | Sept  | Oct   | Nov   | Dec   | Jan   | Feb   | Mar   | April | May   | June  | July  |
| Total.....                        | 0.186  | 0.682 | 0.836 | 0.668 | 0.527 | 0.272 | 0.520 | 0.693 | 1.041 | 1.003 | 0.702 | 1.030 |
| United States <sup>1</sup> /..... | .000   | .000  | .177  | .220  | .240  | .036  | .000  | .127  | .233  | .137  | .270  | .277  |
| Canada.....                       | .000   | .071  | .033  | .065  | .000  | .000  | .000  | .000  | .000  | .050  | .014  | .000  |
| OECD Europe <sup>2</sup> /.....   | .186   | .611  | .620  | .376  | .265  | .235  | .520  | .562  | .801  | .812  | .410  | .744  |
| Main European Importers           |        |       |       |       |       |       |       |       |       |       |       |       |
| France.....                       | .064   | .133  | .149  | .033  | .002  | .120  | .073  | .062  | .294  | .193  | .167  | .214  |
| Germany <sup>3</sup> /.....       | .000   | .000  | .000  | .009  | .000  | .000  | .000  | .000  | .034  | .027  | .013  | .018  |
| Italy.....                        | .021   | .062  | .095  | .022  | .063  | .000  | .067  | .068  | .108  | .133  | .075  | .149  |
| Spain.....                        | .066   | .135  | .150  | .030  | .058  | .080  | .111  | .129  | .102  | .099  | .097  | .223  |
| Netherlands.....                  | .017   | .000  | .063  | .072  | .000  | .000  | .128  | .088  | .129  | .168  | .000  | .000  |
| European Net Exporters            |        |       |       |       |       |       |       |       |       |       |       |       |
| United Kingdom....                | .000   | .000  | .000  | .000  | .000  | -     | -     | -     | -     | -     | -     | -     |
| Smaller European Importers        |        |       |       |       |       |       |       |       |       |       |       |       |
| Austria.....                      | .000   | .033  | .027  | .056  | .019  | .000  | .022  | .042  | .023  | .024  | .000  | .000  |
| Belgium.....                      | .000   | .000  | .000  | .000  | .000  | .000  | .014  | .049  | .050  | .005  | .000  | .076  |
| Denmark.....                      | .000   | .000  | .000  | .000  | .000  | -     | -     | -     | -     | -     | -     | -     |
| Greece.....                       | .000   | .032  | .000  | .049  | .067  | .032  | .000  | .016  | .000  | .030  | .000  | .000  |
| Portugal.....                     | .000   | .063  | .000  | .000  | .000  | .000  | .037  | .053  | .000  | .032  | .032  | .065  |
| Sweden.....                       | .000   | .000  | .000  | .000  | .000  | -     | -     | -     | -     | -     | -     | -     |
| Switzerland.....                  | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Turkey.....                       | .017   | .152  | .136  | .105  | .056  | .004  | .067  | .055  | .061  | .099  | .026  | .000  |
| Japan.....                        | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Other OECD.....                   | .000   | .000  | .006  | .007  | .022  | .001  | .000  | .005  | .008  | .004  | .009  | .009  |

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

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

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

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

Sources: See end of Section 3.

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

1997

1998

|                            | August | Sept  | Oct   | Nov   | Dec   | Jan   | Feb   | Mar   | April | May   | June  | July  |
|----------------------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Total.....                 | 0.955  | 1.244 | 1.144 | 0.994 | 1.003 | 0.984 | 1.207 | 1.289 | 0.860 | 1.202 | 0.976 | 1.086 |
| United States1/.....       | .229   | .322  | .349  | .220  | .188  | .194  | .283  | .307  | .262  | .399  | .275  | .435  |
| Canada.....                | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| OECD Europe2/.....         | .210   | .343  | .251  | .215  | .174  | .205  | .332  | .360  | .149  | .269  | .278  | .205  |
| Main European Importers    |        |       |       |       |       |       |       |       |       |       |       |       |
| France.....                | .003   | .069  | .000  | .000  | .000  | .003  | .093  | .006  | .000  | .066  | .000  | .000  |
| Germany3/.....             | .009   | .016  | .012  | .014  | .013  | .004  | .020  | .016  | .021  | .024  | .027  | .014  |
| Italy.....                 | .000   | .000  | .001  | .000  | .000  | .000  | .005  | .000  | .000  | .000  | .000  | .000  |
| Spain.....                 | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Netherlands.....           | .156   | .205  | .194  | .149  | .117  | .183  | .194  | .253  | .102  | .081  | .181  | .117  |
| European Net Exporters     |        |       |       |       |       |       |       |       |       |       |       |       |
| Norway.....                | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| United Kingdom....         | .027   | .029  | .029  | .036  | .028  | .000  | .002  | .070  | .008  | .064  | .048  | .031  |
| Smaller European Importers |        |       |       |       |       |       |       |       |       |       |       |       |
| Austria.....               | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Belgium.....               | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Denmark.....               | .000   | .023  | .000  | .000  | .000  | .000  | .000  | .000  | .008  | .021  | .003  | .000  |
| Finland.....               | -      | -     | -     | -     | -     | .000  | .000  | .000  | .000  | .000  | .000  | .018  |
| Greece.....                | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Portugal.....              | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Sweden.....                | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Switzerland.....           | .000   | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Turkey.....                | .014   | .001  | .015  | .016  | .016  | .015  | .017  | .015  | .010  | .014  | .019  | .025  |
| Japan.....                 | .515   | .578  | .541  | .557  | .630  | .583  | .578  | .611  | .437  | .531  | .421  | .443  |

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

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

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

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

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

Sources: See end of Section 3.

