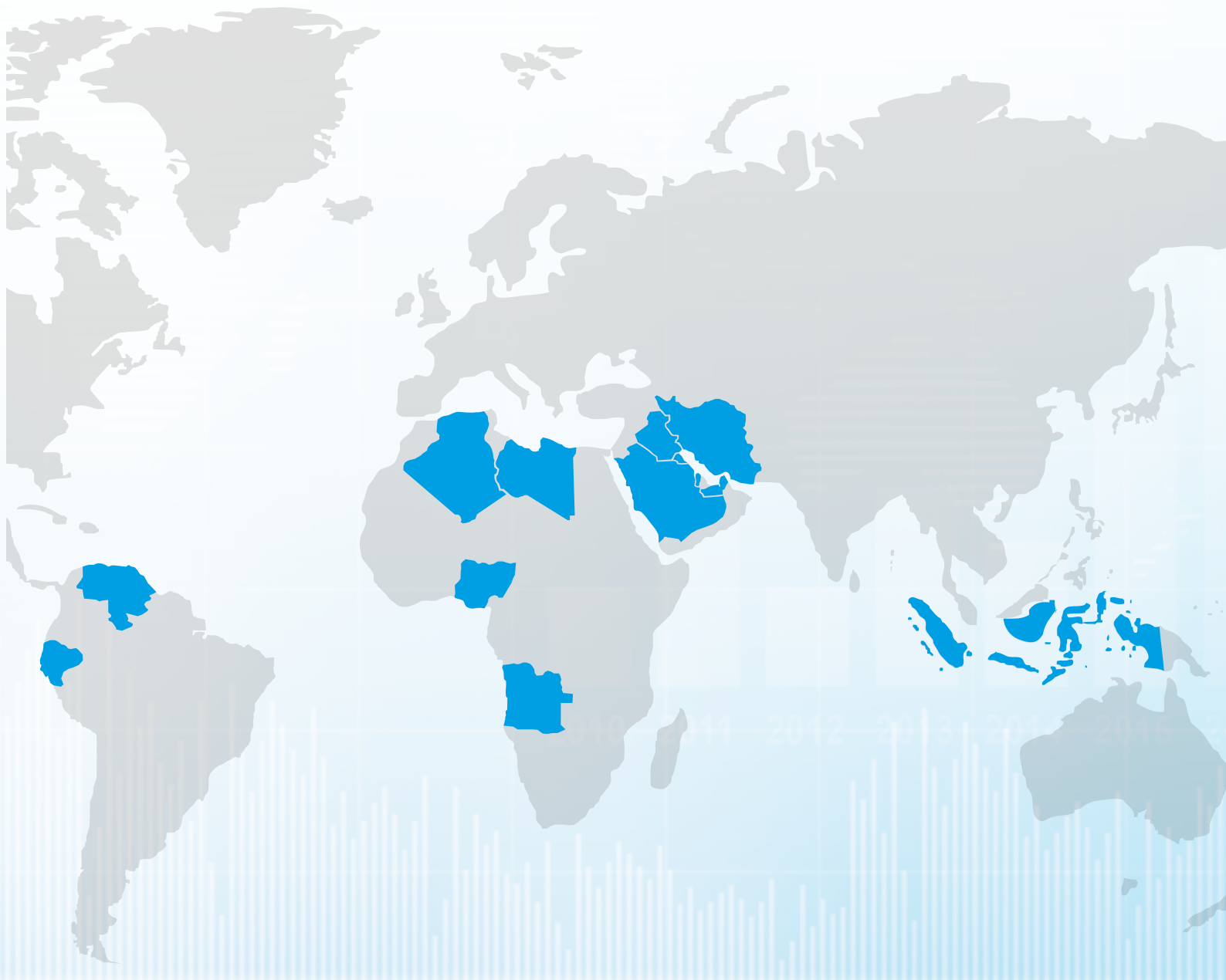


2016



OPEC

Annual Statistical Bulletin

Organization of the Petroleum Exporting Countries

Online Annual Statistical Bulletin 2016:



asb.opec.org

Team for the preparation of the OPEC Annual Statistical Bulletin

Director, Research Division

Omar S Abdul-Hamid

Project Leader

Head, Data Services Department

Adedapo Odulaja

Coordinator, Statistics Team

Hossein Hassani

Statistics Team

Pantelis Christodoulides, Klaus Stöger, Harvir Kalirai,
Mouhamad Moudassir, Mohammad Sattar, Ryszard Pospiech,
Anna Gredinger, Liane-Sophie Hamamciyan

Coordinator, IT Development Team

Mohamed Mekerba

IT Development Team

Hannes Eichner, Roland Kammerer, Zairul Arifin, Vedran Hrgovcic

Editorial Team

Head, Public Relations and Information Department

Hasan Hafidh

Editor

Alvino-Mario Fantini

Coordinator, Design and Production

Carola Bayer

Senior Production Assistant

Diana Lavnick

Graphic Designer

Tara Starnegg

Questions on data

Data queries: dataqueries@opec.org.

Advertising

The OPEC Annual Statistical Bulletin now accepts advertising.

For details, please contact the Head, PR and Information Department at the following address:

Organization of the Petroleum Exporting Countries

Helferstorferstrasse 17, A-1010 Vienna, Austria

Tel: +43 1 211 12/0

Fax: +43 1 216 43 20

Advertising: prid@opec.org

Website: www.opec.org

Photographs

Page 5: Courtesy Zhang Jianshe. Pages 7, 13, 21, 31, 47, 69, 85, 99: Shutterstock.

© 2016 Organization of the Petroleum Exporting Countries

ISSN 0475-0608

Foreword	5
Key messages	6
T a b l e s	
Section 1: Summary	7
Table 1.1 OPEC Members' facts and figures	8
Table 1.2 OPEC Members' crude oil production allocations	9
Section 2: Macro-economics	13
Table 2.1 OPEC Members' population	14
Table 2.2 OPEC Members' GDP at current market prices	15
Table 2.3 OPEC Members' values of exports	16
Table 2.4 OPEC Members' values of petroleum exports	17
Table 2.5 OPEC Members' values of imports	18
Table 2.6 Current account balances in OPEC Members	19
Table 2.7 Annual average exchange rates for OPEC Members	20
Section 3: Oil data: upstream	21
Table 3.1 World proven crude oil reserves by country	22
Table 3.2 Active rigs by country	23
Table 3.3 Wells completed in OPEC Members	25
Table 3.4 Producing wells in OPEC Members	26
Table 3.5 Daily and cumulative crude oil production in OPEC Members	27
Table 3.6 World crude oil production by country	28
Table 3.7 Non-OPEC oil supply and OPEC NGLs	29
Section 4: Oil data: downstream	31
Table 4.1 Refinery capacity in OPEC Members by company and location	32
Table 4.2 Charge refinery capacity in OPEC Members	34
Table 4.3 World refinery capacity by country	34
Table 4.4 World refinery throughput by country	36
Table 4.5 Output of petroleum products in OPEC Members	37
Table 4.6 World output of petroleum products by country	39
Table 4.7 Oil demand by main petroleum product in OPEC Members	40
Table 4.8 World oil demand by country	42
Table 4.9 World oil demand by main petroleum product and region	44
Section 5: Oil trade	47
Table 5.1 OPEC Members' crude oil exports by destination	48
Table 5.2 OPEC Members' petroleum products exports by destination	50
Table 5.3 World crude oil exports by country	52
Table 5.4 World exports of petroleum products by country	55
Table 5.5 World exports of petroleum products by main petroleum product and region	57
Table 5.6 World exports of crude oil and petroleum products by country	59
Table 5.7 World imports of crude oil by country	61
Table 5.8 World imports of petroleum products by country	63
Table 5.9 World imports of petroleum products by main petroleum product and region	64
Table 5.10 World imports of crude oil and petroleum products by country	66
Section 6: Oil transportation	69
Table 6.1 Tanker fleet development in OPEC Members	70
Table 6.2 World tanker fleet by year of build and categories	70
Table 6.3 LPG carrier fleet in OPEC Members	72
Table 6.4 World LPG carrier fleet by size and type	72
Table 6.5 World combined carrier fleet by size	73
Table 6.6 Average spot freight rates by vessel category	74
Table 6.7 Dirty tanker spot freight rates	75
Table 6.8 Clean tanker spot freight rates	76
Table 6.9 Main crude oil pipelines in OPEC Members	77
Table 6.10 Main petroleum product pipelines in OPEC Members	82

Section 7: Oil prices	85
Table 7.1 OPEC Reference Basket (ORB) and corresponding components spot prices	86
Table 7.2 Selected spot crude oil prices	87
Table 7.3 ICE Brent, NYMEX WTI and DME Oman annual average of the 1 st , 6 th and 12 th forward months	90
Table 7.4 OPEC Reference Basket in nominal and real terms	91
Table 7.5 Annual average of premium factors for selected OPEC Reference Basket components	92
Table 7.6 Spot prices of petroleum products in major markets	93
Table 7.7 Retail prices of petroleum products in OPEC Members	94
Table 7.8 Crack spread in major markets	95
Table 7.9 Composite barrel and its components in major consuming countries	96
Section 8: Natural gas data	99
Table 8.1 World proven natural gas reserves by country	100
Table 8.2 Natural gas production in OPEC Members	102
Table 8.3 World marketed production of natural gas by country	104
Table 8.4 World natural gas exports by country	106
Table 8.5 World natural gas imports by country	107
Table 8.6 World natural gas demand by country	110
Table 8.7 LNG carrier fleet in OPEC Members	112
Table 8.8 World LNG carrier fleet by size and type	112
Table 8.9 Main gas pipelines in OPEC Members	113
G r a p h s	
Section 2: Macro-economics	
Graph 2.1: OPEC Members' population	14
Graph 2.2: Population as a share of total OPEC	14
Graph 2.3: OPEC Members' GDP at current market prices	15
Graph 2.4: GDP at current market prices as a share of total OPEC	15
Graph 2.5: OPEC Members' values of exports	16
Graph 2.6: Values of exports as a share of total OPEC	16
Graph 2.7: OPEC Members' values of petroleum exports	17
Graph 2.8: Values of petroleum exports as a share of total OPEC	17
Graph 2.9: OPEC Members' values of imports	18
Graph 2.10: Values of imports as a share of total OPEC	18
Graph 2.11: Current account balances in total OPEC	19
Graph 2.12: Current account balances in OPEC Members	19
Graph 2.13: OPEC oil export revenues vs value of total exports	20
Section 3: Oil data: upstream	
Graph 3.1: World proven crude oil reserves	24
Graph 3.2: OPEC Members' proven crude oil reserves	24
Graph 3.3: World crude oil production	24
Graph 3.4: OPEC Members' crude oil production	24
Graph 3.5: Non-OPEC oil supply and OPEC NGLs	25
Section 4: Oil data: downstream	
Graph 4.1: World refinery capacity	43
Graph 4.2: World output of petroleum products	43
Graph 4.3: OPEC output of refined petroleum products	43
Graph 4.4: World oil demand	46
Graph 4.5: OPEC Members' oil demand	46
Graph 4.6: World oil demand by main petroleum product	46
Section 5: Oil trade	
Graph 5.1: World crude oil exports by region	53
Graph 5.2: OPEC Members' crude oil exports	53
Graph 5.3: World interregional trade of crude oil	54
Graph 5.4: OPEC Members' petroleum products exports by destination	56
Graph 5.5: Percentage share of OPEC crude oil exports by regions	60

Graph 5.6: OPEC Members' exports of crude and petroleum products	60
Graph 5.7: OPEC Members' exports of petroleum products	60
Graph 5.8: OPEC Members' crude oil exports by destination	62
Graph 5.9: OPEC Members' flows of crude and refined oil	68
Section 6: Oil transportation	
Graph 6.1: World tanker fleet by year of build and categories	71
Graph 6.2: World tanker fleet by year of build and categories	71
Graph 6.3: Average spot freight rates by vessel category	74
Graph 6.4: Dirty tankers spot freight rates	75
Graph 6.5: Dirty tankers spot freight costs	75
Graph 6.6: Clean tankers spot freight rates	76
Graph 6.7: Clean tankers spot freight costs	76
Section 7: Oil prices	
Graph 7.1: OPEC Reference Basket	86
Graph 7.2: Differentials of selected spot crude oil prices to OPEC Reference Basket (1)	88
Graph 7.3: Differentials of selected spot crude oil prices to OPEC Reference Basket (2)	88
Graph 7.4: Differentials of selected spot crude oil prices to OPEC Reference Basket (3)	89
Graph 7.5: Differentials of selected spot crude oil prices to OPEC Reference Basket (4)	89
Graph 7.6: OPEC Reference Basket in nominal and real terms	91
Graph 7.7: Spot petroleum product prices — US Gulf	93
Graph 7.8: Spot petroleum product prices — Singapore	93
Graph 7.9: Spot petroleum product prices — Rotterdam	93
Graph 7.10: Composite barrel and its components in volume	97
Graph 7.11: Composite barrel and its components in percentage	98
Section 8: Natural gas data	
Graph 8.1: World proven natural gas reserves	101
Graph 8.2: OPEC Members' proven natural gas reserves	101
Graph 8.3: World marketed production of natural gas	101
Graph 8.4: OPEC Members' marketed production of natural gas	101
Graph 8.5: World natural gas exports	109
Graph 8.6: World natural gas imports	109
General notes	
Definitions	120
Country groupings	121
Economic organizations	122
Abbreviations	122
Selected oil companies	123
Major sources	123
Conversion factors	124
Map	Major OPEC flows of crude and refined oil, 2015
	inside back cover

Disclaimer

The data contained in the OPEC Annual Statistical Bulletin (the 'ASB') is historical and obtained directly from OPEC Member Countries and third parties listed in the publication.

Whilst reasonable efforts have been made to ensure the accuracy of the ASB's content, the OPEC Secretariat makes no warranties or representations as to its accuracy, relevance or comprehensiveness, and assumes no liability or responsibility for any inaccuracy, error or omission, or for any loss or damage arising in connection with or attributable to any action or decision taken as a result of using or relying on the information in the ASB. The ASB is not intended as a benchmark or input data to a benchmark. Definition of terms, as well as names and boundaries on any maps, shall not be regarded as authoritative.

The information contained in the ASB, unless copyrighted by a third party, may be used and/or reproduced for research, educational and other non-commercial purposes without the OPEC Secretariat's prior written permission provided that OPEC is fully acknowledged as the copyright holder. Written permission from the OPEC Secretariat is required for any commercial use.



HE Abdalla Salem El-Badri, OPEC Secretary General

I am happy to present the 51st edition of the Annual Statistical Bulletin (ASB).

This is one of OPEC's principal publications. Since the very first edition, published in 1965, the ASB has been a useful — and frequently cited — reference tool for academics and researchers, policy-makers and analysts, and many others working in the energy industry.

The primary purpose of the ASB is to make reliable data about the global oil and gas industry easily and publicly available. It thus functions as an important source of data for all of the different stakeholders in the oil industry, while also ensuring greater data-sharing and data transparency about the industry and its many actors. This has long been one of the Organization's objectives.

The ASB focuses on OPEC's current 13 Member Countries — Algeria, Angola, Ecuador, Indonesia, Islamic Republic of Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates and Venezuela (the 52nd edition of the ASB will include data of Gabon) — and their National Oil Companies. It also provides statistical data and important information about non-OPEC oil producing countries, bringing together useful data on exports and imports, production, refineries, pipelines and shipping.

As in previous years, the 2016 ASB is available in a print edition, as a PDF file and in an interactive online version. The latter version — which includes historical time-series data going back to 1960 — is available on the OPEC website.

The ASB is the result of close collaboration between the OPEC Secretariat and OPEC's Member Countries. It is only through these efforts that the Organization is able to fulfill its commitment to enhancing data transparency and supporting market stability. I therefore would like to thank Secretariat staff, and our colleagues and officials in our Member Countries, for their hard work and valuable input.

A handwritten signature in black ink, appearing to read 'Abdalla Salem El-Badri', written over a light gray background.

Abdalla Salem El-Badri
Secretary General

- ▶ In 2015, world crude oil production increased by 1.75 million barrels/day (b/d), or 2.4 per cent, as compared to 2014, marking the second highest increase within the last ten years. Among non-OPEC Countries, the biggest yearly increase was for the United States, which grew by 0.72m b/d, or 8.3 per cent, leading to the highest production level since the early 1970s. Crude production during 2015 also increased in the United Kingdom, which saw growth of 0.10m b/d, or 13.4 per cent, for the first time since 1999. Similarly, Norway, which had already reversed its downward trend in 2014, continued to increase in 2015 by 0.06m b/d, or 3.7 per cent. OPEC crude oil production averaged 32.32m b/d during 2015, increasing by 0.93m b/d, or 3.0 per cent, over 2014, the first surge in production after two years of decline. In 2015, the top three crude oil producing countries were Saudi Arabia (10.19m b/d), Russia (10.11m b/d) and the United States (9.43m b/d). Saudi Arabia displaced Russia from first place for the first time since 2005.
- ▶ In 2015, OPEC petroleum export revenues fell by 45.8 per cent from 2014 to \$518.2 billion, marking the lowest level seen since 2005. Total OPEC posted a current account deficit of \$99.6bn in 2015 compared with a surplus of \$238.1bn in 2014. Notably, the last time OPEC recorded a current account deficit was in 1998. In value, total OPEC exports declined by 29.1 per cent year-on-year (y-o-y) while total imports fell 8.7 per cent y-o-y.
- ▶ World oil demand averaged 93.0m b/d in 2015, up by 1.7 per cent y-o-y, with the largest increases taking place in Asia Pacific, particularly India and China, North America, Western Europe, the Middle East and Africa. Total OECD oil demand grew soundly during 2015, while it declined in Latin America for the first time since 2003. OPEC oil demand remained robust during 2015 in the Middle East, Africa and Asia Pacific, while it declined in Latin America — gasoline, kerosene and distillates accounted for the bulk of growth. Distillates and gasoline account for around 56 per cent of total world oil demand and were on increasing trends, while residual fuel oil requirements declined for another year. Gasoline dominated 2015 oil demand growth in Asia Pacific and North America, while distillates appeared robust in Western and Eastern Europe.
- ▶ Total OPEC crude oil exports stood at 23.6m b/d in 2015, up slightly from 23.2m b/d in 2014. This increase represents 1.7 per cent growth y-o-y. The bulk of OPEC crude oil was exported to the Asia Pacific region at a volume of 14.5m b/d or 61.5 per cent. Significant volumes were also exported to Europe, which increased its imports from OPEC MCs to 4.2m b/d in 2015, from 4.0m b/d in 2014. North America imported 2.8m b/d of crude oil from OPEC MCs, 10.6 per cent less than during 2014.
- ▶ Total world proven crude oil reserves stood at 1,493 billion barrels in 2015, increasing slightly by 0.1 per cent from the previous year's level of 1,490bn b. The largest additions came from Angola, Venezuela and IR Iran, while declines were seen in Norway, the UK and Colombia. OPEC increased its proven crude oil reserves by 0.1 per cent to 1,211bn b in 2015, maintaining their share of 81.2 per cent of total world crude oil reserves.
- ▶ In 2015, proven natural gas reserves declined by 0.3 per cent to approximately 202.0 trillion standard cu m. This decrease came on the back of high natural gas production and lower expenditures on exploration and development, mainly as a result of lower gas prices. Total world natural gas marketed production increased by 1.9 per cent in 2015 to reach 3.6 trillion standard cu m; increases occurred mainly in North America and the Middle East.
- ▶ World refinery capacity expanded by 0.8m b/cd to stand at 96.6m b/cd during 2015, mainly supported by additions in the Middle East and Asia Pacific regions. In the Middle East, expansions came largely from OPEC MCs, while in the Asia Pacific region growth came predominantly from India and China. Refinery capacity in the OECD region continued to decline despite small gains seen in the United States. Global refinery throughput ramped up by 2.4 per cent to reach 80.5m b/d in 2015, with the largest gains seen in the Middle East and Asia Pacific regions. In the Middle East, gains in refinery throughput originated in OPEC MCs, while India and China dominated the increases seen in the Asia and Pacific region.
- ▶ The OPEC Reference Basket averaged \$49.49/b in 2015, down from \$96.29/b in 2014 and dropping to the lowest yearly average observed since 2004. The yearly decline was valued at \$46.80/b, or 48.6 per cent, as compared to 2014. Volatility in 2015 stood at \$8.50/b, or 17.2 per cent, relative to the yearly average. The oil market has remained in contango since 2H14 and throughout 2015.



