



Organization of the Petroleum Exporting Countries



The background features abstract blue and white graphics, including a large circular pattern of dots on the left and a wavy line graph on the right, all set against a dark blue gradient.

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OPEC  
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58<sup>th</sup> edition

**Team for the preparation of the OPEC Annual Statistical Bulletin**

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**Director, Research Division**  
Ayed S. Al-Qahtani

**Head, Data Services Department**  
Huda Ali Hamadi Almwasawy

**Coordinator, Statistics Team, Project Leader**  
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**Statistics Team**  
Pantelis Christodoulides, Klaus Stöger,  
Mohammad Sattar, Mihni Mihnev, Justinas Pelenis,  
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**Coordinator, IT Development Team**  
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**IT Development Team**  
Vedran Blazevic, Hannes Eichner, Roland Kammerer,  
Vedran Hrgovcic, Zairul Arifin, Elke Meyer

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Officer-in-Charge, Public Relations and Information Department**  
Hasan AlHamadi

**Editor**  
Scott Laury

**Coordinator, Design and Production**  
Carola Bayer

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**Graphic Designer**  
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**Questions on data**

Data queries: [dataqueries@opec.org](mailto:dataqueries@opec.org).

Organization of the Petroleum Exporting Countries  
Helperstorferstrasse 17, A-1010 Vienna, Austria  
Website: [www.opec.org](http://www.opec.org)

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Haitham Al Ghais, OPEC Secretary General.

It gives me great pleasure to introduce this **58<sup>th</sup>** edition of the ***Annual Statistical Bulletin*** (ASB).

Since its first publication in 1965, the ASB has evolved into one of the energy industry's most authoritative collations of oil, gas and energy data — an indispensable reference tool for analysts and academics, policymakers and industry specialists. The ASB's ever increasing readership and online viewership reflects its status as a highly respected and regularly cited source on oil market data and conditions.

The need for reliable data accuracy to support informed policy and forecasts has never been greater. This is particularly the case in the sphere of public discussions and policy formation related to the energy transitions. Energy as a topic, so central to our daily lives, can often elicit strong opinions, which in some cases feed into policy formation. OPEC firmly holds the belief that policy needs to be grounded in fact, reality and a reading of events as they are, rather than how we may wish them to be.

In this manner, accurate data and impartial oil market analysis plays a crucial role in the policy making process. OPEC is focused on ensuring the quality and reliability of data research. The ASB is a vital component of OPEC fulfilling its mission and contributing to oil market stability, in the interests of producers, consumers and the global economy.

The ASB is the outcome of hard and labour-intensive work involving analysts, researchers and statisticians, both at the OPEC Secretariat and our Member Countries. The fact we have produced another stellar edition of this flagship publication is a collaborative achievement and an outcome of great teamwork.

I would like to express my sincere appreciation to the staff at the OPEC Secretariat — and all the colleagues and officials in our Member Countries — for their continuous hard work to make this publication possible.

A handwritten signature in blue ink, appearing to read "Haitham Al Ghais".

Haitham Al Ghais  
Secretary General





The **Annual Statistical Bulletin (ASB)**, one of the flagship publications of the Organization of the Petroleum Exporting Countries (OPEC), provides detailed and comprehensive time series data covering all chains of the oil industry, ranging from the exploration to the transportation segments.

The ASB is distinctive in providing comprehensive statistical data on oil and gas activities in each of the 13 OPEC 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 all over the world.

The current version of the ASB (**ASB 2023**) comprises data up to the end of 2022, with the following highlights:

- ▶ World **crude oil production** increased in 2022 by 3.46 million barrels/day (mb/d) or 5.0%, y-o-y, marking the second consecutive annual increase since 2020, to average of 72.80 mb/d. OPEC crude oil production rose by 2.53 mb/d, y-o-y, or 9.6%, while crude production by non-OPEC countries rose by 0.92 mb/d, or 2.1%.
- ▶ World **oil demand** grew by 2.49 mb/d, y-o-y, or by 2.6% to reach 99.56 mb/d in 2022. Oil demand grew, y-o-y, in almost every region and the largest gains were recorded for OECD Americas, OECD Europe, India, Other Asia, the Middle East and Africa. Oil demand in OPEC Member Countries was bullish in 2022, gaining 0.57 mb/d or 6.9%, y-o-y. Distillates and gasoline accounted for around 54.9% of 2022 world oil demand with an upward trend during the years 2021 and 2022. Residual fuel oil requirements were about 6.7% of total oil demand in 2022.
- ▶ World **refinery capacity** increased in 2022 by an additional 0.50 mb/d to stand at 101.77 mb/d. The Non-OECD region, particularly the Middle East and China recorded refining capacity additions, while the OECD declined for the fourth consecutive year in 2022. Globally, refinery throughput increased by 2.19 mb/d or 2.7% to reach 83.84 mb/d in 2022, amid robust oil demand.
- ▶ OPEC Member Countries **exported** an average of 21.39 mb/d of crude oil in 2022, a strong increase of about 1.73 mb/d, y-o-y, or 8.8%, remaining slightly below pre-pandemic levels. Following the pattern seen in previous years, the bulk of crude oil from OPEC Member Countries — 15.20 mb/d or 71.1% — was exported to Asia. Considerable volumes of crude oil — about 3.86 mb/d — were also exported to OECD Europe in 2022, compared with 3.27 mb/d recorded in 2021. OECD Americas imported 1.07 mb/d of crude oil from OPEC Member Countries, which was about 0.13 mb/d, or 13.9% above the 2021 volumes. Exports of petroleum products from OPEC Member Countries averaged 4.46 mb/d during 2022, up by around 0.43 mb/d, or 10.6%, compared to 2021. Imports of petroleum products by OPEC Member Countries averaged at 1.67 mb/d in 2022, roughly 0.17 mb/d, or 11.1%, higher than in 2021.
- ▶ World **proven crude oil reserves** stood at 1,564 billion barrels (bn b) at the end of 2022, higher by 17 bn b, or 1.1% from the 2021 levels. Proven crude oil reserves in OPEC Member Countries increased marginally to 1,244 bn b at the end of 2022, following a decline during 2021. At the end of 2022, world proven natural gas reserves increased by 2.4% to approximately 210.06 trillion standard cubic metres (tr s cu m). Proven natural gas reserves in OPEC Member Countries stood at 75.12 tr s cu m at the end of 2022, up 1.2% from the level at the end of 2021.
- ▶ The **OPEC Reference Basket** averaged \$100.08/b in nominal terms during 2022, up from \$69.89/b in 2021, an increase of \$30.19/b, or 43.2%. The average volatility was \$12.33/b, or 12.3%, relative to the yearly average.



# **SECTION 1**

## **Summary**

**Table 1.1**  
**OPEC Members' facts and figures, 2022**

	Algeria	Angola	Congo	Equatorial Guinea	Gabon	IR Iran	Iraq	Kuwait	Libya	Nigeria	Saudi Arabia	United Arab Emirates	Venezuela	OPEC
Population million people	45.40	33.09	5.98	1.50	2.16	85.69	42.25	4.39	6.78	221.60	34.79	9.89	33.11	<b>526.62</b>
Land area <sup>1</sup> 1,000 sq km	2,382	1,248	342	28	268	1,648	438	18	1,760	924	2,150	84	916	<b>12,205</b>
GDP per capita \$	4,119	3,481	2,095	10,982	10,149	4,110	6,253	41,493	6,502	2,122	31,850	51,308	2,813	<b>6,408</b>
Nominal GDP at market prices million \$	186,995	115,164	12,530	16,451	21,931	352,213	264,182	181,978	44,066	470,332	1,108,149	507,535	93,111	<b>3,374,636</b>
GDP growth, real PPP %	3.4	2.7	2.6	2.8	3.3	2.7	7.0	7.5	1.0	3.3	8.7	7.6	9.0	<b>5.6</b>
Value of exports million \$	69,256	50,120	10,800	7,900	15,405	77,413	138,291	110,370	37,686	68,119	442,569	532,797	17,686	<b>1,578,410</b>
Value of imports million \$	47,331	28,564	7,500	6,200	3,338	64,395	87,216	55,271	29,634	79,274	258,789	420,510	18,036	<b>1,106,057</b>
Current account balance million \$	-4,636	11,763	3,303	43	572	26,044	41,339	17,101	8,116	-1,010	150,753	135,927	1,887	<b>391,201</b>
Value of petroleum exports million \$	32,513	41,241	8,297	3,111	6,812	42,619	120,571	95,352	33,255	53,457	326,289	94,677	15,379	<b>873,573</b>
Proven crude oil reserves million barrels	12,200	2,550	1,811	1,100	2,000	20,860	145,019	101,500	48,363	36,967	267,192	113,000	303,221	<b>1,243,523</b>
Natural gas reserves billion s cu m	4,504	129	284	39	26	33,988	37,14	1,784	1,505	5,913	9,514	8,210	5,511	<b>75,121</b>
Crude oil production 1,000 b/d	1,020	1,137	262	81	191	2,554	4,453	2,707	981	1,138	10,591	3,064	716	<b>28,895</b>
Natural gas marketed production million s cu m	100,513	5,505	423	8,105	463	262,261	9,778	13,883	23,807	44,307	122,895	55,574	24,421	<b>671,936</b>
Refinery capacity 1,000 b/cd	677	80	21	na	25	2,237	1,116	1,005	634	486	3,291	1,227	2,276	<b>13,074</b>
Refinery throughput 1,000 b/d	669	44	18	na	20	1,752	702	842	144	5	2,702	1,046	550	<b>8,493</b>
Output of petroleum products 1,000 b/d	644	48	17	na	20	1,737	834	983	148	6	2,768	953	266	<b>8,423</b>
Oil demand 1,000 b/d	431	152	8	5	45	1,793	828	469	192	518	3,172	958	272	<b>8,842</b>
Crude oil exports <sup>2</sup> 1,000 b/d	477	1,085	243	81	185	901	3,712	1,879	920	1,388	7,364	2,717	438	<b>21,389</b>
Exports of petroleum products 1,000 b/d	509	22	5	0	10	383	172	711	99	0	1,468	903	176	<b>4,459</b>
Imports of petroleum products 1,000 b/d	11	67	0	5	5	91	113	29	128	525	360	249	88	<b>1,672</b>
Natural gas exports million s cu m	48,920	7,540	0	5,737	0	18,794	0	0	2,479	32,190	0	7,280	0	<b>122,939</b>

**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
<b>OPEC</b>	<b>15,700</b>	<b>15,700</b>	<b>14,348</b>	<b>14,348</b>			<b>14,172</b>	<b>14,890</b>		<b>16,718</b>
<b>OPEC excl Iraq</b>					<b>13,247</b>	<b>13,325</b>			<b>13,350</b>	

	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
<b>OPEC</b>	<b>17,622</b>	<b>18,526</b>	<b>20,068</b>	<b>20,473</b>	<b>20,183<sup>a</sup></b>	<b>23,650*</b>	<b>20,958</b>	<b>24,200*</b>	<b>22,828</b>	<b>21,901</b>

**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/ 63<sup>rd</sup> (Extraordinary) Meeting of the OPEC Conference, 19–20 March 1982.
- 2/ 67<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 14 March 1983. No production level allocated to Saudi Arabia which acted as the swing producer. Venezuela: 1.7 mb/d including condensates. Nigeria: At the 70<sup>th</sup> Meeting of the OPEC Conference, 10–11 July 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/ 71<sup>st</sup> (Extraordinary) Meeting of the OPEC Conference, 29–31 October 1984. Retained at the 75<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 4 October 1985.
- 4/ 78<sup>th</sup> Meeting of the OPEC Conference, 25–30 June 1986, and 28 July–5 August 1986, with the exception of Iraq.
- 5/ 79<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 6–22 October 1986, with the exception of Iraq.
- 6/ 79<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 6–22 October 1986, with the exception of Iraq.
- 7/ 80<sup>th</sup> Meeting of the OPEC Conference, 11–20 December 1986.
- 8/ 81<sup>st</sup> Meeting of the OPEC Conference, 25–27 June 1987.
- 9/ 82<sup>nd</sup> Meeting of the OPEC Conference, 9–14 December 1987, with the exception of Iraq. Extended at the 83<sup>rd</sup> Meeting of the OPEC Conference, 11–14 June 1988, with the exception of Iraq.
- 10/ 84<sup>th</sup> Meeting of the OPEC Conference, 21–28 November 1988.
- 11/ 85<sup>th</sup> Meeting of the OPEC Conference, 5–7 June 1989.
- 12/ 3<sup>rd</sup> Meeting of the Eight-Minister Monitoring Committee, 23–27 September 1989.
- 13/ 86<sup>th</sup> Meeting of the OPEC Conference, 25–28 November 1989.
- 14/ 87<sup>th</sup> Meeting of the OPEC Conference, 26–27 July 1990. September 2000–March 2001: Oil Ministers' informal consultations and 1<sup>st</sup> Ministerial Monitoring Committee, 26–29 August 1990 (interim course of action: OPEC shall consequently increase production in accordance with need). Retained August 1990 agreement at the 88<sup>th</sup> Meeting of the OPEC Conference, December 12–13, 1990.
- 15/ 3<sup>rd</sup> Meeting of the Ministerial Monitoring Committee, 11–12 March 1991. Reservations were made by Algeria and IR Iran as to the total OPEC production level. Reiterated without reservations at the 89<sup>th</sup> Meeting of the OPEC Conference, 4 June 1991.
- 16/ 4<sup>th</sup> Meeting of the Ministerial Monitoring Committee, 24–25 September 1991. Retained at the 90<sup>th</sup> Meeting of the Conference, 26–27 November 1991.
- 17/ 6<sup>th</sup> Meeting of the Ministerial Monitoring Committee, 12–15 February 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 91<sup>st</sup> Meeting of the OPEC Conference, 21–22 May 1992. The Conference also decided to allow any additional production from Kuwait.
- 18/ 9<sup>th</sup> Meeting of the Ministerial Monitoring Committee, 16–17 September 1992. Reaffirmed to allow for any additional production from Kuwait.
- 19/ 92<sup>nd</sup> Meeting of the OPEC Conference, 25–27 November 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/ 10<sup>th</sup> Meeting of the Ministerial Monitoring Committee, 13–16 February 1993 with full support of Member Countries, except Iraq. Rollover of this agreement at the 93<sup>rd</sup> Meeting of the OPEC Conference, 8–10 June 1993, with full support of Member Countries, except Iraq and Kuwait.

## Summary

**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
<b>OPEC</b>	<b>22,812</b>	<b>23,325</b>	<b>25,630</b>							
<b>OPEC excl Iraq</b>				<b>1,145</b>	<b>22,467</b>	<b>21,196</b>	<b>19,149<sup>b</sup></b>	<b>23,425</b>	<b>24,163</b>	<b>24,624</b>
<b>Target</b>				<b>23,762</b>						

	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
<b>OPEC excl Iraq</b>	<b>23,241</b>	<b>22,319</b>	<b>21,397</b>	<b>20,013</b>	<b>21,213</b>	<b>22,595</b>	<b>23,425</b>	<b>22,595</b>	<b>21,673</b>	<b>23,517</b>

- 21/ 94<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 25–29 September 1993, with full support of Member Countries, except Iraq. Maintained at the 12<sup>th</sup> Meeting of the Ministerial Monitoring Committee, 25–26 March 1994, with full support of Member Countries, except Iraq. Maintained at the 97<sup>th</sup>, 98<sup>th</sup> and 99<sup>th</sup> Meeting of the OPEC Conference, 21–22 November 1994, 19–20 June, 1995, and 21–22 November 1995, respectively.
- 22/ 100<sup>th</sup> Meeting of the OPEC Conference, 5–7 June 1996. The remaining volume of 1.2 mb/d is to be supplied by Iraq. Rollover of the agreement at the 101<sup>st</sup> and the 102<sup>nd</sup> Meeting of the OPEC Conference, 27–28 November 1996, and 25–26 June 1997, respectively.
- 23/ 103<sup>rd</sup> Meeting of the OPEC Conference, 26 November–1 December 1997. The remaining volume of 1,314,080 b/d is to be supplied by Iraq.
- 24/ 104<sup>th</sup> Meeting (Extraordinary) of the OPEC Conference, 30 March 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/ 105<sup>th</sup> Meeting of the OPEC Conference, 24 June 1998. Iraq is not called upon to participate in this agreement.
- 26/ 107<sup>th</sup> Meeting of the OPEC Conference, 23 March 1999. Reaffirmed strong commitment to the agreement at the 108<sup>th</sup> Meeting of the OPEC Conference, 22 September 1999. Iraq is not called upon to participate in this agreement.
- 27/ 109<sup>th</sup> Meeting of the OPEC Conference, 27–29 March 2000. Agreement of OPEC Member Countries excluding IR Iran and Iraq.
- 28/ 110<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 21 June 2000. Iraq is not called upon to participate in this agreement.
- 29/ 111<sup>th</sup> Meeting of the OPEC Conference, 10–11 September 2000. Iraq is not called upon to participate in this agreement.
- 30/ 111<sup>th</sup> Meeting of the OPEC Conference, 10–11 September 2000; including additional 500,000 b/d (price band mechanism) as announced by the OPEC President on 30 October 2000, and effective from 31 October 2000. Iraq is not called upon to participate in this agreement.
- 31/ 113<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 17 January 2001. Iraq is not called upon to participate in this agreement.
- 32/ 114<sup>th</sup> Meeting of the OPEC Conference, 16–17 March 2001. Retained at the 115<sup>th</sup> (Extraordinary) and 116<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 5 June and 3 July 2001, respectively. Iraq is not called upon to participate in this agreement.
- 33/ OPEC Conference, 25 July 2001. Retained at the 117<sup>th</sup> Meeting of the OPEC Conference, 26–27 September 2001. Iraq is not called upon to participate in this agreement.
- 34/ Announced during the 118<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 14 November 2001, and confirmed its implementation during the Consultative Meeting of the OPEC Conference in Cairo, 28 December 2001. Retained at the 119<sup>th</sup> (Extraordinary), 120<sup>th</sup> (Extraordinary) and 121<sup>st</sup> Meeting of the OPEC Conference, 15 March, 26 June and 19 September 2002, respectively. Iraq is not called upon to participate in this agreement.
- 35/ 122<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 12 December 2002. Iraq is not called upon to participate in this agreement.
- 36/ 123<sup>rd</sup> (Extraordinary) Meeting of the OPEC Conference, 12 January 2003. Retained at the 124<sup>th</sup> Meeting of the OPEC Conference, 11 March 2003. Iraq is not called upon to participate in this agreement.
- 37/ Consultative Meeting of the OPEC Conference, 24 April 2003. Retained at the 125<sup>th</sup> (Extraordinary) and 126<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 11 June and 31 July 2003, respectively. Iraq is not called upon to participate in this agreement.
- 38/ 127<sup>th</sup> Meeting of the OPEC Conference, 24 September 2003. Retained at the 128<sup>th</sup> (Extraordinary) and 129<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 4 December 2003, and 10 February 2004, respectively. Iraq is not called upon to participate in this agreement.
- 39/ 129<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 10 February 2004. Reconfirmed at the 130<sup>th</sup> Meeting of the OPEC Conference, 31 March 2004. Iraq is not called upon to participate in this agreement.
- 40/ 131<sup>st</sup> (Extraordinary) Meeting of the OPEC Conference, 3 June 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
<b>OPEC excl Iraq</b>	<b>23,979</b>	<b>24,901</b>	<b>25,362</b>	<b>25,823</b>						<b>1,432</b>
<b>OPEC excl Angola and Iraq</b>					<b>1,126</b>	<b>469</b>	<b>500#</b>			
<b>Target OPEC excl Angola and Iraq</b>					<b>26,300#</b>	<b>25,800#</b>	<b>27,253#</b>			
<b>Target OPEC excl Iraq</b>								<b>29,673*</b>	<b>28,808^</b>	<b>27,308^</b>
	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	—	—	—	—	—	—
<b>OPEC</b>			<b>28,664<sup>c</sup></b>	<b>28,842<sup>c</sup></b>	<b>25,429<sup>d</sup></b>	<b>25,518<sup>d</sup></b>	<b>25,146<sup>d</sup></b>	<b>20,599<sup>d</sup></b>	<b>21,815<sup>d</sup></b>	<b>22,119<sup>d</sup></b>
<b>Target OPEC excl Iraq</b>			<b>24,845<sup>^</sup></b>							
<b>Target OPEC</b>			<b>30,000<sup>^</sup></b>	<b>32,500<sup>*</sup></b>						

- 41/ 131<sup>st</sup> (Extraordinary) Meeting of the OPEC Conference, 3 June 2004. Iraq is not called upon to participate in this agreement.
- 42/ 132<sup>nd</sup> Meeting of the OPEC Conference, 15 September 2004. Iraq is not called upon to participate in this agreement. During the 133<sup>rd</sup> (Extraordinary) Meeting of the OPEC Conference, 10 December 2004, Member Countries agreed to collectively reduce the over-production by 1 mb/d from their current actual output, effective 1 January 2005. Agreement of 132<sup>nd</sup> Meeting is retained at the 134<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 30 January 2005.
- 43/ 135<sup>th</sup> Meeting of the OPEC Conference, 16 March 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/ 136<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 15 June 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 137<sup>th</sup> OPEC Conference , 20 September 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 1 October 2005. The 138<sup>th</sup> (12 December 2005), the 139<sup>th</sup> (Extraordinary, 31 January 2006), the 140<sup>th</sup> (8 March 2006) and the 141<sup>st</sup> (Extraordinary, 1 June 2006) Conference retained the OPEC production level as agreed on 15 June 2005.
- 45/ Consultative Meeting of the OPEC Conference, 19–20 October 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/ 143<sup>rd</sup> (Extraordinary) Meeting of the OPEC Conference, 14 December 2006. Data reflects a further production adjustment to the decision taken in Doha, 19–20 October 2006. Iraq is not called upon to participate in this agreement.
- 47/ 145<sup>th</sup> Meeting of the OPEC Conference, 11 September 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/ 146<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 5 December 2007. Iraq is not called upon to participate in the agreement.
- 49/ 149<sup>th</sup> Meeting of the OPEC Conference, 9–10 September 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/ 150<sup>th</sup> (Extraordinary) Meeting of the OPEC Conference, 24 October 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 151<sup>st</sup> (Extraordinary) Meeting of the Conference, 17 December 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 160<sup>th</sup> Meeting of the Conference, 14 December 2011, decided to maintain the total OPEC production level of 30.0 mb/d. This agreement was maintained at the 161<sup>st</sup> (14 June 2012), the 162<sup>nd</sup> (12 December 2012), the 163<sup>rd</sup> (31 May 2013), the 164<sup>th</sup> (4 December 2013), the 165<sup>th</sup> (11 June 2014), the 166<sup>th</sup> (27 November 2014) and – for the last time – at the 167<sup>th</sup> (5 June 2015) Meeting of the Conference,
- 53/ The 171<sup>st</sup> Meeting of the Conference, 30 November 2016, decided to reduce its production by around 1.2 mb/d to bring its ceiling to 32.5 mb/d, effective of 1 January 2017. Agreed crude oil production levels were allocated, with the exception of Libya and Nigeria.
- 54/ The 172<sup>nd</sup> Meeting of the Conference, 25 May 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 173<sup>rd</sup> Meeting of the Conference, 30 November 2017, amended the adjustment to take effect for the whole year 2018.
- 55/ The 175<sup>th</sup> Meeting of the Conference, 6–7 December 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 176<sup>th</sup> Meeting of the OPEC Conference, 1 July 2019, decided to extend the production adjustments agreed at the 175<sup>th</sup> 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 177<sup>th</sup> Meeting of the OPEC Conference, 6 December 2019, decided to support additional adjustments to the adjustment levels as agreed at the 175<sup>th</sup> Meeting of the OPEC Conference.
- 58/ The 9<sup>th</sup> and 10<sup>th</sup> OPEC and non-OPEC Ministerial Meetings, 9–10 and 12 April 2020, agreed to adjust downwards overall crude oil production from OPEC and participating non-OPEC countries by 9.7 mb/d, starting on 1 May 2020, for an initial period of two months that concludes on 30 June 2020. The 179<sup>th</sup> Meeting of the OPEC Conference, as well as the 11<sup>th</sup> OPEC and non-OPEC Ministerial Meeting, held on 6 June 2020, agreed on extending the production adjustments pertaining in May and June by one further month.
- 59/ The 12<sup>th</sup> OPEC and non-OPEC Ministerial Meeting, 5 January 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 13<sup>th</sup> and 14<sup>th</sup> OPEC and non-OPEC Ministerial Meeting, 5 January 2021, and 4 March 2021.

## Summary

**Table 1.2  
OPEC Members' crude oil production allocations**

(1,000 b/d)

	May 21	Jun 21	Jul 21	Aug 21	Sep 21	Oct 21	Nov 21	Dec 21	Jan 22	Feb 22
	60/	60/	60/	61/	61/	62/	63/	64/	65/	66/
Algeria	887	898	912	922	932	942	952	962	972	982
Angola	1,283	1,298	1,319	1,333	1,348	1,363	1,377	1,392	1,406	1,421
Congo	273	276	281	284	287	290	293	296	300	303
Equatorial Guinea	107	108	110	111	112	114	115	116	117	118
Gabon	157	159	161	163	165	166	168	170	172	173
IR Iran	-	-	-	-	-	-	-	-	-	-
Iraq	3,905	3,954	4,016	4,061	4,105	4,149	4,193	4,237	4,281	4,325
Kuwait	2,358	2,387	2,425	2,451	2,478	2,505	2,532	2,558	2,585	2,612
Libya	-	-	-	-	-	-	-	-	-	-
Nigeria	1,535	1,554	1,579	1,596	1,614	1,631	1,649	1,666	1,683	1,701
Saudi Arabia	9,232	9,347	9,495	9,600	9,704	9,809	9,913	10,018	10,122	10,227
United Arab Emirates	2,659	2,692	2,735	2,765	2,795	2,825	2,855	2,885	2,916	2,946
Venezuela	-	-	-	-	-	-	-	-	-	-
<b>OPEC</b>	<b>22,396<sup>d</sup></b>	<b>22,673<sup>d</sup></b>	<b>23,033<sup>d</sup></b>	<b>23,286<sup>d</sup></b>	<b>23,540<sup>d</sup></b>	<b>23,794<sup>d</sup></b>	<b>24,047<sup>d</sup></b>	<b>24,300<sup>d</sup></b>	<b>24,554<sup>d</sup></b>	<b>24,808<sup>d</sup></b>

	Mar22	Apr22	May22	Jun22	Jul22	Aug22	Sep22	Oct22	Nov22-
	67/	68/	69/	70/	71/	72/	73/	74/	75/
Algeria	992	1,002	1,013	1,023	1,039	1,055	1,057	1,055	1,007
Angola	1,435	1,450	1,465	1,480	1,502	1,525	1,529	1,525	1,455
Congo	306	309	312	315	320	325	325	325	310
Equatorial Guinea	120	121	122	123	125	127	127	127	121
Gabon	175	177	179	181	183	186	187	186	177
IR Iran	-	-	-	-	-	-	-	-	-
Iraq	4,370	4,414	4,461	4,509	4,580	4,651	4,663	4,651	4,431
Kuwait	2,639	2,665	2,694	2,724	2,768	2,811	2,818	2,811	2,676
Libya	-	-	-	-	-	-	-	-	-
Nigeria	1,718	1,735	1,753	1,772	1,799	1,826	1,830	1,826	1,742
Saudi Arabia	10,331	10,436	10,549	10,663	10,833	11,004	11,030	11,004	10,478
United Arab Emirates	2,976	3,006	3,040	3,075	3,127	3,179	3,186	3,179	3,019
Venezuela	-	-	-	-	-	-	-	-	-
<b>OPEC</b>	<b>25,062<sup>d</sup></b>	<b>25,315<sup>d</sup></b>	<b>25,588<sup>d</sup></b>	<b>25,865<sup>d</sup></b>	<b>26,276<sup>d</sup></b>	<b>26,689<sup>d</sup></b>	<b>26,752<sup>d</sup></b>	<b>26,689<sup>d</sup></b>	<b>25,416<sup>d</sup></b>

- 60/ The 15<sup>th</sup> OPEC and non-OPEC Ministerial Meeting, 1 April 2021, approved the adjustment of the production levels for May, June and July 2021.
- 61/ The 19<sup>th</sup> OPEC and non-OPEC Ministerial Meeting, 18 July 2021, approved to adjust upward their overall production by 400,000 b/d on a monthly basis starting August 2021.
- 62/ The 20<sup>th</sup> OPEC and non-OPEC Ministerial Meeting, 1 September 2021, reconfirmed the production adjustment plan from the 19<sup>th</sup> OPEC and non-OPEC Ministerial Meeting and approved to adjust upward the monthly overall production by 400,000 b/d for the month of October 2021.
- 63/ The 21<sup>st</sup> OPEC and non-OPEC Ministerial Meeting, 4 October 2021, reconfirmed the production adjustment plan from the 19<sup>th</sup> OPEC and non-OPEC Ministerial Meeting and approved to adjust upward the monthly overall production by 400,000 b/d for the month of November 2021.
- 64/ The 22<sup>nd</sup> OPEC and non-OPEC Ministerial Meeting, 4 November 2021, reconfirmed the production adjustment plan from the 19<sup>th</sup> OPEC and non-OPEC Ministerial Meeting and approved to adjust upward the monthly overall production by 400,000 b/d for the month of December 2021.
- 65/ The 23<sup>rd</sup> OPEC and non-OPEC Ministerial Meeting, 2 December 2021, reconfirmed the production adjustment plan from the 19<sup>th</sup> OPEC and non-OPEC Ministerial Meeting and approved to adjust upward the monthly overall production by 400,000 b/d for the month of January 2022.
- 66/ The 24<sup>th</sup> OPEC and non-OPEC Ministerial Meeting, 4 January 2022, reconfirmed the production adjustment plan from the 19<sup>th</sup> OPEC and non-OPEC Ministerial Meeting and approved to adjust upward the monthly overall production by 400,000 b/d for the month of February 2022.
- 67/ The 25<sup>th</sup> OPEC and non-OPEC Ministerial Meeting, 2 February 2022, reconfirmed the production adjustment plan from the 19<sup>th</sup> OPEC and non-OPEC Ministerial Meeting and approved to adjust upward the monthly overall production by 400,000 b/d for the month of March 2022.
- 68/ The 26<sup>th</sup> OPEC and non-OPEC Ministerial Meeting, 2 March 2022, reconfirmed the production adjustment plan from the 19<sup>th</sup> OPEC and non-OPEC Ministerial Meeting and approved to adjust upward the monthly overall production by 400,000 b/d for the month of April 2022.
- 69/ The 27<sup>th</sup> OPEC and non-OPEC Ministerial Meeting, 31 March 2022, reconfirmed the baseline adjustment, the production adjustment plan and the monthly production adjustment mechanism approved at the 19<sup>th</sup> OPEC and non-OPEC Ministerial Meeting and the decision to adjust upward the monthly overall production by 432,000 b/d for the month of May 2022.
- 70/ The 28<sup>th</sup> OPEC and non-OPEC Ministerial Meeting, 5 May 2022, reconfirmed the production adjustment plan and the monthly production adjustment mechanism approved at the 19<sup>th</sup> OPEC and non-OPEC Ministerial Meeting and the decision to adjust upward the monthly overall production by 432,000 b/d for the month of June 2022.
- 71/ The 29<sup>th</sup> OPEC and non-OPEC Ministerial Meeting, 2 June 2022, reconfirmed the production adjustment plan and the monthly production adjustment mechanism approved at the 19<sup>th</sup> OPEC and non-OPEC Ministerial Meeting and the decision to adjust upward the monthly overall production. Moreover, it advanced the planned overall production adjustment for the month of September and redistribute equally the 432,000 b/d production increase over the months of July and August 2022. Therefore, July production will be adjusted upward by 648,000 b/d.
- 72/ The 30<sup>th</sup> OPEC and non-OPEC Ministerial Meeting, 30 June 2022, reconfirmed the production adjustment plan and the monthly production adjustment mechanism approved at the 19<sup>th</sup> and 29<sup>th</sup> OPEC and non-OPEC Ministerial Meetings and the decision to adjust upward the monthly overall production for the month of August 2022 by 0.648 mb/d.
- 73/ The 31<sup>st</sup> OPEC and non-OPEC Ministerial Meeting, 3 August 2022, reaffirmed the decision of the 10<sup>th</sup> OPEC and non-OPEC Ministerial Meeting on 12 April 2020 and further endorsed in subsequent meetings including the 19<sup>th</sup> OPEC and non-OPEC Ministerial Meeting on the 18 July 2021, and adjusted upward the production level for OPEC and non-OPEC Participating Countries by 0.1 mb/d for the month of September 2022.
- 74/ The 32<sup>nd</sup> OPEC and non-OPEC Ministerial Meeting, 5 September 2022, reverted to the production level of August 2022 for OPEC and non-OPEC Participating Countries for the month of October 2022.
- 75/ The 33<sup>rd</sup> OPEC and non-OPEC Ministerial Meeting, 5 October 2022, reaffirmed the decision of the 10<sup>th</sup> OPEC and non-OPEC Ministerial Meeting on 12 April 2020 and further endorsed in subsequent meetings, including the 19<sup>th</sup> OPEC and non-OPEC Ministerial Meeting on 18 July 2021, and adjusted downward the overall production by 2 mb/d from the August 2022 required production levels, starting November 2022 for OPEC and non-OPEC Participating Countries.