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

#### Oil Imports

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

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

**1970-1997**

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

|                     | Algeria | Indonesia | Iran  | Iraq  | Kuwait <sup>1</sup> | Libya | Nigeria | Qatar | Saudi Arabia <sup>1</sup> | United Arab Emirates | Venezuela | 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                | 2,102     | 26,606     |
| 1981 Average.....   | 1,002   | 1,605     | 1,380 | 1,000 | 1,125               | 1,140 | 1,433   | 405   | 9,815                     | 1,474                | 2,168     | 22,481     |
| 1982 Average.....   | 987     | 1,339     | 2,214 | 1,012 | 823                 | 1,150 | 1,295   | 330   | 6,483                     | 1,250                | 1,895     | 18,778     |
| 1983 Average.....   | 968     | 1,343     | 2,440 | 1,005 | 1,064               | 1,105 | 1,241   | 295   | 5,086                     | 1,149                | 1,801     | 17,497     |
| 1984 Average.....   | 1,014   | 1,412     | 2,174 | 1,209 | 1,157               | 1,087 | 1,388   | 394   | 4,663                     | 1,146                | 1,798     | 17,442     |
| 1985 Average.....   | 1,037   | 1,325     | 2,250 | 1,433 | 1,023               | 1,059 | 1,495   | 301   | 3,388                     | 1,193                | 1,677     | 16,181     |
| 1986 Average.....   | 945     | 1,390     | 2,035 | 1,690 | 1,419               | 1,034 | 1,467   | 308   | 4,870                     | 1,330                | 1,787     | 18,275     |
| 1987 Average.....   | 1,048   | 1,343     | 2,298 | 2,079 | 1,585               | 972   | 1,341   | 293   | 4,265                     | 1,541                | 1,752     | 18,517     |
| 1988 Average.....   | 1,040   | 1,342     | 2,240 | 2,685 | 1,492               | 1,175 | 1,450   | 346   | 5,086                     | 1,565                | 1,903     | 20,324     |
| 1989 Average.....   | 1,095   | 1,409     | 2,810 | 2,897 | 1,783               | 1,150 | 1,716   | 380   | 5,064                     | 1,860                | 1,907     | 22,071     |
| 1990 Average.....   | 1,175   | 1,462     | 3,088 | 2,040 | 1,175               | 1,375 | 1,810   | 406   | 6,410                     | 2,117                | 2,137     | 23,195     |
| 1991 Average.....   | 1,230   | 1,592     | 3,312 | 305   | 190                 | 1,483 | 1,892   | 395   | 8,115                     | 2,386                | 2,375     | 23,275     |
| 1992 Average.....   | 1,214   | 1,504     | 3,429 | 425   | 1,058               | 1,433 | 1,943   | 423   | 8,332                     | 2,266                | 2,371     | 24,398     |
| 1993 Average.....   | 1,162   | 1,511     | 3,540 | 512   | 1,852               | 1,361 | 1,960   | 413   | 8,198                     | 2,159                | 2,450     | 25,119     |
| 1994 Average.....   | 1,180   | 1,510     | 3,618 | 553   | 2,025               | 1,378 | 1,931   | 415   | 8,120                     | 2,193                | 2,588     | 25,510     |
| 1995 Average.....   | 1,202   | 1,503     | 3,643 | 560   | 2,057               | 1,390 | 1,993   | 442   | 8,231                     | 2,233                | 2,750     | 26,004     |
| 1996 Average.....   | 1,242   | 1,547     | 3,686 | 579   | 2,062               | 1,401 | 2,188   | 510   | 8,218                     | 2,278                | 3,053     | 26,764     |
| 1997 Average P..... | 1,277   | 1,546     | 3,664 | 1,187 | 2,083               | 1,446 | 2,317   | 649   | 8,562                     | 2,316                | 3,315     | 28,362     |

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

P=Preliminary.

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

Sources: See end of Section 4.

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

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

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

Sources: See end of Section 4.

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

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

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

-- = Not applicable. P=Preliminary.

Sources: See end of Section 4.

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

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

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

P=Preliminary.

Note: OPEC=Organization of Petroleum Exporting Countries. See Appendix A for Countries in this group.  
Sources: See end of Section 4.

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

|                    | Algeria | Canada | Mexico | Saudi Arabia | Russia | Former USSR | United States <sup>1</sup> / | Persian Gulf <sup>2</sup> / | OPEC <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         | 1,609                        | 604                         | 761                 | 869                 | 3,869 |
| 1985 Average.....  | 120     | 337    | 271    | 375          | --     | 350         | 1,630                        | 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          | --     | --          | 1,697                        | 1,003                       | 1,185               | 1,364               | 4,975 |
| 1993 Average.....  | 145     | 506    | 459    | 704          | --     | --          | 1,736                        | 1,040                       | 1,238               | 1,435               | 5,181 |
| 1994 Average.....  | 140     | 529    | 461    | 698          | --     | --          | 1,727                        | 1,071                       | 1,267               | 1,465               | 5,293 |
| 1995 Average.....  | 145     | 581    | 447    | 701          | --     | --          | 1,762                        | 1,106                       | 1,301               | 1,506               | 5,485 |
| 1996 Average.....  | 150     | 596    | 423    | 697          | --     | --          | 1,830                        | 1,082                       | 1,295               | 1,501               | 5,582 |
| 1997 Average P.... | 145     | 631    | 386    | 723          | 200    | --          | 1,817                        | 1,108                       | 1,310               | 1,488               | 5,571 |

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

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

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

P=Preliminary.

Sources: See end of Section 4.

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

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

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

2/ See Appendix A for countries in this group.

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

P=Preliminary.

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

Sources: See end of Section 4.

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

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

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

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

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

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

P=Preliminary.

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

Sources: See end of Section 4.