SECTION 1

Summary

Table 1.1

Summary

OPEC Members' facts and figures, 2015

	Algeria	Angola	Ecuador	Indonesia	IR Iran	Iraq	Kuwait	Libya	Nigeria	Qatar	Saudi Arabia	United Arab Emirates	Venezuela	OPEC
Population million inhabitants	39,950	25,789	16,279	255,462	78,327	36,932	4,239	6,322	183,173	2,421	31,016	9,581	30,678	720,170
Land area 1,000 sq km	2,382	1,248	284	1,904	1,648	438	18	1,760	924	12	2,150	84	916	13,766
GDP per capita \$	4,551	3,993	6,086	3,486	4,949	4,588	28,469	6,058	2,646	68,765	21,061	38,649	7,809	5,422
GDP at market prices million \$	181,828	102,979	99,068	890,597	387,611	169,460	120,682	38,300	484,635	166,484	653,219	370,293	239,572	3,904,727
Value of exports million \$	37,787	32,637	18,366	150,283	77,974	54,667	54,959	10,861	45,365	77,294	205,447	333,370	38,010	1,137,020
Value of imports million \$	51,501	20,052	20,458	142,695	67,285	51,581	31,895	11,236	53,087	28,496	167,484	287,025	37,243	970,039
Current account balance million \$	-30,074	-8,748	-2,201	-17,760	1,394	-134	14,140	-16,703	-15,439	13,751	-41,307	21,593	-18,087	-99,574
Value of petroleum exports million \$	21,751	31,696	6,660	6,397	27,308	54,394	48,782	4,975	41,818	28,303	157,962	52,369	35,802	518,216
Proven crude oil reserves million barrels	12,200	9,524	8,273	3,230	158,400	142,503	101,500	48,363	37,062	25,244	266,455	97,800	300,878	1,211,432
Natural gas reserves billion cu m	4,504.0	308.1	10.9	2,775.1	33,500.0	3,158.0	1,784.0	1,504.9	5,284.3	24,299.1	8,588.2	6,091.0	5,701.5	97,509.1
Crude oil production 1,000 b/d	1,157.1	1,767.1	543.1	690.1	3,151.6	3,504.1	2,858.7	403.9	1,748.2	656.0	10,192.6	2,988.9	2,653.9	32,315.2
Natural gas marketed production million cu m	83,040.7	772.5	496.9	70,274.0	226,673.0	1,001.9	16,909.0	15,493.0	45,148.1	178,472.0	104,450.0	60,181.0	26,004.4	828,916.3
Refinery capacity 1,000 b/cd	650.8	65.0	190.8	1,125.0	1,781.0	900.0	936.0	380.0	445.0	283.0	2,907.0	1,124.0	1,890.6	12,678.2
Refinery throughput (1,000 b/d)	670.9	52.7	133.2	856.7	1,817.0	415.1	865.6	91.9	21.8	252.8	2,180.5	918.6	1,416.9	9,693.8
Output of petroleum products (1,000 b/d)	628.6	43.5	193.6	959.0	1,818.5	444.7	1,013.2	137.2	24.1	611.3	2,480.5	842.1	1,049.9	10,246.2
Oil demand 1,000 b/d	418.5	141.8	258.7	1,668.5	1,794.9	685.9	345.7	211.1	407.8	206.0	3,318.7	778.1	657.9	10,893.8
Crude oil exports 1,000 b/d	642.2	1,710.9	432.9	315.1	1,081.1	3,004.9	1,963.8	235.0	2,114.0	490.7	7,163.3	2,441.5	1,974.0	23,569.5
Exports of petroleum products 1,000 b/d	605.4	36.7	15.6	74.4	514.3	13.7	739.4	30.0	18.0	521.0	1,154.7	950.3	318.0	4,991.6
Imports of petroleum products 1,000 b/d	83.2	134.5	153.6	506.0	52.5	81.1	-	72.6	441.0	32.8	588.0	89.9	187.0	2,422.4
Natural gas exports million cu m	43,418.7	-	-	29,213.0	8,541.0	-	-	4,664.0	26,703.5	129,877.2	-	13,200.0	-	255,617.4
Exchange rate national currency/\$	100.691	120.061	1,000	13,389.400	29,011.500	1,167.330	0.301	1.379	192.441	3.640	3.750	3.673	6.284	

Notes: Land area figures as per official websites.

Table 1.2

Summary

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
Ecuador	200	200	183	183	221	221	210	221	221	230
Indonesia	1,300	1,300	1,189	1,189	1,193	1,193	1,133	1,190	1,190	1,240
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
Qatar	300	300	280	280	300	300	285	299	299	312
Saudi Arabia	7,150	5,000	4,353	4,353	4,353	4,353	4,133	4,343	4,343	4,524
United Arab Emirates	1,000	1,100	950	950	950	950	902	948	948	988
Venezuela	1,500	1,675	1,555	1,555	1,574	1,574	1,495	1,571	1,571	1,636
OPEC	17,350	17,350	15,863	15,863			15,648	16,441		18,334
OPEC excl Iraq					14,801	14,879			14,901	

	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
Ecuador	242	254	273	273	273	nd	273	nd	--	--
Indonesia	1,307	1,374	1,374	1,374	1,443	nd	1,374	nd	1,374	1,317
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
Qatar	329	346	371	371	399	nd	377	nd	380	364
Saudi Arabia	4,769	5,014	5,380	5,380	8,034	nd	7,887	nd	8,395	8,000
United Arab Emirates	1,041	1,094	1,095	1,500	2,320	nd	2,244	nd	2,260	2,161
Venezuela	1,724	1,812	1,945	1,945	2,235	nd	2,147	nd	2,360	2,257
OPEC	19,325	20,316	21,889	22,294	22,013[#]	23,650[*]	22,709	24,200[*]	24,289	23,301

Notes: Totals may not add up due to independent rounding. Angola joined OPEC in January 2007; Ecuador suspended its membership from December 1992 to October 2007. Indonesia suspended its membership in January 2009, but this was reactivated from January 1, 2016.

-- No production level allocated.

nd No distribution made.

OPEC excluding Kuwait and Iraq.

OPEC excluding IR Iran and Iraq.

* Includes Gabon.

** Excluding Indonesia.

Agreed at the:

- 1/ 63rd (Extraordinary) Meeting of the OPEC Conference, March 19–20, 1982.
- 2/ 67th (Extraordinary) Meeting of the OPEC Conference, March 14, 1983. No production level allocated to Saudi Arabia which acted as the swing producer. Venezuela: 1.7m b/d including condensates. Nigeria: At the 70th Meeting of the OPEC Conference, July 10–11, 1984, a temporary production rise to 1.4m b/d and 1.45m b/d in August 1984 and September 1984, respectively, was decided.
- 3/ 71st (Extraordinary) Meeting of the OPEC Conference, October 29–31, 1984. Retained at the 75th (Extraordinary) Meeting of the OPEC Conference, October 4, 1985.
- 4/ 78th Meeting of the OPEC Conference, June 25–30, 1986, and July 28–August 5, 1986, with the exception of Iraq.
- 5/ 79th (Extraordinary) Meeting of the OPEC Conference, October 6–22, 1986, with the exception of Iraq.
- 6/ 79th (Extraordinary) Meeting of the OPEC Conference, October 6–22, 1986, with the exception of Iraq.
- 7/ 80th Meeting of the OPEC Conference, December 11–20, 1986.
- 8/ 81st Meeting of the OPEC Conference, June 25–27, 1987.
- 9/ 82nd Meeting of the OPEC Conference, December 9–14, 1987, with the exception of Iraq. Extended at the 83rd Meeting of the OPEC Conference, June 11–14, 1988, with the exception of Iraq.
- 10/ 84th Meeting of the OPEC Conference, November 21–28, 1988.
- 11/ 85th Meeting of the OPEC Conference, June 5–7, 1989.
- 12/ 3rd Meeting of the Eight-Minister Monitoring Committee, September 23–27, 1989.
- 13/ 86th Meeting of the OPEC Conference, November 25–28, 1989.
- 14/ 87th Meeting of the OPEC Conference, July 26–27, 1990. September 2000–March 2001: Oil Ministers' informal consultations and 1st Ministerial Monitoring Committee, August 26–29, 1990 (interim course of action: OPEC shall consequently increase production in accordance with need). Retained August 1990 agreement at the 88th Meeting of the OPEC Conference, December 12–13, 1990.
- 15/ 3rd Meeting of the Ministerial Monitoring Committee, March 11–12, 1991. Reservations were made by Algeria and IR Iran as to the total OPEC production level. Reiterated without reservations at the 89th Meeting of the OPEC Conference, June 4, 1991.
- 16/ 4th Meeting of the Ministerial Monitoring Committee, September 24–25, 1991. Retained at the 90th Meeting of the Conference, November 26–27, 1991.
- 17/ 6th Meeting of the Ministerial Monitoring Committee, February 12–15, 1992. Reservations were made by IR Iran as to the total OPEC production level and by Saudi Arabia as to their allocated production level. Rollover (inclusive of reservations) at the 91st Meeting of the OPEC Conference, May 21–22, 1992. The Conference also decided to allow any additional production from Kuwait.
- 18/ 9th Meeting of the Ministerial Monitoring Committee, September 16–17, 1992. Reaffirmed to allow for any additional production from Kuwait.
- 19/ 92nd Meeting of the OPEC Conference, November 25–27, 1992, with full support of Member Countries, except Iraq and the allowance of additional volumes to Kuwait as they become available during the 1Q93.
- 20/ 10th Meeting of the Ministerial Monitoring Committee, February 13–16, 1993 with full support of Member Countries, except Iraq. Rollover of this agreement at the 93rd Meeting of the OPEC Conference, June 8–10, 1993, with full support of Member Countries, except Iraq and Kuwait.

Table 1.2**Summary****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	Feb 01– Mar 01
	21/	22/	23/	24/	25/	26/	27/	28/	29/	30/	31/
Algeria	750	750	909	50	788	731	788	811	837	853	805
Indonesia	1,330	1,330	1,456	70	1,280	1,187	1,280	1,317	1,359	1,385	1,307
IR Iran	3,600	3,600	3,942	140	3,318	3,359	--	3,727	3,844	3,917	3,698
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	2,021
Libya	1,390	1,390	1,522	80	1,323	1,227	1,323	1,361	1,404	1,431	1,350
Nigeria	1,865	1,865	2,042	125	2,033	1,885	2,033	2,091	2,157	2,198	2,075
Qatar	378	378	414	30	640	593	640	658	679	692	653
Saudi Arabia	8,000	8,000	8,761	300	8,023	7,438	8,023	8,253	8,512	8,674	8,189
United Arab Emirates	2,161	2,161	2,366	125	2,157	2,000	2,157	2,219	2,289	2,333	2,201
Venezuela	2,359	2,359	2,583	200	2,845	2,720	2,845	2,926	3,019	3,077	2,902
OPEC	24,233	25,033	27,500								
OPEC excl Iraq				1,245	24,387	22,976	21,069##	25,400	26,200	26,700	25,201
Target				25,742							

	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	Aug 04– Oct 04	Nov 1, 04– Mar 16, 05
	32/	33/	34/	35/	36/	37/	38/	39/	40/	41/	42/
Algeria	773	741	693	735	782	811	782	750	814	830	862
Indonesia	1,255	1,203	1,125	1,192	1,270	1,317	1,270	1,218	1,322	1,347	1,399
IR Iran	3,552	3,406	3,186	3,377	3,597	3,729	3,597	3,450	3,744	3,817	3,964
Iraq	--	--	--	--	--	--	--	--	--	--	--
Kuwait	1,941	1,861	1,741	1,845	1,966	2,038	1,966	1,886	2,046	2,087	2,167
Libya	1,296	1,242	1,162	1,232	1,312	1,360	1,312	1,258	1,365	1,392	1,446
Nigeria	1,993	1,911	1,787	1,894	2,018	2,092	2,018	1,936	2,101	2,142	2,224
Qatar	627	601	562	596	635	658	635	609	661	674	700
Saudi Arabia	7,865	7,541	7,053	7,476	7,963	8,256	7,963	7,638	8,288	8,450	8,775
United Arab Emirates	2,113	2,025	1,894	2,007	2,138	2,217	2,138	2,051	2,225	2,269	2,356
Venezuela	2,786	2,670	2,497	2,647	2,819	2,923	2,819	2,704	2,934	2,992	3,107
OPEC excl Iraq	24,201	23,201	21,700	23,000	24,500	25,400	24,500	23,500	25,500	26,000	27,000

- 21/ 94th (Extraordinary) Meeting of the OPEC Conference, September 25–29, 1993, with full support of Member Countries, except Iraq. Maintained at the 12th Meeting of the Ministerial Monitoring Committee, March 25–26, 1994, with full support of Member Countries, except Iraq. Maintained at the 97th, 98th and 99th Meeting of the OPEC Conference, November 21–22, 1994, June 19–20, 1995, and November 21–22, 1995, respectively.
- 22/ 100th Meeting of the OPEC Conference, June 5–7, 1996. The remaining volume of 1.2m b/d is to be supplied by Iraq. Rollover of the agreement at the 101st and the 102nd Meeting of the OPEC Conference, November 27–28, 1996, and June 25–26, 1997, respectively.
- 23/ 103rd Meeting of the OPEC Conference, November 26–December 1, 1997. The remaining volume of 1,314,080 b/d is to be supplied by Iraq.
- 24/ 104th Meeting (Extraordinary) of the OPEC Conference, March 30, 1998. Data reflect temporary production cuts from OPEC excluding Iraq production in February 1998 as reported by selected secondary sources. Iraq is not called upon to participate in this agreement.
- 25/ 105th Meeting of the OPEC Conference, June 24, 1998. Iraq is not called upon to participate in this agreement.
- 26/ 107th Meeting of the OPEC Conference, March 23, 1999. Reaffirmed strong commitment to the agreement at the 108th Meeting of the OPEC Conference, September 22, 1999. Iraq is not called upon to participate in this agreement.
- 27/ 109th Meeting of the OPEC Conference, March 27–29, 2000. Agreement of OPEC Member Countries excluding IR Iran and Iraq.
- 28/ 110th (Extraordinary) Meeting of the OPEC Conference, June 21, 2000. Iraq is not called upon to participate in this agreement.
- 29/ 111th Meeting of the OPEC Conference, September 10–11, 2000. Iraq is not called upon to participate in this agreement.
- 30/ 111th Meeting of the OPEC Conference, September 10–11, 2000; including additional 500,000 b/d (price band mechanism) as announced by the OPEC President on October 30, 2000, and effective from October 31, 2000. Iraq is not called upon to participate in this agreement.
- 31/ 113th (Extraordinary) Meeting of the OPEC Conference, January 17, 2001. Iraq is not called upon to participate in this agreement.
- 32/ 114th Meeting of the OPEC Conference, March 16–17, 2001. Retained at the 115th (Extraordinary) and 116th (Extraordinary) Meeting of the OPEC Conference, June 5 and July 3, 2001, respectively. Iraq is not called upon to participate in this agreement.
- 33/ OPEC Conference, July 25, 2001. Retained at the 117th Meeting of the OPEC Conference, September 26–27, 2001. Iraq is not called upon to participate in this agreement.
- 34/ Announced during the 118th (Extraordinary) Meeting of the OPEC Conference, November 14, 2001, and confirmed its implementation during the Consultative Meeting of the OPEC Conference in Cairo, December 28, 2001. Retained at the 119th (Extraordinary), 120th (Extraordinary) and 121st Meeting of the OPEC Conference, March 15, June 26 and September 19, 2002, respectively. Iraq is not called upon to participate in this agreement.
- 35/ 122th (Extraordinary) Meeting of the OPEC Conference, December 12, 2002. Iraq is not called upon to participate in this agreement.
- 36/ 123rd (Extraordinary) Meeting of the OPEC Conference, January 12, 2003. Retained at the 124th Meeting of the OPEC Conference, March 11, 2003. Iraq is not called upon to participate in this agreement.
- 37/ Consultative Meeting of the OPEC Conference, April 24, 2003. Retained at the 125th (Extraordinary) and 126th (Extraordinary) Meeting of the OPEC Conference, June 11 and July 31, 2003, respectively. Iraq is not called upon to participate in this agreement.
- 38/ 127th Meeting of the OPEC Conference, September 24, 2003. Retained at the 128th (Extraordinary) and 129th (Extraordinary) Meeting of the OPEC Conference, December 4, 2003, and February 10, 2004, respectively. Iraq is not called upon to participate in this agreement.
- 39/ 129th (Extraordinary) Meeting of the OPEC Conference, February 10, 2004. Reconfirmed at the 130th Meeting of the OPEC Conference, March 31, 2004. Iraq is not called upon to participate in this agreement.
- 40/ 131st (Extraordinary) Meeting of the OPEC Conference, June 3, 2004. Iraq is not called upon to participate in this agreement.
- 41/ 131st (Extraordinary) Meeting of the OPEC Conference, June 3, 2004. Iraq is not called upon to participate in this agreement.
- 42/ 132nd Meeting of the OPEC Conference, September 15, 2004. Iraq is not called upon to participate in this agreement. During the 133rd (Extraordinary) Meeting of the OPEC Conference, December 10, 2004, Member Countries agreed to collectively reduce the over-production by 1m b/d from their current actual output, effective January 1, 2005. Agreement of 132nd Meeting is retained at the 134th (Extraordinary) Meeting of the OPEC Conference, January 30, 2005.

OPEC Members' crude oil production allocations (1,000 b/d)

	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	Jan 09– Dec 11	Jan 12– Dec 15
	43/	44/	45/	46/	47/	48/	49/	50/	51/	52/
Algeria	878	894	59	25	nd	nd	nd	71	nd	nd
Angola	--	--	--	--	--	nd	nd	99	nd	nd
Ecuador	--	--	--	--	--	nd	nd	27	nd	nd
Indonesia	1,425	1,451	39	16	nd	nd	--	--	--	--
IR Iran	4,037	4,110	176	73	nd	nd	nd	199	nd	nd
Iraq	--	--	--	--	--	--	--	--	--	nd
Kuwait	2,207	2,247	100	42	nd	nd	nd	132	nd	nd
Libya	1,473	1,500	72	30	nd	nd	nd	89	nd	nd
Nigeria	2,265	2,306	100	42	nd	nd	nd	113	nd	nd
Qatar	713	726	35	15	nd	nd	nd	43	nd	nd
Saudi Arabia	8,937	9,099	380	158	nd	nd	nd	466	nd	nd
United Arab Emirates	2,400	2,444	101	42	nd	nd	nd	134	nd	nd
Venezuela	3,165	3,223	138	57	nd	nd	nd	129	nd	nd
OPEC excl Iraq	27,500	28,000						1,500**		
OPEC excl Angola, Ecuador and Iraq			1,200	500	500					
Target OPEC excl Angola, Ecuador and Iraq			26,300	25,800	27,253					
Target OPEC excl Iraq						29,673	28,808**	27,308**	24,845	
Target OPEC										30,000

- 43/ 135th Meeting of the OPEC Conference, March 16, 2005. Iraq is not called upon to participate in this agreement. The President of the Conference is authorized, after consultation with fellow Heads of Delegation, to announce an additional 500,000 b/d increase until its next Meeting, if prices remain at current high levels or continue to further rise.
- 44/ 136th (Extraordinary) Meeting of the OPEC Conference, June 15, 2005. Iraq is not called upon to participate in this agreement. The President of the Conference is authorized, after consultation with fellow Heads of Delegation, to announce an additional 500,000 b/d increase until its next Meeting, if prices remain at current high levels or continue to further rise. The 137th OPEC Conference, September 20, 2005, agreed to make available to the market the spare capacity of 2m b/d, should it be called for, for a period of three months, starting October 1, 2005. The 138th (December 12, 2005), the 139th (Extraordinary, January 31, 2006), the 140th (March 8, 2006) and the 141st (Extraordinary, June 1, 2006) Conference retained the OPEC production level as agreed on June 15, 2005.
- 45/ Consultative Meeting of the OPEC Conference, October 19–20, 2006. Data reflect interim production cuts from OPEC excluding Iraq production in September 2006. Iraq is not called upon to participate in this agreement.
- 46/ 143rd (Extraordinary) Meeting of the OPEC Conference, December 14, 2006. Data reflect a further production cut to the decision taken in Doha, October 19–20, 2006. Iraq is not called upon to participate in this agreement.
- 47/ 145th Meeting of the OPEC Conference, September 11, 2007. Angola and Iraq are not called upon to participate in this agreement. Data reflect production increase of 500,000 b/d for OPEC (excluding Angola and Iraq) to achieve 27.253m b/d.
- 48/ 146th (Extraordinary) Meeting of the OPEC Conference, December 5, 2007. Iraq is not called upon to participate in the agreement.
- 49/ 149th Meeting of the OPEC Conference, September 9–10, 2008: The Conference agreed to abide to September 2007 production allocations (adjusted to include new Members Angola and Ecuador and excluding Indonesia and Iraq), totalling to 28.8m b/d.
- 50/ 150th (Extraordinary) Meeting of the OPEC Conference, October 24, 2008: Data reflect a production cut of 1.5m b/d to achieve 27.31m b/d. Iraq and Indonesia are not called upon to participate in the agreement.
- 51/ The 151th (Extraordinary) Meeting of the Conference, December 17, 2008, agreed to reduce OPEC excluding Iraq production by total of 4.2m b/d from September levels of the actual production based on secondary sources. Iraq is not called upon to participate in the agreement.
- 52/ The 160th Meeting of the Conference, December 14, 2011, decided to maintain the total OPEC production level of 30.0m b/d. This agreement was maintained at the 161st (June 14, 2012), the 162nd (December 12, 2012), the 163rd (May 31, 2013), the 164th (December 4, 2013), the 165th (June 11, 2014), the 166th (November 27, 2014) and — for the last time — at the 167th (June 5, 2015) Meeting of the Conference.

