



Organization of the Petroleum Exporting Countries

2021
**OPEC
Annual
Statistical
Bulletin**

56th edition

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Mohammad Sanusi Barkindo, OPEC Secretary General.

I am pleased to introduce this **56th edition** of the **Annual Statistical Bulletin (ASB)**. Along with the *World Oil Outlook (WOO)* and the *Monthly Oil Market Report (MOMR)*, the **ASB is one of OPEC's flagship publications**. With its first edition released back in 1965, this annual publication has evolved through the decades to become a **trusted industry handbook** for energy stakeholders around the world.

In the novel *'A study in Scarlet'* by Arthur Conan Doyle, detective Sherlock Holmes says: "It is a capital mistake to theorize before one has data."

This brilliant quote encapsulates perfectly what we seek to achieve in this publication and indeed in all that we do at OPEC. The **data we collect is of critical importance**, and we constantly strive to ensure the **greatest accuracy** in all that we do.

However, even more important is how we **leverage this important information** to make **smart and educated decisions**. Let's face it, anything that is not backed up by solid facts and figures can be considered an assumption, and we do not trust in assumptions.

The oil and gas industry is no exception to this rule. And, indeed, that is why **industry leaders, energy analysts and oil companies** turn each year to the ASB for the key data they need on the global oil and gas industry as input for their **planning and decision-making**.

OPEC's commitment to **high-quality, transparent** oil and gas data supports our goal of fostering **sustainable oil market stability for the benefit of producers, consumers and the global economy**.

As far as distribution goes, we continue to **harness the latest technologies to expand access** to the ASB's valuable data. In this regard, we offer an **interactive online version** that provides **historical time-series data going back to 1960**, as well as a **SmartApp version** that is available for iOS and Android devices. This provides our readers access to valuable data wherever they are, and at any time.

This year's ASB is the fruitful outcome of countless hours of hard work by **OPEC's Secretariat in close collaboration with our Member Countries**. These dedicated efforts have resulted in the high-quality and insightful content you are about to read. I congratulate the entire ASB team for once again achieving an **excellent product that will prove highly beneficial to stakeholders across the global industry**.

A handwritten signature in black ink, which appears to be "Mohammad S. Barkindo".

Mohammad Sanusi Barkindo
Secretary General



As one of the flagship publications of the Organization of the Petroleum Exporting Countries (OPEC), the *Annual Statistical Bulletin (ASB)* offers detailed and comprehensive time-series data on several aspects of the global petroleum industry, including production, demand, imports and exports, as well as exploration and transportation activities.

In particular, the ASB contains key statistical data on oil and natural gas activities in each of OPEC's 13 Member Countries: Algeria, Angola, Congo, Equatorial Guinea, Gabon, the Islamic Republic of Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, the United Arab Emirates and Venezuela. In addition, it provides valuable data for many other countries grouped by geographical region, and covers the major economic zones around the world.

The ASB 2021 comprises data up to the end of 2020, with the following highlights:

- ▶ Total world crude oil production declined in 2020 by 6.15 million barrels/day (mb/d), or 8.2 per cent, as compared to 2019, to average 69.09 mb/d, marking a historical year-on-year drop after the outbreak of the COVID-19 pandemic. OPEC crude oil production declined sharply year-on-year by 3.72 mb/d, or 12.7 per cent, while crude production by non-OPEC countries fell by 2.43 mb/d, or 5.3 per cent.
- ▶ With an average of 90.73 mb/d in 2020, world oil demand was heavily impacted by the COVID-19 pandemic and fell by a historic 9.30 mb/d y-o-y. OECD oil demand fell sharply in 2020, while oil demand in the non-OECD declined for the first year in history. Oil demand in OPEC Member Countries was sluggish in 2020, losing 8.2 per cent y-o-y. Distillates and gasoline accounted for around 55.1 per cent of 2020 world oil demand with a steep downward trend amid COVID-19 containment measures. Residual fuel oil requirements were about 7.1 per cent of total oil demand in 2020.
- ▶ OPEC Member Countries exported an average of 19.70 mb/d of crude oil in 2020, a sharp decrease of about 2.78 mb/d, or 12.4 per cent, compared to 2019 and marking the fourth consecutive annual decline. Following the pattern in previous years, the bulk of crude oil from OPEC Member Countries — 14.43 mb/d or 73.2 per cent — was exported to Asia, particularly to China and India. Considerable volumes of crude oil — about 3.13 mb/d — were also exported to OECD Europe in 2020, which, however, represents a decline compared with 3.74 mb/d recorded in 2019. OECD Americas imported 0.84 mb/d of crude oil from OPEC Member Countries, which was about 0.38 mb/d, or 31.1 per cent, less than the 2019 volumes. Exports of petroleum products from OPEC Member Countries averaged 3.48 mb/d during 2020, down by around 0.40 mb/d, or 10.4 per cent, compared to 2019. Imports of petroleum products by OPEC Member Countries averaged at 1.52 mb/d in 2020, roughly 0.17 mb/d, or 9.8 per cent, lower than in 2019.
- ▶ World proven crude oil reserves stood at 1,549 billion barrels (bn b) at the end of 2020, increasing by 0.2 per cent from the level of 1,546bn b recorded at the end of 2019. Proven crude oil reserves in OPEC Member Countries increased by 0.3 per cent to 1,237bn b at the end of 2020, following a firm increase during 2019. At the end of 2020, world proven natural gas reserves fell by 0.4 per cent to approximately 206.7 trillion standard cubic metres (cu m). Proven natural gas reserves in OPEC Member Countries stood at 73.74tr standard cu m at the end of 2020, down 1.4 per cent from the level at the end of 2019.
- ▶ World refinery capacity shrank by 0.3 million barrels/calendar day (b/cd) to stand at 101.1 mb/cd during 2020. The non-OECD region, particularly China, Other Asia and the Middle East, recorded refining capacity additions. Refinery capacity in the OECD declined sharply in 2020 as compared to 2019. Globally, refinery throughput fell by a historic 9.1 per cent to reach 78.0 mb/d in 2020 amid bearish oil demand during the COVID-19 pandemic.
- ▶ The OPEC Reference Basket averaged \$41.47/b in nominal terms during 2020, down from \$64.04/b in 2019, a strong decrease of \$22.57/b, or 35.2 per cent. The volatility level was \$12.55/b, or 30.3 per cent, relative to the yearly average.

SECTION 1

Summary

Table 1.1
OPEC Members' facts and figures, 2020

	Algeria	Angola	Congo	Equatorial Guinea	Gabon	IR Iran	Iraq	Kuwait	Libya	Nigeria	Saudi Arabia	United Arab Emirates	Venezuela	OPEC
Population million inhabitants	43.90	31.13	5.52	1.41	2.11	84.15	40.15	4.46	6.64	213.40	35.01	9.28	32.37	509.54
Land area ¹ 1,000 sq km	2,382	1,248	342	28	268	1,648	438	18	1,760	924	2,150	84	916	12,205
GDP per capita \$	3,254	2,006	1,854	6,774	7,420	7,571	4,160	24,176	3,281	2,016	19,996	38,661	1,460	5,320
GDP at market prices million \$	142,842	62,440	10,232	9,524	15,642	637,112	167,037	107,936	21,797	430,197	700,118	358,869	47,255	2,711,001
GDP growth real PPP %	-6.0	-4.0	-7.8	-5.8	-1.8	3.4	-10.9	-8.1	-45.0	-1.8	-4.1	-5.9	-25.0	-4.8
Value of exports million \$	21,092	20,696	5,376	2,856	5,613	40,237	46,811	46,863	6,883	37,984	173,864	335,238	8,236	751,748
Value of imports million \$	39,674	9,603	4,280	2,380	2,448	40,934	40,927	45,793	11,580	71,285	137,997	246,886	8,407	662,195
Current account balance million \$	-21,129	-504	-579	-1,135	-1,738	-5,300	-6,250	-999	-8,409	-17,074	-19,647	20,983	-3,717	-65,499
Value of petroleum exports million \$	13,169	18,704	3,687	1,765	2,875	7,656	44,287	35,231	5,711	27,730	119,359	32,943	7,960	321,078
Proven crude oil reserves million barrels	12,200	7,231	1,811	1,100	2,000	208,600	145,019	101,500	48,363	36,910	261,600	107,000	303,561	1,236,895
Natural gas reserves billion cu m	4,504	301	284	39	26	34,077	3,714	1,784	1,505	5,750	8,438	7,726	5,590	73,737
Crude oil production 1,000 b/d	898.7	1,271.5	2,99.9	113.6	207.4	1,985.3	3,996.6	2,438.0	389.3	1,493.2	9,213.2	2,778.6	588.6	25,654.0
Natural gas marketed production million cu m	85,119.0	11,313.4	404.8	6,023.5	501.9	253,770.0	7,374.1	12,883.0	17,713.7	49,947.3	119,000.0	55,064.5	18,026.1	637,141.3
Refinery capacity 1,000 b/cd	676.8	80.3	21.0	na	25.0	2,201.0	828.5	800.0	634.0	461.0	2,927.0	1,272.0	2,275.5	12,202.1
Refinery throughput 1,000 b/d	638.8	46.7	16.6	na	16.7	1,587.3	543.3	571.5	85.8	1.0	2,173.3	935.8	345.2	6,962.1
Output of petroleum products 1,000 b/d	614.5	44.1	15.7	na	16.0	1,577.0	587.2	780.3	80.4	0.9	2,177.2	925.1	338.7	7,157.2
Oil demand 1,000 b/d	383.0	98.7	6.9	4.6	44.6	1,692.4	549.9	461.1	182.6	465.8	3,037.3	828.2	299.7	8,055.0
Crude oil exports ² 1,000 b/d	438.7	1,219.7	282.2	114.5	196.1	404.5	3,428.4	1,826.3	347.2	1,879.3	6,658.6	2,418.4	486.8	19,700.6
Exports of petroleum products 1,000 b/d	503.4	16.3	4.3	0.0	8.6	280.7	151.0	527.0	65.8	0.0	1,016.6	839.6	69.6	3,482.9
Imports of petroleum products 1,000 b/d	35.5	134.3	0.2	4.2	6.9	91.6	76.7	14.8	147.4	465.9	353.1	120.2	68.5	1,519.2
Natural gas exports million cu m	39,459.0	627.6	0.0	4,025.9	0.0	12,670.0	0.0	0.0	4,292.0	35,586.1	0.0	8,766.1	0.0	105,426.8

Notes:

1. Land area figures as per official websites.
2. Crude oil exports may include lease condensates and volumes of oil in transit.

Table 1.2
OPEC Members' crude oil production allocations

(1,000 b/d)

	Apr 82– Mar 83	Apr 83– Oct 84	Nov 84– Aug 86	Sep 86– Oct 86	Nov 86	Dec 86	Jan 87– Jun 87	Jul 87– Dec 87	Jan 88– Dec 88	Jan 89– Jun 89
	1/	2/	3/	4/	5/	6/	7/	8/	9/	10/
Algeria	650	725	663	663	669	669	635	667	667	695
Gabon	150	150	137	137	160	160	152	159	159	166
IR Iran	1,200	2,400	2,300	2,300	2,317	2,317	2,255	2,369	2,369	2,640
Iraq	1,200	1,200	1,200	1,200	—	—	1,466	1,540	—	2,640
Kuwait	800	1,050	900	900	921	999	948	996	996	1,037
Libya	750	1,100	990	990	999	999	948	996	996	1,037
Nigeria	1,300	1,300	1,300	1,300	1,304	1,304	1,238	1,301	1,301	1,355
Saudi Arabia	7,150	5,000	4,353	4,353	4,353	4,353	4,133	4,343	4,343	4,524
United Arab Emirates	1,000	1,100	950	950	950	950	902	948	948	988
Venezuela	1,500	1,675	1,555	1,555	1,574	1,574	1,495	1,571	1,571	1,636
OPEC	15,700	15,700	14,348	14,348			14,172	14,890		16,718
OPEC excl Iraq					13,247	13,325			13,350	

	Jul 89– Sep 89	Oct 89– Dec 89	Jan 90– Jul 90	Aug 90	Apr 91– Sep 91	Oct 91– Jan 92	Feb 92– Sep 92	Oct 92– Dec 92	Jan 93– Feb 93	Mar 93– Sep 93
	11/	12/	13/	14/	15/	16/	17/	18/	19/	20/
Algeria	733	771	827	827	827	nd	760	nd	764	732
Gabon	175	184	197	197	285	nd	273	nd	293	281
IR Iran	2,783	2,926	3,140	3,140	3,217	nd	3,184	nd	3,490	3,340
Iraq	2,783	2,926	3,140	3,140	—	nd	505	nd	500	400
Kuwait	1,093	1,149	1,500	1,500	—	nd	812	nd	1,500	1,600
Libya	1,093	1,149	1,233	1,233	1,425	nd	1,395	nd	1,409	1,350
Nigeria	1,428	1,501	1,611	1,611	1,840	nd	1,751	nd	1,857	1,780
Saudi Arabia	4,769	5,014	5,380	5,380	8,034	nd	7,887	nd	8,395	8,000
United Arab Emirates	1,041	1,094	1,095	1,500	2,320	nd	2,244	nd	2,260	2,161
Venezuela	1,724	1,812	1,945	1,945	2,235	nd	2,147	nd	2,360	2,257
OPEC	17,622	18,526	20,068	20,473	20,183^a	23,650[*]	20,958	24,200[*]	22,828	21,901

Notes: Totals may not add up due to independent rounding.

— No production level allocated.

nd No distribution made.

^ Includes Ecuador and Qatar.

Includes Indonesia and Qatar.

* Includes Ecuador, Indonesia and Qatar.

a. OPEC excluding Kuwait and Iraq.

b. OPEC excluding IR Iran and Iraq.

c. OPEC excluding Libya and Nigeria.

d. OPEC excluding IR Iran, Libya and Venezuela.

Agreed at the:

1/ 63rd [Extraordinary] Meeting of the OPEC Conference, March 19–20, 1982.

2/ 67th [Extraordinary] Meeting of the OPEC Conference, March 14, 1983. No production level allocated to Saudi Arabia which acted as the swing producer. Venezuela: 1.7 mb/d including condensates. Nigeria: At the 70th Meeting of the OPEC Conference, July 10–11, 1984, a temporary production rise to 1.4 mb/d and 1.45 mb/d in August 1984 and September 1984, respectively, was decided.

3/ 71st [Extraordinary] Meeting of the OPEC Conference, October 29–31, 1984. Retained at the 75th [Extraordinary] Meeting of the OPEC Conference, October 4, 1985.

4/ 78th Meeting of the OPEC Conference, June 25–30, 1986, and July 28–August 5, 1986, with the exception of Iraq.

5/ 79th [Extraordinary] Meeting of the OPEC Conference, October 6–22, 1986, with the exception of Iraq.

6/ 79th [Extraordinary] Meeting of the OPEC Conference, October 6–22, 1986, with the exception of Iraq.

7/ 80th Meeting of the OPEC Conference, December 11–20, 1986.

8/ 81st Meeting of the OPEC Conference, June 25–27, 1987.

9/ 82nd Meeting of the OPEC Conference, December 9–14, 1987, with the exception of Iraq. Extended at the 83rd Meeting of the OPEC Conference, June 11–14, 1988, with the exception of Iraq.

10/ 84th Meeting of the OPEC Conference, November 21–28, 1988.

11/ 85th Meeting of the OPEC Conference, June 5–7, 1989.

12/ 3rd Meeting of the Eight-Minister Monitoring Committee, September 23–27, 1989.

13/ 86th Meeting of the OPEC Conference, November 25–28, 1989.

14/ 87th Meeting of the OPEC Conference, July 26–27, 1990. September 2000–March 2001: Oil Ministers' informal consultations and 1st Ministerial Monitoring Committee, August 26–29, 1990 (interim course of action: OPEC shall consequently increase production in accordance with need). Retained August 1990 agreement at the 88th Meeting of the OPEC Conference, December 12–13, 1990.

15/ 3rd Meeting of the Ministerial Monitoring Committee, March 11–12, 1991. Reservations were made by Algeria and IR Iran as to the total OPEC production level. Reiterated without reservations at the 89th Meeting of the OPEC Conference, June 4, 1991.

16/ 4th Meeting of the Ministerial Monitoring Committee, September 24–25, 1991. Retained at the 90th Meeting of the Conference, November 26–27, 1991.

17/ 6th Meeting of the Ministerial Monitoring Committee, February 12–15, 1992. Reservations were made by IR Iran as to the total OPEC production level and by Saudi Arabia as to their allocated production level. Rollover (inclusive of reservations) at the 91st Meeting of the OPEC Conference, May 21–22, 1992. The Conference also decided to allow any additional production from Kuwait.

18/ 9th Meeting of the Ministerial Monitoring Committee, September 16–17, 1992. Reaffirmed to allow for any additional production from Kuwait.

19/ 92nd Meeting of the OPEC Conference, November 25–27, 1992, with full support of Member Countries, except Iraq and the allowance of additional volumes to Kuwait as they become available during the 1Q93.

20/ 10th Meeting of the Ministerial Monitoring Committee, February 13–16, 1993 with full support of Member Countries, except Iraq. Rollover of this agreement at the 93rd Meeting of the OPEC Conference, June 8–10, 1993, with full support of Member Countries, except Iraq and Kuwait.

Table 1.2
OPEC Members' crude oil production allocations

(1,000 b/d)

	Oct 93– Jun 96	Jul 96– Dec 97	Jan 98– Mar 98	Apr 98– Jun 98	Jul 98– Mar 99	Apr 99– Mar 00	Apr 00– Jun 00	Jul 00– Sep 00	Oct 1, 00– Oct 30, 00	Oct 31, 00 –Jan 01
	21/	22/	23/	24/	25/	26/	27/	28/	29/	30/
Algeria	750	750	909	50	788	731	788	811	837	853
Gabon	287	—	—	—	—	—	—	—	—	—
IR Iran	3,600	3,600	3,942	140	3,318	3,359	—	3,727	3,844	3,917
Iraq	400	1,200	1,314	—	—	—	—	—	—	—
Kuwait	2,000	2,000	2,190	125	1,980	1,836	1,980	2,037	2,101	2,141
Libya	1,390	1,390	1,522	80	1,323	1,227	1,323	1,361	1,404	1,431
Nigeria	1,865	1,865	2,042	125	2,033	1,885	2,033	2,091	2,157	2,198
Saudi Arabia	8,000	8,000	8,761	300	8,023	7,438	8,023	8,253	8,512	8,674
United Arab Emirates	2,161	2,161	2,366	125	2,157	2,000	2,157	2,219	2,289	2,333
Venezuela	2,359	2,359	2,583	200	2,845	2,720	2,845	2,926	3,019	3,077
OPEC	22,812	23,325	25,630							
OPEC excl Iraq				1,145	22,467	21,196	19,149^b	23,425	24,163	24,624
Target				23,762						

	Feb 01– Mar 01	Apr 01– Aug 01	Sep 01– Dec 01	Jan 02– Dec 02	Jan 03	Feb 03– May 03	Jun 03– Oct 03	Nov 03– Mar 04	Apr 04– Jun 04	Jul 04
	31/	32/	33/	34/	35/	36/	37/	38/	39/	40/
Algeria	805	773	741	693	735	782	811	782	750	814
IR Iran	3,698	3,552	3,406	3,186	3,377	3,597	3,729	3,597	3,450	3,744
Iraq	—	—	—	—	—	—	—	—	—	—
Kuwait	2,021	1,941	1,861	1,741	1,845	1,966	2,038	1,966	1,886	2,046
Libya	1,350	1,296	1,242	1,162	1,232	1,312	1,360	1,312	1,258	1,365
Nigeria	2,075	1,993	1,911	1,787	1,894	2,018	2,092	2,018	1,936	2,101
Saudi Arabia	8,189	7,865	7,541	7,053	7,476	7,963	8,256	7,963	7,638	8,288
United Arab Emirates	2,201	2,113	2,025	1,894	2,007	2,138	2,217	2,138	2,051	2,225
Venezuela	2,902	2,786	2,670	2,497	2,647	2,819	2,923	2,819	2,704	2,934
OPEC excl Iraq	23,241	22,319	21,397	20,013	21,213	22,595	23,425	22,595	21,673	23,517

- 21/ 94th (Extraordinary) Meeting of the OPEC Conference, September 25–29, 1993, with full support of Member Countries, except Iraq. Maintained at the 12th Meeting of the Ministerial Monitoring Committee, March 25–26, 1994, with full support of Member Countries, except Iraq. Maintained at the 97th, 98th and 99th Meeting of the OPEC Conference, November 21–22, 1994, June 19–20, 1995, and November 21–22, 1995, respectively.
- 22/ 100th Meeting of the OPEC Conference, June 5–7, 1996. The remaining volume of 1.2 mb/d is to be supplied by Iraq. Rollover of the agreement at the 101st and the 102nd Meeting of the OPEC Conference, November 27–28, 1996, and June 25–26, 1997, respectively.
- 23/ 103rd Meeting of the OPEC Conference, November 26–December 1, 1997. The remaining volume of 1,314,080 b/d is to be supplied by Iraq.
- 24/ 104th Meeting (Extraordinary) of the OPEC Conference, March 30, 1998. Data reflects temporary production adjustments from OPEC excluding Iraq production in February 1998 as reported by selected secondary sources. Iraq is not called upon to participate in this agreement.
- 25/ 105th Meeting of the OPEC Conference, June 24, 1998. Iraq is not called upon to participate in this agreement.
- 26/ 107th Meeting of the OPEC Conference, March 23, 1999. Reaffirmed strong commitment to the agreement at the 108th Meeting of the OPEC Conference, September 22, 1999. Iraq is not called upon to participate in this agreement.
- 27/ 109th Meeting of the OPEC Conference, March 27–29, 2000. Agreement of OPEC Member Countries excluding IR Iran and Iraq.
- 28/ 110th (Extraordinary) Meeting of the OPEC Conference, June 21, 2000. Iraq is not called upon to participate in this agreement.
- 29/ 111th Meeting of the OPEC Conference, September 10–11, 2000. Iraq is not called upon to participate in this agreement.
- 30/ 111th Meeting of the OPEC Conference, September 10–11, 2000; including additional 500,000 b/d (price band mechanism) as announced by the OPEC President on October 30, 2000, and effective from October 31, 2000. Iraq is not called upon to participate in this agreement.
- 31/ 113th (Extraordinary) Meeting of the OPEC Conference, January 17, 2001. Iraq is not called upon to participate in this agreement.
- 32/ 114th Meeting of the OPEC Conference, March 16–17, 2001. Retained at the 115th (Extraordinary) and 116th (Extraordinary) Meeting of the OPEC Conference, June 5 and July 3, 2001, respectively. Iraq is not called upon to participate in this agreement.
- 33/ OPEC Conference, July 25, 2001. Retained at the 117th Meeting of the OPEC Conference, September 26–27, 2001. Iraq is not called upon to participate in this agreement.
- 34/ Announced during the 118th (Extraordinary) Meeting of the OPEC Conference, November 14, 2001, and confirmed its implementation during the Consultative Meeting of the OPEC Conference in Cairo, December 28, 2001. Retained at the 119th (Extraordinary), 120th (Extraordinary) and 121st Meeting of the OPEC Conference, March 15, June 26 and September 19, 2002, respectively. Iraq is not called upon to participate in this agreement.
- 35/ 122th (Extraordinary) Meeting of the OPEC Conference, December 12, 2002. Iraq is not called upon to participate in this agreement.
- 36/ 123rd (Extraordinary) Meeting of the OPEC Conference, January 12, 2003. Retained at the 124th Meeting of the OPEC Conference, March 11, 2003. Iraq is not called upon to participate in this agreement.
- 37/ Consultative Meeting of the OPEC Conference, April 24, 2003. Retained at the 125th (Extraordinary) and 126th (Extraordinary) Meeting of the OPEC Conference, June 11 and July 31, 2003, respectively. Iraq is not called upon to participate in this agreement.
- 38/ 127th Meeting of the OPEC Conference, September 24, 2003. Retained at the 128th (Extraordinary) and 129th (Extraordinary) Meeting of the OPEC Conference, December 4, 2003, and February 10, 2004, respectively. Iraq is not called upon to participate in this agreement.
- 39/ 129th (Extraordinary) Meeting of the OPEC Conference, February 10, 2004. Reconfirmed at the 130th Meeting of the OPEC Conference, March 31, 2004. Iraq is not called upon to participate in this agreement.
- 40/ 131st (Extraordinary) Meeting of the OPEC Conference, June 3, 2004. Iraq is not called upon to participate in this agreement.

Table 1.2
OPEC Members' crude oil production allocations

(1,000 b/d)

	Aug 04– Oct 04	Nov 1, 04– Mar 16, 05	Mar 17, 05– Jun 30, 05	Jul 05– Oct 06	Nov 06– Jan 07	Feb 07– Oct 07	Nov 07– Dec 07	Jan 08– Sep 08	Oct 08	Nov 08– Dec 08
	41/	42/	43/	44/	45/	46/	47/	48/	49/	50/
Algeria	830	862	878	894	59	25	nd	nd	nd	71
Angola	—	—	—	—	—	—	—	nd	nd	99
IR Iran	3,817	3,964	4,037	4,110	176	73	nd	nd	nd	199
Iraq	—	—	—	—	—	—	—	—	—	—
Kuwait	2,087	2,167	2,207	2,247	100	42	nd	nd	nd	132
Libya	1,392	1,446	1,473	1,500	72	30	nd	nd	nd	89
Nigeria	2,142	2,224	2,265	2,306	100	42	nd	nd	nd	113
Saudi Arabia	8,450	8,775	8,937	9,099	380	158	nd	nd	nd	466
United Arab Emirates	2,269	2,356	2,400	2,444	101	42	nd	nd	nd	134
Venezuela	2,992	3,107	3,165	3,223	138	57	nd	nd	nd	129
OPEC excl Iraq	23,979	24,901	25,362	25,823						1,432
OPEC excl Angola and Iraq					1,126	469	500[#]			
Target OPEC excl Angola and Iraq					26,300[#]	25,800[#]	27,253[#]			
Target OPEC excl Iraq								29,673*	28,808[^]	27,308[^]

	Jan 09– Dec 11	Jan 12– Dec 15	Jan 17– May 17	Jun 17– Dec 18	Jan 19– May 19	Jun 19– Dec 19	Jan 20– Mar 20	May 20– Jul 20	Aug 20– Dec 20	Jan 21 Apr 21
	51/	52/	53/	54/	55/	56/	57/	58/	58/	59/
Algeria	nd	nd	1,039	1,039	1,025	1,025	1,013	816	864	876
Angola	nd	nd	1,673	1,673	1,481	1,481	1,481	1,180	1,249	1,267
Congo	—	—	—	—	315	315	311	251	266	269
Equatorial Guinea	—	—	—	178	123	123	122	98	104	105
Gabon	—	—	193	193	181	181	179	144	153	155
IR Iran	nd	nd	3,797	3,797	—	—	—	—	—	—
Iraq	—	nd	4,351	4,351	4,512	4,512	4,462	3,592	3,804	3,857
Kuwait	nd	nd	2,707	2,707	2,724	2,724	2,669	2,168	2,297	2,329
Libya	nd	nd	—	—	—	—	—	—	—	—
Nigeria	nd	nd	—	—	1,685	1,774	1,753	1,412	1,495	1,516
Saudi Arabia	nd	nd	10,058	10,058	10,311	10,311	10,144	8,492	8,993	9,119
United Arab Emirates	nd	nd	2,874	2,874	3,072	3,072	3,012	2,446	2,590	2,626
Venezuela	nd	nd	1,972	1,972	—	—	—	—	—	—
OPEC			28,664^c	28,842^c	25,429^d	25,518^d	25,146^d	20,599^d	21,815^d	22,119^d
Target OPEC excl Iraq	24,845[^]									
Target OPEC		30,000[^]	32,500[*]							

- 41/ 131st [Extraordinary] Meeting of the OPEC Conference, June 3, 2004. Iraq is not called upon to participate in this agreement.
- 42/ 132nd Meeting of the OPEC Conference, September 15, 2004. Iraq is not called upon to participate in this agreement. During the 133rd [Extraordinary] Meeting of the OPEC Conference, December 10, 2004, Member Countries agreed to collectively reduce the over-production by 1 mb/d from their current actual output, effective January 1, 2005. Agreement of 132nd Meeting is retained at the 134th [Extraordinary] Meeting of the OPEC Conference, January 30, 2005.
- 43/ 135th Meeting of the OPEC Conference, March 16, 2005. Iraq is not called upon to participate in this agreement. The President of the Conference is authorized, after consultation with fellow Heads of Delegation, to announce an additional 500,000 b/d increase until its next Meeting, if prices remain at current high levels or continue to further rise.
- 44/ 136th [Extraordinary] Meeting of the OPEC Conference, June 15, 2005. Iraq is not called upon to participate in this agreement. The President of the Conference is authorized, after consultation with fellow Heads of Delegation, to announce an additional 500,000 b/d increase until its next Meeting, if prices remain at current high levels or continue to further rise. The 137th OPEC Conference, September 20, 2005, agreed to make available to the market the spare capacity of 2 mb/d, should it be called for, for a period of three months, starting October 1, 2005. The 138th [December 12, 2005], the 139th [Extraordinary, January 31, 2006], the 140th [March 8, 2006] and the 141st [Extraordinary, June 1, 2006] Conference retained the OPEC production level as agreed on June 15, 2005.
- 45/ Consultative Meeting of the OPEC Conference, October 19–20, 2006. Data reflects interim production adjustments from OPEC excluding Iraq production in September 2006. Iraq is not called upon to participate in this agreement.
- 46/ 143rd [Extraordinary] Meeting of the OPEC Conference, December 14, 2006. Data reflects a further production adjustment to the decision taken in Doha, October 19–20, 2006. Iraq is not called upon to participate in this agreement.
- 47/ 145th Meeting of the OPEC Conference, September 11, 2007. Angola and Iraq are not called upon to participate in this agreement. Data reflect production increase of 500,000 b/d for OPEC (excluding Angola and Iraq) to achieve 27.253 mb/d.
- 48/ 146th [Extraordinary] Meeting of the OPEC Conference, December 5, 2007. Iraq is not called upon to participate in the agreement.
- 49/ 149th Meeting of the OPEC Conference, September 9–10, 2008: The Conference agreed to abide to September 2007 production allocations (adjusted to include new Members Angola and Ecuador and excluding Indonesia and Iraq), totalling to 28.8 mb/d.
- 50/ 150th [Extraordinary] Meeting of the OPEC Conference, October 24, 2008: Data reflects a production adjustment of 1.5 mb/d to achieve 27.31 mb/d. Iraq and Indonesia are not called upon to participate in the agreement.
- 51/ The 151th [Extraordinary] Meeting of the Conference, December 17, 2008, agreed to reduce OPEC production excluding Iraq production by a total of 4.2 mb/d from September levels of the actual production based on secondary sources. Iraq is not called upon to participate in the agreement.
- 52/ The 160th Meeting of the Conference, December 14, 2011, decided to maintain the total OPEC production level of 30.0 mb/d. This agreement was maintained at the 161st (June 14, 2012), the 162nd (December 12, 2012), the 163rd (May 31, 2013), the 164th (December 4, 2013), the 165th (June 11, 2014), the 166th (November 27, 2014) and — for the last time — at the 167th (June 5, 2015) Meeting of the Conference.
- 53/ The 171st Meeting of the Conference, November 30, 2016, decided to reduce its production by around 1.2 mb/d to bring its ceiling to 32.5 mb/d, effective of January 1, 2017. Agreed crude oil production levels were allocated, with the exception of Libya and Nigeria.
- 54/ The 172nd Meeting of the Conference, May 25, 2017, decided to extend its production adjustments for a further period of nine months. Furthermore, the Conference approved Equatorial Guinea's admission to the Organization with immediate effect (the table is adjusted accordingly). The 173rd Meeting of the Conference, November 30, 2017, amended the adjustment to take effect for the whole year 2018.
- 55/ The 175th Meeting of the Conference, December 6–7, 2018, decided to adjust OPEC overall production by 800,000 b/d from October 2018 levels, effective as of January 2019, for an initial period of six months, with a review in April 2019.
- 56/ The 176th Meeting of the OPEC Conference, July 1, 2019, decided to extend the production adjustments agreed at the 175th Meeting of the OPEC Conference for an additional period of nine months and to adjust the required production level for Nigeria from 1.685 mb/d to 1.774 mb/d effective June 2019.
- 57/ The 177th Meeting of the OPEC Conference, December 6, 2019, decided to support additional adjustments to the adjustment levels as agreed at the 175th Meeting of the OPEC Conference.
- 58/ The 9th and 10th OPEC and non-OPEC Ministerial Meetings, April 9/10 and 12, 2020, agreed to adjust downwards overall crude oil production from OPEC and participating non-OPEC countries by 9.7 mb/d, starting on May 1, 2020, for an initial period of two months that concludes on June 30, 2020. The 179th Meeting of the OPEC Conference, as well as the 11th OPEC and non-OPEC Ministerial Meeting, held on June 6, 2020, agreed on extending the production adjustments pertaining in May and June by one further month.
- 59/ The 12th OPEC and non-OPEC Ministerial Meeting, January 5, 2021, agreed to increase production from OPEC and participating non-OPEC countries by 500,000 b/d starting in January 2021, and adjusting the production reduction from 7.7 mb/d to 7.2 mb/d. The decision for OPEC production allocation was reconfirmed by the 13th and 14th OPEC and non-OPEC Ministerial Meeting, January 5, 2021, and March 4, 2021.