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

|                 | France | Italy | Germany <sup>1/</sup> | United Kingdom | OECD Europe <sup>2/</sup> | United States <sup>3/</sup> | Canada | Japan | Other <sup>4/</sup> | OECD Excluding East Germany | OECD Including East Germany | World Total |
|-----------------|--------|-------|-----------------------|----------------|---------------------------|-----------------------------|--------|-------|---------------------|-----------------------------|-----------------------------|-------------|
| 1970 Average... | 1,937  | 1,710 | 2,607                 | 2,096          | 12,404                    | 14,697                      | 1,516  | 3,817 | 836                 | 33,270                      | 33,493                      | 46,808      |
| 1971 Average... | 2,115  | 1,838 | 2,702                 | 2,141          | 13,005                    | 15,213                      | 1,565  | 4,142 | 831                 | 34,755                      | 34,993                      | 49,416      |
| 1972 Average... | 2,322  | 1,947 | 2,859                 | 2,284          | 13,934                    | 16,367                      | 1,664  | 4,363 | 948                 | 37,275                      | 37,545                      | 53,094      |
| 1973 Average... | 2,601  | 2,068 | 3,055                 | 2,341          | 14,925                    | 17,308                      | 1,729  | 4,949 | 988                 | 39,900                      | 40,182                      | 57,237      |
| 1974 Average... | 2,447  | 2,004 | 2,748                 | 2,210          | 13,988                    | 16,653                      | 1,779  | 4,864 | 1,095               | 38,379                      | 38,686                      | 56,677      |
| 1975 Average... | 2,252  | 1,855 | 2,650                 | 1,911          | 13,217                    | 16,322                      | 1,779  | 4,621 | 1,041               | 36,980                      | 37,287                      | 56,198      |
| 1976 Average... | 2,420  | 1,971 | 2,877                 | 1,892          | 14,124                    | 17,461                      | 1,818  | 4,837 | 1,119               | 39,358                      | 39,687                      | 59,673      |
| 1977 Average... | 2,294  | 1,897 | 2,865                 | 1,905          | 13,916                    | 18,431                      | 1,850  | 4,880 | 1,160               | 40,237                      | 40,584                      | 61,826      |
| 1978 Average... | 2,408  | 1,952 | 2,927                 | 1,938          | 14,290                    | 18,847                      | 1,902  | 4,945 | 1,204               | 41,187                      | 41,550                      | 64,158      |
| 1979 Average... | 2,463  | 2,039 | 3,003                 | 1,971          | 14,667                    | 18,513                      | 1,971  | 5,050 | 1,178               | 41,379                      | 41,748                      | 65,220      |
| 1980 Average... | 2,256  | 1,934 | 2,707                 | 1,725          | 13,634                    | 17,056                      | 1,873  | 4,960 | 1,072               | 38,595                      | 38,970                      | 63,067      |
| 1981 Average... | 2,023  | 1,874 | 2,449                 | 1,590          | 12,515                    | 16,058                      | 1,768  | 4,848 | 1,080               | 36,269                      | 36,624                      | 60,903      |
| 1982 Average... | 1,880  | 1,781 | 2,372                 | 1,531          | 12,053                    | 15,296                      | 1,578  | 4,582 | 1,008               | 34,517                      | 34,888                      | 59,503      |
| 1983 Average... | 1,835  | 1,750 | 2,324                 | 1,531          | 11,765                    | 15,231                      | 1,448  | 4,395 | 953                 | 33,793                      | 34,129                      | 58,739      |
| 1984 Average... | 1,754  | 1,646 | 2,322                 | 1,849          | 11,736                    | 15,726                      | 1,472  | 4,576 | 990                 | 34,500                      | 34,840                      | 59,831      |
| 1985 Average... | 1,772  | 1,717 | 2,338                 | 1,634          | 11,681                    | 15,726                      | 1,504  | 4,384 | 976                 | 34,271                      | 34,633                      | 60,091      |
| 1986 Average... | 1,789  | 1,855 | 2,424                 | 1,603          | 12,255                    | 16,665                      | 1,548  | 4,439 | 951                 | 35,279                      | 35,641                      | 61,759      |
| 1987 Average... | 1,797  | 1,836 | 2,422                 | 1,697          | 12,427                    | 17,283                      | 1,693  | 4,752 | 939                 | 35,911                      | 36,253                      | 62,999      |
| 1988 Average... | 1,857  | 1,930 | 2,280                 | 1,738          | 12,531                    | 17,325                      | 1,733  | 4,983 | 998                 | 37,093                      | 37,415                      | 64,819      |
| 1989 Average... | 1,818  | 1,872 | 2,382                 | 1,752          | 12,629                    | 16,988                      | 1,690  | 5,140 | 1,027               | 37,570                      | 37,871                      | 65,917      |
| 1990 Average... | 1,935  | 1,863 | 2,828                 | 1,801          | 13,391                    | 16,714                      | 1,622  | 5,284 | 1,056               | 37,475                      | 37,758                      | 65,985      |
| 1991 Average... | 1,926  | 1,937 | 2,843                 | 1,803          | 13,605                    | 17,033                      | 1,643  | 5,446 | 1,041               | --                          | 38,067                      | 66,577      |
| 1992 Average... | 1,875  | 1,852 | 2,900                 | 1,815          | 13,523                    | 17,237                      | 1,688  | 5,401 | 1,118               | --                          | 38,768                      | 66,742      |
| 1993 Average... | 1,833  | 1,841 | 2,879                 | 1,837          | 13,597                    | 17,718                      | 1,727  | 5,674 | 1,174               | --                          | 38,967                      | 67,043      |
| 1994 Average... | 1,896  | 2,048 | 2,875                 | 1,845          | 14,120                    | 17,725                      | 1,755  | 5,711 | 1,243               | --                          | 39,890                      | 68,313      |
| 1995 Average... | 1,935  | 2,058 | 2,911                 | 1,845          | 14,269                    | 18,309                      | 1,797  | 5,867 | 1,191               | --                          | 40,553                      | 69,926      |
| 1996 Average... | 1,955  | 2,045 | 2,903                 | 1,799          | 14,433                    | 18,620                      | 1,857  | 5,711 | 1,138               | --                          | 41,432                      | 71,524      |
| 1997 Average P. |        |       |                       |                |                           |                             |        |       |                     |                             | 41,760                      | 73,207      |

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

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

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

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

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

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

Sources: See end of Section 4.

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

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

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

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

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

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

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

\*Data for 1997 are preliminary.

Sources: See end of Section 4.

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

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

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

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

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

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

Sources: See end of Section 4.

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

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

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

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

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

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

\*Data for 1997 are preliminary.

Sources: See end of Section 4.