Visit our website

www.opec.org





SECTION 2

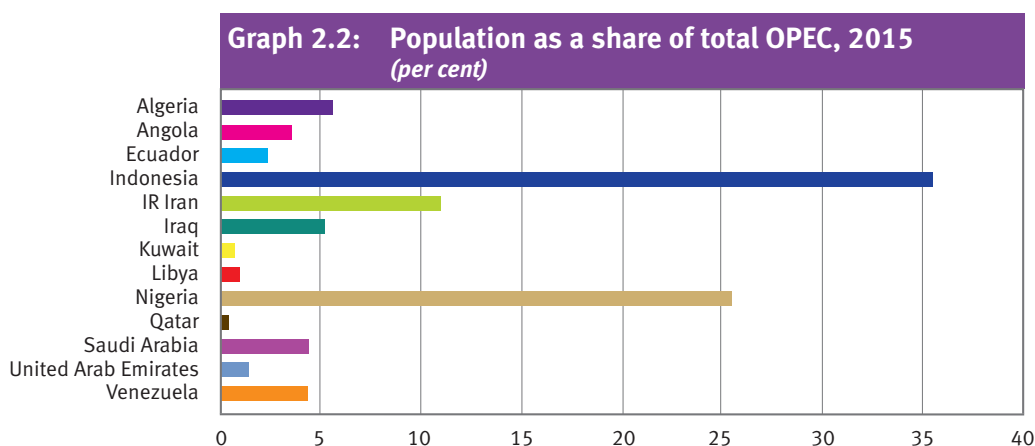
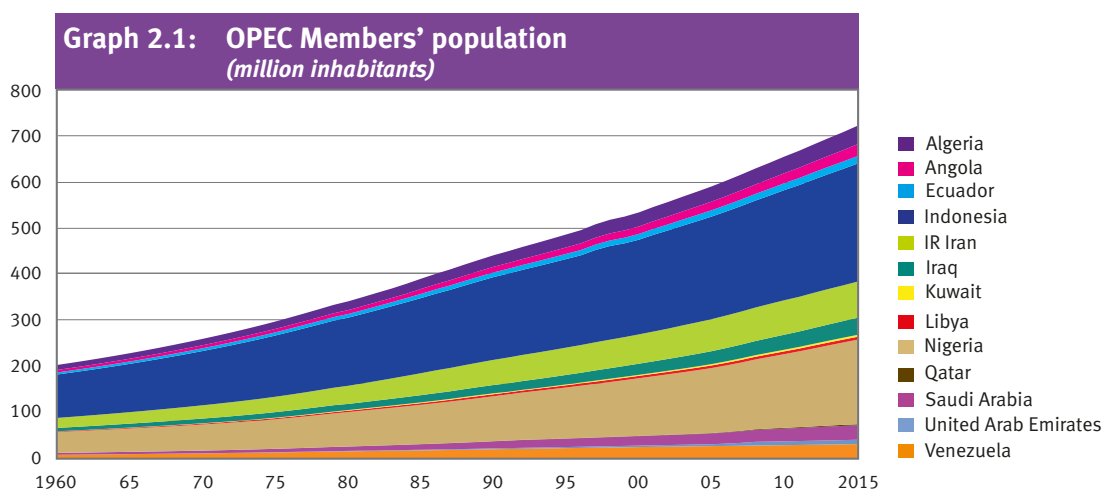
Macro-economics

Table 2.1

Macro-economics

OPEC Members' population (*million inhabitants*)

	2011	2012	2013	2014	2015	change 15/14
Algeria	36.717	37.495	38.297	39.114	39.950	0.836
Angola	22.314	22.984	23.673	24.383	25.789	1.406
Ecuador	15.266	15.521	15.775	16.027	16.279	0.251
Indonesia	241.991	245.425	248.818	252.165	255.462	3.297
IR Iran	75.150	76.117	76.900	77.336	78.327	0.991
Iraq	33.339	34.207	35.096	36.005	36.932	0.928
Kuwait	3.697	3.824	3.965	4.092	4.239	0.147
Libya	5.923	6.283	6.266	6.259	6.322	0.063
Nigeria	164.193	168.834	173.615	178.271	183.173	4.902
Qatar	1.733	1.837	2.045	2.235	2.421	0.186
Saudi Arabia	28.376	29.196	29.994	30.770	31.016	0.246
United Arab Emirates	8.512	8.768	9.031	9.302	9.581	0.279
Venezuela	28.944	29.365	29.786	30.206	30.678	0.472
OPEC	666.155	679.856	693.261	706.166	720.170	14.004



OPEC Members' GDP at current market prices (*m \$*)

	2011	2012	2013	2014	2015
Algeria	200,236	209,048	209,705	213,567	181,828
Angola	104,116	115,342	124,912	126,775	102,979
Ecuador	79,277	87,925	94,776	100,917	99,068
Indonesia	755,256	892,590	919,002	914,552	890,597
IR Iran	564,459	583,164	380,348	416,490	387,611
Iraq	185,750	218,032	232,497	223,508	169,460
Kuwait	154,064	174,079	174,130	163,675	120,682
Libya	34,702	81,909	66,042	44,417	38,300
Nigeria ¹	402,561	461,448	515,134	531,217	484,635
Qatar	169,805	190,290	201,885	210,109	166,484
Saudi Arabia	669,507	733,956	744,336	753,832	653,219
United Arab Emirates	347,454	373,430	388,591	401,961	370,293
Venezuela ²	297,637	298,380	234,264	250,281	239,572
OPEC	3,964,823	4,419,592	4,285,622	4,351,302	3,904,727

Notes:

1. Data from 2010 onward reflects the rebasing/re-benchmarking of the national account series (GDP). This process consists of replacing an old base year used to compile volume measures of GDP with a new and more recent base year or price structure.
2. Data from 2013 onward is from the IMF World Economic Outlook Database as official data is unavailable.

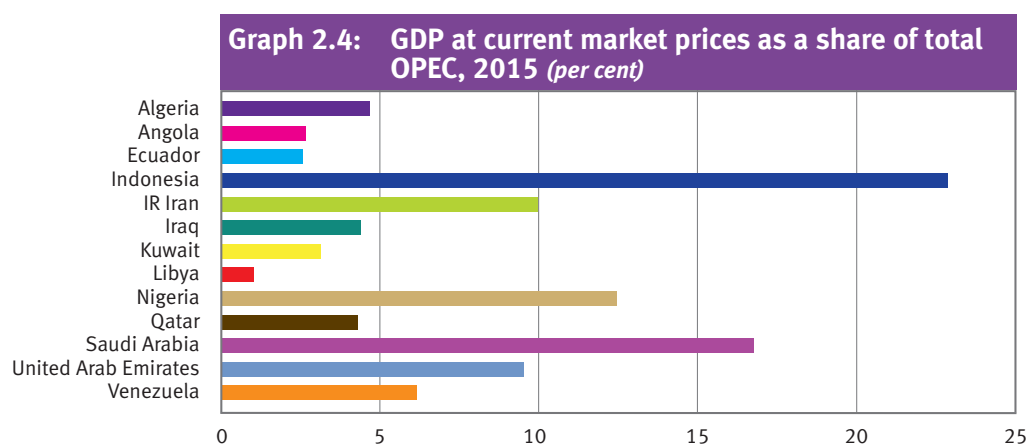
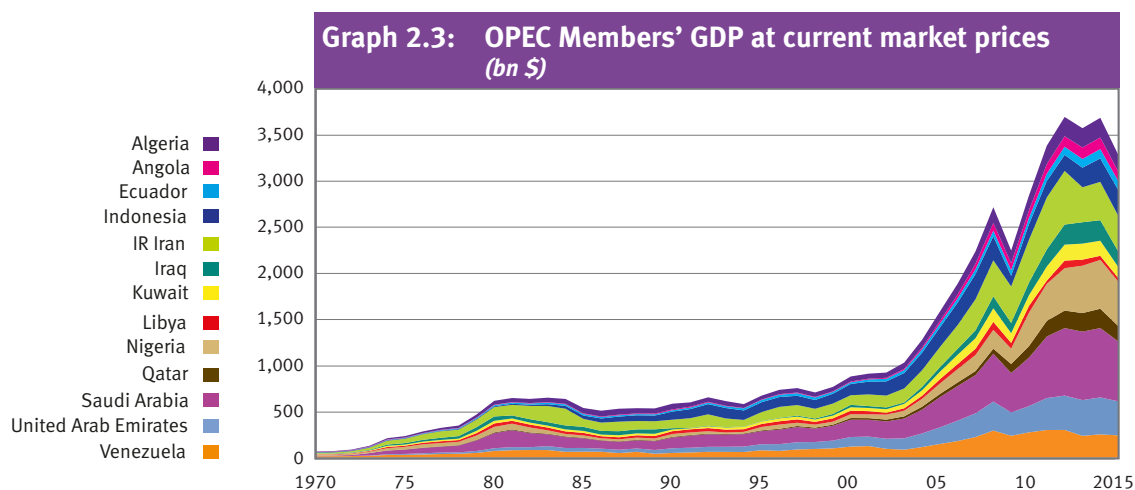


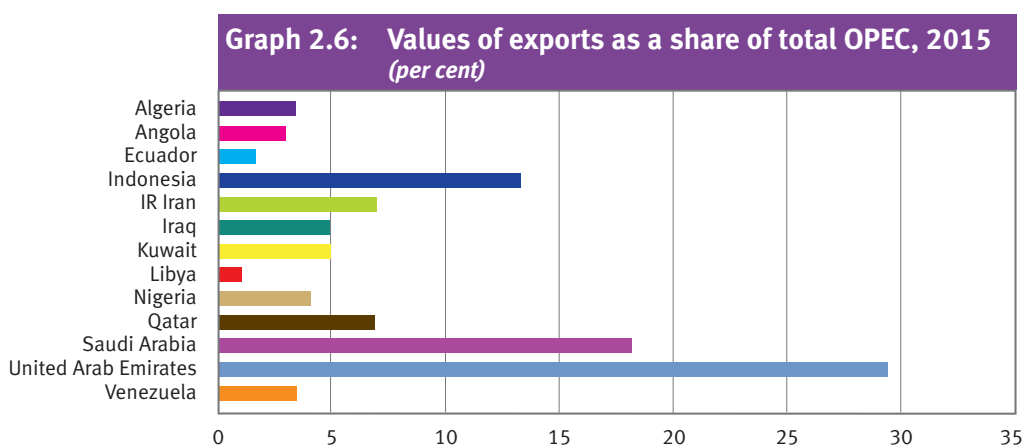
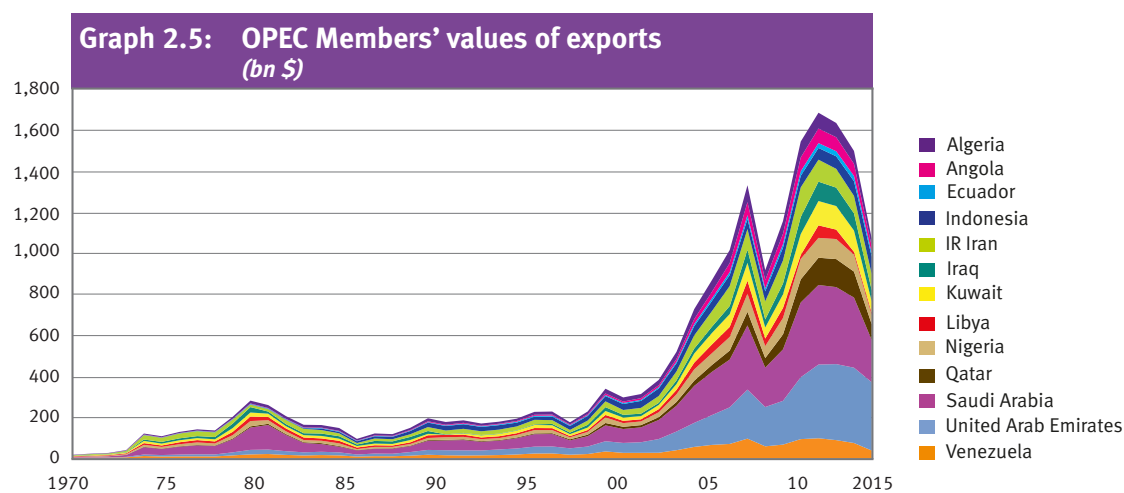
Table 2.3

Macro-economics

OPEC Members' values of exports (m \$)

	2011	2012	2013	2014	2015
Algeria	77,668	77,123	69,659	62,886	37,787
Angola	67,310	71,093	68,247	59,170	32,637
Ecuador	22,322	23,765	24,848	25,732	18,366
Indonesia	203,497	190,032	182,552	175,981	150,283
IR Iran	144,874	107,409	91,793	85,235	77,974
Iraq	83,226	94,392	89,742	83,981	54,667
Kuwait	102,052	118,917	115,096	103,891	54,959
Libya	19,060	61,026	46,018	13,806	10,861
Nigeria	99,878	96,905	97,818	82,586	45,365
Qatar	112,912	132,985	136,767	126,702	77,294
Saudi Arabia	364,698	388,401	375,873	342,324	205,447
United Arab Emirates	302,036	359,728	371,028	367,597	333,370
Venezuela	93,747	97,877	88,753	74,714	38,010
OPEC	1,693,281	1,819,651	1,758,194	1,604,606	1,137,020

Notes:
All figures fob.



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

	2011	2012	2013	2014	2015
Algeria	51,409	48,271	44,462	40,628	21,751
Angola	65,215	69,386	66,299	57,017	31,696
Ecuador	12,925	13,792	14,107	13,276	6,660
Indonesia	18,606	16,457	14,504	12,839	6,397
IR Iran	114,751	101,468	61,923	53,652	27,308
Iraq	83,006	94,103	89,402	83,561	54,394
Kuwait	96,721	112,933	108,548	97,554	48,782
Libya	18,615	60,188	44,445	10,424	4,975
Nigeria	88,449	95,131	89,930	77,489	41,818
Qatar	62,680	65,065	62,519	56,406	28,303
Saudi Arabia	317,614	337,480	321,888	284,424	157,962
United Arab Emirates	79,573	86,016	85,640	97,165	52,369
Venezuela	88,131	93,569	85,603	71,731	35,802
OPEC	1,097,695	1,193,858	1,089,270	956,164	518,216

Notes:

Where applicable, petroleum product exports are included. Data for some countries may include condensates, as well as other NGLs. Some countries import substantial amounts of crude and products, resulting in lower net revenue from petroleum operations.

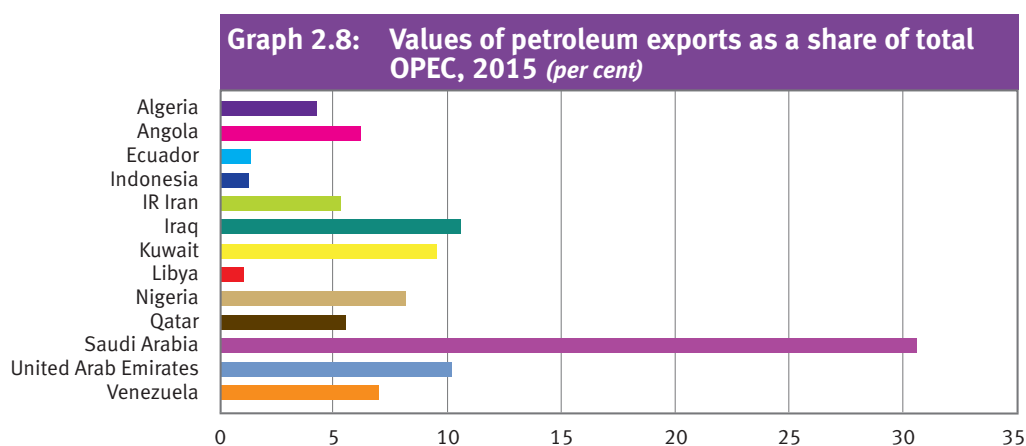
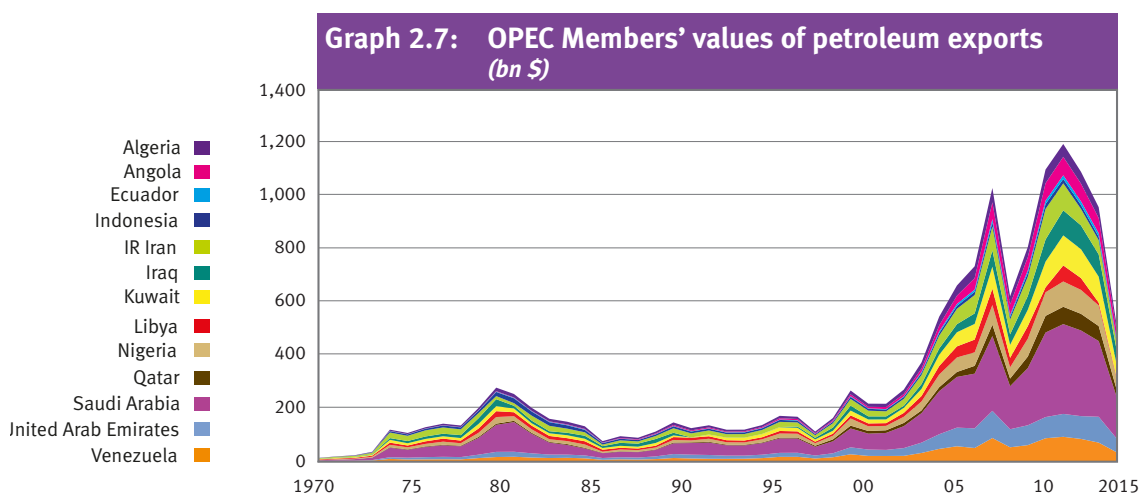
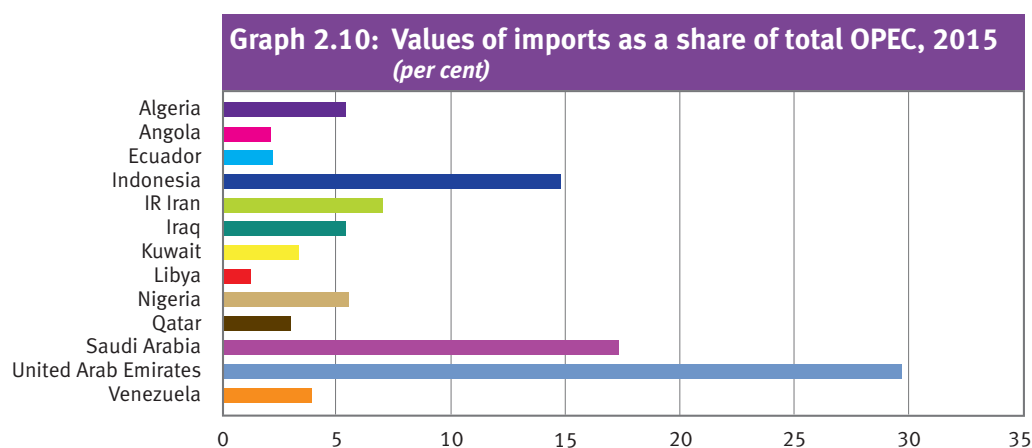
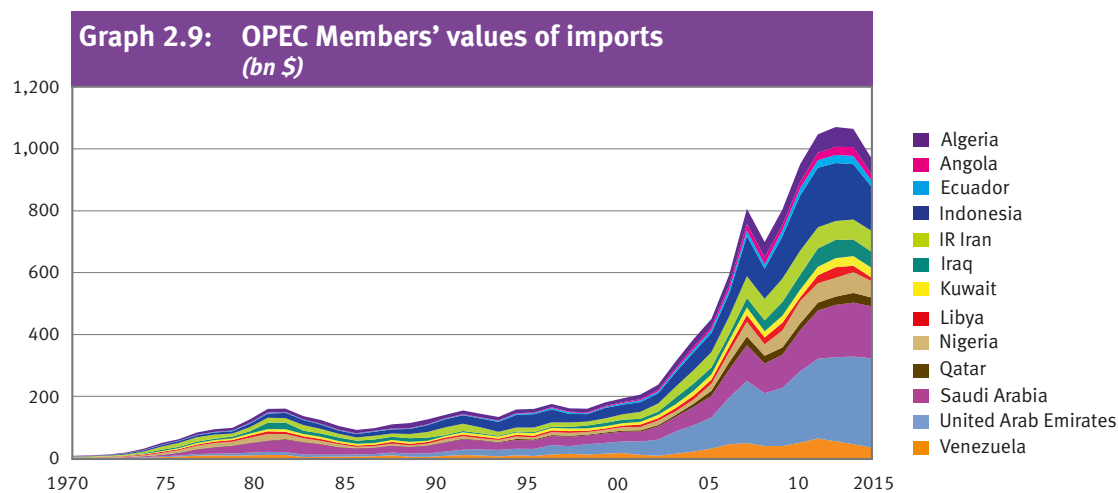


Table 2.5
Macro-economics
OPEC Members' values of imports (m \$)

	2011	2012	2013	2014	2015
Algeria	57,275	59,483	63,642	58,580	51,501
Angola	20,228	23,717	26,344	28,587	20,052
Ecuador	23,152	24,205	25,889	26,445	20,458
Indonesia	177,436	191,691	186,629	178,179	142,695
IR Iran	77,805	68,243	60,738	64,635	67,285
Iraq	47,803	59,006	58,796	53,177	51,581
Kuwait	25,143	27,268	29,293	31,034	31,895
Libya	11,200	25,590	34,050	20,430	11,236
Nigeria	72,076	62,519	60,500	66,991	53,087
Qatar	22,333	25,223	26,866	31,145	28,496
Saudi Arabia	131,724	155,593	168,155	173,834	167,484
United Arab Emirates	229,932	256,528	270,579	282,151	287,025
Venezuela	52,575	65,951	57,183	47,508	37,243
OPEC	948,683	1,045,019	1,068,662	1,062,695	970,039

Notes:

All figures cif.