Table 1.2
OPEC Members' crude oil production allocations

(1,000 b/d)

	May 21	Jun 21	Jul 21
	60/	60/	60/
Algeria	887	898	912
Angola	1,283	1,298	1,319
Congo	273	276	281
Equatorial Guinea	107	108	110
Gabon	157	159	161
IR Iran	-	-	-
Iraq	3,905	3,954	4,016
Kuwait	2,358	2,387	2,425
Libya	-	-	-
Nigeria	1,535	1,554	1,579
Saudi Arabia	9,232	9,347	9,495
United Arab Emirates	2,659	2,692	2,735
Venezuela	-	-	-
OPEC	22,396^d	22,673^d	23,033^d

60/ The 15th OPEC and non-OPEC Ministerial Meeting, April 1, 2021, approved the adjustment of the production levels for May, June and July 2021.

SECTION **2**

Macro-economics

Table 2.1
OPEC Members' population

(million inhabitants)

	2016	2017	2018	2019	2020	change 20/19
Algeria	40.836	41.721	42.578	43.424	43.900	0.476
Angola	27.503	28.360	29.250	30.176	31.128	0.952
Congo	4.981	5.111	5.244	5.381	5.518	0.137
Equatorial Guinea	1.221	1.268	1.314	1.360	1.406	0.046
Gabon	1.980	2.025	2.053	2.080	2.108	0.028
IR Iran	80.277	81.423	82.360	83.269	84.149	0.880
Iraq	36.169	37.140	38.124	39.128	40.150	1.022
Kuwait	3.925	4.083	4.227	4.420	4.465	0.044
Libya	6.385	6.448	6.513	6.578	6.644	0.066
Nigeria	192.414	197.697	202.988	208.282	213.402	5.120
Saudi Arabia	31.788	32.552	33.414	34.218	35.013	0.795
United Arab Emirates	9.121	9.304	9.367	9.504	9.282	-0.221
Venezuela	31.028	31.431	31.828	32.220	32.375	0.155
OPEC	467.629	478.562	489.260	500.039	509.540	9.501

Table 2.2
OPEC Members' GDP at current market prices

(m \$)

	2016	2017	2018	2019	2020
Algeria	157,828	170,097	175,415	171,149	142,842
Angola	101,124	122,124	101,615	84,516	62,440
Congo	10,159	11,110	13,402	12,542	10,232
Equatorial Guinea	11,241	12,201	13,278	11,025	9,524
Gabon	14,020	14,620	17,210	16,875	15,642
IR Iran	418,977	446,501	457,587	582,521	637,112
Iraq	166,603	187,534	227,512	235,097	167,037
Kuwait	109,407	120,688	140,672	134,620	107,936
Libya	18,563	30,211	41,432	39,832	21,797
Nigeria	404,649	375,745	421,742	406,176	430,197
Saudi Arabia	644,936	688,586	786,522	792,967	700,118
United Arab Emirates	357,045	385,606	422,215	421,142	358,869
Venezuela	279,249	143,841	98,437	63,960	47,255
OPEC	2,693,800	2,708,864	2,917,039	2,972,421	2,711,001

Table 2.3
OPEC Members' real GDP growth rates PPP based weights (%)

	2016	2017	2018	2019	2020
Algeria	3.2	1.3	1.2	0.8	-6.0
Angola	-2.6	-0.1	-2.0	-0.6	-4.0
Congo	-10.7	-4.4	-6.4	-0.6	-7.8
Equatorial Guinea	-8.8	-5.7	-6.4	-5.6	-5.8
Gabon	2.1	0.5	0.8	3.9	-1.8
IR Iran	13.4	3.8	-6.0	-6.8	3.4
Iraq	15.2	-3.4	0.8	4.5	-10.9
Kuwait	2.9	-4.7	1.2	0.4	-8.1
Libya	-7.4	64.0	17.9	13.2	-45.0
Nigeria	-1.6	0.8	1.9	2.2	-1.8
Saudi Arabia	1.7	-0.7	2.4	0.3	-4.1
United Arab Emirates	3.1	2.4	1.2	1.7	-5.9
Venezuela	-17.0	-15.7	-19.6	-35.0	-25.0
OPEC	2.1	-0.2	-1.0	-1.8	-4.8

Notes:

Aggregates were compiled on the basis of 2017 GDP weights using 2017 purchasing power parities (PPP).

Table 2.4
OPEC Members' values of exports (m \$)

	2016	2017	2018	2019	2020
Algeria	33,396	37,937	44,514	38,059	21,092
Angola	28,441	35,421	41,851	32,877	20,696
Congo	4,329	5,418	8,010	7,390	5,376
Equatorial Guinea	5,751	5,122	5,068	4,099	2,856
Gabon	4,519	5,022	5,672	5,764	5,613
IR Iran	93,868	110,010	106,981	68,034	40,237
Iraq	46,830	63,604	92,831	88,903	46,811
Kuwait	52,113	61,788	79,789	73,428	46,863
Libya	9,446	17,599	27,254	25,871	6,883
Nigeria	37,301	49,492	65,357	67,481	37,984
Saudi Arabia	183,607	221,862	294,387	261,617	173,864
United Arab Emirates	360,626	384,044	392,863	389,372	335,238
Venezuela	27,614	33,887	33,602	20,677	8,236
OPEC	887,842	1,031,204	1,198,180	1,083,572	751,748

Notes:

All figures fob.

Table 2.5
OPEC Members' values of petroleum exports *(m \$)*

	2016	2017	2018	2019	2020
Algeria	18,643	22,355	26,082	22,674	13,169
Angola	26,022	32,026	37,801	32,334	18,704
Congo	3,444	4,763	7,468	7,072	3,687
Equatorial Guinea	2,447	2,461	3,150	2,644	1,765
Gabon	3,128	3,596	4,419	4,767	2,875
IR Iran	41,123	52,728	60,519	19,402	7,656
Iraq	43,684	59,730	84,218	80,027	44,287
Kuwait	40,600	48,928	64,582	52,433	35,231
Libya	9,313	15,536	25,386	24,197	5,711
Nigeria	27,295	37,983	54,513	45,106	27,730
Saudi Arabia	136,194	170,241	231,585	200,487	119,359
United Arab Emirates	40,436	50,647	57,890	52,452	32,943
Venezuela	25,942	31,497	29,810	18,335	7,960
OPEC	418,270	532,491	687,422	561,932	321,078

Table 2.6
OPEC Members' values of imports *(m \$)*

	2016	2017	2018	2019	2020
Algeria	56,086	55,609	56,184	49,572	39,674
Angola	13,041	14,463	15,798	11,041	9,603
Congo	6,788	4,753	5,543	5,654	4,280
Equatorial Guinea	3,184	2,916	3,070	2,824	2,380
Gabon	2,651	2,249	2,342	2,676	2,448
IR Iran	87,191	118,913	62,167	53,450	40,934
Iraq	44,116	48,506	56,876	72,283	40,927
Kuwait	53,090	56,293	61,566	54,940	45,793
Libya	8,667	10,556	13,786	16,543	11,580
Nigeria	46,552	49,508	73,851	93,969	71,285
Saudi Arabia	140,170	134,519	137,065	153,163	137,997
United Arab Emirates	270,442	290,783	281,536	288,398	246,886
Venezuela	17,977	13,364	13,505	7,192	8,407
OPEC	749,955	802,433	783,289	811,704	662,195

Notes:
All figures cif.

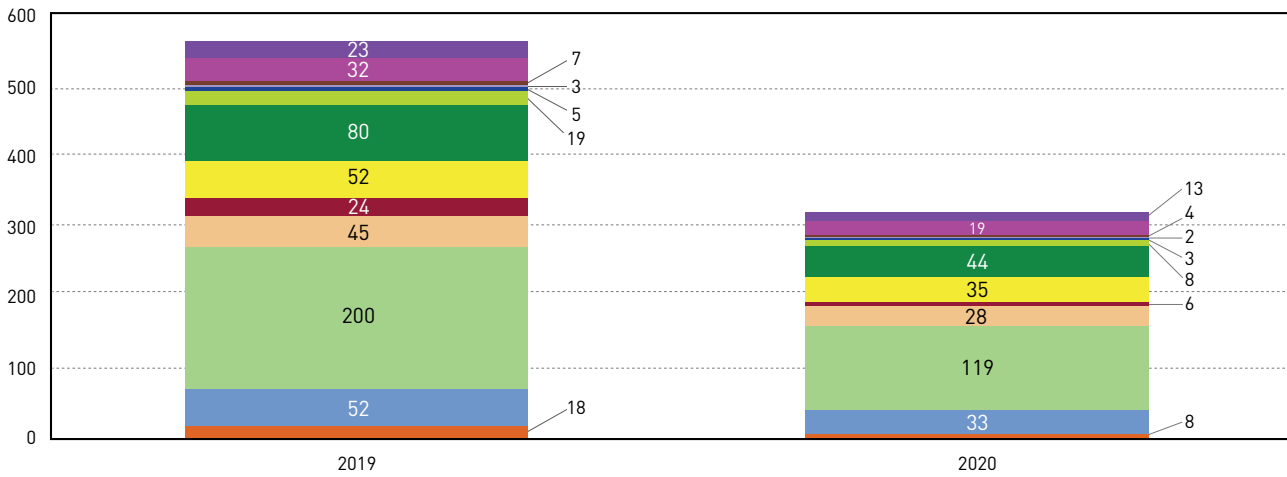
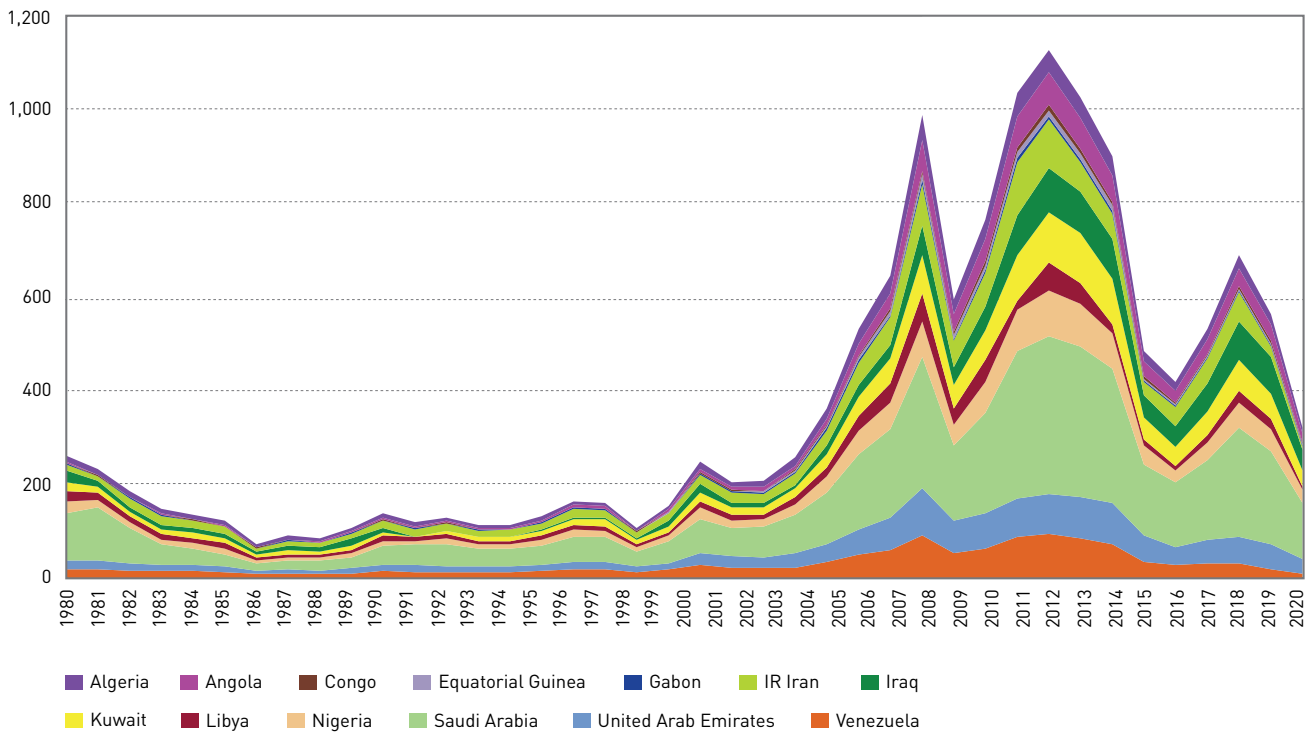
Table 2.7

Current account balances in OPEC Members*(m \$)*

	2016	2017	2018	2019	2020
Algeria	-26,032	-21,763	-15,820	-18,813	-21,129
Angola	-3,085	-633	7,403	34	-504
Congo	-3,594	-835	685	-110	-579
Equatorial Guinea	-557	-518	-733	-991	-1,135
Gabon	-1,416	-724	-619	-825	-1,738
IR Iran	16,388	15,816	16,959	3,754	-5,300
Iraq	2,158	14,841	35,270	15,763	-6,250
Kuwait	5,057	9,603	20,395	22,141	-999
Libya	-4,610	4,513	11,361	7,291	-8,409
Nigeria	2,722	10,399	5,334	-17,016	-17,074
Saudi Arabia	-23,843	10,464	71,972	46,949	-19,647
United Arab Emirates	13,206	27,474	40,493	37,357	20,983
Venezuela	-3,870	8,706	8,613	6,733	-3,717
OPEC	-27,476	77,346	201,312	102,267	-65,499

Graph 2.1
OPEC Members' values of petroleum exports

(bn \$)



SECTION **3**

Oil data: upstream

Table 3.1

World proven crude oil reserves by country

(mb)

	2016	2017	2018	2019	2020	% change 20/19
OECD Americas	44,483	51,270	54,973	54,580	55,192	1.1
Canada ¹	4,418	5,423	5,192	4,906	5,005	2.0
Chile	150	150	150	150	150	0.0
Mexico	7,142	6,537	5,807	5,333	5,498	3.1
United States	32,773	39,160	43,824	44,191	44,539	0.8
OECD Europe	12,264	12,454	13,098	13,224	12,412	-6.1
Denmark	491	439	428	441	441	0.0
Norway	7,601	7,918	8,645	8,523	7,902	-7.3
United Kingdom	2,564	2,500	2,500	2,700	2,500	-7.4
Others	1,608	1,597	1,525	1,560	1,569	0.6
OECD Asia and Pacific	2,491	2,493	2,483	2,477	2,475	-0.1
Australia	2,390	2,390	2,390	2,390	2,390	0.0
Others	101	103	93	87	85	-2.3
China	25,620	25,627	25,927	26,154	26,023	-0.5
India	4,622	4,495	4,423	4,423	4,605	4.1
Other Asia	13,548	13,583	13,415	13,577	12,841	-5.4
Brunei	1,100	1,100	1,100	1,100	1,100	0.0
Indonesia	3,230	3,310	3,170	3,150	2,480	-21.3
Malaysia	3,600	3,600	3,600	3,600	3,600	0.0
Vietnam	4,400	4,400	4,400	4,400	4,400	0.0
Others	1,218	1,173	1,145	1,327	1,261	-5.0
Latin America	329,689	329,283	330,461	331,628	330,719	-0.3
Argentina	2,185	2,162	2,017	2,389	2,483	3.9
Brazil	13,000	12,634	12,835	13,435	12,715	-5.4
Colombia	2,002	1,665	1,782	1,960	2,036	3.9
Ecuador	8,273	8,273	8,273	8,273	8,273	0.0
Venezuela	302,250	302,809	303,806	303,806	303,561	-0.1
Others	1,979	1,740	1,748	1,765	1,651	-6.5
Middle East	807,730	804,639	803,184	854,945	860,037	0.6
IR Iran	157,200	155,600	155,600	208,600	208,600	0.0
Iraq	148,766	147,223	145,019	145,019	145,019	0.0
Kuwait	101,500	101,500	101,500	101,500	101,500	0.0
Oman	5,373	5,373	5,373	5,373	5,373	0.0
Qatar	25,244	25,244	25,244	25,244	25,244	0.0
Saudi Arabia	266,208	266,260	267,026	258,600	261,600	1.2
Syrian Arab Republic	2,500	2,500	2,500	2,500	2,500	0.0
United Arab Emirates	97,800	97,800	97,800	105,000	107,000	1.9
Others	3,139	3,139	3,122	3,109	3,201	3.0
Africa	128,875	127,677	126,972	125,228	124,560	-0.5
Algeria	12,200	12,200	12,200	12,200	12,200	0.0
Angola	9,523	8,384	8,160	7,783	7,231	-7.1
Congo	2,982	2,982	2,982	1,947	1,811	-7.0
Egypt	3,384	3,325	3,325	3,075	3,075	0.0
Equatorial Guinea	1,100	1,100	1,100	1,100	1,100	0.0
Gabon	2,000	2,000	2,000	2,000	2,000	0.0
Libya	48,363	48,363	48,363	48,363	48,363	0.0
Nigeria	37,453	37,453	36,972	36,890	36,910	0.1
Sudans	5,000	5,000	5,000	5,000	5,000	0.0
Others	6,870	6,870	6,870	6,870	6,870	0.0
Russia	80,000	80,000	80,000	80,000	80,000	0.0
Other Eurasia	38,874	38,874	38,874	38,874	38,874	0.0
Azerbaijan	7,000	7,000	7,000	7,000	7,000	0.0
Belarus	198	198	198	198	198	0.0
Kazakhstan	30,000	30,000	30,000	30,000	30,000	0.0
Turkmenistan	600	600	600	600	600	0.0
Ukraine	395	395	395	395	395	0.0
Uzbekistan	594	594	594	594	594	0.0
Others	87	87	87	87	87	0.0
Other Europe	932	932	932	914	914	0.0
Total world	1,489,127	1,491,327	1,494,742	1,546,024	1,548,652	0.2
<i>of which</i>						
OPEC	1,187,345	1,183,674	1,182,528	1,232,808	1,236,895	0.3
OPEC percentage	79.7	79.4	79.1	79.7	79.9	
OECD	59,238	66,217	70,554	70,281	70,079	-0.3

Notes: Figures as at year-end.

1. Data excludes oil sands.

Table 3.2
Active rigs by country

(number of rigs)

	2016	2017	2018	2019	2020	change 20/19
OECD Americas	866	1,153	1,252	989	475	-514
Canada	209	205	141	135	91	-44
Chile	4	3	2	1	2	1
Mexico	19	15	31	49	41	-8
United States	634	930	1,078	804	341	-463
OECD Europe	80	64	72	77	52	-25
Germany	4	3	5	4	0	-4
Italy	4	4	3	5	1	-4
Netherlands	2	4	1	3	2	-1
Norway	16	16	18	17	17	0
Poland	8	6	6	6	3	-3
United Kingdom	11	5	11	11	5	-6
Others	35	26	28	31	24	-7
OECD Asia and Pacific	10	15	24	29	17	-12
Australia	9	14	22	25	14	-11
New Zealand	0	0	1	2	1	-1
Others	1	1	1	2	2	0
China¹	25	32	35	38	30	-8
India	116	116	124	109	81	-28
Other Asia	62	74	67	65	49	-16
Indonesia	16	34	24	26	26	0
Malaysia	4	7	7	12	3	-9
Pakistan	21	20	19	15	13	-2
Others	21	13	17	12	7	-5
Latin America	247	325	304	265	190	-75
Argentina	59	71	74	50	29	-21
Bolivia	5	3	3	5	2	-3
Brazil	13	14	10	14	9	-5
Colombia	19	25	30	33	14	-19
Ecuador	7	14	28	5	5	0
Trinidad & Tobago	3	5	2	3	3	0
Venezuela	138	189	151	149	124	-25
Others	3	4	6	6	4	-2
Middle East	566	535	566	532	383	-149
IR Iran	153	157	157	117	117	0
Iraq	44	54	80	77	30	-47
Kuwait	58	78	85	87	85	-2
Oman	59	55	51	53	42	-11
Qatar	10	17	9	14	8	-6
Saudi Arabia	161	111	125	115	59	-56
United Arab Emirates	79	59	57	66	40	-26
Yemen	0	0	0	1	1	0
Others	2	4	2	2	1	-1
Africa	141	118	173	173	129	-44
Algeria	52	50	50	42	22	-20
Angola	10	7	8	21	7	-14
Congo	10	10	16	4	5	1
Egypt	24	22	27	31	17	-14
Equatorial Guinea	2	2	2	1	0	-1
Gabon	0	2	4	9	5	-4
Libya	17	1	9	16	11	-5
Nigeria	9	13	32	17	49	32
Others	17	11	25	32	13	-19
Other Europe	12	12	14	14	12	-2
Romania	6	7	10	10	10	0
Others	6	5	4	4	2	-2
Total world^{1,2}	2,125	2,444	2,631	2,291	1,418	-873
<i>of which</i>						
OPEC	733	733	776	721	554	-167
<i>OPEC percentage</i>	<i>34.5</i>	<i>30.0</i>	<i>29.5</i>	<i>31.5</i>	<i>39.1</i>	
OECD	956	1,232	1,348	1,095	544	-551

Notes:

Figure as at year end.

1. Excluding onshore rigs for China.

2. Excluding Russia and Other Eurasia.

Table 3.3
Wells completed in OPEC Members

	2016	2017	2018	2019	2020	change 20/19
Algeria	292	332	277	265	160	-105
Angola	67	43	32	104	14	-90
Congo	64	64	80	15	9	-6
Equatorial Guinea	10	5	21	9	6	-3
Gabon	14	11	27	59	38	-21
IR Iran	206	216	195	117	105	-12
Iraq	131	139	160	190	171	-19
Kuwait ¹	622	555	488	379	444	65
Libya	14	5	35	115	75	-40
Nigeria	76	76	81	100	81	-19
Saudi Arabia ¹	622	594	588	580	522	-58
United Arab Emirates	271	364	399	440	396	-44
Venezuela	736	478	710	639	263	-376
OPEC	3,125	2,882	3,093	3,012	2,284	-728
Total world	52,086	65,614	72,230	67,818	46,519	-21,299

Notes:

1. Figures include share of wells completed from Neutral Zone.

Table 3.4
Daily and cumulative crude oil production in OPEC Members

(1,000 b)

Daily crude oil production

(average)

	1970	1980	1990	2000	2010	2020
Algeria	1,029.1	1,019.9	783.5	796.0	1,189.8	898.7
Angola	83.9	150.0	473.8	736.1	1,757.6	1,271.5
Congo	0.0	55.8	156.0	267.1	308.6	299.9
Equatorial Guinea	0.0	0.0	0.0	115.3	237.1	113.6
Gabon	108.8	174.5	274.4	282.8	233.2	207.4
IR Iran	3,829.0	1,467.4	3,135.3	3,661.3	3,544.0	1,985.3
Iraq	1,548.6	2,646.4	2,112.6	2,810.0	2,358.1	3,996.6
Kuwait ¹	2,989.6	1,663.7	858.6	1,996.1	2,312.1	2,438.0
Libya	3,318.0	1,831.6	1,389.1	1,347.2	1,486.6	389.3
Nigeria	1,083.1	2,058.0	1,726.7	2,053.6	2,048.3	1,493.2
Saudi Arabia ¹	3,799.1	9,900.5	6,412.5	8,094.5	8,165.6	9,213.2
United Arab Emirates	779.6	1,701.9	1,762.6	2,174.7	2,323.8	2,778.6
Venezuela	3,708.0	2,165.0	2,135.2	2,891.0	2,853.6	568.6
OPEC	22,276.8	24,834.7	21,220.3	27,225.6	28,818.5	25,654.0

Cumulative crude oil production up to and including year

(1,000 b)

	1970	1980	1990	2000	2010	2020
Algeria	2,569,469	6,404,548	8,974,340	11,837,030	16,079,015	20,126,810
Angola	76,423	623,359	1,681,478	3,972,081	8,818,353	14,632,186
Congo	5,406	83,269	503,937	1,277,335	2,185,806	3,173,024
Equatorial Guinea	0	0	0	125,946	1,080,047	1,704,524
Gabon	195,732	870,019	1,507,592	2,691,226	3,586,461	4,369,926
IR Iran	12,357,977	29,969,896	38,410,483	51,367,070	65,152,744	77,051,255
Iraq	7,476,078	15,826,156	22,246,208	26,918,241	34,596,929	48,218,807
Kuwait ¹	13,028,906	21,993,164	25,857,094	32,092,887	40,548,105	50,702,426
Libya	5,476,384	12,810,843	16,929,582	21,993,272	27,594,678	30,317,094
Nigeria	1,138,896	8,389,456	13,656,562	20,572,881	28,198,355	34,420,268
Saudi Arabia ¹	13,283,848	42,306,785	61,814,608	91,266,532	122,387,773	158,323,836
United Arab Emirates	1,160,471	7,164,231	11,921,927	19,785,670	28,265,801	38,748,431
Venezuela	26,301,976	36,046,663	42,528,079	51,772,971	62,363,887	70,147,603
OPEC	83,071,565	182,488,388	246,031,889	335,673,140	440,857,955	551,936,190

Notes:

1. Figures include share of production from Neutral Zone.

Table 3.5
World crude oil production by country

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
OECD Americas	12,194.3	12,535.8	14,052.8	15,274.3	14,143.0	-7.4
Canada	1,185.5	1,212.9	1,272.8	1,303.8	1,198.8	-8.1
Chile	3.7	3.0	3.0	2.8	1.5	-47.2
Mexico	2,153.5	1,948.4	1,813.0	1,678.1	1,659.7	-1.1
United States	8,851.6	9,371.4	10,964.1	12,289.5	11,283.0	-8.2
OECD Europe	2,927.6	2,874.8	2,862.2	2,774.7	2,969.3	7.0
Denmark	140.1	136.6	114.9	101.7	71.0	-30.2
Norway	1,614.6	1,588.3	1,486.8	1,408.2	1,690.7	20.1
United Kingdom	914.8	891.2	984.9	1,007.2	930.5	-7.6
Others	258.1	258.7	275.7	257.6	277.1	7.6
OECD Asia and Pacific	328.6	298.4	311.1	388.6	376.5	-3.1
Australia	289.8	263.0	283.7	360.7	351.3	-2.6
Others	38.8	35.4	27.4	27.9	25.2	-9.9
China	3,986.1	3,821.5	3,787.0	3,825.0	3,889.0	1.7
India	720.8	719.9	695.6	654.6	615.7	-5.9
Other Asia	2,200.9	2,094.0	1,997.1	1,926.8	1,768.6	-8.2
Brunei	109.1	100.6	99.5	109.6	100.5	-8.3
Indonesia	737.9	710.2	684.6	664.0	630.8	-5.0
Malaysia	656.6	648.0	650.9	608.7	539.6	-11.4
Thailand	163.2	141.1	129.1	125.9	117.0	-7.1
Vietnam	303.8	272.0	240.3	221.6	193.7	-12.6
Others	230.2	222.0	192.6	196.8	187.0	-5.0
Latin America	4,694.9	4,730.4	4,698.6	4,952.8	4,971.0	0.4
Argentina	510.6	479.5	489.4	508.6	480.3	-5.6
Brazil	2,510.0	2,621.8	2,586.5	2,787.7	2,939.8	5.5
Colombia	883.3	853.6	865.2	885.9	781.0	-11.8
Ecuador	549.0	531.3	517.2	530.8	479.5	-9.7
Guyana	0.0	0.0	0.0	3.1	73.5	2,302.1
Others	242.1	244.1	240.2	236.7	216.9	-8.4
Middle East	1,810.4	1,731.4	1,722.8	1,689.1	1,625.1	-3.8
Bahrain	205.0	194.9	193.2	194.4	195.7	0.7
Oman	908.7	883.9	870.0	840.6	761.9	-9.4
Qatar	651.5	600.0	600.6	595.4	603.1	1.3
Syrian Arab Republic	21.0	20.7	20.6	21.7	22.4	3.4
Yemen	24.2	31.8	38.4	37.0	42.0	13.5
Africa	1,230.2	1,242.0	1,267.5	1,252.9	1,169.2	-6.7
Cameroon	91.6	75.6	69.0	71.5	73.5	2.8
Chad	128.5	120.6	128.0	118.0	106.2	-10.0
Egypt	544.4	530.9	538.8	510.6	472.7	-7.4
Ghana	91.8	163.0	189.9	199.2	183.3	-8.0
Sudans	250.2	221.6	223.3	237.3	230.4	-2.9
Others	123.7	130.4	118.4	116.3	103.1	-11.3
Russia	10,292.2	10,207.2	10,383.2	10,479.5	9,459.8	-9.7
Other Eurasia	2,389.4	2,478.1	2,559.9	2,533.2	2,342.3	-7.5
Azerbaijan	769.8	729.2	725.0	678.5	611.3	-9.9
Kazakhstan	1,320.3	1,468.9	1,564.5	1,587.3	1,470.0	-7.4
Others	299.3	280.1	270.4	267.5	261.1	-2.4
Other Europe	127.2	122.2	119.2	116.0	109.8	-5.3
Total non-OPEC	42,902.8	42,855.6	44,457.0	45,867.5	43,439.3	-5.3
OPEC	32,464.4	31,639.2	31,238.1	29,375.3	25,654.0	-12.7
Algeria	1,146.3	1,058.7	1,040.1	1,023.2	898.7	-12.2
Angola	1,721.6	1,632.2	1,473.3	1,372.8	1,271.5	-7.4
Congo	225.0	262.7	323.5	329.2	299.9	-8.9
Equatorial Guinea	160.1	128.6	120.2	109.6	113.6	3.6
Gabon	220.7	210.1	193.4	217.8	207.4	-4.8
IR Iran	3,651.3	3,867.3	3,553.0	2,356.2	1,985.3	-15.7
Iraq	4,647.8	4,468.7	4,410.0	4,576.1	3,996.6	-12.7
Kuwait¹	2,954.3	2,704.2	2,736.6	2,677.7	2,438.0	-9.0
Libya	389.1	810.5	950.7	1,096.6	389.3	-64.5
Nigeria	1,427.3	1,535.6	1,601.6	1,737.4	1,493.2	-14.1
Saudi Arabia¹	10,460.2	9,959.2	10,317.3	9,808.2	9,213.2	-6.1
UAE	3,088.3	2,966.5	3,008.3	3,057.9	2,778.6	-9.1
Venezuela	2,372.5	2,034.8	1,510.2	1,012.6	568.6	-43.9
Total world	75,367.2	74,494.8	75,695.1	75,242.9	69,093.3	-8.2
<i>of which</i>						
<i>OPEC percentage</i>	43.1	42.5	41.3	39.0	37.1	
OECD	15,450.6	15,709.0	17,226.1	18,437.5	17,488.8	-5.1

Notes:

OPEC Member Countries are not included in the regional totals.