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

|                            | 1987    | 1988  | 1989  | 1990  | 1991  | 1992  | 1993  | 1994  | 1995  | 1996  | 1997  |
|----------------------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                            | Average |       |       |       |       |       |       |       |       |       |       |
| Total Net Imports...       | 5.914   | 6.587 | 7.202 | 7.161 | 6.626 | 6.938 | 7.618 | 8.054 | 7.886 | 8.498 | 9.158 |
| Imports from OPEC1/        | 2.988   | 3.439 | 3.986 | 4.172 | 3.918 | 3.888 | 4.103 | 4.036 | 3.979 | 4.194 | 4.542 |
| Imports from               |         |       |       |       |       |       |       |       |       |       |       |
| Persian Gulf2/             |         |       |       |       |       |       |       |       |       |       |       |
| Total.....                 | 1.072   | 1.526 | 1.857 | 1.961 | 1.835 | 1.774 | 1.775 | 1.722 | 1.563 | 1.594 | 1.747 |
| Bahrain.....               | -.001   | .000  | -.001 | -.001 | -.001 | -.002 | -.002 | -.002 | -.003 | -.002 | -.002 |
| Iran.....                  | .098    | .000  | .000  | .000  | .032  | .000  | .000  | .000  | .000  | .000  | .000  |
| Iraq.....                  | .083    | .343  | .449  | .518  | .000  | .000  | .000  | .000  | .000  | .001  | .089  |
| Kuwait.....                | .082    | .092  | .157  | .086  | .006  | .051  | .353  | .312  | .218  | .236  | .253  |
| U.A.E.....                 | .059    | .028  | .027  | .016  | .001  | .004  | .009  | .011  | .004  | -.003 | -.003 |
| Qatar.....                 | .000    | .000  | .002  | .004  | .000  | .001  | .001  | .000  | .000  | .000  | .004  |
| Saudi Arabia.....          | .751    | 1.063 | 1.224 | 1.339 | 1.797 | 1.720 | 1.414 | 1.402 | 1.344 | 1.363 | 1.406 |
| Imports from OPEC-Africa   |         |       |       |       |       |       |       |       |       |       |       |
| Total.....                 | .830    | .918  | 1.084 | 1.080 | .956  | .876  | .956  | .880  | .859  | .872  | .979  |
| Algeria.....               | .295    | .300  | .269  | .280  | .253  | .196  | .220  | .243  | .234  | .256  | .285  |
| Libya.....                 | .000    | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Nigeria.....               | .535    | .618  | .815  | .800  | .703  | .680  | .736  | .637  | .625  | .616  | .694  |
| Imports from               |         |       |       |       |       |       |       |       |       |       |       |
| OPEC-South America         |         |       |       |       |       |       |       |       |       |       |       |
| Total.....                 | .801    | .790  | .861  | 1.016 | 1.020 | 1.161 | 1.295 | 1.322 | 1.468 | 1.667 | 1.758 |
| Venezuela.....             | .801    | .790  | .861  | 1.016 | 1.020 | 1.161 | 1.295 | 1.322 | 1.468 | 1.667 | 1.758 |
| Imports from OPEC-Far East |         |       |       |       |       |       |       |       |       |       |       |
| Total.....                 | .284    | .205  | .182  | .113  | .106  | .075  | .074  | .109  | .087  | .058  | .057  |
| Indonesia.....             | .284    | .205  | .182  | .113  | .106  | .075  | .074  | .109  | .087  | .058  | .057  |

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

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

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

Sources: See end of Section 4.

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

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

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

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

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

Sources: See end of Section 4.

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

|                                 | 1987    | 1988  | 1989  | 1990  | 1991  | 1992  | 1993  | 1994  | 1995  | 1996  | 1997  |
|---------------------------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                                 | Average |       |       |       |       |       |       |       |       |       |       |
| Total Net Imports...            | 7.742   | 7.774 | 7.994 | 8.210 | 8.588 | 8.459 | 8.127 | 7.355 | 7.226 | 7.339 | 7.340 |
| Imports from OPEC1/             | 5.597   | 5.842 | 6.188 | 6.633 | 6.728 | 6.758 | 6.794 | 6.385 | 6.154 | 6.053 | 6.260 |
| Imports from Persian Gulf2/     |         |       |       |       |       |       |       |       |       |       |       |
| Total.....                      | 3.330   | 3.428 | 3.754 | 3.908 | 3.660 | 3.666 | 4.048 | 3.506 | 3.365 | 3.171 | 3.469 |
| Bahrain.....                    | .001    | .009  | .005  | .020  | .002  | .003  | .004  | .003  | .000  | .001  | .001  |
| Iran.....                       | .732    | .850  | 1.076 | 1.190 | 1.132 | 1.113 | 1.253 | 1.074 | 1.149 | 1.059 | .942  |
| Iraq.....                       | .905    | .959  | .897  | .591  | .000  | .000  | .001  | .000  | .000  | .006  | .336  |
| Kuwait.....                     | .469    | .474  | .452  | .346  | .019  | .142  | .461  | .302  | .269  | .288  | .249  |
| U.A.E.....                      | .206    | .134  | .214  | .446  | .281  | .199  | .092  | .067  | .011  | .004  | .009  |
| Qatar.....                      | .040    | .021  | .024  | .026  | .009  | .006  | .000  | .000  | .002  | .002  | .000  |
| Saudi Arabia.....               | .978    | .981  | 1.086 | 1.290 | 2.217 | 2.203 | 2.237 | 2.060 | 1.933 | 1.811 | 1.932 |
| Imports from OPEC-Africa        |         |       |       |       |       |       |       |       |       |       |       |
| Total.....                      | 2.058   | 2.198 | 2.224 | 2.509 | 2.818 | 2.818 | 2.491 | 2.644 | 2.500 | 2.644 | 2.569 |
| Algeria.....                    | .627    | .646  | .648  | .683  | .757  | .772  | .693  | .690  | .724  | .746  | .681  |
| Libya.....                      | .962    | 1.071 | 1.044 | 1.267 | 1.332 | 1.361 | 1.193 | 1.233 | 1.201 | 1.204 | 1.268 |
| Nigeria.....                    | .469    | .481  | .532  | .559  | .729  | .686  | .605  | .721  | .575  | .694  | .620  |
| Imports from OPEC-South America |         |       |       |       |       |       |       |       |       |       |       |
| Total.....                      | .208    | .220  | .212  | .227  | .249  | .268  | .240  | .219  | .273  | .206  | .206  |
| Venezuela.....                  | .208    | .220  | .212  | .227  | .249  | .268  | .240  | .219  | .273  | .206  | .206  |
| Imports from OPEC-Far East      |         |       |       |       |       |       |       |       |       |       |       |
| Total.....                      | .002    | .005  | .004  | .008  | .002  | .009  | .019  | .019  | .017  | .033  | .017  |
| Indonesia.....                  | .002    | .005  | .004  | .008  | .002  | .009  | .019  | .019  | .017  | .033  | .017  |

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

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

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

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

Sources: See end of Section 4.