# SECTION 2

## Macro-economics

Table 2.1  
OPEC Members' population

(million people)

	2018	2019	2020	2021	2022	change 22/21
Algeria	42.578	43.424	44.227	45.024	45.400	0.376
Angola	29.250	30.176	31.128	32.098	33.086	0.989
Congo	5.441	5.571	5.702	5.836	5.982	0.146
Equatorial Guinea	1.314	1.360	1.406	1.452	1.498	0.046
Gabon	2.053	2.080	2.108	2.135	2.161	0.026
IR Iran	82.084	83.075	84.038	84.841	85.690	0.849
Iraq	38.124	39.128	40.150	41.191	42.249	1.058
Kuwait	4.227	4.420	4.465	4.336	4.386	0.050
Libya	6.513	6.578	6.644	6.710	6.777	0.067
Nigeria	202.988	208.282	213.402	218.402	221.602	3.200
Saudi Arabia	33.414	34.218	35.013	34.111	34.793	0.682
United Arab Emirates	9.367	9.504	9.282	9.558	9.892	0.334
Venezuela	31.828	32.220	32.605	32.986	33.105	0.119
<b>OPEC</b>	<b>489.181</b>	<b>500.035</b>	<b>510.170</b>	<b>518.679</b>	<b>526.621</b>	<b>7.941</b>

Table 2.2  
OPEC Members' nominal GDP (at current market prices)

(m \$)

	2018	2019	2020	2021	2022
Algeria	174,902	171,550	145,717	163,429	186,995
Angola	101,353	83,137	54,821	71,258	115,164
Congo	13,676	12,910	10,502	12,131	12,530
Equatorial Guinea	13,097	11,364	10,099	12,269	16,451
Gabon	16,875	16,875	15,339	20,242	21,931
IR Iran	246,318	241,658	195,528	289,294	352,213
Iraq	227,512	233,636	182,455	254,782	264,182
Kuwait	138,209	136,189	105,941	136,643	181,978
Libya	76,681	69,241	46,895	39,007	44,066
Nigeria	421,742	406,176	430,197	436,450	470,332
Saudi Arabia	846,584	838,565	734,271	868,586	1,108,149
United Arab Emirates	423,014	417,216	357,219	405,468	507,535
Venezuela	102,021	73,003	43,788	57,148	93,111
<b>OPEC</b>	<b>2,801,984</b>	<b>2,711,519</b>	<b>2,332,772</b>	<b>2,766,706</b>	<b>3,374,636</b>

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

(%)

	2018	2019	2020	2021	2022
Algeria	1.2	1.0	-5.1	3.4	3.4
Angola	-1.3	-0.7	-5.6	1.1	2.7
Congo	-4.8	1.0	-6.2	1.5	2.6
Equatorial Guinea	-6.2	-5.5	-4.2	-3.2	2.8
Gabon	0.8	3.9	-1.9	1.5	3.3
IR Iran	-1.8	-3.1	3.3	4.7	2.7
Iraq	4.7	5.8	-15.7	7.7	7.0
Kuwait	2.4	-0.6	-8.9	1.3	7.5
Libya	7.9	-11.2	-29.5	28.3	1.0
Nigeria	1.9	2.2	-1.8	3.6	3.3
Saudi Arabia	2.8	0.8	-4.3	3.9	8.7
United Arab Emirates	1.3	1.1	-5.0	3.9	7.6
Venezuela	-19.7	-27.7	-30.0	0.5	9.0
<b>OPEC</b>	<b>0.1</b>	<b>-0.9</b>	<b>-4.9</b>	<b>4.1</b>	<b>5.6</b>

**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 of goods and services**

(m \$)

	2018	2019	2020	2021	2022
Algeria	45,234	39,014	26,103	43,703	69,256
Angola	41,389	35,180	21,004	33,675	50,120
Congo	9,701	8,748	5,675	8,377	10,800
Equatorial Guinea	7,804	5,810	4,392	6,806	7,900
Gabon	9,155	8,678	7,275	11,281	15,405
IR Iran	91,049	50,267	39,413	60,135	77,413
Iraq	92,831	88,903	50,613	91,514	138,291
Kuwait	79,464	72,580	47,982	76,177	110,370
Libya	29,830	29,058	9,312	33,417	37,686
Nigeria	65,357	67,481	37,984	46,868	68,119
Saudi Arabia	314,917	285,860	182,848	286,502	442,569
United Arab Emirates	392,866	404,046	351,258	425,149	532,797
Venezuela	33,602	21,017	6,682	10,138	17,686
<b>OPEC</b>	<b>1,213,197</b>	<b>1,116,641</b>	<b>790,542</b>	<b>1,133,742</b>	<b>1,578,410</b>

**Notes:**

All figures fob.

Table 2.5

**OPEC Members' values of petroleum exports**

(m \$)

	2018	2019	2020	2021	2022
Algeria	26,082	22,674	13,188	23,356	32,513
Angola	37,801	32,230	18,782	28,837	41,241
Congo	7,468	7,072	3,689	5,785	8,297
Equatorial Guinea	3,175	2,703	1,765	2,366	3,111
Gabon	4,419	4,767	2,714	4,641	6,812
IR Iran	60,519	19,402	7,914	25,526	42,619
Iraq	84,218	80,027	44,128	79,788	120,571
Kuwait	64,582	52,433	35,228	61,703	95,352
Libya	25,386	24,197	5,724	27,485	33,255
Nigeria	54,513	45,106	27,730	41,378	53,457
Saudi Arabia	231,585	200,488	119,359	202,166	326,289
United Arab Emirates	57,890	52,417	31,341	54,595	94,677
Venezuela	29,810	18,335	5,738	8,816	15,379
<b>OPEC</b>	<b>687,447</b>	<b>561,851</b>	<b>317,300</b>	<b>566,442</b>	<b>873,573</b>

Table 2.6

**OPEC Members' values of imports of goods and services**

(m \$)

	2018	2019	2020	2021	2022
Algeria	56,329	50,033	40,372	43,256	47,331
Angola	25,887	22,299	15,146	18,845	28,564
Congo	7,891	6,924	4,799	5,579	7,500
Equatorial Guinea	5,764	4,971	4,640	5,717	6,200
Gabon	3,833	3,712	3,454	3,406	3,338
IR Iran	84,870	60,519	49,479	56,700	64,395
Iraq	56,876	72,283	54,722	50,707	87,216
Kuwait	63,051	61,135	40,671	44,001	55,271
Libya	17,274	22,694	12,912	17,431	29,634
Nigeria	73,851	93,969	71,285	51,667	79,274
Saudi Arabia	209,589	218,941	182,184	213,016	258,789
United Arab Emirates	307,692	321,525	273,691	347,532	420,510
Venezuela	17,483	11,125	9,831	11,998	18,036
<b>OPEC</b>	<b>930,390</b>	<b>950,129</b>	<b>763,186</b>	<b>869,856</b>	<b>1,106,057</b>

**Notes:**

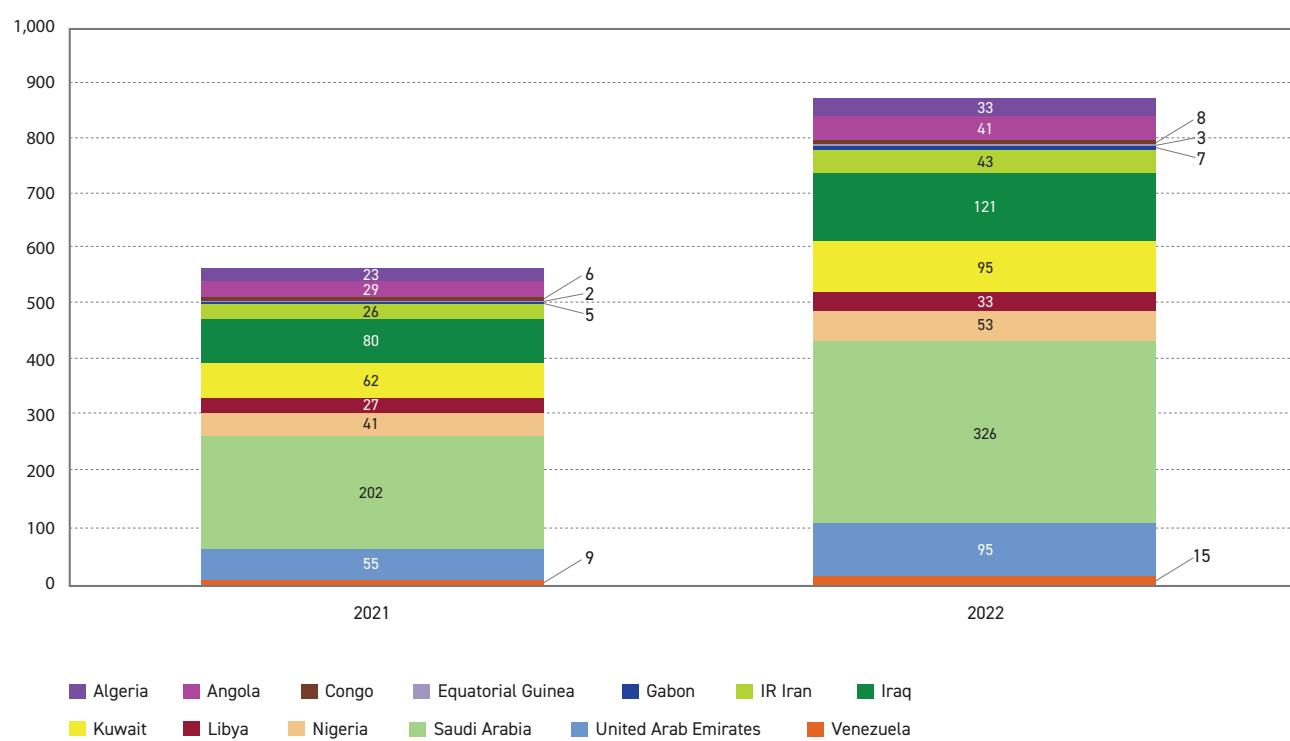
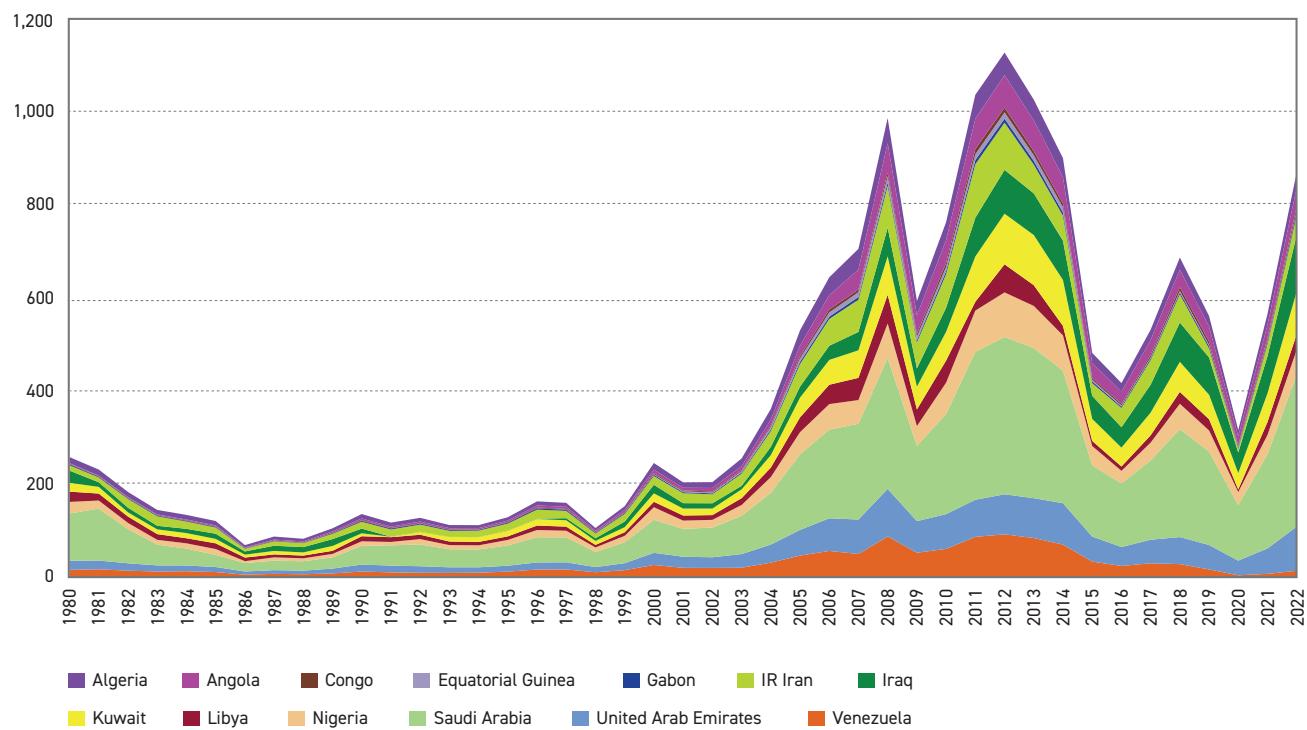
All figures cif.

**Table 2.7**  
**Current account balances in OPEC Members** (m \$)

	2018	2019	2020	2021	2022
Algeria	-15,820	-16,914	-16,955	-18,684	-4,636
Angola	7,403	5,137	872	8,399	11,763
Congo	840	1,632	1,441	2,623	3,303
Equatorial Guinea	-166	72	-125	-121	43
Gabon	-640	-150	-839	-1,036	572
IR Iran	26,241	-1,652	-708	11,144	26,044
Iraq	35,270	15,763	-6,198	24,563	41,339
Kuwait	19,898	17,861	4,843	37,390	17,101
Libya	11,361	4,817	-4,780	14,429	8,116
Nigeria	7,283	-13,685	-15,986	-1,849	-1,010
Saudi Arabia	71,972	38,230	-22,814	44,324	150,753
United Arab Emirates	40,490	37,332	22,073	47,986	135,927
Venezuela	8,879	5,506	-2,839	370	1,887
<b>OPEC</b>	<b>213,010</b>	<b>93,950</b>	<b>-42,015</b>	<b>169,539</b>	<b>391,201</b>

Graph 2.1  
OPEC Members' values of petroleum exports

(bn \$)



## **SECTION 3**

### **Oil data: upstream**

## Oil data: upstream

Table 3.1  
World proven crude oil reserves by country

(mb)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>54,973</b>	<b>54,580</b>	<b>46,402</b>	<b>51,774</b>	<b>65,690</b>	<b>26.9</b>
Canada <sup>1</sup>	5,192	4,906	4,919	4,855	4,731	-2.6
Chile	150	150	150	150	150	0.0
Mexico	5,807	5,333	5,498	5,618	5,558	-1.1
United States	43,824	44,191	35,835	41,151	55,251	34.3
<b>OECD Europe</b>	<b>13,098</b>	<b>13,224</b>	<b>12,412</b>	<b>11,772</b>	<b>11,251</b>	<b>-4.4</b>
Denmark	428	441	441	428	340	-20.6
Norway	8,645	8,523	7,902	7,745	7,573	-2.2
United Kingdom	2,500	2,700	2,500	2,000	1,800	-10.0
Others	1,525	1,560	1,569	1,599	1,538	-3.8
<b>OECD Asia Pacific</b>	<b>2,483</b>	<b>2,477</b>	<b>2,475</b>	<b>1,833</b>	<b>1,890</b>	<b>3.1</b>
Australia	2,390	2,390	2,390	1,747	1,803	3.2
Others	93	87	85	86	87	1.2
<b>China</b>	<b>25,927</b>	<b>26,154</b>	<b>26,023</b>	<b>26,491</b>	<b>27,003</b>	<b>1.9</b>
<b>India</b>	<b>4,423</b>	<b>4,423</b>	<b>4,605</b>	<b>4,489</b>	<b>4,370</b>	<b>-2.7</b>
<b>Other Asia</b>	<b>13,415</b>	<b>13,577</b>	<b>12,841</b>	<b>12,829</b>	<b>12,522</b>	<b>-2.4</b>
Brunei	1,100	1,100	1,100	1,100	1,100	0.0
Indonesia	3,170	3,150	2,480	2,440	2,250	-7.8
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	1,145	1,327	1,261	1,289	1,172	-9.1
<b>Latin America</b>	<b>330,461</b>	<b>331,628</b>	<b>330,719</b>	<b>329,481</b>	<b>331,265</b>	<b>0.5</b>
Argentina	2,017	2,389	2,483	2,411	2,838	17.7
Brazil	12,835	13,435	12,715	11,890	13,242	11.4
Colombia	1,782	1,960	2,036	1,820	2,040	12.1
Ecuador	8,273	8,273	8,273	8,273	8,273	0.0
<b>Venezuela</b>	<b>303,806</b>	<b>303,806</b>	<b>303,561</b>	<b>303,468</b>	<b>303,221</b>	<b>-0.1</b>
Others	1,748	1,765	1,651	1,619	1,651	2.0
<b>Middle East</b>	<b>803,184</b>	<b>863,418</b>	<b>865,519</b>	<b>869,612</b>	<b>871,612</b>	<b>0.2</b>
<b>IR Iran</b>	<b>155,600</b>	<b>208,600</b>	<b>208,600</b>	<b>208,600</b>	<b>208,600</b>	<b>0.0</b>
<b>Iraq</b>	<b>145,019</b>	<b>145,019</b>	<b>145,019</b>	<b>145,019</b>	<b>145,019</b>	<b>0.0</b>
<b>Kuwait</b>	<b>101,500</b>	<b>101,500</b>	<b>101,500</b>	<b>101,500</b>	<b>101,500</b>	<b>0.0</b>
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
<b>Saudi Arabia</b>	<b>267,026</b>	<b>267,073</b>	<b>267,082</b>	<b>267,192</b>	<b>267,192</b>	<b>0.0</b>
Syrian Arab Rep.	2,500	2,500	2,500	2,500	2,500	0.0
<b>United Arab Emirates</b>	<b>97,800</b>	<b>105,000</b>	<b>107,000</b>	<b>111,000</b>	<b>113,000</b>	<b>1.8</b>
Others	3,122	3,109	3,201	3,184	3,184	0.0
<b>Africa</b>	<b>125,861</b>	<b>124,117</b>	<b>123,449</b>	<b>119,099</b>	<b>119,050</b>	<b>0.0</b>
<b>Algeria</b>	<b>12,200</b>	<b>12,200</b>	<b>12,200</b>	<b>12,200</b>	<b>12,200</b>	<b>0.0</b>
<b>Angola</b>	<b>8,160</b>	<b>7,783</b>	<b>7,231</b>	<b>2,516</b>	<b>2,550</b>	<b>1.4</b>
<b>Congo</b>	<b>2,982</b>	<b>1,947</b>	<b>1,811</b>	<b>1,811</b>	<b>1,811</b>	<b>0.0</b>
Egypt	3,325	3,075	3,075	3,300	3,300	0.0
<b>Equatorial Guinea</b>	<b>1,100</b>	<b>1,100</b>	<b>1,100</b>	<b>1,100</b>	<b>1,100</b>	<b>0.0</b>
<b>Gabon</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>	<b>2,000</b>	<b>0.0</b>
<b>Libya</b>	<b>48,363</b>	<b>48,363</b>	<b>48,363</b>	<b>48,363</b>	<b>48,363</b>	<b>0.0</b>
<b>Nigeria</b>	<b>36,972</b>	<b>36,890</b>	<b>36,910</b>	<b>37,050</b>	<b>36,967</b>	<b>-0.2</b>
Sudans	5,000	5,000	5,000	5,000	5,000	0.0
Others	5,759	5,759	5,759	5,759	5,759	0.0
<b>Russia</b>	<b>80,000</b>	<b>80,000</b>	<b>80,000</b>	<b>80,000</b>	<b>80,000</b>	<b>0.0</b>
<b>Other Eurasia</b>	<b>38,874</b>	<b>38,874</b>	<b>38,874</b>	<b>38,874</b>	<b>38,874</b>	<b>0.0</b>
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
<b>Other Europe</b>	<b>932</b>	<b>914</b>	<b>914</b>	<b>914</b>	<b>914</b>	<b>0.0</b>
<b>Total world</b>	<b>1,493,631</b>	<b>1,553,386</b>	<b>1,544,233</b>	<b>1,547,168</b>	<b>1,564,441</b>	<b>1.1</b>
of which						-
OPEC	1,182,528	1,241,281	1,242,377	1,241,819	1,243,523	0.1
OPEC percentage	79.2	79.9	80.5	80.3	79.5	
OECD	70,554	70,281	61,289	65,379	78,831	20.6

**Notes:** Figures as at year-end.

1. Data excludes oil sands.

**Table 3.2**  
**Active rigs by country**

(number)

	2018	2019	2020	2021	2022	change 22/21
<b>OECD Americas</b>	<b>1,252</b>	<b>989</b>	<b>475</b>	<b>778</b>	<b>973</b>	<b>195</b>
Canada	141	135	91	149	145	-4
Chile	2	1	2	2	2	0
Mexico	31	49	41	47	47	0
United States	1,078	804	341	580	779	199
<b>OECD Europe</b>	<b>72</b>	<b>77</b>	<b>52</b>	<b>61</b>	<b>70</b>	<b>9</b>
Germany	5	4	0	1	3	-2
Italy	3	5	1	2	4	2
Netherlands	1	3	2	2	2	0
Norway	18	17	17	18	17	-1
Poland	6	6	3	2	2	0
United Kingdom	11	11	5	8	10	2
Others	28	31	24	28	32	4
<b>OECD Asia Pacific</b>	<b>24</b>	<b>29</b>	<b>17</b>	<b>23</b>	<b>24</b>	<b>1</b>
Australia	22	25	14	19	20	1
New Zealand	1	2	1	2	2	0
Others	1	2	2	2	2	0
<b>China<sup>1</sup></b>	<b>35</b>	<b>38</b>	<b>30</b>	<b>41</b>	<b>41</b>	<b>0</b>
<b>India</b>	<b>124</b>	<b>109</b>	<b>81</b>	<b>76</b>	<b>78</b>	<b>2</b>
<b>Other Asia</b>	<b>67</b>	<b>65</b>	<b>49</b>	<b>68</b>	<b>65</b>	<b>-3</b>
Indonesia	24	26	26	32	32	0
Malaysia	7	12	3	7	4	-3
Pakistan	19	15	13	15	11	-4
Others	17	12	7	14	18	4
<b>Latin America</b>	<b>304</b>	<b>265</b>	<b>78</b>	<b>112</b>	<b>131</b>	<b>19</b>
Argentina	74	50	29	51	60	9
Bolivia	3	5	2	4	3	-1
Brazil	10	14	9	8	12	4
Colombia	30	33	14	29	35	6
Ecuador	28	5	5	11	7	-4
Trinidad & Tobago	2	3	3	0	1	1
<b>Venezuela</b>	<b>151</b>	<b>149</b>	<b>12</b>	<b>3</b>	<b>7</b>	<b>4</b>
Others	6	6	4	6	6	0
<b>Middle East</b>	<b>566</b>	<b>532</b>	<b>383</b>	<b>406</b>	<b>434</b>	<b>28</b>
<b>IR Iran</b>	<b>157</b>	<b>117</b>	<b>117</b>	<b>117</b>	<b>117</b>	<b>0</b>
<b>Iraq</b>	<b>80</b>	<b>77</b>	<b>30</b>	<b>44</b>	<b>55</b>	<b>11</b>
<b>Kuwait</b>	<b>85</b>	<b>87</b>	<b>85</b>	<b>78</b>	<b>67</b>	<b>-11</b>
Oman	51	53	42	46	49	3
Qatar	9	14	8	10	11	1
<b>Saudi Arabia</b>	<b>125</b>	<b>115</b>	<b>59</b>	<b>65</b>	<b>80</b>	<b>15</b>
<b>United Arab Emirates</b>	<b>57</b>	<b>66</b>	<b>40</b>	<b>42</b>	<b>52</b>	<b>10</b>
Yemen	0	1	1	1	1	0
Others	2	2	1	3	2	-1
<b>Africa</b>	<b>173</b>	<b>173</b>	<b>129</b>	<b>187</b>	<b>242</b>	<b>55</b>
<b>Algeria</b>	<b>50</b>	<b>42</b>	<b>22</b>	<b>77</b>	<b>132</b>	<b>55</b>
<b>Angola</b>	<b>8</b>	<b>21</b>	<b>7</b>	<b>9</b>	<b>11</b>	<b>2</b>
<b>Congo</b>	<b>16</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>1</b>	<b>-4</b>
Egypt	27	31	17	30	33	3
<b>Equatorial Guinea</b>	<b>2</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>-3</b>
<b>Gabon</b>	<b>4</b>	<b>9</b>	<b>5</b>	<b>4</b>	<b>2</b>	<b>-2</b>
<b>Libya</b>	<b>9</b>	<b>16</b>	<b>11</b>	<b>14</b>	<b>9</b>	<b>-5</b>
<b>Nigeria</b>	<b>32</b>	<b>17</b>	<b>49</b>	<b>23</b>	<b>27</b>	<b>4</b>
Others	25	32	13	22	27	5
<b>Other Europe</b>	<b>14</b>	<b>14</b>	<b>12</b>	<b>9</b>	<b>13</b>	<b>4</b>
Romania	10	10	10	4	4	0
Others	4	4	2	5	9	4
<b>Total world<sup>1,2</sup></b>	<b>2,631</b>	<b>2,291</b>	<b>1306</b>	<b>1761</b>	<b>2071</b>	<b>310</b>
of which						
OPEC	776	721	442	484	560	76
<b>OPEC percentage</b>	<b>29.5</b>	<b>31.5</b>	<b>33.8</b>	<b>27.5</b>	<b>27.1</b>	
OECD	1,348	1,095	544	862	1,067	205

**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

(number)

	2018	2019	2020	2021	2022	change 22/21
Algeria	277	265	160	113	149	36
Angola	32	104	14	27	38	11
Congo	80	15	9	4	11	7
Equatorial Guinea	21	9	0	2	0	-2
Gabon	27	59	23	16	18	2
IR Iran	195	117	105	105	105	0
Iraq	160	190	130	108	221	113
Kuwait <sup>1</sup>	488	379	444	380	448	68
Libya	35	115	93	102	58	-44
Nigeria	81	100	81	73	74	1
Saudi Arabia <sup>1</sup>	588	580	466	314	370	56
United Arab Emirates	399	440	320	254	276	22
Venezuela	710	639	23	90	23	-67
<b>OPEC</b>	<b>3,093</b>	<b>3,012</b>	<b>1,868</b>	<b>1,588</b>	<b>1,791</b>	<b>203</b>
<b>Total world</b>	<b>72,230</b>	<b>67,818</b>	<b>46,305</b>	<b>51,924</b>	<b>60,029</b>	<b>8,105</b>

**Notes:**

- Figures include share of wells completed from Neutral Zone.

**Table 3.4**  
**Daily and cumulative crude oil production in OPEC Members**

(1,000 b)

<b>Daily crude oil production</b>		<i>(average)</i>					
		<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>2022</b>
Algeria		1,029	1,020	783	796	1,190	1,020
Angola		84	150	474	736	1,758	1,137
Congo		0	56	156	269	308	262
Equatorial Guinea		0	0	0	116	241	81
Gabon		109	175	274	281	241	191
IR Iran		3,829	1,467	3,135	3,661	3,544	2,554
Iraq		1,549	2,646	2,113	2,810	2,358	4,453
Kuwait <sup>1</sup>		2,990	1,664	859	1,996	2,312	2,707
Libya		3,318	1,832	1,389	1,347	1,487	981
Nigeria		1,083	2,058	1,727	2,054	2,048	1,138
Saudi Arabia <sup>1</sup>		3,799	9,901	6,413	8,095	8,166	10,591
United Arab Emirates		780	1,702	1,763	2,175	2,324	3,064
Venezuela		3,708	2,165	2,135	2,891	2,854	716
<b>OPEC</b>		<b>22,277</b>	<b>24,835</b>	<b>21,220</b>	<b>27,227</b>	<b>28,830</b>	<b>28,895</b>

**Cumulative crude oil production up to and including year**

(1,000 b)

	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>2022</b>
Algeria	2,569,469	6,404,548	8,974,340	11,837,030	16,079,015	20,831,674
Angola	76,423	623,359	1,681,478	3,972,081	8,818,353	15,457,512
Congo	5,406	83,269	503,937	1,278,189	2,188,381	3,370,408
Equatorial Guinea	0	0	0	126,194	1,081,642	1,770,257
Gabon	195,732	870,019	1,507,592	2,690,685	3,592,623	4,521,553
IR Iran	12,357,977	29,969,896	38,410,483	51,367,070	65,152,744	78,854,645
Iraq	7,476,078	15,826,156	22,246,208	26,918,241	34,596,929	51,293,529
Kuwait <sup>1</sup>	13,028,906	21,993,164	25,857,094	32,092,887	40,548,105	52,571,954
Libya	5,476,384	12,810,843	16,929,582	21,993,272	27,594,678	31,109,767
Nigeria	1,138,896	8,389,456	13,656,562	20,572,881	28,198,355	35,318,413
Saudi Arabia <sup>1</sup>	13,283,848	42,306,785	61,814,608	91,266,532	122,387,773	165,520,041
United Arab Emirates	1,160,471	7,164,231	11,921,927	19,785,670	28,265,801	40,858,782
Venezuela	26,301,976	36,046,663	42,528,079	51,772,971	62,363,887	70,641,227
<b>OPEC</b>	<b>83,071,565</b>	<b>182,488,388</b>	<b>246,031,889</b>	<b>335,673,701</b>	<b>440,868,285</b>	<b>572,119,762</b>

**Notes:**

Prior to 2020, the crude oil production series for Nigeria includes some blended condensate from lease and gas plants.

1. Figures include share of production from Neutral Zone.

## Oil data: upstream

Table 3.5  
World crude oil production by country

(1,000 b/d)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>14,039</b>	<b>15,300</b>	<b>14,181</b>	<b>14,105</b>	<b>14,744</b>	<b>4.5</b>
Canada	1,273	1,304	1,199	1,185	1,232	4.0
Chile	3	3	1	2	2	8.8
Mexico	1,810	1,679	1,663	1,665	1,622	-2.5
United States	10,953	12,315	11,318	11,254	11,887	5.6
<b>OECD Europe</b>	<b>2,862</b>	<b>2,775</b>	<b>2,977</b>	<b>2,902</b>	<b>2,724</b>	<b>-6.2</b>
Denmark	115	102	71	66	65	-1.5
Norway	1,487	1,408	1,699	1,770	1,685	-4.8
United Kingdom	985	1,007	931	791	723	-8.5
Others	276	258	277	276	251	-9.1
<b>OECD Asia Pacific</b>	<b>144</b>	<b>164</b>	<b>163</b>	<b>143</b>	<b>129</b>	<b>-9.5</b>
Australia	117	136	138	121	110	-8.4
Others	27	28	25	22	19	-15.4
<b>China</b>	<b>3,787</b>	<b>3,825</b>	<b>3,889</b>	<b>3,988</b>	<b>4,094</b>	<b>2.7</b>
<b>India</b>	<b>661</b>	<b>623</b>	<b>587</b>	<b>574</b>	<b>563</b>	<b>-1.8</b>
<b>Other Asia</b>	<b>1,886</b>	<b>1,825</b>	<b>1,686</b>	<b>1,560</b>	<b>1,451</b>	<b>-7.0</b>
Brunei	100	110	101	98	84	-14.2
Indonesia	685	664	631	585	539	-7.8
Malaysia	539	506	456	418	397	-5.1
Thailand	129	126	117	98	79	-19.2
Vietnam	240	222	194	184	180	-2.5
Others	193	197	188	177	172	-2.9
<b>Latin America</b>	<b>6,207</b>	<b>5,961</b>	<b>5,536</b>	<b>5,575</b>	<b>6,027</b>	<b>8.1</b>
Argentina	489	509	480	513	582	13.5
Brazil	2,587	2,788	2,940	2,905	3,022	4.0
Colombia	865	886	781	736	754	2.5
Ecuador	517	531	479	473	481	1.7
Guyana	0	3	73	109	276	153.0
<b>Venezuela</b>	<b>1,510</b>	<b>1,013</b>	<b>569</b>	<b>636</b>	<b>716</b>	<b>12.6</b>
Others	238	232	213	203	195	-3.9
<b>Middle East</b>	<b>25,731</b>	<b>24,171</b>	<b>22,043</b>	<b>22,234</b>	<b>25,094</b>	<b>12.9</b>
Bahrain	193	194	196	193	190	-1.7
<b>IR Iran</b>	<b>3,536</b>	<b>2,362</b>	<b>1,991</b>	<b>2,392</b>	<b>2,554</b>	<b>6.8</b>
<b>Iraq</b>	<b>4,410</b>	<b>4,576</b>	<b>3,997</b>	<b>3,971</b>	<b>4,453</b>	<b>12.1</b>
<b>Kuwait<sup>1</sup></b>	<b>2,737</b>	<b>2,678</b>	<b>2,438</b>	<b>2,415</b>	<b>2,707</b>	<b>12.1</b>
Oman	870	841	762	752	848	12.8
Qatar	601	595	603	601	606	0.8
<b>Saudi Arabia<sup>1</sup></b>	<b>10,317</b>	<b>9,808</b>	<b>9,213</b>	<b>9,125</b>	<b>10,591</b>	<b>16.1</b>
Syrian Arab Republic	21	22	23	23	32	40.6
<b>United Arab Emirates</b>	<b>3,008</b>	<b>3,058</b>	<b>2,779</b>	<b>2,718</b>	<b>3,064</b>	<b>12.8</b>
Yemen	38	37	42	45	49	9.5
<b>Africa</b>	<b>6,946</b>	<b>7,133</b>	<b>5,857</b>	<b>6,199</b>	<b>5,858</b>	<b>-5.5</b>
<b>Algeria</b>	<b>1,040</b>	<b>1,023</b>	<b>899</b>	<b>911</b>	<b>1,020</b>	<b>12.0</b>
<b>Angola</b>	<b>1,473</b>	<b>1,373</b>	<b>1,271</b>	<b>1,124</b>	<b>1,137</b>	<b>1.1</b>
Cameroon	69	72	73	68	61	-9.6
Chad	128	118	106	96	87	-8.9
<b>Congo</b>	<b>323</b>	<b>329</b>	<b>300</b>	<b>267</b>	<b>262</b>	<b>-1.9</b>
Egypt	539	511	487	448	452	1.0
<b>Equatorial Guinea</b>	<b>120</b>	<b>110</b>	<b>114</b>	<b>93</b>	<b>81</b>	<b>-12.9</b>
<b>Gabon</b>	<b>193</b>	<b>218</b>	<b>207</b>	<b>181</b>	<b>191</b>	<b>5.2</b>
Ghana	170	198	183	151	142	-6.0
<b>Libya</b>	<b>946</b>	<b>1,091</b>	<b>389</b>	<b>1,207</b>	<b>981</b>	<b>-18.7</b>
<b>Nigeria</b>	<b>1,602</b>	<b>1,737</b>	<b>1,493</b>	<b>1,323</b>	<b>1,138</b>	<b>-14.0</b>
Sudans	223	237	230	221	205	-7.1
Others	118	117	104	110	101	-8.3
<b>Russia</b>	<b>10,355</b>	<b>10,390</b>	<b>9,409</b>	<b>9,619</b>	<b>9,756</b>	<b>1.4</b>
<b>Other Eurasia</b>	<b>2,560</b>	<b>2,533</b>	<b>2,344</b>	<b>2,336</b>	<b>2,260</b>	<b>-3.3</b>
Azerbaijan	725	678	611	590	558	-5.4
Kazakhstan	1,564	1,587	1,470	1,489	1,464	-1.7
Others	270	268	262	257	237	-7.7
<b>Other Europe</b>	<b>119</b>	<b>119</b>	<b>114</b>	<b>109</b>	<b>103</b>	<b>-5.3</b>
<b>Total world</b>	<b>75,297</b>	<b>74,819</b>	<b>68,786</b>	<b>69,346</b>	<b>72,801</b>	<b>5.0</b>
of which						
OPEC	31,217	29,376	25,659	26,363	28,895	9.6
OPEC percentage	41.5	39.3	37.3	38.0	39.7	
OECD	17,046	18,239	17,321	17,151	17,597	2.6

**Notes:**

Prior to 2020, the crude oil production series for Nigeria includes some blended condensate from lease and gas plants.