Current account balances in OPEC Members (m \$)

	2011	2012	2013	2014	2015
Algeria	17,770	12,420	999	-9,434	-30,074
Angola	13,085	13,853	8,348	3,722	-8,748
Ecuador	-402	-165	-968	-568	-2,201
Indonesia	1,685	-24,418	-29,109	-27,500	-17,760
IR Iran	59,364	23,416	26,523	15,891	1,394
Iraq	26,365	29,542	22,055	24,428	-134
Kuwait	65,743	79,137	69,476	53,981	14,140
Libya	3,173	23,836	8,895	-12,362	-16,703
Nigeria	10,757	17,516	19,205	1,279	-15,439
Qatar	51,906	61,946	62,332	49,410	13,751
Saudi Arabia	158,545	164,764	135,442	76,915	-41,307
United Arab Emirates	50,948	79,564	74,118	58,734	21,593
Venezuela	16,342	2,586	4,604	3,598	-18,087
OPEC	475,283	483,998	401,921	238,094	-99,574

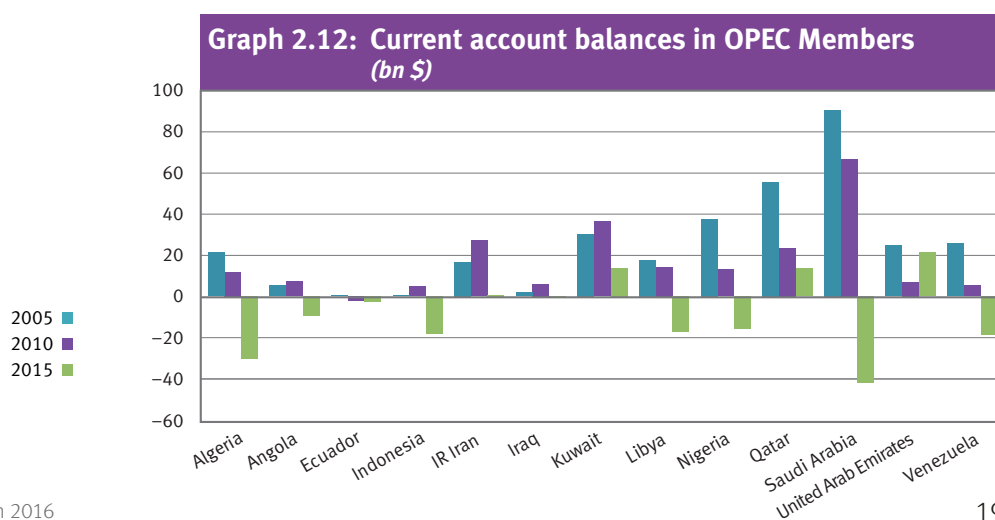
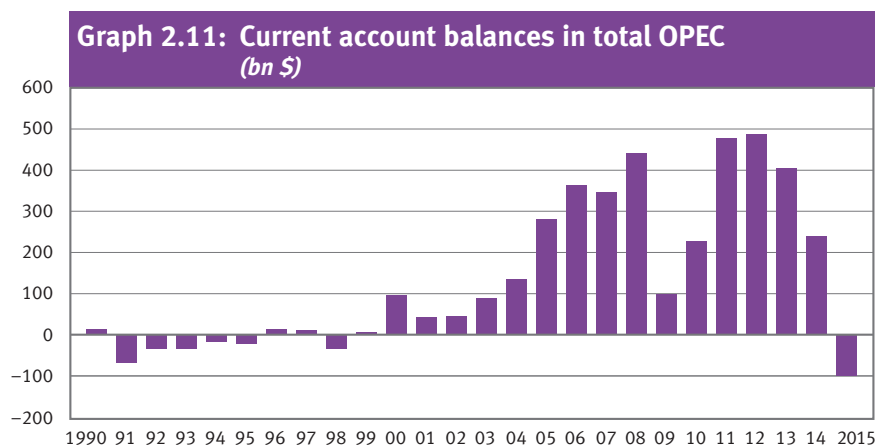


Table 2.7

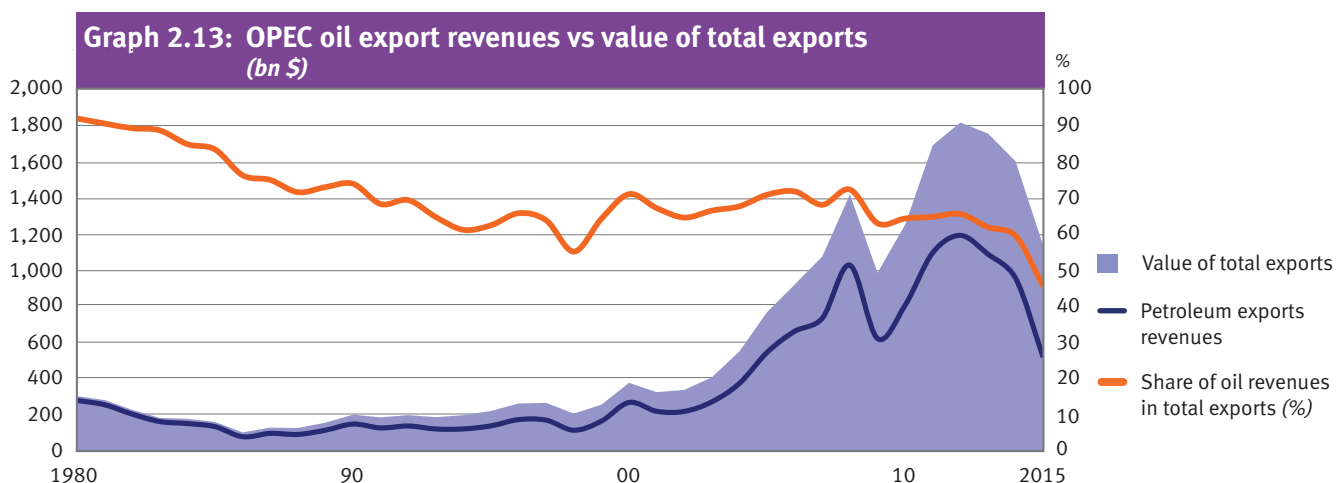
Macro-economics

Annual average exchange rates for OPEC Members (*units of national currency/\$*)

	2011	2012	2013	2014	2015	% change 15/14
Algeria	72.94	77.54	79.37	80.58	100.69	25.0
Angola	93.93	95.47	96.52	98.17	120.06	22.3
Ecuador	1.00	1.00	1.00	1.00	1.00	–
Indonesia	8,770.43	9,386.63	10,461.20	11,865.20	13,389.40	12.8
IR Iran	10,616.30	12,175.50	18,414.40	25,941.70	29,011.50	11.8
Iraq	1,170.00	1,166.17	1,166.00	1,166.00	1,167.33	0.1
Kuwait	0.28	0.28	0.28	0.28	0.30	5.7
Libya	1.26	1.26	1.26	1.29	1.38	7.3
Nigeria	153.86	157.50	157.31	158.55	192.44	21.4
Qatar	3.64	3.64	3.64	3.64	3.64	–
Saudi Arabia	3.75	3.75	3.75	3.75	3.75	–
United Arab Emirates	3.67	3.67	3.67	3.67	3.67	–
Venezuela	4.29	4.29	6.05	6.28	6.28	–

Notes:

Conversions to the US dollar are based on average annual market exchange rates.





SECTION 3

Oil data: upstream

Table 3.1**Oil data: upstream**World proven crude oil reserves by country (*m b*)

	2011	2012	2013	2014	2015	% change 15/14
North America	30,625	34,661	37,652	40,503	40,503	–
Canada ¹	4,081	4,132	4,281	4,118	4,118	–
United States	26,544	30,529	33,371	36,385	36,385	–
Latin America	336,996	338,356	341,522	341,296	342,757	0.4
Argentina	2,505	2,805	2,820	2,354	2,380	1.1
Brazil	12,841	13,154	15,050	15,544	16,184	4.1
Colombia	1,900	2,200	2,377	2,445	2,308	–5.6
Ecuador	8,235	8,235	8,832	8,273	8,273	–
Mexico	11,362	11,424	11,079	9,711	9,711	–
Venezuela	297,571	297,735	298,350	299,953	300,878	0.3
Others	2,582	2,803	3,014	3,016	3,023	0.2
Eastern Europe and Eurasia	117,314	119,881	119,874	119,863	119,860	–
Azerbaijan	7,000	7,000	7,000	7,000	7,000	–
Belarus	198	198	198	198	198	–
Kazakhstan	30,000	30,000	30,000	30,000	30,000	–
Russia	77,403	80,000	80,000	80,000	80,000	–
Turkmenistan	600	600	600	600	600	–
Ukraine	395	395	395	395	395	–
Uzbekistan	594	594	594	594	594	–
Others	1,124	1,094	1,087	1,076	1,073	–0.3
Western Europe	10,880	10,800	11,336	10,760	10,064	–6.5
Denmark	900	805	805	611	511	–16.4
Norway	5,320	5,366	5,825	5,497	5,139	–6.5
United Kingdom	2,800	2,800	2,979	2,982	2,755	–7.6
Others	1,860	1,829	1,727	1,670	1,660	–0.6
Middle East	797,155	799,132	802,958	802,512	802,848	–
Iran	154,580	157,300	157,800	157,530	158,400	0.6
Iraq	141,350	140,300	144,211	143,069	142,503	–0.4
Kuwait	101,500	101,500	101,500	101,500	101,500	–
Oman	5,500	5,500	4,974	5,151	5,306	3.0
Qatar	25,382	25,244	25,244	25,244	25,244	–
Saudi Arabia	265,405	265,850	265,789	266,578	266,455	–
Syrian Arab Republic	2,500	2,500	2,500	2,500	2,500	–
United Arab Emirates	97,800	97,800	97,800	97,800	97,800	–
Others	3,138	3,138	3,139	3,140	3,140	–
Africa	125,521	128,371	128,150	127,334	128,049	0.6
Algeria	12,200	12,200	12,200	12,200	12,200	–
Angola	9,055	9,055	9,011	8,423	9,524	13.1
Egypt	4,400	4,400	4,400	4,400	4,400	–
Gabon	2,000	2,000	2,000	2,000	2,000	–
Libya	48,014	48,472	48,363	48,363	48,363	–
Nigeria	36,247	37,139	37,071	37,448	37,062	–1.0
Sudans	5,000	5,000	5,000	5,000	5,000	–
Others	8,605	10,105	10,105	9,500	9,500	–
Asia and Pacific	47,322	47,552	47,860	48,197	48,597	0.8
Australia	3,873	3,922	3,957	3,982	3,982	–
Brunei	1,100	1,100	1,100	1,100	1,100	–
China	23,747	24,428	24,376	24,649	25,132	2.0
India	5,549	5,571	5,643	5,675	5,680	0.1
Indonesia	3,640	3,291	3,303	3,303	3,230	–2.2
Malaysia	3,739	3,668	3,750	3,750	3,750	–
Vietnam	4,400	4,400	4,400	4,400	4,400	–
Others	1,274	1,172	1,331	1,338	1,323	–1.2
Total world	1,465,813	1,478,753	1,489,352	1,490,465	1,492,677	0.1
<i>of which</i>						
OPEC	1,200,979	1,204,121	1,209,474	1,209,685	1,211,432	0.1
<i>OPEC percentage</i>	<i>81.9</i>	<i>81.4</i>	<i>81.2</i>	<i>81.2</i>	<i>81.2</i>	
OECD	57,104	61,153	64,365	65,274	64,572	–1.1
FSU	116,289	118,886	118,886	118,886	118,886	–

Notes: Figures as at year-end.

1. Data refers to conventional crude oil.

Table 3.2

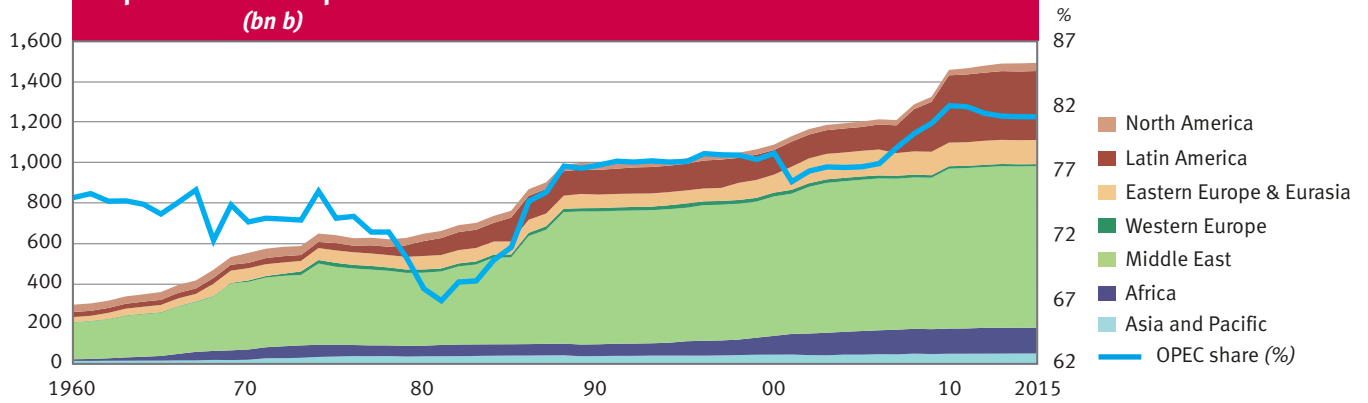
Oil data: upstream

Active rigs by country

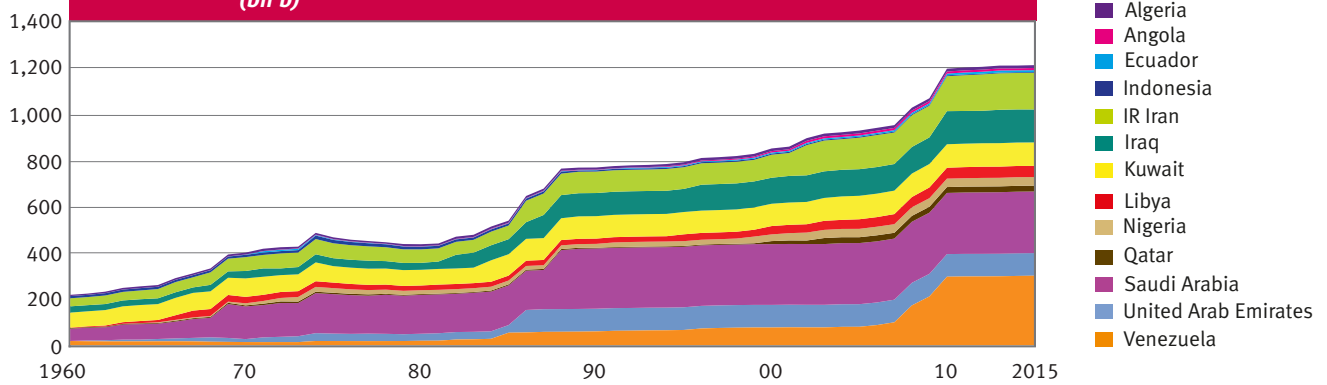
	2011	2012	2013	2014	2015	change 15/14
North America	2,432	2,137	2,146	2,255	855	-1,400
Canada	429	353	372	374	144	-230
United States	2,003	1,784	1,774	1,881	711	-1,170
Latin America	509	517	550	553	389	-164
Argentina	64	75	94	113	91	-22
Bolivia	5	9	11	6	5	-1
Brazil	86	71	54	42	38	-4
Colombia	75	39	45	46	12	-34
Ecuador	39	44	50	41	7	-34
Mexico	105	114	98	72	42	-30
Trinidad & Tobago	4	5	3	3	7	4
Venezuela	116	149	186	221	182	-39
Others	15	11	9	9	5	-4
Eastern Europe and Eurasia	404	428	410	420	427	7
Azerbaijan	14	14	14	17	17	-
Kazakhstan	60	60	59	57	57	-
Poland	11	15	12	12	12	-
Romania	10	10	12	17	18	1
Russia	300	320	304	307	311	4
Turkmenistan	9	9	9	10	12	2
Others	-	-	-	-	-	-
Western Europe	112	136	126	148	114	-34
Germany	5	6	4	3	6	3
Italy	4	5	4	4	3	-1
Netherlands	4	9	5	10	4	-6
Norway	10	25	14	14	17	3
United Kingdom	16	21	12	20	9	-11
Others	73	70	87	97	75	-22
Middle East	446	518	535	505	529	24
IR Iran	123	133	138	135	130	-5
Iraq	59	92	83	69	65	-4
Kuwait	32	31	31	45	58	13
Oman	50	43	65	57	73	16
Qatar	6	6	5	6	6	-
Saudi Arabia	121	148	148	145	145	-
Syrian Arab Republic	27	27	22	11	-	-11
United Arab Emirates	19	26	30	30	51	21
Yemen	2	4	6	3	-	-3
Others	7	8	7	4	1	-3
Africa	240	209	265	265	205	-60
Algeria	33	38	49	49	49	-
Angola	22	27	28	37	30	-7
Egypt	71	48	52	52	44	-8
Gabon	6	6	6	7	2	-5
Libya	55	23	31	31	31	-
Nigeria	38	44	59	46	29	-17
Others	15	23	40	43	20	-23
Asia and Pacific	1,095	1,110	1,130	1,113	1,099	-14
Australia	14	23	18	18	16	-2
China	833	827	827	823	824	1
India	117	114	121	114	100	-14
Indonesia	80	84	92	92	104	12
Malaysia	8	13	12	8	5	-3
New Zealand	4	6	8	6	-	-6
Pakistan	12	21	21	19	23	4
Others	27	22	31	33	27	-6
Total world	5,238	5,055	5,162	5,259	3,618	-1,641
<i>of which</i>						
OPEC	743	845	930	947	887	-60
<i>OPEC percentage</i>	<i>14.2</i>	<i>16.7</i>	<i>18.0</i>	<i>18.0</i>	<i>24.5</i>	
OECD	2,642	2,391	2,367	2,466	999	-1,467
FSU	404	428	410	420	427	7

Notes: Figure as at year end. Number of workover rigs for Venezuela is estimated to stand at 393 in 2015, 181 in 2014, 75 in 2013, 144 in 2012 and 128 in 2011. Average active rigs of the USA is estimated to stand at 977 in 2015, 1,862 in 2014, 1,761 in 2013, 1,919 in 2012 and 1,879 in 2011.