1. Figures include share of production from Neutral Zone.

Table 3.6
Non-OPEC oil supply and OPEC NGLs

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
OECD Americas	20,597.6	21,511.9	24,049.6	25,814.8	24,684.4	-4.4
Canada	4,499.0	4,850.2	5,278.5	5,412.9	5,166.8	-4.5
Chile	4.9	6.0	9.1	11.3	9.2	-19.2
Mexico	2,464.5	2,231.9	2,076.6	1,923.7	1,915.7	-0.4
United States	13,629.1	14,423.8	16,685.4	18,466.8	17,592.7	-4.7
OECD Europe	3,853.2	3,826.7	3,842.0	3,709.4	3,898.8	5.1
Denmark	145.0	143.1	121.0	107.4	78.0	-27.4
Norway	1,996.8	1,969.1	1,851.5	1,736.0	2,000.9	15.3
United Kingdom	1,040.1	1,026.1	1,123.7	1,146.5	1,066.2	-7.0
Others	671.4	688.4	745.8	719.5	753.7	4.8
OECD Asia and Pacific	425.3	391.8	409.8	524.4	532.7	1.6
Australia	349.7	317.3	341.4	456.5	461.8	1.2
Others	75.6	74.4	68.4	67.9	70.8	4.4
China	4,090.1	3,969.1	3,976.6	4,044.5	4,115.8	1.8
India	852.5	860.3	859.3	822.2	767.1	-6.7
Other Asia	2,882.1	2,802.8	2,723.8	2,688.5	2,507.7	-6.7
Brunei	120.9	113.1	111.5	121.4	110.3	-9.2
Indonesia	927.1	891.0	869.2	882.2	871.8	-1.2
Malaysia	731.0	725.5	735.0	694.1	622.3	-10.4
Thailand	514.0	521.1	517.3	514.3	464.7	-9.6
Vietnam	333.8	302.0	269.3	250.6	222.7	-11.1
Others	255.2	250.0	221.6	225.8	216.0	-4.4
Latin America	5,662.7	5,721.2	5,791.8	6,087.5	6,042.6	-0.7
Argentina	691.6	669.5	688.4	708.1	662.9	-6.4
Brazil	3,122.0	3,251.9	3,316.1	3,556.6	3,673.3	3.3
Colombia	908.3	878.6	891.1	910.9	804.0	-11.7
Ecuador	557.9	540.6	526.0	539.2	487.5	-9.6
Guyana	0.0	0.0	0.0	3.1	73.5	2,302.1
Others	383.0	380.6	370.1	369.7	341.6	-7.6
Middle East	3,267.5	3,139.0	3,206.5	3,176.5	3,176.9	0.0
Bahrain	225.0	208.4	208.4	217.4	218.0	0.3
Oman	1,004.2	970.6	978.5	970.8	950.6	-2.1
Qatar	1,985.1	1,896.9	1,946.6	1,916.6	1,929.9	0.7
Syrian Arab Republic	29.0	27.7	27.6	27.7	28.4	2.7
Yemen	24.2	35.4	45.4	44.0	50.0	13.6
Africa	1,498.9	1,497.2	1,507.8	1,507.1	1,413.6	-6.2
Cameroon	91.6	75.6	69.0	71.5	73.5	2.8
Chad	128.5	120.6	128.0	118.0	106.2	-10.0
Egypt	687.5	661.5	672.3	654.7	618.7	-5.5
Ghana	91.8	163.0	189.9	199.4	185.3	-7.1
South Africa	120.0	118.8	101.3	103.7	91.7	-11.6
Sudans	250.2	221.6	223.3	237.3	230.4	-2.9
Others	129.3	136.0	124.0	122.3	107.8	-11.9
Russia	11,229.4	11,326.4	11,515.5	11,611.8	10,591.9	-8.8
Other Eurasia	2,896.8	3,009.0	3,081.0	3,072.6	2,914.9	-5.1
Azerbaijan	849.1	803.9	805.0	788.8	730.0	-7.5
Kazakhstan	1,665.1	1,842.4	1,925.1	1,928.1	1,825.2	-5.3
Others	382.5	362.7	350.9	355.8	359.7	1.1
Other Europe	131.2	126.2	123.2	119.9	112.8	-5.9
Total non-OPEC	57,387.3	58,181.5	61,086.9	63,179.1	60,759.1	-3.8
Processing gains	2,265.0	2,304.0	2,343.0	2,363.0	2,150.4	-9.0
Non-OPEC supply	59,652.3	60,485.5	63,429.9	65,542.1	62,909.5	-4.0
OPEC NGL	5,011.4	5,068.0	5,194.7	5,121.9	4,944.6	-3.5
OPEC non-conventional (NCF)	86.2	98.0	98.7	94.9	103.7	9.3
OPEC (NGL+NCF)	5,097.7	5,166.0	5,293.4	5,216.8	5,048.3	-3.2
Non-OPEC & OPEC (NGL+NCF)	64,749.9	65,651.5	68,723.3	70,758.9	67,957.9	-4.0
<i>of which</i>						
OECD	24,876.1	25,730.4	28,301.4	30,048.5	29,115.8	-3.1

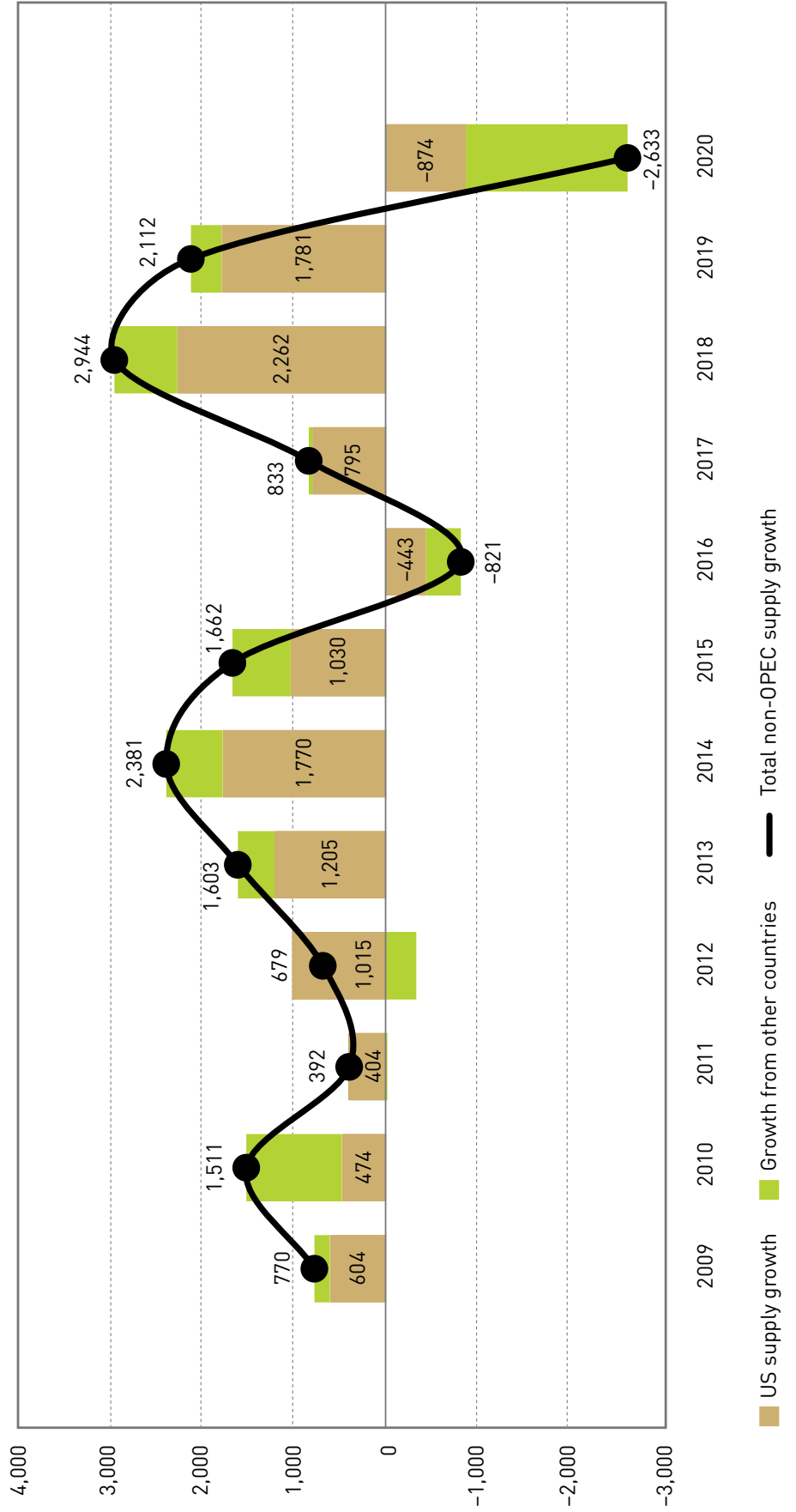
Table 3.7
World biofuel production

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
OECD Americas	1,134.2	1,172.9	1,203.5	1,182.7	1,061.2	-10.3
Canada	36.0	38.0	35.0	41.0	37.0	-9.8
United States	1,098.2	1,134.9	1,168.5	1,141.7	1,024.2	-10.3
OECD Europe	275.3	289.8	311.9	311.5	296.4	-4.8
France	56.0	55.0	61.0	55.0	55.8	1.5
Germany	78.0	78.0	81.0	85.0	77.0	-9.4
Italy	7.0	14.0	15.0	15.0	11.0	-26.7
Netherlands	10.9	12.4	12.8	14.5	21.0	44.8
Poland	18.9	21.3	22.0	24.0	22.0	-8.3
Spain	24.5	27.5	28.8	30.6	26.7	-12.8
United Kingdom	16.0	18.0	18.0	13.0	13.0	0.0
Others	64.0	63.5	73.2	74.4	69.9	-6.1
OECD Asia and Pacific	5.0	4.0	4.0	5.0	4.0	-20.0
China	52.0	65.0	58.0	66.0	79.0	19.7
India	17.0	16.0	29.0	35.0	32.0	-8.6
Other Asia	122.0	131.0	157.0	202.0	235.0	16.3
Indonesia	57.0	55.0	71.0	110.0	138.0	25.5
Malaysia	12.0	16.0	21.0	24.0	23.0	-4.2
Thailand	42.0	49.0	53.0	56.0	62.0	10.7
Others	11.0	11.0	12.0	12.0	12.0	0.0
Latin America	608.2	619.0	719.2	758.7	715.5	-5.7
Argentina	67.0	75.0	67.0	61.0	54.0	-11.5
Brazil	515.2	519.0	622.2	665.7	633.5	-4.8
Colombia	17.0	17.0	18.0	18.0	16.0	-11.1
Others	9.0	8.0	12.0	14.0	12.0	-14.3
Others	6.0	6.0	6.0	7.0	6.0	-14.3
Total world	2,219.7	2,303.7	2,488.6	2,567.9	2,429.2	-5.4
<i>of which</i>						
OECD	1,414.5	1,466.7	1,519.4	1,499.2	1,361.7	-9.2

Graph 3.1
The importance of the United States for non-OPEC supply growth in recent years

(1,000 b/d)



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SECTION 4

Oil data: downstream

Table 4.1
Refinery capacity in OPEC Members by company and location

(1,000 b/cd)

	Location	2016	2017	2018	2019	2020
Algeria		651	651	657	657	677
Sonatrach	Skikda	355	355	355	355	355
	Skikda (condensate)	122	122	122	122	122
	Arzew	81	81	87	87	87
	Alger	58	58	58	58	78
	Hassi Messaoud	22	22	22	22	22
	Adrar	13	13	13	13	13
Angola		80	80	80	80	80
Fina Petroleos de Angola	Luanda	65	65	65	65	65
Sonangol	Malongo	15	15	15	15	15
Congo		21	21	21	21	21
Société Nationale des Pétroles du Congo	Pointe Noire	21	21	21	21	21
Equatorial Guinea¹		na	na	na	na	na
Gabon		25	25	25	25	25
Total and Shell	Port Gentil	25	25	25	25	25
IR Iran		1,901	1,901	2,141	2,201	2,201
NIOC	Abadan	399	399	399	399	399
	Isfahan	375	375	375	375	375
	Bandar Abbas	284	284	284	344	344
	Tehran	245	245	245	245	245
	Arak	242	242	242	242	242
	Tabriz	110	110	110	110	110
	Shiraz	56	56	56	56	56
	Kermanshah	22	22	22	22	22
	Lavan	48	48	48	48	48
	Bandar Abbas	120	120	240	240	240
	Qeshm	na	na	120	120	120
Iraq		900	594	726	813	828
INOC	Baiji	310	na	23	38	53
	Basrah	210	210	210	280	280
	Daura	140	140	140	140	140
	Kirkuk	30	30	30	30	30
	Sainia	30	30	30	30	30
	Najaf	30	30	30	30	30
	Samawa	30	30	30	30	30
	Nasiria	30	30	30	30	30
	Missan	30	30	30	30	30
	Diwania	20	20	20	20	20
	Haditha	16	16	16	16	16
	Qaiarah	14	14	14	14	14
	Kask	10	na	5	7	7
	Kar	na	10	80	80	80
	Bazyan	na	4	38	38	38
Kuwait		936	786	736	736	800
KNPC	Mina Al-Ahmadi	466	466	466	466	346
	Mina Abdullah	270	270	270	270	454
	Shuaiba	200	50	na	na	na

Table 4.1

Refinery capacity in OPEC Members by company and location

(1,000 b/cd)

	Location	2016	2017	2018	2019	2020
Libya		634	634	634	634	634
NOC	Ras Lanuf	220	220	220	220	220
	Zawia	120	120	120	120	120
	Tobruk	20	20	20	20	20
	Marsa El-Brega	10	10	10	10	10
	Sarir	10	10	10	10	10
	Zueitina (condensate)	68	68	68	68	68
	Briga (condensate)	155	155	155	155	155
	Mellita (condensate)	31	31	31	31	31
Nigeria		446	446	446	446	461
PHRC	Port Harcourt New	150	150	150	150	150
WRPC	Warri	125	125	125	125	125
KRPC	Kaduna	110	110	110	110	110
PHRC	Port Harcourt	60	60	60	60	60
NDPR	Rivers State	1	1	1	1	1
Niger Delta Refining	Ogbele	na	na	na	na	10
Waltersmith Petroman Oil Ltd	Ibigwe	na	na	na	na	5
Saudi Arabia		2,934	2,921	2,856	2,896	2,927
Saudi Aramco	Ras Tanura	550	550	550	550	550
	Yanbu	78	65	na	na	na
	Riyadh	na	na	na	na	na
	Jeddah	na	na	na	na	na
Saudi Aramco & Mobil	Samref	400	400	400	400	400
Saudi Aramco & Petrobra	Rabigh	400	400	400	400	400
Saudi Aramco & Total	Satorp	405	405	405	440	460
Saudi Aramco	Yasref	430	430	430	430	430
Saudi Aramco & Shell	Sasref	300	300	300	305	305
United Arab Emirates		1,122	1,122	1,122	1,122	1,272
ADNOC	Al-Ruwais (East and West)	817	817	817	817	817
Emirate Oil	Jebel Ali	140	140	140	140	210
ADNOC	Umm Al-Narr	85	85	85	85	85
Metro Oil	Fujairah	80	80	80	80	80
Ecomar Energy	Fujairah	na	na	na	na	80
Venezuela		2,276	2,276	2,276	2,276	2,276
PDVSA	Amuay	645	645	645	645	645
	Cardon	310	310	310	310	310
	Puerto La Cruz	187	187	187	187	187
	El Palito	140	140	140	140	140
	Caripito	na	na	na	na	na
	San Lorenzo	na	na	na	na	na
	San Roque	5	5	5	5	5
	Bajo Grande	16	16	16	16	16
	Moron	na	na	na	na	na
	Tucupita	na	na	na	na	na
	Barinas	na	na	na	na	na
	Petropiar ²	248	248	248	248	248
	Petromonagas ²	158	158	158	158	158
	Petrocedeno ²	284	284	284	284	284
	Petrozuata ²	160	160	160	160	160
	Anzoátegui ²	122	122	122	122	122
OPEC		11,926	11,457	11,720	11,907	12,202

Notes:

All figures refer to the designated or nameplate refining capacity.

1. Equatorial Guinea does not have refining capacities.

2. Upgrader refinery capacity.

Table 4.2
World refinery capacity by country

(1,000 b/cd)

	2016	2017	2018	2019	2020	change 20/19
OECD Americas	22,297	22,349	22,419	22,201	21,538	-663
Canada	1,934	1,966	1,972	2,046	2,046	0
Chile	220	220	220	220	220	0
Mexico	1,522	1,522	1,522	1,522	1,522	0
United States ¹	18,621	18,641	18,705	18,413	17,750	-663
OECD Europe	13,488	13,178	12,966	13,393	13,328	-65
Belgium	776	776	776	776	776	0
France	1,406	1,335	1,252	1,252	1,252	0
Germany	2,051	2,051	2,051	2,051	2,051	0
Italy	1,900	1,900	1,900	1,900	1,900	0
Netherlands	1,376	1,376	1,376	1,376	1,376	0
Poland	581	581	581	581	581	0
Spain	1,562	1,562	1,562	1,562	1,562	0
Turkey	596	596	596	784	784	0
United Kingdom	1,227	1,227	1,233	1,238	1,173	-65
Others	2,012	1,773	1,638	1,872	1,872	0
OECD Asia and Pacific	7,691	7,892	7,970	7,970	7,855	-115
Australia	452	455	462	462	462	0
Japan	3,600	3,526	3,597	3,597	3,482	-115
New Zealand	136	136	136	136	136	0
South Korea ¹	3,246	3,518	3,518	3,518	3,518	0
Others	257	257	257	257	257	0
China	14,377	14,609	15,257	16,059	16,174	115
India	4,620	4,706	4,752	4,796	4,796	0
Other Asia	7,209	7,605	7,603	7,767	7,881	114
Indonesia	1,251	1,257	1,272	1,272	1,272	0
Thailand	1,235	1,235	1,235	1,235	1,250	16
Singapore	1,684	1,684	1,684	1,684	1,684	0
Malaysia	618	625	625	925	925	0
Philippines	276	276	276	276	276	0
Pakistan	389	368	368	368	368	0
Vietnam	163	167	367	367	367	0
Others	1,593	1,993	1,776	1,641	1,739	98
Latin America	6,413	6,449	6,399	6,339	6,395	57
Argentina	657	631	631	631	661	30
Brazil	2,289	2,289	2,289	2,289	2,289	0
Colombia	421	415	415	415	415	0
Ecuador	191	188	188	188	188	0
Venezuela²	2,276	2,276	2,276	2,276	2,276	0
Others	580	651	600	541	567	27
Middle East	8,814	8,483	8,671	8,812	9,080	268
IR Iran¹	1,901	1,901	2,141	2,201	2,201	0
Iraq	900	594	726	813	828	15
Kuwait	936	786	736	736	800	64
Qatar¹	429	430	430	430	430	0
Saudi Arabia¹	2,934	2,921	2,856	2,896	2,927	31
United Arab Emirates¹	1,122	1,122	1,122	1,122	1,272	150
Others	592	729	660	614	622	8
Africa	3,337	3,400	3,369	3,452	3,514	62
Algeria¹	651	651	657	657	677	20
Angola	80	80	80	80	80	0
Congo	21	21	21	21	21	0
Egypt	733	733	733	833	833	0
Gabon	25	25	25	25	25	0
Libya	634	634	634	634	634	0
Nigeria	446	446	446	446	461	15
South Africa	520	520	520	520	520	0
Others	228	290	254	236	263	27
Russia	6,583	6,587	6,870	7,030	7,030	0
Other Eurasia	2,157	2,455	2,440	2,388	2,392	5
Azerbaijan	120	120	120	120	120	0
Belarus	460	498	505	505	505	0
Kazakhstan	350	350	424	435	435	0
Turkmenistan	237	237	237	237	237	0
Ukraine	240	240	240	240	240	0
Others	750	1,010	913	850	855	5
Other Europe	1,169	1,296	1,232	1,152	1,114	-38
Bulgaria	195	195	195	195	195	0
Croatia	134	134	134	134	90	-44
Romania	256	256	256	256	256	0
Others	584	711	647	567	573	6
Total world	98,156	99,008	99,947	101,357	101,096	-261
<i>of which</i>						
OPEC	11,926	11,457	11,720	11,907	12,202	295
OPEC percentage	12.1	11.6	11.7	11.7	12.1	
OECD	43,476	43,419	43,355	43,563	42,720	-843

Notes:

All figures refer to the designated or nameplate refining capacity.

1. Includes condensate splitters.

2. Includes upgrader capacity.

Table 4.3
World refinery throughput by country

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
OECD Americas	19,561	19,809	20,060	20,092	17,620	-12.3
Canada	1,821	1,861	1,847	2,193	2,052	-6.4
Chile	201	225	232	252	205	-18.8
Mexico	1,026	839	666	671	643	-4.2
United States	16,513	16,884	17,315	16,976	14,720	-13.3
OECD Europe	12,847	13,162	13,061	12,943	11,371	-12.1
Belgium	677	713	689	712	553	-22.3
France	1,247	1,257	1,187	1,089	784	-28.0
Germany	1,947	1,941	1,959	1,937	1,847	-4.6
Italy	1,511	1,548	1,490	1,467	1,228	-16.3
Netherlands	1,226	1,226	1,235	1,261	1,149	-8.9
Poland	548	545	551	583	547	-6.2
Spain	1,295	1,321	1,358	1,315	1,117	-15.1
Turkey	569	607	546	720	681	-5.4
United Kingdom	1,163	1,160	1,165	1,215	990	-18.5
Others	2,664	2,844	2,880	2,644	2,475	-6.4
OECD Asia and Pacific	7,368	7,392	7,378	7,418	6,502	-12.4
Australia	466	452	517	500	416	-16.8
Japan	3,479	3,395	3,273	3,233	2,640	-18.3
New Zealand	106	107	103	109	96	-11.3
South Korea	3,103	3,215	3,248	3,334	3,109	-6.8
Others	213	223	238	242	241	-0.5
China	10,774	11,354	12,033	13,015	13,484	3.6
India	4,741	4,790	4,891	5,043	4,421	-12.3
Other Asia	5,515	5,544	5,764	5,501	5,092	-7.4
Indonesia	877	892	1,050	1,010	962	-4.8
Thailand	1,045	1,082	1,119	1,015	998	-1.6
Singapore	1,240	1,265	1,181	1,175	1,090	-7.2
Malaysia	586	516	507	587	520	-11.5
Philippines	216	211	237	168	114	-32.3
Pakistan	258	286	276	229	154	-32.9
Vietnam	147	124	181	318	294	-7.4
Others	1,145	1,169	1,213	999	961	-3.8
Latin America	4,294	4,117	3,971	3,886	3,141	-19.2
Argentina	481	492	467	473	437	-7.6
Brazil	1,800	1,677	1,650	1,678	1,717	2.3
Colombia	337	346	345	354	266	-25.0
Ecuador	151	156	170	143	119	-16.8
Venezuela	1,035	956	842	818	345	-57.8
Others	491	490	496	420	257	-38.8
Middle East	7,272	7,488	7,590	7,385	6,548	-11.3
IR Iran	1,646	1,689	1,705	1,718	1,587	-7.6
Iraq	448	536	609	639	543	-15.0
Kuwait	826	679	681	660	572	-13.4
Qatar	280	379	368	365	305	-16.4
Saudi Arabia	2,459	2,601	2,642	2,484	2,173	-12.5
United Arab Emirates	1,100	1,091	1,065	1,037	936	-9.7
Others	513	512	519	482	432	-10.4
Africa	1,968	2,047	2,082	2,024	1,919	-5.2
Algeria	624	630	644	645	639	-0.9
Angola	44	54	55	54	47	-13.7
Congo	16	17	18	17	17	-4.8
Egypt	502	506	517	559	600	7.3
Gabon	19	16	16	14	17	22.3
Libya	83	99	98	83	86	2.9
Nigeria	52	64	38	9	1	-89.0
South Africa	461	494	528	493	389	-21.0
Others	167	167	169	150	124	-17.2
Russia	5,578	5,592	5,720	5,701	5,387	-5.5
Other Eurasia	1,568	1,557	1,683	1,653	1,494	-9.6
Azerbaijan	114	113	116	130	123	-5.2
Belarus	375	367	368	360	328	-9.1
Kazakhstan	316	302	411	388	315	-18.9
Turkmenistan	178	178	178	181	172	-5.0
Ukraine	61	73	80	81	77	-5.7
Others	525	524	530	513	480	-6.4
Other Europe	1,149	1,160	1,158	1,149	1,018	-11.5
Bulgaria	124	135	117	136	98	-27.5
Croatia	77	81	81	54	40	-26.0
Romania	234	231	237	249	213	-14.3
Others	714	713	722	711	666	-6.3
Total world	82,635	84,011	85,391	85,811	77,996	-9.1
<i>of which</i>						
OPEC	8,351	8,432	8,412	8,178	6,962	-14.9
<i>OPEC percentage</i>	<i>10.1</i>	<i>10.0</i>	<i>9.9</i>	<i>9.5</i>	<i>8.9</i>	
OECD	39,776	40,363	40,500	40,454	35,493	-12.3

Notes:

Includes throughput of crude oil, NGLs, and other hydrocarbons, as well as upgrader intake in some countries.

Table 4.4
Output of petroleum products in OPEC Members

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
Algeria	621	609	621	660	614	-6.8
Gasoline	61	60	73	83	67	-19.4
Kerosene	35	36	32	33	22	-33.4
Distillates	176	169	198	216	205	-5.0
Residuals	124	117	106	110	112	2.0
Others	225	227	211	217	208	-4.2
Angola	45	55	55	55	44	-19.3
Gasoline	1	1	1	1	0	-70.4
Kerosene	9	12	9	9	6	-34.1
Distillates	12	15	15	15	11	-23.4
Residuals	12	15	17	18	17	-7.0
Others	10	13	13	12	10	-18.3
Congo	16	16	16	16	16	-3.6
Gasoline	5	5	5	5	5	-4.2
Kerosene	2	2	2	2	1	-12.0
Distillates	3	3	3	3	3	-4.7
Residuals	5	6	6	6	6	-0.2
Others	1	1	1	1	1	-3.6
Equatorial Guinea	na	na	na	na	na	na
Gabon	19	14	13	11	16	39.4
Gasoline	2	2	2	2	1	-25.9
Kerosene	1	1	1	1	1	150.1
Distillates	6	5	5	4	5	32.1
Residuals	8	6	5	5	7	46.6
Others	1	1	1	1	2	82.7
IR Iran	1,618	1,680	1,691	1,705	1,577	-7.5
Gasoline	379	394	398	407	383	-5.9
Kerosene	114	119	122	119	67	-44.2
Distillates	489	545	551	550	521	-5.3
Residuals	403	384	387	385	373	-3.1
Others	232	238	233	243	233	-4.2
Iraq	449	539	718	747	587	-21.4
Gasoline	49	63	84	95	48	-49.8
Kerosene	34	43	47	49	38	-23.7
Distillates	67	91	107	118	102	-13.2
Residuals	221	294	314	329	279	-15.1
Others	78	47	166	156	121	-22.8
Kuwait	857	883	891	886	780	-12.0
Gasoline	56	36	36	61	51	-16.3
Kerosene	156	143	143	136	115	-15.8
Distillates	194	170	171	168	181	7.5
Residuals	184	153	154	147	73	-50.3
Others	267	381	387	374	361	-3.6

Table 4.4
Output of petroleum products in OPEC Members

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
Libya	80	93	94	76	80	5.5
Gasoline	9	8	5	3	3	11.7
Kerosene	9	9	6	4	4	3.8
Distillates	20	19	14	10	11	12.0
Residuals	23	22	15	10	11	10.7
Others	20	35	54	49	51	2.8
Nigeria	48	59	33	8	1	-88.6
Gasoline	14	20	9	2	0	-100.0
Kerosene	7	10	6	1	0	-97.7
Distillates	12	14	7	2	0	-78.4
Residuals	6	11	10	2	0	-92.5
Others	8	4	1	0	0	36.5
Saudi Arabia	2,511	2,630	2,817	2,586	2,177	-15.8
Gasoline	491	510	545	548	454	-17.1
Kerosene	217	228	262	232	145	-37.5
Distillates	934	988	1,073	1,057	985	-6.9
Residuals	409	426	455	424	345	-18.6
Others	460	478	481	325	248	-23.6
United Arab Emirates	1,089	1,043	1,027	1,005	925	-8.0
Gasoline	132	98	98	96	90	-6.2
Kerosene	341	287	289	283	244	-13.6
Distillates	220	229	229	227	208	-8.1
Residuals	33	49	47	45	41	-9.1
Others	363	379	364	354	341	-3.8
Venezuela	1,050	976	804	743	339	-54.4
Gasoline	221	241	200	186	57	-69.2
Kerosene	42	34	26	23	7	-67.6
Distillates	182	156	122	115	41	-63.9
Residuals	291	296	250	238	123	-48.1
Others	314	250	207	182	109	-39.9
OPEC	8,401	8,596	8,781	8,499	7,157	-15.8
Gasoline	1,438	1,453	1,468	1,501	1,176	-21.6
Kerosene	970	921	947	894	652	-27.1
Distillates	2,316	2,404	2,495	2,485	2,276	-8.4
Residuals	1,725	1,785	1,771	1,722	1,393	-19.1
Others	1,988	2,061	2,125	1,920	1,691	-11.9

Notes:

Data may include products from GTLs and condensate units.

Table 4.5
World output of petroleum products by country

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
OECD Americas	23,229	23,368	23,477	23,538	20,369	-13.5
Canada	1,888	2,009	1,889	2,196	2,044	-6.9
Chile	216	216	219	244	193	-20.7
Mexico	1,046	845	677	660	640	-2.9
United States	20,079	20,298	20,693	20,439	17,492	-14.4
OECD Europe	13,861	14,317	14,289	14,204	12,518	-11.9
Belgium	704	732	702	734	580	-21.0
France	1,283	1,304	1,232	1,120	807	-27.9
Germany	2,204	2,158	2,064	2,077	1,980	-4.7
Italy	1,571	1,607	1,548	1,522	1,272	-16.5
Netherlands	1,283	1,282	1,302	1,329	1,185	-10.8
Poland	559	554	592	600	565	-5.8
Spain	1,346	1,361	1,398	1,357	1,153	-15.0
Turkey	619	658	590	772	734	-5.0
United Kingdom	1,283	1,290	1,255	1,262	1,025	-18.8
Others	3,009	3,371	3,605	3,432	3,217	-6.2
OECD Asia and Pacific	7,567	7,658	7,639	7,630	6,706	-12.1
Australia	473	462	520	507	425	-16.2
Japan	3,546	3,467	3,290	3,277	2,733	-16.6
New Zealand	125	126	126	126	96	-23.2
South Korea	3,122	3,302	3,388	3,396	3,138	-7.6
Others	301	300	316	324	314	-3.1
China	10,449	11,059	11,608	12,501	12,982	3.8
India	5,236	5,268	5,371	5,545	4,877	-12.0
Other Asia	7,392	7,496	7,660	7,569	7,179	-5.1
Indonesia	889	908	1,008	970	994	2.4
Thailand	1,206	1,235	1,257	1,143	1,123	-1.8
Singapore	1,297	1,322	1,242	1,236	1,150	-7.0
Malaysia	512	487	477	544	489	-10.1
Philippines	207	202	228	159	113	-29.2
Pakistan	259	290	288	217	151	-30.6
Vietnam	145	130	210	302	282	-6.5
Others	2,877	2,923	2,950	2,997	2,878	-4.0
Latin America	4,815	4,611	4,463	4,224	3,400	-19.5
Argentina	532	517	511	521	484	-7.2
Brazil	1,912	1,787	1,764	1,637	1,679	2.6
Colombia	325	314	318	329	251	-23.8
Ecuador	152	153	167	143	120	-16.1
Venezuela	1,050	976	804	743	339	-54.4
Others	843	865	898	851	528	-38.0
Middle East	7,570	7,895	8,269	8,036	7,029	-12.5
IR Iran	1,618	1,680	1,691	1,705	1,577	-7.5
Iraq	449	539	718	747	587	-21.4
Kuwait	857	883	891	886	780	-12.0
Qatar	274	363	352	350	296	-15.3
Saudi Arabia	2,511	2,630	2,817	2,586	2,177	-15.8
United Arab Emirates	1,089	1,043	1,027	1,005	925	-8.0
Others	773	758	772	756	686	-9.2
Africa	2,031	2,075	2,148	2,116	1,944	-8.1
Algeria	621	609	621	660	614	-6.8
Angola	45	55	55	55	44	-19.3
Congo	16	16	16	16	16	-3.6
Egypt	487	491	519	509	542	6.5
Gabon	19	14	13	11	16	39.4
Libya	80	93	94	76	80	5.5
Nigeria	48	59	33	8	1	-88.6
South Africa	461	472	481	450	352	-21.9
Others	256	265	316	330	278	-15.7
Russia	5,976	6,147	6,264	6,257	5,932	-5.2
Other Eurasia	1,709	1,687	1,770	1,787	1,623	-9.1
Azerbaijan	114	107	114	131	123	-6.0
Belarus	373	366	368	359	325	-9.6
Kazakhstan	298	296	374	353	284	-19.5
Turkmenistan	179	179	179	183	174	-5.0
Ukraine	62	66	81	82	77	-5.7
Others	683	675	655	678	640	-5.7
Other Europe	1,332	1,354	1,305	1,236	1,098	-11.2
Bulgaria	146	150	130	137	96	-29.7
Croatia	78	82	83	54	39	-27.9
Romania	241	243	234	242	205	-15.1
Others	868	879	858	803	757	-5.7
Total world	91,165	92,937	94,264	94,644	85,658	-9.5
<i>of which</i>						
OPEC	8,401	8,596	8,781	8,499	7,157	-15.8
<i>OPEC percentage</i>	9.2	9.2	9.3	9.0	8.4	
OECD	44,657	45,343	45,406	45,373	39,594	-12.7

Notes:

Data may include products from GTL and condensate units.