1. Figures include share of production from Neutral Zone.

**Table 3.6**  
**Non-OPEC oil supply and OPEC NGLs**

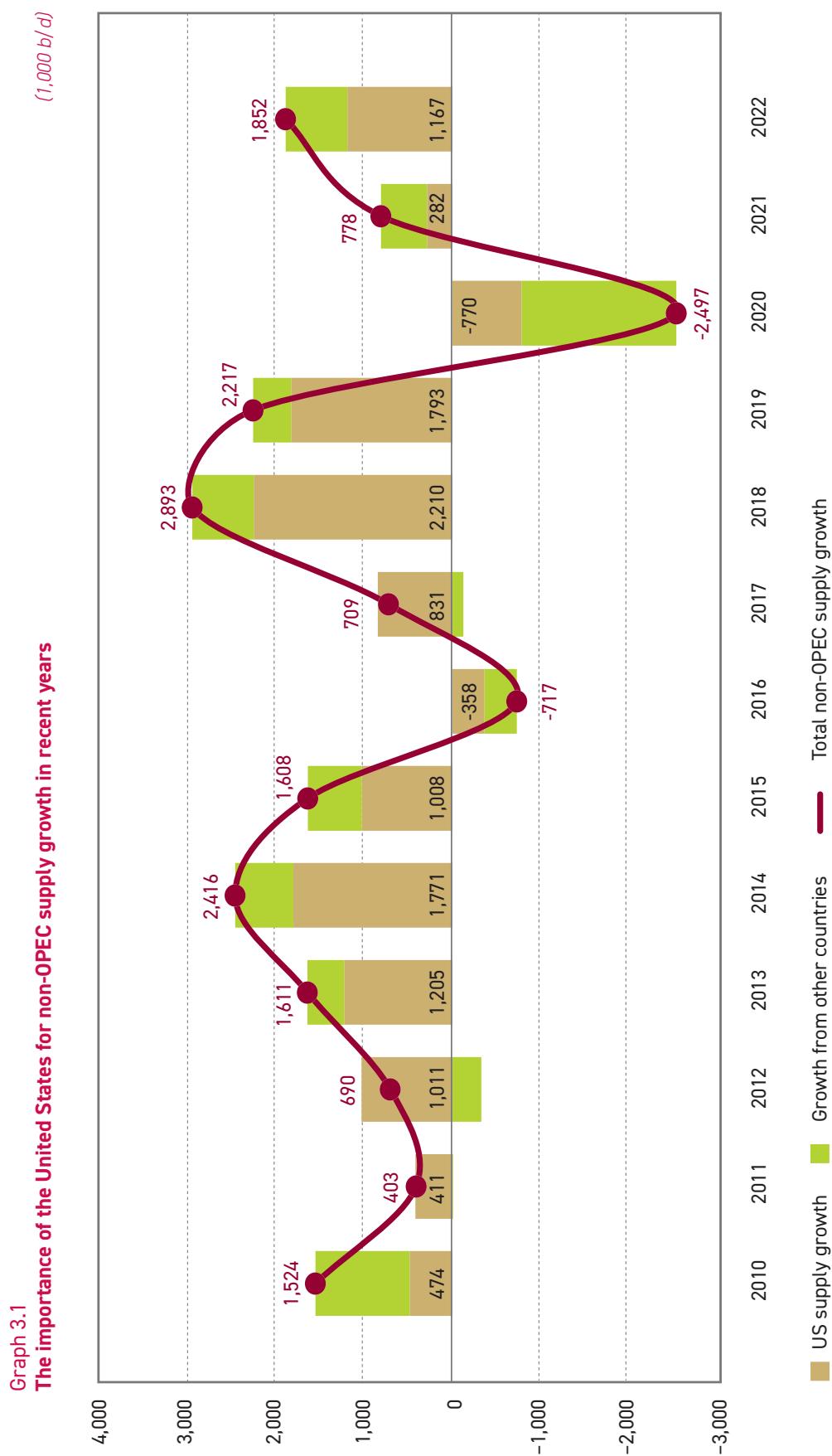
(1,000 b/d)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>24,100</b>	<b>25,882</b>	<b>24,867</b>	<b>25,447</b>	<b>26,841</b>	<b>5.5</b>
Canada	5,279	5,413	5,167	5,443	5,616	3.2
Chile	9	11	9	9	9	7.8
Mexico	2,075	1,928	1,932	1,954	2,007	2.7
United States	16,737	18,530	17,760	18,041	19,209	6.5
<b>OECD Europe</b>	<b>3,876</b>	<b>3,740</b>	<b>3,921</b>	<b>3,791</b>	<b>3,571</b>	<b>-5.8</b>
Denmark	121	107	78	72	71	-1.2
Norway	1,852	1,736	2,009	2,031	1,893	-6.8
United Kingdom	1,124	1,146	1,066	908	857	-5.6
Others	779	751	768	780	750	-3.9
<b>OECD Asia Pacific</b>	<b>408</b>	<b>523</b>	<b>523</b>	<b>512</b>	<b>477</b>	<b>-6.7</b>
Australia	340	455	452	441	410	-7.0
Others	68	68	71	71	67	-4.8
<b>China</b>	<b>3,985</b>	<b>4,054</b>	<b>4,161</b>	<b>4,319</b>	<b>4,479</b>	<b>3.7</b>
<b>India</b>	<b>869</b>	<b>833</b>	<b>782</b>	<b>779</b>	<b>774</b>	<b>-0.7</b>
<b>Other Asia</b>	<b>2,775</b>	<b>2,746</b>	<b>2,534</b>	<b>2,424</b>	<b>2,308</b>	<b>-4.8</b>
Brunei	111	121	110	107	92	-13.4
Indonesia	904	917	882	849	827	-2.5
Malaysia	735	694	622	585	579	-1.1
Thailand	517	514	460	442	372	-15.9
Vietnam	270	251	219	212	207	-2.3
Others	237	248	241	230	231	0.3
<b>Latin America</b>	<b>5,790</b>	<b>6,086</b>	<b>6,025</b>	<b>5,960</b>	<b>6,338</b>	<b>6.4</b>
Argentina	688	708	646	694	768	10.7
Brazil	3,316	3,557	3,673	3,590	3,715	3.5
Colombia	891	911	805	761	779	2.4
Ecuador	526	539	484	478	486	1.7
Guyana	0	3	73	109	276	153.0
Others	368	368	343	327	314	-4.1
<b>Middle East</b>	<b>3,193</b>	<b>3,157</b>	<b>3,155</b>	<b>3,185</b>	<b>3,287</b>	<b>3.2</b>
Bahrain	208	217	217	209	207	-1.1
Oman	979	971	951	971	1,064	9.6
Qatar	1,933	1,897	1,908	1,924	1,921	-0.2
Syrian Arab Republic	28	28	29	28	37	33.3
Yemen	45	44	50	53	57	8.0
<b>Africa</b>	<b>1,488</b>	<b>1,506</b>	<b>1,411</b>	<b>1,341</b>	<b>1,294</b>	<b>-3.5</b>
Cameroon	69	72	73	68	61	-9.6
Chad	128	118	106	96	87	-8.9
Egypt	672	655	619	592	600	1.2
Ghana	170	198	185	157	152	-3.2
South Africa	101	104	88	91	83	-8.8
Sudans	223	237	230	221	205	-7.1
Others	124	123	110	116	106	-8.9
<b>Russia</b>	<b>11,355</b>	<b>11,507</b>	<b>10,541</b>	<b>10,800</b>	<b>11,033</b>	<b>2.2</b>
<b>Other Eurasia</b>	<b>3,081</b>	<b>3,073</b>	<b>2,914</b>	<b>2,926</b>	<b>2,829</b>	<b>-3.3</b>
Azerbaijan	805	789	730	741	700	-5.5
Kazakhstan	1,925	1,928	1,825	1,835	1,790	-2.4
Others	351	356	359	351	339	-3.5
<b>Other Europe</b>	<b>123</b>	<b>123</b>	<b>118</b>	<b>113</b>	<b>107</b>	<b>-5.5</b>
<b>Total non-OPEC</b>	<b>61,042</b>	<b>63,230</b>	<b>60,951</b>	<b>61,597</b>	<b>63,338</b>	<b>2.8</b>
Processing gains	2,344	2,373	2,155	2,287	2,398	4.9
<b>Non-OPEC supply</b>	<b>63,386</b>	<b>65,603</b>	<b>63,106</b>	<b>63,884</b>	<b>65,736</b>	<b>2.9</b>
OPEC NGL	5,192	5,120	5,062	5,185	5,293	2.1
OPEC non-conventional (NCF)	99	95	104	99	100	0.8
<b>OPEC (NGL+NCF)</b>	<b>5,290</b>	<b>5,215</b>	<b>5,166</b>	<b>5,284</b>	<b>5,393</b>	<b>2.1</b>
<b>Non-OPEC &amp; OPEC (NGL+NCF)</b>	<b>68,676</b>	<b>70,818</b>	<b>68,272</b>	<b>69,168</b>	<b>71,129</b>	<b>2.8</b>
of which						
OECD	28,383	30,145	29,311	29,750	30,890	3.8

Table 3.7  
World biofuel production

(1,000 b/d)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>1,227</b>	<b>1,217</b>	<b>1,099</b>	<b>1,189</b>	<b>1,259</b>	<b>5.9</b>
Canada	35	41	37	37	41	10.8
United States	1,192	1,176	1,062	1,152	1,218	5.7
<b>OECD Europe</b>	<b>389</b>	<b>374</b>	<b>359</b>	<b>359</b>	<b>330</b>	<b>-8.0</b>
France	68	65	61	46	40	-13.0
Germany	78	79	77	82	70	-14.6
Italy	27	25	27	24	23	-4.2
Netherlands	43	43	44	49	47	-4.1
Poland	22	24	24	24	26	8.1
Spain	52	51	38	40	38	-5.0
United Kingdom	18	13	15	22	24	9.1
Others	81	73	74	72	62	-13.5
<b>OECD Asia Pacific</b>	<b>17</b>	<b>19</b>	<b>20</b>	<b>20</b>	<b>21</b>	<b>2.0</b>
<b>China</b>	<b>66</b>	<b>71</b>	<b>78</b>	<b>94</b>	<b>112</b>	<b>19.1</b>
<b>India</b>	<b>31</b>	<b>36</b>	<b>40</b>	<b>61</b>	<b>77</b>	<b>26.2</b>
<b>Other Asia</b>	<b>206</b>	<b>258</b>	<b>263</b>	<b>273</b>	<b>305</b>	<b>11.7</b>
Indonesia	106	145	148	166	195	17.5
Malaysia	21	24	23	20	22	10.0
Thailand	53	56	57	52	47	-9.6
Others	26	33	35	35	41	17.1
<b>Latin America</b>	<b>719</b>	<b>762</b>	<b>705</b>	<b>682</b>	<b>696</b>	<b>1.9</b>
Argentina	67	61	37	51	56	9.8
Brazil	622	666	634	594	602	1.2
Colombia	18	18	17	18	18	0.0
Others	12	17	17	19	20	5.3
<b>Others</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>6</b>	<b>7</b>	<b>16.7</b>
<b>Total world</b>	<b>2,662</b>	<b>2,744</b>	<b>2,572</b>	<b>2,685</b>	<b>2,807</b>	<b>4.5</b>
<i>of which</i>						
OECD	1,633	1,610	1,478	1,569	1,610	2.7



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# **SECTION 4**

## **Oil data: downstream**

Table 4.1

Refinery capacity<sup>1</sup> in OPEC Members by company and location

(1,000 b/cd)

	Location	2018	2019	2020	2021	2022
<b>Algeria</b>		<b>657</b>	<b>657</b>	<b>677</b>	<b>677</b>	<b>677</b>
Sonatrach	Skikda	355	355	355	355	355
	Skikda (Condensate)	122	122	122	122	122
	Arzew	87	87	87	87	87
	Algiers	58	58	78	78	78
	Hassi Messaoud	22	22	22	22	22
	Adrar	13	13	13	13	13
<b>Angola</b>		<b>80</b>	<b>80</b>	<b>80</b>	<b>80</b>	<b>80</b>
Luanda Refinery	Luanda	65	65	65	65	65
Sonangol	Malongo	15	15	15	15	15
<b>Congo</b>		<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>
Societe Nationale des Petroles du Congo	Pointe Noire	21	21	21	21	21
<b>Equatorial Guinea<sup>2</sup></b>		<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>
<b>Gabon</b>		<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>
Total and Shell	Port Gentil	25	25	25	25	25
<b>IR Iran</b>		<b>2,141</b>	<b>2,201</b>	<b>2,201</b>	<b>2,202</b>	<b>2,237</b>
NIOC	Abadan	399	399	399	374	374
	Isfahan	375	375	375	375	375
	Bandar Abbas	284	344	344	344	344
	Tehran	245	245	245	245	245
	Arak	242	242	242	242	242
	Tabriz	110	110	110	110	110
	Shiraz	56	56	56	82	82
	Kermanshah	22	22	22	22	22
	Lavan	48	48	48	48	48
	Bandar Abbas	240	240	240	240	240
	Qeshm	120	120	120	120	155
<b>Iraq</b>		<b>726</b>	<b>743</b>	<b>758</b>	<b>976</b>	<b>1,116</b>
INOC	Baiji	23	38	53	140	140
	Basrah	210	210	210	210	210
	Daura	140	140	140	140	140
	Kirkuk	30	30	30	56	56
	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	40	40
	Diwania	20	20	20	20	20
	Haditha	16	16	16	16	16
	Qaïarah	14	14	14	14	14
	Kask	5	7	7	20	20
	Kar	80	80	80	160	160
	Bazyan	38	38	38	40	40
	Karbala	na	na	na	na	140
<b>Kuwait</b>		<b>736</b>	<b>736</b>	<b>800</b>	<b>800</b>	<b>1,005</b>
KNPC	Mina Al-Ahmadi	466	466	346	346	346
	Mina Abdullah	270	270	454	454	454
	Al-Zour	na	na	na	na	205
<b>Libya</b>		<b>634</b>	<b>634</b>	<b>634</b>	<b>634</b>	<b>634</b>
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

**Table 4.1**  
**Refinery capacity in OPEC Members by company and location**

(1,000 b/cd)

	Location	2018	2019	2020	2021	2022
<b>Nigeria</b>		<b>446</b>	<b>446</b>	<b>461</b>	<b>486</b>	<b>486</b>
PHRC	New Port Hartcourt	150	150	150	150	150
WRPC	Warri	125	125	125	125	125
KRPC	Kaduna	110	110	110	110	110
PHRC	Port Hartcourt	60	60	60	60	60
NDPR	Rivers states	1	1	1	1	1
Niger Delta Refining	Ogbele	na	na	10	10	10
Waltersmith Petroman Oil Ltd	Ibigwe	na	na	5	5	5
Edo Refinery and Petrochemicals	Benin	na	na	na	6	6
Omsa, Pillar, Astek (Opac)	Kwale	na	na	na	7	7
Azikel Refinery	Obunagha-Gbarain, Bayelsa State	na	na	na	12	12
<b>Saudi Arabia</b>		<b>2,856</b>	<b>2,896</b>	<b>2,927</b>	<b>3,327</b>	<b>3,291</b>
Saudi Aramco	Ras Tanura	550	550	550	550	550
	Yanbu	245	245	252	252	220
	Riyadh	126	126	130	130	126
Saudi Aramco & Mobil	Samref	400	400	400	400	400
Saudi Aramco & Petrola	Rabigh	400	400	400	400	400
Saudi Aramco & Total	Satorp	405	440	460	460	460
Saudi Aramco	Yasref	430	430	430	430	430
Saudi Aramco & Shell	Sasref	300	305	305	305	305
Saudi Aramco	Jazan	na	na	na	400	400
<b>United Arab Emirates</b>		<b>1,122</b>	<b>1,122</b>	<b>1,272</b>	<b>1,272</b>	<b>1,227</b>
ADNOC		817	817	817	817	817
Emirate Oil	Jebel Ali	140	140	210	210	210
ADNOC	Umm Al-Narr	85	85	85	85	na
VTTI Fujairah Terminals Limited FTL FZC - 1 Fujairah		80	80	80	80	120
VTTI Fujairah Terminals Limited FTL FZC - 2 Fujairah		na	na	80	80	80
<b>Venezuela</b>		<b>2,276</b>	<b>2,276</b>	<b>2,276</b>	<b>2,276</b>	<b>2,276</b>
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
	San Roque	5	5	5	5	5
	Bajo Grande	16	16	16	16	16
	Petropiar <sup>3</sup>	248	248	248	248	248
	Petromonagas <sup>3</sup>	158	158	158	158	158
	Petrocedeno <sup>3</sup>	284	284	284	284	284
	Petrozuata <sup>3</sup>	160	160	160	160	160
	Anzoátegui <sup>3</sup>	122	122	122	122	122
<b>Total OPEC</b>		<b>11,720</b>	<b>11,837</b>	<b>12,132</b>	<b>12,775</b>	<b>13,074</b>

**Notes:**

1. All figures refer to the designated, or nameplate refining capacity.
2. Equatorial Guinea does not have refining capacities.
3. Upgrader refinery capacity.

## Oil data: downstream

Table 4.2

World refinery capacity by country<sup>1</sup>

(1,000 b/cd)

	2018	2019	2020	2021	2022	change 22/21
<b>OECD Americas</b>	<b>22,586</b>	<b>22,294</b>	<b>21,631</b>	<b>21,636</b>	<b>21,640</b>	<b>4</b>
Canada	2,046	2,046	2,046	2,046	2,062	16
Chile	220	220	220	220	220	0
Mexico	1,615	1,615	1,615	1,615	1,615	0
United States <sup>2</sup>	18,705	18,413	17,750	17,755	17,743	-12
<b>OECD Europe</b>	<b>14,314</b>	<b>14,468</b>	<b>14,453</b>	<b>13,983</b>	<b>13,983</b>	<b>0</b>
Belgium	776	776	776	669	669	0
France	1,252	1,252	1,252	1,151	1,151	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	1,342	1,292	1,292	1,292	0
Poland	581	581	581	581	581	0
Spain	1,562	1,562	1,562	1,562	1,562	0
Turkey	596	784	784	784	784	0
United Kingdom	1,238	1,238	1,173	1,173	1,173	0
Others <sup>2</sup>	2,981	2,981	3,081	2,820	2,820	0
<b>OECD Asia Pacific</b>	<b>7,970</b>	<b>7,970</b>	<b>7,855</b>	<b>7,620</b>	<b>7,364</b>	<b>-256</b>
Australia	462	462	462	227	227	0
Japan	3,597	3,597	3,482	3,482	3,362	-120
New Zealand	136	136	136	136	0	-136
South Korea <sup>2</sup>	3,518	3,518	3,518	3,518	3,518	0
Others	257	257	257	257	257	0
<b>China</b>	<b>15,257</b>	<b>16,059</b>	<b>16,174</b>	<b>16,462</b>	<b>17,182</b>	<b>720</b>
<b>India</b>	<b>4,796</b>	<b>4,796</b>	<b>4,796</b>	<b>4,836</b>	<b>4,836</b>	<b>0</b>
<b>Other Asia</b>	<b>6,836</b>	<b>7,296</b>	<b>7,311</b>	<b>7,110</b>	<b>7,110</b>	<b>0</b>
Indonesia	1,272	1,272	1,272	1,272	1,272	0
Thailand	1,235	1,235	1,250	1,250	1,250	0
Singapore	1,684	1,684	1,684	1,453	1,453	0
Malaysia	625	925	925	955	955	0
Philippines	276	276	276	276	276	0
Pakistan	368	368	368	368	368	0
Vietnam	367	367	367	367	367	0
Others <sup>2</sup>	1,010	1,170	1,170	1,170	1,170	0
<b>Latin America</b>	<b>6,618</b>	<b>6,618</b>	<b>6,648</b>	<b>6,648</b>	<b>6,681</b>	<b>33</b>
Argentina	631	631	661	661	661	0
Brazil	2,289	2,289	2,289	2,289	2,289	0
Colombia	415	415	415	415	415	0
Ecuador	188	188	188	188	188	0
<b>Venezuela<sup>3</sup></b>	<b>2,276</b>	<b>2,276</b>	<b>2,276</b>	<b>2,276</b>	<b>2,276</b>	<b>0</b>
Others <sup>2</sup>	820	820	820	820	853	33
<b>Middle East</b>	<b>8,575</b>	<b>8,700</b>	<b>8,965</b>	<b>9,667</b>	<b>10,037</b>	<b>370</b>
<b>IR Iran<sup>2</sup></b>	<b>2,141</b>	<b>2,201</b>	<b>2,201</b>	<b>2,202</b>	<b>2,237</b>	<b>35</b>
<b>Iraq</b>	<b>726</b>	<b>743</b>	<b>758</b>	<b>976</b>	<b>1,116</b>	<b>140</b>
<b>Kuwait</b>	<b>736</b>	<b>736</b>	<b>800</b>	<b>800</b>	<b>1,005</b>	<b>205</b>
Qatar <sup>2</sup>	430	430	430	430	430	0
<b>Saudi Arabia<sup>2</sup></b>	<b>2,856</b>	<b>2,896</b>	<b>2,927</b>	<b>3,327</b>	<b>3,291</b>	<b>-36</b>
<b>United Arab Emirates<sup>2</sup></b>	<b>1,122</b>	<b>1,122</b>	<b>1,272</b>	<b>1,272</b>	<b>1,227</b>	<b>-45</b>
Others <sup>2</sup>	564	572	577	660	731	71
<b>Africa</b>	<b>3,477</b>	<b>3,607</b>	<b>3,642</b>	<b>3,512</b>	<b>3,384</b>	<b>-128</b>
<b>Algeria<sup>2</sup></b>	<b>657</b>	<b>657</b>	<b>677</b>	<b>677</b>	<b>677</b>	<b>0</b>
<b>Angola</b>	<b>80</b>	<b>80</b>	<b>80</b>	<b>80</b>	<b>80</b>	<b>0</b>
<b>Congo</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>21</b>	<b>0</b>
Egypt	733	833	833	833	833	0
<b>Gabon</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>25</b>	<b>0</b>
<b>Libya</b>	<b>634</b>	<b>634</b>	<b>634</b>	<b>634</b>	<b>634</b>	<b>0</b>
<b>Nigeria</b>	<b>446</b>	<b>446</b>	<b>461</b>	<b>486</b>	<b>486</b>	<b>0</b>
South Africa	520	520	520	345	210	-135
Others <sup>2</sup>	362	392	412	412	419	7
<b>Russia</b>	<b>6,870</b>	<b>7,030</b>	<b>7,030</b>	<b>7,105</b>	<b>7,105</b>	<b>0</b>
<b>Other Eurasia</b>	<b>1,599</b>	<b>1,619</b>	<b>1,619</b>	<b>1,619</b>	<b>1,379</b>	<b>-240</b>
Azerbaijan	120	120	120	120	120	0
Belarus	505	505	505	505	505	0
Kazakhstan	425	425	425	425	425	0
Turkmenistan	237	237	237	237	237	0
Ukraine	240	240	240	240	0	-240
Others	72	92	92	92	92	0
<b>Other Europe</b>	<b>1,079</b>	<b>1,035</b>	<b>1,035</b>	<b>1,065</b>	<b>1,065</b>	<b>0</b>
Bulgaria	195	195	195	195	195	0
Croatia	134	90	90	90	90	0
Romania	256	256	256	256	256	0
Others	494	494	494	524	524	0
<b>Total world</b>	<b>99,978</b>	<b>101,493</b>	<b>101,160</b>	<b>101,263</b>	<b>101,766</b>	<b>503</b>
<i>of which</i>						
OPEC	11,720	11,837	12,132	12,775	13,074	299
<i>OPEC percentage</i>	11.7	11.7	12.0	12.6	12.8	
OECD	44,870	44,732	43,939	43,239	42,987	-252

**Notes:**

1. All figures refer to the designated or nameplate refining capacity.
2. Includes condensate splitters.
3. Includes upgrader capacity.

**Table 4.3**  
**World refinery throughput by country**

(1,000 b/d)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>20,056</b>	<b>20,108</b>	<b>17,561</b>	<b>18,727</b>	<b>19,690</b>	<b>5.1</b>
Canada	1,847	2,211	1,993	2,068	2,136	3.3
Chile	232	252	205	225	208	-7.5
Mexico	666	658	643	779	886	13.8
United States	17,311	16,987	14,720	15,655	16,460	5.1
<b>OECD Europe</b>	<b>13,351</b>	<b>13,247</b>	<b>11,680</b>	<b>11,994</b>	<b>12,568</b>	<b>4.8</b>
Belgium	689	712	553	620	580	-6.4
France	1,187	1,089	784	747	871	16.6
Germany	1,959	1,937	1,847	1,859	1,954	5.1
Italy	1,490	1,467	1,228	1,357	1,465	7.9
Netherlands	1,235	1,261	1,149	1,206	1,212	0.5
Poland	551	583	547	538	579	7.5
Spain	1,358	1,315	1,117	1,168	1,261	8.0
Turkey	546	720	682	730	790	8.2
United Kingdom	1,165	1,215	990	1,001	1,126	12.4
Others	3,170	2,948	2,784	2,768	2,731	-1.3
<b>OECD Asia Pacific</b>	<b>7,401</b>	<b>7,421</b>	<b>6,490</b>	<b>6,392</b>	<b>6,688</b>	<b>4.6</b>
Australia	517	500	416	327	263	-19.4
Japan	3,273	3,209	2,640	2,616	2,822	7.9
New Zealand	125	125	96	92	24	-74.1
South Korea	3,248	3,334	3,109	3,120	3,341	7.1
Others	238	253	229	236	238	0.7
<b>China</b>	<b>12,033</b>	<b>13,015</b>	<b>13,484</b>	<b>14,073</b>	<b>13,486</b>	<b>-4.2</b>
<b>India</b>	<b>4,891</b>	<b>5,043</b>	<b>4,421</b>	<b>4,725</b>	<b>4,997</b>	<b>5.7</b>
<b>Other Asia</b>	<b>5,638</b>	<b>5,503</b>	<b>5,173</b>	<b>5,165</b>	<b>5,326</b>	<b>3.1</b>
Indonesia	1,042	986	962	927	952	2.7
Thailand	1,132	1,025	998	995	1,021	2.6
Singapore	1,181	1,175	1,090	1,128	1,030	-8.8
Malaysia	507	587	520	451	569	26.1
Philippines	237	168	114	84	122	45.5
Pakistan	262	206	201	206	203	-1.4
Vietnam	223	265	289	288	321	11.6
Others	1,054	1,092	1,000	1,086	1,109	2.1
<b>Latin America</b>	<b>4,207</b>	<b>3,973</b>	<b>3,344</b>	<b>3,649</b>	<b>3,775</b>	<b>3.5</b>
Argentina	467	473	442	466	484	3.9
Brazil	1,650	1,678	1,717	1,785	1,889	5.9
Colombia	397	408	367	350	353	0.9
Ecuador	170	143	131	143	146	2.3
<b>Venezuela</b>	<b>842</b>	<b>818</b>	<b>345</b>	<b>521</b>	<b>550</b>	<b>5.6</b>
Others	680	453	343	384	353	-8.2
<b>Middle East</b>	<b>7,848</b>	<b>7,742</b>	<b>6,900</b>	<b>7,549</b>	<b>8,077</b>	<b>7.0</b>
<b>IR Iran</b>	<b>1,705</b>	<b>1,718</b>	<b>1,587</b>	<b>1,691</b>	<b>1,752</b>	<b>3.6</b>
Iraq	609	639	543	623	702	12.8
Kuwait	681	660	575	686	842	22.7
Qatar	367	454	462	315	317	0.5
<b>Saudi Arabia</b>	<b>2,642</b>	<b>2,484</b>	<b>2,173</b>	<b>2,475</b>	<b>2,702</b>	<b>9.2</b>
<b>United Arab Emirates</b>	<b>1,065</b>	<b>1,037</b>	<b>936</b>	<b>1,063</b>	<b>1,046</b>	<b>-1.6</b>
Others	777	750	623	696	716	2.9
<b>Africa</b>	<b>2,213</b>	<b>2,205</b>	<b>2,061</b>	<b>2,025</b>	<b>2,084</b>	<b>2.9</b>
<b>Algeria</b>	<b>644</b>	<b>645</b>	<b>639</b>	<b>643</b>	<b>669</b>	<b>4.0</b>
<b>Angola</b>	<b>55</b>	<b>54</b>	<b>47</b>	<b>40</b>	<b>44</b>	<b>9.7</b>
<b>Congo</b>	<b>17</b>	<b>17</b>	<b>16</b>	<b>17</b>	<b>18</b>	<b>6.4</b>
Egypt	517	559	600	594	623	4.8
<b>Gabon</b>	<b>16</b>	<b>14</b>	<b>17</b>	<b>19</b>	<b>20</b>	<b>3.8</b>
<b>Libya</b>	<b>98</b>	<b>83</b>	<b>86</b>	<b>134</b>	<b>144</b>	<b>6.9</b>
<b>Nigeria</b>	<b>38</b>	<b>9</b>	<b>1</b>	<b>5</b>	<b>5</b>	<b>6.7</b>
South Africa	528	542	414	325	332	2.1
Others	301	282	243	248	230	-7.0
<b>Russia</b>	<b>5,720</b>	<b>5,701</b>	<b>5,387</b>	<b>5,612</b>	<b>5,462</b>	<b>-2.7</b>
<b>Other Eurasia</b>	<b>1,293</b>	<b>1,256</b>	<b>1,156</b>	<b>1,298</b>	<b>1,175</b>	<b>-9.5</b>
Azerbaijan	116	130	123	143	131	-8.5
Belarus	368	360	328	393	378	-3.9
Kazakhstan	411	386	315	349	364	4.2
Turkmenistan	172	172	172	173	176	1.2
Ukraine	90	85	92	94	16	-83.0
Others	135	123	126	146	111	-23.8
<b>Other Europe</b>	<b>559</b>	<b>547</b>	<b>449</b>	<b>435</b>	<b>508</b>	<b>16.6</b>
Bulgaria	126	139	108	94	153	62.2
Croatia	74	54	53	50	45	-9.9
Romania	237	250	211	206	240	16.7
Others	121	105	77	85	70	-18.2
<b>Total world</b>	<b>85,210</b>	<b>85,762</b>	<b>78,107</b>	<b>81,644</b>	<b>83,836</b>	<b>2.7</b>
<i>of which</i>						
OPEC	8,412	8,178	6,966	7,916	8,493	7.3
<i>OPEC percentage</i>	9.9	9.5	8.9	9.7	10.1	
OECD	40,808	40,776	35,731	37,112	38,946	4.9

**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)

	2018	2019	2020	2021	2022	% change 22/21
<b>Algeria</b>	<b>621</b>	<b>660</b>	<b>614</b>	<b>621</b>	<b>644</b>	<b>3.7</b>
Gasoline	73	83	67	74	74	0.7
Kerosene	32	33	22	19	22	15.7
Distillates	198	216	205	211	211	0.4
Residuals	106	110	112	104	110	6.7
Others	211	217	208	214	226	5.5
<b>Angola</b>	<b>55</b>	<b>55</b>	<b>44</b>	<b>40</b>	<b>48</b>	<b>22.5</b>
Gasoline	1	1	0	0	2	664.7
Kerosene	9	9	6	5	5	10.8
Distillates	15	15	11	9	11	20.7
Residuals	17	18	17	16	10	-36.0
Others	13	12	10	9	20	113.1
<b>Congo</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>17</b>	<b>6.3</b>
Gasoline	5	5	5	5	5	5.8
Kerosene	2	2	1	1	2	6.9
Distillates	3	3	3	3	3	5.9
Residuals	6	6	6	6	6	6.7
Others	1	1	1	1	1	5.9
<b>Equatorial Guinea</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>	<b>na</b>
<b>Gabon</b>	<b>13</b>	<b>11</b>	<b>16</b>	<b>19</b>	<b>20</b>	<b>3.7</b>
Gasoline	2	2	1	2	2	4.1
Kerosene	1	1	1	2	2	3.7
Distillates	5	4	5	6	6	4.0
Residuals	5	5	7	8	8	3.5
Others	1	1	2	2	2	3.4
<b>IR Iran</b>	<b>1,691</b>	<b>1,705</b>	<b>1,577</b>	<b>1,673</b>	<b>1,737</b>	<b>3.8</b>
Gasoline	398	407	383	405	424	4.8
Kerosene	122	119	67	95	100	6.2
Distillates	551	550	521	547	570	4.1
Residuals	387	385	373	384	373	-2.8
Others	233	243	233	242	269	11.2
<b>Iraq</b>	<b>718</b>	<b>747</b>	<b>587</b>	<b>740</b>	<b>834</b>	<b>12.6</b>
Gasoline	84	95	48	44	63	41.7
Kerosene	47	49	38	40	34	-14.8
Distillates	107	118	102	118	136	14.6
Residuals	314	329	279	335	377	12.6
Others	166	156	121	203	224	10.4
<b>Kuwait</b>	<b>891</b>	<b>886</b>	<b>780</b>	<b>845</b>	<b>983</b>	<b>16.3</b>
Gasoline	36	61	51	61	64	4.5
Kerosene	143	136	115	148	199	33.8
Distillates	171	168	181	190	236	24.2
Residuals	154	147	73	90	92	2.0
Others	387	374	361	356	393	10.5

**Table 4.4**  
**Output of petroleum products in OPEC Members**

(1,000 b/d)

	2018	2019	2020	2021	2022	% change 22/21
<b>Libya</b>	<b>94</b>	<b>76</b>	<b>80</b>	<b>126</b>	<b>148</b>	<b>17.4</b>
Gasoline	5	3	3	6	7	19.6
Kerosene	6	4	4	7	9	26.2
Distillates	14	10	11	19	24	26.7
Residuals	15	10	11	18	23	25.5
Others	54	49	51	75	84	12.1
<b>Nigeria</b>	<b>33</b>	<b>8</b>	<b>1</b>	<b>5</b>	<b>6</b>	<b>28.5</b>
Gasoline	9	2	0	0	0	0.0
Kerosene	6	1	0	0	1	83.6
Distillates	7	2	0	2	2	14.9
Residuals	10	2	0	2	2	31.1
Others	1	0	0	1	1	22.6
<b>Saudi Arabia</b>	<b>2,817</b>	<b>2,586</b>	<b>2,177</b>	<b>2,548</b>	<b>2,768</b>	<b>8.6</b>
Gasoline	545	548	454	544	630	15.9
Kerosene	262	232	145	126	153	21.6
Distillates	1,073	1,057	985	1,115	1,209	8.5
Residuals	455	424	345	422	481	14.0
Others	481	325	248	341	294	-13.8
<b>United Arab Emirates</b>	<b>1,027</b>	<b>1,005</b>	<b>925</b>	<b>1,041</b>	<b>953</b>	<b>-8.4</b>
Gasoline	98	96	90	98	93	-5.6
Kerosene	289	283	244	293	263	-10.2
Distillates	229	227	208	228	205	-10.3
Residuals	47	45	41	46	40	-12.9
Others	364	354	341	375	352	-6.1
<b>Venezuela</b>	<b>804</b>	<b>743</b>	<b>339</b>	<b>270</b>	<b>266</b>	<b>-1.6</b>
Gasoline	200	186	57	57	83	45.6
Kerosene	26	23	7	9	15	63.7
Distillates	122	115	41	48	35	-28.3
Residuals	250	238	123	95	112	18.6
Others	207	182	109	61	21	-65.7
<b>OPEC</b>	<b>8,781</b>	<b>8,499</b>	<b>7,157</b>	<b>7,943</b>	<b>8,423</b>	<b>6.0</b>
Gasoline	1,455	1,489	1,160	1,296	1,448	11.7
Kerosene	945	892	651	745	804	7.9
Distillates	2,495	2,484	2,274	2,497	2,648	6.1
Residuals	1,766	1,719	1,388	1,525	1,636	7.3
Others	2,120	1,915	1,684	1,881	1,888	0.4

**Notes:**

Data may include products from GTLs and condensate units.