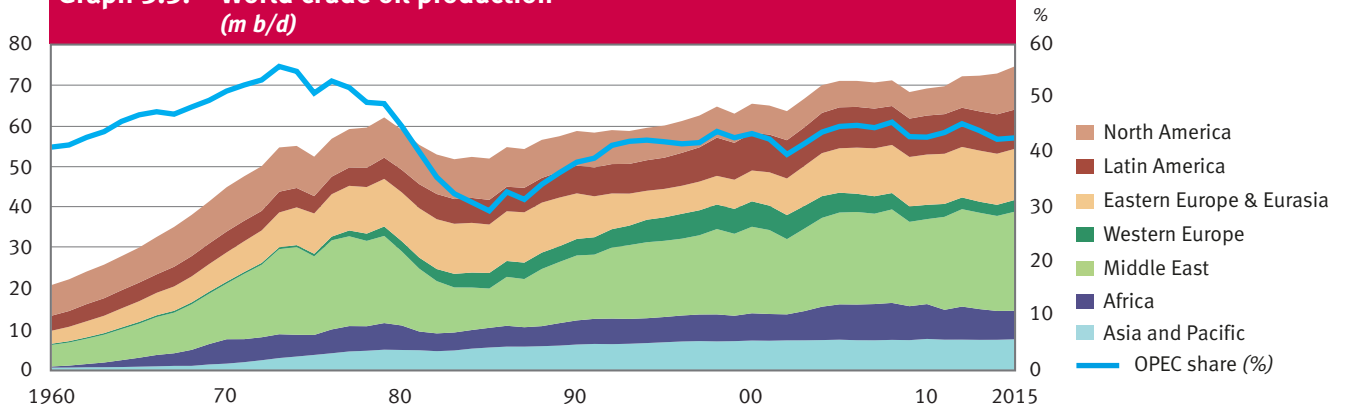
Graph 3.1: World proven crude oil reserves (bn b)



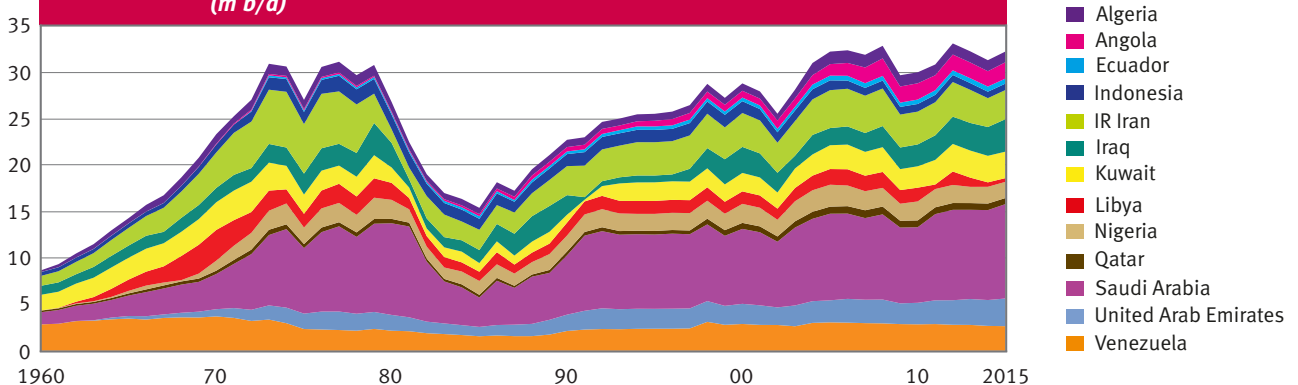
Graph 3.2: OPEC Members' proven crude oil reserves (bn b)



Graph 3.3: World crude oil production (m b/d)



Graph 3.4: OPEC Members' crude oil production (m b/d)



Wells completed in OPEC Members

	2011	2012	2013	2014	2015	change 15/14
Algeria	249	258	191	215	250	35
Angola	112	127	115	87	92	5
Ecuador	207	268	316	327	210	-117
Indonesia	838	766	1,025	818	609	-209
IR Iran	204	323	321	306	288	-18
Iraq	76	228	313	281	154	-127
Kuwait ¹	523	533	590	596	622	26
Libya	76	68	106	162	35	-127
Nigeria	124	107	114	141	116	-25
Qatar	29	87	88	99	77	-22
Saudi Arabia ¹	312	362	429	538	616	78
United Arab Emirates	266	304	277	292	219	-73
Venezuela	1,050	788	415	669	635	-34
OPEC	4,066	4,219	4,300	4,531	3,923	-608
Total world	99,039	101,757	104,888	101,670	74,776	-26,894

Notes:

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

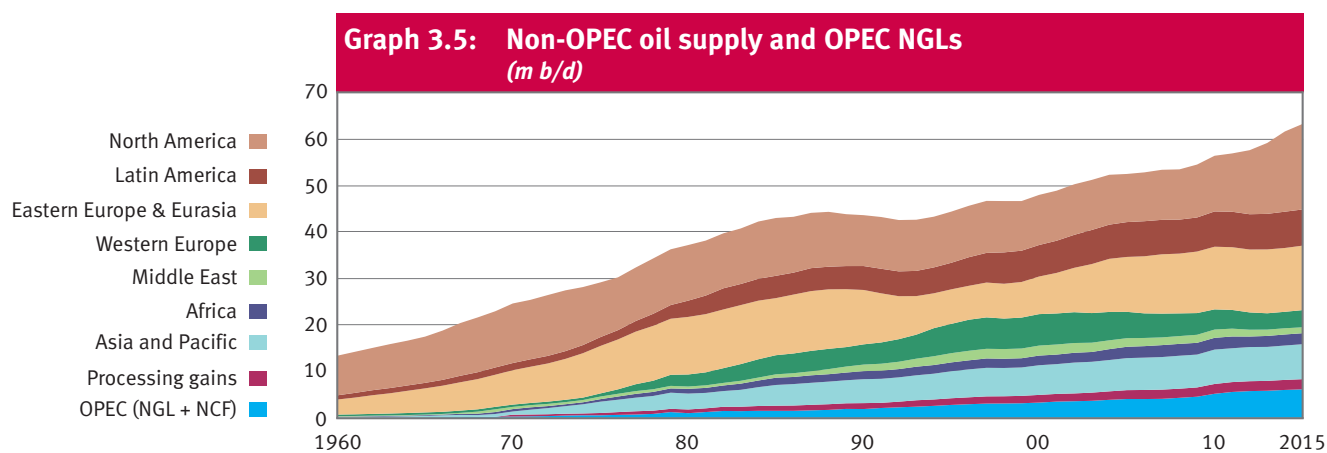


Table 3.4**Oil data: upstream**

Producing wells in OPEC Members

	2011	2012	2013	2014	2015	change 15/14
Algeria	2,010	2,061	2,061	2,042	1,968	-74
Angola	1,476	1,554	1,554	1,509	1,593	84
Ecuador	3,079	3,177	3,414	3,592	3,483	-109
Indonesia	10,423	10,472	10,472	10,263	10,248	-15
IR Iran	2,026	2,119	2,204	2,281	2,339	58
Iraq	1,695	1,700	1,735	1,963	2,361	398
Kuwait ¹	1,798	1,831	1,794	1,760	1,731	-29
Libya	609	1,910	1,308	632	540	-92
Nigeria	2,116	2,168	1,951	2,010	1,947	-63
Qatar	517	517	511	500	467	-33
Saudi Arabia ¹	3,245	3,407	3,372	3,406	3,555	149
United Arab Emirates	1,592	1,640	1,722	1,735	1,792	57
Venezuela	14,915	14,959	14,809	14,710	14,685	-25
OPEC	45,501	47,515	46,907	46,403	46,709	306
Total world	971,879	981,598	981,696	1,060,232	1,113,243	53,011

Notes:

Excluding shut-in wells.

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

Daily and cumulative crude oil production in OPEC Members (1,000 b)

Daily crude oil production (average)

	1960	1970	1980	1990	2000	2015
Algeria	181.1	1,029.1	1,019.9	783.5	796.0	1,157.1
Angola	1.1	83.9	150.0	473.8	736.1	1,767.1
Ecuador	7.5	4.1	204.1	286.1	392.2	543.1
Indonesia	409.6	853.6	1,575.7	1,299.3	1,272.5	690.1
IR Iran	1,067.7	3,829.0	1,467.4	3,135.3	3,661.3	3,151.6
Iraq	972.2	1,548.6	2,646.4	2,112.6	2,810.0	3,504.1
Kuwait ¹	1,691.8	2,989.6	1,663.7	858.6	1,996.1	2,858.7
Libya	–	3,318.0	1,831.6	1,389.1	1,347.2	403.9
Nigeria	17.4	1,083.1	2,058.0	1,726.7	2,053.6	1,748.2
Qatar	174.6	362.4	471.4	405.6	648.2	656.0
Saudi Arabia ¹	1,313.5	3,799.1	9,900.5	6,412.5	8,094.5	10,192.6
United Arab Emirates	–	779.6	1,701.9	1,762.6	2,174.7	2,988.9
Venezuela	2,846.1	3,708.0	2,165.0	2,135.2	2,891.0	2,653.9
OPEC	8,682.6	23,388.1	26,855.6	22,780.9	28,873.3	32,315.2

Notes:

1. Figures include share of production from Neutral Zone.

Cumulative crude oil production up to and including year

	1960	1970	1980	1990	2000	2015
Algeria	81,372	2,569,469	6,404,548	8,974,340	11,837,030	18,238,800
Angola	1,127	76,423	623,359	1,681,478	3,972,081	11,902,120
Ecuador	2,745	26,191	617,927	1,526,131	2,843,162	5,507,898
Indonesia	2,235,799	4,217,164	9,325,438	13,978,938	18,869,006	23,811,369
IR Iran	4,167,717	12,357,977	29,969,896	38,410,483	51,367,070	71,419,818
Iraq	2,750,439	7,476,078	15,826,156	22,246,208	26,918,241	40,143,950
Kuwait ¹	4,333,049	13,028,906	21,993,164	25,857,094	32,092,887	45,765,606
Libya	–	5,476,384	12,810,843	16,929,582	21,993,272	28,989,169
Nigeria	12,318	1,138,896	8,389,456	13,656,562	20,572,881	31,572,120
Qatar	451,617	1,428,583	3,199,374	4,334,808	6,032,088	10,017,501
Saudi Arabia ¹	4,345,242	13,283,848	42,306,785	61,814,608	91,266,532	140,142,486
United Arab Emirates	–	1,160,471	7,164,231	11,921,927	19,785,670	33,304,209
Venezuela	13,865,487	26,301,976	36,046,663	42,528,079	51,772,971	67,407,643
OPEC	32,246,910	88,542,364	194,677,840	263,860,237	359,322,888	528,222,687

Notes:

1. Figures include share of production from Neutral Zone.

Table 3.6**Oil data: upstream**

World crude oil production by country (1,000 b/d)

	2011	2012	2013	2014	2015	% change 15/14
North America	6,898.2	7,784.3	8,835.6	10,107.5	10,694.2	5.8
Canada	1,260.8	1,308.5	1,381.6	1,399.8	1,263.4	-9.7
United States	5,637.4	6,475.8	7,454.0	8,707.6	9,430.8	8.3
Latin America	9,807.6	9,701.3	9,698.3	9,740.6	9,715.7	-0.3
Argentina	553.4	549.3	540.0	532.2	532.2	-
Brazil	2,105.4	2,061.3	2,023.9	2,254.6	2,437.3	8.1
Chile	4.5	6.1	6.7	6.6	6.3	-4.9
Colombia	915.2	944.2	1,008.2	990.3	1,005.6	1.5
Ecuador	500.3	503.6	526.4	556.6	543.1	-2.4
Mexico	2,552.5	2,547.9	2,522.2	2,428.9	2,266.8	-6.7
Peru	69.6	66.6	62.8	69.3	58.0	-16.3
Trinidad & Tobago	92.0	81.7	81.2	81.2	78.6	-3.1
Venezuela	2,880.9	2,803.9	2,789.5	2,682.6	2,653.9	-1.1
Others	133.9	136.7	137.7	138.2	133.9	-3.1
Eastern Europe and Eurasia	12,411.2	12,505.8	12,656.2	12,646.6	12,650.7	-
Azerbaijan	872.0	817.2	814.7	793.1	786.7	-0.8
Kazakhstan	1,325.9	1,306.5	1,372.8	1,344.8	1,321.6	-1.7
Romania	83.8	82.0	82.1	80.2	78.8	-1.8
Russia	9,787.4	9,953.3	10,047.3	10,087.5	10,111.7	0.2
Turkmenistan	173.6	187.3	180.4	185.9	206.2	10.9
Ukraine	48.7	46.0	43.7	40.7	36.2	-11.2
Others	119.7	113.5	115.2	114.2	109.5	-4.1
Western Europe	3,196.3	2,888.2	2,724.2	2,750.3	2,892.9	5.2
Denmark	221.7	201.9	176.0	164.9	156.0	-5.4
France	17.8	16.3	16.0	15.3	16.7	8.7
Germany	51.8	51.1	51.8	48.1	48.1	-0.1
Italy	99.2	101.0	101.6	106.3	100.1	-5.8
Netherlands	21.4	21.6	21.6	29.7	26.9	-9.5
Norway	1,680.1	1,532.8	1,463.6	1,511.8	1,567.4	3.7
Turkey	45.7	44.8	46.2	47.7	48.5	1.8
United Kingdom	1,006.0	868.6	796.1	776.0	879.7	13.4
Others	52.5	50.2	51.3	50.4	49.5	-1.9
Middle East	23,004.8	24,106.5	23,845.3	23,510.9	24,494.9	4.2
Bahrain	190.3	173.0	197.6	202.5	202.6	-
IR Iran	3,576.0	3,739.8	3,575.3	3,117.1	3,151.6	1.1
Iraq	2,652.6	2,942.4	2,979.6	3,110.5	3,504.1	12.7
Kuwait ¹	2,658.7	2,977.6	2,924.7	2,866.8	2,858.7	-0.3
Oman	780.1	813.5	844.3	856.1	885.2	3.4
Qatar	733.5	733.6	723.9	709.2	656.0	-7.5
Saudi Arabia ¹	9,311.0	9,763.0	9,637.0	9,712.7	10,192.6	4.9
Syrian Arab Republic	333.3	151.6	45.3	22.8	19.2	-15.8
United Arab Emirates	2,564.2	2,653.0	2,796.5	2,794.0	2,988.9	7.0
Yemen	205.1	159.2	121.0	119.2	36.0	-69.8
Africa	7,389.2	8,181.6	7,612.2	7,135.6	7,072.8	-0.9
Algeria	1,161.6	1,199.8	1,202.6	1,192.8	1,157.1	-3.0
Angola	1,618.0	1,704.0	1,701.2	1,653.7	1,767.1	6.9
Congo	295.3	294.5	280.7	276.3	277.4	0.4
Egypt	530.4	533.1	531.3	531.8	540.9	1.7
Equatorial Guinea	205.9	238.8	223.1	236.9	245.3	3.6
Gabon	251.0	242.0	234.1	231.3	227.9	-1.5
Libya	489.5	1,450.0	993.3	479.9	403.9	-15.8
Nigeria	1,974.8	1,954.1	1,753.7	1,807.0	1,748.2	-3.3
Sudans	428.0	119.3	232.3	285.6	278.6	-2.5
Others	434.6	446.1	459.8	440.3	426.4	-3.2
Asia and Pacific	7,467.0	7,474.8	7,423.1	7,439.3	7,558.6	1.6
Australia	411.3	405.4	334.7	353.4	321.5	-9.0
Brunei	156.5	145.7	122.1	114.4	115.3	0.8
China	4,052.1	4,074.2	4,163.8	4,208.3	4,273.7	1.6
India	766.9	759.7	755.8	752.8	746.8	-0.8
Indonesia	794.2	763.4	727.1	697.3	690.1	-1.0
Malaysia	564.7	585.4	594.5	614.7	665.0	8.2
New Zealand	46.8	41.1	35.4	39.5	41.3	4.5
Others	674.5	699.9	689.8	658.8	705.0	7.0
Total world	70,174.4	72,642.5	72,794.9	73,330.7	75,079.8	2.4
<i>of which</i>						
OPEC	30,915.4	33,188.1	32,330.9	31,380.2	32,315.2	3.0
OPEC percentage	44.1	45.7	44.4	42.8	43.0	
OECD	13,111.4	13,678.7	14,472.0	15,698.9	16,233.3	3.4
FSU	12,282.3	12,376.6	12,521.8	12,511.1	12,517.7	0.1

Notes:

1. Figures include share of production from Neutral Zone.

Table 3.7

Oil data: upstream

Non-OPEC oil supply and OPEC NGLs (1,000 b/d)

	2011	2012	2013	2014	2015	% change 15/14
North America	12,564.3	13,801.5	15,269.7	17,272.6	18,407.1	6.6
Canada	3,542.3	3,779.1	4,038.0	4,312.4	4,419.8	2.5
United States	9,022.1	10,022.4	11,231.7	12,960.2	13,987.2	7.9
Latin America	7,635.3	7,596.6	7,659.7	7,818.1	7,794.0	-0.3
Argentina	705.4	708.3	684.0	692.5	681.0	-1.7
Brazil	2,601.1	2,567.9	2,602.5	2,859.2	3,064.7	7.2
Chile	12.8	11.4	10.4	8.7	7.2	-17.1
Colombia	934.2	965.2	1,030.2	1,013.3	1,029.6	1.6
Mexico	2,945.4	2,922.5	2,892.2	2,801.2	2,598.8	-7.2
Peru	152.7	153.1	167.3	172.9	149.4	-13.6
Trinidad & Tobago	135.8	116.5	115.4	112.1	108.4	-3.3
Others	147.9	151.7	157.7	158.2	154.9	-2.1
Eastern Europe and Eurasia	13,513.3	13,552.1	13,756.4	13,745.9	13,889.3	1.0
Azerbaijan	933.3	883.5	891.5	866.2	860.1	-0.7
Kazakhstan	1,602.7	1,586.4	1,642.7	1,623.5	1,596.3	-1.7
Romania	87.8	86.0	85.1	82.9	80.8	-2.5
Russia	10,398.8	10,491.8	10,635.3	10,675.4	10,846.8	1.6
Turkmenistan	197.6	213.3	209.4	217.9	238.3	9.4
Ukraine	73.6	75.1	69.2	60.3	54.0	-10.5
Others	219.5	216.1	223.3	219.7	213.0	-3.0
Western Europe	4,029.5	3,724.3	3,519.1	3,546.6	3,695.7	4.2
Denmark	223.7	203.9	180.0	168.9	160.0	-5.3
France	98.3	94.3	90.5	89.8	91.0	1.4
Germany	153.1	149.9	145.2	141.2	141.4	0.2
Italy	140.4	144.7	144.3	140.8	142.8	1.4
Netherlands	42.2	48.1	54.2	49.7	48.0	-3.5
Norway	2,040.1	1,917.1	1,837.7	1,888.6	1,947.6	3.1
Turkey	45.7	44.8	46.2	47.7	48.5	1.8
United Kingdom	1,121.1	956.0	874.7	872.3	971.8	11.4
Others	165.0	165.4	146.4	147.7	144.6	-2.1
Middle East	1,692.1	1,469.0	1,361.1	1,338.8	1,273.5	-4.9
Bahrain	212.3	195.0	218.6	223.5	223.6	-
Oman	885.5	918.6	942.1	943.3	981.2	4.0
Syrian Arab Republic	367.1	176.6	59.5	32.8	27.2	-17.0
Yemen	227.1	178.7	141.0	139.2	41.6	-70.1
Africa	2,535.3	2,266.9	2,361.8	2,377.5	2,370.4	-0.3
Congo	295.3	294.5	280.7	276.3	277.4	0.4
Egypt	702.4	710.1	714.3	709.8	717.9	1.1
Equatorial Guinea	251.9	282.7	267.0	280.8	289.2	3.0
Gabon	251.0	242.0	234.1	231.3	227.9	-1.5
Sudans	428.0	119.3	232.3	285.6	278.6	-2.5
Others	606.6	618.3	633.4	593.7	579.3	-2.4
Asia and Pacific	7,289.9	7,358.6	7,316.3	7,407.0	7,529.4	1.7
Australia	484.0	475.4	401.4	428.3	378.6	-11.6
Brunei	169.2	158.6	135.3	126.7	126.8	0.1
China	4,114.5	4,158.1	4,247.2	4,295.3	4,366.7	1.7
India	888.0	875.5	866.4	869.3	865.6	-0.4
Malaysia	647.7	659.4	648.0	682.7	735.0	7.7
New Zealand	50.3	45.6	41.4	46.6	48.0	2.9
Others	936.2	986.0	976.6	958.1	1,008.7	5.3
Non-OPEC production	49,259.7	49,769.0	51,244.1	53,506.5	54,959.4	2.7
Processing gains	2,126.0	2,130.0	2,130.0	2,162.0	2,185.0	1.1
Non-OPEC supply	51,385.7	51,899.0	53,374.1	55,668.5	57,144.4	2.7
OPEC NGL	5,402.1	5,517.0	5,557.7	5,703.6	5,833.7	2.3
OPEC non-conventional (NCF)	158.4	231.3	265.0	293.0	296.3	1.1
OPEC (NGL+NCF)	5,560.5	5,748.3	5,822.7	5,996.6	6,130.1	2.2
Non-OPEC & OPEC (NGL+NCF)	56,946.2	57,647.3	59,196.8	61,665.1	63,274.4	2.6
<i>of which</i>						
OECD	20,170.2	21,073.2	22,234.9	24,202.0	25,232.4	4.3
FSU	13,325.7	13,360.4	13,555.9	13,546.3	13,693.8	1.1

Visit our

Interactive ASB



asb.opec.org



SECTION 4

Oil data: downstream

Table 4.1

Oil data: downstream

Refinery capacity in OPEC Members by company and location (1,000 b/cd)