Table 4.6
Oil demand by main petroleum product in OPEC Members

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
Algeria	399	422	431	430	383	-11.0
Gasoline	90	90	85	85	73	-14.4
Kerosene	12	13	13	14	7	-49.6
Distillates	218	218	225	229	201	-12.2
Residuals	4	3	3	3	4	33.4
Others	75	97	105	101	99	-1.4
Angola	122	115	121	122	99	-19.2
Gasoline	26	19	22	22	21	-7.6
Kerosene	9	11	11	10	6	-37.5
Distillates	60	63	63	65	49	-24.3
Residuals	3	3	4	4	3	-8.6
Others	24	18	21	22	20	-9.7
Congo	8	8	8	9	7	-19.1
Gasoline	2	2	2	2	2	-10.0
Kerosene	1	1	1	1	0	-39.0
Distillates	4	4	4	4	3	-25.0
Residuals	0	0	0	0	0	-1.0
Others	2	2	2	2	2	-12.0
Equatorial Guinea	6	5	5	5	5	-5.9
Gasoline	2	2	2	2	1	-8.8
Kerosene	1	1	1	1	1	-28.2
Distillates	3	2	2	2	2	9.5
Residuals	0	0	0	0	0	0.0
Others	0	0	0	0	0	9.1
Gabon	46	47	47	48	45	-6.4
Gasoline	7	7	7	7	7	-4.2
Kerosene	3	3	3	3	3	-16.9
Distillates	33	34	35	35	33	-4.8
Residuals	0	0	0	0	0	0.0
Others	3	2	2	2	2	-21.5
IR Iran	1,801	1,819	1,854	1,838	1,692	-7.9
Gasoline	444	582	596	590	550	-6.8
Kerosene	138	114	108	98	52	-47.5
Distillates	499	491	516	511	472	-7.7
Residuals	366	281	260	258	252	-2.1
Others	354	351	375	380	366	-3.7
Iraq	757	723	704	716	550	-23.2
Gasoline	109	125	140	146	119	-18.7
Kerosene	33	36	34	41	40	-3.0
Distillates	100	114	138	152	131	-13.8
Residuals	218	271	289	253	130	-48.5
Others	298	177	103	124	129	4.7

Table 4.6
Oil demand by main petroleum product in OPEC Members

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
Kuwait	380	401	417	460	461	0.2
Gasoline	70	61	61	79	61	-22.5
Kerosene	17	14	15	23	11	-52.0
Distillates	49	51	53	55	48	-12.6
Residuals	131	109	114	103	60	-41.9
Others	112	166	175	200	281	40.2
Libya	208	208	215	214	183	-14.7
Gasoline	76	78	81	83	91	9.8
Kerosene	5	5	5	4	3	-26.9
Distillates	84	88	92	94	61	-35.2
Residuals	29	26	27	22	18	-17.6
Others	13	11	11	11	10	-12.7
Nigeria	393	426	446	470	466	-0.9
Gasoline	299	316	337	355	350	-1.4
Kerosene	25	26	24	23	15	-35.1
Distillates	67	82	79	89	94	6.2
Residuals	2	2	3	1	1	-12.4
Others	1	1	2	2	6	174.3
Saudi Arabia	3,210	3,272	3,105	3,199	3,037	-5.1
Gasoline	556	599	561	550	455	-17.2
Kerosene	88	101	104	103	44	-57.9
Distillates	701	591	522	528	492	-6.8
Residuals	470	516	503	540	600	11.1
Others	1,395	1,465	1,415	1,479	1,448	-2.1
United Arab Emirates	799	819	885	899	828	-7.9
Gasoline	176	185	211	215	200	-6.7
Kerosene	148	157	166	168	142	-15.3
Distillates	106	102	123	129	115	-10.6
Residuals	329	330	335	329	323	-1.9
Others	40	45	50	58	47	-18.9
Venezuela	566	503	403	367	300	-18.2
Gasoline	227	195	170	155	119	-23.0
Kerosene	4	8	7	6	1	-80.8
Distillates	163	127	118	113	94	-16.2
Residuals	20	18	17	17	16	-1.2
Others	151	155	92	77	69	-10.6
OPEC	8,696	8,768	8,642	8,777	8,055	-8.2
Gasoline	2,084	2,260	2,274	2,290	2,049	-10.6
Kerosene	485	491	493	495	324	-34.4
Distillates	2,088	1,967	1,970	2,005	1,796	-10.4
Residuals	1,572	1,561	1,554	1,529	1,408	-7.9
Others	2,467	2,489	2,352	2,458	2,478	0.8

Table 4.7
World oil demand by country

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
OECD America	24,868	25,112	25,638	25,691	22,539	-12.3
Canada	2,465	2,463	2,520	2,508	2,192	-12.6
Chile	352	357	363	362	324	-10.6
Mexico	2,053	2,019	1,932	1,958	1,581	-19.3
United States	19,999	20,273	20,822	20,863	18,443	-11.6
OECD Europe	14,059	14,411	14,307	14,314	12,437	-13.1
Belgium	632	638	684	642	565	-12.0
France	1,710	1,737	1,686	1,688	1,421	-15.8
Germany	2,383	2,450	2,326	2,346	2,149	-8.4
Italy	1,237	1,245	1,272	1,255	1,050	-16.3
Netherlands	935	943	929	916	858	-6.2
Poland	582	658	680	698	662	-5.1
Spain	1,290	1,297	1,332	1,328	1,088	-18.1
Turkey	942	991	958	987	924	-6.4
United Kingdom	1,599	1,619	1,605	1,578	1,215	-23.0
Others	2,749	2,834	2,835	2,875	2,503	-12.9
OECD Asia Pacific	8,147	8,156	8,012	7,934	7,141	-10.0
Australia	1,117	1,167	1,185	1,178	1,022	-13.3
Japan	4,035	3,945	3,850	3,739	3,326	-11.1
New Zealand	168	177	179	184	152	-17.7
South Korea	2,605	2,630	2,566	2,599	2,437	-6.2
Others	221	238	231	234	204	-12.5
China	11,951	12,471	13,013	13,485	13,191	-2.2
India	4,387	4,531	4,768	4,913	4,510	-8.2
Other Asia	8,467	8,692	8,907	9,001	8,132	-9.7
Indonesia	1,684	1,715	1,773	1,796	1,622	-9.7
Thailand	1,378	1,409	1,443	1,456	1,330	-8.7
Singapore	1,328	1,374	1,374	1,410	1,339	-5.0
Malaysia	747	759	783	787	680	-13.5
Philippines	374	389	426	449	378	-15.9
Pakistan	465	500	469	470	425	-9.6
Vietnam	410	419	439	454	407	-10.4
Others	2,081	2,127	2,200	2,179	1,949	-10.5
Latin America	6,500	6,506	6,527	6,594	6,012	-8.8
Argentina	720	736	722	709	597	-15.7
Brazil	3,072	3,104	3,162	3,236	3,071	-5.1
Colombia	324	331	336	348	292	-16.1
Ecuador	247	241	260	271	225	-17.0
Venezuela	566	503	403	367	300	-18.2
Others	1,571	1,592	1,644	1,664	1,527	-8.2
Middle East	8,145	8,231	8,128	8,201	7,545	-8.0
IR Iran	1,801	1,819	1,854	1,838	1,692	-7.9
Iraq	757	723	704	716	550	-23.2
Kuwait	380	401	417	460	461	0.2
Qatar	350	339	330	342	292	-14.5
Saudi Arabia	3,210	3,272	3,105	3,199	3,037	-5.1
Syria	141	157	137	127	113	-11.0
United Arab Emirates	799	819	885	899	828	-7.9
Others	707	700	695	620	572	-7.8
Africa	4,095	4,203	4,335	4,371	4,083	-6.6
Algeria	399	422	431	430	383	-11.0
Angola	122	115	121	122	99	-19.2
Congo	8	8	8	9	7	-19.1
Egypt	872	855	794	757	715	-5.7
Equatorial Guinea	6	5	5	5	5	-5.9
Gabon	46	47	47	48	45	-6.4
Libya	208	208	215	214	183	-14.7
Nigeria	393	426	446	470	466	-0.9
South Africa	658	668	671	654	615	-5.9
Tunisia	90	99	109	113	87	-22.6
Others	1,293	1,351	1,488	1,550	1,480	-4.5
Russia	3,430	3,477	3,549	3,568	3,367	-5.6
Other Eurasia	1,141	1,166	1,207	1,193	1,074	-9.9
Azerbaijan	103	107	121	123	106	-14.3
Belarus	158	160	157	141	127	-10.5
Kazakhstan	290	294	308	294	285	-2.9
Turkmenistan	145	151	157	161	150	-6.9
Ukraine	269	272	280	286	231	-19.0
Others	176	181	185	187	176	-6.3
Other Europe	696	718	743	764	697	-8.8
Bulgaria	109	114	120	124	118	-5.3
Croatia	103	106	109	113	106	-6.2
Romania	187	195	197	202	188	-6.7
Serbia and Montenegro	92	94	97	104	93	-10.4
Others	204	210	219	221	192	-13.2
Total world	95,887	97,674	99,131	100,030	90,727	-9.3
<i>of which</i>						
OPEC	8,696	8,768	8,642	8,777	8,055	-8.2
OPEC percentage	9.1	9.0	8.7	8.8	8.9	
OECD	47,075	47,680	47,957	47,940	42,116	-12.1

Table 4.8

World oil demand by main petroleum product and region

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
OECD Americas	24,868	25,112	25,638	25,691	22,539	-12.3
Gasoline	11,091	11,083	11,157	11,096	9,582	-13.6
Kerosene	1,899	1,959	2,027	2,081	1,260	-39.5
Distillates	5,125	5,150	5,336	5,255	4,878	-7.2
Residuals	605	660	675	625	523	-16.3
Others	6,148	6,260	6,443	6,635	6,296	-5.1
OECD Europe	14,059	14,411	14,307	14,314	12,437	-13.1
Gasoline	1,899	1,918	1,948	1,994	1,725	-13.5
Kerosene	1,368	1,444	1,519	1,549	745	-51.9
Distillates	6,284	6,425	6,390	6,384	5,902	-7.5
Residuals	890	944	945	927	778	-16.1
Others	3,618	3,680	3,505	3,461	3,287	-5.0
OECD Asia Pacific	8,147	8,156	8,012	7,934	7,141	-10.0
Gasoline	1,554	1,549	1,543	1,523	1,391	-8.7
Kerosene	899	919	915	908	616	-32.2
Distillates	1,810	1,837	1,816	1,838	1,742	-5.2
Residuals	703	707	704	582	587	0.8
Others	3,181	3,144	3,034	3,083	2,804	-9.1
China	11,951	12,471	13,013	13,485	13,191	-2.2
Gasoline	2,831	3,077	3,126	3,245	3,050	-6.0
Kerosene	678	691	731	889	623	-29.9
Distillates	3,394	3,470	3,544	3,402	3,326	-2.2
Residuals	361	391	421	510	537	5.5
Others	4,687	4,841	5,191	5,439	5,654	4.0
India	4,387	4,531	4,768	4,913	4,510	-8.2
Gasoline	573	623	642	699	635	-9.2
Kerosene	266	247	253	237	139	-41.4
Distillates	1,566	1,662	1,704	1,732	1,494	-13.7
Residuals	168	151	147	150	139	-7.3
Others	1,814	1,847	2,022	2,095	2,103	0.4
Other Asia	8,467	8,692	8,907	9,001	8,132	-9.7
Gasoline	1,706	1,772	1,860	1,915	1,808	-5.6
Kerosene	705	744	779	813	486	-40.2
Distillates	2,094	2,114	2,157	2,169	2,068	-4.7
Residuals	1,216	1,208	1,185	1,150	1,090	-5.2
Others	2,746	2,852	2,926	2,954	2,680	-9.3
Latin America	6,500	6,506	6,527	6,594	6,012	-8.8
Gasoline	1,898	1,924	1,904	1,911	1,751	-8.4
Kerosene	296	303	313	323	195	-39.8
Distillates	2,128	2,089	2,070	2,082	1,900	-8.8
Residuals	587	605	610	605	594	-1.8
Others	1,591	1,585	1,629	1,672	1,572	-6.0
Middle East	8,145	8,231	8,128	8,201	7,545	-8.0
Gasoline	1,492	1,677	1,686	1,669	1,444	-13.5
Kerosene	457	455	465	474	308	-35.0
Distillates	1,874	1,773	1,763	1,780	1,628	-8.5
Residuals	1,541	1,533	1,526	1,503	1,396	-7.1
Others	2,781	2,793	2,688	2,775	2,770	-0.2

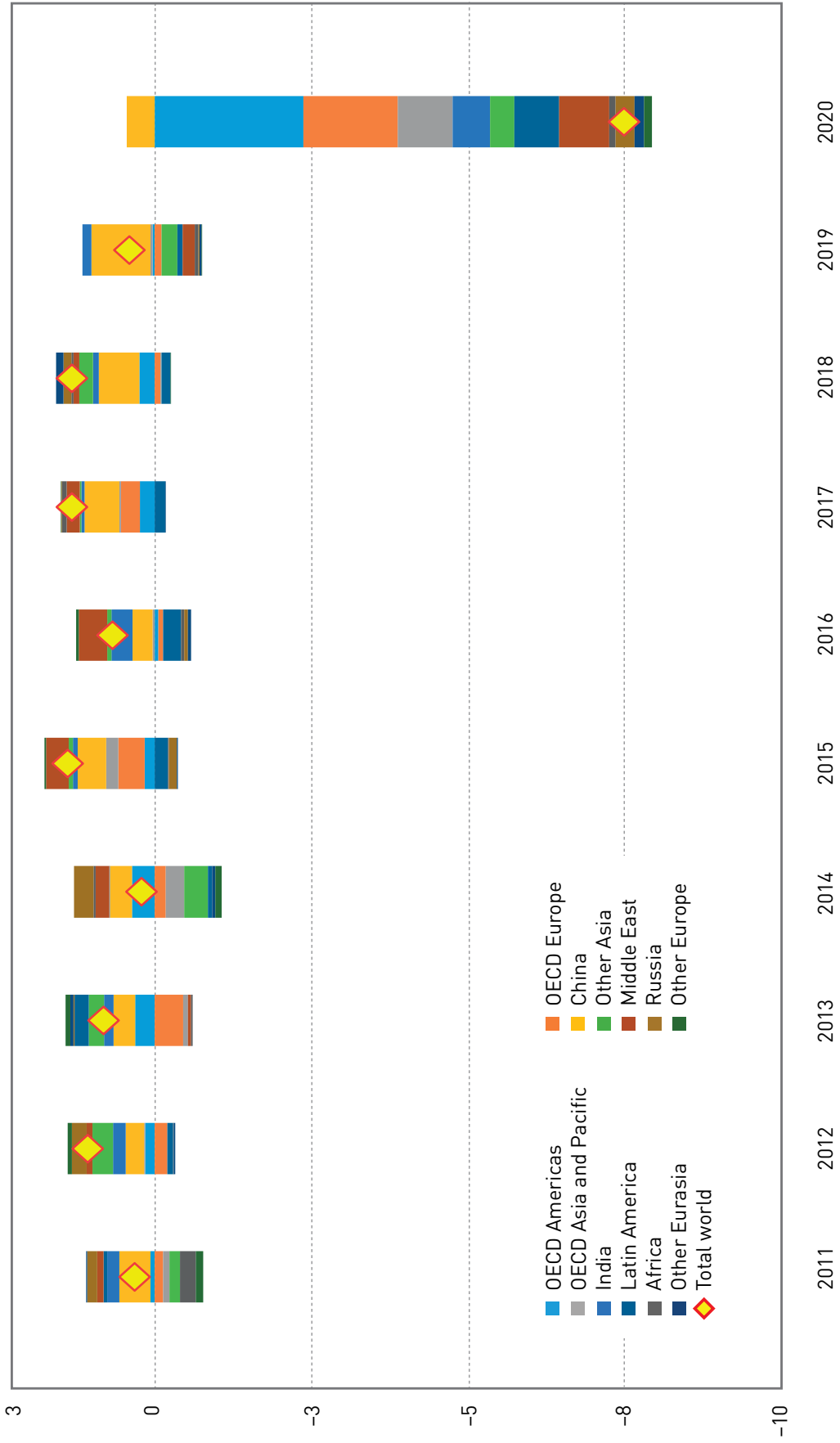
Table 4.8
World oil demand by main petroleum product and region

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
Africa	4,095	4,203	4,335	4,371	4,083	-6.6
Gasoline	1,072	1,112	1,156	1,199	1,105	-7.8
Kerosene	307	311	316	323	235	-27.3
Distillates	1,653	1,683	1,719	1,762	1,663	-5.6
Residuals	444	449	439	431	396	-8.3
Others	619	648	704	655	685	4.5
Russia	3,430	3,477	3,549	3,568	3,367	-5.6
Gasoline	906	922	918	895	881	-1.6
Kerosene	253	261	260	227	143	-37.0
Distillates	778	776	720	903	833	-7.8
Residuals	178	151	135	112	73	-34.8
Others	1,315	1,366	1,515	1,432	1,437	0.4
Other Eurasia	1,141	1,166	1,207	1,193	1,074	-9.9
Gasoline	283	290	274	235	210	-10.7
Kerosene	65	77	90	94	42	-55.5
Distillates	469	483	494	527	508	-3.6
Residuals	222	229	255	298	293	-1.7
Others	103	88	94	39	22	-43.8
Other Europe	696	718	743	764	697	-8.8
Gasoline	130	133	146	166	120	-27.8
Kerosene	23	23	24	26	5	-80.8
Distillates	318	330	340	352	318	-9.5
Residuals	53	50	45	40	39	-2.5
Others	171	181	188	180	214	19.3
Total world	95,887	97,674	99,131	100,030	90,727	-9.3
Gasoline	25,436	26,080	26,360	26,548	23,702	-10.7
Kerosene	7,215	7,436	7,692	7,943	4,796	-39.6
Distillates	27,494	27,793	28,052	28,185	26,260	-6.8
Residuals	6,967	7,079	7,088	6,933	6,445	-7.1
Others	28,775	29,286	29,938	30,420	29,524	-2.9
<i>of which</i>						
OPEC	8,696	8,768	8,642	8,777	8,055	-8.2
Gasoline	2,084	2,260	2,274	2,290	2,049	-10.6
Kerosene	485	491	493	495	324	-34.4
Distillates	2,088	1,967	1,970	2,005	1,796	-10.4
Residuals	1,572	1,561	1,554	1,529	1,408	-7.9
Others	2,467	2,489	2,352	2,458	2,478	0.8
OECD	47,075	47,680	47,957	47,940	42,116	-12.1
Gasoline	14,544	14,550	14,648	14,613	12,699	-13.1
Kerosene	4,166	4,322	4,461	4,538	2,621	-42.2
Distillates	13,219	13,412	13,542	13,477	12,522	-7.1
Residuals	2,198	2,311	2,324	2,134	1,888	-11.5
Others	12,948	13,085	12,982	13,178	12,387	-6.0

Graph 4.1
World refinery throughput by region

(y-o-y change; mb/d)



SECTION **5**

Oil trade

Table 5.1
OPEC Members' crude oil exports by destination

(1,000 b/d)

	Destination	2016	2017	2018	2019	2020
Algeria		668.7	632.5	571.0	584.2	438.7
<i>of which</i>	OECD Americas	143.4	74.2	65.1	15.7	23.7
	OECD Europe	392.5	353.8	345.9	360.0	286.0
	OECD Asia Pacific	12.5	41.1	37.0	43.3	30.0
	China	0.0	5.7	8.4	8.6	8.4
	India	22.5	38.3	38.0	53.8	27.1
	Other Asia	51.1	37.5	32.9	31.5	36.9
	Latin America	44.2	46.9	40.4	43.9	19.2
	Middle East	0.0	0.0	0.0	23.2	0.0
	Africa	0.7	31.3	2.1	0.0	0.0
	Russia	0.0	0.0	0.0	0.0	0.0
	Other Eurasia	0.0	0.4	0.0	0.0	0.0
	Other Europe	1.8	3.2	1.3	4.1	7.4
Angola		1,670.1	1,576.7	1,420.6	1,318.7	1,219.7
<i>of which</i>	OECD Americas	59.9	104.3	70.0	42.8	33.6
	OECD Europe	326.5	105.0	133.8	163.9	109.0
	OECD Asia Pacific	7.7	18.4	13.1	12.9	8.0
	China	907.6	971.5	928.0	892.5	866.8
	India	124.6	132.0	125.4	118.9	71.6
	Other Asia	124.0	137.4	74.8	52.3	104.6
	Latin America	40.4	35.7	17.4	17.3	10.5
	Middle East	0.0	0.0	16.1	2.6	2.6
	Africa	79.4	72.4	41.9	15.5	12.9
	Russia	0.0	0.0	0.0	0.0	0.0
	Other Eurasia	0.0	0.0	0.0	0.0	0.0
	Other Europe	0.0	0.0	0.0	0.0	0.0
Congo		254.3	261.2	307.1	309.4	282.2
<i>of which</i>	OECD Americas	9.1	5.2	12.9	15.2	5.2
	OECD Europe	36.5	14.6	5.0	17.6	25.1
	OECD Asia Pacific	16.1	11.7	15.6	5.1	5.1
	China	139.1	178.4	237.5	231.2	182.3
	India	1.5	1.6	6.2	20.2	15.2
	Other Asia	42.1	43.3	27.3	17.4	26.3
	Latin America	0.7	0.0	0.0	2.6	4.8
	Middle East	6.4	6.5	2.6	0.0	7.8
	Africa	0.0	0.0	0.0	0.0	10.3
	Russia	0.0	0.0	0.0	0.0	0.0
	Other Eurasia	0.0	0.0	0.0	0.0	0.0
	Other Europe	2.8	0.0	0.0	0.0	0.0
Equatorial Guinea		157.6	124.8	121.0	110.2	114.5
<i>of which</i>	OECD Americas	3.3	7.2	14.6	15.1	0.0
	OECD Europe	104.1	57.1	44.8	37.2	29.2
	OECD Asia Pacific	0.0	0.0	0.0	0.0	3.6
	China	23.6	46.1	45.0	30.4	53.2
	India	26.5	14.4	10.9	21.9	20.3
	Other Asia	0.0	0.0	0.0	5.6	8.2
	Latin America	0.0	0.0	5.6	0.0	0.0
	Middle East	0.0	0.0	0.0	0.0	0.0
	Africa	0.0	0.0	0.0	0.0	0.0
	Russia	0.0	0.0	0.0	0.0	0.0
	Other Eurasia	0.0	0.0	0.0	0.0	0.0
	Other Europe	0.0	0.0	0.0	0.0	0.0
Gabon		205.2	188.4	174.1	206.9	196.1
<i>of which</i>	OECD Americas	1.2	6.2	5.9	0.0	0.0
	OECD Europe	65.2	17.4	9.6	16.8	37.9
	OECD Asia Pacific	45.0	24.8	30.2	19.4	14.7
	China	47.2	76.9	73.3	140.9	116.8
	India	2.0	8.8	14.6	0.0	6.8
	Other Asia	10.9	36.3	24.8	29.1	19.8
	Latin America	33.7	17.9	14.1	0.0	0.0
	Middle East	0.0	0.0	0.0	0.0	0.0
	Africa	0.0	0.0	1.5	0.7	0.0
	Russia	0.0	0.0	0.0	0.0	0.0
	Other Eurasia	0.0	0.0	0.0	0.0	0.0
	Other Europe	0.0	0.0	0.0	0.0	0.0
IR Iran		1,921.7	2,125.0	1,849.6	651.1	404.5
<i>of which</i>	OECD Americas	0.0	0.0	0.0	0.0	0.0
	OECD Europe	486.1	743.4	442.6	59.5	3.8
	OECD Asia Pacific	341.7	362.3	272.0	135.7	0.0
	China	581.6	515.0	585.4	298.1	78.4
	India	468.0	469.8	530.8	93.5	0.0
	Other Asia	32.3	22.9	18.8	64.2	316.6
	Latin America	0.0	0.0	0.0	0.0	0.0
	Middle East	0.0	0.0	0.0	0.0	5.7
	Africa	0.8	0.0	0.0	0.0	0.0
	Russia	0.0	0.0	0.0	0.0	0.0
	Other Eurasia	0.0	0.0	0.0	0.0	0.0
	Other Europe	11.3	11.6	0.0	0.0	0.0
Iraq		3,803.5	3,802.0	3,862.0	3,968.2	3,428.4
<i>of which</i>	OECD Americas	416.9	598.4	503.1	300.4	138.9
	OECD Europe	981.8	975.3	870.3	1,051.6	755.8
	OECD Asia Pacific	453.2	399.1	431.7	361.9	242.5
	China	724.4	740.8	900.8	1,038.6	1,137.4
	India	760.7	844.1	954.5	987.6	902.1
	Other Asia	332.2	146.4	132.3	118.8	83.6
	Latin America	134.3	27.4	28.6	8.1	6.0
	Middle East	0.0	41.0	0.0	35.9	21.8
	Africa	0.0	17.0	18.2	45.9	65.1
	Russia	0.0	0.0	0.0	0.0	0.0
	Other Eurasia	0.0	0.0	0.0	0.0	0.0
	Other Europe	0.0	12.5	22.6	19.5	75.1

Table 5.1
OPEC Members' crude oil exports by destination

(1,000 b/d)

	Destination	2016	2017	2018	2019	2020
Kuwait		2,128.2	2,010.0	2,050.0	1,986.3	1,826.3
<i>of which</i>	OECD Americas	244.5	253.8	205.6	153.3	0.0
	OECD Europe	181.1	137.5	38.6	16.2	32.0
	OECD Asia Pacific	656.0	666.9	667.6	661.7	552.2
	China	326.5	365.6	465.7	454.1	537.9
	India	202.8	223.4	229.5	214.2	183.6
	Other Asia	458.1	323.7	386.8	418.9	429.2
	Latin America	0.0	0.0	0.0	0.0	0.0
	Middle East	0.0	0.0	0.0	0.0	0.0
	Africa	59.2	39.2	56.2	67.9	86.2
	Russia	0.0	0.0	0.0	0.0	0.0
	Other Eurasia	0.0	0.0	0.0	0.0	0.0
	Other Europe	0.0	0.0	0.0	0.0	5.3
Libya		350.1	792.1	998.5	1,035.7	347.2
<i>of which</i>	OECD Americas	16.5	56.4	55.8	63.8	2.9
	OECD Europe	291.7	624.4	662.2	677.6	241.4
	OECD Asia Pacific	15.5	32.7	29.3	31.2	7.0
	China	9.0	52.4	170.9	188.2	72.9
	India	0.0	0.0	5.4	2.7	3.5
	Other Asia	4.1	13.2	63.6	52.2	14.3
	Latin America	0.0	0.0	3.3	4.3	0.0
	Middle East	0.0	0.0	0.0	0.0	0.0
	Africa	2.9	1.9	1.4	4.6	0.0
	Russia	0.0	0.0	0.0	0.0	0.0
	Other Eurasia	0.0	0.0	0.0	0.0	0.0
	Other Europe	10.4	11.1	6.6	11.2	5.2
Nigeria		1,738.0	1,811.1	1,979.5	2,008.2	1,879.3
<i>of which</i>	OECD Americas	309.6	331.5	172.0	27.5	90.2
	OECD Europe	569.6	692.6	1,055.8	439.3	812.4
	OECD Asia Pacific	0.7	18.1	39.6	237.8	38.5
	China	17.5	15.8	9.2	0.0	80.8
	India	362.1	364.8	327.4	0.0	295.5
	Other Asia	109.1	113.9	11.0	427.2	220.5
	Latin America	81.3	50.1	52.3	252.2	21.5
	Middle East	0.0	2.5	0.0	122.3	9.4
	Africa	252.3	221.8	309.5	260.7	310.5
	Russia	0.0	0.0	0.0	0.0	0.0
	Other Eurasia	0.0	0.0	0.0	163.7	0.0
	Other Europe	35.8	0.0	2.6	77.6	0.0
Saudi Arabia		7,463.4	6,968.3	7,371.5	7,038.1	6,658.6
<i>of which</i>	OECD Americas	1,177.0	1,003.5	1,020.3	560.5	548.8
	OECD Europe	870.8	771.7	869.3	797.4	756.5
	OECD Asia Pacific	2,063.4	2,151.0	2,025.8	1,865.7	1,854.8
	China	1,022.4	1,047.7	1,138.6	1,671.4	1,700.5
	India	807.2	719.4	787.8	852.2	751.1
	Other Asia	1,025.0	879.3	1,028.6	781.1	582.0
	Latin America	71.4	71.3	70.5	66.7	51.7
	Middle East	272.9	155.1	266.9	266.0	211.6
	Africa	153.1	163.8	163.8	177.0	201.7
	Russia	0.0	0.0	0.0	0.0	0.0
	Other Eurasia	0.0	0.0	0.0	0.0	0.0
	Other Europe	0.0	5.7	0.0	0.0	0.0
United Arab Emirates		2,407.8	2,378.7	2,296.5	2,414.2	2,418.4
<i>of which</i>	OECD Americas	6.6	13.4	5.0	2.8	1.0
	OECD Europe	18.4	0.0	0.0	0.0	3.2
	OECD Asia Pacific	1,146.4	1,139.0	1,090.8	1,247.6	1,088.5
	China	227.1	167.8	252.2	242.1	528.0
	India	333.4	308.4	326.5	414.4	447.6
	Other Asia	654.0	729.8	598.0	464.0	248.0
	Latin America	0.0	0.0	0.0	0.0	0.6
	Middle East	1.3	7.9	0.0	0.0	0.0
	Africa	20.5	12.4	24.0	43.2	101.4
	Russia	0.0	0.0	0.0	0.0	0.0
	Other Eurasia	0.0	0.0	0.0	0.0	0.0
	Other Europe	0.0	0.0	0.0	0.0	0.0
Venezuela		1,835.0	1,596.4	1,273.1	846.6	486.8
<i>of which</i>	OECD Americas	645.9	545.6	494.3	28.2	0.0
	OECD Europe	63.6	65.4	49.4	98.2	39.2
	OECD Asia Pacific	0.0	8.1	0.0	0.0	0.0
	China	290.0	330.9	277.2	245.7	13.7
	India	392.7	291.2	289.0	338.5	109.8
	Other Asia	0.0	13.5	26.6	82.0	280.7
	Latin America	442.7	341.6	133.9	45.9	30.7
	Middle East	0.0	0.0	2.7	7.1	0.0
	Africa	0.0	0.0	0.0	0.9	11.2
	Russia	0.0	0.0	0.0	0.0	0.0
	Other Eurasia	0.0	0.0	0.0	0.0	1.6
	Other Europe	0.0	0.0	0.0	0.0	0.0
OPEC		24,603.5	24,267.2	24,274.5	22,477.8	19,700.6
<i>of which</i>	OECD Americas	3,034.0	2,999.6	2,624.7	1,225.4	844.3
	OECD Europe	4,387.8	4,558.4	4,527.2	3,735.3	3,131.4
	OECD Asia Pacific	4,758.4	4,873.2	4,652.6	4,622.3	3,844.9
	China	4,316.3	4,514.5	5,092.3	5,441.8	5,377.2
	India	3,504.0	3,416.2	3,646.0	3,118.0	2,834.2
	Other Asia	2,842.8	2,497.2	2,425.7	2,544.3	2,370.8
	Latin America	848.7	590.8	366.1	440.9	145.1
	Middle East	280.6	213.0	288.2	457.2	258.9
	Africa	568.9	559.8	618.7	616.4	799.2
	Russia	0.0	0.0	0.0	0.0	0.0
	Other Eurasia	0.0	0.4	0.0	163.7	1.6
	Other Europe	62.1	44.1	33.1	112.4	93.0

Notes:

Data may include lease condensates and volumes of oil in transit.

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Table 5.2
World crude oil exports by country

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
OECD Americas	4,607.0	5,315.0	6,509.1	7,461.2	7,412.2	-0.7
Canada	2,742.2	2,892.9	3,177.8	3,279.3	3,037.7	-7.4
Mexico	1,273.8	1,264.1	1,283.3	1,199.9	1,198.5	-0.1
United States	591.0	1,158.0	2,048.0	2,982.0	3,175.0	6.5
Others	0.0	0.0	0.0	0.0	1.0	100.0
OECD Europe	2,102.3	2,195.0	2,167.5	2,144.4	2,274.5	6.1
Norway	1,372.2	1,361.2	1,254.5	1,233.5	1,501.8	21.7
United Kingdom	620.2	692.7	818.0	834.4	724.3	-13.2
Others	110.0	141.1	95.0	76.5	48.4	-36.8
OECD Asia Pacific	230.1	206.0	236.2	270.6	271.2	0.2
Australia	199.5	179.8	214.6	248.8	253.2	1.7
Others	30.6	26.3	21.6	21.7	18.0	-17.1
China	58.6	97.1	52.4	16.1	32.7	103.2
India	0.0	0.0	0.0	0.0	0.0	0.0
Other Asia	1,020.5	951.9	838.7	643.8	654.1	1.6
Brunei	104.7	98.0	91.9	106.9	82.3	-23.0
Indonesia	334.5	284.8	205.7	70.9	92.9	31.0
Malaysia	342.8	344.8	357.5	287.0	280.0	-2.4
Vietnam	146.3	129.5	88.5	85.4	113.5	33.0
Others	92.3	94.8	95.1	93.6	85.3	-8.8
Latin America	3,830.5	3,821.7	3,468.9	3,292.1	3,006.0	-8.7
Brazil	891.3	1,127.4	1,147.0	1,301.3	1,401.0	7.7
Colombia	613.5	641.5	590.3	611.6	541.0	-11.6
Ecuador	400.2	379.8	367.2	397.8	361.8	-9.1
Trinidad & Tobago	28.3	31.3	30.2	54.2	55.6	2.5
Venezuela	1,835.0	1,596.4	1,273.1	846.6	486.8	-42.5
Others	62.3	45.2	61.0	80.5	159.8	98.5
Middle East	19,321.1	18,756.8	18,916.8	17,630.1	16,303.0	-7.5
Bahrain	131.9	154.8	156.3	155.8	150.9	-3.1
IR Iran	1,921.7	2,125.0	1,849.6	651.1	404.5	-37.9
Iraq	3,803.5	3,802.0	3,862.0	3,968.2	3,428.4	-13.6
Kuwait	2,128.2	2,010.0	2,050.0	1,986.3	1,826.3	-8.1
Oman	887.5	803.0	807.8	838.6	859.9	2.5
Qatar	503.4	466.0	477.3	524.5	502.8	-4.1
Saudi Arabia	7,463.4	6,968.3	7,371.5	7,038.1	6,658.6	-5.4
United Arab Emirates	2,407.8	2,378.7	2,296.5	2,414.2	2,418.4	0.2
Others	73.6	48.9	45.7	53.2	53.2	-0.1
Africa	5,957.5	6,226.5	6,435.9	6,454.1	5,384.4	-16.6
Algeria	668.7	632.5	571.0	584.2	438.7	-24.9
Angola	1,670.1	1,576.7	1,420.6	1,318.7	1,219.7	-7.5
Congo	254.3	261.2	307.1	309.4	282.2	-8.8
Egypt	164.6	139.3	114.9	90.3	102.8	13.9
Equatorial Guinea	157.6	124.8	121.0	110.2	114.5	3.9
Gabon	205.2	188.4	174.1	206.9	196.1	-5.2
Libya	350.1	792.1	998.5	1,035.7	347.2	-66.5
Nigeria	1,738.0	1,811.1	1,979.5	2,008.2	1,879.3	-6.4
Sudans	119.6	98.5	114.8	138.2	135.4	-2.0
Others	629.4	601.8	634.5	652.4	668.6	2.5
Russia	5,079.3	5,057.5	5,206.8	5,253.0	4,653.5	-11.4
Other Eurasia	1,969.1	2,060.6	2,080.2	2,040.3	1,982.7	-2.8
Azerbaijan	655.1	615.3	608.6	559.3	500.3	-10.5
Kazakhstan	1,229.5	1,370.7	1,401.2	1,410.9	1,416.7	0.4
Others	84.5	74.6	70.4	70.1	65.8	-6.2
Other Europe	18.2	10.6	11.8	15.9	13.7	-13.6
Total world	44,194.1	44,698.7	45,924.3	45,221.6	41,988.0	-7.2
<i>of which</i>						
OPEC	24,603.5	24,267.2	24,274.5	22,477.8	19,700.6	-12.4
OPEC percentage	55.7	54.3	52.9	49.7	46.9	
OECD	6,939.5	7,716.1	8,912.8	9,876.3	9,957.9	0.8

Notes:

Data may include lease condensates and volumes of oil in transit.