## Oil data: downstream

**Table 4.5  
World output of petroleum products by country**

(1,000 b/d)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>23,469</b>	<b>23,527</b>	<b>20,286</b>	<b>21,624</b>	<b>22,523</b>	<b>4.2</b>
Canada	1,889	2,191	1,966	2,026	2,093	3.3
Chile	219	244	193	202	180	-10.7
Mexico	677	660	638	754	865	14.8
United States	20,685	20,432	17,489	18,642	19,384	4.0
<b>OECD Europe</b>	<b>13,992</b>	<b>13,861</b>	<b>12,173</b>	<b>12,551</b>	<b>13,102</b>	<b>4.4</b>
Belgium	702	734	579	646	600	-7.1
France	1,232	1,121	805	769	892	16.0
Germany	2,065	2,076	1,973	1,981	2,101	6.0
Italy	1,549	1,521	1,268	1,401	1,519	8.4
Netherlands	1,302	1,329	1,183	1,256	1,237	-1.5
Poland	592	600	564	555	594	7.0
Spain	1,398	1,356	1,150	1,215	1,305	7.4
Turkey	589	772	732	784	851	8.5
United Kingdom	1,254	1,262	1,025	1,034	1,157	11.9
Others	3,309	3,090	2,894	2,909	2,846	-2.2
<b>OECD Asia Pacific</b>	<b>7,642</b>	<b>7,636</b>	<b>6,652</b>	<b>6,590</b>	<b>6,868</b>	<b>4.2</b>
Australia	520	507	424	333	269	-19.4
Japan	3,291	3,279	2,726	2,730	2,924	7.1
New Zealand	126	126	96	92	25	-72.7
South Korea	3,389	3,397	3,130	3,149	3,363	6.8
Others	316	327	276	285	286	0.4
<b>China</b>	<b>11,608</b>	<b>12,501</b>	<b>12,952</b>	<b>13,537</b>	<b>13,013</b>	<b>-3.9</b>
<b>India</b>	<b>5,675</b>	<b>5,665</b>	<b>5,120</b>	<b>5,426</b>	<b>5,690</b>	<b>4.9</b>
<b>Other Asia</b>	<b>7,683</b>	<b>7,592</b>	<b>7,333</b>	<b>7,099</b>	<b>7,332</b>	<b>3.3</b>
Indonesia	1,042	1,024	1,049	927	952	2.7
Thailand	1,410	1,366	1,418	1,295	1,331	2.8
Singapore	1,242	1,236	1,150	1,192	1,090	-8.6
Malaysia	494	574	512	447	566	26.5
Philippines	228	163	112	85	125	47.8
Pakistan	288	196	196	201	198	-1.3
Vietnam	210	252	277	276	308	11.4
Others	2,770	2,781	2,619	2,676	2,762	3.2
<b>Latin America</b>	<b>4,463</b>	<b>4,374</b>	<b>3,618</b>	<b>3,639</b>	<b>3,738</b>	<b>2.7</b>
Argentina	511	521	487	520	541	4.0
Brazil	1,764	1,787	1,839	1,903	2,017	6.0
Colombia	318	329	296	285	288	1.2
Ecuador	167	143	130	144	149	3.0
<b>Venezuela</b>	<b>804</b>	<b>743</b>	<b>339</b>	<b>270</b>	<b>266</b>	<b>-1.6</b>
Others	898	851	528	517	479	-7.4
<b>Middle East</b>	<b>8,269</b>	<b>8,036</b>	<b>7,092</b>	<b>7,820</b>	<b>8,292</b>	<b>6.0</b>
<b>IR Iran</b>	<b>1,691</b>	<b>1,705</b>	<b>1,577</b>	<b>1,673</b>	<b>1,737</b>	<b>3.8</b>
<b>Iraq</b>	<b>718</b>	<b>747</b>	<b>587</b>	<b>740</b>	<b>834</b>	<b>12.6</b>
<b>Kuwait</b>	<b>891</b>	<b>886</b>	<b>780</b>	<b>845</b>	<b>983</b>	<b>16.3</b>
Qatar	352	350	359	248	250	0.9
<b>Saudi Arabia</b>	<b>2,817</b>	<b>2,586</b>	<b>2,177</b>	<b>2,548</b>	<b>2,768</b>	<b>8.6</b>
<b>United Arab Emirates</b>	<b>1,027</b>	<b>1,005</b>	<b>925</b>	<b>1,041</b>	<b>953</b>	<b>-8.4</b>
Others	772	756	686	725	767	5.8
<b>Africa</b>	<b>2,006</b>	<b>2,087</b>	<b>1,912</b>	<b>1,897</b>	<b>1,991</b>	<b>5.0</b>
<b>Algeria</b>	<b>621</b>	<b>660</b>	<b>614</b>	<b>621</b>	<b>644</b>	<b>3.7</b>
<b>Angola</b>	<b>55</b>	<b>55</b>	<b>44</b>	<b>40</b>	<b>48</b>	<b>22.5</b>
<b>Congo</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>16</b>	<b>17</b>	<b>6.3</b>
Egypt	519	570	596	587	622	5.9
<b>Gabon</b>	<b>13</b>	<b>11</b>	<b>16</b>	<b>19</b>	<b>20</b>	<b>3.7</b>
<b>Libya</b>	<b>94</b>	<b>76</b>	<b>80</b>	<b>126</b>	<b>148</b>	<b>17.4</b>
<b>Nigeria</b>	<b>33</b>	<b>8</b>	<b>1</b>	<b>5</b>	<b>6</b>	<b>28.5</b>
South Africa	429	461	326	277	290	4.6
Others	226	230	218	207	196	-5.1
<b>Russia</b>	<b>6,264</b>	<b>6,257</b>	<b>5,912</b>	<b>6,160</b>	<b>5,985</b>	<b>-2.8</b>
<b>Other Eurasia</b>	<b>1,793</b>	<b>1,708</b>	<b>1,613</b>	<b>1,731</b>	<b>1,520</b>	<b>-12.2</b>
Azerbaijan	120	123	114	135	128	-5.5
Belarus	383	349	329	390	376	-3.4
Kazakhstan	415	426	402	429	441	3.0
Turkmenistan	179	174	173	175	177	1.2
Ukraine	91	86	93	95	15	-84.0
Others	605	550	502	508	382	-24.8
<b>Other Europe</b>	<b>1,291</b>	<b>1,241</b>	<b>1,119</b>	<b>1,113</b>	<b>1,069</b>	<b>-4.0</b>
Bulgaria	134	149	109	95	160	68.8
Croatia	85	58	54	52	47	-8.5
Romania	264	281	254	239	262	9.6
Others	808	752	702	728	600	-17.6
<b>Total world</b>	<b>94,153</b>	<b>94,485</b>	<b>85,783</b>	<b>89,187</b>	<b>91,123</b>	<b>2.2</b>
<i>of which</i>						
OPEC	8,781	8,499	7,157	7,943	8,423	6.0
<i>OPEC percentage</i>	9.3	9.0	8.3	8.9	9.2	
OECD	45,102	45,023	39,111	40,766	42,492	4.2

**Notes:**

Data may exclude products from GTL and condensate units.

Table 4.6

## Oil demand by main petroleum product in OPEC Members

(1,000 b/d)

	2018	2019	2020	2021	2022	% change 22/21
<b>Algeria</b>	<b>431</b>	<b>430</b>	<b>383</b>	<b>418</b>	<b>431</b>	<b>3.2</b>
Gasoline	85	85	73	74	72	-2.3
Kerosene	13	14	7	7	11	59.0
Distillates	225	229	201	212	219	3.4
Residuals	3	3	4	4	3	-16.3
Others	105	101	99	122	126	3.7
<b>Angola</b>	<b>171</b>	<b>175</b>	<b>146</b>	<b>144</b>	<b>152</b>	<b>5.4</b>
Gasoline	22	22	21	25	27	10.3
Kerosene	11	10	6	2	5	126.9
Distillates	63	65	49	48	46	-2.6
Residuals	4	4	3	7	9	31.0
Others	71	74	67	63	64	2.2
<b>Congo</b>	<b>8</b>	<b>9</b>	<b>7</b>	<b>7</b>	<b>8</b>	<b>5.0</b>
Gasoline	2	2	2	2	2	3.5
Kerosene	1	1	0	0	0	2.1
Distillates	4	4	3	3	3	7.7
Residuals	0	0	0	0	0	4.0
Others	2	2	2	2	2	2.0
<b>Equatorial Guinea</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>7.1</b>
Gasoline	2	2	1	2	2	7.0
Kerosene	1	1	1	1	1	30.7
Distillates	2	2	2	2	2	-14.4
Residuals	0	0	0	0	0	-
Others	0	0	0	0	0	123.7
<b>Gabon</b>	<b>47</b>	<b>48</b>	<b>42</b>	<b>45</b>	<b>45</b>	<b>2.1</b>
Gasoline	7	7	6	6	6	2.2
Kerosene	3	3	3	3	3	7.2
Distillates	35	35	29	31	31	1.2
Residuals	0	0	0	0	0	-
Others	2	2	4	5	5	4.5
<b>IR Iran</b>	<b>1,854</b>	<b>1,838</b>	<b>1,692</b>	<b>1,777</b>	<b>1,793</b>	<b>0.9</b>
Gasoline	596	590	550	575	574	-0.1
Kerosene	108	98	52	61	67	10.9
Distillates	516	511	472	491	508	3.6
Residuals	260	258	252	255	218	-14.4
Others	375	380	366	396	425	7.4
<b>Iraq</b>	<b>704</b>	<b>716</b>	<b>550</b>	<b>621</b>	<b>828</b>	<b>33.2</b>
Gasoline	140	146	119	159	185	16.3
Kerosene	34	41	40	34	38	10.1
Distillates	138	152	131	145	166	14.3
Residuals	289	253	130	189	214	13.4
Others	103	124	129	94	225	139.6

**Table 4.6**  
**Oil demand by main petroleum product in OPEC Members** (1,000 b/d)

	2018	2019	2020	2021	2022	% change 22/21
<b>Kuwait</b>	<b>417</b>	<b>460</b>	<b>461</b>	<b>462</b>	<b>469</b>	<b>1.4</b>
Gasoline	61	79	61	75	82	9.8
Kerosene	15	23	11	12	19	62.1
Distillates	53	55	48	56	60	8.2
Residuals	114	103	60	103	99	-3.9
Others	175	200	281	216	208	-4.0
<b>Libya</b>	<b>215</b>	<b>214</b>	<b>183</b>	<b>186</b>	<b>192</b>	<b>3.3</b>
Gasoline	81	83	91	91	95	4.4
Kerosene	5	4	3	3	3	3.9
Distillates	92	94	61	63	65	4.1
Residuals	27	22	18	19	19	1.8
Others	11	11	10	11	10	-8.6
<b>Nigeria</b>	<b>446</b>	<b>470</b>	<b>466</b>	<b>495</b>	<b>518</b>	<b>4.7</b>
Gasoline	337	355	350	389	420	7.8
Kerosene	24	23	15	17	15	-8.9
Distillates	79	89	94	81	71	-12.2
Residuals	3	1	1	2	3	38.3
Others	2	2	6	6	10	54.2
<b>Saudi Arabia</b>	<b>3,105</b>	<b>3,139</b>	<b>2,927</b>	<b>2,966</b>	<b>3,172</b>	<b>7.0</b>
Gasoline	561	550	455	480	500	4.2
Kerosene	104	103	44	47	72	51.3
Distillates	522	528	492	503	574	14.1
Residuals	503	540	600	568	608	7.0
Others	1,415	1,419	1,338	1,367	1,418	3.7
<b>United Arab Emirates</b>	<b>885</b>	<b>899</b>	<b>828</b>	<b>916</b>	<b>958</b>	<b>4.5</b>
Gasoline	211	215	200	220	234	6.1
Kerosene	166	168	142	166	173	4.5
Distillates	123	129	115	130	138	5.8
Residuals	335	329	323	340	348	2.6
Others	50	58	47	60	65	7.1
<b>Venezuela</b>	<b>403</b>	<b>367</b>	<b>188</b>	<b>232</b>	<b>272</b>	<b>17.4</b>
Gasoline	170	155	61	65	84	29.0
Kerosene	7	6	3	3	11	282.6
Distillates	118	113	39	43	51	17.5
Residuals	17	47	56	65	71	8.9
Others	92	47	29	56	56	-0.1
<b>OPEC</b>	<b>8,692</b>	<b>8,769</b>	<b>7,878</b>	<b>8,274</b>	<b>8,842</b>	<b>6.9</b>
Gasoline	2,274	2,290	1,990	2,164	2,284	5.6
Kerosene	493	495	326	355	419	17.9
Distillates	1,970	2,005	1,737	1,807	1,935	7.1
Residuals	1,554	1,559	1,448	1,551	1,593	2.7
Others	2,402	2,420	2,377	2,396	2,612	9.0

**Table 4.7**  
**World oil demand by country**

(1,000 b/d)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD America</b>	<b>25,354</b>	<b>25,400</b>	<b>22,449</b>	<b>24,315</b>	<b>25,011</b>	<b>2.9</b>
Canada	2,509	2,471	2,171	2,259	2,283	1.0
Chile	363	362	331	367	382	4.2
Mexico	1,886	1,985	1,599	1,655	1,916	15.8
United States	20,596	20,583	18,348	20,034	20,430	2.0
<b>OECD Europe</b>	<b>14,315</b>	<b>14,312</b>	<b>12,414</b>	<b>13,105</b>	<b>13,504</b>	<b>3.0</b>
Belgium	684	643	563	631	599	-5.0
France	1,686	1,689	1,428	1,548	1,535	-0.9
Germany	2,327	2,355	2,148	2,126	2,170	2.1
Italy	1,272	1,255	1,033	1,185	1,223	3.2
Netherlands	929	905	861	850	881	3.7
Poland	680	698	660	702	729	3.7
Spain	1,332	1,328	1,088	1,188	1,286	8.3
Turkey	958	987	921	978	1,019	4.2
United Kingdom	1,606	1,565	1,211	1,237	1,358	9.8
Others	2,841	2,887	2,500	2,660	2,703	1.6
<b>OECD Asia Pacific</b>	<b>8,010</b>	<b>7,945</b>	<b>7,167</b>	<b>7,382</b>	<b>7,433</b>	<b>0.7</b>
Australia	1,183	1,166	999	1,020	1,079	5.7
Japan	3,852	3,764	3,361	3,415	3,369	-1.3
New Zealand	179	184	149	149	159	6.8
South Korea	2,564	2,596	2,448	2,578	2,582	0.2
Others	232	235	210	220	244	11.2
<b>China</b>	<b>13,207</b>	<b>13,808</b>	<b>13,937</b>	<b>14,997</b>	<b>14,851</b>	<b>-1.0</b>
<b>India</b>	<b>4,934</b>	<b>4,994</b>	<b>4,510</b>	<b>4,772</b>	<b>5,137</b>	<b>7.7</b>
<b>Other Asia</b>	<b>8,907</b>	<b>9,060</b>	<b>8,131</b>	<b>8,667</b>	<b>9,022</b>	<b>4.1</b>
Indonesia	1,773	1,856	1,622	1,786	1,922	7.7
Malaysia	783	786	680	772	799	3.5
Pakistan	469	470	425	469	491	4.6
Philippines	426	449	378	454	489	7.8
Singapore	1,374	1,410	1,339	1,376	1,411	2.6
Thailand	1,443	1,456	1,330	1,347	1,458	8.2
Vietnam	439	454	407	431	450	4.4
Others	2,200	2,179	1,949	2,032	2,002	-1.5
<b>Latin America</b>	<b>6,527</b>	<b>6,594</b>	<b>5,900</b>	<b>6,246</b>	<b>6,435</b>	<b>3.0</b>
Argentina	722	709	597	683	724	6.0
Brazil	3,162	3,236	3,071	3,207	3,245	1.2
Colombia	336	348	292	341	368	7.7
Ecuador	260	271	225	235	247	5.0
<b>Venezuela</b>	<b>403</b>	<b>367</b>	<b>188</b>	<b>232</b>	<b>272</b>	<b>17.4</b>
Others	1,644	1,664	1,527	1,548	1,580	2.1
<b>Middle East</b>	<b>8,128</b>	<b>8,201</b>	<b>7,445</b>	<b>7,792</b>	<b>8,295</b>	<b>6.4</b>
I.R.Iran	1,854	1,838	1,692	1,777	1,793	0.9
Iraq	704	716	550	621	828	33.2
Kuwait	417	460	461	462	469	1.4
Qatar	330	342	292	321	344	7.1
<b>Saudi Arabia</b>	<b>3,105</b>	<b>3,139</b>	<b>2,927</b>	<b>2,966</b>	<b>3,172</b>	<b>7.0</b>
Syria	137	127	123	124	127	2.3
<b>United Arab Emirates</b>	<b>885</b>	<b>899</b>	<b>828</b>	<b>916</b>	<b>958</b>	<b>4.5</b>
Others	695	680	572	605	606	0.0
<b>Africa</b>	<b>4,320</b>	<b>4,435</b>	<b>4,078</b>	<b>4,223</b>	<b>4,401</b>	<b>4.2</b>
Algeria	431	430	383	418	431	3.2
Angola	171	175	146	144	152	5.4
Congo	8	9	7	7	8	5.0
Egypt	789	834	760	786	862	9.7
Equatorial Guinea	5	5	5	5	5	7.1
Gabon	47	48	42	45	45	2.1
Libya	215	214	183	186	192	3.3
Nigeria	446	470	466	495	518	4.7
South Africa	671	654	595	622	623	0.1
Tunisia	109	113	87	84	93	11.5
Others	1,428	1,485	1,405	1,432	1,471	2.8
<b>Russia</b>	<b>3,549</b>	<b>3,568</b>	<b>3,387</b>	<b>3,613</b>	<b>3,560</b>	<b>-1.5</b>
<b>Other Eurasia</b>	<b>1,207</b>	<b>1,192</b>	<b>1,074</b>	<b>1,210</b>	<b>1,148</b>	<b>-5.1</b>
Azerbaijan	121	123	106	107	109	1.9
Belarus	157	141	127	188	180	-4.5
Kazakhstan	308	293	285	292	296	1.3
Turkmenistan	157	161	150	186	190	1.7
Ukraine	280	286	231	250	184	-26.5
Others	185	187	176	185	190	2.4
<b>Other Europe</b>	<b>743</b>	<b>764</b>	<b>697</b>	<b>754</b>	<b>767</b>	<b>1.7</b>
Bulgaria	120	124	118	128	130	1.7
Croatia	109	113	106	117	117	-0.6
Romania	197	202	188	202	210	4.0
Serbia	97	104	93	101	101	-0.4
Others	219	221	192	205	209	1.9
<b>Total world</b>	<b>99,199</b>	<b>100,275</b>	<b>91,190</b>	<b>97,076</b>	<b>99,565</b>	<b>2.6</b>
<i>of which</i>						
OPEC	8,692	8,769	7,878	8,274	8,842	6.9
<i>OPEC percentage</i>	8.8	8.7	8.6	8.5	8.9	0.9
OECD	47,679	47,657	42,030	44,802	45,948	2.6

## Oil data: downstream

Table 4.8

### World oil demand by main petroleum product and region

(1,000 b/d)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>25,354</b>	<b>25,400</b>	<b>22,449</b>	<b>24,315</b>	<b>25,011</b>	<b>2.9</b>
Gasoline	11,059	10,995	9,526	10,342	10,447	1.0
Kerosene	2,010	2,047	1,246	1,565	1,825	16.6
Distillates	5,354	5,306	4,885	5,060	5,196	2.7
Residuals	553	536	406	553	577	4.3
Others	6,378	6,516	6,386	6,795	6,966	2.5
<b>OECD Europe</b>	<b>14,315</b>	<b>14,312</b>	<b>12,414</b>	<b>13,105</b>	<b>13,504</b>	<b>3.0</b>
Gasoline	1,996	2,035	1,756	1,930	2,042	5.8
Kerosene	1,524	1,550	741	860	1,272	47.9
Distillates	6,455	6,464	5,933	6,256	6,233	-0.4
Residuals	874	837	688	757	824	8.9
Others	3,466	3,426	3,296	3,302	3,133	-5.1
<b>OECD Asia Pacific</b>	<b>8,010</b>	<b>7,945</b>	<b>7,167</b>	<b>7,382</b>	<b>7,433</b>	<b>0.7</b>
Gasoline	1,538	1,512	1,378	1,351	1,351	0.0
Kerosene	923	906	609	605	685	13.2
Distillates	1,906	1,924	1,830	1,891	1,920	1.5
Residuals	516	428	422	450	481	6.9
Others	3,127	3,175	2,928	3,085	2,996	-2.9
<b>China</b>	<b>13,207</b>	<b>13,808</b>	<b>13,937</b>	<b>14,997</b>	<b>14,851</b>	<b>-1.0</b>
Gasoline	3,126	3,245	3,192	3,477	3,178	-8.6
Kerosene	751	909	673	715	511	-28.5
Distillates	3,574	3,462	3,396	3,510	3,705	5.6
Residuals	421	510	537	622	615	-1.2
Others	5,335	5,682	6,138	6,673	6,842	2.5
<b>India</b>	<b>4,934</b>	<b>4,994</b>	<b>4,510</b>	<b>4,772</b>	<b>5,137</b>	<b>7.7</b>
Gasoline	662	699	635	715	814	13.8
Kerosene	263	237	139	155	185	19.4
Distillates	1,704	1,732	1,494	1,595	1,751	9.8
Residuals	167	150	139	146	164	12.3
Others	2,138	2,176	2,103	2,160	2,223	2.9
<b>Other Asia</b>	<b>8,907</b>	<b>9,060</b>	<b>8,131</b>	<b>8,667</b>	<b>9,022</b>	<b>4.1</b>
Gasoline	1,860	1,915	1,808	1,933	2,073	7.3
Kerosene	779	813	486	480	551	14.7
Distillates	2,157	2,169	2,068	2,328	2,416	3.8
Residuals	1,185	1,150	1,090	1,104	1,160	5.1
Others	2,926	3,013	2,680	2,821	2,822	0.0
<b>Latin America</b>	<b>6,527</b>	<b>6,594</b>	<b>5,900</b>	<b>6,246</b>	<b>6,435</b>	<b>3.0</b>
Gasoline	1,904	1,911	1,701	1,793	1,902	6.1
Kerosene	313	323	195	220	279	26.6
Distillates	2,070	2,082	1,900	2,021	2,067	2.3
Residuals	610	605	533	557	548	-1.6
Others	1,629	1,672	1,572	1,654	1,640	-0.9
<b>Middle East</b>	<b>8,128</b>	<b>8,201</b>	<b>7,445</b>	<b>7,792</b>	<b>8,295</b>	<b>6.4</b>
Gasoline	1,686	1,669	1,444	1,592	1,683	5.8
Kerosene	465	474	308	366	415	13.4
Distillates	1,763	1,780	1,628	1,709	1,821	6.6
Residuals	1,526	1,503	1,396	1,417	1,467	3.5
Others	2,688	2,775	2,670	2,709	2,908	7.4

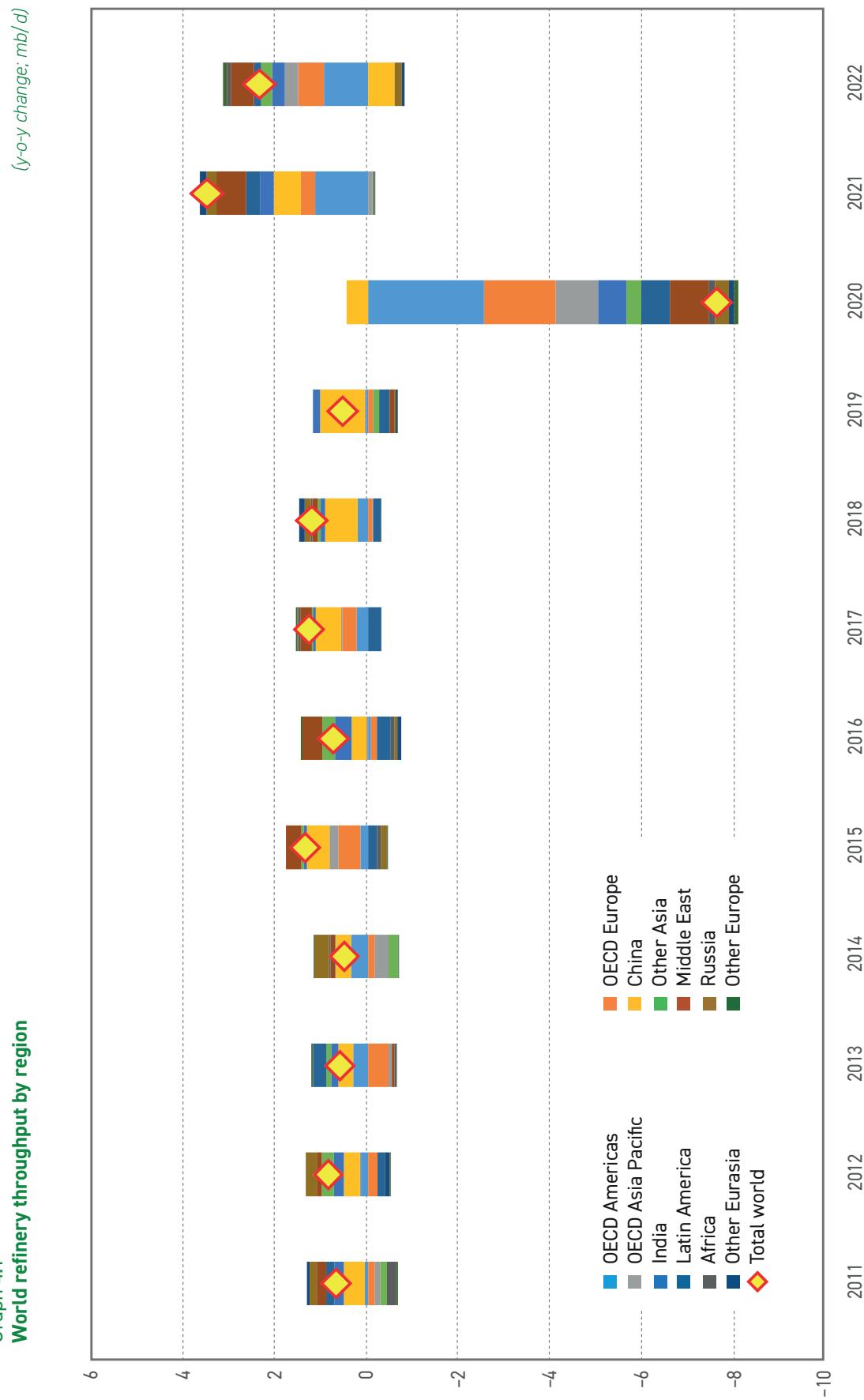
Table 4.8

## World oil demand by main petroleum product and region

(1,000 b/d)

	2018	2019	2020	2021	2022	% change 22/21
<b>Africa</b>	<b>4,320</b>	<b>4,435</b>	<b>4,078</b>	<b>4,223</b>	<b>4,401</b>	<b>4.2</b>
Gasoline	1,156	1,179	1,105	1,169	1,217	4.1
Kerosene	316	333	235	257	275	7.0
Distillates	1,719	1,762	1,643	1,700	1,728	1.7
Residuals	439	431	396	378	423	11.9
Others	689	729	700	718	757	5.3
<b>Russia</b>	<b>3,549</b>	<b>3,568</b>	<b>3,387</b>	<b>3,613</b>	<b>3,560</b>	<b>-1.5</b>
Gasoline	918	895	881	912	901	-1.2
Kerosene	260	227	143	158	123	-22.0
Distillates	720	863	833	930	930	-0.1
Residuals	135	112	73	87	90	3.0
Others	1,515	1,472	1,457	1,526	1,517	-0.6
<b>Other Eurasia</b>	<b>1,207</b>	<b>1,192</b>	<b>1,074</b>	<b>1,210</b>	<b>1,148</b>	<b>-5.1</b>
Gasoline	274	225	190	234	217	-7.2
Kerosene	90	94	22	60	47	-21.5
Distillates	494	517	508	570	547	-4.1
Residuals	255	276	283	298	280	-6.1
Others	94	81	72	47	57	21.1
<b>Other Europe</b>	<b>743</b>	<b>764</b>	<b>697</b>	<b>754</b>	<b>767</b>	<b>1.7</b>
Gasoline	146	166	140	167	168	0.7
Kerosene	24	26	5	12	23	91.7
Distillates	340	352	348	353	364	3.2
Residuals	45	40	39	34	20	-41.2
Others	188	180	164	188	192	2.0
<b>Total world</b>	<b>99,199</b>	<b>100,275</b>	<b>91,190</b>	<b>97,076</b>	<b>99,565</b>	<b>2.6</b>
Gasoline	26,326	26,447	23,756	25,615	25,993	1.5
Kerosene	7,718	7,938	4,801	5,454	6,191	13.5
Distillates	28,256	28,413	26,466	27,924	28,679	2.7
Residuals	6,727	6,578	6,001	6,404	6,648	3.8
Others	30,173	30,898	30,165	31,679	32,053	1.2
<i>of which</i>						
<b>OPEC</b>	<b>8,692</b>	<b>8,769</b>	<b>7,878</b>	<b>8,274</b>	<b>8,842</b>	<b>6.9</b>
Gasoline	2,274	2,290	1,990	2,164	2,284	5.6
Kerosene	493	495	326	355	419	17.9
Distillates	1,970	2,005	1,737	1,807	1,935	7.1
Residuals	1,554	1,559	1,448	1,551	1,593	2.7
Others	2,402	2,420	2,377	2,396	2,612	9.0
<b>OECD</b>	<b>47,679</b>	<b>47,657</b>	<b>42,030</b>	<b>44,802</b>	<b>45,948</b>	<b>2.6</b>
Gasoline	14,593	14,542	12,660	13,623	13,840	1.6
Kerosene	4,457	4,503	2,596	3,030	3,782	24.8
Distillates	13,715	13,694	12,648	13,207	13,349	1.1
Residuals	1,943	1,801	1,516	1,760	1,882	6.9
Others	12,971	13,117	12,610	13,182	13,095	-0.7

Graph 4.1  
World refinery throughput by region



# **SECTION 5**

## **Oil trade**

Table 5.1  
OPEC Members' crude oil exports by destination

(1,000 b/d)

	Destination	2018	2019	2020	2021	2022
<b>Algeria</b> <i>of which</i>	OECD Americas	571	584	439	446	477
	OECD Europe	65	16	24	17	21
	OECD Asia Pacific	346	360	286	308	356
	China	37	43	30	27	25
	India	8	9	8	0	0
	Other Asia	38	54	27	11	17
	Latin America	33	32	37	46	27
	Middle East	40	44	19	33	31
	Africa	0	23	0	0	0
	Russia	2	0	0	0	0
	Other Eurasia	0	0	0	2	0
	Other Europe	1	4	7	1	0
<b>Angola</b> <i>of which</i>	1,421	1,319	1,220	1,080	1,085	
	OECD Americas	70	43	34	52	45
	OECD Europe	134	164	109	44	235
	OECD Asia Pacific	13	13	8	5	0
	China	928	892	867	772	584
	India	125	119	72	76	102
	Other Asia	75	52	105	86	82
	Latin America	17	17	11	13	19
	Middle East	16	3	3	10	5
	Africa	42	15	13	18	11
	Russia	0	0	0	0	0
	Other Eurasia	0	0	0	0	0
	Other Europe	0	0	0	3	3
<b>Congo</b> <i>of which</i>	307	309	282	251	243	
	OECD Americas	13	15	5	0	5
	OECD Europe	5	18	25	10	36
	OECD Asia Pacific	16	5	5	24	0
	China	238	231	182	166	128
	India	6	20	15	25	35
	Other Asia	27	17	26	18	12
	Latin America	0	3	5	3	19
	Middle East	3	0	8	5	0
	Africa	0	0	10	0	8
	Russia	0	0	0	0	0
	Other Eurasia	0	0	0	0	0
	Other Europe	0	0	0	0	0
<b>Equatorial Guinea</b> <i>of which</i>	121	110	115	93	81	
	OECD Americas	15	15	0	0	3
	OECD Europe	45	37	29	41	56
	OECD Asia Pacific	0	0	4	0	0
	China	45	30	53	21	15
	India	11	22	20	27	7
	Other Asia	0	6	8	5	0
	Latin America	6	0	0	0	0
	Middle East	0	0	0	0	0
	Africa	0	0	0	0	0
	Russia	0	0	0	0	0
	Other Eurasia	0	0	0	0	0
	Other Europe	0	0	0	0	0
<b>Gabon</b> <i>of which</i>	174	207	196	181	185	
	OECD Americas	6	0	0	0	2
	OECD Europe	10	17	38	21	49
	OECD Asia Pacific	30	19	15	29	18
	China	73	141	117	57	63
	India	15	0	7	34	2
	Other Asia	25	29	20	40	50
	Latin America	14	0	0	0	0
	Middle East	0	0	0	0	1
	Africa	1	1	0	0	0
	Russia	0	0	0	0	0
	Other Eurasia	0	0	0	0	0
	Other Europe	0	0	0	0	0
<b>IR Iran</b> <i>of which</i>	1,850	651	404	763	901	
	OECD Americas	0	0	0	3	1
	OECD Europe	443	60	4	1	0
	OECD Asia Pacific	272	136	0	0	0
	China	585	298	78	230	276
	India	531	94	0	0	0
	Other Asia	19	64	317	435	524
	Latin America	0	0	0	26	44
	Middle East	0	0	6	68	56
	Africa	0	0	0	0	0
	Russia	0	0	0	0	0
	Other Eurasia	0	0	0	0	0
	Other Europe	0	0	0	0	0
<b>Iraq</b> <i>of which</i>	3,862	3,968	3,428	3,440	3,712	
	OECD Americas	503	300	139	178	253
	OECD Europe	870	1,052	756	844	914
	OECD Asia Pacific	432	362	242	166	255
	China	901	1,039	1,137	949	950
	India	954	988	902	1,005	1,012
	Other Asia	132	119	84	93	67
	Latin America	29	8	6	16	0
	Middle East	0	36	22	35	72
	Africa	18	46	65	74	120
	Russia	0	0	0	0	0
	Other Eurasia	0	0	0	0	0
	Other Europe	23	20	75	81	69