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

|                                 | 1987  | 1988  | 1989  | 1990  | 1991  | 1992  | 1993  | 1994  | 1995  | 1996  | 1997  |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Average                         |       |       |       |       |       |       |       |       |       |       |       |
| Total Net Imports..             | 1.742 | 1.718 | 1.711 | 1.750 | 1.869 | 1.784 | 1.761 | 1.615 | 1.721 | 1.738 | 1.769 |
| Imports from OPEC1/             | .684  | .737  | .875  | 1.101 | 1.021 | .932  | 1.006 | .956  | .911  | .897  | .899  |
| Imports from Persian Gulf2/     |       |       |       |       |       |       |       |       |       |       |       |
| Total.....                      | .459  | .484  | .647  | .864  | .708  | .640  | .757  | .651  | .647  | .573  | .617  |
| Bahrain.....                    | -     | .007  | .002  | .011  | .000  | .001  | .002  | .000  | .000  | .001  | .000  |
| Iran.....                       | .088  | .012  | .158  | .182  | .171  | .151  | .243  | .156  | .208  | .172  | .127  |
| Iraq.....                       | .151  | .143  | .128  | .062  | .000  | .000  | .000  | .000  | .000  | .000  | .078  |
| Kuwait.....                     | .044  | .017  | .021  | .015  | .011  | .029  | .032  | .016  | .022  | .017  | .017  |
| U.A.E.....                      | -     | .017  | .040  | .233  | .064  | .033  | .025  | .003  | .002  | .001  | .000  |
| Qatar.....                      | .002  | .017  | .009  | .022  | .003  | .002  | .000  | .000  | .000  | .000  | .000  |
| Saudi Arabia.....               | .175  | .271  | .288  | .339  | .459  | .424  | .454  | .477  | .416  | .381  | .394  |
| Imports from OPEC-Africa        |       |       |       |       |       |       |       |       |       |       |       |
| Total.....                      | .212  | .249  | .218  | .233  | .296  | .281  | .242  | .301  | .262  | .323  | .282  |
| Algeria.....                    | .072  | .079  | .089  | .092  | .107  | .105  | .066  | .089  | .103  | .105  | .131  |
| Libya.....                      | .064  | .090  | .065  | .079  | .104  | .087  | .063  | .059  | .043  | .051  | .060  |
| Nigeria.....                    | .076  | .079  | .064  | .062  | .084  | .090  | .112  | .153  | .115  | .168  | .091  |
| Imports from OPEC-South America |       |       |       |       |       |       |       |       |       |       |       |
| Total.....                      | .012  | .011  | .012  | .015  | .017  | .011  | .010  | .003  | .002  | .001  | .000  |
| Venezuela.....                  | .012  | .011  | .012  | .015  | .017  | .011  | .010  | .003  | .002  | .001  | .000  |
| Imports from OPEC-Far East      |       |       |       |       |       |       |       |       |       |       |       |
| Total.....                      | -     | -     | .000  | .000  | .001  | .001  | .000  | .000  | .000  | .000  | .000  |
| Indonesia.....                  | -     | -     | .000  | .000  | .001  | .001  | .000  | .000  | .000  | .000  | .000  |

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

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

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

Sources: See end of Section 4.

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

|                            | 1987    | 1988  | 1989  | 1990  | 1991  | 1992  | 1993  | 1994  | 1995  | 1996  | 1997  |
|----------------------------|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                            | Average |       |       |       |       |       |       |       |       |       |       |
| Total Net Imports..        | 2.281   | 2.279 | 2.112 | 2.202 | 2.664 | 2.739 | 2.723 | 2.731 | 2.699 | 2.793 | 2.804 |
| Imports from OPEC1/        | .675    | .761  | .739  | .771  | .859  | .957  | .948  | .838  | .711  | .660  | .645  |
| Imports from               |         |       |       |       |       |       |       |       |       |       |       |
| Persian Gulf2/             |         |       |       |       |       |       |       |       |       |       |       |
| Total.....                 | .187    | .197  | .216  | .217  | .227  | .215  | .250  | .217  | .172  | .145  | .157  |
| Bahrain.....               | -       | -     | -     | -     | -     | -     | .000  | .001  | .000  | .000  | .000  |
| Iran.....                  | .020    | .051  | .041  | .055  | .053  | .021  | .053  | .040  | .031  | .018  | .023  |
| Iraq.....                  | .052    | .032  | .009  | .004  | .000  | .000  | .000  | .000  | .000  | .000  | .001  |
| Kuwait.....                | .017    | .013  | .022  | .013  | .000  | .009  | .022  | .026  | .015  | .016  | .012  |
| U.A.E.....                 | .024    | .006  | .023  | .016  | .012  | .002  | .002  | .001  | .000  | .000  | .001  |
| Qatar.....                 | .001    | .001  | .002  | .003  | .002  | .001  | .000  | .000  | .000  | .000  | .000  |
| Saudi Arabia.....          | .072    | .095  | .119  | .125  | .161  | .182  | .173  | .149  | .125  | .111  | .120  |
| Imports from OPEC-Africa   |         |       |       |       |       |       |       |       |       |       |       |
| Total.....                 | .401    | .472  | .436  | .465  | .524  | .614  | .594  | .543  | .461  | .462  | .442  |
| Algeria.....               | .146    | .141  | .106  | .098  | .126  | .183  | .195  | .161  | .135  | .125  | .095  |
| Libya.....                 | .160    | .237  | .235  | .244  | .262  | .252  | .244  | .244  | .234  | .258  | .246  |
| Nigeria.....               | .095    | .095  | .095  | .123  | .136  | .179  | .154  | .139  | .093  | .079  | .101  |
| Imports from               |         |       |       |       |       |       |       |       |       |       |       |
| OPEC-South America         |         |       |       |       |       |       |       |       |       |       |       |
| Total.....                 | .086    | .091  | .086  | .088  | .107  | .128  | .105  | .079  | .078  | .053  | .046  |
| Venezuela.....             | .086    | .091  | .086  | .088  | .107  | .128  | .105  | .079  | .078  | .053  | .046  |
| Imports from OPEC-Far East |         |       |       |       |       |       |       |       |       |       |       |
| Total.....                 | .002    | -     | -     | .002  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |
| Indonesia.....             | .002    | -     | -     | .002  | .000  | .000  | .000  | .000  | .000  | .000  | .000  |

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

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

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

Sources: See end of Section 4.