Table 5.3

World exports of petroleum products by country

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
OECD Americas	5,291.8	5,872.6	6,141.8	6,095.8	5,903.7	-3.2
Canada	435.3	491.1	443.9	484.6	416.9	-14.0
Mexico	182.1	156.1	140.5	115.5	138.8	20.2
United States	4,670.0	5,218.0	5,553.0	5,490.0	5,333.0	-2.9
Others	4.5	7.4	4.3	5.7	14.9	162.2
OECD Europe	7,575.1	7,886.3	7,651.0	7,312.4	6,456.3	-11.7
Belgium	537.9	623.9	621.6	607.8	502.4	-17.3
France	428.1	434.7	424.2	367.4	277.9	-24.3
Germany	465.3	482.8	461.1	449.0	452.1	0.7
Italy	580.1	636.3	579.0	556.8	461.8	-17.1
Netherlands	2,303.6	2,332.6	2,305.8	2,247.2	1,917.6	-14.7
Norway	351.5	432.8	415.8	428.4	387.8	-9.5
Spain	423.3	471.3	452.7	419.6	398.2	-5.1
Sweden	320.6	349.8	346.5	230.3	200.5	-12.9
United Kingdom	523.7	505.6	483.4	450.9	396.5	-12.1
Others	1,641.1	1,616.4	1,561.0	1,554.9	1,461.5	-6.0
OECD Asia Pacific	2,075.5	2,113.5	2,171.3	2,248.7	1,848.0	-17.8
Japan	594.8	575.3	548.1	609.4	350.3	-42.5
South Korea	1,313.4	1,367.0	1,432.3	1,408.6	1,258.8	-10.6
Others	167.2	171.2	190.8	230.7	238.9	3.6
China	1,088.5	1,168.8	1,276.1	1,460.0	1,324.0	-9.3
India	1,401.7	1,411.4	1,344.3	1,359.8	1,216.2	-10.6
Other Asia	3,190.4	3,317.3	3,081.8	2,845.4	2,777.1	-2.4
Indonesia	82.9	80.3	86.8	89.0	96.3	8.3
Malaysia	609.3	632.1	662.6	645.9	774.8	20.0
Singapore	1,995.0	2,088.3	1,776.7	1,621.8	1,440.0	-11.2
Others	503.3	516.5	555.7	488.8	465.9	-4.7
Latin America	1,047.5	981.6	1,057.2	885.1	820.9	-7.3
Brazil	124.4	133.1	170.5	217.2	283.9	30.7
Ecuador	31.4	42.3	42.2	38.9	33.7	-13.3
Trinidad & Tobago	121.0	118.2	119.4	14.7	12.4	-15.9
Venezuela	262.5	229.6	226.2	97.5	69.6	-28.6
Others	508.2	458.5	498.9	516.8	421.2	-18.5
Middle East	4,247.8	3,979.1	4,700.1	4,081.4	3,557.8	-12.8
Bahrain	230.3	240.7	237.9	249.1	213.3	-14.4
IR Iran	515.0	270.2	272.1	284.6	280.7	-1.4
Iraq	36.8	20.1	45.7	106.6	151.0	41.7
Kuwait	707.4	640.0	630.4	637.1	527.0	-17.3
Qatar	568.1	639.4	552.2	537.6	460.0	-14.4
Saudi Arabia	1,502.6	1,438.2	1,971.2	1,300.3	1,016.6	-21.8
United Arab Emirates	630.0	653.7	916.0	881.8	839.6	-4.8
Others	57.6	76.9	74.6	84.3	69.7	-17.3
Africa	862.1	844.6	844.6	858.3	907.8	5.8
Algeria	541.1	569.7	532.1	506.2	503.4	-0.5
Angola	54.3	17.2	17.6	16.8	16.3	-3.0
Congo	5.7	5.8	5.9	5.9	4.3	-27.6
Egypt	36.3	43.6	73.3	125.8	165.6	31.6
Equatorial Guinea	0.0	0.0	0.0	0.0	0.0	0.0
Gabon	10.4	12.3	8.9	7.5	8.6	14.7
Libya	23.1	23.5	25.4	21.0	65.8	213.1
Nigeria	17.9	19.3	21.3	20.1	0.0	-100.0
Others	173.1	153.2	160.1	154.9	143.8	-7.2
Russia	2,501.7	2,478.6	2,509.9	2,555.9	2,419.4	-5.3
Other Eurasia	544.3	545.2	460.1	461.7	446.3	-3.3
Azerbaijan	36.8	24.8	26.3	26.8	27.9	4.4
Kazakhstan	136.4	145.9	127.6	120.9	113.8	-5.9
Others	371.1	374.6	306.2	314.0	304.7	-3.0
Other Europe	210.4	210.4	209.1	209.8	164.1	-21.8
Romania	96.1	89.2	95.3	95.2	79.0	-17.0
Others	114.3	121.2	113.8	114.6	85.1	-25.7
Total world	30,036.8	30,809.2	31,447.2	30,374.2	27,841.4	-8.3
<i>of which</i>						
OPEC	4,307.0	3,899.4	4,672.7	3,885.5	3,482.9	-10.4
<i>OPEC percentage</i>	<i>14.3</i>	<i>12.7</i>	<i>14.9</i>	<i>12.8</i>	<i>12.5</i>	
OECD	14,942.4	15,872.4	15,964.1	15,656.9	14,208.0	-9.3

Notes:

Data may include re-exports and volumes of oil in transit.

Table 5.4

World exports of petroleum products by main petroleum product and region

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
OECD Americas	5,291.8	5,872.6	6,141.8	6,095.8	5,903.7	-3.2
Gasoline	1,062.7	1,161.4	1,226.7	1,170.5	1,048.8	-10.4
Kerosene	223.1	243.4	273.6	277.8	126.6	-54.4
Distillates	1,536.3	1,755.4	1,587.5	1,630.7	1,547.9	-5.1
Residuals	525.2	528.8	534.2	361.5	292.2	-19.2
Others	1,944.5	2,183.6	2,519.9	2,655.4	2,888.1	8.8
OECD Europe	7,575.1	7,886.3	7,651.0	7,312.4	6,456.3	-11.7
Gasoline	1,906.0	1,986.1	1,968.0	1,973.1	1,638.7	-16.9
Kerosene	367.4	399.1	435.1	437.9	316.3	-27.8
Distillates	2,209.6	2,292.5	2,036.9	1,986.5	1,930.0	-2.8
Residuals	1,405.3	1,147.9	1,030.0	872.5	911.0	4.4
Others	1,686.9	2,060.6	2,180.9	2,042.3	1,660.2	-18.7
OECD Asia Pacific	2,075.5	2,113.5	2,171.3	2,248.7	1,848.0	-17.8
Gasoline	309.1	338.2	350.9	353.0	278.0	-21.2
Kerosene	427.5	449.1	439.3	452.4	307.5	-32.0
Distillates	772.2	780.0	793.2	869.9	738.1	-15.1
Residuals	147.9	146.7	183.6	139.5	123.3	-11.6
Others	418.7	399.4	404.2	434.0	401.1	-7.6
China	1,088.5	1,168.8	1,276.1	1,460.0	1,324.0	-9.3
Gasoline	225.2	246.3	299.2	379.8	371.6	-2.2
Kerosene	278.0	280.8	312.1	374.5	212.9	-43.2
Distillates	304.0	341.9	366.1	424.3	390.7	-7.9
Residuals	178.4	201.6	219.0	202.7	286.5	41.3
Others	102.8	98.2	79.8	78.7	62.3	-20.8
India	1,401.7	1,411.4	1,344.3	1,359.8	1,216.2	-10.6
Gasoline	375.5	332.3	309.5	301.5	267.8	-11.2
Kerosene	159.2	148.6	160.7	154.7	86.4	-44.2
Distillates	551.4	571.1	564.0	604.6	603.9	-0.1
Residuals	44.2	42.7	40.2	31.6	16.6	-47.6
Others	271.4	316.7	269.8	267.4	241.5	-9.7
Other Asia	3,190.4	3,317.3	3,081.8	2,845.4	2,777.1	-2.4
Gasoline	776.8	794.4	702.6	604.4	603.5	-0.2
Kerosene	73.4	79.8	68.0	61.2	102.4	67.5
Distillates	980.1	949.3	969.5	906.5	890.1	-1.8
Residuals	791.4	860.6	769.4	670.3	552.0	-17.6
Others	568.8	633.2	572.3	603.0	628.9	4.3
Latin America	1,047.5	981.6	1,057.2	885.1	820.9	-7.3
Gasoline	31.7	17.0	50.4	90.7	74.9	-17.4
Kerosene	56.8	36.5	27.2	68.4	30.5	-55.4
Distillates	46.0	30.2	68.4	17.8	22.6	26.9
Residuals	545.7	638.5	666.9	460.4	516.7	12.2
Others	367.4	259.3	244.3	247.7	176.1	-28.9
Middle East	4,247.8	3,979.1	4,700.1	4,081.4	3,557.8	-12.8
Gasoline	293.8	284.5	499.8	347.2	294.3	-15.2
Kerosene	598.3	544.0	661.0	593.7	521.8	-12.1
Distillates	1,100.9	1,000.3	1,329.3	1,132.3	941.8	-16.8
Residuals	622.9	716.9	876.1	606.7	477.4	-21.3
Others	1,631.9	1,433.4	1,333.8	1,401.4	1,322.5	-5.6

Table 5.4

World exports of petroleum products by main petroleum product and region

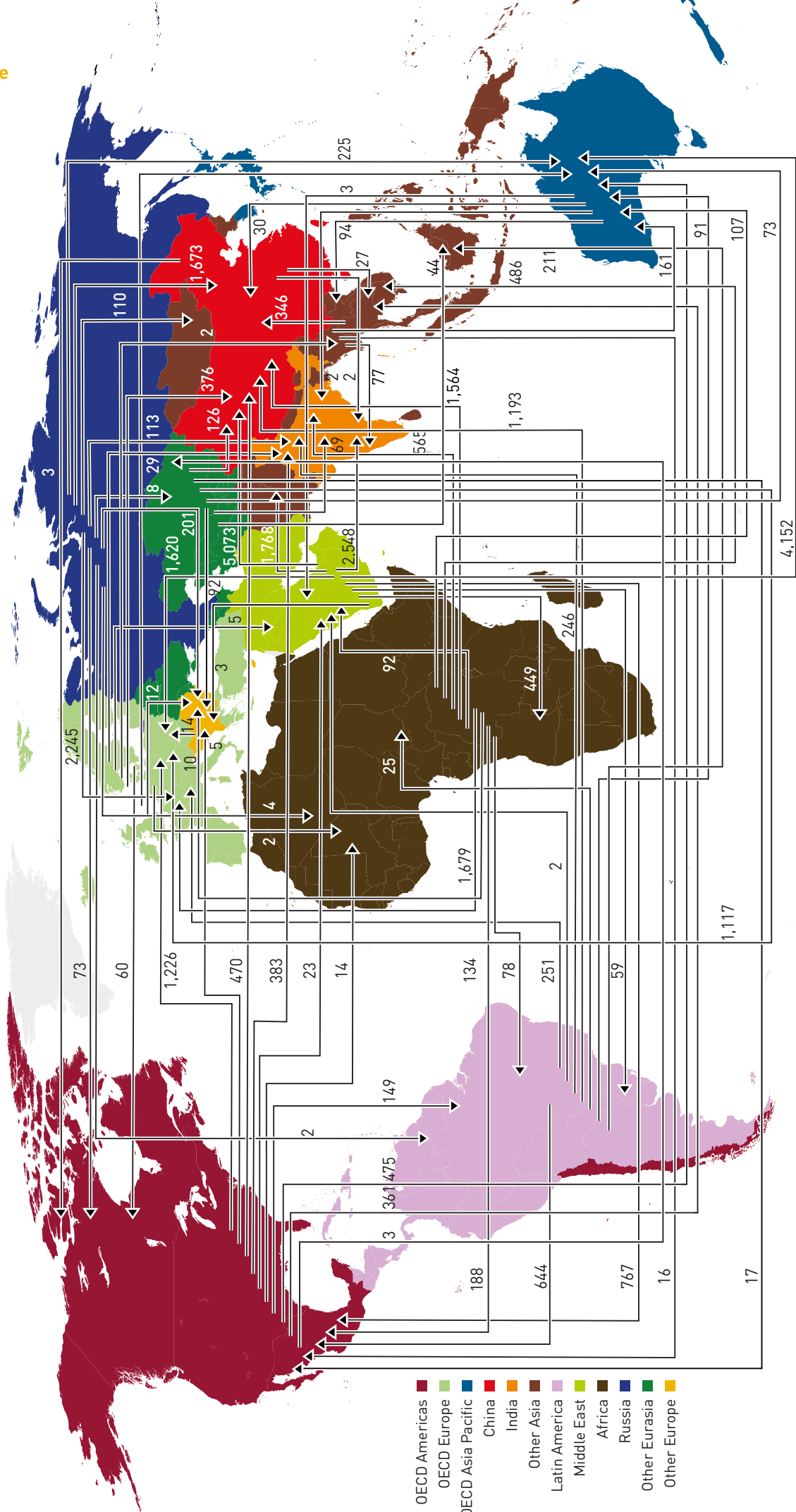
(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
Africa	862.1	844.6	844.6	858.3	907.8	5.8
Gasoline	14.5	13.7	17.8	18.9	13.0	-31.2
Kerosene	56.0	75.4	78.4	64.3	85.7	33.1
Distillates	14.3	31.4	27.0	38.2	11.0	-71.2
Residuals	320.3	287.1	252.7	248.2	294.5	18.7
Others	456.9	437.0	468.8	488.7	503.6	3.0
Russia	2,501.7	2,478.6	2,509.9	2,555.9	2,419.4	-5.3
Gasoline	119.8	103.3	98.5	121.8	133.0	9.2
Kerosene	56.3	51.1	59.4	61.5	46.7	-24.1
Distillates	979.5	1,023.9	1,115.5	1,051.8	1,043.8	-0.8
Residuals	735.0	671.5	589.7	645.9	584.9	-9.4
Others	611.0	628.9	646.8	675.0	611.0	-9.5
Other Eurasia	544.3	545.2	460.1	461.7	446.3	-3.3
Gasoline	81.4	77.9	65.3	56.9	81.7	43.7
Kerosene	11.4	12.6	10.7	14.9	7.3	-51.3
Distillates	149.6	123.8	97.9	109.0	118.5	8.7
Residuals	190.5	193.3	167.8	153.3	105.5	-31.2
Others	111.4	137.6	118.3	127.6	133.4	4.5
Other Europe	210.4	210.4	209.1	209.8	164.1	-21.8
Gasoline	91.7	89.9	91.5	93.1	80.5	-13.6
Kerosene	6.6	6.8	8.1	8.7	4.6	-47.0
Distillates	72.4	78.0	71.0	81.3	60.0	-26.2
Residuals	28.8	23.6	25.9	15.3	9.4	-38.6
Others	11.0	12.0	12.5	11.4	9.6	-15.6
Total world	30,036.8	30,809.2	31,447.2	30,374.2	27,841.4	-8.3
Gasoline	5,288.2	5,445.1	5,680.2	5,510.8	4,886.0	-11.3
Kerosene	2,314.0	2,327.1	2,533.8	2,570.1	1,848.6	-28.1
Distillates	8,716.2	8,977.8	9,026.4	8,852.7	8,298.5	-6.3
Residuals	5,535.7	5,459.2	5,355.6	4,408.1	4,169.9	-5.4
Others	8,182.6	8,600.0	8,851.2	9,032.5	8,638.3	-4.4
<i>of which</i>						
OPEC	4,307.0	3,899.4	4,672.7	3,885.5	3,482.9	-10.4
Gasoline	290.9	286.8	496.0	343.9	294.6	-14.3
Kerosene	586.9	492.6	582.6	508.7	466.9	-8.2
Distillates	1,052.5	932.9	1,260.0	1,051.5	874.7	-16.8
Residuals	982.2	1,018.0	1,154.2	776.2	650.7	-16.2
Others	1,394.4	1,169.1	1,179.8	1,205.2	1,196.0	-0.8
OECD	14,942.4	15,872.4	15,964.1	15,656.9	14,208.0	-9.3
Gasoline	3,307.4	3,517.1	3,573.7	3,527.4	2,992.5	-15.2
Kerosene	1,004.3	1,082.2	1,135.6	1,152.4	755.9	-34.4
Distillates	4,510.4	4,817.8	4,409.0	4,472.7	4,224.8	-5.5
Residuals	2,122.5	1,854.1	1,767.9	1,393.4	1,357.5	-2.6
Others	3,997.7	4,601.1	5,077.8	5,111.0	4,877.3	-4.6

Notes:

Data may include re-exports and volumes of oil in transit.

Graph 5.1
World inter-regional trade of crude oil, 2020
(1,000 b/d)



Notes:
Excluding intraregional trade.

Table 5.5

World exports of crude oil and petroleum products by country

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
OECD Americas	9,898.9	11,187.7	12,650.9	13,557.0	13,315.9	-1.8
Canada	3,177.4	3,384.1	3,621.7	3,763.9	3,454.6	-8.2
Mexico	1,455.9	1,420.3	1,423.8	1,315.4	1,337.3	1.7
United States	5,261.0	6,376.0	7,601.0	8,472.0	8,508.0	0.4
Others	4.5	7.4	4.3	5.7	16.0	180.6
OECD Europe	9,677.5	10,081.3	9,818.6	9,456.8	8,730.7	-7.7
Belgium	537.9	623.9	621.6	607.8	502.4	-17.3
France	428.1	434.7	424.2	367.4	277.9	-24.3
Germany	467.4	482.8	461.1	451.2	452.1	0.2
Italy	592.6	651.2	589.1	556.8	465.4	-16.4
Netherlands	2,310.2	2,340.9	2,314.6	2,255.2	1,925.3	-14.6
Norway	1,723.7	1,794.0	1,670.3	1,661.9	1,889.5	13.7
Spain	423.3	471.3	452.7	419.6	398.2	-5.1
Sweden	320.6	366.0	346.5	235.9	201.5	-14.6
United Kingdom	1,143.8	1,198.3	1,301.4	1,285.4	1,120.9	-12.8
Others	1,730.0	1,718.2	1,637.1	1,615.7	1,497.5	-7.3
OECD Asia Pacific	2,305.6	2,319.5	2,407.4	2,519.3	2,119.2	-15.9
Australia	249.1	230.3	279.5	344.7	361.6	4.9
Japan	594.8	575.3	548.1	609.4	350.3	-42.5
South Korea	1,313.4	1,367.0	1,432.3	1,408.6	1,258.8	-10.6
Others	148.3	146.9	147.6	156.6	148.5	-5.1
China	1,147.1	1,265.9	1,328.5	1,476.1	1,356.7	-8.1
India	1,401.7	1,411.4	1,344.3	1,359.8	1,216.2	-10.6
Other Asia	4,210.9	4,269.1	3,920.5	3,489.1	3,431.1	-1.7
Brunei	106.9	99.5	93.6	108.8	118.6	9.0
Indonesia	417.4	365.1	292.5	159.9	189.2	18.4
Malaysia	952.0	976.8	1,020.1	932.9	1,054.8	13.1
Singapore	2,009.7	2,103.4	1,792.5	1,636.5	1,453.8	-11.2
Vietnam	177.3	161.0	120.1	114.7	141.1	23.1
Others	547.6	563.3	601.7	536.4	473.6	-11.7
Latin America	4,878.0	4,803.3	4,526.1	4,177.1	3,826.8	-8.4
Brazil	1,015.7	1,260.5	1,317.5	1,518.4	1,684.9	11.0
Colombia	710.4	720.6	668.4	697.1	609.9	-12.5
Ecuador	431.6	422.1	409.3	436.8	395.6	-9.4
Trinidad & Tobago	149.3	149.5	149.6	68.9	67.9	-1.4
Venezuela	2,097.5	1,826.0	1,499.4	944.0	556.4	-41.1
Others	473.6	424.6	481.9	511.9	512.1	0.0
Middle East	23,568.9	22,735.9	23,616.9	21,711.4	19,860.8	-8.5
Bahrain	362.2	395.5	394.3	404.8	364.2	-10.0
IR Iran	2,436.7	2,395.2	2,121.7	935.7	685.2	-26.8
Iraq	3,840.3	3,822.1	3,907.7	4,074.9	3,579.4	-12.2
Kuwait	2,835.6	2,650.0	2,680.4	2,623.4	2,353.3	-10.3
Oman	912.5	828.4	833.2	874.8	886.9	1.4
Qatar	1,071.5	1,105.4	1,029.5	1,062.1	962.8	-9.3
Saudi Arabia	8,965.9	8,406.5	9,342.7	8,338.4	7,675.3	-8.0
United Arab Emirates	3,037.8	3,032.4	3,212.5	3,296.0	3,257.9	-1.2
Others	106.2	100.4	94.9	101.3	95.9	-5.4
Africa	6,819.5	7,071.0	7,280.5	7,312.5	6,292.1	-14.0
Algeria	1,209.8	1,202.2	1,103.1	1,090.4	942.1	-13.6
Angola	1,724.4	1,593.9	1,438.2	1,335.4	1,235.9	-7.5
Congo	260.0	267.0	313.0	315.3	286.5	-9.1
Egypt	200.9	183.0	188.3	216.1	268.3	24.2
Equatorial Guinea	157.6	124.8	121.0	110.2	114.5	3.9
Gabon	215.6	200.7	182.9	214.4	204.7	-4.5
Libya	373.3	815.5	1,023.9	1,056.7	413.0	-60.9
Nigeria	1,755.9	1,830.4	2,000.7	2,028.4	1,879.3	-7.3
Sudans	128.6	107.5	124.0	147.4	144.4	-2.0
Others	793.4	746.0	785.5	798.1	803.4	0.7
Russia	7,581.0	7,536.1	7,716.6	7,808.9	7,072.9	-9.4
Other Eurasia	2,513.4	2,605.8	2,540.3	2,502.0	2,429.0	-2.9
Azerbaijan	691.9	640.1	634.9	586.0	528.2	-9.9
Kazakhstan	1,365.9	1,516.6	1,528.8	1,531.8	1,530.4	-0.1
Others	455.6	449.2	376.6	384.1	370.5	-3.6
Other Europe	228.6	221.0	220.9	225.6	177.8	-21.2
Romania	97.1	89.8	95.6	96.0	79.8	-16.9
Others	131.5	131.2	125.3	129.6	98.1	-24.4
Total world	74,230.9	75,507.9	77,371.5	75,595.7	69,829.4	-7.6
<i>of which</i>						
OPEC	28,910.5	28,166.7	28,947.2	26,363.2	23,183.4	-12.1
<i>OPEC percentage</i>	38.9	37.3	37.4	34.9	33.2	
OECD	21,881.9	23,588.5	24,876.9	25,533.2	24,165.9	-5.4

Notes:

Data may include lease condensates, re-exports of petroleum products and volumes of oil in transit.

Table 5.6
World imports of crude oil by country

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
OECD Americas	8,908.4	8,952.6	8,687.3	7,788.7	6,742.6	-13.4
Canada	888.7	806.6	742.7	802.9	718.4	-10.5
Chile	169.8	177.0	172.7	184.8	147.2	-20.3
United States	7,850.0	7,969.0	7,768.0	6,801.0	5,877.0	-13.6
Others	0.0	0.0	3.9	0.0	0.0	0.0
OECD Europe	11,229.5	11,739.5	11,443.3	11,545.0	10,006.4	-13.3
Belgium	641.8	688.9	666.7	696.5	550.9	-20.9
France	1,092.2	1,148.6	1,061.0	976.1	666.2	-31.8
Germany	1,837.3	1,832.1	1,720.3	1,737.0	1,671.2	-3.8
Greece	472.5	477.9	491.3	461.0	458.5	-0.5
Italy	1,225.8	1,339.6	1,253.0	1,275.0	1,014.2	-20.5
Netherlands	1,090.4	1,091.6	1,096.6	1,153.0	997.8	-13.5
Spain	1,292.2	1,331.8	1,364.7	1,338.8	1,104.6	-17.5
Sweden	396.5	401.1	402.2	344.4	374.9	8.9
Turkey	502.6	520.3	423.5	627.5	591.4	-5.7
United Kingdom	797.6	893.7	891.8	910.4	708.7	-22.2
Others	1,880.5	2,013.9	2,072.2	2,025.5	1,867.9	-7.8
OECD Asia Pacific	6,730.3	6,958.3	6,783.9	6,628.0	5,698.2	-14.0
Australia	332.6	334.7	360.8	328.5	237.9	-27.6
Japan	3,157.8	3,235.2	3,055.9	3,022.7	2,472.4	-18.2
South Korea	2,925.2	3,041.1	3,034.5	2,924.1	2,660.4	-9.0
Others	314.6	347.2	332.8	352.7	327.5	-7.1
China	7,625.4	8,425.7	9,260.2	10,180.5	10,852.6	6.6
India	4,308.3	4,341.4	4,543.6	4,506.6	4,033.0	-10.5
Other Asia	3,578.0	3,686.6	3,713.4	3,523.7	3,139.3	-10.9
Indonesia	366.1	343.8	335.8	215.6	233.0	8.1
Malaysia	198.0	208.9	210.3	283.8	247.5	-12.8
Philippines	212.2	196.7	229.8	161.6	89.3	-44.7
Singapore	896.9	981.7	918.7	847.6	752.9	-11.2
Thailand	852.6	906.0	942.3	932.1	837.3	-10.2
Others	1,052.3	1,049.6	1,076.4	1,083.0	979.3	-9.6
Latin America	668.1	683.7	681.3	603.3	490.8	-18.6
Brazil	134.3	149.8	185.6	188.9	134.3	-28.9
Ecuador	6.0	15.3	19.8	19.9	18.7	-6.4
Trinidad & Tobago	101.0	89.7	72.4	2.9	0.0	-100.0
Venezuela	5.7	1.0	2.1	4.3	5.7	33.3
Others	421.1	427.9	401.4	387.3	332.1	-14.3
Middle East	464.7	491.5	453.9	486.2	515.5	6.0
Bahrain	212.4	222.9	220.2	226.3	179.1	-20.8
United Arab Emirates	52.4	68.0	41.7	52.8	163.3	209.6
Others	199.8	200.6	192.1	207.2	173.1	-16.5
Africa	615.4	585.3	627.5	640.3	690.3	7.8
Algeria	4.9	4.8	5.5	3.5	0.0	-100.0
Egypt	83.3	86.9	142.3	120.8	221.0	82.9
South Africa	431.9	402.8	436.5	409.2	371.5	-9.2
Others	95.4	90.8	43.3	106.8	97.8	-8.4
Russia	0.0	0.0	0.0	0.0	0.0	0.0
Other Eurasia	403.5	416.5	416.4	409.5	370.8	-9.4
Belarus	365.6	365.3	367.9	363.0	320.8	-11.6
Ukraine	10.4	20.6	15.4	16.0	25.2	57.3
Others	27.5	30.6	33.0	30.5	24.9	-18.4
Other Europe	390.5	419.9	424.9	433.2	360.4	-16.8
Bulgaria	124.2	137.4	128.0	141.0	97.3	-31.0
Croatia	50.8	57.2	59.2	44.9	47.5	5.8
Romania	153.2	159.1	169.9	177.8	154.3	-13.3
Others	62.4	66.2	67.8	69.5	61.3	-11.8
Total world	44,921.9	46,700.9	47,035.6	46,745.1	42,900.1	-8.2
<i>of which</i>						
OECD	26,868.2	27,650.4	26,914.4	25,961.7	22,447.2	-13.5

Notes:

Data may include lease condensates and volumes of oil in transit.

Table 5.7

World imports of petroleum products by country

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
OECD Americas	3,343.0	3,454.5	3,729.8	3,944.8	3,271.8	-17.1
Canada	248.3	274.3	304.9	312.8	196.1	-37.3
Mexico	735.5	846.0	1,089.6	1,138.2	932.9	-18.0
United States	2,205.0	2,175.0	2,174.0	2,340.0	1,981.0	-15.3
Others	154.2	159.2	161.3	153.8	161.8	5.2
OECD Europe	7,948.0	8,083.9	8,101.2	7,889.3	6,937.4	-12.1
Belgium	550.8	575.5	621.3	564.1	529.6	-6.1
France	822.9	860.8	896.1	938.7	926.4	-1.3
Germany	824.2	880.4	866.5	907.5	746.0	-17.8
Italy	323.8	346.5	362.9	322.1	269.8	-16.2
Netherlands	1,925.9	1,925.9	1,864.5	1,797.5	1,556.0	-13.4
Spain	363.0	399.7	361.9	364.7	308.2	-15.5
Turkey	520.8	556.4	573.3	443.6	382.3	-13.8
United Kingdom	737.2	700.0	754.0	703.7	533.8	-24.1
Others	1,879.5	1,838.7	1,800.7	1,847.4	1,685.2	-8.8
OECD Asia Pacific	2,435.9	2,522.3	2,676.9	2,631.5	2,582.3	-1.9
Australia	550.5	606.1	625.3	633.9	589.7	-7.0
Japan	868.9	923.5	976.0	896.3	918.7	2.5
South Korea	919.5	890.6	957.9	994.7	962.6	-3.2
Others	97.1	102.2	117.8	106.6	111.3	4.4
China	1,220.3	1,368.5	1,397.5	1,389.4	1,318.4	-5.1
India	814.1	843.5	776.5	968.6	1,050.7	8.5
Other Asia	5,619.8	6,066.5	5,797.9	5,976.9	5,268.7	-11.8
Indonesia	498.6	575.8	641.6	945.4	503.0	-46.8
Malaysia	647.8	760.1	751.6	679.3	795.3	17.1
Singapore	2,472.6	2,621.3	2,334.9	2,243.8	2,088.3	-6.9
Others	2,000.8	2,109.4	2,069.9	2,108.4	1,882.2	-10.7
Latin America	1,875.4	2,009.7	2,072.5	2,042.2	1,594.4	-21.9
Brazil	550.5	697.8	640.2	725.3	606.1	-16.4
Ecuador	122.6	134.2	193.8	187.5	164.5	-12.3
Panama	66.1	64.4	61.5	65.2	41.8	-35.9
Venezuela	160.2	164.9	245.3	167.1	68.5	-59.0
Others	976.0	948.5	931.8	897.1	713.5	-20.5
Middle East	1,848.5	1,929.5	2,253.8	1,549.6	1,244.1	-19.7
IR Iran	61.6	96.0	101.0	97.5	91.6	-6.1
Iraq	91.7	115.6	89.4	95.8	76.7	-20.0
Kuwait	0.0	0.5	30.2	14.0	14.8	5.6
Qatar	20.6	20.5	21.5	22.5	20.8	-7.3
Saudi Arabia	591.1	486.8	898.4	319.4	353.1	10.5
United Arab Emirates	340.2	344.4	350.6	265.9	120.2	-54.8
Others	743.3	865.6	762.7	734.5	567.0	-22.8
Africa	1,907.6	1,893.7	1,900.8	1,918.4	1,769.3	-7.8
Algeria	73.3	74.5	17.2	43.0	35.5	-17.5
Angola	75.8	70.6	99.5	64.9	134.3	106.8
Congo	1.4	1.6	1.7	0.4	0.2	-53.2
Egypt	351.3	318.2	278.3	263.8	148.8	-43.6
Equatorial Guinea	6.4	6.5	3.9	4.7	4.2	-11.2
Gabon	6.1	6.2	7.7	7.9	6.9	-12.9
Libya	107.9	130.9	136.8	144.1	147.4	2.3
Morocco	256.8	271.6	266.9	269.7	240.1	-11.0
Nigeria	423.4	391.7	442.0	459.6	465.9	1.4
Tunisia	74.6	82.5	84.7	88.8	71.3	-19.7
Others	530.7	539.7	562.0	571.5	514.8	-9.9
Russia	24.3	25.7	29.2	23.5	25.8	10.0
Other Eurasia	384.6	390.4	371.6	362.0	363.0	0.3
Ukraine	196.2	201.2	213.1	222.0	220.7	-0.6
Others	188.4	189.3	158.5	140.0	142.3	1.6
Other Europe	407.9	434.2	426.4	456.7	444.0	-2.8
Bulgaria	39.0	43.3	35.8	37.8	38.6	2.2
Croatia	27.9	32.4	31.6	48.5	35.8	-26.3
Romania	61.4	67.1	67.1	67.2	80.9	20.5
Others	279.6	291.4	292.0	303.3	288.7	-4.8
Total world	27,829.5	29,022.5	29,534.1	29,153.0	25,869.8	-11.3
<i>of which</i>						
OPEC	1,939.2	1,890.0	2,423.7	1,684.4	1,519.2	-9.8
<i>OPEC percentage</i>	<i>7.0</i>	<i>6.5</i>	<i>8.2</i>	<i>5.8</i>	<i>5.9</i>	
OECD	13,727.0	14,060.7	14,507.9	14,465.6	12,791.4	-11.6

Notes:

Data may include re-exports and volumes of oil in transit.