	Location	2011	2012	2013	2014	2015
Algeria		592.0	592.0	650.8	650.8	650.8
Sonatrach	Skikda	323.4	323.4	355.3	355.3	355.3
	Skikda (condensate)	122.2	122.2	122.2	122.2	122.2
	Arzew	53.8	53.8	80.8	80.8	80.8
	Alger	58.1	58.1	58.1	58.1	58.1
	Hassi Messaoud	21.5	21.5	21.5	21.5	21.5
	Adrar	12.9	12.9	12.9	12.9	12.9
Angola		65.0	65.0	65.0	65.0	65.0
Fina Petroleos de Angola	Luanda	65.0	65.0	65.0	65.0	65.0
Ecuador		188.4	188.4	190.8	190.8	190.8
Petroindustrial	Esmeraldas	110.0	110.0	110.0	110.0	110.0
	Santa Elens	45.0	45.0	45.0	45.0	45.0
	Shushufindi	20.0	20.0	20.0	20.0	20.0
Repsol YPF	Orellana	7.2	7.2	7.2	7.2	7.2
Andes Petroleum	Sucumbios	3.5	3.5	3.5	3.5	3.5
Petroproduccion	El Oro	nap	nap	2.4	2.4	2.4
	Sucumbios	1.7	1.7	1.7	1.7	1.7
	Lago Agrio	1.0	1.0	1.0	1.0	1.0
Indonesia		1,125.0	1,125.0	1,125.0	1,125.0	1,125.0
Pertamina	Cilacap	348.0	348.0	348.0	348.0	348.0
	Balikpapan	250.0	250.0	250.0	250.0	250.0
	Plaju/Musi	118.0	118.0	118.0	118.0	118.0
	Balongan	125.0	125.0	125.0	125.0	125.0
	Dumai	120.0	120.0	120.0	120.0	120.0
	Sungai Pakning	50.0	50.0	50.0	50.0	50.0
	Kasim	10.0	10.0	10.0	10.0	10.0
Migas	Cepu	3.8	3.8	3.8	3.8	3.8
TPPI	Tuban	100.2	100.2	100.2	100.2	100.2
IR Iran		1,715.0	1,715.0	1,715.0	1,781.0	1,781.0
NIOC	Abadan	360.0	360.0	360.0	399.0	399.0
	Isfahan	370.0	370.0	370.0	375.0	375.0
	Bandar Abbas	320.0	320.0	320.0	284.0	284.0
	Tehran	220.0	220.0	220.0	245.0	245.0
	Arak	250.0	250.0	250.0	242.0	242.0
	Tabriz	110.0	110.0	110.0	110.0	110.0
	Shiraz	40.0	40.0	40.0	56.0	56.0
	Lavan	25.0	25.0	25.0	22.0	22.0
	Kermanshah	20.0	20.0	20.0	48.0	48.0
Iraq		810.0	820.0	830.0	900.0	900.0
INOC	Baiji	310.0	310.0	310.0	310.0	310.0
	Basrah	140.0	140.0	140.0	210.0	210.0
	Daura	140.0	140.0	140.0	140.0	140.0
	Kirkuk	30.0	30.0	30.0	30.0	30.0
	Sainia	20.0	20.0	30.0	30.0	30.0
	Najaf	30.0	30.0	30.0	30.0	30.0
	Samawa	30.0	30.0	30.0	30.0	30.0
	Nasiria	30.0	30.0	30.0	30.0	30.0
	Missan	30.0	30.0	30.0	30.0	30.0
	Diwania	10.0	20.0	20.0	20.0	20.0
	Haditha	16.0	16.0	16.0	16.0	16.0

Refinery capacity in OPEC Members by company and location (1,000 b/cd)

	Location	2011	2012	2013	2014	2015
Iraq (cont'd)						
	Qaiarah	14.0	14.0	14.0	14.0	14.0
	Kask	10.0	10.0	10.0	10.0	10.0
Kuwait		936.0	936.0	936.0	936.0	936.0
KNPC	Mina Al-Ahmadi	466.0	466.0	466.0	466.0	466.0
	Mina Abdullah	270.0	270.0	270.0	270.0	270.0
	Shuaiba	200.0	200.0	200.0	200.0	200.0
Libya		380.0	380.0	380.0	380.0	380.0
NOC	Ras Lanuf	220.0	220.0	220.0	220.0	220.0
	Zawia	120.0	120.0	120.0	120.0	120.0
	Tobruk	20.0	20.0	20.0	20.0	20.0
	Sarir	10.0	10.0	10.0	10.0	10.0
	Marsa El-Brega	10.0	10.0	10.0	10.0	10.0
Nigeria		445.0	445.0	445.0	445.0	445.0
PHRC	New Port Harcourt	150.0	150.0	150.0	150.0	150.0
WRPC	Warri	125.0	125.0	125.0	125.0	125.0
KRPC	Kaduna	110.0	110.0	110.0	110.0	110.0
PHRC	Old Port Harcourt	60.0	60.0	60.0	60.0	60.0
Qatar		283.0	283.0	283.0	283.0	283.0
Qatar Petroleum	Ras Laffan condensate	146.0	146.0	146.0	146.0	146.0
	Mesaieed refinery & condensate	137.0	137.0	137.0	137.0	137.0
Saudi Arabia		2,107.0	2,107.0	2,507.0	2,907.0	2,907.0
Saudi Aramco	Ras Tanura	550.0	550.0	550.0	550.0	550.0
	Yanbu	235.0	235.0	235.0	235.0	235.0
	Riyadh	124.0	124.0	124.0	124.0	124.0
	Jeddah	88.0	88.0	88.0	88.0	88.0
Saudi Aramco & Mobil	Samref	400.0	400.0	400.0	400.0	400.0
Saudi Aramco & Petrola	Rabigh	400.0	400.0	400.0	400.0	400.0
Saudi Aramco & Total	Satorp	nap	nap	400.0	400.0	400.0
Saudi Aramco	Yasref	nap	nap	nap	400.0	400.0
Saudi Aramco & Shell	Sasref	310.0	310.0	310.0	310.0	310.0
United Arab Emirates		675.0	675.0	707.0	707.0	1,124.0
ADNOC	Al-Ruwais	400.0	400.0	400.0	400.0	817.0
Emirate Oil	Jebel Ali	120.0	120.0	140.0	140.0	140.0
ADNOC	Umm Al-Narr	85.0	85.0	85.0	85.0	85.0
METRO Oil	Fujairah	70.0	70.0	82.0	82.0	82.0
Venezuela		1,872.0	1,872.0	1,855.0	1,890.6	1,890.6
PDVSA	Amuay	600.0	600.0	600.0	600.0	600.0
	Cardon	340.0	340.0	340.0	340.0	340.0
	Puerto La Cruz	195.5	195.5	195.5	195.5	195.5
	El Palito	126.9	126.9	126.9	126.9	126.9
	San Roque	5.2	5.2	5.2	5.2	5.2
	Bajo Grande	4.1	4.1	5.0	5.0	5.0
	Petropiar ¹	184.2	184.2	145.8	198.0	198.0
	Petromonagas ¹	130.4	130.4	132.2	136.0	136.0
	Petrocedeno ¹	175.3	175.3	181.7	153.0	153.0
	Petrozuata ¹	110.4	110.4	122.7	131.0	131.0
OPEC		11,193.3	11,203.3	11,689.6	12,261.2	12,678.2

Notes:

1. Upgrader refinery capacity.

Table 4.2

Oil data: downstream

Charge refinery capacity in OPEC Members, 2015 (1,000 b/cd)

	Vacuum distillation	Thermal operations	Catalytic cracking	Catalytic reforming	Catalytic ¹ hydrocracking	Catalytic hydrotreating
Algeria	10.7	–	7.1	89.7	–	82.0
Angola	2.5	–	8.7	–	2.4	3.4
Ecuador	45.3	31.5	18.0	12.8	–	27.5
Indonesia	265.0	82.6	101.4	92.9	99.7	23.4
IR Iran	624.0	104.0	40.0	197.4	145.0	180.2
Iraq	145.0	–	–	88.0	74.2	292.0
Kuwait	341.8	80.0	43.0	54.6	204.5	588.7
Libya	3.7	–	–	20.3	–	43.3
Nigeria ¹	132.2	23.4	86.0	73.5	33.0	110.8
Qatar ¹	–	–	60.0	24.6	194.0	39.4
Saudi Arabia	645.9	191.1	187.6	240.4	259.0	755.0
United Arab Emirates	92.8	–	127.0	208.2	120.0	638.3
Venezuela	679.0	145.0	231.8	49.5	–	389.7
OPEC	2,987.9	657.6	910.6	1,151.9	1,131.8	3,173.6

Notes:

1. Includes GTL cracker capacities.

Table 4.3

World refinery capacity by country (1,000 b/cd)

	2011	2012	2013	2014	2015	change 15/14
North America	19,775.4	19,377.7	19,865.1	19,974.3	20,016.8	42.5
Canada	2,039.4	2,049.7	2,049.7	2,049.7	2,049.7	–
United States	17,736.0	17,328.0	17,815.4	17,924.6	17,967.1	42.5
Latin America	8,780.6	8,785.2	8,363.7	8,541.3	8,541.3	–
Argentina	627.1	630.6	630.6	630.6	630.6	–
Brazil	2,010.0	2,000.0	2,093.0	2,235.0	2,235.0	–
Colombia	330.0	330.0	330.0	330.0	330.0	–
Ecuador	188.4	188.4	190.8	190.8	190.8	–
Mexico	1,690.0	1,690.0	1,690.0	1,690.0	1,690.0	–
Netherland Antilles	320.0	320.0	320.0	320.0	320.0	–
Trinidad & Tobago	168.0	168.0	168.0	168.0	168.0	–
Venezuela ¹	1,872.0	1,872.0	1,855.0	1,890.6	1,890.6	–
Others	1,575.2	1,586.3	1,086.3	1,086.3	1,086.3	–
Eastern Europe and Eurasia	9,978.2	10,163.2	10,262.7	10,337.7	10,387.7	50.0
Azerbaijan	399.0	399.0	399.0	399.0	399.0	–
Belarus	493.3	493.3	493.3	493.3	493.3	–
Kazakhstan	345.1	345.1	345.1	345.1	345.1	–
Poland	493.0	493.0	493.0	493.0	493.0	–

World refinery capacity by country (1,000 b/cd)

	2011	2012	2013	2014	2015	change 15/14
Eastern Europe and Eurasia (cont'd)						
Romania	537.3	537.3	461.8	461.8	461.8	–
Russia	5,569.0	5,754.0	5,929.0	6,004.0	6,054.0	50.0
Ukraine	879.8	879.8	879.8	879.8	879.8	–
Others	1,261.8	1,261.8	1,261.8	1,261.8	1,261.8	–
Western Europe	15,155.9	14,790.8	14,136.1	13,918.6	13,918.6	–
Belgium	740.3	739.8	739.8	739.8	739.8	–
France	1,843.8	1,718.8	1,508.4	1,406.0	1,406.0	–
Germany	2,417.7	2,247.0	2,247.0	2,188.0	2,188.0	–
Italy	2,337.2	2,337.2	2,115.7	2,046.0	2,046.0	–
Netherlands	1,208.6	1,196.6	1,196.6	1,196.6	1,196.6	–
Spain	1,271.5	1,271.5	1,291.5	1,427.5	1,427.5	–
United Kingdom	1,766.2	1,767.2	1,524.4	1,402.0	1,402.0	–
Others	3,570.6	3,512.7	3,512.7	3,512.7	3,512.7	–
Middle East	7,708.3	7,718.3	8,160.3	8,696.3	9,113.3	417.0
IR Iran	1,715.0	1,715.0	1,715.0	1,781.0	1,781.0	–
Iraq	810.0	820.0	830.0	900.0	900.0	–
Kuwait	936.0	936.0	936.0	936.0	936.0	–
Qatar	283.0	283.0	283.0	283.0	283.0	–
Saudi Arabia	2,107.0	2,107.0	2,507.0	2,907.0	2,907.0	–
United Arab Emirates	675.0	675.0	707.0	707.0	1,124.0	417.0
Others	1,182.3	1,182.3	1,182.3	1,182.3	1,182.3	–
Africa	3,414.0	3,412.0	3,490.8	3,490.8	3,490.8	–
Algeria	592.0	592.0	650.8	650.8	650.8	–
Angola	65.0	65.0	65.0	65.0	65.0	–
Egypt	726.3	726.3	726.3	726.3	726.3	–
South Africa	486.5	484.5	484.5	484.5	484.5	–
Libya	380.0	380.0	380.0	380.0	380.0	–
Nigeria	445.0	445.0	445.0	445.0	445.0	–
Others	719.2	719.2	739.2	739.2	739.2	–
Asia and Pacific	29,525.7	30,537.6	30,593.0	30,851.8	31,120.5	268.7
Australia	757.2	760.1	674.1	541.1	440.1	–101.0
China	10,834.3	11,547.3	11,787.3	12,337.3	12,437.3	100.0
India	3,883.6	4,278.8	4,319.0	4,319.0	4,619.0	300.0
Indonesia	1,125.0	1,125.0	1,125.0	1,125.0	1,125.0	–
Japan	4,499.2	4,477.4	4,339.7	3,947.0	3,916.7	–30.3
South Korea	2,859.5	2,887.0	2,887.0	2,887.0	2,887.0	–
Singapore	1,427.0	1,422.0	1,414.0	1,514.0	1,514.0	–
Others	4,139.9	4,039.9	4,046.9	4,181.4	4,181.4	–
Total world	94,338.0	94,784.7	94,871.7	95,810.8	96,589.0	778.2
<i>of which</i>						
OPEC	11,193.3	11,203.3	11,689.6	12,261.2	12,678.2	417.0
<i>OPEC percentage</i>	<i>11.9</i>	<i>11.8</i>	<i>12.3</i>	<i>12.8</i>	<i>13.1</i>	
OECD	45,507.8	44,753.7	44,362.7	43,728.7	43,639.8	–88.8
FSU	8,347.4	8,532.4	8,707.4	8,782.4	8,832.4	50.0

Notes:

1. Includes upgrader capacity.

Table 4.4

Oil data: downstream

World refinery throughput by country (1,000 b/d)

	2011	2012	2013	2014	2015	% change 15/14
North America	16,443.1	16,781.4	17,082.8	17,557.0	17,825.9	1.5
Canada	1,734.1	1,802.0	1,789.6	1,733.4	1,716.1	-1.0
United States	14,708.9	14,979.4	15,293.2	15,823.5	16,109.8	1.8
Latin America	7,024.8	6,967.6	6,764.2	6,409.5	6,224.9	-2.9
Argentina	515.4	529.3	522.9	523.7	534.2	2.0
Brazil	1,865.0	1,927.0	2,055.0	2,107.0	1,967.3	-6.6
Colombia	304.4	296.8	288.6	237.3	243.8	2.7
Ecuador	156.6	152.0	140.4	137.8	133.2	-3.3
Mexico	1,167.9	1,206.5	1,224.6	1,152.8	1,059.8	-8.1
Netherlands Antilles	168.7	175.2	143.4	147.7	152.2	3.0
Trinidad & Tobago	136.8	108.4	125.5	104.3	125.3	20.1
Venezuela	1,441.5	1,315.8	1,393.6	1,351.0	1,416.9	4.9
Others	1,268.5	1,256.7	870.0	647.8	592.3	-8.6
Eastern Europe and Eurasia	7,831.6	7,999.5	8,130.5	8,450.2	8,395.5	-0.6
Azerbaijan	122.7	120.8	129.2	131.8	125.9	-4.4
Belarus	411.2	435.1	424.9	435.5	435.5	-
Kazakhstan	295.6	295.8	297.6	299.4	302.3	1.0
Poland	526.1	550.7	513.9	514.0	555.7	8.1
Romania	198.8	188.2	193.9	215.8	212.7	-1.5
Russia	5,191.4	5,434.9	5,590.9	5,915.3	5,791.6	-2.1
Ukraine	166.2	78.4	77.3	61.8	50.0	-19.1
Others	919.7	895.7	903.0	876.7	921.9	5.2
Western Europe	11,403.8	11,394.0	10,784.8	10,729.5	11,338.8	5.7
Belgium	599.7	638.0	555.5	645.3	644.0	-0.2
France	1,336.9	1,157.1	1,138.4	1,115.3	1,172.6	5.1
Germany	1,917.0	1,940.2	1,895.3	1,861.8	1,905.9	2.4
Italy	1,580.0	1,487.4	1,270.9	1,202.3	1,346.0	12.0
Netherlands	1,012.4	1,008.2	959.7	1,003.7	1,059.9	5.6
Spain	1,044.7	1,177.3	1,161.3	1,178.5	1,295.8	10.0
United Kingdom	1,460.1	1,376.9	1,219.6	1,142.6	1,143.4	0.1
Others	2,453.0	2,608.8	2,584.0	2,580.2	2,771.2	7.4
Middle East	6,914.4	6,815.2	6,636.6	6,913.0	7,309.2	5.7
IR Iran	1,746.3	1,717.0	1,817.0	1,817.0	1,817.0	-
Iraq	549.9	587.0	606.5	495.3	415.1	-16.2
Kuwait	842.5	905.5	863.7	871.8	865.6	-0.7
Qatar	278.0	292.0	269.0	261.0	252.8	-3.1
Saudi Arabia	1,827.2	1,726.1	1,577.5	2,000.0	2,180.5	9.0
United Arab Emirates	635.0	637.5	650.5	636.8	918.6	44.3
Others	1,035.5	950.2	852.5	831.0	859.4	3.4
Africa	2,163.5	2,270.0	2,123.4	2,294.3	2,227.7	-2.9
Algeria	522.3	577.6	536.8	699.3	670.9	-4.1
Angola	44.4	38.8	33.4	31.6	52.7	66.8
Egypt	534.5	532.9	487.4	514.1	527.1	2.5
South Africa	452.0	464.9	400.7	451.7	430.9	-4.6
Libya	116.3	123.3	140.1	91.9	91.9	-
Nigeria	73.4	84.7	94.7	67.1	21.8	-67.6
Others	420.4	447.7	430.4	438.6	432.5	-1.4
Asia and Pacific	24,480.4	25,311.0	25,858.6	26,254.3	27,159.2	3.4
Australia	627.0	599.6	587.6	538.0	427.4	-20.6
China	8,880.8	9,239.9	9,533.5	10,158.3	10,659.0	4.9
India	4,091.9	4,394.9	4,466.1	4,503.3	4,584.8	1.8
Indonesia	1,007.9	981.8	998.5	844.0	856.7	1.5
Japan	3,230.2	3,223.5	3,265.8	3,125.5	3,137.5	0.4
South Korea	2,652.1	2,735.8	2,638.2	2,692.4	2,952.9	9.7
Singapore	993.4	993.7	1,277.0	1,262.0	1,210.0	-4.1
Others	2,997.2	3,141.8	3,092.0	3,130.7	3,331.0	6.4
Total world	76,261.6	77,538.6	77,381.0	78,607.7	80,481.4	2.4
<i>of which</i>						
OPEC	9,241.5	9,139.0	9,121.6	9,304.7	9,693.8	4.2
OPEC percentage	12.1	11.8	11.8	11.8	12.0	
OECD	36,596.4	36,978.8	36,593.6	36,816.3	37,811.8	2.7
FSU	6,604.1	6,761.2	6,936.2	7,225.9	7,107.0	-1.6

Output of petroleum products in OPEC Members (1,000 b/d)

	2011	2012	2013	2014	2015	% change 15/14
Algeria	501.3	451.5	506.0	651.3	628.6	-3.5
Gasoline	51.3	50.8	48.7	63.3	59.0	-6.7
Kerosene	24.3	24.3	36.1	42.2	34.4	-18.5
Distillates	154.3	126.4	148.6	190.4	186.2	-2.2
Residuals	117.0	86.7	113.0	139.4	139.6	0.2
Others	154.4	163.3	159.5	216.0	209.4	-3.1
Angola	39.4	38.7	45.4	43.8	43.5	-0.7
Gasoline	1.3	1.5	1.5	0.5	0.4	-28.0
Kerosene	7.0	7.8	9.2	11.1	6.8	-38.4
Distillates	10.6	10.8	12.1	10.1	12.4	22.8
Residuals	16.4	16.3	16.9	13.0	17.1	31.5
Others	4.1	2.4	5.8	9.2	6.8	-25.3
Ecuador	217.3	132.9	210.0	201.0	193.6	-3.7
Gasoline	55.3	28.3	65.1	81.1	85.6	5.6
Kerosene	8.3	8.2	8.6	8.2	8.0	-2.4
Distillates	37.9	42.1	32.3	29.7	29.2	-1.7
Residuals	67.8	32.6	54.6	45.3	45.1	-0.4
Others	48.0	21.6	49.4	36.7	25.6	-30.2
Indonesia	957.2	926.5	914.5	903.9	959.0	6.1
Gasoline	200.4	204.4	195.5	194.3	213.1	9.6
Kerosene	85.0	80.7	76.3	73.2	69.1	-5.7
Distillates	329.0	348.4	347.3	345.2	346.6	0.4
Residuals	170.3	163.3	163.9	163.9	166.0	1.3
Others	172.4	129.6	131.5	127.2	164.3	29.1
IR Iran	1,748.7	1,811.9	1,918.4	1,811.5	1,818.5	0.4
Gasoline	308.5	418.6	455.7	412.5	422.4	2.4
Kerosene	116.9	124.5	124.5	137.7	128.8	-6.4
Distillates	598.1	555.6	588.6	533.0	545.4	2.3
Residuals	487.2	476.3	512.8	464.3	457.8	-1.4
Others	238.0	237.0	237.0	264.0	264.0	-
Iraq	613.2	580.4	601.3	522.8	444.7	-14.9
Gasoline	75.4	76.4	85.9	66.2	56.0	-15.4
Kerosene	87.4	44.5	41.6	30.9	27.8	-10.0
Distillates	130.1	127.6	132.4	104.3	72.3	-30.7
Residuals	217.2	282.4	293.0	249.2	221.8	-11.0
Others	103.2	49.5	48.4	72.2	66.7	-7.6
Kuwait	881.9	1057.0	992.1	918.3	1013.2	10.3
Gasoline	56.9	52.4	59.2	36.75	47.8	30.0
Kerosene	176.9	180.8	187.8	195.8	189.7	-3.1
Distillates	244.8	227.6	248.3	244.5	226.1	-7.5
Residuals	180.2	199.8	179.8	149.9	185.3	23.6
Others	223.1	396.4	317.0	291.3	364.3	25.1
Libya	340.5	148.3	144.8	135.0	137.2	1.6
Gasoline	17.7	15.1	17.3	16.7	16.3	-1.9
Kerosene	47.5	16.2	16.4	16.8	16.4	-1.9
Distillates	78.8	46.2	41.8	37.9	37.9	-
Residuals	137.0	41.4	43.9	42.3	43.1	2.0
Others	59.5	29.4	25.4	21.4	23.4	9.4