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

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

1/ OPEC=Organization of Petroleum Exporting Countries. See Appendix A for countries in this group.  
2/ The Persian Gulf countries are all members of OPEC, except for Bahrain.

Notes: \*Imports include Crude Oil, Natural Gas Liquids, and Refined Products, and are on a direct basis. \*Negative numbers represent net exports. \*A dash (-) indicates no trade. \*Zeroes (.000) indicate net imports of less than 0.0005 million barrels per day. \*Data for 1997 are preliminary.  
Sources: See end of Section 4.

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

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

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

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

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

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

Sources: See end of Section 4.

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

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

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

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

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

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

Sources: See end of Section 4.

## Sources for Section 4 (Historical Oil Data)

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

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

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

Oil Stocks

United States: EIA, Petroleum Supply Annual 1997.

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

Oil Demand

United States: EIA, Petroleum Supply Annual 1997.

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

Oil Imports

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

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



## **Appendix A**

### **Organizational and Geographical Definitions**

## Appendix A. Organizational and Geographical Definitions

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

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

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

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

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

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

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

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

**Appendix B**

**Explanatory Notes**

## Appendix B. Explanatory Notes

### Note 1: World Oil Supply

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

### Note 2: Oil Stocks

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

## **Appendix C**

### **Glossary**

## Appendix C. Glossary

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

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

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

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

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

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

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

**Other Hydrocarbons.** Other materials processed at refineries. Includes coal tar derivatives, hydrogen, glisonte, 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/ceneu/world/main1.html>). The status of the demand numbers shown in Section 2 of this current International Petroleum Statistics Report may be summarized as follows.

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

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

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

## **Appendix E**

### **Conversions**

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

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

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

|                                    | 1987  | 1988  | 1989  | 1990  | 1991  | 1992  | 1993  | 1994  | 1995  | 1996  |
|------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>North America</b>               |       |       |       |       |       |       |       |       |       |       |
| Canada                             | 7.453 | 7.453 | 7.453 | 7.453 | 7.186 | 7.186 | 7.186 | 7.186 | 7.186 | 7.186 |
| Mexico                             | 6.965 | 6.965 | 6.965 | 6.965 | 6.965 | 6.965 | 6.965 | 6.965 | 6.965 | 6.965 |
| United States                      | 7.333 | 7.333 | 7.333 | 7.333 | 7.333 | 7.333 | 7.333 | 7.333 | 7.333 | 7.333 |
| <b>Central &amp; South America</b> |       |       |       |       |       |       |       |       |       |       |
| Argentina                          | 7.149 | 7.149 | 7.149 | 7.149 | 7.120 | 7.120 | 7.120 | 7.120 | 7.120 | 7.120 |
| Bolivia                            | 7.881 | 7.881 | 7.881 | 7.881 | 7.881 | 7.881 | 7.881 | 7.881 | 7.881 | 7.881 |
| Brazil                             | 7.268 | 7.268 | 7.268 | 7.268 | 7.056 | 7.056 | 7.056 | 7.056 | 7.056 | 7.056 |
| Chile                              | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 |
| Colombia                           | 7.084 | 7.084 | 7.084 | 7.084 | 7.080 | 7.080 | 7.080 | 7.080 | 7.080 | 7.080 |
| Cuba                               | 6.449 | 6.449 | 6.449 | 6.449 | 6.449 | 6.449 | 6.449 | 6.449 | 6.449 | 6.449 |
| Ecuador                            | 7.130 | 7.130 | 7.130 | 7.130 | 7.130 | 7.130 | 7.130 | 7.130 | 7.130 | 7.130 |
| Peru                               | 7.407 | 7.407 | 7.407 | 7.407 | 7.407 | 7.407 | 7.407 | 7.407 | 7.407 | 7.407 |
| Trinidad and Tobago                | 7.084 | 7.084 | 7.084 | 7.084 | 7.084 | 7.084 | 7.084 | 7.084 | 7.084 | 7.084 |
| Venezuela                          | 6.880 | 6.880 | 6.880 | 6.880 | 6.890 | 6.890 | 6.890 | 6.890 | 6.890 | 6.890 |
| <b>Western Europe</b>              |       |       |       |       |       |       |       |       |       |       |
| Austria                            | 7.082 | 7.082 | 7.082 | 7.082 | 7.200 | 7.200 | 7.200 | 7.200 | 7.200 | 7.200 |
| Denmark                            | 7.689 | 7.689 | 7.689 | 7.689 | 7.405 | 7.405 | 7.405 | 7.405 | 7.405 | 7.405 |
| France                             | 7.332 | 7.332 | 7.332 | 7.332 | 7.332 | 7.332 | 7.332 | 7.332 | 7.332 | 7.332 |
| Germany                            | --    | --    | --    | --    | 7.300 | 7.330 | 7.330 | 7.330 | 7.330 | 7.330 |
| Germany, East                      | 7.340 | 7.340 | 7.340 | 7.340 | 7.340 | --    | --    | --    | --    | --    |
| Germany, West                      | 7.247 | 7.247 | 7.247 | 7.247 | 7.247 | --    | --    | --    | --    | --    |
| Greece                             | 7.178 | 7.178 | 7.178 | 7.178 | 7.231 | 7.231 | 7.231 | 7.231 | 7.231 | 7.231 |
| Italy                              | 6.853 | 6.853 | 6.853 | 6.853 | 7.300 | 7.300 | 7.300 | 7.300 | 7.300 | 7.300 |
| Netherlands                        | 6.853 | 6.853 | 6.853 | 6.853 | 7.239 | 7.239 | 7.239 | 7.239 | 7.239 | 7.239 |
| Norway                             | 7.810 | 7.810 | 7.810 | 7.810 | 7.644 | 7.644 | 7.644 | 7.644 | 7.644 | 7.644 |
| Spain                              | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 |
| Sweden                             | 7.247 | 7.247 | 7.247 | 7.247 | 7.247 | 7.247 | 7.247 | 7.247 | 7.247 | 7.247 |
| Turkey                             | 7.150 | 7.150 | 7.150 | 7.150 | 7.200 | 7.200 | 7.200 | 7.200 | 7.200 | 7.200 |
| United Kingdom                     | 7.466 | 7.466 | 7.466 | 7.466 | 7.523 | 7.523 | 7.523 | 7.523 | 7.523 | 7.523 |
| Former Yugoslavia                  | 7.418 | 7.418 | 7.418 | 7.418 | 7.418 | 7.418 | --    | --    | --    | --    |
| Croatia                            | --    | --    | --    | --    | --    | 7.418 | 7.418 | 7.418 | 7.418 | 7.418 |
| Serbia and Montenegro              | --    | --    | --    | --    | --    | 7.418 | 7.418 | 7.418 | 7.418 | 7.418 |
| Slovenia                           | --    | --    | --    | --    | --    | --    | --    | 7.418 | 7.418 | 7.418 |