Table 5.8

World imports of petroleum products by main petroleum product and region

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
OECD Americas	3,343.0	3,454.5	3,729.8	3,944.8	3,271.8	-17.1
Gasoline	1,586.6	1,609.2	1,675.6	1,825.5	1,362.1	-25.4
Kerosene	304.6	320.7	311.4	370.2	251.7	-32.0
Distillates	596.8	637.6	738.1	717.1	659.1	-8.1
Residuals	311.5	295.3	326.5	272.3	265.1	-2.6
Others	543.6	591.7	678.1	759.6	733.8	-3.4
OECD Europe	7,948.0	8,083.9	8,101.2	7,889.3	6,937.4	-12.1
Gasoline	690.9	693.1	608.8	630.1	557.8	-11.5
Kerosene	807.0	834.7	894.1	911.2	589.3	-35.3
Distillates	3,083.6	3,081.4	2,957.9	2,929.6	2,717.1	-7.3
Residuals	1,101.7	827.5	776.6	721.5	776.6	7.6
Others	2,264.9	2,647.2	2,863.9	2,697.0	2,296.5	-14.8
OECD Asia Pacific	2,435.9	2,522.3	2,676.9	2,631.5	2,582.3	-1.9
Gasoline	159.2	163.4	178.3	186.5	198.5	6.5
Kerosene	125.8	156.3	183.3	159.2	106.1	-33.4
Distillates	332.5	355.6	389.5	398.6	422.7	6.1
Residuals	154.1	142.4	159.8	101.9	84.8	-16.8
Others	1,664.3	1,704.7	1,766.0	1,785.3	1,770.1	-0.9
China	1,220.3	1,368.5	1,397.5	1,389.4	1,318.4	-5.1
Gasoline	4.9	0.4	10.3	7.7	11.1	44.6
Kerosene	74.2	78.9	86.4	76.2	54.3	-28.7
Distillates	18.1	14.8	14.2	23.7	24.4	2.9
Residuals	212.5	246.3	297.9	269.5	230.5	-14.5
Others	910.7	1,028.2	988.6	1,012.3	998.0	-1.4
India	814.1	843.5	776.5	968.6	1,050.7	8.5
Gasoline	12.7	4.0	8.2	49.5	31.1	-37.2
Kerosene	0.0	0.0	0.0	0.0	0.0	0.0
Distillates	19.1	28.3	6.3	39.5	32.7	-17.2
Residuals	21.0	17.5	30.4	47.5	116.6	145.4
Others	761.2	793.7	731.6	832.1	870.3	4.6
Other Asia	5,619.8	6,066.5	5,797.9	5,976.9	5,268.7	-11.8
Gasoline	904.6	1,164.7	1,076.9	1,282.4	1,075.3	-16.1
Kerosene	231.7	266.0	249.8	267.9	174.4	-34.9
Distillates	937.4	920.5	957.0	1,106.6	918.7	-17.0
Residuals	2,026.4	2,154.9	1,891.2	1,574.7	1,430.0	-9.2
Others	1,519.7	1,560.4	1,623.0	1,745.3	1,670.3	-4.3
Latin America	1,875.4	2,009.7	2,072.5	2,042.2	1,594.4	-21.9
Gasoline	577.4	631.6	639.3	643.9	511.2	-20.6
Kerosene	34.2	19.4	42.6	92.7	35.6	-61.6
Distillates	571.7	684.4	677.6	687.5	555.9	-19.1
Residuals	135.8	110.2	127.0	107.6	56.9	-47.1
Others	556.3	564.1	586.0	510.5	434.8	-14.8
Middle East	1,848.5	1,929.5	2,253.8	1,549.6	1,244.1	-19.7
Gasoline	788.4	965.1	989.8	764.1	570.7	-25.3
Kerosene	82.2	19.8	132.9	11.6	15.2	30.7
Distillates	631.5	364.7	460.9	158.2	87.2	-44.9
Residuals	338.1	561.3	624.7	602.4	552.6	-8.3
Others	8.3	18.6	45.4	13.3	18.4	38.1

Table 5.8

World imports of petroleum products by main petroleum product and region*(1,000 b/d)*

	2016	2017	2018	2019	2020	% change 20/19
Africa	1,907.6	1,893.7	1,900.8	1,918.4	1,769.3	-7.8
Gasoline	758.5	804.5	1,055.2	899.1	916.5	1.9
Kerosene	45.2	33.4	49.9	79.7	36.4	-54.3
Distillates	649.8	700.9	532.5	648.2	504.8	-22.1
Residuals	166.4	74.0	29.3	37.3	24.1	-35.3
Others	287.8	280.9	233.9	254.1	287.4	13.1
Russia	24.3	25.7	29.2	23.5	25.8	10.0
Gasoline	4.0	0.7	0.9	0.3	0.9	232.4
Kerosene	0.3	1.4	0.4	0.2	0.0	-100.0
Distillates	1.7	2.9	1.5	1.0	0.7	-27.3
Residuals	0.0	0.2	0.0	0.5	0.5	3.3
Others	18.4	20.5	26.4	21.5	23.7	10.0
Other Eurasia	384.6	390.4	371.6	362.0	363.0	0.3
Gasoline	100.0	86.2	64.6	53.1	50.8	-4.3
Kerosene	6.1	9.4	11.7	6.9	3.7	-46.0
Distillates	170.2	172.4	164.7	173.8	180.3	3.8
Residuals	18.0	14.2	6.0	6.4	2.5	-61.4
Others	90.3	108.2	124.7	121.8	125.7	3.1
Other Europe	407.9	434.2	426.4	456.7	444.0	-2.8
Gasoline	41.9	41.7	37.0	38.5	37.3	-3.0
Kerosene	18.8	22.1	24.8	20.6	9.1	-55.5
Distillates	183.0	211.2	199.1	222.2	217.6	-2.0
Residuals	89.6	90.3	95.9	98.1	93.6	-4.5
Others	74.8	68.9	69.6	77.4	86.2	11.4
Total world	27,829.5	29,022.5	29,534.1	29,153.0	25,869.8	-11.3
Gasoline	5,629.1	6,164.6	6,344.9	6,380.7	5,323.4	-16.6
Kerosene	1,730.1	1,762.0	1,987.3	1,996.4	1,275.9	-36.1
Distillates	7,195.3	7,174.6	7,099.3	7,106.0	6,321.3	-11.0
Residuals	4,575.0	4,534.1	4,365.4	3,839.7	3,634.0	-5.4
Others	8,700.0	9,387.1	9,737.2	9,830.3	9,315.3	-5.2
<i>of which</i>						
OPEC	1,939.2	1,890.0	2,423.7	1,684.4	1,519.2	-9.8
Gasoline	865.5	1,012.6	1,305.0	947.5	816.7	-13.8
Kerosene	66.2	16.7	101.1	46.9	27.7	-41.0
Distillates	566.0	392.1	475.1	335.2	285.2	-14.9
Residuals	216.6	311.5	359.8	286.1	340.0	18.8
Others	224.8	157.0	182.7	68.7	49.7	-27.7
OECD	13,727.0	14,060.7	14,507.9	14,465.6	12,791.4	-11.6
Gasoline	2,436.7	2,465.6	2,462.7	2,642.1	2,118.4	-19.8
Kerosene	1,237.4	1,311.6	1,388.8	1,440.6	947.1	-34.3
Distillates	4,012.9	4,074.6	4,085.5	4,045.3	3,798.9	-6.1
Residuals	1,567.3	1,265.1	1,263.0	1,095.7	1,126.5	2.8
Others	4,472.7	4,943.7	5,308.0	5,241.9	4,800.4	-8.4

Notes:

Data may include re-exports and volumes of oil in transit.

Table 5.9
World imports of crude oil and petroleum products by country

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
OECD Americas	12,251.5	12,407.1	12,417.1	11,733.5	10,014.4	-14.7
Canada	1,137.0	1,080.9	1,047.6	1,115.7	914.5	-18.0
Mexico	735.5	846.0	1,093.5	1,138.2	932.9	-18.0
United States	10,055.0	10,144.0	9,942.0	9,141.0	7,858.0	-14.0
Others	324.0	336.2	334.0	338.6	309.0	-8.7
OECD Europe	19,177.5	19,823.3	19,544.5	19,434.3	16,943.7	-12.8
Belgium	1,192.6	1,264.3	1,288.0	1,260.6	1,080.5	-14.3
France	1,915.0	2,009.4	1,957.1	1,914.8	1,592.5	-16.8
Germany	2,661.5	2,712.5	2,586.8	2,644.5	2,417.2	-8.6
Greece	555.3	559.5	562.8	559.2	537.4	-3.9
Italy	1,549.6	1,686.2	1,615.9	1,597.1	1,284.1	-19.6
Netherlands	3,016.3	3,017.5	2,961.1	2,950.5	2,553.8	-13.4
Spain	1,655.2	1,731.5	1,726.6	1,703.5	1,412.8	-17.1
Sweden	631.2	617.8	608.3	532.6	548.5	3.0
Turkey	1,023.3	1,076.7	996.7	1,071.0	973.8	-9.1
United Kingdom	1,534.8	1,593.6	1,645.8	1,614.0	1,242.5	-23.0
Others	3,442.5	3,554.4	3,595.4	3,586.4	3,300.6	-8.0
OECD Asia Pacific	9,166.2	9,480.6	9,460.8	9,259.5	8,280.5	-10.6
Australia	883.0	940.7	986.0	962.4	827.6	-14.0
Japan	4,026.7	4,158.7	4,031.9	3,919.0	3,391.0	-13.5
South Korea	3,844.8	3,931.7	3,992.3	3,918.8	3,623.0	-7.5
Others	411.7	449.5	450.5	459.3	438.8	-4.5
China	8,845.7	9,794.2	10,657.6	11,569.8	12,171.0	5.2
India	5,122.3	5,184.9	5,320.1	5,475.2	5,083.8	-7.1
Other Asia	9,197.8	9,753.1	9,511.4	9,500.6	8,408.1	-11.5
Indonesia	864.7	919.6	977.4	1,161.0	736.0	-36.6
Malaysia	845.8	969.0	961.9	963.2	1,042.8	8.3
Philippines	450.5	483.4	483.2	472.6	313.1	-33.7
Singapore	3,369.5	3,602.9	3,253.6	3,091.4	2,841.3	-8.1
Thailand	1,019.8	1,080.8	1,118.2	1,148.3	1,040.7	-9.4
Others	2,647.4	2,697.4	2,717.1	2,664.2	2,434.3	-8.6
Latin America	2,543.5	2,693.4	2,753.8	2,645.6	2,085.2	-21.2
Brazil	684.8	847.6	825.8	914.3	740.4	-19.0
Ecuador	128.6	149.5	213.6	207.4	183.2	-11.7
Venezuela	165.9	165.9	247.4	171.4	74.2	-56.7
Others	1,564.3	1,530.4	1,467.0	1,352.5	1,087.4	-19.6

Table 5.9

World imports of crude oil and petroleum products by country

(1,000 b/d)

	2016	2017	2018	2019	2020	% change 20/19
Middle East	2,313.2	2,420.9	2,707.7	2,035.8	1,759.6	-13.6
Bahrain	225.1	236.5	234.9	241.5	192.0	-20.5
IR Iran	61.6	96.0	101.0	97.5	91.6	-6.1
Iraq	91.7	115.6	89.4	95.8	76.7	-20.0
Kuwait	0.0	0.5	30.2	14.0	14.8	5.6
Qatar	20.6	20.5	21.5	22.5	20.8	-7.3
Saudi Arabia	591.1	486.8	898.4	319.4	353.1	10.5
United Arab Emirates	392.7	412.4	392.3	318.7	283.5	-11.0
Others	930.4	1,052.6	940.0	926.4	727.1	-21.5
Africa	2,523.0	2,479.0	2,528.4	2,558.7	2,459.6	-3.9
Algeria	78.2	79.3	22.7	46.5	35.5	-23.7
Angola	75.8	70.6	99.5	64.9	134.3	106.8
Congo	1.4	1.6	1.7	0.4	0.2	-53.2
Egypt	434.5	405.1	420.6	384.7	369.8	-3.9
Equatorial Guinea	6.4	6.5	3.9	4.7	4.2	-11.2
Gabon	6.1	6.2	7.7	7.9	6.9	-12.9
Libya	107.9	130.9	136.8	144.1	147.4	2.3
Morocco	256.8	271.6	266.9	269.7	240.1	-11.0
Nigeria	423.4	391.7	442.0	459.6	465.9	1.4
South Africa	512.2	489.8	513.8	476.4	429.7	-9.8
Tunisia	93.0	95.9	95.3	104.3	85.5	-18.0
Others	527.3	530.1	517.4	595.6	540.1	-9.3
Russia	24.3	25.7	29.2	23.5	25.8	10.0
Other Eurasia	788.1	806.9	788.0	771.6	733.8	-4.9
Belarus	388.3	394.2	380.0	367.2	321.9	-12.3
Ukraine	206.6	221.8	228.5	238.0	245.8	3.3
Others	193.2	191.0	179.4	166.4	166.1	-0.2
Other Europe	798.4	854.1	851.3	889.9	804.4	-9.6
Bulgaria	163.2	180.8	163.8	178.8	135.9	-24.0
Croatia	78.7	89.6	90.8	93.4	83.3	-10.9
Romania	214.6	226.2	237.0	245.0	235.2	-4.0
Others	342.0	357.6	359.8	372.8	350.0	-6.1
Total world	72,751.5	75,723.3	76,569.8	75,898.1	68,769.9	-9.4
<i>of which</i>						
OPEC	2,002.2	1,963.8	2,473.0	1,744.9	1,688.3	-3.2
OECD	40,595.1	41,711.1	41,422.4	40,427.3	35,238.6	-12.8

Notes:

Data may include lease condensates, re-exports of petroleum products and volumes of oil in transit.

(1,000 b/d)

Graph 5.2
OPEC Members' crude oil exports by destination, 2020



SECTION 6

Oil transportation

Oil transportation

Table 6.1

Average spot freight rates by vessel category

(% of Worldscale)

	Tanker size (1,000 dwt)	2016	2017	2018	2019	2020
GP	16.5–24.9	105.3	141.5	134.6	134.0	124.6
MR	25.0–44.9	135.4	163.7	149.3	164.1	146.3
LR1	45.0–79.9	97.6	109.7	113.6	118.3	103.0
LR2	80.0–159.9	66.9	69.3	64.7	72.2	62.4
VLCC	160.0–319.9	52.9	44.9	40.7	50.2	49.6

Notes:

Average spot freight rates are the average of all spot freight rates by tanker size reported each month in the spot market.

GP = general purpose carrier; MR = medium range carrier; LR1 = large range 1 carrier; LR2 = large range 2 carrier; VLCC = very large crude carrier.

Graph 6.1

Average spot freight rates by vessel category

(% of Worldscale)

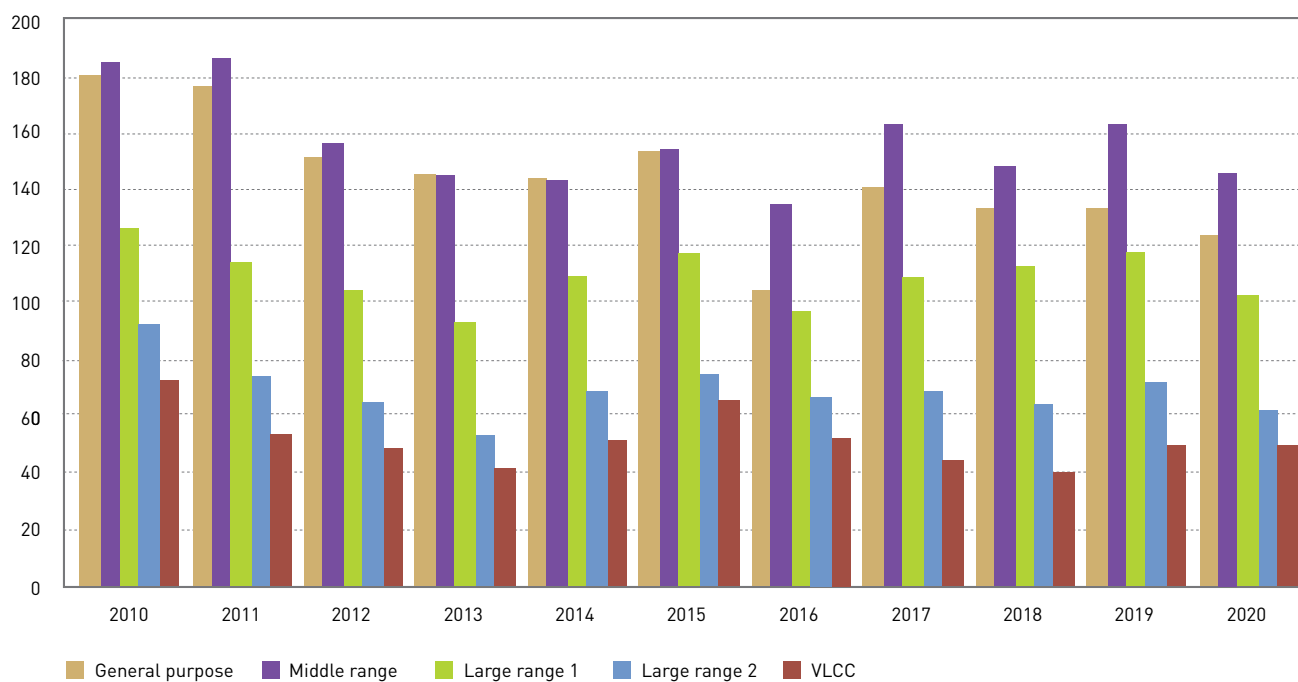


Table 6.2
Dirty tanker spot freight rates

(% of Worldscale and \$/t)

	2016		2017		2018		2019		2020	
	%	\$/t	%	\$/t	%	\$/t	%	\$/t	%	\$/t
ME/EAST	60	10.8	59	8.2	57	9.4	66	13.0	60	14.1
ME/WEST	37	7.6	30	4.8	25	4.7	35	7.8	40	11.6
WAF/EAST	62	17.7	62	13.5	57	14.9	66	20.5	60	22.2
WAF/USGC	70	12.6	75	10.3	72	11.6	81	15.4	67	14.9
WEST/USGC	64	11.6	63	9.2	61	9.8	67	12.5	58	11.7
INDO/EAST	99	11.4	103	9.6	102	11.0	114	14.1	91	13.2
CAR/USEC	107	8.6	121	7.8	133	9.7	128	11.2	115	11.5
MED/MED	97	6.1	106	5.7	115	6.8	116	7.9	88	6.5
MED/WEST	91	9.8	101	8.6	107	10.5	108	12.4	81	10.4

Notes:

ME = Middle East; EAST = Far East; WEST = North-West Europe; WAF = West Africa; USGC = US Gulf Coast; INDO = Indonesia; CAR = Caribbean; USEC = US East Coast; MED = Mediterranean.

Table 6.3
Clean tanker spot freight rates

(% of Worldscale and \$/t)

	2016		2017		2018		2019		2020	
	%	\$/t	%	\$/t	%	\$/t	%	\$/t	%	\$/t
ME/EAST	100	19.5	120	18.2	118	21.1	124	26.2	122	30.0
SING/EAST	124	12.2	161	12.6	137	12.5	151	16.0	137	16.8
WEST/USEC	105	14.5	141	15.4	134	16.5	134	19.3	125	18.9
MED/MED	136	7.9	160	8.0	151	8.4	166	10.4	147	10.2
MED/WEST	146	15.5	170	14.7	160	15.9	175	20.2	156	20.0

Notes:

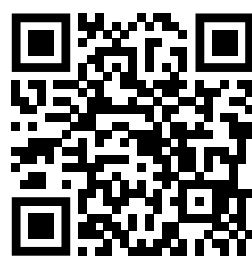
ME = Middle East; EAST = Far East; SING = Singapore; WEST = North-West Europe; USEC = US East Coast; MED = Mediterranean.

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SECTION **7**

Oil prices

Table 7.1
OPEC Reference Basket (ORB) and corresponding components' spot prices

(\$/b)

	Representative crude stream	2016	2017	2018	2019	2020
Algeria	Saharan Blend	44.28	54.12	71.44	64.49	42.12
Angola	Girassol	43.61	54.47	71.72	66.11	42.64
Congo	Djeno	41.98	52.77	68.59	61.80	35.77
Equatorial Guinea	Zafiro	42.43	54.04	71.36	65.74	41.54
Gabon	Rabi Light	42.62	53.16	70.30	63.18	40.22
IR Iran	Iran Heavy	39.57	51.71	67.97	61.85	40.77
Iraq	Basrah Light	39.53	51.87	68.62	63.64	41.55
Kuwait	Kuwait Export	39.30	51.60	68.90	64.25	41.49
Libya	Es Sider	42.69	52.82	69.78	63.81	40.06
Nigeria	Bonny Light	44.02	54.55	72.11	65.63	41.53
Saudi Arabia	Arab Light	40.96	52.59	70.59	64.96	41.91
United Arab Emirates	Murban	44.83	54.82	72.20	64.72	42.98
Venezuela	Merey	34.02	47.63	64.47	54.04	28.12
OPEC	ORB	40.76	52.43	69.78	64.04	41.47
ORB	Volatility ¹	7.28	5.00	6.59	4.11	12.55
ORB	Coefficient of variation ² , %	17.85	9.54	9.44	6.43	30.26

Notes:

1. Standard deviation of daily prices.

2. Ratio of volatility to annual average price.

Graph 7.1
OPEC Reference Basket

(\$/b)

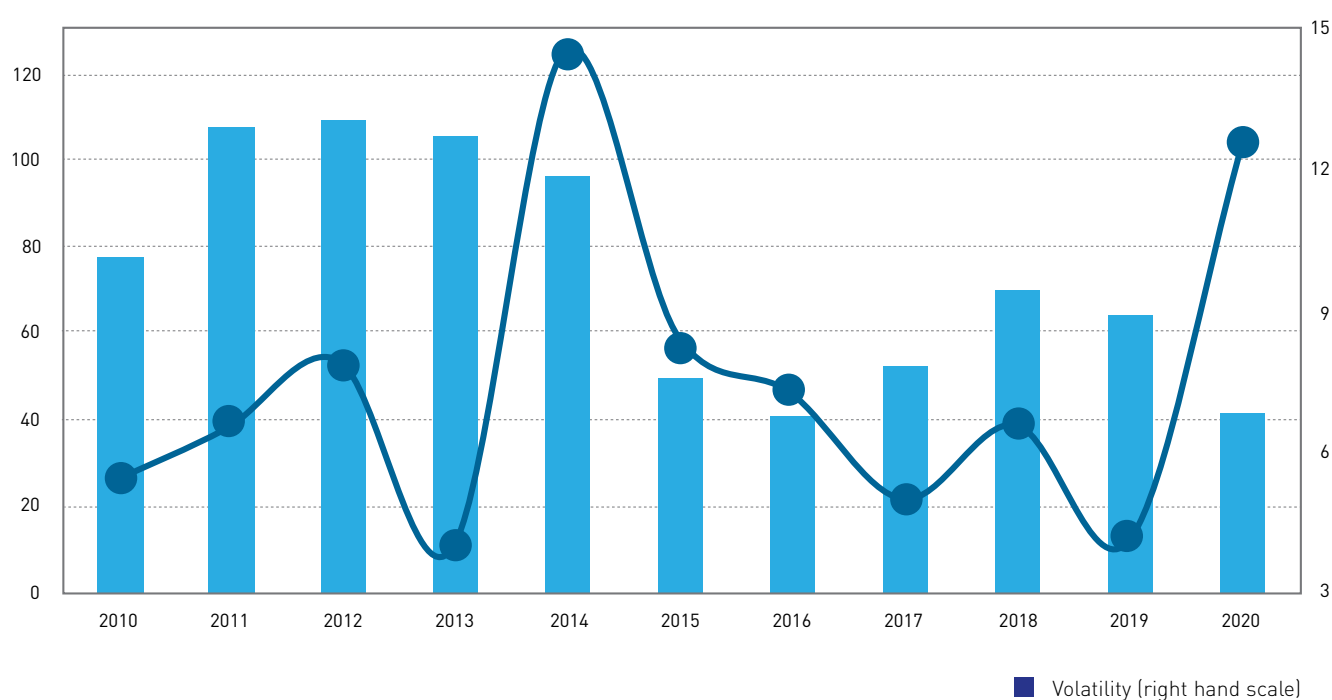


Table 7.2
Selected spot crude oil prices

(\$/b)

	Crude stream	2016	2017	2018	2019	2020
Algeria	Zarzaitine	44.02	54.08	71.35	64.42	41.72
Angola	Cabinda	42.83	54.30	71.15	65.34	42.29
Egypt	Suez Mix	40.41	51.56	68.47	62.61	40.23
IR Iran	Iran Light	41.66	52.36	69.10	62.74	40.36
Indonesia	Minas	41.11	48.99	65.44	60.25	41.08
Libya	Brega	43.73	53.62	70.65	63.76	40.12
Malaysia	Miri	46.39	56.93	75.90	69.30	47.15
Malaysia	Tapis	45.69	56.33	73.78	69.15	43.24
Mexico	Isthmus	42.37	54.60	68.74	63.00	36.61
Mexico	Maya	36.52	47.00	62.71	57.51	36.20
Nigeria	Forcados	43.70	54.58	72.56	66.19	41.56
Norway	Ekosfisk	44.01	54.49	71.86	65.24	42.33
Norway	Oseberg	44.52	55.04	72.34	65.38	42.36
Oman	Oman	41.96	53.32	70.10	64.00	43.20
Qatar	Dukhan	43.69	54.12	71.22	63.65	42.44
Russia	Urals	42.16	53.27	70.13	64.38	41.83
Saudi Arabia	Arab Heavy	38.45	50.96	68.79	63.85	41.45
United Kingdom	Brent	43.76	54.17	71.22	64.19	41.67
United Kingdom	Forties	43.42	54.20	71.21	64.66	41.38
United States	WTI	43.27	50.82	65.16	57.02	39.43
United Arab Emirates	Dubai	41.39	53.08	69.68	63.48	42.31
Spread	WTI — Brent	-0.49	-3.35	-6.06	-7.17	-2.24
	WTI — Dubai	1.88	-2.26	-4.52	-6.46	-2.88
	Brent — Dubai	2.37	1.09	1.54	0.71	-0.64

Table 7.3
ICE Brent, NYMEX WTI and DME Oman annual average of the 1st, 6th and 12th forward months (\$/b)

	2016	2017	2018	2019	2020
ICE Brent					
1 st forward month	45.13	54.74	71.69	64.16	43.21
6 th forward month	47.65	55.08	70.66	62.32	45.15
12 th forward month	49.49	54.88	68.94	61.19	46.20
NYMEX WTI					
1 st forward month	43.47	50.85	64.90	57.04	39.34
6 th forward month	46.88	51.95	63.59	56.80	41.86
12 th forward month	48.45	51.88	61.81	55.47	42.71
DME Oman					
1 st forward month	41.99	53.24	69.88	63.99	43.03
6 th forward month	43.89	53.47	68.25	60.93	44.52
12 th forward month	45.81	53.30	66.51	59.68	45.54

Table 7.4
OPEC Reference Basket in nominal and real terms (\$/b)

	2016	2017	2018	2019	2020
Nominal oil price	40.76	52.43	69.78	64.04	41.47
Nominal price adjusted for:					
Exchange rates ¹	35.92	46.28	59.82	56.63	36.19
Inflation ²	32.29	40.89	53.45	48.41	31.17
Combined ³	28.45	36.09	45.82	42.81	27.20

Notes:

Base: 2001 = 100.

1. Based on weighted average index of currency exchange rates in the modified Geneva I Agreement (see Geneva I Agreement definition under 'General Notes').
2. Based on weighted average consumer price indices of modified Geneva I countries and the US.
3. Based on combined indices of exchange rates and inflation.

Table 7.5

Annual average of premium factors for selected OPEC Reference Basket components

(\$/b)

		2016	2017	2018	2019	2020
Europe						
Algeria	Saharan Blend	0.52	-0.05	0.23	0.31	0.43
IR Iran	Iran Heavy	-6.38	-5.13	-6.27	-6.80	-5.78
Iraq	Basrah Light	-4.74	-3.41	-4.18	-3.03	-2.65
Libya	Es Sider	-1.08	-1.35	-1.43	-0.38	-1.71
Nigeria	Bonny Light	0.26	0.39	0.89	1.44	-0.16
Saudi Arabia	Arab Light	-4.64	-3.20	-2.47	-1.29	-3.21
Asia						
IR Iran	Iran Heavy	-2.01	-1.11	-0.73	-0.14	-1.19
Iraq	Basrah Light	-1.94	-0.64	0.02	1.26	-0.16
Kuwait	Kuwait Export	-2.31	-1.32	-0.46	0.91	-1.10
Saudi Arabia	Arab Light	-0.42	-0.08	1.56	1.85	-0.43
US						
Iraq	Basrah Light	-0.59	-0.08	-0.37	1.33	0.56
Saudi Arabia	Arab Light	0.29	0.75	0.98	3.00	1.17
	Arab Medium	-1.17	-0.53	-0.57	1.35	0.07
	Arab Heavy	-1.74	-1.86	-1.74	0.52	-0.44

Notes:

Premium factors are related to corresponding benchmark crudes.

Table 7.6
Spot prices of petroleum products in major markets

(\$/b)

	Specifications	2016	2017	2018	2019	2020
US Gulf						
Gasoline	Regular unleaded 87	57.15	68.57	80.17	72.70	47.80
Gasoil	0.2% sulphur	50.10	62.31	80.99	74.61	44.92
Fuel oil	3.0% sulphur	32.13	47.05	60.17	52.55	34.72
Singapore						
Gasoline	Premium unleaded 97	57.81	69.51	81.30	74.15	47.61
Gasoil	0.05% sulphur	52.05	65.69	84.05	77.22	48.36
Fuel oil	380 centistokes	34.92	49.24	64.74	56.70	37.53
Rotterdam						
Gasoline	Premium unleaded 98	63.58	75.13	87.34	79.52	51.34
Gasoil	10ppm sulphur	53.28	66.35	85.94	79.50	49.17
Fuel oil	3.5% sulphur	29.64	44.31	59.04	48.90	33.27

Notes:

US Gulf and Singapore prices apply to cargo. Rotterdam prices apply to barge size lots.

Table 7.7
Crack spreads in major markets

(\$/b)

	Specifications	2016	2017	2018	2019	2020
US Gulf crack spread vs WTI						
Gasoline	Regular unleaded 87	14.10	17.69	15.46	15.79	8.28
Gasoil	0.2% sulphur	6.98	11.33	16.15	17.61	5.41
Fuel oil	3.0% sulphur	-11.09	-3.82	-4.76	-4.51	-4.65
Singapore crack spread vs Dubai						
Gasoline	Premium unleaded 97	16.55	16.38	11.90	10.77	5.37
Gasoil	0.05% sulphur	10.85	12.57	14.65	13.75	6.12
Fuel oil	380 centistokes	-6.33	-3.87	-4.72	-6.83	-4.67
Rotterdam crack spread vs Brent						
Gasoline	Premium unleaded 98	19.86	20.89	16.45	15.26	9.86
Gasoil	10ppm sulphur	9.57	12.11	15.00	15.26	7.65
Fuel oil	3.5% sulphur	-14.05	-9.90	-11.90	-15.37	-8.26

Notes:

US Gulf and Singapore prices apply to cargo. Rotterdam prices apply to barge size lots.