Table 4.5

Oil data: downstream

Output of petroleum products in OPEC Members (1,000 b/d)

	2011	2012	2013	2014	2015	% change 15/14
Nigeria	100.3	82.3	88.5	57.0	24.1	-57.7
Gasoline	29.7	27.4	30.4	17.3	12.3	-29.2
Kerosene	16.0	12.9	15.8	9.8	3.4	-65.0
Distillates	21.8	18.8	18.4	13.2	4.5	-65.8
Residuals	25.2	18.4	20.7	14.5	3.6	-75.2
Others	7.7	4.8	3.3	2.1	0.3	-88.1
Qatar	650.0	659.0	650.0	638.4	611.3	-4.3
Gasoline	43.0	46.0	37.0	46.2	36.9	-20.0
Kerosene	84.0	79.0	76.0	67.3	71.3	5.9
Distillates	54.0	45.0	44.0	44.9	42.7	-5.0
Residuals	4.0	6.0	7.0	4.5	9.5	111.1
Others	465.0	483.0	486.0	475.6	450.9	-5.2
Saudi Arabia	1,856.7	1,927.1	1,841.7	2,103.5	2,480.5	17.9
Gasoline	390.6	398.6	369.0	425.4	492.9	15.9
Kerosene	166.4	174.3	162.9	199.2	210.8	5.9
Distillates	628.5	639.7	602.1	710.7	962.9	35.5
Residuals	416.9	508.4	455.3	469.1	447.0	-4.7
Others	254.3	206.1	252.4	299.2	366.9	22.6
United Arab Emirates	625.8	624.0	653.3	625.6	842.1	34.6
Gasoline	82.6	87.6	91.4	87.2	102.5	17.6
Kerosene	169.5	180.5	191.5	180.5	256.9	42.3
Distillates	126.8	112.0	123.2	123.2	176.9	43.5
Residuals	37.2	35.3	51.0	26.0	26.1	0.5
Others	209.8	208.6	196.3	208.6	279.7	34.1
Venezuela	1,123.9	1,232.0	1,245.1	1,162.5	1,049.9	-9.7
Gasoline	300.2	294.6	293.1	273.7	248.0	-9.4
Kerosene	78.2	71.2	67.7	63.4	60.5	-4.6
Distillates	272.5	269.2	255.2	242.7	206.7	-14.8
Residuals	305.0	303.7	312.4	271.8	255.9	-5.9
Others	168.1	293.2	316.7	311.0	278.8	-10.3
OPEC	9,656.2	9,671.6	9,811.2	9,774.6	10,246.2	4.8
Gasoline	1,613.1	1,701.8	1,749.7	1,721.1	1,793.3	4.2
Kerosene	1,067.4	1,005.0	1,014.4	1,036.1	1,084.0	4.6
Distillates	2,687.1	2,569.3	2,594.3	2,629.8	2,849.8	8.4
Residuals	2,181.2	2,170.6	2,224.2	2,053.2	2,018.0	-1.7
Others	2,107.4	2,224.9	2,228.7	2,334.4	2,501.1	7.1

Notes:

Data may include products from GTLs and condensate units.

Table 4.6

Oil data: downstream

World output of petroleum products by country (1,000 b/d)

	2011	2012	2013	2014	2015	% change 15/14
North America	20,562.4	20,471.0	20,983.3	21,512.1	21,749.2	1.1
Canada	1,889.5	1,907.0	1,877.3	1,858.1	1,856.2	-0.1
United States	18,672.8	18,564.0	19,106.0	19,654.0	19,893.0	1.2
Latin America	7,543.2	7,352.0	7,353.3	6,999.8	6,625.1	-5.4
Argentina	616.9	650.9	681.7	681.7	688.5	1.0
Brazil	2,212.4	2,073.4	2,178.8	2,210.7	2,076.7	-6.1
Colombia	292.6	279.2	262.3	237.3	242.1	2.0
Ecuador	217.3	132.9	210.0	201.0	193.6	-3.7
Mexico	1,411.6	1,417.6	1,517.2	1,463.6	1,334.2	-8.8
Netherland Antilles	173.2	146.5	146.5	161.2	166.0	3.0
Trinidad & Tobago	137.5	85.0	125.3	99.1	124.8	26.0
Venezuela	1,123.9	1,232.0	1,245.1	1,162.5	1,049.9	-9.7
Others	1,357.8	1,334.6	986.6	782.7	749.5	-4.3
Eastern Europe and Eurasia	9,172.4	9,064.3	9,154.0	9,351.6	9,214.7	-1.5
Azerbaijan	122.6	114.7	126.1	128.5	125.3	-2.5
Belarus	411.5	408.4	404.3	414.5	414.5	-
Kazakhstan	300.0	300.0	352.1	385.8	389.7	1.0
Poland	550.8	569.5	518.3	515.5	566.2	9.8
Romania	214.0	216.4	215.2	244.4	242.3	-0.9
Russia	6,432.4	6,436.1	6,536.1	6,636.1	6,437.0	-3.0
Ukraine	208.5	112.7	87.7	71.5	71.5	-
Others	932.5	906.6	914.0	955.4	968.3	1.4
Western Europe	12,563.9	12,379.2	12,320.6	12,247.4	12,857.8	5.0
Belgium	664.9	714.5	666.2	734.5	728.9	-0.8
France	1,526.0	1,296.3	1,260.6	1,264.3	1,273.5	0.7
Germany	2,095.8	2,120.1	2,139.1	2,114.8	2,163.3	2.3
Italy	1,706.5	1,607.2	1,495.0	1,408.3	1,566.9	11.3
Netherlands	1,217.4	1,208.8	1,186.4	1,214.1	1,277.5	5.2
Spain	1,145.2	1,236.6	1,238.5	1,243.5	1,335.6	7.4
United Kingdom	1,551.9	1,417.9	1,410.5	1,332.7	1,341.0	0.6
Others	2,656.2	2,777.8	2,924.4	2,935.3	3,171.0	8.0
Middle East	7,387.9	7,612.7	7,575.8	7,485.4	8,103.6	8.3
IR Iran	1,748.7	1,811.9	1,918.4	1,811.5	1,818.5	0.4
Iraq	613.2	580.4	601.3	522.8	444.7	-14.9
Kuwait	881.9	1,057.0	992.1	918.3	1,013.2	10.3
Qatar	650.0	659.0	650.0	638.4	611.3	-4.3
Saudi Arabia	1,856.7	1,927.1	1,841.7	2,103.5	2,480.5	17.9
United Arab Emirates	625.8	624.0	653.3	625.6	842.1	34.6
Others	1,011.5	953.3	918.9	865.4	893.3	3.2
Africa	2,421.5	2,192.1	2,168.1	2,335.0	2,266.4	-2.9
Algeria	501.3	451.5	506.0	651.3	628.6	-3.5
Angola	39.4	38.7	45.4	43.8	43.5	-0.7
Egypt	548.3	543.9	487.3	510.8	527.7	3.3
South Africa	422.2	500.6	435.6	476.2	452.4	-5.0
Libya	340.5	148.3	144.8	135.0	137.2	1.6
Nigeria	100.3	82.3	88.5	57.0	24.1	-57.7
Others	469.5	426.8	460.5	460.8	453.0	-1.7
Asia and Pacific	26,100.4	26,812.3	27,151.3	27,872.0	28,738.9	3.1
Australia	667.9	644.6	628.3	603.8	479.3	-20.6
China	9,842.7	10,132.6	10,248.5	10,794.7	11,118.6	3.0
India	3,931.8	4,096.6	4,514.7	4,798.1	4,888.1	1.9
Indonesia	957.2	926.5	914.5	903.9	959.0	6.1
Japan	3,755.1	3,748.1	3,669.0	3,518.8	3,532.8	0.4
South Korea	2,712.9	2,811.3	2,706.7	2,765.3	3,060.0	10.7
Singapore	1,078.7	1,099.6	1,044.5	1,031.9	1,001.0	-3.0
Others	3,154.1	3,352.9	3,425.2	3,455.5	3,700.2	7.1
Total world	85,751.7	85,883.5	86,706.5	87,803.3	89,555.8	2.0
<i>of which</i>						
OPEC	9,656.2	9,671.6	9,811.2	9,774.6	10,246.2	4.8
<i>OPEC percentage</i>	<i>11.3</i>	<i>11.3</i>	<i>11.3</i>	<i>11.1</i>	<i>11.4</i>	
OECD	42,927.1	42,720.3	43,032.2	43,327.8	44,267.9	2.2
FSU	7,813.0	7,709.7	7,850.8	7,990.0	7,794.8	-2.4

Notes:

Data may include products from GTL and condensate units.

Table 4.7

Oil data: downstream

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

	2011	2012	2013	2014	2015	% change 15/14
Algeria	329.5	351.1	376.8	389.5	418.5	7.5
Gasoline	67.4	79.3	80.7	87.0	93.3	7.2
Kerosene	10.1	11.2	11.3	11.7	11.7	0.2
Distillates	177.1	187.5	207.1	211.7	224.7	6.2
Residuals	4.0	4.0	4.5	4.4	4.6	3.6
Others	70.8	69.1	73.2	74.7	84.2	12.7
Angola	84.4	84.5	149.2	147.2	141.8	-3.7
Gasoline	21.2	21.8	28.6	33.6	30.8	-8.4
Kerosene	6.0	4.1	11.3	11.9	11.6	-2.4
Distillates	46.5	50.7	75.1	77.4	86.4	11.6
Residuals	3.5	0.9	6.7	1.9	1.2	-37.6
Others	7.2	7.0	27.6	22.4	11.8	-47.2
Ecuador	264.2	269.2	272.0	285.8	258.7	-9.5
Gasoline	44.4	49.8	50.8	52.9	58.7	11.0
Kerosene	7.5	7.3	7.9	7.9	7.5	-5.4
Distillates	81.6	79.5	88.9	92.6	91.6	-1.1
Residuals	39.1	39.1	32.9	38.6	33.8	-12.5
Others	91.7	93.5	91.6	93.7	67.1	-28.4
Indonesia	1,515.6	1,580.7	1,604.9	1,635.1	1,668.5	2.0
Gasoline	452.1	498.8	520.3	529.7	537.0	1.4
Kerosene	94.7	92.6	94.9	93.9	91.4	-2.7
Distillates	609.1	617.1	611.8	624.9	611.5	-2.1
Residuals	63.8	53.2	64.8	57.8	46.6	-19.3
Others	295.9	318.9	313.1	328.8	382.1	16.2
IR Iran	1,784.3	1,764.7	1,776.2	1,845.6	1,794.9	-2.7
Gasoline	372.3	393.4	394.5	437.6	455.5	4.1
Kerosene	142.1	104.2	104.5	137.7	128.8	-6.4
Distillates	592.2	618.1	619.8	538.4	546.5	1.5
Residuals	378.3	342.7	343.7	413.5	378.6	-8.5
Others	299.5	306.2	313.7	318.5	285.5	-10.3
Iraq	628.1	664.5	714.8	680.3	685.9	0.8
Gasoline	129.0	136.9	134.3	110.3	104.6	-5.2
Kerosene	50.7	47.8	44.9	32.8	30.9	-5.7
Distillates	139.4	156.4	159.3	131.1	104.2	-20.5
Residuals	146.0	158.9	173.5	153.0	179.1	17.0
Others	162.9	164.6	202.7	253.0	267.1	5.6
Kuwait	340.9	377.0	329.6	337.0	345.7	2.6
Gasoline	59.1	62.6	65.7	69.0	71.1	3.1
Kerosene	18.1	19.0	19.3	22.0	22.8	3.3
Distillates	51.8	54.1	56.7	54.6	59.5	8.9
Residuals	133.7	135.0	128.2	127.0	130.2	2.5
Others	78.3	106.2	59.7	64.4	62.1	-3.5

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

	2011	2012	2013	2014	2015	% change 15/14
Libya	221.3	220.0	250.0	222.2	211.1	-5.0
Gasoline	62.8	72.9	88.5	78.1	75.2	-3.7
Kerosene	9.1	17.3	9.4	6.5	5.1	-21.5
Distillates	82.9	70.2	98.0	90.4	85.3	-5.6
Residuals	50.3	45.8	38.7	33.2	32.0	-3.6
Others	16.3	13.8	15.3	14.0	13.5	-3.6
Nigeria	311.4	343.6	384.9	396.1	407.8	3.0
Gasoline	215.3	241.3	273.9	283.8	306.4	8.0
Kerosene	43.6	47.7	53.3	53.0	43.9	-17.1
Distillates	43.3	45.1	48.8	50.3	56.0	11.3
Residuals	8.2	8.6	8.0	7.9	1.0	-87.5
Others	0.9	1.0	1.0	1.1	0.6	-46.2
Qatar	124.7	125.4	149.1	167.9	206.0	22.7
Gasoline	26.9	31.5	29.6	34.2	33.1	-3.2
Kerosene	36.8	40.3	57.5	65.4	94.9	45.1
Distillates	39.8	32.6	39.6	45.3	53.3	17.9
Residuals	1.9	2.0	2.1	2.1	2.2	1.0
Others	19.3	18.8	20.3	20.9	22.5	7.6
Saudi Arabia	2,727.1	2,872.7	2,994.0	3,163.4	3,318.7	4.9
Gasoline	445.1	480.7	504.5	522.5	558.8	7.0
Kerosene	65.5	67.7	70.0	74.7	85.9	15.0
Distillates	651.0	710.8	729.7	753.3	778.4	3.3
Residuals	310.9	318.8	364.1	379.5	399.0	5.1
Others	1,254.5	1,294.8	1,325.8	1,433.4	1,496.5	4.4
United Arab Emirates	617.9	638.0	665.2	719.5	778.1	8.2
Gasoline	105.5	127.9	144.0	167.6	174.8	4.3
Kerosene	102.1	95.7	102.8	119.3	146.5	22.8
Distillates	92.4	94.3	92.4	98.2	105.5	7.4
Residuals	282.9	284.8	290.5	295.4	311.8	5.6
Others	35.0	35.3	35.5	39.0	39.5	1.4
Venezuela	741.7	786.3	831.1	751.8	657.9	-12.5
Gasoline	292.9	301.8	299.1	283.3	259.1	-8.6
Kerosene	5.7	7.5	6.6	6.4	5.4	-17.0
Distillates	182.8	217.8	249.1	236.9	210.3	-11.2
Residuals	63.4	46.9	48.5	36.8	21.0	-42.9
Others	196.9	212.2	227.9	188.4	162.2	-13.9
OPEC	9,691.0	10,077.7	10,498.0	10,741.3	10,893.8	1.4
Gasoline	2,293.8	2,498.9	2,614.5	2,689.5	2,758.4	2.6
Kerosene	592.1	562.3	593.6	643.4	686.4	6.7
Distillates	2,789.9	2,934.2	3,076.2	3,004.9	3,013.2	0.3
Residuals	1,486.0	1,440.8	1,506.2	1,551.3	1,541.1	-0.7
Others	2,529.2	2,641.5	2,707.5	2,852.2	2,894.8	1.5

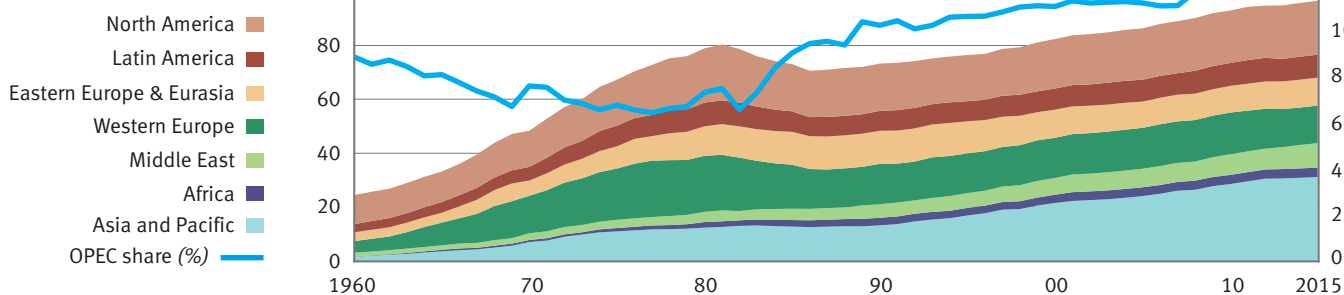
Table 4.8

Oil data: downstream

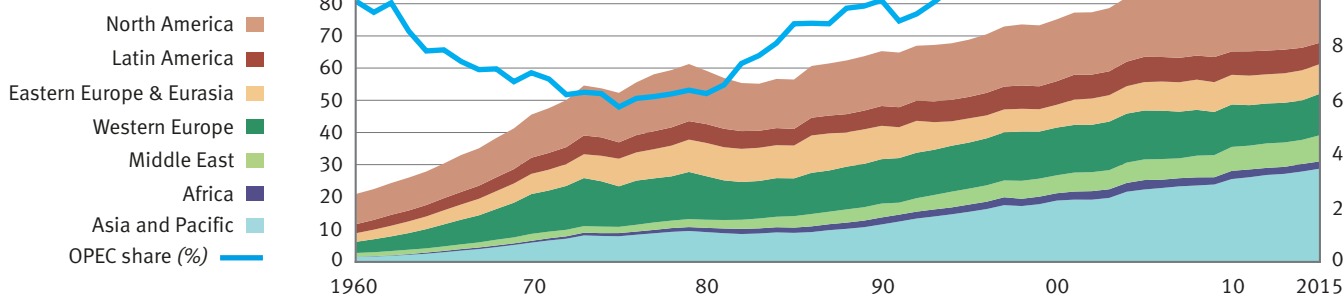
World oil demand by country (1,000 b/d)