-- = No Production of this form of energy.

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

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

|                                             | 1987  | 1988  | 1989  | 1990  | 1991  | 1992  | 1993  | 1994  | 1995  | 1996  |
|---------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>Eastern Europe &amp; Former U.S.S.R.</b> |       |       |       |       |       |       |       |       |       |       |
| Albania . . . . .                           | 6.594 | 6.594 | 6.594 | 6.594 | 6.594 | 6.594 | 6.594 | 6.594 | 6.594 | 6.594 |
| Bulgaria . . . . .                          | 7.332 | 7.332 | 7.332 | 7.332 | 7.332 | 7.332 | 7.332 | 7.332 | 7.332 | 7.332 |
| Former Czechoslovakia . . . . .             | 6.780 | 6.780 | 6.780 | 6.780 | 6.780 | 6.780 | 6.780 | 6.780 | 6.780 | 6.780 |
| Czech Republic . . . . .                    | --    | --    | --    | --    | --    | --    | 6.780 | 6.780 | 6.780 | 6.780 |
| Slovakia . . . . .                          | --    | --    | --    | --    | --    | --    | 6.780 | 6.780 | 6.780 | 6.780 |
| Hungary . . . . .                           | 6.690 | 6.690 | 6.690 | 6.690 | 6.690 | 6.690 | 6.690 | 6.690 | 6.690 | 6.690 |
| Poland . . . . .                            | 7.418 | 7.418 | 7.418 | 7.418 | 7.418 | 7.418 | 7.418 | 7.418 | 7.418 | 7.418 |
| Romania . . . . .                           | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 |
| Former U.S.S.R. . . . .                     | 7.270 | 7.270 | 7.270 | 7.270 | 7.270 | --    | --    | --    | --    | --    |
| Azerbaijan . . . . .                        | --    | --    | --    | --    | --    | 7.270 | 7.270 | 7.270 | 7.270 | 7.270 |
| Belarus . . . . .                           | --    | --    | --    | --    | --    | 7.270 | 7.270 | 7.270 | 7.270 | 7.270 |
| Georgia . . . . .                           | --    | --    | --    | --    | --    | 7.270 | 7.270 | 7.270 | 7.270 | 7.270 |
| Lithuania . . . . .                         | --    | --    | --    | --    | --    | --    | --    | 7.270 | 7.270 | 7.270 |
| Kazakhstan . . . . .                        | --    | --    | --    | --    | --    | 7.270 | 7.270 | 7.270 | 7.270 | 7.270 |
| Kyrgyzstan . . . . .                        | --    | --    | --    | --    | --    | 7.270 | 7.270 | 7.270 | 7.270 | 7.270 |
| Russia . . . . .                            | --    | --    | --    | --    | --    | 7.270 | 7.270 | 7.270 | 7.270 | 7.270 |
| Tajikistan . . . . .                        | --    | --    | --    | --    | --    | 7.270 | 7.270 | 7.270 | 7.270 | 7.270 |
| Turkmenistan . . . . .                      | --    | --    | --    | --    | --    | 7.270 | 7.270 | 7.270 | 7.270 | 7.270 |
| Ukraine . . . . .                           | --    | --    | --    | --    | --    | 7.270 | 7.270 | 7.270 | 7.270 | 7.270 |
| Uzbekistan . . . . .                        | --    | --    | --    | --    | --    | 7.270 | 7.270 | 7.270 | 7.270 | 7.270 |
| <b>Middle East</b>                          |       |       |       |       |       |       |       |       |       |       |
| Bahrain . . . . .                           | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 |
| Iran . . . . .                              | 7.305 | 7.305 | 7.305 | 7.305 | 7.305 | 7.305 | 7.305 | 7.305 | 7.305 | 7.305 |
| Iraq . . . . .                              | 7.426 | 7.426 | 7.426 | 7.426 | 7.426 | 7.430 | 7.430 | 7.430 | 7.430 | 7.430 |
| Israel . . . . .                            | 7.247 | 7.247 | 7.247 | 7.247 | 7.247 | 7.247 | 7.247 | 7.247 | 7.247 | 7.247 |
| Jordan . . . . .                            | 7.190 | 7.190 | 7.190 | 7.190 | 7.190 | 7.190 | 7.190 | 7.190 | 7.190 | 7.190 |
| Kuwait . . . . .                            | 7.245 | 7.245 | 7.245 | 7.245 | 7.245 | 7.250 | 7.250 | 7.250 | 7.250 | 7.250 |
| Oman . . . . .                              | 7.332 | 7.332 | 7.332 | 7.332 | 7.330 | 7.330 | 7.330 | 7.330 | 7.330 | 7.330 |
| Qatar . . . . .                             | 7.500 | 7.500 | 7.500 | 7.500 | 7.500 | 7.500 | 7.500 | 7.500 | 7.500 | 7.500 |
| Saudi Arabia . . . . .                      | 7.268 | 7.268 | 7.268 | 7.268 | 7.323 | 7.323 | 7.323 | 7.323 | 7.323 | 7.323 |
| Syria . . . . .                             | 6.836 | 6.836 | 6.836 | 6.836 | 6.836 | 6.836 | 6.836 | 6.836 | 6.836 | 6.836 |
| United Arab Emirates . . . . .              | 7.480 | 7.480 | 7.480 | 7.480 | 7.480 | 7.480 | 7.480 | 7.480 | 7.480 | 7.480 |
| Yemen . . . . .                             | 7.627 | 7.636 | 7.632 | 7.632 | 7.631 | 7.631 | 7.631 | 7.631 | 7.631 | 7.631 |

-- = No Production of this form of energy.