SECTION 8

Taxes on oil

Table 8.1
Composite barrel and its components in major OECD oil consuming countries

	2016			2017			2018			2019			2020		
	\$/b	% share	% change y-o-y	\$/b	% share	% change y-o-y	\$/b	% share	% change y-o-y	\$/b	% share	% change y-o-y	\$/b	% share	% change y-o-y
United States															
Composite barrel	92.45		-12.6	104.70		13.3	120.61		15.2	115.90		-3.9	95.78		-0.17
Crude cif price	37.94	41.0	-17.2	48.12	46.0	26.8	59.21	49.1	23.0	56.33	48.6	-4.9	36.57	0.38	-0.35
Tax	22.16	24.0	-0.6	23.26	22.2	5.0	23.80	19.7	2.3	23.85	20.6	0.2	23.86	0.25	0.00
Industry margin	32.36	35.0	-14.2	33.32	31.8	3.0	37.60	31.2	12.8	35.72	30.8	-5.0	35.35	0.37	-0.01
Canada															
Composite barrel	123.58		-8.4	138.90		12.4	156.69		12.8	144.19		-8.0	121.87		-0.15
Crude cif price	43.60	35.3	-18.5	54.30	39.1	24.5	70.88	45.2	30.5	63.12	43.8	-10.9	45.79	0.38	-0.27
Tax	44.40	35.9	-3.2	47.42	34.1	6.8	49.25	31.4	3.8	49.26	34.2	0.0	48.01	0.39	-0.03
Industry margin	35.57	28.8	0.0	37.18	26.8	4.5	36.56	23.3	-1.7	31.81	22.1	-13.0	28.07	0.23	-0.12
Japan															
Composite barrel	153.28		-3.6	167.49		9.3	193.29		15.4	192.76		-0.3	182.65		-0.05
Crude cif price	41.79	27.3	-22.9	54.42	32.5	30.2	72.85	37.7	33.9	66.78	34.6	-8.3	46.85	0.26	-0.30
Tax	69.36	45.3	10.1	69.82	41.7	0.7	72.86	37.7	4.3	75.45	39.1	3.6	78.58	0.43	0.04
Industry margin	42.13	27.5	0.7	43.25	25.8	2.7	47.59	24.6	10.0	50.53	26.2	6.2	57.22	0.31	0.13
France															
Composite barrel	196.09		-4.5	221.06		12.7	267.48		21.0	254.02		-5.0	229.46		-0.10
Crude cif price	43.48	22.2	-18.2	54.47	24.6	25.3	71.59	26.8	31.4	64.98	25.6	-9.2	44.04	0.19	-0.32
Tax	123.43	62.9	2.8	134.72	60.9	9.1	157.03	58.7	16.6	149.87	59.0	-4.6	148.50	0.65	-0.01
Industry margin	29.19	14.9	-9.1	31.87	14.4	9.2	38.86	14.5	21.9	39.17	15.4	0.8	36.93	0.16	-0.06
Germany															
Composite barrel	198.20		-6.8	216.75		9.4	251.49		16.0	235.70		-6.3	212.36		-0.10
Crude cif price	42.80	21.6	-18.7	54.02	24.9	26.2	70.50	28.0	30.5	64.43	27.3	-8.6	43.24	0.20	-0.33
Tax	119.53	60.3	-1.2	125.11	57.7	4.7	137.45	54.7	9.9	130.97	55.6	-4.7	127.12	0.60	-0.03
Industry margin	35.87	18.1	-8.3	37.62	17.4	4.9	43.54	17.3	15.7	40.30	17.1	-7.4	42.00	0.20	0.04
Italy															
Composite barrel	229.12		-8.2	250.31		9.2	280.84		12.2	265.15		-5.6	241.28		-0.09
Crude cif price	42.33	18.5	-18.7	53.17	21.2	25.6	70.88	25.2	33.3	64.70	24.4	-8.7	43.24	0.18	-0.33
Tax	150.50	65.7	-3.1	156.95	62.7	4.3	168.06	59.8	7.1	159.12	60.0	-5.3	156.75	0.65	-0.01
Industry margin	36.29	15.8	-13.9	40.19	16.1	10.7	41.90	14.9	4.3	41.32	15.6	-1.4	41.29	0.17	0.00
United Kingdom															
Composite barrel	230.74		-14.7	239.81		3.9	267.01		11.3	258.11		-3.3	235.69		-0.09
Crude cif price	44.62	19.3	-17.1	54.69	22.8	22.6	72.65	27.2	32.8	65.58	25.4	-9.7	44.62	0.19	-0.32
Tax	159.06	68.9	-12.4	154.91	64.6	-2.6	163.50	61.2	5.5	158.00	61.2	-3.4	155.08	0.66	-0.02
Industry margin	27.07	11.7	-22.9	30.20	12.6	11.6	30.86	11.6	2.2	34.53	13.4	11.9	36.00	0.15	0.04
67															
Composite barrel	174.78		-8.5	191.29		9.4	219.63		14.8	209.40		-4.7	188.44		-0.10
Crude cif price	42.37	24.2	-18.8	53.31	27.9	25.8	69.79	31.8	30.9	63.70	30.4	-8.7	43.48	0.23	-0.32
Tax	98.35	56.3	-2.9	101.74	53.2	3.5	110.28	50.2	8.4	106.65	50.9	-3.3	105.41	0.56	-0.01
Industry margin	34.07	19.5	-9.5	36.23	18.9	6.4	39.56	18.0	9.2	39.05	18.6	-1.3	39.55	0.21	0.01
OECD															
Composite barrel	180.99		-8.3	199.83		10.4	225.54		12.9	214.51		-4.9	192.41		-0.10
Crude cif price	42.73	23.6	-18.6	53.68	26.9	25.6	70.89	31.4	32.1	64.62	30.1	-8.8	43.97	0.23	-0.32
Tax	97.41	53.8	-2.2	102.51	51.3	5.2	109.95	48.7	7.3	105.35	49.1	-4.2	103.60	0.54	-0.02
Industry margin	40.86	22.6	-10.0	43.64	21.8	6.8	44.70	19.8	2.4	44.54	20.8	-0.4	44.84	0.23	0.01

Notes:

Prices partly estimated and preliminary. Quotations converted from various volumetric units to barrels. Because of rounding in the conversions from other units to barrels, some results may not agree exactly with the sum of their component parts.

Graph 8.1
Composite barrel and its components

(\$/b)

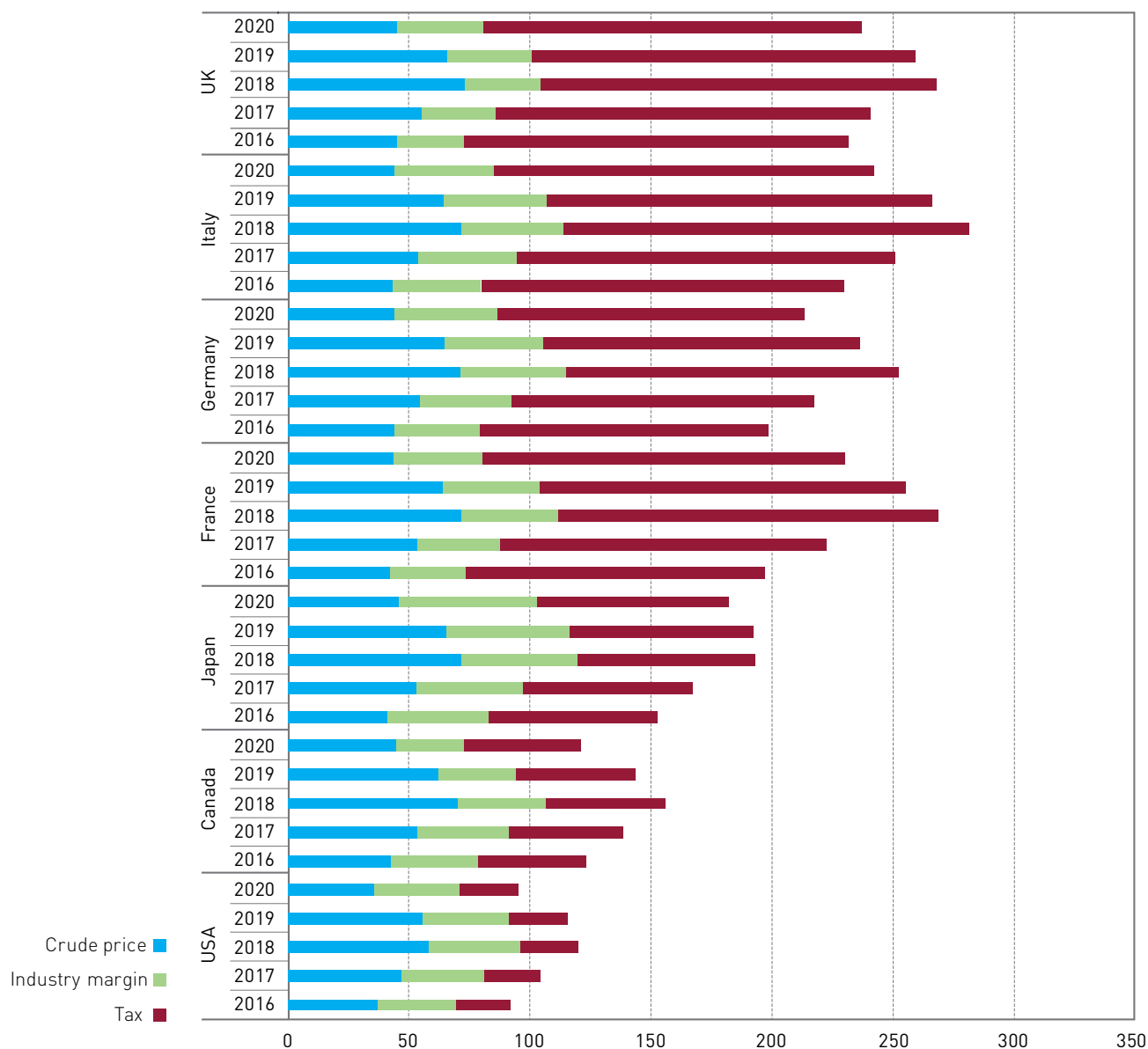


Table 8.2
Tax to CIF crude oil price ratio in major OECD oil consuming countries (ratio)

	2016	2017	2018	2019	2020
USA	0.58	0.48	0.40	0.42	0.65
Canada	1.02	0.87	0.69	0.78	1.05
Japan	1.66	1.28	1.00	1.13	1.68
France	2.84	2.47	2.19	2.31	3.37
Germany	2.79	2.32	1.95	2.03	2.94
Italy	3.56	2.95	2.37	2.46	3.63
UK	3.56	2.83	2.25	2.41	3.48
G7	2.32	1.91	1.58	1.67	2.42
OECD	2.28	1.91	1.55	1.63	2.36

Notes:

Prices partly estimated and preliminary. Quotations converted from various volumetric units to barrels. Because of rounding in the conversions from other units to barrels, some results may not agree exactly with the sum of their component parts.

Graph 8.2
Composite barrel and its components in percentage [%]

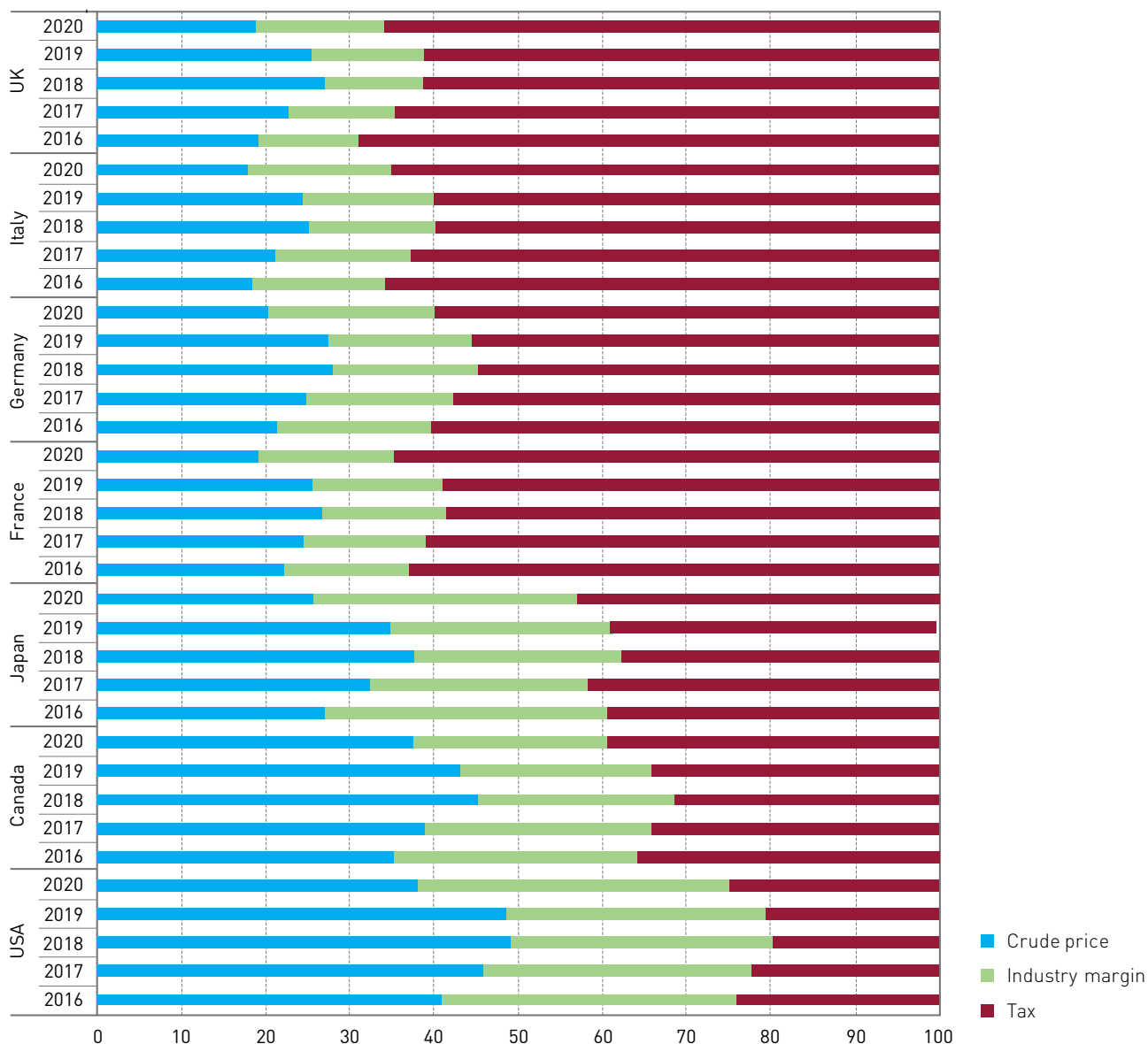


Table 8.3
Euro Big 4 household energy prices, 2020 [\$ /toe NCV]

	Automotive diesel	Premium unleaded 95 RON	Liquefied petroleum gas	Natural gas	Electricity
Tax	1,047	1,280	428	250	1,040
Non-tax	612	618	831	732	2,016
Total price	1,659	1,898	1,259	982	3,055
Tax share (%)	63	67	34	25	34

Notes:

Prices partly estimated and preliminary.
Europe 4 includes France, Germany, Italy and the United Kingdom.
Data for LPG pricing in the UK and natural gas pricing in Italy is not available (the average of the remaining three is used).

SECTION 9

Natural gas data

Natural gas data

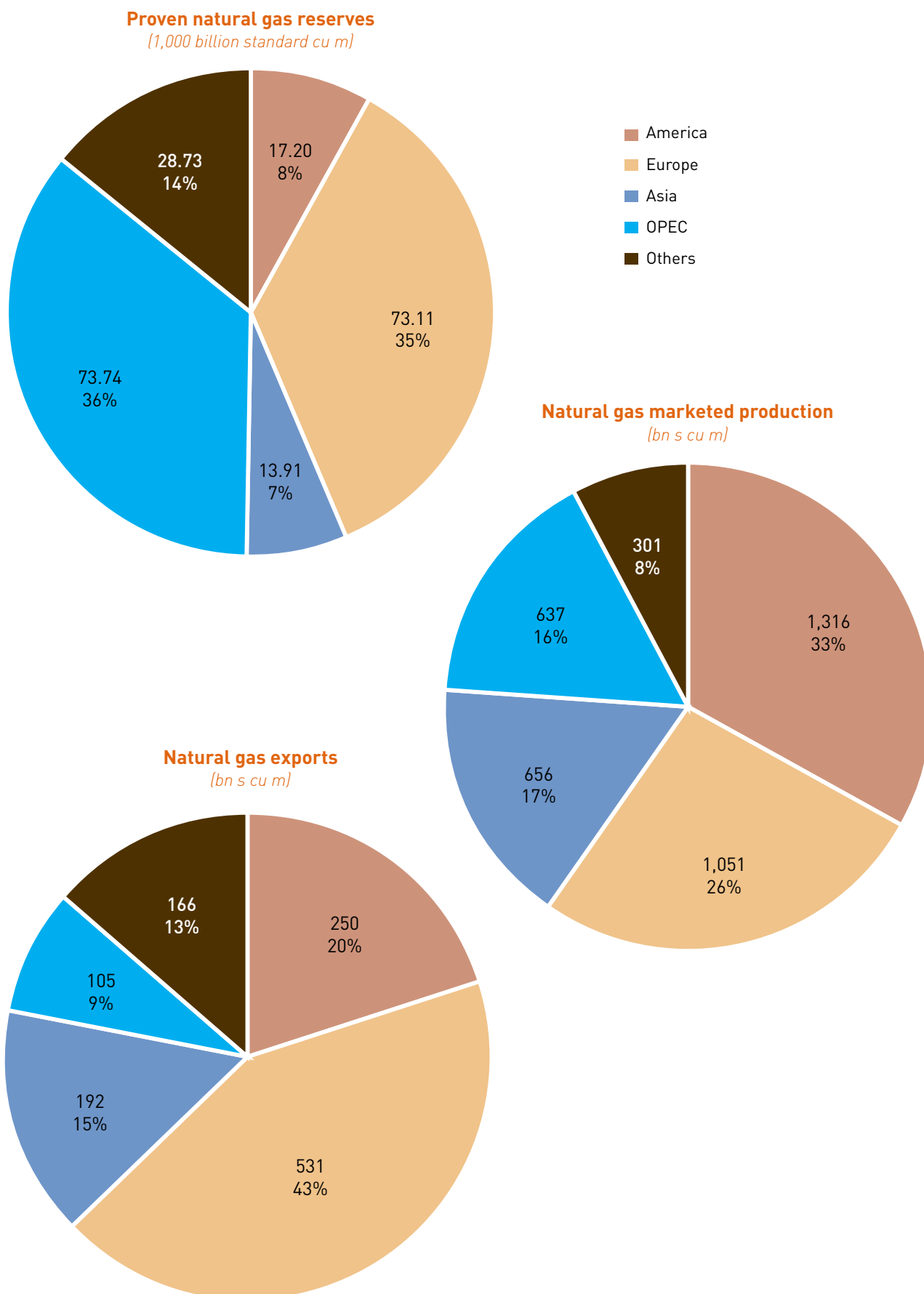
Table 9.1
World proven natural gas reserves by country

(bn s cu m)

	2016	2017	2018	2019	2020	% change 20/19
OECD Americas	11,429	14,695	15,637	15,685	15,499	-1.2
Canada	2,097	2,083	2,008	2,061	2,354	14.2
Chile	5	5	4	4	4	0.0
Mexico	208	199	188	183	183	0.0
United States	9,119	12,408	13,437	13,437	12,958	-3.6
OECD Europe	3,702	3,572	2,987	2,874	2,781	-3.2
Denmark	77	72	69	66	66	0.0
Germany	42	37	30	25	23	-6.5
Italy	38	45	48	46	45	-2.8
Netherlands	740	695	196	147	133	-9.8
Norway	2,388	2,334	2,226	2,165	2,088	-3.6
Poland	58	56	73	85	86	1.8
United Kingdom	288	263	276	276	276	0.0
Others	71	70	69	64	64	0.0
OECD Asia Pacific	3,738	3,761	3,770	3,821	3,856	0.9
Australia	3,193	3,193	3,193	3,193	3,226	1.0
Japan	29	28	27	26	26	0.0
New Zealand	50	51	53	54	56	2.9
Others	466	489	497	548	548	0.0
China	2,838	2,786	2,779	2,834	2,987	5.4
India	1,227	1,284	1,340	1,381	1,422	3.0
Other Asia	7,587	7,300	7,057	6,891	5,642	-18.1
Bangladesh	365	337	325	312	312	0.0
Brunei	252	240	246	240	240	0.0
Indonesia	2,841	2,745	2,605	2,605	1,408	-46.0
Malaysia	2,470	2,346	2,290	2,217	2,224	0.3
Myanmar	273	265	256	248	238	-4.0
Pakistan	479	502	499	446	431	-3.4
Thailand	193	181	171	171	138	-19.2
Vietnam	203	199	195	190	190	0.0
Others	511	485	470	462	462	0.0
Latin America	7,642	7,565	7,503	7,447	7,288	-2.1
Argentina	337	355	357	373	396	6.2
Bolivia	310	303	303	310	310	0.0
Brazil	378	370	368	367	349	-4.9
Colombia	114	110	107	104	88	-15.5
Ecuador	11	11	11	11	11	0.0
Peru	456	455	466	375	311	-17.2
Trinidad & Tobago	286	246	208	225	225	0.1
Venezuela	5,740	5,707	5,674	5,674	5,590	-1.5
Others	10	9	9	9	9	0.0
Middle East	79,675	79,572	79,957	81,951	81,075	-1.1
IR Iran	33,721	33,810	33,899	33,988	34,077	0.3
Iraq	3,820	3,744	3,729	3,714	3,714	0.0
Kuwait	1,784	1,784	1,784	1,784	1,784	0.0
Oman	705	705	677	674	674	0.0
Qatar	24,073	23,861	23,846	23,831	23,831	0.0
Saudi Arabia	8,619	8,715	9,069	9,423	8,438	-10.5
United Arab Emirates	6,091	6,091	6,091	7,726	7,726	0.0
Others	862	862	862	811	831	2.4
Africa	14,978	15,336	15,765	15,862	15,807	-0.3
Algeria	4,504	4,504	4,504	4,504	4,504	0.0
Angola	440	422	383	343	301	-12.4
Cameroon	152	151	150	149	149	0.0
Congo	285	285	285	284	284	-0.2
Egypt	2,221	2,221	2,221	2,221	2,221	0.0
Equatorial Guinea	47	42	42	39	39	0.0
Gabon	26	26	26	26	26	0.0
Libya	1,505	1,505	1,505	1,505	1,505	0.0
Nigeria	5,475	5,627	5,675	5,761	5,750	-0.2
Others	324	554	975	1,029	1,029	0.0
Russia	50,617	50,508	49,571	49,154	48,938	-0.4
Other Eurasia	15,117	15,242	16,499	19,587	21,285	8.7
Armenia	18	18	18	18	18	0.0
Azerbaijan	1,277	1,270	1,435	1,917	2,200	14.8
Kazakhstan	1,898	1,865	1,830	1,830	1,830	0.0
Turkmenistan	9,979	10,161	11,335	13,950	15,365	10.1
Ukraine	380	384	358	349	349	0.0
Uzbekistan	1,564	1,543	1,522	1,522	1,522	0.0
Others	1	1	1	1	1	0.0
Other Europe	119	111	103	103	103	0.0
Bulgaria	4	4	4	4	4	0.0
Romania	99	92	87	87	87	0.0
Others	16	15	12	12	12	0.0
Total world	198,669	201,732	202,969	207,590	206,683	-0.4
<i>of which</i>						
OPEC	72,056	72,261	72,665	74,771	73,737	-1.4
OPEC percentage	36.3	35.8	35.8	36.0	35.7	
OECD	18,870	22,028	22,394	22,380	22,136	-1.1

Notes: Figures as at year-end.

Graph 9.1
Natural gas flows during 2020



Natural gas data

Table 9.2
Yearly and cumulative marketed natural gas production in OPEC Members

(million s cu m)

Marketed natural gas production yearly

	1960	1970	1980	1990	2000	2010	2020
Algeria	0	2,599	11,647	51,600	83,119	84,615	85,119
Angola	0	40	260	540	570	733	11,313
Congo	0	10	10	0	0	575	405
Equatorial Guinea	0	0	0	0	30	6,540	6,023
Gabon	7	20	70	100	80	80	502
IR Iran	960	12,881	7,138	24,200	60,240	187,357	253,770
Iraq	604	780	1,281	3,980	3,150	7,511	7,374
Kuwait	943	2,037	4,071	4,190	9,600	11,733	12,883
Libya	0	294	5,170	6,200	5,880	16,814	17,714
Nigeria	0	111	1,070	4,010	12,460	28,099	49,947
Saudi Arabia	0	1,230	11,431	33,520	49,810	87,660	119,000
United Arab Emirates	0	756	6,863	22,110	38,380	51,282	55,064
Venezuela	4,958	7,710	14,805	21,966	27,801	19,728	18,026
OPEC	7,472	28,468	63,816	172,416	291,120	502,727	637,141

Cumulative marketed natural gas production up to and including year

	1960	1970	1980	1990	2000	2010	2020
Algeria	0	15,428	89,208	472,552	1,102,721	1,940,983	2,815,438
Angola	0	40	844	4,684	10,354	17,147	57,592
Congo	0	10	119	149	149	1,797	9,695
Equatorial Guinea	0	0	0	0	70	25,870	100,326
Gabon	7	147	2,132	3,162	4,142	5,012	9,206
IR Iran	960	33,063	203,263	353,113	790,718	1,906,280	4,157,201
Iraq	604	6,991	19,128	43,668	72,138	109,022	196,503
Kuwait	943	22,483	59,123	109,793	179,932	290,934	447,196
Libya	0	294	43,981	93,091	155,921	269,950	422,065
Nigeria	0	861	6,387	35,998	95,883	335,691	777,008
Saudi Arabia	0	8,588	58,961	275,956	708,196	1,410,617	2,488,927
United Arab Emirates	0	2,379	30,627	178,652	491,312	967,964	1,517,330
Venezuela	4,958	69,435	184,608	363,836	628,796	862,302	1,096,380
OPEC	7,472	159,719	698,381	1,934,654	4,240,332	8,143,569	14,094,868

Table 9.3
World marketed production of natural gas by country

(million s cu m)

	2016	2017	2018	2019	2020	% change 20/19
OECD America	980,901	1,003,151	1,103,209	1,185,323	1,169,732	-1.3
Canada	183,819	190,625	195,471	188,020	183,002	-2.7
Chile	1,229	1,222	1,522	1,750	1,402	-19.9
Mexico	41,227	36,216	33,003	31,956	36,905	15.5
United States	754,626	775,088	873,213	963,597	948,423	-1.6
OECD Europe	243,042	243,923	234,386	218,701	201,977	-7.6
Denmark	4,505	4,835	4,119	3,133	1,805	-42.4
Germany	7,606	6,974	5,945	5,741	4,874	-15.1
Italy	5,783	5,540	5,451	4,851	3,932	-18.9
Netherlands	50,543	43,871	38,909	33,607	24,167	-28.1
Norway	120,366	127,733	126,415	119,050	116,208	-2.4
Poland	5,794	5,706	5,616	5,669	5,593	-1.3
United Kingdom	41,606	41,887	40,658	40,287	39,858	-1.1
Others	6,839	7,377	7,273	6,363	5,540	-12.9
OECD Asia Pacific	110,992	131,164	148,734	169,756	170,468	0.4
Australia	93,442	112,583	130,519	151,924	153,014	0.7
Japan	4,243	4,698	4,407	3,872	3,589	-7.3
New Zealand	5,066	4,987	4,408	4,516	4,477	-0.9
Others	8,241	8,896	9,400	9,444	9,388	-0.6
China	132,700	144,000	154,800	169,970	187,390	10.2
India	30,400	31,750	31,700	31,160	27,350	-12.2
Other Asia	297,698	296,995	291,861	287,760	270,670	-5.9
Bangladesh	26,300	26,500	26,450	25,310	24,700	-2.4
Brunei	11,550	11,800	11,390	11,630	11,285	-3.0
Indonesia	72,200	70,400	70,200	63,940	59,984	-6.2
Malaysia	64,400	68,000	66,310	68,100	63,051	-7.4
Myanmar	16,800	16,460	16,070	16,660	16,000	-4.0
Pakistan	38,800	38,820	38,100	37,400	35,000	-6.4
Thailand	38,900	37,400	36,440	37,420	33,950	-9.3
Vietnam	9,460	8,730	8,830	9,010	8,800	-2.3
Others	19,288	18,885	18,071	18,290	17,900	-2.1
Latin America	165,958	168,955	164,444	162,529	146,484	-9.9
Argentina	38,210	38,160	40,560	42,600	38,690	-9.2
Bolivia	20,800	20,200	19,100	16,750	16,100	-3.9
Brazil	20,620	23,750	21,700	22,180	20,600	-7.1
Colombia	10,400	9,600	9,500	9,770	9,600	-1.7
Ecuador	530	463	349	310	300	-3.2
Peru	14,000	12,900	12,420	13,700	12,300	-10.2
Trinidad & Tobago	32,500	32,900	34,900	35,530	29,838	-16.0
Venezuela	27,718	29,793	24,785	20,559	18,026	-12.3
Others	1,180	1,190	1,130	1,130	1,030	-8.8
Middle East	661,005	668,951	680,857	693,654	690,866	-0.4
IR Iran	226,905	238,003	248,524	253,773	253,770	0.0
Iraq	10,416	10,650	11,130	11,544	7,374	-36.1
Kuwait	17,291	17,102	17,738	13,952	12,883	-7.7
Oman	30,450	31,250	35,900	35,864	36,064	0.6
Qatar	182,830	182,230	181,330	183,594	184,880	0.7
Saudi Arabia	110,860	115,000	118,000	117,000	119,000	1.7
United Arab Emirates	61,862	54,086	47,624	55,097	55,064	-0.1
Others	20,390	20,630	20,610	22,830	21,830	-4.4
Africa	216,627	230,927	248,171	252,781	247,524	-2.1
Algeria	93,152	94,778	95,898	90,302	85,119	-5.7
Angola	1,919	3,111	9,614	10,546	11,313	7.3
Cameroon	540	600	1,600	1,600	2,360	47.5
Congo	866	860	867	580	405	-30.2
Egypt	42,100	51,900	62,100	68,866	62,140	-9.8
Equatorial Guinea	7,876	8,237	7,751	6,235	6,023	-3.4
Gabon	551	487	530	464	502	8.2
Libya	15,570	14,309	13,880	14,190	17,714	24.8
Nigeria	42,562	45,434	44,251	47,828	49,947	4.4
Others	11,490	11,210	11,680	12,170	12,000	-1.4
Russia	599,440	646,800	680,430	692,680	649,144	-6.3
Other Eurasia	192,380	197,450	207,180	210,666	193,538	-8.1
Azerbaijan	17,500	16,900	17,800	20,811	22,408	7.7
Kazakhstan	21,700	25,800	27,040	26,076	24,202	-7.2
Turkmenistan	79,770	80,500	84,440	86,662	81,662	-5.8
Ukraine	19,420	19,850	20,330	20,261	18,440	-9.0
Uzbekistan	51,640	52,000	55,170	54,446	44,446	-18.4
Others	2,350	2,400	2,400	2,410	2,380	-1.2
Other Europe	11,580	12,080	11,630	11,360	6,816	-40.0
Bulgaria	90	70	10	30	54	80.0
Croatia	1,310	1,180	1,000	840	790	-6.0
Romania	9,600	10,300	10,120	9,990	5,492	-45.0
Others	580	530	500	500	480	-4.0
Total world	3,642,722	3,776,147	3,957,402	4,086,340	3,961,959	-3.0
<i>of which</i>						
OPEC	617,549	631,851	640,592	642,069	637,141	-0.8
OPEC percentage	17.0	16.7	16.2	15.7	16.1	
OECD	1,334,935	1,378,238	1,486,329	1,573,780	1,542,177	-2.0

Natural gas data

Table 9.4
World natural gas exports by country

(million s cu m)

	2016	2017	2018	2019	2020	% change 20/19
OECD America	150,786	174,724	182,044	208,488	220,482	5.8
Canada	84,269	85,123	79,774	76,629	70,932	-7.4
United States	66,133	89,305	102,162	131,847	149,538	13.4
Others	384	296	108	12	12	0.0
OECD Europe	240,957	264,759	270,349	269,022	261,267	-2.9
Belgium	21,180	23,950	24,640	28,870	28,875	0.0
Denmark	2,114	2,235	1,538	1,344	1,713	27.5
France	3,717	6,038	5,925	10,789	9,102	-15.6
Germany	27,530	35,910	38,440	41,830	50,092	19.8
Italy	212	271	396	326	315	-3.4
Netherlands	56,597	48,017	54,485	47,664	39,976	-16.1
Norway	114,373	122,485	120,961	111,304	112,951	1.5
Spain	3,984	2,876	3,244	1,121	1,188	6.0
United Kingdom	10,300	11,347	7,610	8,044	9,595	19.3
Others	950	11,630	13,110	17,730	7,460	-57.9
OECD Asia Pacific	58,683	74,863	91,582	100,253	102,562	2.3
Australia	58,683	74,803	91,582	100,253	102,562	2.3
Others	0	60	0	0	0	0.0
China	3,430	3,472	3,402	3,640	5,200	42.9
India	80	0	90	0	0	0.0
Other Asia	96,670	99,300	93,360	92,612	83,832	-9.5
Brunei	8,450	8,920	8,270	8,322	7,848	-5.7
Indonesia	30,420	29,820	29,620	24,860	22,525	-9.4
Malaysia	34,180	36,840	33,960	35,310	31,262	-11.5
Myanmar	12,800	12,150	11,310	12,240	11,506	-6.0
Others	10,820	11,570	10,200	11,880	10,692	-10.0
Latin America	37,570	34,700	36,760	35,650	29,271	-17.9
Argentina	60	10	300	810	700	-13.6
Bolivia	17,800	16,400	15,110	12,650	12,400	-2.0
Peru	5,070	5,250	4,700	5,080	4,150	-18.3
Trinidad & Tobago	14,150	12,620	16,380	17,110	12,021	-29.7
Others	490	420	270	0	0	0.0
Middle East	158,769	161,547	178,210	173,228	175,862	1.5
IR Iran	8,567	12,927	12,327	12,350	12,670	2.6
Oman	10,550	11,150	13,400	8,500	10,626	25.0
Qatar	130,324	128,645	143,445	143,000	143,700	0.5
United Arab Emirates	9,328	8,775	8,938	9,258	8,766	-5.3
Others	0	50	100	120	100	-16.7
Africa	95,151	103,002	95,370	100,484	95,111	-5.3
Algeria	53,974	53,891	51,424	42,776	39,459	-7.8
Angola	1,149	517	541	582	628	7.8
Congo	0	190	0	0	0	0.0
Egypt	670	1,160	1,240	6,694	7,100	6.1
Equatorial Guinea	5,587	6,183	5,509	4,679	4,026	-14.0
Libya	4,664	4,470	4,251	5,700	4,292	-24.7
Nigeria	25,147	32,511	28,626	35,953	35,586	-1.0
Others	3,960	4,080	3,780	4,100	4,020	-2.0
Russia	208,040	229,420	249,870	262,400	199,928	-23.8
Other Eurasia	67,920	70,270	76,040	78,730	67,497	-14.3
Azerbaijan	7,620	8,030	9,190	11,300	9,900	-12.4
Kazakhstan	12,480	14,220	17,550	17,840	13,222	-25.9
Turkmenistan	37,700	37,700	36,400	37,370	32,643	-12.6
Uzbekistan	10,120	10,320	12,900	12,220	11,731	-4.0
Other Europe	14,371	16,139	14,084	7,100	2,772	-61.0
Bulgaria	14,371	16,139	14,084	7,087	2,656	-62.5
Others	0	0	0	13	116	792.3
Total world	1,132,426	1,232,196	1,291,162	1,331,607	1,243,784	-6.6
<i>of which</i>						
OPEC	108,415	119,464	111,616	111,298	105,427	-5.3
<i>OPEC percentage</i>	<i>9.6</i>	<i>9.7</i>	<i>8.6</i>	<i>8.4</i>	<i>8.5</i>	
OECD	450,426	514,346	543,975	577,763	584,311	1.1

Notes:

Data may include re-exports and natural gas in transit.