Table 5.1  
OPEC Members' crude oil exports by destination

(1,000 b/d)

	Destination	2018	2019	2020	2021	2022
<b>Kuwait</b> <i>of which</i>	OECD Americas	2,050	1,986	1,826	1,740	1,879
	OECD Europe	206	153	0	0	0
	OECD Asia Pacific	39	16	32	0	0
	China	668	662	552	511	548
	India	466	454	538	607	637
	Other Asia	229	214	184	221	176
	Latin America	387	419	429	354	446
	Middle East	0	0	0	0	0
	Africa	0	0	0	0	0
	Russia	56	68	86	47	71
	Other Eurasia	0	0	0	0	0
	Other Europe	0	0	5	0	0
<b>Libya</b> <i>of which</i>	OECD Americas	999	1,036	347	1,091	920
	OECD Europe	56	64	3	89	78
	OECD Asia Pacific	662	678	241	799	658
	China	29	31	7	13	9
	India	171	188	73	124	77
	Other Asia	5	3	4	10	18
	Latin America	64	52	14	42	76
	Middle East	3	4	0	2	0
	Africa	0	0	0	5	3
	Russia	1	5	0	0	1
	Other Eurasia	0	0	0	4	0
	Other Europe	7	11	5	5	0
<b>Nigeria</b> <i>of which</i>	OECD Americas	1,979	2,008	1,879	1,592	1,388
	OECD Europe	172	28	90	170	130
	OECD Asia Pacific	1,056	439	812	664	702
	China	40	238	38	22	8
	India	9	0	81	34	8
	Other Asia	327	0	296	299	194
	Latin America	11	427	221	173	145
	Middle East	52	252	21	50	51
	Africa	0	122	9	8	6
	Russia	310	261	310	168	144
	Other Eurasia	0	164	0	0	0
	Other Europe	3	78	0	3	0
<b>Saudi Arabia</b> <i>of which</i>	OECD Americas	7,372	7,038	6,659	6,227	7,364
	OECD Europe	1,020	561	549	422	530
	OECD Asia Pacific	869	797	756	517	759
	China	2,026	1,866	1,855	1,754	1,978
	India	1,139	1,671	1,701	1,758	1,754
	Other Asia	788	852	751	707	815
	Latin America	1,029	781	582	580	1,046
	Middle East	70	67	52	84	94
	Africa	267	266	212	209	151
	Russia	164	177	202	196	237
	Other Eurasia	0	0	0	0	0
	Other Europe	0	0	0	0	0
<b>United Arab Emirates</b> <i>of which</i>	OECD Americas	2,296	2,414	2,418	2,305	2,717
	OECD Europe	5	3	1	10	4
	OECD Asia Pacific	0	0	3	17	85
	China	1,091	1,248	1,089	1,349	1,006
	India	252	242	528	419	554
	Other Asia	327	414	448	331	385
	Latin America	598	464	248	167	683
	Middle East	0	0	0	0	0
	Africa	0	0	0	0	0
	Russia	24	43	101	12	0
	Other Eurasia	0	0	0	0	0
	Other Europe	0	0	0	0	0
<b>Venezuela</b> <i>of which</i>	OECD Americas	1,273	847	487	448	438
	OECD Europe	494	28	0	0	0
	OECD Asia Pacific	49	98	39	0	15
	China	0	0	0	0	0
	India	277	246	14	102	100
	Other Asia	289	338	110	0	0
	Latin America	27	82	281	317	284
	Middle East	134	46	31	26	33
	Africa	3	7	0	3	5
	Russia	0	1	11	0	0
	Other Eurasia	0	0	0	0	0
	Other Europe	0	0	0	0	0
<b>OPEC</b> <i>of which</i>	OECD Americas	24,274	22,478	19,701	19,656	21,389
	OECD Europe	2,625	1,225	844	941	1,072
	OECD Asia Pacific	4,527	3,735	3,131	3,267	3,844
	China	4,653	4,622	3,845	3,900	3,848
	India	5,092	5,442	5,377	5,240	5,145
	Other Asia	3,646	3,118	2,834	2,745	2,764
	Latin America	2,426	2,544	2,371	2,355	3,442
	Middle East	366	441	145	253	291
	Africa	288	457	259	343	299
	Russia	619	616	799	516	591
	Other Eurasia	0	0	2	5	0
	Other Europe	0	0	93	92	72

**Notes:**

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

## Oil trade

**Table 5.2**

**World crude oil exports by country**

(1,000 b/d)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>6,509</b>	<b>7,523</b>	<b>7,544</b>	<b>7,242</b>	<b>7,967</b>	<b>10.0</b>
Canada	3,178	3,342	3,139	3,188	3,350	5.1
Mexico	1,283	1,200	1,199	1,091	1,012	-7.3
United States	2,048	2,982	3,206	2,963	3,604	21.6
Others	0	0	1	0	1	-
<b>OECD Europe</b>	<b>2,168</b>	<b>2,144</b>	<b>2,277</b>	<b>2,232</b>	<b>2,131</b>	<b>-4.5</b>
Norway	1,254	1,234	1,502	1,563	1,558	-0.3
United Kingdom	818	834	726	604	540	-10.5
Others	95	77	48	64	33	-49.5
<b>OECD Asia Pacific</b>	<b>236</b>	<b>271</b>	<b>271</b>	<b>271</b>	<b>257</b>	<b>-5.0</b>
Australia	215	249	253	257	244	-5.3
Others	22	22	18	13	14	2.1
<b>China</b>	<b>52</b>	<b>16</b>	<b>33</b>	<b>53</b>	<b>41</b>	<b>-21.3</b>
<b>India</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>
<b>Other Asia</b>	<b>833</b>	<b>653</b>	<b>656</b>	<b>545</b>	<b>414</b>	<b>-23.9</b>
Brunei	92	107	88	69	39	-43.5
Indonesia	206	74	92	117	40	-66.3
Malaysia	358	287	280	209	203	-2.8
Vietnam	83	94	99	66	55	-16.0
Others	95	91	97	84	77	-7.3
<b>Latin America</b>	<b>3,477</b>	<b>3,289</b>	<b>3,008</b>	<b>2,738</b>	<b>3,060</b>	<b>11.8</b>
Brazil	1,147	1,301	1,401	1,292	1,346	4.2
Colombia	595	609	539	422	487	15.4
Ecuador	367	398	352	316	313	-0.8
Trinidad & Tobago	23	60	57	61	54	-11.9
<b>Venezuela</b>	<b>1,273</b>	<b>847</b>	<b>487</b>	<b>448</b>	<b>438</b>	<b>-2.2</b>
Others	72	75	172	198	421	112.4
<b>Middle East</b>	<b>18,909</b>	<b>17,586</b>	<b>16,266</b>	<b>16,036</b>	<b>18,155</b>	<b>13.2</b>
Bahrain	157	156	151	152	152	-0.2
<b>IR Iran</b>	<b>1,850</b>	<b>651</b>	<b>404</b>	<b>763</b>	<b>901</b>	<b>18.1</b>
<b>Iraq</b>	<b>3,862</b>	<b>3,968</b>	<b>3,428</b>	<b>3,440</b>	<b>3,712</b>	<b>7.9</b>
<b>Kuwait</b>	<b>2,050</b>	<b>1,986</b>	<b>1,826</b>	<b>1,740</b>	<b>1,879</b>	<b>8.0</b>
Oman	808	839	860	897	922	2.8
Qatar	477	485	464	474	475	0.2
<b>Saudi Arabia</b>	<b>7,372</b>	<b>7,038</b>	<b>6,659</b>	<b>6,227</b>	<b>7,364</b>	<b>18.2</b>
<b>United Arab Emirates</b>	<b>2,296</b>	<b>2,414</b>	<b>2,418</b>	<b>2,305</b>	<b>2,717</b>	<b>17.9</b>
Others	38	49	55	38	34	-12.2
<b>Africa</b>	<b>6,087</b>	<b>6,126</b>	<b>5,028</b>	<b>5,282</b>	<b>4,841</b>	<b>-8.4</b>
<b>Algeria</b>	<b>571</b>	<b>584</b>	<b>439</b>	<b>446</b>	<b>477</b>	<b>6.9</b>
<b>Angola</b>	<b>1,421</b>	<b>1,319</b>	<b>1,220</b>	<b>1,080</b>	<b>1,085</b>	<b>0.5</b>
<b>Congo</b>	<b>307</b>	<b>309</b>	<b>282</b>	<b>251</b>	<b>243</b>	<b>-3.1</b>
Egypt	115	90	103	111	71	-35.7
<b>Equatorial Guinea</b>	<b>121</b>	<b>110</b>	<b>115</b>	<b>93</b>	<b>81</b>	<b>-13.0</b>
<b>Gabon</b>	<b>174</b>	<b>207</b>	<b>196</b>	<b>181</b>	<b>185</b>	<b>2.0</b>
<b>Libya</b>	<b>999</b>	<b>1,036</b>	<b>347</b>	<b>1,091</b>	<b>920</b>	<b>-15.7</b>
<b>Nigeria</b>	<b>1,979</b>	<b>2,008</b>	<b>1,879</b>	<b>1,592</b>	<b>1,388</b>	<b>-12.8</b>
Sudans	115	138	135	138	116	-15.3
Others	286	324	313	301	275	-8.6
<b>Russia</b>	<b>5,207</b>	<b>5,241</b>	<b>4,617</b>	<b>4,510</b>	<b>4,780</b>	<b>6.0</b>
<b>Other Eurasia</b>	<b>2,080</b>	<b>2,033</b>	<b>1,975</b>	<b>1,862</b>	<b>1,813</b>	<b>-2.7</b>
Azerbaijan	609	559	500	483	441	-8.6
Kazakhstan	1,401	1,411	1,417	1,323	1,315	-0.6
Others	70	63	57	56	56	-0.4
<b>Other Europe</b>	<b>12</b>	<b>16</b>	<b>25</b>	<b>23</b>	<b>17</b>	<b>-25.6</b>
<b>Total world</b>	<b>45,571</b>	<b>44,900</b>	<b>41,700</b>	<b>40,794</b>	<b>43,477</b>	<b>6.6</b>
<i>of which</i>						
OPEC	24,274	22,478	19,701	19,656	21,389	8.8
<i>OPEC percentage</i>	53.3	50.1	47.2	48.2	49.2	
OECD	8,913	9,939	10,092	9,744	10,355	6.3

**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)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>6,142</b>	<b>6,083</b>	<b>5,855</b>	<b>6,190</b>	<b>6,609</b>	<b>6.8</b>
Canada	444	473	409	430	414	-3.9
Mexico	141	115	139	170	199	16.8
United States	5,553	5,489	5,292	5,573	5,973	7.2
Others	4	6	15	16	23	41.7
<b>OECD Europe</b>	<b>7,651</b>	<b>7,312</b>	<b>6,460</b>	<b>7,037</b>	<b>6,917</b>	<b>-1.7</b>
Belgium	622	608	502	541	513	-5.1
France	424	367	278	278	296	6.5
Germany	461	449	454	522	562	7.6
Italy	579	557	462	531	526	-1.1
Netherlands	2,306	2,247	1,918	2,258	2,193	-2.9
Norway	416	428	388	379	295	-22.2
Spain	453	420	398	396	359	-9.5
Sweden	347	230	201	250	282	12.8
United Kingdom	483	451	395	392	452	15.2
Others	1,561	1,555	1,464	1,489	1,439	-3.4
<b>OECD Asia Pacific</b>	<b>2,171</b>	<b>2,243</b>	<b>1,858</b>	<b>1,814</b>	<b>2,052</b>	<b>13.1</b>
Japan	548	609	385	401	510	27.2
South Korea	1,432	1,409	1,259	1,206	1,346	11.6
Others	191	225	214	207	196	-5.3
<b>China</b>	<b>1,276</b>	<b>1,460</b>	<b>1,324</b>	<b>1,289</b>	<b>1,148</b>	<b>-11.0</b>
<b>India</b>	<b>1,344</b>	<b>1,360</b>	<b>1,216</b>	<b>1,284</b>	<b>1,312</b>	<b>2.2</b>
<b>Other Asia</b>	<b>3,061</b>	<b>2,828</b>	<b>2,748</b>	<b>2,874</b>	<b>3,021</b>	<b>5.1</b>
Indonesia	66	71	66	66	69	4.8
Malaysia	663	646	775	877	938	6.9
Singapore	1,777	1,622	1,440	1,426	1,487	4.3
Others	556	489	466	505	527	4.4
<b>Latin America</b>	<b>1,057</b>	<b>840</b>	<b>848</b>	<b>800</b>	<b>913</b>	<b>14.1</b>
Brazil	171	217	284	246	253	2.9
Ecuador	42	39	56	62	59	-4.6
Trinidad & Tobago	119	15	12	10	8	-16.1
<b>Venezuela</b>	<b>226</b>	<b>97</b>	<b>70</b>	<b>67</b>	<b>176</b>	<b>161.2</b>
Others	499	472	426	415	416	0.3
<b>Middle East</b>	<b>4,770</b>	<b>4,039</b>	<b>3,564</b>	<b>4,112</b>	<b>4,436</b>	<b>7.9</b>
Bahrain	239	250	214	218	234	7.2
<b>IR Iran</b>	<b>272</b>	<b>285</b>	<b>281</b>	<b>333</b>	<b>383</b>	<b>15.0</b>
Iraq	46	107	151	158	172	8.8
Kuwait	630	637	527	604	711	17.8
Qatar	579	466	433	456	466	2.3
<b>Saudi Arabia</b>	<b>1,971</b>	<b>1,300</b>	<b>1,017</b>	<b>1,344</b>	<b>1,468</b>	<b>9.3</b>
<b>United Arab Emirates</b>	<b>916</b>	<b>882</b>	<b>840</b>	<b>891</b>	<b>903</b>	<b>1.3</b>
Others	117	113	103	109	98	-9.7
<b>Africa</b>	<b>845</b>	<b>854</b>	<b>900</b>	<b>901</b>	<b>822</b>	<b>-8.8</b>
Algeria	532	506	503	493	509	3.2
Angola	18	17	16	29	22	-23.4
Congo	6	6	4	4	5	6.9
Egypt	73	126	166	134	49	-63.1
Gabon	9	8	9	10	10	3.5
Libya	25	21	66	89	99	11.3
Nigeria	21	20	0	11	0	-100.0
Others	160	150	136	131	127	-2.9
<b>Russia</b>	<b>2,510</b>	<b>2,554</b>	<b>2,417</b>	<b>2,385</b>	<b>2,277</b>	<b>-4.5</b>
<b>Other Eurasia</b>	<b>461</b>	<b>437</b>	<b>383</b>	<b>358</b>	<b>284</b>	<b>-20.7</b>
Azerbaijan	27	28	28	38	22	-41.2
Kazakhstan	129	122	114	107	99	-7.3
Others	306	288	240	214	163	-23.9
<b>Other Europe</b>	<b>216</b>	<b>231</b>	<b>197</b>	<b>166</b>	<b>223</b>	<b>34.3</b>
Romania	102	101	91	82	101	23.3
Others	114	130	106	85	123	45.0
<b>Total world</b>	<b>31,504</b>	<b>30,240</b>	<b>27,769</b>	<b>29,210</b>	<b>30,012</b>	<b>2.7</b>
of which						
OPEC	4,673	3,885	3,483	4,034	4,459	10.6
OPEC percentage	14.8	12.8	12.5	13.8	14.9	
OECD	15,964	15,638	14,173	15,041	15,577	3.6

**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)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>6,142</b>	<b>6,083</b>	<b>5,855</b>	<b>6,190</b>	<b>6,609</b>	<b>6.8</b>
Gasoline	1,095	1,080	930	1,058	1,077	1.8
Kerosene	241	243	105	116	186	61.3
Distillates	1,418	1,477	1,360	1,229	1,443	17.5
Residuals	480	333	274	283	309	9.5
Others	2,908	2,949	3,185	3,506	3,593	2.5
<b>OECD Europe</b>	<b>7,651</b>	<b>7,312</b>	<b>6,460</b>	<b>7,037</b>	<b>6,917</b>	<b>-1.7</b>
Gasoline	1,974	1,980	1,645	1,842	1,859	1.0
Kerosene	436	439	317	314	364	16.1
Distillates	2,028	1,978	1,926	2,067	1,952	-5.6
Residuals	1,029	872	911	1,093	1,041	-4.8
Others	2,184	2,045	1,661	1,721	1,700	-1.2
<b>OECD Asia Pacific</b>	<b>2,171</b>	<b>2,243</b>	<b>1,858</b>	<b>1,814</b>	<b>2,052</b>	<b>13.1</b>
Gasoline	352	350	274	370	392	5.8
Kerosene	440	454	310	254	333	30.9
Distillates	790	864	751	715	821	14.8
Residuals	184	141	111	87	120	37.7
Others	405	434	411	388	387	-0.3
<b>China</b>	<b>1,276</b>	<b>1,460</b>	<b>1,324</b>	<b>1,289</b>	<b>1,148</b>	<b>-11.0</b>
Gasoline	299	380	372	340	295	-13.4
Kerosene	312	375	213	182	232	27.3
Distillates	366	424	391	342	216	-36.9
Residuals	219	203	286	356	338	-5.0
Others	80	79	62	68	67	-2.3
<b>India</b>	<b>1,344</b>	<b>1,360</b>	<b>1,216</b>	<b>1,284</b>	<b>1,312</b>	<b>2.2</b>
Gasoline	310	301	268	294	303	3.1
Kerosene	161	155	86	104	143	38.1
Distillates	566	605	604	624	600	-3.9
Residuals	40	32	17	32	32	-0.2
Others	268	267	242	229	233	2.0
<b>Other Asia</b>	<b>3,061</b>	<b>2,828</b>	<b>2,748</b>	<b>2,874</b>	<b>3,021</b>	<b>5.1</b>
Gasoline	722	725	650	698	897	28.5
Kerosene	199	179	324	206	193	-6.2
Distillates	1,005	863	855	861	850	-1.3
Residuals	717	618	445	601	584	-2.8
Others	418	444	473	507	496	-2.2
<b>Latin America</b>	<b>1,057</b>	<b>840</b>	<b>848</b>	<b>800</b>	<b>913</b>	<b>14.1</b>
Gasoline	150	126	119	107	96	-10.5
Kerosene	50	36	32	38	63	64.3
Distillates	99	70	81	14	42	202.2
Residuals	489	376	405	433	424	-2.2
Others	269	232	210	207	287	38.8
<b>Middle East</b>	<b>4,770</b>	<b>4,039</b>	<b>3,564</b>	<b>4,112</b>	<b>4,436</b>	<b>7.9</b>
Gasoline	429	232	229	243	358	47.3
Kerosene	510	425	336	320	422	32.1
Distillates	1,340	1,100	918	1,308	1,344	2.8
Residuals	614	542	455	465	506	8.8
Others	1,877	1,741	1,625	1,776	1,805	1.7

Table 5.4

## World exports of petroleum products by main petroleum product and region

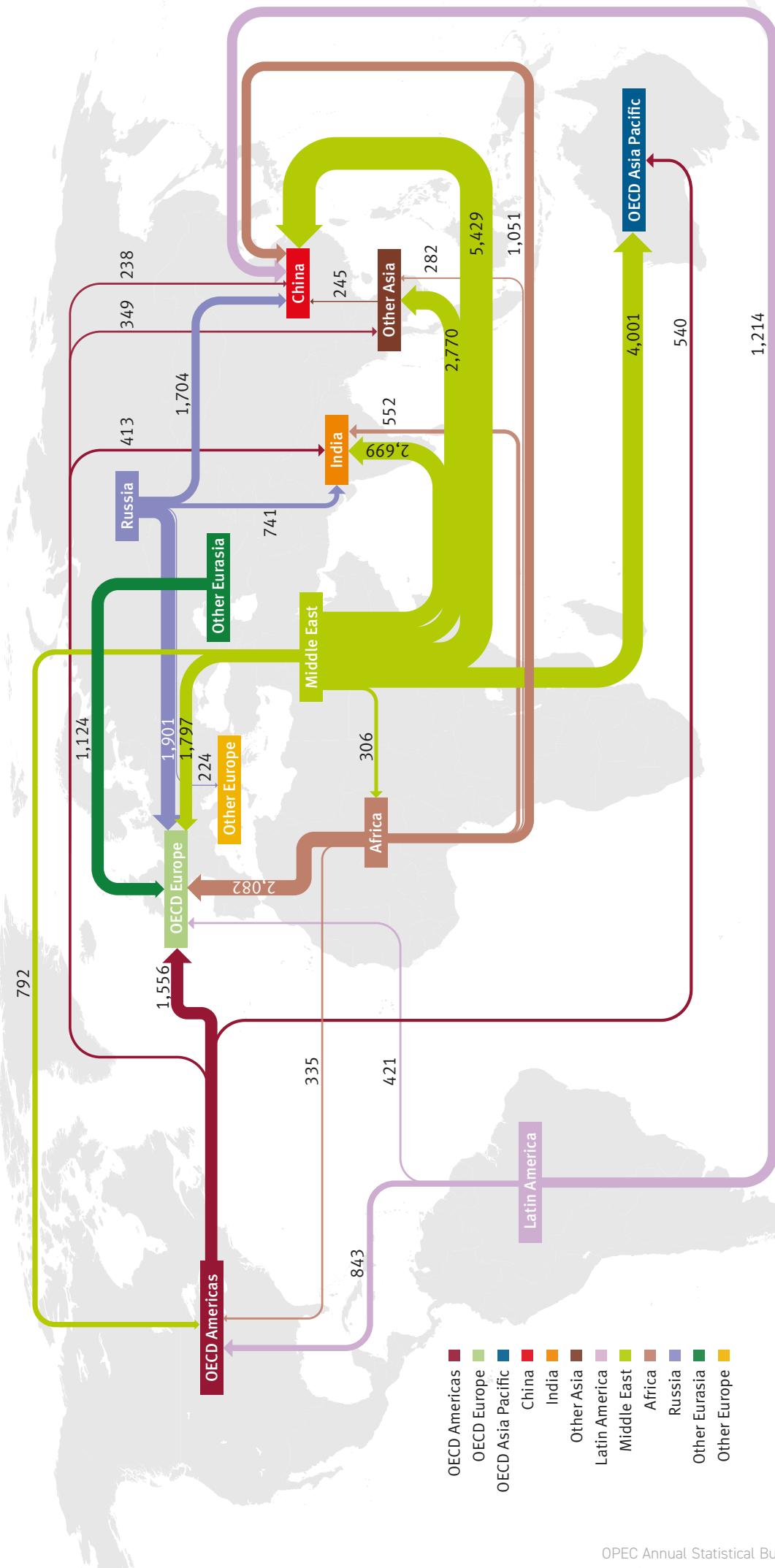
(1,000 b/d)

	2018	2019	2020	2021	2022	% change 22/21
<b>Africa</b>	<b>845</b>	<b>854</b>	<b>900</b>	<b>901</b>	<b>822</b>	<b>-8.8</b>
Gasoline	44	41	43	53	56	5.9
Kerosene	71	68	73	62	32	-47.4
Distillates	57	57	47	58	70	21.0
Residuals	205	211	239	252	233	-7.6
Others	468	477	498	478	431	-9.7
<b>Russia</b>	<b>2,510</b>	<b>2,554</b>	<b>2,417</b>	<b>2,385</b>	<b>2,277</b>	<b>-4.5</b>
Gasoline	99	122	133	100	125	25.3
Kerosene	59	62	47	49	28	-43.1
Distillates	1,116	1,050	1,042	997	968	-2.9
Residuals	590	646	585	628	564	-10.2
Others	647	675	611	611	592	-3.1
<b>Other Eurasia</b>	<b>461</b>	<b>437</b>	<b>383</b>	<b>358</b>	<b>284</b>	<b>-20.7</b>
Gasoline	78	67	83	66	46	-30.5
Kerosene	13	11	5	5	4	-20.3
Distillates	109	118	103	100	74	-25.8
Residuals	159	136	92	94	95	1.0
Others	102	105	101	94	65	-30.3
<b>Other Europe</b>	<b>216</b>	<b>231</b>	<b>197</b>	<b>166</b>	<b>223</b>	<b>34.3</b>
Gasoline	74	81	71	65	88	35.9
Kerosene	7	8	4	5	8	51.4
Distillates	64	77	63	47	70	49.9
Residuals	24	19	11	11	13	15.9
Others	46	45	48	38	44	15.5
<b>Total world</b>	<b>31,504</b>	<b>30,240</b>	<b>27,769</b>	<b>29,210</b>	<b>30,012</b>	<b>2.7</b>
Gasoline	5,625	5,484	4,816	5,235	5,591	6.8
Kerosene	2,500	2,453	1,852	1,654	2,009	21.5
Distillates	8,958	8,683	8,141	8,363	8,451	1.1
Residuals	4,750	4,127	3,832	4,336	4,259	-1.8
Others	9,672	9,493	9,128	9,622	9,701	0.8
<i>of which</i>						
<b>OPEC</b>	<b>4,673</b>	<b>3,885</b>	<b>3,483</b>	<b>4,034</b>	<b>4,459</b>	<b>10.6</b>
Gasoline	416	217	221	313	415	32.3
Kerosene	452	366	300	445	495	11.2
Distillates	1,158	943	787	923	1,160	25.7
Residuals	826	659	574	765	775	1.4
Others	1,821	1,701	1,601	1,587	1,614	1.7
<b>OECD</b>	<b>15,964</b>	<b>15,638</b>	<b>14,173</b>	<b>15,041</b>	<b>15,577</b>	<b>3.6</b>
Gasoline	3,421	3,410	2,849	3,270	3,328	1.8
Kerosene	1,117	1,136	732	684	883	29.2
Distillates	4,236	4,319	4,037	4,010	4,216	5.1
Residuals	1,692	1,346	1,297	1,463	1,470	0.5
Others	5,497	5,428	5,258	5,614	5,680	1.2

**Notes:**

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

**Graph 5.1** **World inter-regional trade of crude oil, 2022**



**Notes:**  
Excluc  
Only v

Excluding intraregional trade.  
Only volumes greater than 200,000 b/d are shown.

Table 5.5

## World exports of crude oil and petroleum products by country

(1,000 b/d)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>12,651</b>	<b>13,607</b>	<b>13,399</b>	<b>13,432</b>	<b>14,576</b>	<b>8.5</b>
Canada	3,622	3,814	3,548	3,618	3,764	4.0
Mexico	1,424	1,315	1,337	1,262	1,211	-4.0
United States	7,601	8,471	8,498	8,536	9,577	12.2
Others	4	6	16	16	24	49.1
<b>OECD Europe</b>	<b>9,819</b>	<b>9,457</b>	<b>8,736</b>	<b>9,269</b>	<b>9,048</b>	<b>-2.4</b>
Belgium	622	608	502	545	514	-5.8
France	424	367	278	279	296	5.9
Germany	461	451	454	522	564	8.0
Italy	589	557	465	535	537	0.4
Netherlands	2,315	2,255	1,925	2,264	2,193	-3.1
Norway	1,670	1,662	1,890	1,942	1,853	-4.6
Spain	453	420	398	396	359	-9.5
Sweden	347	236	202	272	282	3.8
United Kingdom	1,301	1,285	1,122	996	992	-0.4
Others	1,637	1,616	1,500	1,517	1,458	-3.9
<b>OECD Asia Pacific</b>	<b>2,407</b>	<b>2,513</b>	<b>2,129</b>	<b>2,085</b>	<b>2,309</b>	<b>10.8</b>
Australia	279	345	362	353	327	-7.3
Japan	548	609	385	401	510	27.2
South Korea	1,432	1,409	1,259	1,206	1,346	11.6
Others	147	151	124	125	126	1.0
<b>China</b>	<b>1,328</b>	<b>1,476</b>	<b>1,357</b>	<b>1,342</b>	<b>1,189</b>	<b>-11.4</b>
<b>India</b>	<b>1,344</b>	<b>1,360</b>	<b>1,216</b>	<b>1,284</b>	<b>1,312</b>	<b>2.2</b>
<b>Other Asia</b>	<b>3,894</b>	<b>3,481</b>	<b>3,404</b>	<b>3,418</b>	<b>3,435</b>	<b>0.5</b>
Brunei	92	125	188	231	208	-10.0
Indonesia	271	145	158	183	108	-40.8
Malaysia	1,020	933	1,055	1,087	1,142	5.1
Singapore	1,788	1,625	1,442	1,436	1,490	3.7
Vietnam	124	141	138	111	82	-26.5
Others	598	512	422	370	406	9.7
<b>Latin America</b>	<b>4,534</b>	<b>4,129</b>	<b>3,856</b>	<b>3,538</b>	<b>3,973</b>	<b>12.3</b>
Brazil	1,318	1,518	1,685	1,538	1,599	4.0
Colombia	725	743	679	551	563	2.2
Ecuador	409	437	408	378	372	-1.4
Trinidad & Tobago	142	75	70	72	63	-12.5
<b>Venezuela</b>	<b>1,499</b>	<b>944</b>	<b>557</b>	<b>515</b>	<b>614</b>	<b>19.2</b>
Others	441	412	458	484	761	57.1
<b>Middle East</b>	<b>23,679</b>	<b>21,625</b>	<b>19,830</b>	<b>20,148</b>	<b>22,591</b>	<b>12.1</b>
Bahrain	395	406	365	370	385	4.1
<b>IR Iran</b>	<b>2,122</b>	<b>936</b>	<b>685</b>	<b>1,096</b>	<b>1,284</b>	<b>17.2</b>
Iraq	3,908	4,075	3,579	3,598	3,884	8.0
Kuwait	2,680	2,623	2,353	2,344	2,590	10.5
Oman	906	935	948	975	1,008	3.3
Qatar	1,056	950	897	930	942	1.2
<b>Saudi Arabia</b>	<b>9,343</b>	<b>8,338</b>	<b>7,675</b>	<b>7,571</b>	<b>8,832</b>	<b>16.7</b>
<b>United Arab Emirates</b>	<b>3,213</b>	<b>3,296</b>	<b>3,258</b>	<b>3,196</b>	<b>3,620</b>	<b>13.3</b>
Others	56	65	70	68	46	-33.3
<b>Africa</b>	<b>6,932</b>	<b>6,980</b>	<b>5,928</b>	<b>6,184</b>	<b>5,663</b>	<b>-8.4</b>
Algeria	1,103	1,090	942	939	986	5.0
Angola	1,438	1,335	1,236	1,109	1,107	-0.1
Congo	313	315	286	255	247	-3.0
Egypt	188	216	268	245	121	-50.7
Equatorial Guinea	121	110	115	93	81	-13.0
Gabon	183	214	205	191	195	2.1
Libya	1,024	1,057	413	1,180	1,019	-13.6
Nigeria	2,001	2,028	1,879	1,603	1,388	-13.4
Sudans	116	139	136	138	117	-15.3
Others	445	474	447	431	401	-6.9
<b>Russia</b>	<b>7,717</b>	<b>7,795</b>	<b>7,034</b>	<b>6,896</b>	<b>7,057</b>	<b>2.3</b>
<b>Other Eurasia</b>	<b>2,542</b>	<b>2,470</b>	<b>2,358</b>	<b>2,220</b>	<b>2,097</b>	<b>-5.6</b>
Azerbaijan	636	587	529	520	463	-10.9
Kazakhstan	1,530	1,533	1,531	1,430	1,414	-1.1
Others	376	350	298	270	219	-19.0
<b>Other Europe</b>	<b>228</b>	<b>247</b>	<b>222</b>	<b>190</b>	<b>241</b>	<b>26.9</b>
Romania	103	102	92	83	102	23.1
Others	125	145	130	107	139	29.8
<b>Total world</b>	<b>77,074</b>	<b>75,140</b>	<b>69,469</b>	<b>70,004</b>	<b>73,489</b>	<b>5.0</b>
<i>of which</i>						
OPEC	28,947	26,363	23,184	23,690	25,848	9.1
<i>OPEC percentage</i>	37.6	35.1	33.4	33.8	35.2	
OECD	24,877	25,577	24,265	24,786	25,932	4.6