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

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

|                                       | 1987  | 1988  | 1989  | 1990  | 1991  | 1992  | 1993  | 1994  | 1995  | 1996  |
|---------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>Africa</b>                         |       |       |       |       |       |       |       |       |       |       |
| Algeria . . . . .                     | 7.936 | 7.936 | 7.936 | 7.936 | 8.130 | 8.130 | 8.130 | 8.130 | 8.130 | 8.130 |
| Angola . . . . .                      | 7.409 | 7.409 | 7.409 | 7.409 | 7.409 | 7.409 | 7.409 | 7.409 | 7.409 | 7.409 |
| Benin . . . . .                       | 6.870 | 6.870 | 6.870 | 6.870 | 6.870 | 6.870 | 6.870 | 6.870 | 6.870 | 6.870 |
| Cameroon . . . . .                    | 7.205 | 7.205 | 7.205 | 7.205 | 7.205 | 7.205 | 7.205 | 7.205 | 7.205 | 7.205 |
| Congo . . . . .                       | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 | 7.506 |
| Cote d'Ivoire (Ivory Coast) . . . . . | 7.285 | 7.285 | 7.285 | 7.285 | 7.285 | 7.285 | 7.285 | 7.285 | 7.285 | 7.285 |
| Egypt . . . . .                       | 7.256 | 7.256 | 7.256 | 7.256 | 7.256 | 7.256 | 7.256 | 7.256 | 7.256 | 7.256 |
| Equatorial Guinea . . . . .           | --    | --    | --    | --    | 8.077 | 8.077 | 8.077 | 8.077 | 8.077 | 8.077 |
| Gabon . . . . .                       | 7.305 | 7.305 | 7.305 | 7.305 | 7.305 | 7.305 | 7.305 | 7.305 | 7.305 | 7.305 |
| Ghana . . . . .                       | 7.285 | --    | --    | --    | --    | --    | 7.285 | 7.285 | 7.285 | 7.285 |
| Libya . . . . .                       | 7.515 | 7.515 | 7.515 | 7.515 | 7.580 | 7.580 | 7.580 | 7.580 | 7.580 | 7.580 |
| Morocco . . . . .                     | 7.600 | 7.600 | 7.600 | 7.600 | 7.600 | 7.600 | 7.600 | 7.600 | 7.600 | 7.600 |
| Nigeria . . . . .                     | 7.315 | 7.315 | 7.315 | 7.315 | 7.315 | 7.315 | 7.315 | 7.315 | 7.315 | 7.315 |
| South Africa . . . . .                | --    | --    | --    | --    | --    | --    | 9.853 | 9.853 | 9.853 | 9.853 |
| Sudan . . . . .                       | --    | --    | --    | --    | --    | --    | 7.452 | 7.452 | 7.452 | 7.452 |
| Tunisia . . . . .                     | 7.689 | 7.689 | 7.689 | 7.689 | 7.689 | 7.689 | 7.689 | 7.689 | 7.689 | 7.689 |
| Zaire . . . . .                       | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 |
| <b>Far East &amp; Oceania</b>         |       |       |       |       |       |       |       |       |       |       |
| Australia . . . . .                   | 7.855 | 7.855 | 7.855 | 7.855 | 7.868 | 7.868 | 7.868 | 7.868 | 7.868 | 7.868 |
| Bangladesh . . . . .                  | 7.453 | 7.453 | 7.453 | 7.453 | 7.453 | 7.453 | 7.453 | 7.453 | 7.453 | 7.453 |
| Brunei . . . . .                      | 7.340 | 7.340 | 7.340 | 7.340 | 7.340 | 7.340 | 7.340 | 7.340 | 7.340 | 7.340 |
| Burma . . . . .                       | 7.084 | 7.084 | 7.084 | 7.084 | 7.084 | 7.084 | 7.084 | 7.084 | 7.084 | 7.084 |
| China . . . . .                       | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 | 7.320 |
| India . . . . .                       | 7.600 | 7.600 | 7.600 | 7.600 | 7.600 | 7.600 | 7.600 | 7.600 | 7.600 | 7.600 |
| Indonesia . . . . .                   | 7.558 | 7.558 | 7.558 | 7.558 | 7.558 | 7.558 | 7.558 | 7.558 | 7.558 | 7.558 |
| Japan . . . . .                       | 7.285 | 7.285 | 7.285 | 7.285 | 7.357 | 7.357 | 7.357 | 7.357 | 7.357 | 7.357 |
| Malaysia . . . . .                    | 7.641 | 7.641 | 7.641 | 7.641 | 7.641 | 7.641 | 7.641 | 7.641 | 7.641 | 7.641 |
| New Zealand . . . . .                 | 8.127 | 8.127 | 8.127 | 8.127 | 8.127 | 8.127 | 8.127 | 8.127 | 8.127 | 8.127 |
| Pakistan . . . . .                    | 7.500 | 7.500 | 7.500 | 7.500 | 7.500 | 7.500 | 7.500 | 7.500 | 7.500 | 7.500 |
| Papua New Guinea . . . . .            | --    | --    | --    | --    | --    | --    | 7.809 | 7.809 | 7.809 | 7.809 |
| Philippines . . . . .                 | 7.285 | 7.285 | 7.285 | 7.285 | 7.285 | 7.285 | 7.285 | 7.285 | 7.285 | 7.285 |
| Taiwan . . . . .                      | 6.568 | 6.568 | 6.568 | 6.568 | 6.568 | 6.568 | 6.568 | 6.568 | 6.568 | 6.568 |
| Thailand . . . . .                    | 6.758 | 6.758 | 6.758 | 6.758 | 6.758 | 6.758 | 6.758 | 6.758 | 6.758 | 6.758 |
| Vietnam . . . . .                     | 7.082 | 7.082 | 7.082 | 7.082 | 7.082 | 7.082 | 7.082 | 7.082 | 7.082 | 7.082 |

-- = No Production of this form of energy.

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