Table 9.5
World natural gas imports by country

(million s cu m)

	2016	2017	2018	2019	2020	% change 20/19
OECD America	135,125	133,885	123,304	118,707	109,535	-7.7
Canada	22,271	25,266	23,175	26,071	23,572	-9.6
United States	85,133	85,891	81,802	77,641	72,259	-6.9
Others	27,721	22,728	18,327	14,995	13,704	-8.6
OECD Europe	516,369	557,251	572,669	598,904	569,055	-5.0
Austria	7,400	8,470	10,760	15,100	13,250	-12.3
Belgium	39,430	42,100	43,830	43,143	42,696	-1.0
France	46,444	48,260	49,316	54,670	46,140	-15.6
Germany	150,561	153,555	162,392	158,897	155,493	-2.1
Italy	65,285	69,622	67,877	70,912	66,227	-6.6
Netherlands	29,470	32,860	44,300	52,690	53,255	1.1
Poland	12,500	13,180	13,850	15,800	14,477	-8.4
Spain	30,350	32,980	33,580	37,590	32,838	-12.6
Turkey	46,352	55,121	50,007	45,212	47,991	6.1
United Kingdom	48,457	47,623	48,177	47,620	43,933	-7.7
Others	40,120	53,480	48,580	57,270	52,755	-7.9
OECD Asia Pacific	171,754	177,251	184,940	171,940	168,620	-1.9
Australia	6,921	6,200	6,258	5,772	6,730	16.6
Japan	120,073	120,501	119,372	111,308	107,286	-3.6
South Korea	44,520	49,930	58,630	54,170	53,914	-0.5
Others	240	620	680	690	690	0.0
China	72,800	92,020	121,280	129,730	138,371	6.7
India	26,160	26,740	29,590	31,500	34,349	9.0
Other Asia	52,100	58,750	63,690	71,390	73,607	3.1
Brunei	2,160	2,580	2,350	4,190	4,226	0.9
Indonesia	4,460	6,570	8,970	10,700	11,072	3.5
Malaysia	12,810	13,420	14,500	14,440	15,667	8.5
Myanmar	12,760	13,830	14,200	14,370	15,642	8.9
Others	19,910	22,350	23,670	27,690	27,000	-2.5
Latin America	27,910	25,870	25,810	23,060	16,800	-27.1
Argentina	11,580	12,200	10,890	7,330	6,000	-18.1
Brazil	13,380	10,720	10,810	10,220	6,300	-38.4
Venezuela	0	0	0	0	0	0.0
Others	2,950	2,950	4,110	5,510	4,500	-18.3
Middle East	47,467	43,528	46,598	39,577	40,778	3.0
IR Iran	9,246	4,731	6,000	1,270	1,270	0.0
Iraq	0	1,456	4,100	6,104	7,200	18.0
Jordan	4,460	4,560	4,030	3,170	4,000	26.2
Kuwait	4,311	4,781	4,418	4,509	5,335	18.3
Oman	1,970	1,970	2,000	2,000	300	-85.0
United Arab Emirates	27,479	26,030	26,050	22,504	22,653	0.7
Others	0	0	0	20	20	0.0
Africa	18,230	17,320	12,980	10,140	9,474	-6.6
Egypt	9,750	8,040	3,060	0	0	0.0
Morocco	1,150	1,140	1,000	950	860	-9.5
South Africa	3,960	4,080	4,120	3,950	3,600	-8.9
Tunisia	3,270	3,680	4,100	4,440	4,234	-4.6
Others	100	380	700	800	780	-2.5
Russia	15,910	18,150	15,100	19,000	18,735	-1.4
Other Eurasia	48,880	53,560	57,020	62,740	56,837	-9.4
Belarus	17,200	17,600	18,810	18,750	17,366	-7.4
Kazakhstan	5,230	5,600	8,500	9,700	6,200	-36.1
Ukraine	11,100	14,100	10,600	14,200	16,796	18.3
Others	15,350	16,260	19,110	20,090	16,474	-18.0
Other Europe	5,960	7,380	7,650	8,980	8,240	-8.2
Bulgaria	2,980	3,120	2,970	3,240	3,102	-4.3
Romania	1,390	1,610	1,790	2,360	2,299	-2.6
Others	1,590	2,650	2,890	3,380	2,839	-16.0
Total world	1,138,665	1,211,705	1,260,631	1,285,668	1,244,401	-3.2
<i>of which</i>						
OPEC	41,037	36,998	40,568	34,387	36,458	6.0
OPEC percentage	3.6	3.1	3.2	2.7	2.9	
OECD	823,248	868,387	880,913	889,551	847,210	-4.8

Notes:

Data may include re-exports and natural gas in transit.

Natural gas data

Table 9.6
World natural gas demand by country

(million s cu m)

	2016	2017	2018	2019	2020	% change 20/19
OECD America	970,747	961,696	1,043,620	1,067,794	1,047,482	-1.9
Canada	123,746	133,063	138,127	138,950	132,413	-4.7
Chile	5,323	5,396	6,164	6,229	6,233	0.1
Mexico	64,544	54,550	46,671	41,987	45,732	8.9
United States	777,134	768,687	852,658	880,628	863,104	-2.0
OECD Europe	504,607	529,623	510,908	522,494	506,756	-3.0
Austria	8,746	9,494	8,982	9,267	8,823	-4.8
Belgium	17,019	17,265	17,716	18,163	18,276	0.6
France	42,699	42,874	40,861	41,614	38,562	-7.3
Germany	89,133	92,473	85,316	91,792	89,292	-2.7
Italy	70,914	75,150	72,667	74,316	70,920	-4.6
Netherlands	42,032	46,438	43,046	44,912	44,067	-1.9
Poland	19,108	20,381	20,836	21,311	21,993	3.2
Spain	28,558	31,007	30,925	35,399	31,738	-10.3
Turkey	46,471	53,598	49,542	44,995	47,990	6.7
United Kingdom	81,236	79,562	80,870	79,343	73,315	-7.6
Others	58,691	61,381	60,147	61,382	61,780	0.6
OECD Asia Pacific	221,990	224,108	230,338	232,740	231,258	-0.6
Australia	39,250	41,930	42,190	53,320	53,059	-0.5
Japan	122,321	121,377	121,905	114,172	112,087	-1.8
New Zealand	5,049	5,068	4,547	4,533	4,461	-1.6
South Korea	45,530	45,185	52,012	50,743	51,751	2.0
Others	9,840	10,548	9,684	9,972	9,900	-0.7
China	205,500	236,020	276,080	299,610	320,419	6.9
India	56,480	58,490	61,200	62,570	62,828	0.4
Other Asia	247,990	252,070	257,770	264,000	247,441	-6.3
Bangladesh	26,300	26,500	27,360	30,560	30,060	-1.6
Brunei	3,100	2,880	3,120	3,040	3,237	6.5
Indonesia	41,780	40,580	40,580	39,350	36,684	-6.8
Malaysia	32,380	33,740	34,700	36,980	31,480	-14.9
Myanmar	4,000	4,310	4,760	4,420	4,320	-2.3
Pakistan	43,260	45,390	47,070	48,100	46,100	-4.2
Thailand	51,660	51,230	50,640	51,790	47,500	-8.3
Vietnam	9,460	8,730	8,830	9,010	8,310	-7.8
Others	36,050	38,710	40,710	40,750	39,750	-2.5
Latin America	152,165	156,374	148,577	146,590	130,045	-11.3
Argentina	49,730	50,350	51,150	49,120	44,023	-10.4
Bolivia	3,000	3,800	3,890	4,100	3,950	-3.7
Brazil	33,910	34,390	32,440	32,400	27,000	-16.7
Colombia	10,480	9,650	9,760	10,130	9,745	-3.8
Peru	8,930	7,650	7,720	8,620	8,112	-5.9
Trinidad & Tobago	18,350	20,280	18,520	18,420	17,690	-4.0
Venezuela	23,715	26,204	20,117	17,550	13,725	-21.8
Others	4,050	4,050	4,980	6,250	5,800	-7.2

Table 9.6
World natural gas demand by country

(million s cu m)

	2016	2017	2018	2019	2020	% change 20/19
Middle East	483,264	520,487	541,946	550,834	551,206	0.1
Bahrain	16,000	16,500	16,630	18,900	19,137	1.3
IR Iran	188,598	217,760	227,820	231,220	232,941	0.7
Iraq	9,101	9,457	13,025	17,598	18,798	6.8
Kuwait	21,602	21,067	21,860	18,460	18,218	-1.3
Oman	21,870	22,070	23,780	23,680	23,460	-0.9
Qatar	38,592	38,347	42,790	42,930	41,889	-2.4
Saudi Arabia	106,852	115,000	118,000	122,720	119,000	-3.0
United Arab Emirates	71,799	71,596	70,030	68,226	70,763	3.7
Others	8,850	8,690	8,010	7,100	7,000	-1.4
Africa	134,756	137,602	145,170	153,256	152,770	-0.3
Algeria	39,546	40,373	44,429	46,809	45,226	-3.4
Angola	770	780	785	789	821	4.1
Congo	846	680	867	580	405	-30.2
Egypt	51,180	58,780	62,780	63,840	62,417	-2.2
Equatorial Guinea	1,592	1,577	1,523	1,477	1,876	27.0
Gabon	551	407	530	635	665	4.7
Libya	5,893	5,250	5,040	6,939	8,554	23.3
Nigeria	18,168	12,795	10,756	12,705	14,361	13.0
South Africa	4,960	4,880	5,080	5,050	4,750	-5.9
Tunisia	4,670	4,980	5,350	5,570	4,894	-12.1
Others	6,580	7,100	8,030	8,860	8,800	-0.7
Russia	407,310	435,530	445,660	449,280	443,000	-1.4
Other Eurasia	162,130	168,670	175,640	182,600	177,239	-2.9
Azerbaijan	10,180	9,420	10,540	12,530	12,458	-0.6
Kazakhstan	14,450	17,180	17,990	18,360	17,237	-6.1
Turkmenistan	42,070	42,800	48,040	49,330	48,888	-0.9
Ukraine	30,520	33,950	30,930	34,340	35,517	3.4
Uzbekistan	41,520	41,680	42,270	42,080	40,737	-3.2
Others	23,390	23,640	25,870	25,960	22,402	-13.7
Other Europe	16960	18430	18780	19300	18110	-6.2
Bulgaria	3,070	3,190	2,980	2,770	2,300	-17.0
Romania	10,990	11,410	11,910	12,310	11,824	-3.9
Others	2,900	3,830	3,890	4,220	3,986	-5.5
Total world	3,563,899	3,699,100	3,855,688	3,951,068	3,888,554	-1.6
<i>of which</i>						
OPEC	489,033	522,947	534,782	545,710	545,354	-0.1
<i>OPEC percentage</i>	<i>13.7</i>	<i>14.1</i>	<i>13.9</i>	<i>13.8</i>	<i>14.0</i>	
OECD	1,697,344	1,715,427	1,784,866	1,823,028	1,785,496	-2.1

General notes

Definitions

Barrels per calendar day (b/cd): the total number of barrels processed in a refinery within 24 hours, reflecting all operational limitations (eg routine inspections, maintenance, repairs etc).

Barrels per stream day (b/sd): the number of barrels of input that a refining facility can process within 24 hours, operating at full capacity under optimal crude and product slate conditions.

Biofuels: transportation fuels derived from biomass include fuel ethanol and biodiesel, whereby these fuels are usually blended with petroleum fuels. Ethanol is an alcohol made by fermenting starch or sugar, notably from (corn) grains and sugar cane. Biodiesel is made primarily from vegetable oils (eg palm oil, soybean oil) or from other oily sources (such as waste cooking grease).

Completion: the installation of permanent equipment for the production of oil or gas.

Composite barrel: a consumption weighted average of retail prices (including taxes) of the main groups of refined petroleum products.

Crude oil: a mixture of hydrocarbons that exists in a liquid phase in natural underground reservoirs and remains liquid at atmospheric pressure after passing through surface separating facilities. For statistical purposes, volumes reported as crude oil include:

- liquids technically defined as crude oil;
- small amounts of hydrocarbons that exist in the gaseous phase in natural underground reservoirs, but which are liquid at atmospheric pressure after being recovered from oil well (casing head) gas in lease separators;
- small amounts of non-hydrocarbons produced with the oil;
- very heavy and extra-heavy crude oils with viscosity less than 10,000 mPa-s (centipoises) at original reservoir conditions.

Distillates: middle distillate type hydrocarbons; includes products similar to number one and number two heating oils and diesel fuels. These products are used for space heating, diesel engine fuel and electrical power generation.

Dry hole: a well found to be incapable of producing either oil or gas in sufficient quantities to justify completion as an oil or gas well.

Exports of petroleum products: excludes international air and marine bunkers.

Gasoline: a mixture of relatively volatile hydrocarbons, with or without small quantities of additives, that have been blended to form a fuel suitable for use in internal combustion engines; includes gasoline used in aviation.

Geneva I agreement: agreement of January 1972 between some OPEC Member Countries and the major international oil companies, which had the effect of establishing an index for quarterly adjustments of posted crude oil prices on the basis of the arithmetic average of the deviations of the exchange rates of nine major currencies against the US dollar. This was modified to an import-weighted index in 1978, accounting for exchange rates and inflation rates. The present 'modified Geneva I + US dollar' currency basket includes the US dollar, the euro, the Japanese yen, the UK pound and the Swiss franc.

Kerosene: medium hydrocarbon distillates in the 150° to 280° C distillation range; used as a heating fuel as well as for certain types of internal combustion engines. Includes jet fuel, which is a fuel of naphtha or of kerosene type, suitable for commercial or military purposes in aircraft turbine engines.

Natural gas liquids (NGLs): those reservoir gases liquefied at the surface in lease separators, field facilities or gas processing plants. NGLs consist of field condensates and natural gas plant products such as ethane, pentane, propane, butane and natural gasoline.

Natural gas: a mixture of hydrocarbon compounds and small quantities of various non-hydrocarbons existing in the gaseous phase or in solution with oil in natural underground reservoirs at reservoir conditions. The natural gas volumes refer to Standard Conditions of 60° F, 14.73 psia (15.6° C, 760 mm/Hg).

Gross production: the total flow of natural gas from oil and gas reservoirs of associated-dissolved and non-associated gas.

Marketed production: corresponds to gross production, minus the volumes of gas flared or re-injected into fields, minus the shrinkage.

Re-injection: the total volume of natural gas produced from oil and gas completions, processed through gas-processing plants and field facilities, and used for gas lift, gas injection and cycling operations.

Shrinkage: volume shrinkage due to purification and/or extraction of natural gas liquids, gas used as input to GTL plants, lease separators plant, own consumption, as well as any other losses caused by spillage, evaporation, etc.

Non-conventional oil: includes synthetic crude oil from tar sands, oil shale, etc, liquids derived from coal liquefaction(CTL) and gas liquefaction (GTL), hydrogen and emulsified oils (eg Orimulsion), non-hydrocarbon compounds added to or blended with a product to modify fuel properties (octane, cetane, cold properties, etc) of substances like alcohols (methanol, ethanol), ethers (such as MTBE (methyl tertiary butyl ether), ETBE (ethyl tertiary butyl ether), TAME (tertiary amyl methyl ether) or esters (eg rapeseed or dimethylester, etc) and chemical compounds such as TML (tetramethyl lead) or TEL (tetraethyl lead) and detergents.

Oil demand: inland delivery, including refinery fuels and losses, as well as products from gas plants, including international air and marine bunkers, as well as direct crude burning.

Oil or gas well: a well completed for the production of oil or gas from one or more zones or reservoirs.

Oil supply: consists of crude oil natural gas liquids and non-conventional oil production.

OPEC Basket: the OPEC Reference Basket (ORB) price was introduced on January 1, 1987. Up to June 15, 2005, it was the arithmetic average of seven selected crudes. These were: Saharan Blend (Algeria); Minas (Indonesia); Bonny Light (Nigeria); Arab Light (Saudi Arabia); Dubai (United Arab Emirates); Tia Juana Light (Venezuela); and Isthmus (Mexico). Mexico is not a Member of OPEC. As of June 16, 2005, the ORB is calculated as a production-weighted average of the OPEC Basket of crudes. These are: Saharan Blend (Algeria); Girassol (Angola, as of January 2007); Djeno (Congo, as of June 2018), Oriente (Ecuador, as of October 19, 2007); Zafiro (Equatorial Guinea, as of May 25, 2017); Rabi Light (Gabon, as of July 1, 2016); Iran Heavy (IR Iran); Basrah Light (Iraq); Kuwait Export (Kuwait); Es Sider (Libya); Bonny Light (Nigeria); Qatar Marine (Qatar); Arab Light (Saudi Arabia); Murban (United Arab Emirates); and Merey (Venezuela).

Output of petroleum products: the total amount of petroleum products produced from refinery input in a given period, excluding refinery fuels.

Petroleum products: products obtained from the processing of crude oil, unfinished oils, NGLs and other hydrocarbon compounds. These include aviation gasoline, motor gasoline, naphtha, kerosene, jet fuel, distillate fuel oil, residual fuel oil, liquefied petroleum gas, lubricants, paraffin wax, petroleum coke, asphalt and other products.

Proven crude oil reserves: the estimated quantities of all liquids statistically defined as crude oil. They consist of those quantities of crude oil which by analysis of geoscience and engineering data can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operating methods and government regulations (*source: SPE — Petroleum Resources Management System*).

Proven natural gas reserves: are the estimated quantities of all hydrocarbons statistically defined as natural gas. They consist of those quantities of natural gas (associated and non-associated) which by analysis of geoscience and engineering data can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under defined economic conditions, operation methods and government regulations (*source: SPE — Petroleum Resources Management System*).

Refinery capacity (charge): the input (feed) capacity of refinery processing facilities.

Refinery capacity (operable): the maximum amount of input to atmospheric distillation units that can be processed in an average 24-hour period.

Refinery throughput: oil input into an atmospheric distillation unit.

Residual fuel oil: fuels obtained as liquid still bottoms from the distillation of crude used alone or in blends with heavy liquids from other refinery process operations. It is used for the generation of electric power, space heating, vessel bunkering and various industrial purposes.

Rig: a derrick complete with engine-house and other equipment necessary for drilling oil and gas wells.

Well (exploratory and development): a hole drilled for the purpose of finding or producing crude oil or natural gas, or providing services related to the production of crude oil and natural gas.

Country groupings

(OPEC Member Countries are shown in bold.)

OECD Americas: Chile, Canada, Mexico and United States.

OECD Europe: Austria, Belgium, Czech Republic, Denmark (including Faroe Islands), Estonia, Finland, France (including Andorra and Monaco), Germany, Greece, Hungary, Iceland, Ireland, Italy (including San Marino and the Holy See), Latvia, Lithuania, Luxembourg, Netherlands, Norway (including Svalbard and Jan Mayen Islands), Poland, Portugal, Slovakia, Slovenia, Spain (including Canary Islands), Sweden, Switzerland (including Liechtenstein), Turkey and United Kingdom.

OECD Asia Pacific: Australia, Japan, Korea (Republic of), New Zealand and Other OECD Asia Pacific.

China: People's Republic of China.

India: India

Other Asia: Afghanistan, American Samoa, Bangladesh, Bhutan, Brunei, Cambodia, Canton and Enderbury Islands, China Hong Kong Special Administrative Regions (SAR), China Macau SAR, Cook Islands, Fiji, French Polynesia, Guam, Indonesia, Kiribati, Korea (Democratic People's Republic of), Lao People's Democratic Republic, Malaysia, Maldives, Micronesia Federated States of, Mongolia, Myanmar, Nauru,

General Notes

Nepal, New Caledonia, Niue, Pakistan, Papua New Guinea, Philippines, Samoa, Singapore, Solomon Islands, Sri Lanka, Thailand, Tonga, Tuvalu, Vanuatu, Vietnam, and Other Other Asia.

Latin America: Antigua, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Federation of St Kitts and Nevis, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Nicaragua, Panama (including Panama Canal Zone), Paraguay, Peru, St Lucia, St Vincent, Suriname, Trinidad & Tobago, Uruguay, **Venezuela** and Other Latin America.

Middle East: Bahrain, **Islamic Republic of Iran, Iraq**, Jordan, **Kuwait**, Lebanon, Oman, Qatar, **Saudi Arabia**, Syrian Arab Republic, **United Arab Emirates (UAE)** (Abu Dhabi, Ajman, Dubai, Fujairah, Ras al-Khaimah, Sharjah, Umm al-Qaiwain) and Yemen.

Africa: **Algeria, Angola**, Benin, Botswana, British Indian Ocean Territory, Burkina Faso, Burundi, Cameroon (United Republic of), Cape Verde, Central African Republic, Chad, Comoros, **Congo**, Congo (Democratic Republic of the), Djibouti, Egypt, **Equatorial Guinea**, Eritrea, Eswatini, Ethiopia, **Gabon**, Gambia (The), Ghana, Guinea, Guinea-Bissau, Côte d'Ivoire, Kenya, Lesotho, Liberia, **Libya**, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, **Nigeria**, Reunion, Rwanda, St Helena, São Tomé and Príncipe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, Sudans (including South Sudan and Sudan), Tanzania, Togo, Tunisia, Uganda, Western Sahara, Zambia and Zimbabwe.

Russia: Russian Federation.

Other Eurasia: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Other Europe: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Gibraltar, Malta, Montenegro, the Republic of North Macedonia, Romania and Serbia.

Organization of the Petroleum Exporting Countries (OPEC): Algeria (1969), Angola (2007), Congo (2018), Equatorial Guinea (2017), Gabon (rejoined OPEC in 2016), the Islamic Republic of Iran (1960), Iraq (1960), Kuwait (1960), Libya (1962), Nigeria (1971), Saudi Arabia (1960), United Arab Emirates (1967), Venezuela (1960).

Organization for Economic Co-operation and Development (OECD): Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Korea, Latvia, Lithuania, Luxemburg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States and Other OECD.

Abbreviations

Symbols:

na Not available/not applicable.

Currencies:

\$	US dollar	XAF	Central African Franc (Congo, Gabon and Equatorial Guinea)	LYD	Libyan dinar
€	Euro	IRR	Iranian rial	NGN	Nigerian naira
DZD	Algerian dinar	IQD	Iraqi dinar	SAR	Saudi Arabian riyal
AOA	Angolan new kwanza	KWD	Kuwaiti dinar	AED	United Arab Emirates dirham
				VES	Bolívar soberano

Miscellaneous:

b	barrel(s)	dwt	deadweight tonnage	mb	million barrels
b/d	barrels per day	fob	free on board	NCV	net calorific value
b/cd	barrels per calendar day	ft	feet	NCF	non-conventional
b/sd	barrels per stream day	GDP	gross domestic product	NOC	national oil company
b/yr	barrels per year	GTL	gas to liquids	NGLs	natural gas liquids
bn	billion	LHS	left-hand side	RHS	right-hand side
bn b	billion barrels	LNG	liquefied natural gas	s cu m	standard cubic metres
cif	cost, insurance and freight	LPG	liquefied petroleum gas	t	tonne
cu m	cubic metres	m	million		

Rounding: In all tables totals may not add up due to independent rounding.

Balance of import-export tables may not match due to independent assessments and usage of various secondary sources.

Selected oil companies

ADCO	Abu Dhabi Company for Onshore Oil Operations	NOC	National Oil Corporation (Libya)
ADMA	Abu Dhabi Marine Areas	NODCO	National Oil Distribution Company (Qatar)
ADMA-OPCO	Abu Dhabi Marine Operating Company	NPHR	New Port Harcourt Refinery
ADNOC	Abu Dhabi National Oil Company	Oasis	Oasis Oil Company of the Libya, Inc
ADOC	Abu Dhabi Oil Company	Occidental	Occidental Petroleum Corporation
Agip	Agip SpA	OMV	OMV Aktiengesellschaft
Agoco	Arabian Gulf Oil Company (Libya)	PDVSA	Petroleos de Venezuela SA
Amerada Hess	Amerada Hess Corporation	Perenco	
AOC	Arabian Oil Company	Pertamina	Perusahaan Pertambangan Minyak Dan Gas Bumi Negara
Aramco	Saudi Arabian Oil Company (Saudi Aramco)	Petroecuador	National oil company of Ecuador
Arco	Atlantic Richfield Company	Petroindustrial	Refinery operations company of Ecuador
Asamera	Asamera Oil	Petromer Trend	Petromer Trend Corporation
Ashland	Ashland Oil	Petromin	General Petroleum and Mineral Organization of Saudi Arabia
BP	BP plc	Petroproduccion	Exploration and production oil company of Ecuador
Braspetro	Petrobras Internacional SA	Phillips	Phillips Petroleum Company
Brega Marketing	Brega Petroleum Marketing Company	PPMC	Pipeline and Products Marketing Company (Nigeria)
Buttes	Buttes Gas & Oil Company	QGPC	Qatar General Petroleum Corporation (now Qatar Petroleum)
Calasiatic	Calasiatic Petroleum Company	Royal Dutch/Shell	Royal Dutch Petroleum Company, The Netherlands, and Shell Transport and Trading Co, UK
Caltex (PT)	PT Caltex Pacific Indonesia	SNPC	Société Nationale des Pétroles du Congo
ChevronTexaco	ChevronTexaco Corporation	Sonangol	Sociedade Nacional de Combustíveis de Angola
Conoco	Continental Oil Company	Sonatrach	Société Nationale de Transport et de Commercialisation des Hydrocarbures
Corpoven	Corpoven SA	Stancal	Standard Oil Company of California
DPC	Dubai Petroleum Company	PT Stanvac	PT Stanvac Indonesia
EGPC	Egyptian General Petroleum Corporation	Tenneco	Tenneco Incorporated
ExxonMobil	ExxonMobil Corporation	Tesoro	Tesoro Indonesia Petroleum Corporation
GASCO	Abu Dhabi Onshore Gas Company	Topco	Texas Overseas Petroleum Company
Getty	Getty Oil Corporation	Total	Total
GOC	Gabon Oil Company	Union Oil	Union Oil Company of California
Gulf	Gulf Oil Corporation	VOO	Veba Oil Operations (Libya)
Hispanoil	Hispanica de Petroleos SA	Waha Oil	Waha Oil Company (Libya)
INOC	Iraq National Oil Company	Wintershall	Wintershall AG
Inpex	Indonesia Petroleum Ltd	WRPC	Warri Refinery & Petrochemical Company
JORC	Jeddah Oil Refinery Company	Zadco	Zakum Development Company
KRPC	Kaduna Refinery & Petrochemical Company	ZOC	Zueitina Oil Company (Libya)
KNPC	Kuwait National Petroleum Company KSC		
KOC	Kuwait Oil Company KSC		
Lagoven	Lagoven SA		
Maraven	Maraven SA		
Maxus	Maxus Energy Corporation		
Mobil	Mobil Oil Corporation		
NIGC	National Iranian Gas Company		
NIOC	National Iranian Oil Company		
NNPC	Nigerian National Petroleum Corporation		

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General Notes

Fearnleys, Annual Review
 Financial Times: Oil and Gas International Yearbook
 Galbraith's Weekly Tanker Fixtures Report
 Gas Exporting Countries Forum (GECF)
 Haver Analytics
 IHS Global Insight
 IHS Cambridge Energy Research Associates (IHS CERA)
 India: Ministry of Petroleum & Natural Gas
 Institute Français du Pétrole (IFP): The World Gas Industry
 Institute of Energy Economics, Japan (IEEJ)
 International Energy Agency (IEA): Energy Prices and Taxes; Energy Statistics and Balances; Monthly Oil/Gas Data Services
 IEA Monthly Oil Data Service (MODS)
 International Monetary Fund (IMF): International Financial Statistics, World Economic Outlook Database, Direction of Trade Statistics
 Japan: Ministry of Economy, Trade and Industry
 Joint Organizations Data Initiative
 KPLER
 Middle East Economic Survey
 National Energy Administration of the People's Republic of China (NEA)
 National and international oil companies' reports
 National statistical publications
 National Westminster Bank
 Norway: Ministry of Petroleum and Energy
 NYMEX
 OECD: Trade by Commodities
 OECD/IEA: Energy Balances of non-OECD countries
 OECD/IEA: Energy Balances of OECD countries
 OECD/IEA: Energy Statistics of non-OECD countries
 OECD/IEA: Energy Statistics of OECD countries

OECD/IEA: Quarterly Energy Prices and Taxes
 OECD: International Trade by Commodities Statistics
 Oil & Gas Journal
 Oil and Energy Trends: Annual Statistical Review
 Oil Bulletin Petrolier
 Organización Latinoamericana de Energía (OLADE)
 Organization of Arab Petroleum Exporting Countries (OAPEC)
 Petrobras
 Petroleum Argus
 Petroleum Economist
 Petroleum Intelligence Weekly (PIW)
 Petrologistics
 Petrostrategies
 Platts
 PIRA
 Port of Fujairah
 Port of Rotterdam
 Reuters
 Rystad Energy
 Secretariat's estimates
 Simpson Spence & Young: World Oil Tanker Trends
 Society of Petroleum Engineers (SPE): Petroleum Resources Management System
 United Nations: Energy Statistics Yearbook; Monthly Bulletin of Statistics
 United Nations: National Account Statistics
 Wood Mackenzie
 World Bank: World Development Indicators
 World LPG Gas Association
 World Oil
 World Petroleum Trends

Conversion factors

Crude oil

Standard factors	Metric tonne	Long ton	Barrels	Cubic metres (kilolitres)
Metric tonne	1	0.984	7.33	1.165
Long ton	1.016	1	7.45	1.128
Barrels	0.136	0.134	1	0.159
Cubic metres (kilolitres)	0.858	0.887	6.289	1

By country *(b/tonne)*

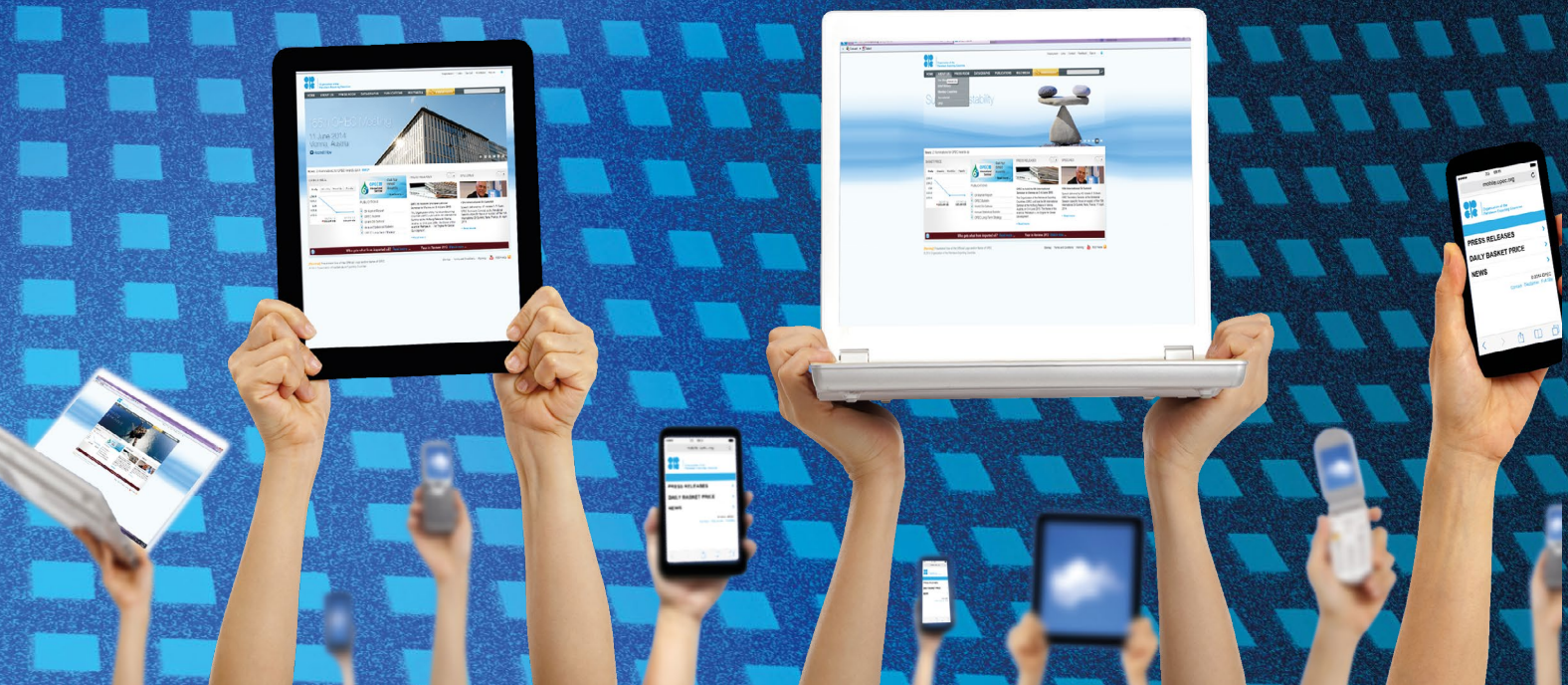
Algeria	8.052
Angola	7.233
Congo	7.157
Equatorial Guinea	7.189
Gabon	7.442
IR Iran	7.382
Iraq	7.379
Kuwait	7.276
Libya	7.537
Nigeria	7.368
Saudi Arabia	7.323
United Arab Emirates	7.565
Venezuela	6.656
OPEC	7.368

Petroleum products *(b/tonne)*

Gasoline	8.4998
Kerosene	7.7652
Distillates	7.2296
Residuals	6.6208

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