**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)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>8,687</b>	<b>7,838</b>	<b>6,788</b>	<b>6,941</b>	<b>7,071</b>	<b>1.9</b>
Canada	743	852	766	662	648	-2.2
Chile	173	185	147	164	146	-11.3
United States	7,768	6,801	5,875	6,114	6,278	2.7
Others	4	0	0	0	0	0.0
<b>OECD Europe</b>	<b>11,443</b>	<b>11,545</b>	<b>10,005</b>	<b>10,213</b>	<b>10,876</b>	<b>6.5</b>
Belgium	667	696	551	579	558	-3.7
France	1,061	976	666	683	822	20.3
Germany	1,720	1,737	1,666	1,641	1,776	8.2
Greece	491	461	459	473	442	-6.6
Italy	1,253	1,275	1,014	1,145	1,257	9.7
Netherlands	1,097	1,153	998	1,060	1,071	1.1
Spain	1,365	1,339	1,105	1,134	1,281	12.9
Sweden	402	344	375	364	378	3.8
Turkey	423	627	591	634	674	6.3
United Kingdom	892	910	713	727	836	14.9
Others	2,072	2,026	1,868	1,772	1,783	0.6
<b>OECD Asia Pacific</b>	<b>6,784</b>	<b>6,628</b>	<b>5,674</b>	<b>5,611</b>	<b>5,905</b>	<b>5.2</b>
Australia	361	328	238	194	163	-15.9
Japan	3,056	3,023	2,472	2,493	2,733	9.6
South Korea	3,034	2,924	2,660	2,613	2,752	5.3
Others	333	352	303	311	257	-17.1
<b>China</b>	<b>9,260</b>	<b>10,180</b>	<b>10,853</b>	<b>10,301</b>	<b>10,189</b>	<b>-1.1</b>
<b>India</b>	<b>4,544</b>	<b>4,507</b>	<b>4,035</b>	<b>4,202</b>	<b>4,581</b>	<b>9.0</b>
<b>Other Asia</b>	<b>3,713</b>	<b>3,518</b>	<b>3,222</b>	<b>3,181</b>	<b>3,641</b>	<b>14.5</b>
Indonesia	336	209	232	206	311	50.8
Malaysia	210	284	248	131	317	143.0
Philippines	230	162	130	108	130	20.1
Singapore	919	848	753	793	835	5.3
Thailand	942	932	837	863	914	5.9
Others	1,076	1,083	1,023	1,081	1,134	5.0
<b>Latin America</b>	<b>681</b>	<b>603</b>	<b>487</b>	<b>554</b>	<b>718</b>	<b>29.8</b>
Brazil	186	189	134	166	274	65.0
Ecuador	20	20	15	16	16	2.7
Trinidad & Tobago	72	3	0	0	0	0.0
<b>Venezuela</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>6</b>	<b>71</b>	<b>1141.1</b>
Others	401	387	332	366	356	-2.5
<b>Middle East</b>	<b>454</b>	<b>438</b>	<b>475</b>	<b>492</b>	<b>517</b>	<b>5.1</b>
Bahrain	220	226	179	183	215	17.6
<b>United Arab Emirates</b>	<b>42</b>	<b>53</b>	<b>163</b>	<b>187</b>	<b>187</b>	<b>-0.1</b>
Others	192	159	133	122	115	-5.5
<b>Africa</b>	<b>628</b>	<b>649</b>	<b>626</b>	<b>452</b>	<b>380</b>	<b>-15.9</b>
<b>Algeria</b>	<b>5</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>
Egypt	142	121	221	154	118	-23.6
South Africa	437	417	307	220	187	-15.3
Others	43	107	98	78	76	-2.8
<b>Russia</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>
<b>Other Eurasia</b>	<b>416</b>	<b>410</b>	<b>374</b>	<b>378</b>	<b>321</b>	<b>-15.0</b>
Belarus	368	363	321	320	285	-10.9
Ukraine	15	16	25	32	16	-48.4
Others	33	31	28	27	20	-24.3
<b>Other Europe</b>	<b>414</b>	<b>450</b>	<b>348</b>	<b>345</b>	<b>439</b>	<b>27.1</b>
Bulgaria	117	141	97	91	142	56.3
Croatia	59	62	48	48	44	-8.0
Romania	170	178	142	140	179	27.5
Others	68	69	61	66	73	11.2
<b>Total world</b>	<b>47,025</b>	<b>46,765</b>	<b>42,888</b>	<b>42,670</b>	<b>44,640</b>	<b>4.6</b>
<i>of which</i>						
OECD	26,914	26,011	22,467	22,764	23,853	4.8

**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)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>3,730</b>	<b>3,942</b>	<b>3,274</b>	<b>3,752</b>	<b>3,522</b>	<b>-6.1</b>
Canada	305	310	192	208	219	5.2
Mexico	1,090	1,138	932	1,004	1,031	2.7
United States	2,174	2,340	1,988	2,360	2,040	-13.6
Others	161	154	162	180	233	29.5
<b>OECD Europe</b>	<b>8,101</b>	<b>7,889</b>	<b>6,936</b>	<b>7,270</b>	<b>7,458</b>	<b>2.6</b>
Belgium	621	564	530	561	554	-1.3
France	896	939	926	967	876	-9.4
Germany	867	907	752	806	769	-4.6
Italy	363	322	270	271	300	10.6
Netherlands	1,865	1,798	1,559	1,745	1,792	2.7
Spain	362	365	308	310	329	6.0
Turkey	573	444	382	400	431	8.0
United Kingdom	754	704	523	543	602	11.0
Others	1,801	1,847	1,685	1,668	1,804	8.2
<b>OECD Asia Pacific</b>	<b>2,677</b>	<b>2,617</b>	<b>2,566</b>	<b>2,869</b>	<b>2,872</b>	<b>0.1</b>
Australia	625	634	590	678	785	15.8
Japan	976	896	919	1,012	914	-9.7
South Korea	958	995	963	1,080	1,018	-5.7
Others	118	92	95	99	155	56.7
<b>China</b>	<b>1,397</b>	<b>1,389</b>	<b>1,318</b>	<b>1,428</b>	<b>1,485</b>	<b>4.0</b>
<b>India</b>	<b>776</b>	<b>969</b>	<b>1,066</b>	<b>1,003</b>	<b>1,057</b>	<b>5.4</b>
<b>Other Asia</b>	<b>5,798</b>	<b>5,759</b>	<b>5,317</b>	<b>5,248</b>	<b>5,474</b>	<b>4.3</b>
Indonesia	642	728	533	518	809	56.2
Malaysia	752	679	795	790	813	2.9
Singapore	2,335	2,244	2,088	1,977	1,944	-1.6
Others	2,070	2,108	1,900	1,963	1,908	-2.8
<b>Latin America</b>	<b>2,073</b>	<b>2,042</b>	<b>1,599</b>	<b>1,811</b>	<b>1,585</b>	<b>-12.5</b>
Brazil	640	725	606	738	583	-20.9
Ecuador	194	188	165	170	168	-1.6
Panama	62	65	42	51	40	-22.4
<b>Venezuela</b>	<b>245</b>	<b>167</b>	<b>68</b>	<b>69</b>	<b>88</b>	<b>28.1</b>
Others	932	897	718	783	707	-9.7
<b>Middle East</b>	<b>1,772</b>	<b>1,090</b>	<b>909</b>	<b>982</b>	<b>1,097</b>	<b>11.7</b>
<b>IR Iran</b>	<b>101</b>	<b>98</b>	<b>92</b>	<b>99</b>	<b>91</b>	<b>-8.0</b>
<b>Iraq</b>	<b>89</b>	<b>96</b>	<b>77</b>	<b>107</b>	<b>113</b>	<b>5.6</b>
<b>Kuwait</b>	<b>30</b>	<b>14</b>	<b>15</b>	<b>34</b>	<b>29</b>	<b>-14.3</b>
Qatar	5	5	5	0	0	0.0
<b>Saudi Arabia</b>	<b>898</b>	<b>319</b>	<b>353</b>	<b>361</b>	<b>360</b>	<b>-0.3</b>
<b>United Arab Emirates</b>	<b>351</b>	<b>266</b>	<b>120</b>	<b>129</b>	<b>249</b>	<b>93.9</b>
Others	297	292	248	252	255	1.0
<b>Africa</b>	<b>2,378</b>	<b>2,393</b>	<b>2,247</b>	<b>2,359</b>	<b>2,367</b>	<b>0.4</b>
<b>Algeria</b>	<b>17</b>	<b>43</b>	<b>35</b>	<b>21</b>	<b>11</b>	<b>-47.6</b>
<b>Angola</b>	<b>99</b>	<b>65</b>	<b>134</b>	<b>55</b>	<b>67</b>	<b>22.3</b>
<b>Congo</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2.8</b>
Egypt	278	264	149	203	184	-9.2
<b>Equatorial Guinea</b>	<b>4</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>7.9</b>
<b>Gabon</b>	<b>8</b>	<b>8</b>	<b>7</b>	<b>6</b>	<b>5</b>	<b>-1.9</b>
<b>Libya</b>	<b>137</b>	<b>144</b>	<b>147</b>	<b>133</b>	<b>128</b>	<b>-3.2</b>
Morocco	293	294	267	291	311	7.2
<b>Nigeria</b>	<b>442</b>	<b>460</b>	<b>466</b>	<b>488</b>	<b>525</b>	<b>7.6</b>
Tunisia	85	89	73	76	74	-2.6
Others	1,012	1,021	965	1,083	1,057	-2.5
<b>Russia</b>	<b>29</b>	<b>23</b>	<b>31</b>	<b>34</b>	<b>19</b>	<b>-44.7</b>
<b>Other Eurasia</b>	<b>372</b>	<b>362</b>	<b>373</b>	<b>361</b>	<b>320</b>	<b>-11.2</b>
Ukraine	213	222	221	241	183	-23.8
Others	159	140	153	120	137	13.9
<b>Other Europe</b>	<b>426</b>	<b>457</b>	<b>425</b>	<b>433</b>	<b>459</b>	<b>6.1</b>
Bulgaria	36	38	47	49	45	-6.8
Croatia	32	49	41	47	58	24.6
Romania	67	67	57	68	70	2.6
Others	292	303	280	269	286	6.1
<b>Total world</b>	<b>29,529</b>	<b>28,934</b>	<b>26,062</b>	<b>27,549</b>	<b>27,717</b>	<b>0.6</b>
<i>of which</i>						
OPEC	2,424	1,684	1,519	1,505	1,672	11.1
<i>OPEC percentage</i>	8.2	5.8	5.8	5.5	6.0	
OECD	14,508	14,449	12,775	13,891	13,852	-0.3

**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)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>3,730</b>	<b>3,942</b>	<b>3,274</b>	<b>3,752</b>	<b>3,522</b>	<b>-6.1</b>
Gasoline	1,392	1,517	1,136	1,422	1,281	-10.0
Kerosene	250	300	208	228	218	-4.3
Distillates	598	582	532	616	598	-2.9
Residuals	258	207	184	193	223	15.4
Others	1,232	1,336	1,215	1,292	1,203	-6.9
<b>OECD Europe</b>	<b>8,101</b>	<b>7,889</b>	<b>6,936</b>	<b>7,270</b>	<b>7,458</b>	<b>2.6</b>
Gasoline	612	634	567	611	603	-1.2
Kerosene	897	914	591	582	783	34.5
Distillates	2,946	2,918	2,705	2,725	2,753	1.0
Residuals	776	721	776	912	903	-1.0
Others	2,871	2,703	2,296	2,440	2,415	-1.0
<b>OECD Asia Pacific</b>	<b>2,677</b>	<b>2,617</b>	<b>2,566</b>	<b>2,869</b>	<b>2,872</b>	<b>0.1</b>
Gasoline	179	183	189	219	251	14.5
Kerosene	183	155	103	116	142	23.0
Distillates	387	395	420	485	540	11.1
Residuals	160	102	85	116	95	-18.3
Others	1,768	1,783	1,769	1,933	1,845	-4.5
<b>China</b>	<b>1,397</b>	<b>1,389</b>	<b>1,318</b>	<b>1,428</b>	<b>1,485</b>	<b>4.0</b>
Gasoline	10	8	11	8	0	-94.4
Kerosene	86	76	54	29	18	-37.0
Distillates	14	24	24	15	9	-42.4
Residuals	298	270	231	251	234	-6.6
Others	989	1,012	998	1,125	1,223	8.8
<b>India</b>	<b>776</b>	<b>969</b>	<b>1,066</b>	<b>1,003</b>	<b>1,057</b>	<b>5.4</b>
Gasoline	8	49	31	23	25	5.8
Kerosene	0	0	0	0	0	0.0
Distillates	6	40	32	3	7	114.0
Residuals	30	48	111	154	166	7.7
Others	732	832	891	823	860	4.5
<b>Other Asia</b>	<b>5,798</b>	<b>5,759</b>	<b>5,317</b>	<b>5,248</b>	<b>5,474</b>	<b>4.3</b>
Gasoline	1,302	1,369	1,277	1,132	1,347	19.0
Kerosene	350	348	221	204	220	7.8
Distillates	1,411	1,398	1,267	1,302	1,232	-5.4
Residuals	1,578	1,488	1,320	1,450	1,335	-7.9
Others	1,156	1,157	1,231	1,160	1,341	15.6
<b>Latin America</b>	<b>2,073</b>	<b>2,042</b>	<b>1,599</b>	<b>1,811</b>	<b>1,585</b>	<b>-12.5</b>
Gasoline	405	430	379	449	314	-30.1
Kerosene	102	103	43	48	63	32.7
Distillates	734	692	582	717	740	3.2
Residuals	240	246	195	147	154	4.8
Others	591	572	399	449	313	-30.3
<b>Middle East</b>	<b>1,772</b>	<b>1,090</b>	<b>909</b>	<b>982</b>	<b>1,097</b>	<b>11.7</b>
Gasoline	790	465	362	398	448	12.4
Kerosene	22	20	10	10	9	-12.9
Distillates	355	136	100	140	130	-7.2
Residuals	498	415	390	368	417	13.4
Others	106	55	47	66	94	42.6

Table 5.8

## World imports of petroleum products by main petroleum product and region

(1,000 b/d)

	2018	2019	2020	2021	2022	% change 22/21
<b>Africa</b>	<b>2,378</b>	<b>2,393</b>	<b>2,247</b>	<b>2,359</b>	<b>2,367</b>	<b>0.4</b>
Gasoline	701	821	791	861	914	6.1
Kerosene	157	151	103	112	109	-2.8
Distillates	1,018	963	879	889	900	1.3
Residuals	115	103	101	99	86	-12.3
Others	387	355	374	399	359	-10.1
<b>Russia</b>	<b>29</b>	<b>23</b>	<b>31</b>	<b>34</b>	<b>19</b>	<b>-44.7</b>
Gasoline	1	0	2	2	1	-50.7
Kerosene	0	0	1	0	0	-41.4
Distillates	1	1	6	6	3	-44.7
Residuals	0	0	2	3	2	-34.2
Others	26	22	19	23	13	-45.6
<b>Other Eurasia</b>	<b>372</b>	<b>362</b>	<b>373</b>	<b>361</b>	<b>320</b>	<b>-11.2</b>
Gasoline	79	64	70	73	63	-14.0
Kerosene	14	10	5	6	6	6.0
Distillates	164	175	187	175	157	-10.2
Residuals	5	4	3	3	2	-41.4
Others	110	108	107	104	93	-11.2
<b>Other Europe</b>	<b>426</b>	<b>457</b>	<b>425</b>	<b>433</b>	<b>459</b>	<b>6.1</b>
Gasoline	32	34	31	31	30	-1.7
Kerosene	15	17	6	12	13	3.9
Distillates	173	197	184	191	222	16.3
Residuals	126	125	120	99	99	0.3
Others	80	84	83	100	95	-5.2
<b>Total world</b>	<b>29,529</b>	<b>28,934</b>	<b>26,062</b>	<b>27,549</b>	<b>27,717</b>	<b>0.6</b>
Gasoline	5,511	5,573	4,847	5,230	5,277	0.9
Kerosene	2,077	2,093	1,347	1,347	1,581	17.4
Distillates	7,809	7,521	6,920	7,265	7,290	0.4
Residuals	4,084	3,728	3,519	3,793	3,715	-2.0
Others	10,048	10,018	9,429	9,914	9,853	-0.6
<i>of which</i>						
<b>OPEC</b>	<b>2,424</b>	<b>1,684</b>	<b>1,519</b>	<b>1,505</b>	<b>1,672</b>	<b>11.1</b>
Gasoline	1,305	948	817	803	921	14.7
Kerosene	101	47	28	28	28	1.4
Distillates	475	335	285	240	242	1.1
Residuals	360	286	340	220	251	13.8
Others	183	69	50	214	230	7.3
<b>OECD</b>	<b>14,508</b>	<b>14,449</b>	<b>12,775</b>	<b>13,891</b>	<b>13,852</b>	<b>-0.3</b>
Gasoline	2,182	2,333	1,891	2,252	2,135	-5.2
Kerosene	1,330	1,369	902	926	1,143	23.5
Distillates	3,931	3,896	3,657	3,827	3,891	1.7
Residuals	1,194	1,030	1,045	1,221	1,221	0.0
Others	5,871	5,821	5,280	5,665	5,463	-3.6

**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)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>12,417</b>	<b>11,780</b>	<b>10,062</b>	<b>10,692</b>	<b>10,594</b>	<b>-0.9</b>
Canada	1,048	1,162	958	871	867	-0.4
Mexico	1,093	1,138	932	1,004	1,031	2.7
United States	9,942	9,141	7,863	8,474	8,318	-1.8
Others	334	339	309	344	378	10.0
<b>OECD Europe</b>	<b>19,545</b>	<b>19,434</b>	<b>16,941</b>	<b>17,483</b>	<b>18,334</b>	<b>4.9</b>
Belgium	1,288	1,261	1,080	1,141	1,112	-2.5
France	1,957	1,915	1,593	1,650	1,698	2.9
Germany	2,587	2,645	2,418	2,447	2,546	4.0
Greece	563	559	537	563	528	-6.4
Italy	1,616	1,597	1,284	1,416	1,556	9.9
Netherlands	2,961	2,950	2,557	2,805	2,863	2.1
Spain	1,727	1,703	1,413	1,444	1,609	11.4
Sweden	608	533	549	500	526	5.1
Turkey	997	1,071	974	1,034	1,106	6.9
United Kingdom	1,646	1,614	1,236	1,270	1,438	13.3
Others	3,595	3,586	3,301	3,212	3,353	4.4
<b>OECD Asia Pacific</b>	<b>9,461</b>	<b>9,245</b>	<b>8,239</b>	<b>8,480</b>	<b>8,778</b>	<b>3.5</b>
Australia	986	962	828	872	948	8.8
Japan	4,032	3,919	3,391	3,505	3,647	4.0
South Korea	3,992	3,919	3,623	3,693	3,770	2.1
Others	451	445	397	410	412	0.7
<b>China</b>	<b>10,658</b>	<b>11,570</b>	<b>12,171</b>	<b>11,730</b>	<b>11,674</b>	<b>-0.5</b>
<b>India</b>	<b>5,320</b>	<b>5,475</b>	<b>5,101</b>	<b>5,206</b>	<b>5,638</b>	<b>8.3</b>
<b>Other Asia</b>	<b>9,511</b>	<b>9,277</b>	<b>8,540</b>	<b>8,429</b>	<b>9,116</b>	<b>8.1</b>
Indonesia	977	937	765	724	1,121	54.7
Malaysia	962	963	1,043	921	1,130	22.8
Philippines	483	473	373	434	463	6.7
Singapore	3,254	3,091	2,841	2,770	2,780	0.3
Thailand	1,118	1,148	1,040	1,077	1,161	7.8
Others	2,717	2,664	2,477	2,504	2,461	-1.7
<b>Latin America</b>	<b>2,754</b>	<b>2,646</b>	<b>2,086</b>	<b>2,364</b>	<b>2,304</b>	<b>-2.6</b>
Brazil	826	914	740	904	857	-5.1
Ecuador	214	207	179	186	184	-1.2
<b>Venezuela</b>	<b>247</b>	<b>171</b>	<b>74</b>	<b>74</b>	<b>159</b>	<b>114.2</b>
Others	1,467	1,352	1,092	1,200	1,103	-8.1

Table 5.9

## World imports of crude oil and petroleum products by country

(1,000 b/d)

	2018	2019	2020	2021	2022	% change 22/21
<b>Middle East</b>	<b>2,226</b>	<b>1,528</b>	<b>1,384</b>	<b>1,474</b>	<b>1,614</b>	<b>9.5</b>
Bahrain	226	232	188	193	219	13.5
IR Iran	101	98	92	99	91	-8.0
Iraq	89	96	77	107	113	5.6
Kuwait	30	14	15	34	29	-14.3
Qatar	5	5	5	0	0	0.0
Saudi Arabia	898	319	353	361	360	-0.3
United Arab Emirates	392	319	284	316	436	38.1
Others	483	445	372	364	366	0.6
<b>Africa</b>	<b>3,005</b>	<b>3,042</b>	<b>2,873</b>	<b>2,811</b>	<b>2,747</b>	<b>-2.2</b>
Algeria	23	46	35	21	11	-47.6
Angola	99	65	134	55	67	22.3
Congo	2	0	0	0	0	2.8
Egypt	421	385	370	357	302	-15.4
Equatorial Guinea	4	5	4	4	5	7.9
Gabon	8	8	7	6	5	-1.9
Libya	137	144	147	133	128	-3.2
Morocco	293	294	267	291	311	7.2
Nigeria	442	460	466	488	525	7.6
South Africa	514	493	385	306	271	-11.5
Tunisia	96	105	90	102	94	-8.3
Others	967	1,037	968	1,049	1,028	-2.0
<b>Russia</b>	<b>29</b>	<b>23</b>	<b>31</b>	<b>34</b>	<b>19</b>	<b>-44.7</b>
<b>Other Eurasia</b>	<b>788</b>	<b>772</b>	<b>747</b>	<b>739</b>	<b>642</b>	<b>-13.2</b>
Belarus	380	367	322	321	285	-11.1
Ukraine	229	238	246	272	200	-26.6
Others	179	166	179	145	156	7.5
<b>Other Europe</b>	<b>841</b>	<b>907</b>	<b>773</b>	<b>778</b>	<b>898</b>	<b>15.4</b>
Bulgaria	153	179	144	140	188	34.3
Croatia	91	110	89	95	103	8.0
Romania	237	245	199	209	249	19.4
Others	360	373	341	335	359	7.1
<b>Total world</b>	<b>76,554</b>	<b>75,699</b>	<b>68,950</b>	<b>70,219</b>	<b>72,357</b>	<b>3.0</b>
<i>of which</i>						
OPEC	2,473	1,745	1,688	1,698	1,931	13.7
OECD	41,422	40,459	35,243	36,655	37,705	2.9

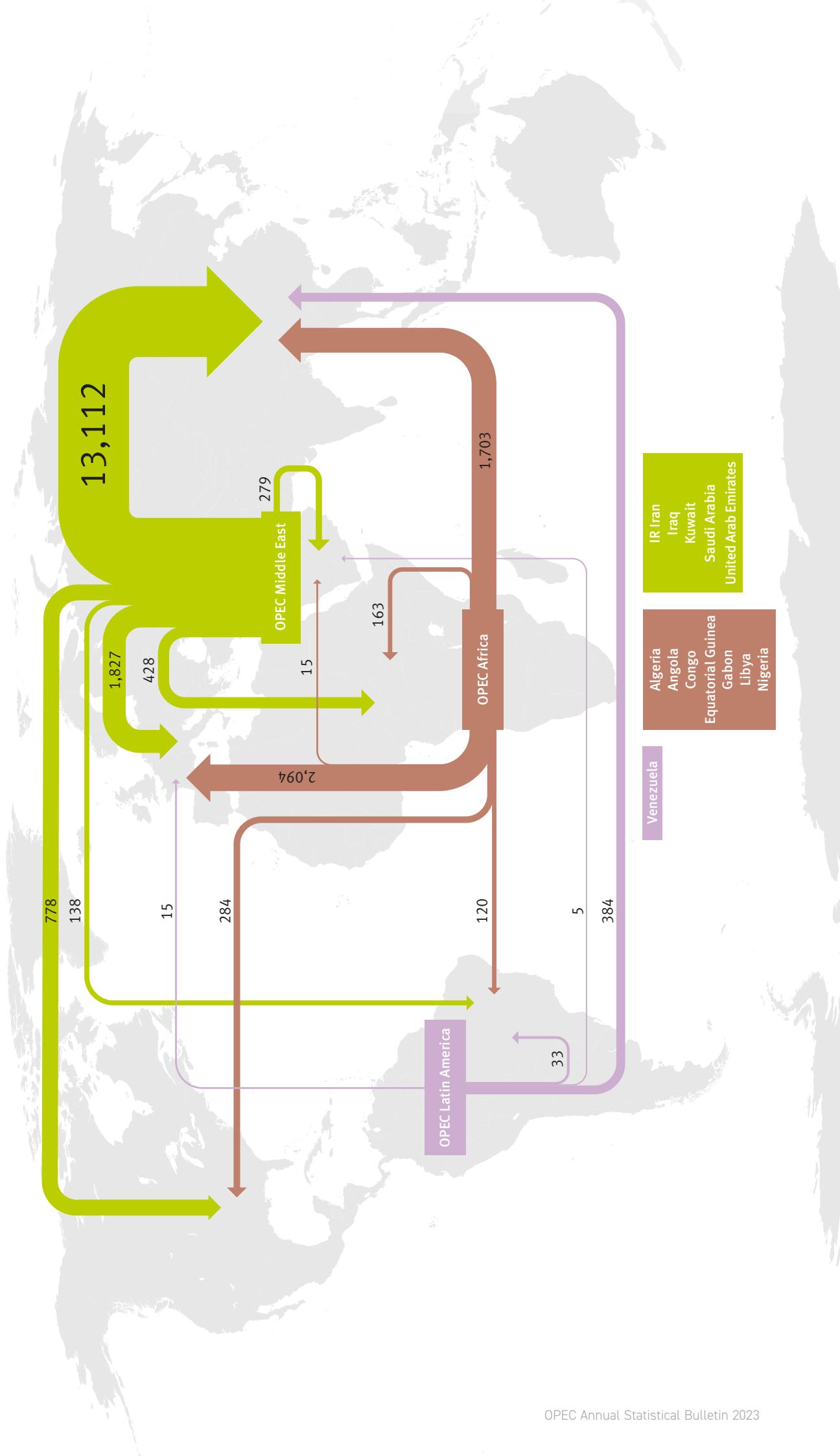
**Notes:**

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

## Oil trade

Graph 5.2  
OPEC Members' crude oil exports by destination, 2022

(1,000 b/d)



# **SECTION 6**

## **Oil transportation**

**Table 6.1**  
**Average spot freight rates by vessel category**

(% of *Worldscale*)

Tanker size (1,000 dwt)	2018	2019	2020	2021	2022	
GP	16.5–24.9	134.6	134.0	124.6	125.3	267.3
MR	25.0–44.9	149.3	164.1	146.3	146.2	303.6
LR1	45.0–79.9	113.6	118.3	103.0	95.8	204.7
LR2	80.0–159.9	64.7	72.2	62.4	47.7	105.8
VLCC	160.0–319.9	40.7	50.2	49.6	28.7	50.1

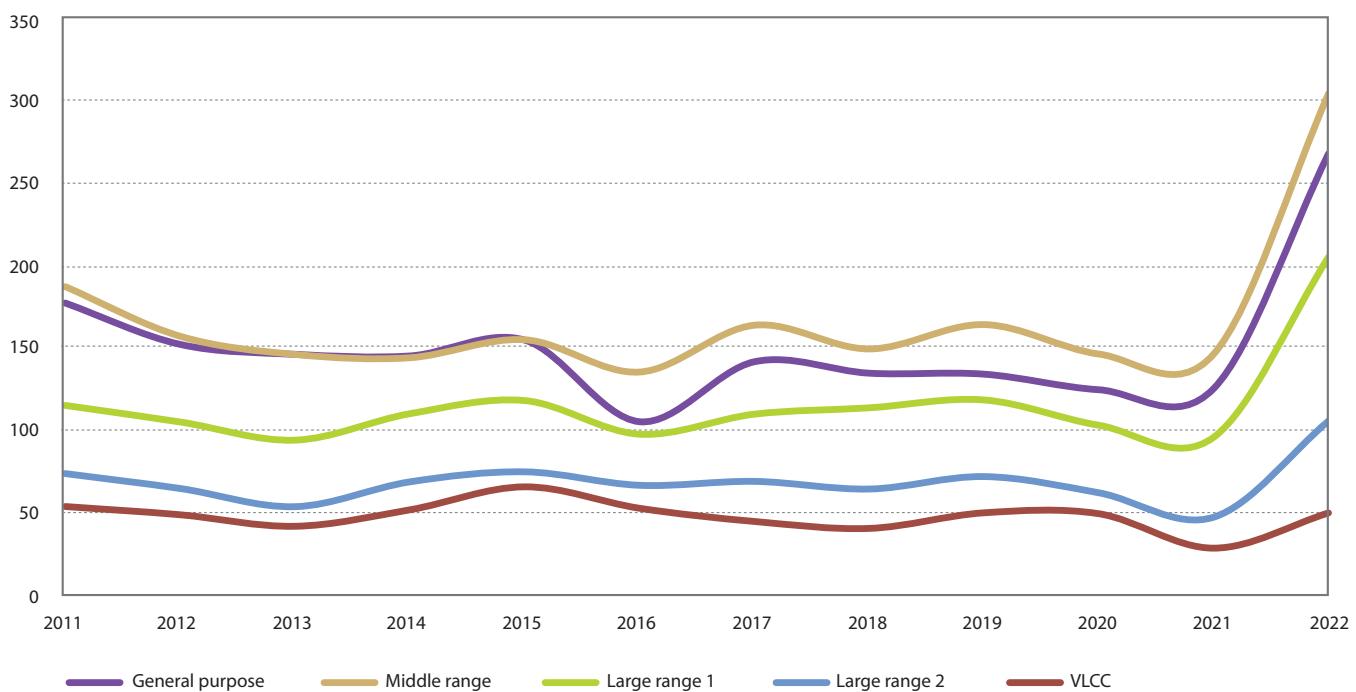
**Notes:**

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)

	2018 %	2018 \$/t	2019 %	2019 \$/t	2020 %	2020 \$/t	2021 %	2021 \$/t	2022 %	2022 \$/t
ME/EAST	57	9.4	66	13.0	60	14.1	35	6.9	62	13.7
ME/WEST	25	4.7	35	7.8	40	11.6	22	5.6	37	10.2
WAF/EAST	57	14.9	66	20.5	60	22.2	37	11.4	64	21.4
WAF/USGC	72	11.6	81	15.4	67	14.9	53	9.9	117	23.8
WEST/USGC	61	9.8	67	12.5	58	11.7	42	7.9	105	20.6
INDO/EAST	102	11.0	114	14.1	91	13.2	86	10.7	186	24.9
CAR/USEC	133	9.7	128	11.2	115	11.5	104	9.6	232	22.8
MED/MED	115	6.8	116	7.9	88	6.5	96	6.2	194	13.7
MED/WEST	107	10.5	108	12.4	81	10.4	89	9.6	179	21.1

**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)

	2018 %	2018 \$/t	2019 %	2019 \$/t	2020 %	2020 \$/t	2021 %	2021 \$/t	2022 %	2022 \$/t
ME/EAST	118	21.1	124	26.2	122	30.0	105	20.8	235	50.2
SING/EAST	137	12.5	151	16.0	137	16.8	139	14.7	302	34.9
WEST/USEC	134	16.5	134	19.3	125	18.9	125	16.1	267	37.9
MED/MED	151	8.4	166	10.4	147	10.2	144	9.4	299	20.7
MED/WEST	160	15.9	175	20.2	156	20.0	154	17.3	309	37.6

**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**

## Oil prices

Table 7.1

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

(\$/b)

	Representative crude stream	2018	2019	2020	2021	2022
Algeria	Saharan Blend	71.44	64.49	42.12	70.89	104.24
Angola	Girassol	71.72	66.11	42.64	71.31	103.66
Congo	Djeno	68.59	61.80	35.77	63.35	93.65
Equatorial Guinea	Zafiro	71.36	65.74	41.54	71.09	102.88
Gabon	Rabi Light	70.30	63.18	40.22	70.34	100.64
IR Iran	Iran Heavy	67.97	61.85	40.77	69.80	99.92
Iraq	Basrah Light/Medium <sup>1</sup>	68.62	63.64	41.55	69.86	97.33
Kuwait	Kuwait Export	68.90	64.25	41.49	70.50	101.19
Libya	Ess Sider	69.78	63.81	40.06	69.16	101.28
Nigeria	Bonny Light	72.11	65.63	41.53	70.63	103.63
Saudi Arabia	Arab Light	70.59	64.96	41.91	70.65	101.64
United Arab Emirates	Murban	72.20	64.72	42.98	70.09	98.89
Venezuela	Merey	64.47	54.04	28.12	51.45	76.96
<b>OPEC</b>	<b>ORB</b>	<b>69.78</b>	<b>64.04</b>	<b>41.47</b>	<b>69.89</b>	<b>100.08</b>
ORB	Volatility <sup>2</sup>	6.59	4.11	12.55	7.87	12.33
ORB	Coefficient of Variation <sup>3</sup> , %	9.44	6.43	30.26	11.26	12.32

#### Notes:

1. As of 2022, ORB based on Basrah Medium, before Basrah Light.

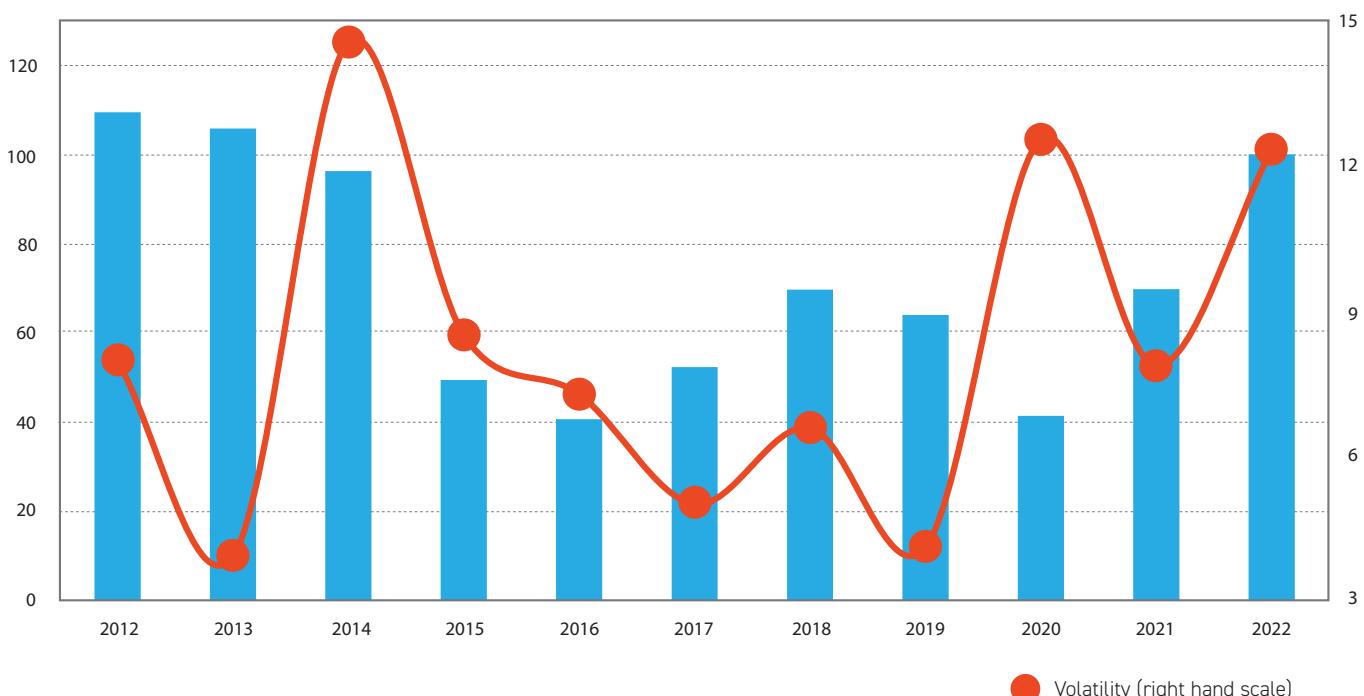
2. Standard deviation of daily prices.

3. 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	2018	2019	2020	2021	2022
<b>Algeria</b>	Zarzaitine	71.35	64.42	41.72	70.72	102.96
<b>Angola</b>	Cabinda	71.15	65.34	42.29	71.00	103.00
Egypt	Suez Mix	68.47	62.61	40.23	67.77	96.15
<b>Iran</b>	Iran Light	69.10	62.74	40.36	67.90	96.28
Indonesia	Minas	65.44	60.25	41.08	68.75	96.94
<b>Libya</b>	Brega	70.65	63.76	40.12	69.39	101.67
Malaysia	Miri	75.90	69.30	47.15	71.26	110.93
Malaysia	Tapis	73.78	69.15	43.24	72.82	111.57
Mexico	Isthmus	68.74	63.00	36.61	66.20	91.85
Mexico	Maya	62.71	57.51	36.20	64.42	87.31
<b>Nigeria</b>	Forcados	72.56	66.19	41.56	70.81	104.76
Norway	Ekofisk	71.86	65.24	42.33	71.65	105.26
Norway	Oseberg	72.34	65.38	42.36	71.78	106.10
Oman	Oman	70.10	64.00	43.20	69.46	96.38
Qatar	Dukhan	71.22	63.65	42.44	69.92	99.25
Russia	Urals	70.13	64.38	41.83	69.45	78.47
<b>Saudi Arabia</b>	Arab Heavy	68.79	63.85	41.45	69.98	99.75
United Kingdom	Brent	71.22	64.19	41.67	70.80	101.10
United Kingdom	Forties	71.21	64.66	41.38	71.23	102.87
United States	WTI	65.16	57.02	39.43	68.17	94.55
<b>United Arab Emirates</b>	Dubai	69.68	63.48	42.31	69.38	96.32
Spread	WTI – Brent	-6.06	-7.17	-2.24	-2.63	-6.55
	WTI – Dubai	-4.52	-6.46	-2.88	-1.21	-1.77
	Brent – Dubai	1.54	0.71	-0.64	1.42	4.78

## Oil prices

Table 7.3

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

	2018	2019	2020	2021	2022
<b>ICE Brent</b>					
1 <sup>st</sup> forward month	71.69	64.16	43.21	70.95	99.04
6 <sup>th</sup> forward month	70.66	62.32	45.15	68.26	91.63
12 <sup>th</sup> forward month	68.94	61.19	46.20	65.88	86.66
<b>NYMEX WTI</b>					
1 <sup>st</sup> forward month	64.90	57.04	39.34	68.11	94.33
6 <sup>th</sup> forward month	63.59	56.80	41.86	65.62	87.46
12 <sup>th</sup> forward month	61.81	55.47	42.71	62.72	82.08
<b>DME Oman</b>					
1 <sup>st</sup> forward month	69.88	63.99	43.03	69.50	96.34
6 <sup>th</sup> forward month	68.25	60.93	44.52	66.59	88.09
12 <sup>th</sup> forward month	66.51	59.68	45.54	64.20	83.13

Table 7.4

**OPEC Reference Basket in nominal and real terms**

**(\$/b)**

	2018	2019	2020	2021	2022
Nominal oil price	69.78	64.04	41.47	69.89	100.08
<b>Nominal price adjusted for:</b>					
Exchange rates <sup>1</sup>	69.87	67.18	44.29	74.41	125.85
Inflation <sup>2</sup>	67.80	60.39	38.38	62.42	80.14
Combined <sup>3</sup>	67.89	63.35	40.99	66.46	100.78

**Notes:**

Base: 2017 = 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)

		2018	2019	2020	2021	2022
<b>Europe</b>						
Algeria	Saharan Blend	0.23	0.31	0.43	0.08	3.14
Iran	Iran Heavy	-6.27	-6.80	-5.78	-4.38	-2.77
Iraq	Basrah Light/Medium <sup>1</sup>	-4.18	-3.03	-2.65	-2.51	-6.63
Libya	Es Sider	-1.43	-0.38	-1.71	-1.65	0.16
Nigeria	Bonny Light	0.89	1.44	-0.16	-0.17	2.49
Saudi Arabia	Arab Light	-2.47	-1.29	-3.21	-1.70	2.06
<b>Asia</b>						
Iran	Iran Heavy	-0.73	-0.14	-1.19	0.58	3.55
Iraq	Basrah Light/Medium <sup>1</sup>	0.02	1.26	-0.16	1.32	2.68
Kuwait	Kuwait Export	-0.46	0.91	-1.10	1.24	4.81
Saudi Arabia	Arab Light	1.56	1.85	-0.43	1.71	5.81
<b>US</b>						
Iraq	Basrah Light/Medium <sup>1</sup>	-0.37	1.33	0.56	-0.17	-1.94
Saudi Arabia	Arab Light	0.98	3.00	1.17	1.08	4.82
	Arab Medium	-0.57	1.35	0.07	0.38	4.24
	Arab Heavy	-1.74	0.52	-0.44	-0.04	3.79

**Notes:**

1. As of 2022, ORB based on Basrah Medium, before Basrah Light.  
 Premium factors are related to corresponding benchmark crudes.

## Oil prices

**Table 7.6**  
**Spot prices of petroleum products in major markets** (\$/b)

	Specifications	2018	2019	2020	2021	2022
<b>US Gulf</b>						
Gasoline	Regular unleaded 87	80.17	72.70	47.80	86.72	123.34
Gasoil	0.2% sulphur	80.99	74.61	44.92	73.94	122.10
Fuel oil	3.0% sulphur	60.17	52.55	34.72	59.84	76.84
<b>Singapore</b>						
Gasoline	Premium unleaded 97	81.30	74.15	47.61	81.66	117.52
Gasoil	0.05% sulphur	84.05	77.22	48.36	75.96	130.65
Fuel oil	380 centistokes	64.74	56.70	37.53	62.07	76.63
<b>Rotterdam</b>						
Gasoline	Premium unleaded 98	87.34	79.52	51.34	85.89	136.26
Gasoil	10ppm sulphur	85.94	79.50	49.17	78.31	142.32
Fuel oil	3.5% sulphur	59.04	48.90	33.27	60.09	75.42

**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	2018	2019	2020	2021	2022
<b>US Gulf crack spread vs WTI</b>						
Gasoline	Regular unleaded 87	15.46	15.79	8.28	18.55	28.79
Gasoil	0.2% sulphur	16.15	17.61	5.41	5.77	27.55
Fuel oil	3.0% sulphur	-4.76	-4.51	-4.65	-8.33	-17.71
<b>Singapore crack spread vs Dubai</b>						
Gasoline	Premium unleaded 97	11.90	10.77	5.37	12.28	21.2
Gasoil	0.05% sulphur	14.65	13.75	6.12	6.58	34.33
Fuel oil	380 centistokes	-4.72	-6.83	-4.67	-7.31	-19.69
<b>Rotterdam crack spread vs Brent</b>						
Gasoline	Premium unleaded 98	16.45	15.26	9.86	15.09	35.16
Gasoil	10ppm sulphur	15.00	15.26	7.65	7.51	41.22
Fuel oil	3.5% sulphur	-11.90	-15.37	-8.26	-10.71	-25.68

**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**

	2018			2019			2020			2021			2022				
	\$/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		
<b>USA</b>																	
Composite Barrel	119.08	49.7	14.5	114.30	-4.0	94.61	-17.2	128.58	35.9	177.78	38.3						
Crude CIF Price	59.19	19.9	23.0	56.33	-4.8	36.57	-35.1	64.43	50.1	76.2	39.2						
Tax	23.67	1.9	1.9	23.74	0.3	23.77	25.1	0.11	23.67	18.4	6.8						
Industry Margin	36.21	30.4	10.9	34.23	-5.5	34.28	36.2	0.1	40.49	31.5	18.1	62.79	35.3	55.1			
<b>Canada</b>																	
Composite Barrel	156.69	45.2	12.8	144.18	-8.0	121.81	-15.5	170.91	40.3	212.03	24.1						
Crude CIF Price	70.88	31.4	3.8	63.12	43.8	-10.9	45.79	37.6	69.44	51.6	104.16	50.0					
Tax	49.25	1.7	1.7	49.23	34.1	0.0	47.89	39.3	57.60	33.7	20.3	58.99	27.8	2.4			
Industry Margin	36.56	23.3		31.83	22.1	-12.9	28.14	23.1	-11.6	43.87	25.7	55.9	48.88	23.1	11.4		
<b>Japan</b>																	
Composite Barrel	193.18	15.4	15.4	192.60	-0.3	182.43	-5.3	200.41	9.9	185.47	-7.5						
Crude CIF Price	72.85	37.7	33.9	66.78	34.7	-8.3	46.85	25.7	-29.8	70.25	35.1	49.9	102.11	55.1	45.4		
Tax	72.75	37.7	4.3	75.27	39.1	3.5	78.35	42.9	4.1	75.23	37.5	-4.0	64.10	34.6	-14.8		
Industry Margin	47.58	24.6	10.0	50.55	26.2	6.2	57.24	31.4	13.2	54.93	27.4	-4.0	19.26	10.4	-64.9		
<b>France</b>																	
Composite Barrel	267.71	21.1	21.1	254.19	-5.0	229.44	-9.7	270.84	18.0	304.74	12.5						
Crude CIF Price	71.59	26.7	31.4	64.98	25.6	-9.2	44.04	19.2	-32.2	71.70	26.5	62.8	105.06	34.5	46.5		
Tax	157.19	58.7	16.6	149.98	59.0	-4.6	148.47	64.7	-1.0	160.02	59.1	7.8	152.91	50.2	-4.4		
Industry Margin	38.93	14.5	22.2	39.23	15.4	0.8	36.93	16.1	-5.9	39.12	14.4	5.9	46.77	15.3	19.5		
<b>Germany</b>																	
Composite Barrel	251.49	16.0	16.0	235.45	-6.4	211.34	-10.2	269.87	27.7	320.48	18.8						
Crude CIF Price	70.50	28.0	30.5	64.43	27.4	-8.6	43.05	20.4	-33.2	71.19	26.4	65.4	97.99	30.6	37.6		
Tax	137.45	54.7	9.9	130.77	55.5	-4.9	126.29	59.8	-3.4	152.83	56.6	21.0	148.23	46.3	-3.0		
Industry Margin	43.54	17.3	15.7	40.25	17.1	-7.6	42.00	19.9	4.3	45.85	17.0	9.2	74.27	23.2	62.0		
<b>Italy</b>																	
Composite Barrel	280.84	12.2	265.11	-5.6	240.27	-9.4	281.01	17.0	302.59	7.7							
Crude CIF Price	70.88	25.2	33.3	64.70	24.4	-8.7	43.24	18.0	-33.2	71.45	25.4	65.2	99.91	33.0	39.8		
Tax	168.06	59.8	7.1	159.07	60.0	-5.3	155.57	64.7	-2.2	166.90	59.4	7.3	130.52	43.1	-21.8		
Industry Margin	41.90	14.9	4.3	41.34	15.6	-1.3	41.46	17.3	0.3	42.66	15.2	2.9	72.16	23.8	69.1		
<b>United Kingdom</b>																	
Composite Barrel	267.01	27.2	32.8	65.58	25.4	-3.2	236.21	-8.6	289.22	22.4	335.90	16.1					
Crude CIF Price	72.65	51.2	5.5	158.37	61.3	-3.1	155.51	65.8	-1.8	172.57	59.7	11.0	159.55	47.5	-7.5		
Tax	163.50	39.37	11.6	22.2	34.61	13.4	12.2	36.08	15.3	4.3	45.45	15.7	26.0	71.68	21.3	57.7	
<b>G7</b>																	
Composite Barrel	219.43	14.8	209.20	-4.7	188.02	-10.1	230.12	22.4	262.71	14.2							
Crude CIF Price	69.79	31.8	30.9	63.70	30.5	-8.7	44.62	18.9	-32.0	71.20	24.6	59.6	104.66	31.2	47.0		
Tax	110.27	50.3	8.4	106.63	51.0	-3.3	105.12	55.9	-1.4	115.55	50.2	9.9	105.65	40.2	-8.6		
Industry Margin	39.37	17.9	8.9	38.86	18.6	-1.3	39.45	21.0	1.5	44.62	19.4	13.1	56.54	21.5	26.7		
<b>OECD</b>																	
Composite Barrel	225.15	12.8	216.60	-3.8	191.45	-11.6	232.53	21.5	270.74	16.4							
Crude CIF Price	70.89	31.5	32.1	64.62	29.8	-8.8	43.97	23.0	-32.0	69.90	30.1	59.0	99.84	36.9	42.8		
Tax	109.45	48.6	7.1	109.92	50.7	0.4	104.01	54.3	-5.4	112.82	48.5	8.5	102.19	37.7	-9.4		
Industry Margin	44.81	19.9	2.6	42.06	19.4	-6.1	43.47	22.7	3.4	49.81	21.4	14.6	68.71	25.4	37.9		

**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)

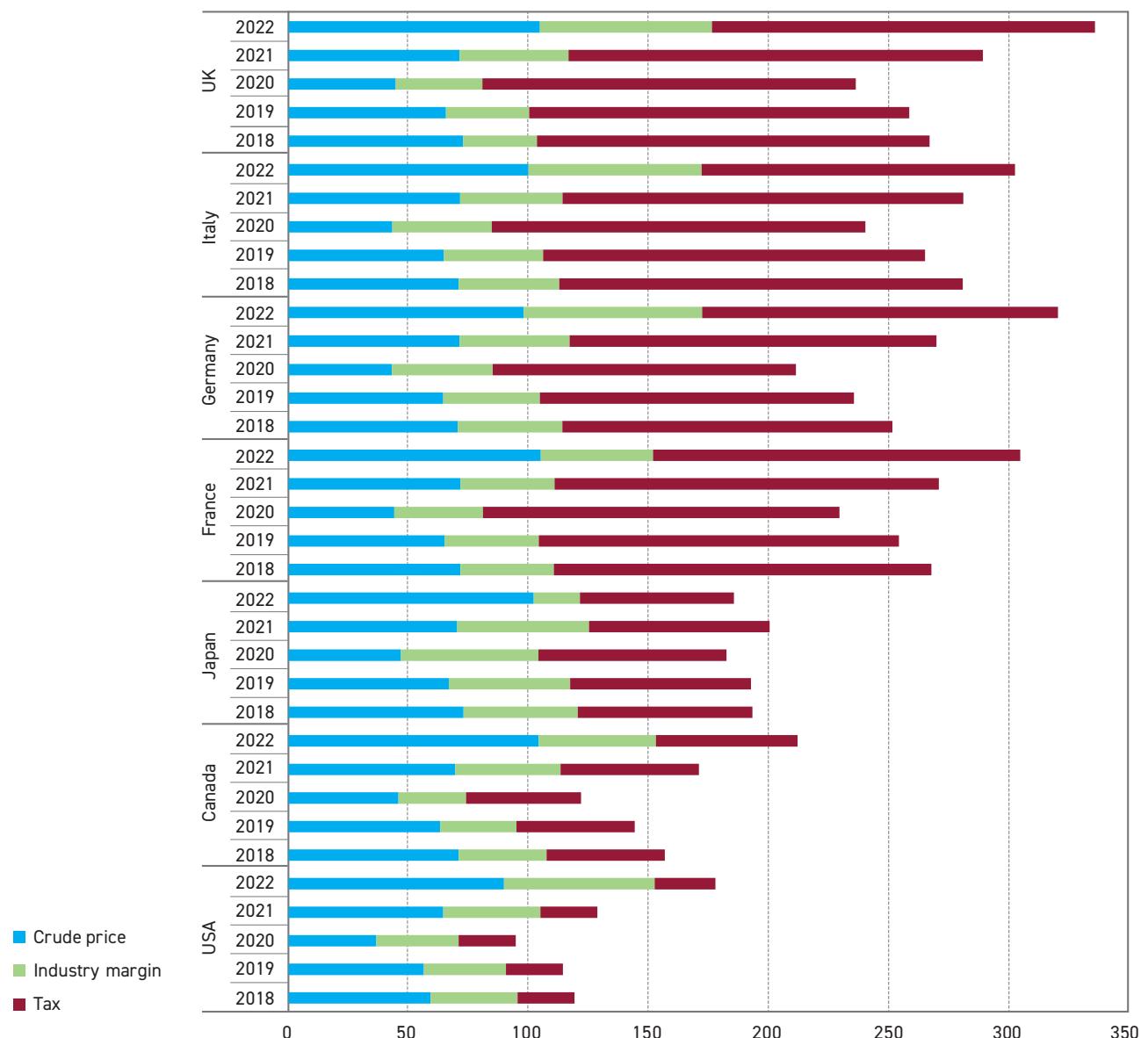


Table 8.2  
Tax to CIF crude oil price ratio in major OECD oil consuming countries

(ratio)

	2018	2019	2020	2021	2022
USA	0.40	0.42	0.65	0.37	0.28
Canada	0.69	0.78	1.05	0.83	0.57
Japan	1.00	1.13	1.67	1.07	0.63
France	2.20	2.31	3.37	2.23	1.46
Germany	1.95	2.03	2.93	2.15	1.51
Italy	2.37	2.46	3.60	2.34	1.31
UK	2.25	2.41	3.49	2.42	1.52
G7	1.58	1.67	2.42	1.65	1.05
OECD	1.54	1.70	2.37	1.61	1.02

**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 (%)

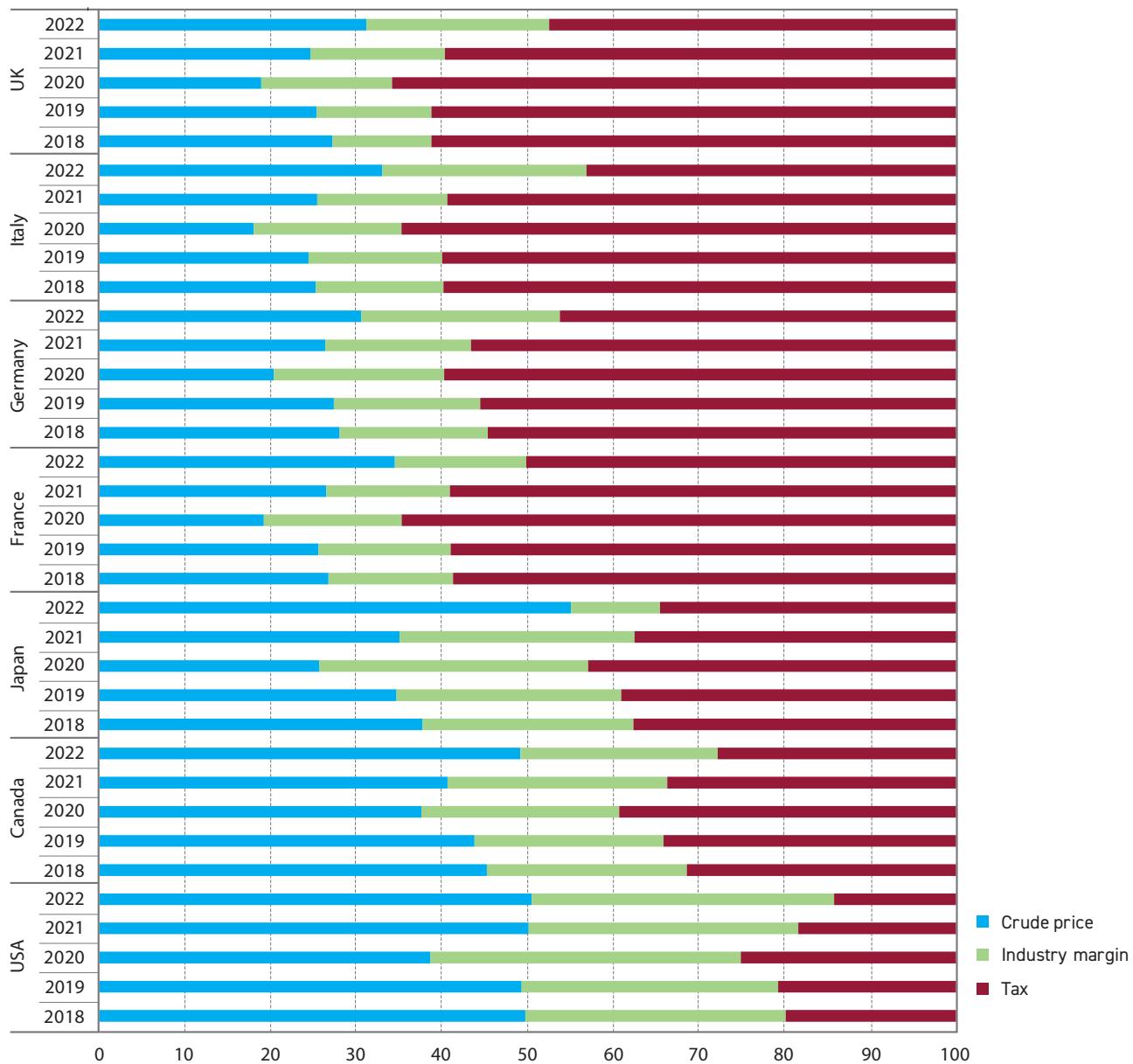


Table 8.3  
Euro Big 4 household energy prices, 2022 (\$/toe NCV)

	Automotive diesel	Premium unleaded 95 RON	Liquefied petroleum gas	Natural gas	Electricity
Tax	1,060	1,248	500	257	719
Non-tax	1,274	1,186	1,040	1,082	2,863
<b>Total price</b>	<b>2,334</b>	<b>2,434</b>	<b>1,540</b>	<b>1,339</b>	<b>3,582</b>
Tax share (%)	45	51	32	19	20

**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

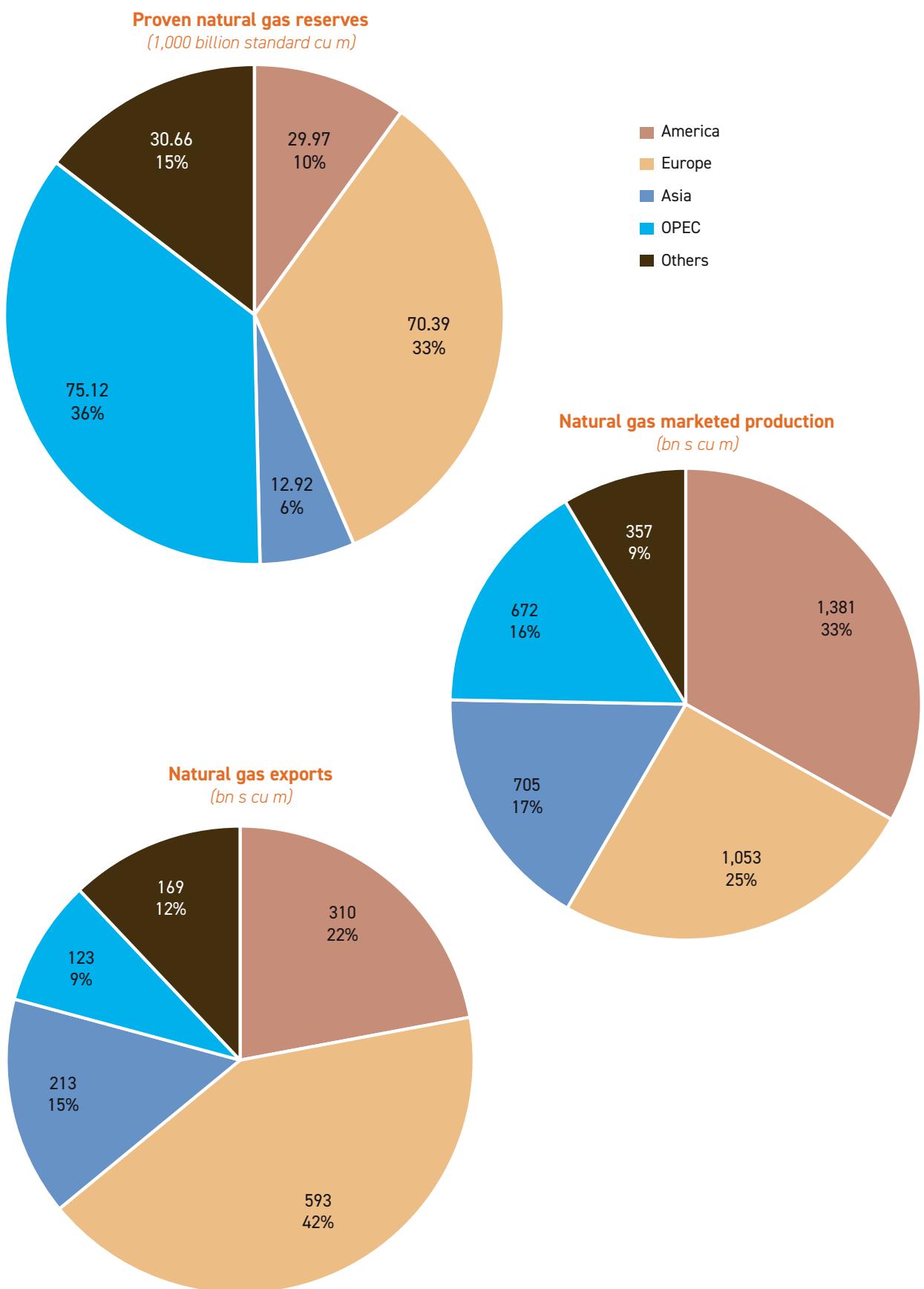
Table 9.1  
World proven natural gas reserves by country

(bn s cu m)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>15,808</b>	<b>15,913</b>	<b>15,933</b>	<b>15,388</b>	<b>19,182</b>	<b>24.7</b>
Canada	2,094	2,471	2,471	2,471	2,464	-0.3
Chile	4	8	8	10	10	0.0
Mexico	273	263	283	305	312	2.2
United States	13,437	13,171	13,171	12,602	16,396	30.1
<b>OECD Europe</b>	<b>2,987</b>	<b>2,858</b>	<b>2,697</b>	<b>2,634</b>	<b>2,644</b>	<b>0.4</b>
Denmark	69	66	64	63	62	-1.6
Germany	30	25	22	20	13	-35.1
Italy	48	46	44	40	35	-11.7
Netherlands	196	147	103	93	93	0.2
Norway	2,226	2,165	2,095	2,072	2,081	0.4
Poland	73	85	85	84	84	0.0
United Kingdom	276	260	221	200	216	8.2
Others	69	64	63	62	60	-3.6
<b>OECD Asia Pacific</b>	<b>3,772</b>	<b>3,475</b>	<b>3,335</b>	<b>3,225</b>	<b>3,225</b>	<b>0.0</b>
Australia	3,193	2,846	2,716	2,587	2,587	0.0
Japan	27	26	24	23	23	0.0
New Zealand	53	53	54	50	50	0.6
Others	499	550	541	565	565	0.0
<b>China</b>	<b>2,779</b>	<b>2,834</b>	<b>2,922</b>	<b>2,893</b>	<b>3,142</b>	<b>8.6</b>
<b>India</b>	<b>1,340</b>	<b>1,381</b>	<b>1,372</b>	<b>1,373</b>	<b>1,374</b>	<b>0.1</b>
<b>Other Asia</b>	<b>5,926</b>	<b>5,569</b>	<b>5,375</b>	<b>5,292</b>	<b>5,182</b>	<b>-2.1</b>
Bangladesh	325	300	284	264	223	-15.4
Brunei	246	240	233	228	228	0.0
Indonesia	1,408	1,233	1,118	1,063	1,008	-5.2
Malaysia	2,290	2,213	2,206	2,172	2,172	0.0
Myanmar	256	248	240	232	232	0.0
Pakistan	615	603	612	656	656	0.0
Thailand	171	138	112	97	83	-14.8
Vietnam	195	190	186	186	186	0.0
Others	420	404	384	394	394	0.0
<b>Latin America</b>	<b>7,392</b>	<b>7,391</b>	<b>7,235</b>	<b>7,249</b>	<b>7,302</b>	<b>0.7</b>
Argentina	372	400	376	392	411	4.8
Bolivia	253	253	253	253	253	0.0
Brazil	368	365	338	379	420	10.7
Colombia	107	90	83	90	96	6.8
Ecuador	11	11	10	10	10	0.0
Peru	300	287	287	287	300	4.5
Trinidad & Tobago	298	302	289	289	294	1.6
<b>Venezuela</b>	<b>5,674</b>	<b>5,674</b>	<b>5,590</b>	<b>5,541</b>	<b>5,511</b>	<b>-0.5</b>
Others	9	9	9	8	8	0.0
<b>Middle East</b>	<b>78,485</b>	<b>80,742</b>	<b>80,781</b>	<b>81,322</b>	<b>82,338</b>	<b>1.3</b>
<b>IR Iran</b>	<b>33,330</b>	<b>33,899</b>	<b>33,988</b>	<b>33,988</b>	<b>33,988</b>	<b>0.0</b>
<b>Iraq</b>	<b>3,729</b>	<b>3,714</b>	<b>3,714</b>	<b>3,714</b>	<b>3,714</b>	<b>0.0</b>
<b>Kuwait</b>	<b>1,784</b>	<b>1,784</b>	<b>1,784</b>	<b>1,784</b>	<b>1,784</b>	<b>0.0</b>
Oman	677	674	673	673	673	0.0
Qatar	23,846	23,831	23,831	23,831	23,831	0.0
<b>Saudi Arabia</b>	<b>8,260</b>	<b>8,366</b>	<b>8,437</b>	<b>8,507</b>	<b>9,514</b>	<b>11.8</b>
<b>United Arab Emirates</b>	<b>6,091</b>	<b>7,726</b>	<b>7,730</b>	<b>8,200</b>	<b>8,210</b>	<b>0.1</b>
Others	767	748	624	624	624	0.0
<b>Africa</b>	<b>17,969</b>	<b>17,998</b>	<b>17,945</b>	<b>18,035</b>	<b>17,928</b>	<b>-0.6</b>
<b>Algeria</b>	<b>4,504</b>	<b>4,504</b>	<b>4,504</b>	<b>4,504</b>	<b>4,504</b>	<b>0.0</b>
<b>Angola</b>	<b>383</b>	<b>343</b>	<b>301</b>	<b>301</b>	<b>129</b>	<b>-57.2</b>
Cameroon	171	170	179	176	176	0.0
<b>Congo</b>	<b>285</b>	<b>284</b>	<b>284</b>	<b>284</b>	<b>284</b>	<b>0.0</b>
Egypt	2,221	2,209	2,209	2,209	2,209	0.0
<b>Equatorial Guinea</b>	<b>42</b>	<b>39</b>	<b>39</b>	<b>39</b>	<b>39</b>	<b>0.0</b>
<b>Gabon</b>	<b>26</b>	<b>26</b>	<b>26</b>	<b>26</b>	<b>26</b>	<b>0.0</b>
<b>Libya</b>	<b>1,505</b>	<b>1,505</b>	<b>1,505</b>	<b>1,505</b>	<b>1,505</b>	<b>0.0</b>
Mozambique	2,840	2,840	2,840	2,840	2,840	0.0
<b>Nigeria</b>	<b>5,675</b>	<b>5,761</b>	<b>5,750</b>	<b>5,848</b>	<b>5,913</b>	<b>1.1</b>
Others	318	316	309	303	303	0.0
<b>Russia</b>	<b>49,571</b>	<b>49,084</b>	<b>47,759</b>	<b>47,759</b>	<b>47,759</b>	<b>0.0</b>
<b>Other Eurasia</b>	<b>19,437</b>	<b>19,910</b>	<b>19,899</b>	<b>19,899</b>	<b>19,899</b>	<b>0.0</b>
Azerbaijan	1,435	1,917	1,917	1,917	1,917	0.0
Kazakhstan	1,830	1,830	1,830	1,830	1,830	0.0
Turkmenistan	13,950	13,950	13,950	13,950	13,950	0.0
Ukraine	358	349	338	338	338	0.0
Uzbekistan	1,846	1,846	1,846	1,846	1,846	0.0
Others	18	18	18	18	18	0.0
<b>Other Europe</b>	<b>103</b>	<b>97</b>	<b>92</b>	<b>88</b>	<b>88</b>	<b>0.0</b>
Bulgaria	4	4	4	4	4	0.0
Romania	87	81	77	74	74	0.0
Others	12	12	11	10	10	0.0
<b>Total world</b>	<b>205,569</b>	<b>207,252</b>	<b>205,345</b>	<b>205,157</b>	<b>210,063</b>	<b>2.4</b>
<i>of which</i>						
OPEC	71,288	73,626	73,651	74,242	75,121	1.2
<i>OPEC percentage</i>	34.7	35.5	35.9	36.2	35.8	
OECD	22,567	22,246	21,965	21,247	25,051	17.9

**Notes:** Figures as at year-end.

Graph 9.1  
Natural gas flows during 2022



## Natural gas data

Table 9.2

**Yearly and cumulative marketed natural gas production in OPEC Members**

(million scu m)

### Marketed natural gas production yearly

	1960	1970	1980	1990	2000	2010	2022
Algeria	0	2,599	11,647	51,600	83,119	84,615	100,513
Angola	0	40	260	540	570	733	5,505
Congo	0	10	10	0	0	575	423
Equatorial Guinea	0	0	0	0	30	6,540	8,105
Gabon	7	20	70	100	80	80	463
IR Iran	960	12,881	7,138	24,200	60,240	187,357	262,261
Iraq	604	780	1,281	3,980	3,150	7,511	9,778
Kuwait	943	2,037	4,071	4,190	9,600	11,733	13,883
Libya	0	294	5,170	6,200	5,880	16,814	23,807
Nigeria	0	111	1,070	4,010	12,460	28,099	44,307
Saudi Arabia	0	1,230	11,431	33,520	49,810	87,660	122,895
United Arab Emirates	0	756	6,863	22,110	38,380	51,282	55,574
Venezuela	4,958	7,710	14,805	21,966	27,801	19,728	24,421
<b>OPEC</b>	<b>7,472</b>	<b>28,468</b>	<b>63,816</b>	<b>172,416</b>	<b>291,120</b>	<b>502,727</b>	<b>671,936</b>

### Cumulative marketed natural gas production up to and including year

	1960	1970	1980	1990	2000	2010	2022
Algeria	0	15,428	89,208	472,552	1,102,721	1,940,983	3,020,994
Angola	0	40	844	4,684	10,354	17,147	71,918
Congo	0	10	119	149	149	1,797	10,533
Equatorial Guinea	0	0	0	0	70	25,870	115,478
Gabon	7	147	2,132	3,162	4,142	5,012	10,123
IR Iran	960	33,063	203,263	353,113	790,718	1,906,280	4,644,934
Iraq	604	6,991	19,128	43,668	72,138	109,022	215,867
Kuwait	943	22,483	59,123	109,793	179,932	290,934	473,807
Libya	0	294	43,981	93,091	155,921	269,950	501,046
Nigeria	0	861	6,387	35,998	95,883	335,691	869,887
Saudi Arabia	0	8,588	58,961	275,956	708,196	1,410,617	2,732,307
United Arab Emirates	0	2,379	30,627	178,652	491,312	967,964	1,627,389
Venezuela	4,958	69,435	184,608	363,836	628,796	862,302	1,144,521
<b>OPEC</b>	<b>7,472</b>	<b>159,719</b>	<b>698,381</b>	<b>1,934,654</b>	<b>4,240,332</b>	<b>8,143,569</b>	<b>15,438,805</b>

Table 9.3

## World marketed production of natural gas by country

(million s cu m)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>1,098,499</b>	<b>1,179,810</b>	<b>1,160,710</b>	<b>1,194,846</b>	<b>1,245,787</b>	<b>4.3</b>
Canada	195,465	188,020	183,528	190,348	202,992	6.6
Chile	1,522	1,750	1,402	1,275	1,387	8.8
Mexico	28,299	27,038	25,581	23,917	25,710	7.5
United States	873,213	963,002	950,199	979,306	1,015,698	3.7
<b>OECD Europe</b>	<b>234,419</b>	<b>218,708</b>	<b>202,087</b>	<b>193,849</b>	<b>204,651</b>	<b>5.6</b>
Denmark	4,119	3,133	1,840	1,864	2,170	16.4
Germany	5,945	5,741	4,874	4,806	4,569	-4.9
Italy	5,451	4,851	3,932	3,335	3,328	-0.2
Netherlands	38,942	33,607	24,167	21,962	18,741	-14.7
Norway	126,415	119,050	116,208	118,301	126,961	7.3
Poland	5,616	5,669	5,593	5,563	5,484	-1.4
United Kingdom	40,658	40,287	39,925	33,077	38,392	16.1
Others	7,273	6,370	5,548	4,941	5,006	1.3
<b>OECD Asia Pacific</b>	<b>148,482</b>	<b>169,408</b>	<b>174,308</b>	<b>180,392</b>	<b>187,265</b>	<b>3.8</b>
Australia	130,519	151,924	153,014	156,154	162,973	4.4
Japan	4,407	3,872	3,589	3,934	4,224	7.4
New Zealand	4,408	4,516	4,477	3,916	3,736	-4.6
Others	9,148	9,096	13,228	16,388	16,332	-0.3
<b>China</b>	<b>154,800</b>	<b>169,970</b>	<b>185,900</b>	<b>201,100</b>	<b>213,470</b>	<b>6.2</b>
<b>India</b>	<b>31,700</b>	<b>31,160</b>	<b>27,700</b>	<b>32,300</b>	<b>33,304</b>	<b>3.1</b>
<b>Other Asia</b>	<b>293,540</b>	<b>290,910</b>	<b>268,800</b>	<b>269,980</b>	<b>270,621</b>	<b>0.2</b>
Bangladesh	26,450	25,310	23,500	24,000	24,940	3.9
Brunei	11,390	11,630	11,100	10,120	9,364	-7.5
Indonesia	70,200	63,940	56,000	55,770	54,859	-1.6
Malaysia	66,310	68,100	62,900	67,240	71,287	6.0
Myanmar	16,070	16,660	15,790	15,280	15,680	2.6
Pakistan	38,100	37,400	35,800	37,300	38,300	2.7
Thailand	36,440	37,420	33,700	33,100	27,719	-16.3
Vietnam	8,830	9,010	8,040	6,520	7,845	20.3
Others	19,750	21,440	21,970	20,650	20,627	-0.1
<b>Latin America</b>	<b>170,646</b>	<b>169,099</b>	<b>152,256</b>	<b>154,145</b>	<b>159,330</b>	<b>3.4</b>
Argentina	47,021	49,350	45,100	45,305	48,417	6.9
Bolivia	19,000	16,750	16,160	16,800	15,453	-8.0
Brazil	21,700	22,180	20,050	20,150	20,958	4.0
Colombia	9,500	9,770	9,500	9,780	9,878	1.0
Ecuador	350	310	300	310	313	1.0
Peru	12,420	13,700	11,990	11,800	11,900	0.8
Trinidad & Tobago	34,900	35,530	30,240	25,430	27,135	6.7
<b>Venezuela</b>	<b>24,785</b>	<b>20,559</b>	<b>18,026</b>	<b>23,720</b>	<b>24,421</b>	<b>3.0</b>
Others	970	950	890	850	854	0.5
<b>Middle East</b>	<b>653,102</b>	<b>673,563</b>	<b>707,602</b>	<b>723,229</b>	<b>736,470</b>	<b>1.8</b>
<b>IR Iran</b>	<b>233,060</b>	<b>241,730</b>	<b>249,630</b>	<b>257,119</b>	<b>262,261</b>	<b>2.0</b>
<b>Iraq</b>	<b>11,130</b>	<b>11,544</b>	<b>7,374</b>	<b>9,586</b>	<b>9,778</b>	<b>2.0</b>
<b>Kuwait</b>	<b>17,738</b>	<b>13,952</b>	<b>12,883</b>	<b>12,728</b>	<b>13,883</b>	<b>9.1</b>
Oman	34,900	35,110	35,300	37,470	38,766	3.5
Qatar	170,040	176,300	205,720	207,476	209,232	0.8
<b>Saudi Arabia</b>	<b>118,000</b>	<b>117,000</b>	<b>119,000</b>	<b>120,485</b>	<b>122,895</b>	<b>2.0</b>
<b>United Arab Emirates</b>	<b>47,624</b>	<b>55,097</b>	<b>55,064</b>	<b>54,485</b>	<b>55,574</b>	<b>2.0</b>
Others	20,610	22,830	22,630	23,880	24,081	0.8
<b>Africa</b>	<b>259,011</b>	<b>268,085</b>	<b>253,110</b>	<b>282,775</b>	<b>267,858</b>	<b>-5.3</b>
<b>Algeria</b>	<b>95,898</b>	<b>90,302</b>	<b>85,119</b>	<b>105,043</b>	<b>100,513</b>	<b>-4.3</b>
<b>Angola</b>	<b>9,614</b>	<b>10,546</b>	<b>11,313</b>	<b>8,820</b>	<b>5,505</b>	<b>-37.6</b>
Cameroon	1,600	2,360	2,380	2,330	2,340	0.4
<b>Congo</b>	<b>867</b>	<b>580</b>	<b>405</b>	<b>415</b>	<b>423</b>	<b>2.0</b>
Egypt	62,100	68,870	61,780	70,400	66,961	-4.9
<b>Equatorial Guinea</b>	<b>7,751</b>	<b>6,235</b>	<b>6,023</b>	<b>7,047</b>	<b>8,105</b>	<b>15.0</b>
<b>Gabon</b>	<b>530</b>	<b>464</b>	<b>502</b>	<b>454</b>	<b>463</b>	<b>2.0</b>
<b>Libya</b>	<b>23,220</b>	<b>26,830</b>	<b>20,930</b>	<b>24,244</b>	<b>23,807</b>	<b>-1.8</b>
<b>Nigeria</b>	<b>44,251</b>	<b>47,828</b>	<b>49,947</b>	<b>48,572</b>	<b>44,307</b>	<b>-8.8</b>
Others	13,180	14,070	14,710	15,450	15,434	-0.1
<b>Russia</b>	<b>680,430</b>	<b>692,680</b>	<b>651,400</b>	<b>719,200</b>	<b>630,759</b>	<b>-12.3</b>
<b>Other Eurasia</b>	<b>205,711</b>	<b>211,308</b>	<b>196,839</b>	<b>210,343</b>	<b>207,915</b>	<b>-1.2</b>
Azerbaijan	17,800	22,840	24,280	29,940	32,323	8.0
Kazakhstan	27,040	26,500	25,680	24,760	23,725	-4.2
Turkmenistan	84,440	86,700	82,700	87,830	87,780	-0.1
Ukraine	21,000	20,700	19,700	19,800	18,000	-9.1
Uzbekistan	55,170	54,300	44,200	47,690	45,782	-4.0
Others	261	268	279	323	305	-5.6
<b>Other Europe</b>	<b>11,700</b>	<b>11,340</b>	<b>10,230</b>	<b>9,991</b>	<b>9,733</b>	<b>-2.6</b>
Bulgaria	10	30	50	30	17	-43.3
Croatia	1,000	840	700	620	584	-5.8
Romania	10,120	9,950	9,010	8,920	8,727	-2.2
Others	570	520	470	421	405	-3.8
<b>Total world</b>	<b>3,942,040</b>	<b>4,086,041</b>	<b>3,990,942</b>	<b>4,172,150</b>	<b>4,167,163</b>	<b>-0.1</b>
of which						
OPEC	634,468	642,667	636,218	672,718	671,936	-0.1
OPEC percentage	16.1	15.7	15.9	16.1	16.1	
OECD	1,481,400	1,567,926	1,537,105	1,569,087	1,637,703	4.4

## Natural gas data

Table 9.4  
World natural gas exports by country

(million s cu m)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>182,044</b>	<b>208,586</b>	<b>220,623</b>	<b>267,968</b>	<b>280,782</b>	<b>4.8</b>
Canada	79,637	76,629	70,932	79,560	84,917	6.7
United States	102,162	131,884	149,640	188,376	195,833	4.0
Others	245	73	51	32	32	0.0
<b>OECD Europe</b>	<b>356,040</b>	<b>336,643</b>	<b>331,578</b>	<b>314,432</b>	<b>335,992</b>	<b>6.9</b>
Austria	41,576	40,152	38,617	36,708	21,544	-41.3
Belgium	25,223	24,606	24,632	22,710	43,433	91.3
Denmark	1,538	1,344	1,713	1,703	1,974	15.9
France	5,925	10,789	9,102	5,787	14,626	152.7
Germany	78,398	67,989	76,251	71,298	53,306	-25.2
Italy	396	326	316	316	316	0.0
Netherlands	54,475	47,664	39,976	43,276	41,271	-4.6
Norway	119,950	113,250	112,270	111,456	118,454	6.3
Spain	3,244	1,121	1,188	3,018	5,256	74.2
United Kingdom	7,610	8,044	9,595	6,816	22,501	230.1
Others	17,705	21,358	17,918	11,344	13,311	17.3
<b>OECD Asia Pacific</b>	<b>91,770</b>	<b>100,433</b>	<b>106,062</b>	<b>112,859</b>	<b>113,522</b>	<b>0.6</b>
Australia	91,582	100,253	102,434	106,803	107,486	0.6
Others	188	180	3,628	6,056	6,036	-0.3
<b>China</b>	<b>3,402</b>	<b>3,640</b>	<b>5,436</b>	<b>5,730</b>	<b>6,024</b>	<b>5.1</b>
<b>India</b>	<b>90</b>	<b>90</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.0</b>
<b>Other Asia</b>	<b>92,880</b>	<b>93,040</b>	<b>89,420</b>	<b>91,138</b>	<b>93,289</b>	<b>2.4</b>
Brunei	8,270	8,590	7,990	7,300	6,149	-15.8
Indonesia	29,620	24,860	24,250	23,540	23,449	-0.4
Malaysia	33,650	35,560	34,210	37,578	40,951	9.0
Myanmar	11,310	12,240	11,370	11,350	11,370	0.2
Others	10,030	11,790	11,600	11,370	11,370	0.0
<b>Latin America</b>	<b>35,290</b>	<b>35,460</b>	<b>32,880</b>	<b>28,433</b>	<b>29,233</b>	<b>2.8</b>
Argentina	300	1,710	1,470	2,083	2,883	38.4
Bolivia	13,840	11,750	11,810	12,900	10,900	-15.5
Peru	4,700	5,200	5,080	4,000	4,000	0.0
Trinidad & Tobago	16,380	16,800	14,240	9,280	11,280	21.6
Others	70	0	280	170	170	0.0
<b>Middle East</b>	<b>161,068</b>	<b>164,378</b>	<b>160,556</b>	<b>174,149</b>	<b>177,476</b>	<b>1.9</b>
<b>IR Iran</b>	<b>12,240</b>	<b>12,350</b>	<b>11,520</b>	<b>18,425</b>	<b>18,794</b>	<b>2.0</b>
Oman	13,120	13,430	12,810	13,360	16,887	26.4
Qatar	126,770	129,340	127,460	134,515	134,515	0.0
<b>United Arab Emirates</b>	<b>8,938</b>	<b>9,258</b>	<b>8,766</b>	<b>7,849</b>	<b>7,280</b>	<b>0.0</b>
<b>Africa</b>	<b>102,686</b>	<b>106,502</b>	<b>97,920</b>	<b>122,467</b>	<b>114,788</b>	<b>-6.3</b>
<b>Algeria</b>	<b>51,424</b>	<b>42,776</b>	<b>39,459</b>	<b>54,759</b>	<b>48,920</b>	<b>-10.7</b>
<b>Angola</b>	<b>5,486</b>	<b>5,904</b>	<b>6,367</b>	<b>5,084</b>	<b>7,540</b>	<b>0.0</b>
Egypt	2,450	5,890	2,820	10,520	12,043	14.5
<b>Equatorial Guinea</b>	<b>5,509</b>	<b>4,679</b>	<b>4,026</b>	<b>4,694</b>	<b>5,737</b>	<b>22.2</b>
<b>Libya</b>	<b>4,251</b>	<b>5,700</b>	<b>4,292</b>	<b>3,066</b>	<b>2,479</b>	<b>-19.1</b>
<b>Nigeria</b>	<b>28,626</b>	<b>35,953</b>	<b>35,586</b>	<b>38,464</b>	<b>32,190</b>	<b>-16.3</b>
Others	4,940	5,600	5,370	5,880	5,880	0.0
<b>Russia</b>	<b>248,470</b>	<b>258,240</b>	<b>236,880</b>	<b>242,810</b>	<b>184,400</b>	<b>-24.1</b>
<b>Other Eurasia</b>	<b>76,040</b>	<b>77,730</b>	<b>61,530</b>	<b>76,840</b>	<b>70,658</b>	<b>-8.0</b>
Azerbaijan	9,190	11,300	13,310	19,280	22,918	18.9
Kazakhstan	17,550	17,840	12,640	12,150	9,930	-18.3
Turkmenistan	36,400	36,370	32,000	39,690	35,690	-10.1
Uzbekistan	12,900	12,220	3,580	5,720	2,120	0.0
<b>Other Europe</b>	<b>105</b>	<b>542</b>	<b>432</b>	<b>602</b>	<b>1,682</b>	<b>179.2</b>
Bulgaria	0	500	400	525	690	31.3
Others	105	42	32	77	992	1,188.3
<b>Total world</b>	<b>1,349,884</b>	<b>1,385,284</b>	<b>1,343,317</b>	<b>1,437,429</b>	<b>1,407,847</b>	<b>-2.1</b>
<i>of which</i>						
OPEC	116,473	116,620	110,016	132,341	122,939	-7.1
<i>OPEC percentage</i>	8.6	8.4	8.2	9.2	8.7	
OECD	629,854	645,662	658,263	695,259	730,296	5.0

### Notes:

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

**Table 9.5**  
**World natural gas imports by country**

(million s cu m)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>164,931</b>	<b>168,094</b>	<b>159,568</b>	<b>169,482</b>	<b>161,352</b>	<b>-4.8</b>
Canada	23,175	26,071	23,642	24,208	21,793	-10.0
Mexico	55,306	59,430	58,820	61,270	57,422	-6.3
United States	81,802	77,641	72,241	79,516	77,191	-2.9
Others	4,648	4,952	4,865	4,488	4,946	10.2
<b>OECD Europe</b>	<b>684,340</b>	<b>702,659</b>	<b>661,641</b>	<b>673,578</b>	<b>611,928</b>	<b>-9.2</b>
Austria	49,511	51,374	45,080	41,460	29,695	-28.4
Belgium	43,641	43,367	42,696	41,004	55,504	35.4
France	49,316	54,670	46,140	45,410	50,358	10.9
Germany	162,392	158,897	155,493	154,452	124,530	-19.4
Italy	67,877	70,912	66,227	72,728	66,446	-8.6
Netherlands	60,895	59,286	59,922	57,426	56,923	-0.9
Poland	45,170	44,790	41,039	39,361	13,743	-65.1
Spain	34,817	37,190	32,489	36,968	36,285	-1.8
Turkey	50,007	45,212	48,125	58,701	48,852	-16.8
United Kingdom	48,177	47,620	43,925	51,071	49,861	-2.4
Others	72,537	89,341	80,505	74,997	79,731	6.3
<b>OECD Asia Pacific</b>	<b>184,384</b>	<b>171,661</b>	<b>168,336</b>	<b>166,598</b>	<b>146,287</b>	<b>-12.2</b>
Australia	6,258	5,772	6,711	6,069	2,787	-54.1
Japan	119,372	111,308	107,286	98,780	87,640	-11.3
South Korea	58,022	53,813	53,559	60,951	55,061	-9.7
Others	732	768	780	798	799	0.1
<b>China</b>	<b>121,280</b>	<b>129,730</b>	<b>136,520</b>	<b>162,820</b>	<b>145,249</b>	<b>-10.8</b>
<b>India</b>	<b>29,590</b>	<b>31,500</b>	<b>33,900</b>	<b>31,100</b>	<b>29,116</b>	<b>-6.4</b>
<b>Other Asia</b>	<b>66,460</b>	<b>74,380</b>	<b>77,460</b>	<b>82,590</b>	<b>96,330</b>	<b>16.6</b>
Malaysia	2,350	4,190	3,950	2,870	4,967	73.1
Pakistan	8,970	10,700	9,760	11,000	11,932	8.5
Singapore	14,500	14,440	15,570	15,860	15,118	-4.7
Thailand	14,200	14,370	14,390	16,050	17,131	6.7
Others	26,440	30,680	33,790	36,810	47,182	28.2
<b>Latin America</b>	<b>24,120</b>	<b>20,610</b>	<b>21,200</b>	<b>30,240</b>	<b>16,687</b>	<b>-44.8</b>
Argentina	10,890	7,330	7,050	8,200	3,499	-57.3
Brazil	10,810	9,660	9,820	17,600	8,567	-51.3
<b>Venezuela</b>	0	0	0	0	0	0.0
Others	2,420	3,620	4,330	4,440	4,621	4.1
<b>Middle East</b>	<b>46,508</b>	<b>39,157</b>	<b>41,078</b>	<b>43,366</b>	<b>44,281</b>	<b>2.1</b>
<b>IR Iran</b>	5,910	1,270	20	0	0	0.0
<b>Iraq</b>	4,100	6,104	7,200	9,738	9,430	-3.2
Jordan	4,030	2,770	4,170	3,450	3,525	2.2
<b>Kuwait</b>	4,418	4,509	5,335	7,024	7,481	6.5
Oman	2,000	2,000	1,600	1,500	2,076	38.4
<b>United Arab Emirates</b>	26,050	22,504	22,653	21,554	21,770	1.0
Others	0	0	100	100	0	-100.0
<b>Africa</b>	<b>12,980</b>	<b>10,140</b>	<b>11,930</b>	<b>14,206</b>	<b>9,866</b>	<b>-30.5</b>
Egypt	3,060	0	2,150	4,110	4,151	1.0
Morocco	1,000	950	850	710	160	-77.5
South Africa	4,120	3,950	3,900	4,300	2,301	-46.5
Tunisia	4,100	4,440	4,130	4,050	2,202	-45.6
Others	700	800	900	1,036	1,052	1.5
<b>Russia</b>	<b>15,100</b>	<b>19,000</b>	<b>8,590</b>	<b>9,100</b>	<b>8,700</b>	<b>-4.4</b>
<b>Other Eurasia</b>	<b>44,170</b>	<b>46,370</b>	<b>41,230</b>	<b>40,042</b>	<b>28,662</b>	<b>-28.4</b>
Belarus	18,810	18,750	17,340	18,300	17,986	-1.7
Kazakhstan	8,500	7,900	3,200	1,700	1,376	-19.1
Ukraine	100	100	100	100	100	0.0
Others	16,760	19,620	20,590	19,942	9,200	-53.9
<b>Other Europe</b>	<b>9,660</b>	<b>10,830</b>	<b>10,140</b>	<b>11,650</b>	<b>14,221</b>	<b>22.1</b>
Bulgaria	2,970	3,240	3,210	3,160	5,745	81.8
Romania	1,790	2,360	1,750	2,580	1,837	-28.8
Others	4,900	5,230	5,180	5,910	6,639	12.3
<b>Total world</b>	<b>1,403,523</b>	<b>1,424,131</b>	<b>1,371,593</b>	<b>1,434,771</b>	<b>1,312,679</b>	<b>-8.5</b>
<i>of which</i>						
OPEC	40,478	34,387	35,208	38,316	38,680	1.0
<i>OPEC percentage</i>	2.9	2.4	2.6	2.7	2.9	
OECD	1,033,655	1,042,414	989,545	1,009,658	919,567	-8.9

**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)

	2018	2019	2020	2021	2022	% change 22/21
<b>OECD Americas</b>	<b>1,080,723</b>	<b>1,111,516</b>	<b>1,087,701</b>	<b>1,097,596</b>	<b>1,148,152</b>	<b>4.6</b>
Canada	138,296	138,954	133,021	137,805	143,011	3.8
Chile	6,164	6,229	6,233	6,270	6,855	9.3
Mexico	83,605	86,468	84,401	85,186	83,131	-2.4
United States	852,658	879,865	864,046	868,335	915,155	5.4
<b>OECD Europe</b>	<b>511,512</b>	<b>522,793</b>	<b>507,051</b>	<b>537,508</b>	<b>470,330</b>	<b>-12.5</b>
Austria	8,982	9,267	8,823	9,344	8,151	-12.8
Belgium	18,325	18,484	18,276	18,343	15,737	-14.2
France	40,861	41,614	38,562	40,866	36,963	-9.6
Germany	85,316	91,792	89,292	93,627	79,259	-15.3
Italy	72,667	74,316	70,920	76,108	68,546	-9.9
Netherlands	43,041	44,912	44,067	42,278	32,996	-22.0
Poland	20,836	21,311	21,993	23,417	19,468	-16.9
Spain	30,925	35,399	31,738	33,581	32,341	-3.7
Turkey	49,542	44,995	48,232	59,653	51,040	-14.4
United Kingdom	80,870	79,321	73,336	76,271	71,028	-6.9
Others	60,147	61,382	61,812	64,020	54,801	-14.4
<b>OECD Asia Pacific</b>	<b>233,235</b>	<b>236,515</b>	<b>235,610</b>	<b>224,230</b>	<b>224,654</b>	<b>0.2</b>
Australia	45,195	57,443	57,291	55,420	58,284	5.2
Japan	121,905	114,172	112,087	97,543	95,748	-1.8
New Zealand	4,547	4,533	4,461	3,814	3,706	-2.8
South Korea	52,012	50,743	51,751	57,013	56,476	-0.9
Others	9,576	9,624	10,020	10,440	10,440	0.0
<b>China</b>	<b>276,080</b>	<b>299,610</b>	<b>322,420</b>	<b>363,920</b>	<b>358,336</b>	<b>-1.5</b>
<b>India</b>	<b>61,200</b>	<b>62,570</b>	<b>61,600</b>	<b>63,400</b>	<b>60,743</b>	<b>-4.2</b>
<b>Other Asia</b>	<b>260,550</b>	<b>266,730</b>	<b>251,220</b>	<b>258,510</b>	<b>259,505</b>	<b>0.4</b>
Bangladesh	27,360	30,560	29,500	31,540	32,802	4.0
Brunei	3,120	3,040	3,110	2,820	2,634	-6.6
Indonesia	40,580	39,350	31,910	32,420	31,599	-2.5
Malaysia	34,700	36,980	33,720	35,790	37,222	4.0
Myanmar	4,760	4,420	4,740	4,100	4,264	4.0
Pakistan	47,070	48,100	45,560	48,300	51,198	6.0
Thailand	50,640	51,790	48,090	49,070	44,768	-8.8
Vietnam	8,830	9,010	8,040	6,520	7,302	12.0
Others	43,490	43,480	46,550	47,950	47,716	-0.5
<b>Latin America</b>	<b>148,667</b>	<b>145,470</b>	<b>131,875</b>	<b>145,310</b>	<b>139,288</b>	<b>-4.1</b>
Argentina	51,150	48,220	44,980	47,460	48,945	3.1
Bolivia	3,890	4,100	4,160	4,810	5,176	7.6
Brazil	32,440	31,840	29,870	37,660	33,894	-10.0
Colombia	9,760	10,130	10,250	10,010	10,110	1.0
Peru	7,720	8,620	7,140	8,320	8,736	5.0
Trinidad & Tobago	18,520	18,730	16,000	16,150	15,683	-2.9
<b>Venezuela</b>	<b>20,117</b>	<b>17,550</b>	<b>13,725</b>	<b>13,650</b>	<b>9,292</b>	<b>-31.9</b>
Others	5,070	6,280	5,750	7,250	7,453	2.8

**Table 9.6**  
**World natural gas demand by country**  
*(million s cu m)*

	2018	2019	2020	2021	2022	% change 22/21
<b>Middle East</b>	<b>541,946</b>	<b>550,434</b>	<b>553,399</b>	<b>567,645</b>	<b>577,209</b>	<b>1.7</b>
Bahrain	16,630	18,900	19,200	20,060	16,737	-16.6
<b>IR Iran</b>	<b>227,820</b>	<b>231,220</b>	<b>233,000</b>	<b>243,019</b>	<b>253,469</b>	<b>4.3</b>
<b>Iraq</b>	<b>13,025</b>	<b>17,598</b>	<b>18,798</b>	<b>19,324</b>	<b>19,865</b>	<b>2.8</b>
<b>Kuwait</b>	<b>21,860</b>	<b>18,460</b>	<b>18,218</b>	<b>19,752</b>	<b>21,364</b>	<b>8.2</b>
Oman	23,780	23,680	24,090	25,610	22,895	-10.6
Qatar	42,790	42,930	42,630	44,420	42,861	-3.5
<b>Saudi Arabia</b>	<b>118,000</b>	<b>122,720</b>	<b>119,000</b>	<b>120,000</b>	<b>122,400</b>	<b>2.0</b>
<b>United Arab Emirates</b>	<b>70,030</b>	<b>68,226</b>	<b>70,763</b>	<b>68,190</b>	<b>70,236</b>	<b>3.0</b>
Others	8,010	6,700	7,700	7,270	7,382	1.5
<b>Africa</b>	<b>146,470</b>	<b>154,746</b>	<b>155,219</b>	<b>161,159</b>	<b>161,901</b>	<b>0.5</b>
<b>Algeria</b>	<b>44,429</b>	<b>46,809</b>	<b>45,226</b>	<b>49,568</b>	<b>51,400</b>	<b>3.7</b>
<b>Angola</b>	<b>785</b>	<b>789</b>	<b>821</b>	<b>826</b>	<b>588</b>	<b>-28.8</b>
<b>Congo</b>	<b>867</b>	<b>580</b>	<b>405</b>	<b>415</b>	<b>425</b>	<b>2.5</b>
Egypt	62,780	63,840	61,810	65,160	62,658	-3.8
<b>Equatorial Guinea</b>	<b>1,523</b>	<b>1,477</b>	<b>1,876</b>	<b>2,193</b>	<b>2,426</b>	<b>10.6</b>
<b>Gabon</b>	<b>530</b>	<b>635</b>	<b>665</b>	<b>554</b>	<b>461</b>	<b>-16.8</b>
<b>Libya</b>	<b>5,040</b>	<b>6,939</b>	<b>8,554</b>	<b>10,475</b>	<b>10,580</b>	<b>1.0</b>
<b>Nigeria</b>	<b>10,756</b>	<b>12,705</b>	<b>14,361</b>	<b>10,108</b>	<b>12,117</b>	<b>19.9</b>
South Africa	5,080	5,050	4,950	5,290	5,264	-0.5
Tunisia	5,350	5,570	5,190	5,310	5,084	-4.3
Others	9,330	10,350	11,360	11,260	10,898	-3.2
<b>Russia</b>	<b>447,060</b>	<b>453,440</b>	<b>423,110</b>	<b>489,500</b>	<b>504,500</b>	<b>3.1</b>
<b>Other Eurasia</b>	<b>174,230</b>	<b>174,730</b>	<b>171,820</b>	<b>166,520</b>	<b>162,405</b>	<b>-2.5</b>
Azerbaijan	10,540	12,530	11,120	11,170	10,088	-9.7
Kazakhstan	17,990	16,560	16,240	14,300	15,201	6.3
Turkmenistan	48,040	50,330	50,700	48,140	50,066	4.0
Ukraine	32,200	29,900	31,000	26,800	20,100	-25.0
Uzbekistan	42,270	42,080	40,900	42,560	43,411	2.0
Others	23,190	23,330	21,860	23,550	23,539	0.0
<b>Other Europe</b>	<b>21,360</b>	<b>21,670</b>	<b>19,970</b>	<b>21,690</b>	<b>18,463</b>	<b>-14.9</b>
Bulgaria	2,980	2,770	2,860	3,190	2,519	-21.0
Romania	11,910	12,310	10,760	11,500	9,304	-19.1
Others	6,470	6,590	6,350	7,000	6,640	-5.1
<b>Total world</b>	<b>3,903,032</b>	<b>4,000,224</b>	<b>3,920,995</b>	<b>4,096,989</b>	<b>4,085,486</b>	<b>-0.3</b>
<i>of which</i>						
OPEC	534,782	545,710	545,413	558,074	574,623	3.0
<i>OPEC percentage</i>	13.7	13.6	13.9	13.6	14.1	
OECD	1,825,470	1,870,824	1,830,362	1,859,334	1,843,136	-0.9



# General notes

## 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, e.g. 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, including 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 (e.g. 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 petroleum products

**Crude oil:** 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 of 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 rate. The present 'modified Geneva I + US dollar' currency basket includes the US dollar, the Chinese yuan, the Euro, the Indian rupee, the Turkish lira, the Japanese yen, the South Korean won, the UK pound, the Vietnamese dong and the Swiss franc.

**Kerosene:** medium hydrocarbon distillates in the 150° to 280° C distillation range and 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 and 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 (e.g. Orimulsion), non-hydrocarbon compounds added to or blended with a product to modify fuel properties (octane, cetane, cold properties, etc.) e.g. alcohols (methanol, ethanol), ethers (such as MTBE (methyl tertiary butyl ether), ETBE (ethyl tertiary butyl ether), TAME (tertiary amyl methyl ether) or esters (e.g. 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 1 January 1987. Up to 15 June 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 16 June 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); Zafiro (Equatorial Guinea, as of 25 May 2017); Rabi Light (Gabon, as of 1 July 2016); Iran Heavy (IR Iran); Basrah Medium (Iraq; prior to 2022, ORB based on Basrah Light); Kuwait Export (Kuwait); Es Sider (Libya); Bonny Light (Nigeria); 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:** Canada, Chile, 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, Nepal, New Caledonia, Niue, Pakistan, Papua New Guinea, Philippines, Samoa, Singapore, Solomon Islands, Sri Lanka, Thailand, Tonga, Tuvalu, Vanuatu, Vietnam, and Other Other Asia.

## General Notes

**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 (1975–95, 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, Luxembourg, 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

### Miscellaneous:

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

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	NODCO	National Oil Distribution Company (Qatar)
ADMA	Abu Dhabi Marine Areas	NPHR	New Port Harcourt Refinery
ADMA-OPCO	Abu Dhabi Marine Operating Company	Oasis	Oasis Oil Company of the Libya, Inc
ADNOC	Abu Dhabi National Oil Company	Occidental	Occidental Petroleum Corporation
ADOC	Abu Dhabi Oil Company	OMV	OMV Aktiengesellschaft
Agip	Agip SpA	PDVSA	Petroleos de Venezuela SA
Agoco	Arabian Gulf Oil Company (Libya)	Perenco	
Amerada Hess	Amerada Hess Corporation	Pertamina	Perusahaan Pertambangan Minyak Dan Gas Bumi Negara
AOC	Arabian Oil Company	PetroChina	PetroChina Co, Ltd
Aramco	Saudi Arabian Oil Company (Saudi Aramco)	Petroecuador	National oil company of Ecuador
Arco	Atlantic Richfield Company	Petroindustrial	Refinery operations company of Ecuador
Asameria	Asameria 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	SNP	China Petroleum & Chemical Corporation
ChevronTexaco	ChevronTexaco Corporation	SNPC	Société Nationale des Pétroles du Congo
Conoco	Continental Oil Company	Sonangol	Sociedade Nacional de Combustíveis de Angola
Corpoven	Corpoven SA	Sonatrach	Société Nationale de Transport et de Commercialisation des Hydrocarbures
DPC	Dubai Petroleum Company	Stancal	Standard Oil Company of California
EGPC	Egyptian General Petroleum Corporation	PT Stanvac	PT Stanvac Indonesia
ENOC	Emirates National Oil Company (UAE)	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	TOT	TotalEnergies SE
GOC	Gabon Oil Company	Total	Total
Gulf	Gulf Oil Corporation	Union Oil	Union Oil Company of California
Hispanoil	Hispanica de Petroleos SA	VLO	Valero Energy Corporation
INOC	Iraq National Oil Company	VOO	Veba Oil Operations (Libya)
Inpex	Indonesia Petroleum Ltd	Waha Oil	Waha Oil Company (Libya)
JORC	Jeddah Oil Refinery Company	Wintershall	Wintershall AG
KRPC	Kaduna Refinery & Petrochemical Company	WRPC	Warri Refinery & Petrochemical Company
KNPC	Kuwait National Petroleum Company KSC	Zadco	Zakum Development Company
KOC	Kuwait Oil Company KSC	ZOC	Zueitina Oil Company (Libya)
Lagoven	Lagoven SA		
Maraven	Maraven SA		
Maxus	Maxus Energy Corporation		
Mobil	Mobil Oil Corporation		
MPC	Marathon Petroleum Corporation		
NIGC	National Iranian Gas Company		
NIIOC	National Iranian Oil Company		
NNPC	Nigerian National Petroleum Corporation		
NOC	National Oil Corporation (Libya)		

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## General Notes

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## 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)	Petroleum products	(b/tonne)
Algeria	8.052	Gasoline	8.4998
Angola	7.370	Kerosene	7.7652
Congo	7.113	Distillates	7.2296
Equatorial Guinea	7.190	Residuals	6.6208
Gabon	7.442		
IR Iran	7.382		
Iraq	7.379		
Kuwait	7.160		
Libya	7.570		
Nigeria	7.417		
Saudi Arabia	7.323		
United Arab Emirates	7.565		
Venezuela	6.656		
<b>OPEC</b>	<b>7.369</b>		

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