	2011	2012	2013	2014	2015	% change 15/14
North America	21,308.2	20,895.6	21,338.3	21,500.3	21,742.1	1.1
Canada	2,356.5	2,403.0	2,374.5	2,395.4	2,335.8	-2.5
United States	18,949.2	18,490.2	18,961.3	19,102.4	19,403.8	1.6
Others	2.5	2.5	2.5	2.5	2.5	0.2
Latin America	8,813.3	9,033.6	9,237.9	9,248.6	9,193.3	-0.6
Argentina	652.3	679.2	688.8	699.8	715.9	2.3
Brazil	2,797.6	2,895.1	3,012.6	3,118.1	3,111.3	-0.2
Colombia	283.3	299.3	297.5	306.3	318.9	4.1
Ecuador	264.2	269.2	272.0	285.8	258.7	-9.5
Mexico	2,112.4	2,101.4	2,090.6	2,006.8	1,980.7	-1.3
Venezuela	741.7	786.3	831.1	751.8	657.9	-12.5
Others	1,961.7	2,003.1	2,045.2	2,080.2	2,149.9	3.4
Eastern Europe and Eurasia	5,679.1	5,705.0	5,766.3	5,906.5	5,937.5	0.5
Czech Republic	197.0	194.0	187.6	199.9	193.2	-3.3
Hungary	143.3	132.8	129.6	138.8	150.6	8.5
Kazakhstan	271.5	275.5	287.9	294.5	297.7	1.1
Poland	560.3	534.5	507.5	513.7	540.9	5.3
Romania	163.3	166.8	167.3	174.5	180.3	3.3
Russia	3,282.2	3,317.7	3,376.6	3,460.1	3,433.7	-0.8
Slovakia	82.0	70.8	73.0	73.0	80.3	9.9
Ukraine	295.2	295.8	273.5	259.3	257.9	-0.5
Others	684.3	717.0	763.3	792.6	802.9	1.3
Western Europe	13,574.3	13,158.6	13,026.0	12,838.1	13,067.7	1.8
France	1,779.4	1,738.9	1,712.9	1,652.7	1,648.7	-0.2
Germany	2,392.0	2,389.2	2,435.3	2,395.9	2,390.0	-0.2
Italy	1,493.8	1,370.3	1,259.9	1,224.4	1,298.6	6.1
Netherlands	1,019.4	1,011.4	1,014.1	964.1	911.4	-5.5
Spain	1,385.5	1,300.9	1,208.4	1,208.6	1,232.2	2.0
United Kingdom	1,576.9	1,527.4	1,502.7	1,519.9	1,543.7	1.6
Others	3,927.3	3,820.6	3,892.8	3,872.5	4,043.1	4.4
Middle East	7,439.7	7,678.7	7,776.9	8,089.6	8,347.6	3.2
IR Iran	1,784.3	1,764.7	1,776.2	1,845.6	1,794.9	-2.7
Iraq	628.1	664.5	714.8	680.3	685.9	0.8
Kuwait	340.9	377.0	329.6	337.0	345.7	2.6
Qatar	124.7	125.4	149.1	167.9	206.0	22.7
Saudi Arabia	2,727.1	2,872.7	2,994.0	3,163.4	3,318.7	4.9
Syrian Arab Republic	313.5	250.1	183.9	178.2	164.6	-7.6
United Arab Emirates	617.9	638.0	665.2	719.5	778.1	8.2
Others	903.3	986.3	964.1	997.7	1,053.7	5.6
Africa	3,505.1	3,627.5	3,819.1	3,904.2	3,992.7	2.3
Algeria	329.5	351.1	376.8	389.5	418.5	7.5
Angola	84.4	84.5	149.2	147.2	141.8	-3.7
Egypt	791.1	830.5	799.0	826.1	823.2	-0.3
Libya	221.3	220.0	250.0	222.2	211.1	-5.0
Nigeria	311.4	343.6	384.9	396.1	407.8	3.0
South Africa	616.8	609.4	641.2	638.1	642.2	0.6
Tunisia	87.4	89.5	89.7	94.5	98.2	3.9
Others	1,063.2	1,098.8	1,128.2	1,190.7	1,249.8	5.0
Asia and Pacific	27,939.7	29,001.8	29,503.5	29,948.5	30,697.7	2.5
Australia	1,036.1	1,049.3	1,056.1	1,055.3	1,061.5	0.6
China	9,409.9	9,739.0	10,067.8	10,464.8	10,832.0	3.5
India	3,432.6	3,649.4	3,698.3	3,786.3	4,050.9	7.0
Indonesia	1,515.6	1,580.7	1,604.9	1,635.1	1,668.5	2.0
Japan	4,439.1	4,697.2	4,557.0	4,346.2	4,187.3	-3.7
New Zealand	152.7	151.7	154.5	157.0	161.7	3.0
South Korea	2,259.3	2,321.8	2,328.3	2,340.3	2,448.2	4.6
Thailand	966.6	1,018.9	1,045.2	1,060.9	1,074.9	1.3
Others	4,727.8	4,793.8	4,991.3	5,102.6	5,212.6	2.2
Total world	88,259.5	89,100.7	90,468.1	91,435.9	92,978.6	1.7
<i>of which</i>						
OPEC	9,691.0	10,077.7	10,498.0	10,741.3	10,893.8	1.4
<i>OPEC percentage</i>	<i>11.0</i>	<i>11.3</i>	<i>11.6</i>	<i>11.7</i>	<i>11.7</i>	
OECD	46,418.5	45,917.9	46,024.4	45,720.9	46,180.7	1.0
FSU	4,378.4	4,444.9	4,540.0	4,641.0	4,621.2	-0.4

Graph 4.1: World refinery capacity
(m b/cd)



Graph 4.2: World output of petroleum products
(m b/d)



Graph 4.3: OPEC output of refined petroleum products
(m b/d)

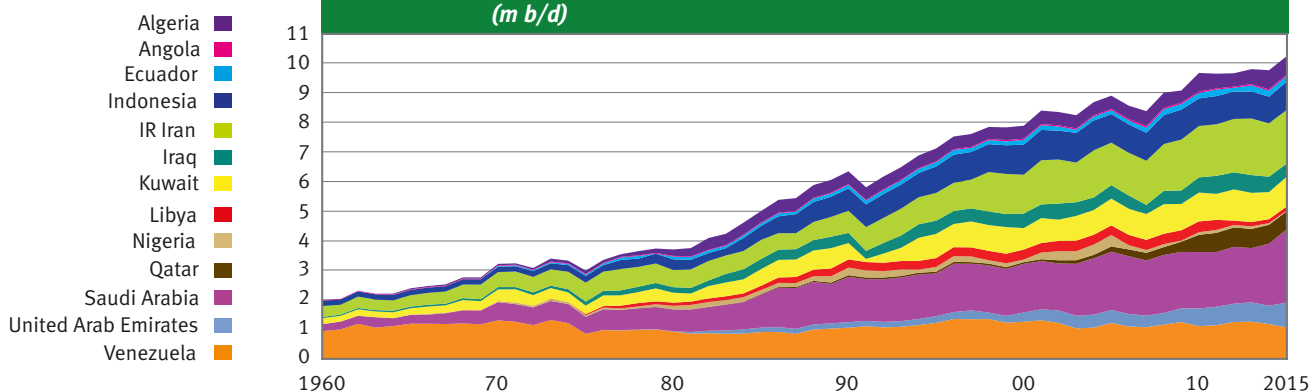


Table 4.9

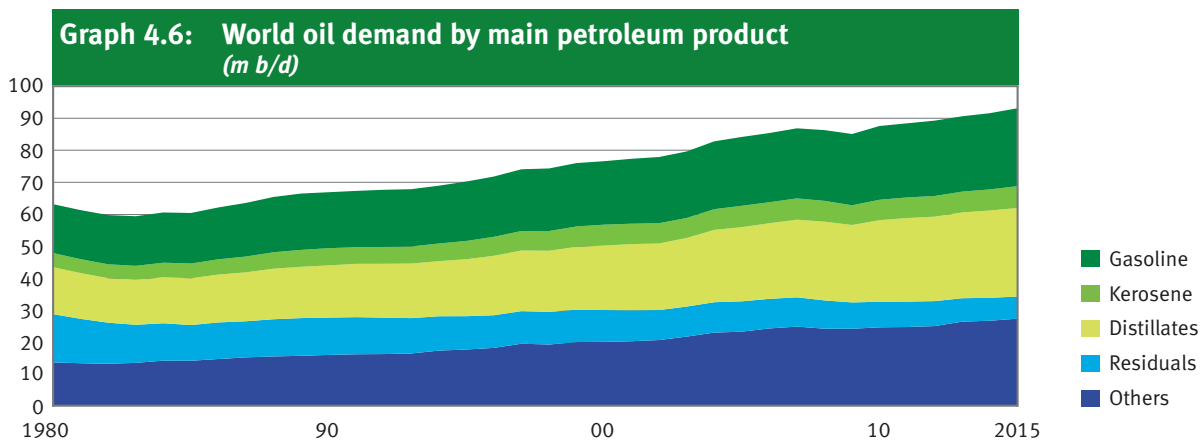
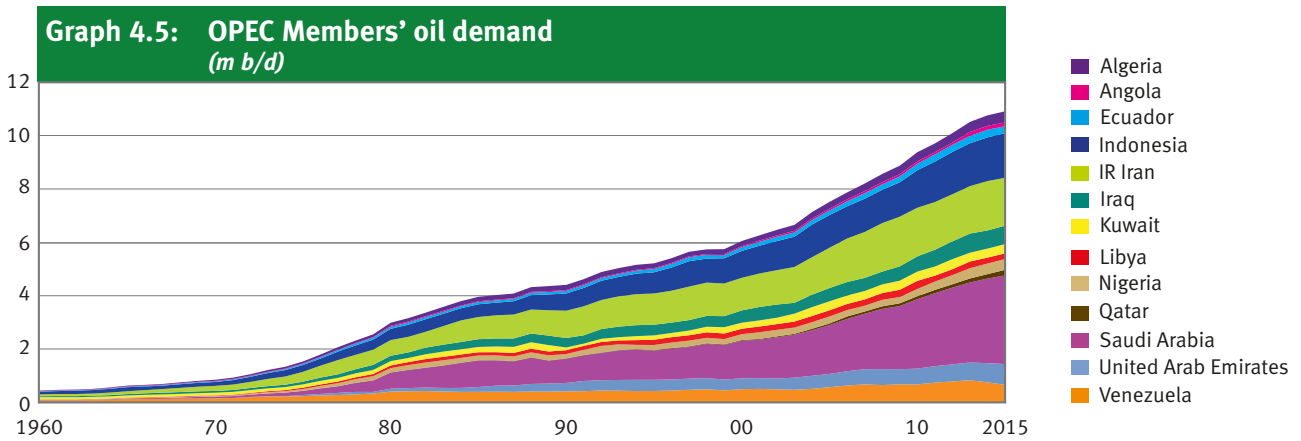
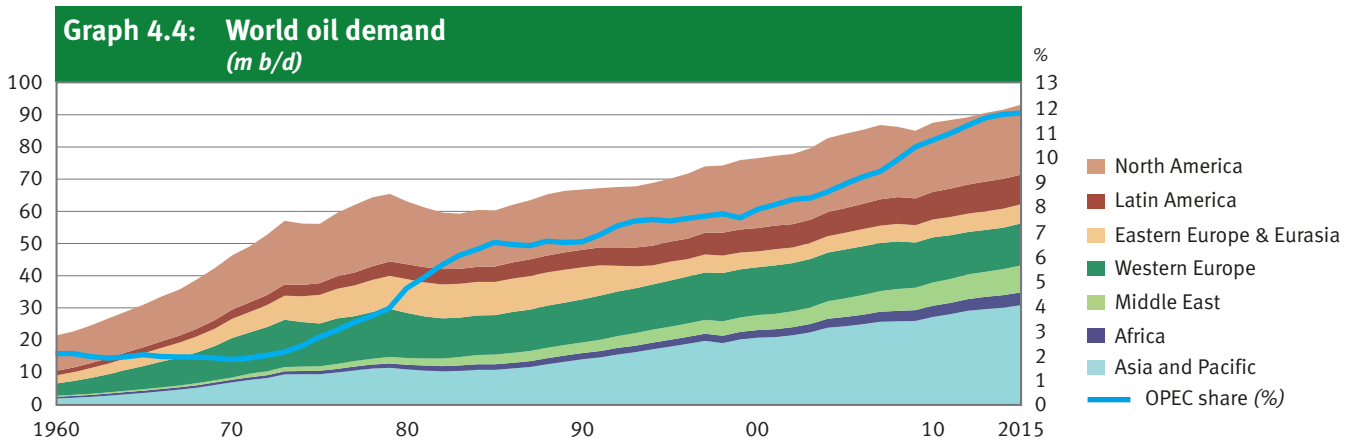
Oil data: downstream

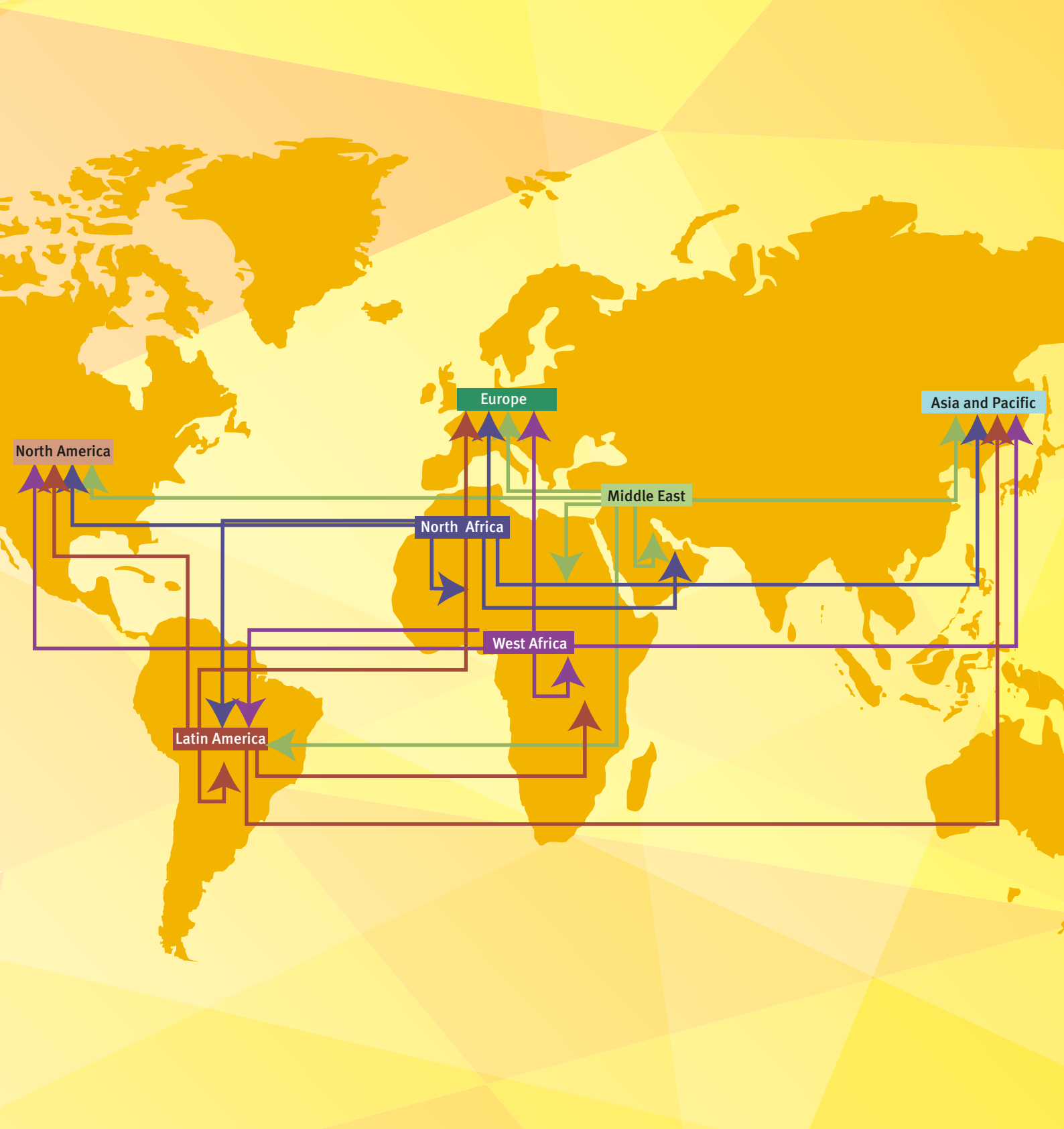
World oil demand by main petroleum product and region (1,000 b/d)

	2011	2012	2013	2014	2015	% change 15/14
North America	21,308.2	20,895.6	21,338.3	21,500.3	21,742.1	1.1
Gasoline	9,845.7	9,607.5	9,795.5	9,880.0	10,203.6	3.3
Kerosene	1,545.2	1,525.3	1,560.7	1,593.8	1,664.5	4.4
Distillates	4,507.2	4,350.3	4,437.3	4,631.0	4,560.9	-1.5
Residuals	564.3	481.8	400.6	326.8	307.8	-5.8
Others	4,845.8	4,930.8	5,144.1	5,068.7	5,005.4	-1.2
Latin America	8,813.3	9,033.6	9,237.9	9,248.6	9,193.3	-0.6
Gasoline	2,198.5	2,354.9	2,334.9	2,344.5	2,350.1	0.2
Kerosene	346.1	367.3	385.8	357.4	365.0	2.1
Distillates	2,582.3	2,708.4	2,751.0	2,761.5	2,746.8	-0.5
Residuals	899.7	906.5	912.8	895.7	876.7	-2.1
Others	2,786.7	2,696.4	2,853.4	2,889.5	2,854.8	-1.2
Eastern Europe and Eurasia	5,679.1	5,705.0	5,766.3	5,906.5	5,937.5	0.5
Gasoline	1,376.5	1,400.5	1,397.7	1,415.3	1,431.0	1.1
Kerosene	361.3	363.8	342.4	353.4	346.6	-1.9
Distillates	1,713.8	1,650.9	1,662.4	1,701.5	1,739.7	2.2
Residuals	469.6	450.0	361.5	357.1	346.8	-2.9
Others	1,757.9	1,839.8	2,002.4	2,079.3	2,073.4	-0.3
Western Europe	13,574.3	13,158.6	13,026.0	12,838.1	13,067.7	1.8
Gasoline	1,958.7	1,833.1	1,767.4	1,756.4	1,768.4	0.7
Kerosene	1,234.9	1,212.9	1,204.9	1,230.5	1,273.0	3.4
Distillates	5,606.4	5,536.2	5,562.2	5,504.0	5,729.7	4.1
Residuals	1,194.6	1,089.8	995.1	907.4	870.7	-4.0
Others	3,579.6	3,486.6	3,496.4	3,439.7	3,425.9	-0.4
Middle East	7,439.7	7,678.7	7,776.9	8,089.6	8,347.6	3.2
Gasoline	1,403.7	1,481.6	1,542.2	1,603.0	1,641.7	2.4
Kerosene	455.0	461.3	453.2	458.3	466.4	1.8
Distillates	2,102.1	2,230.3	2,259.4	2,315.7	2,368.9	2.3
Residuals	1,300.9	1,380.1	1,411.5	1,440.9	1,457.6	1.2
Others	2,178.1	2,125.4	2,110.7	2,271.8	2,412.9	6.2
Africa	3,505.1	3,627.5	3,819.1	3,904.2	3,992.7	2.3
Gasoline	881.8	949.6	928.1	943.1	961.6	2.0
Kerosene	290.8	308.7	315.3	321.5	325.6	1.3
Distillates	1,331.9	1,388.8	1,488.5	1,529.1	1,555.1	1.7
Residuals	421.2	455.2	429.3	446.7	463.2	3.7
Others	579.4	525.2	657.9	663.9	687.2	3.5

World oil demand by main petroleum product and region (1,000 b/d)

	2011	2012	2013	2014	2015	% change 15/14
Asia and Pacific	27,939.7	29,001.8	29,503.5	29,948.5	30,697.7	2.5
Gasoline	5,552.7	5,979.8	5,844.7	5,939.0	6,255.2	5.3
Kerosene	2,220.8	2,239.5	2,254.7	2,289.8	2,396.0	4.6
Distillates	8,346.2	8,596.0	8,714.7	8,915.0	9,052.4	1.5
Residuals	3,112.1	3,051.0	2,828.8	2,809.4	2,599.5	-7.5
Others	8,707.8	9,135.7	9,860.5	9,995.4	10,394.5	4.0
Total world	88,259.5	89,100.7	90,468.1	91,435.9	92,978.6	1.7
Gasoline	23,217.7	23,606.9	23,610.5	23,881.1	24,611.6	3.1
Kerosene	6,454.1	6,478.7	6,517.0	6,604.6	6,837.0	3.5
Distillates	26,189.8	26,460.7	26,875.4	27,357.8	27,753.6	1.4
Residuals	7,962.4	7,814.4	7,339.7	7,184.1	6,922.3	-3.6
Others	24,435.4	24,739.9	26,125.5	26,408.3	26,854.1	1.7
<i>of which</i>						
OPEC	9,691.0	10,077.7	10,498.0	10,741.3	10,893.8	1.4
Gasoline	2,293.8	2,498.9	2,614.5	2,689.5	2,758.4	2.6
Kerosene	592.1	562.3	593.6	643.4	686.4	6.7
Distillates	2,789.9	2,934.2	3,076.2	3,004.9	3,013.2	0.3
Residuals	1,486.0	1,440.8	1,506.2	1,551.3	1,541.1	-0.7
Others	2,529.2	2,641.5	2,707.5	2,852.2	2,894.8	1.5
OECD	46,418.5	45,917.9	46,024.4	45,720.9	46,180.7	1.0
Gasoline	14,362.0	14,044.3	14,158.8	14,193.0	14,491.0	2.1
Kerosene	3,749.0	3,687.0	3,739.0	3,781.0	3,798.0	0.4
Distillates	12,834.0	12,615.3	12,764.3	12,795.4	12,924.4	1.0
Residuals	2,883.0	2,753.0	2,427.0	2,130.0	2,033.0	-4.6
Others	12,590.5	12,818.4	12,935.3	12,821.4	12,934.2	0.9
FSU	4,378.4	4,444.9	4,540.0	4,641.0	4,621.2	-0.4
Gasoline	1,126.0	1,160.0	1,189.0	1,204.1	1,199.0	-0.4
Kerosene	321.2	328.2	332.2	342.2	334.2	-2.3
Distillates	1,056.9	1,005.2	1,036.2	1,060.2	1,072.2	1.1
Residuals	432.4	415.3	427.3	421.3	406.3	-3.6
Others	1,441.9	1,536.1	1,555.3	1,613.1	1,609.4	-0.2





SECTION 5

Oil trade

Table 5.1

Oil trade

OPEC Members' crude oil exports by destination (1,000 b/d)

	Destination	2011	2012	2013	2014	2015
Algeria		842.9	808.6	744.0	622.9	642.2
	Europe	387.6	424.3	522.4	517.6	543.9
	North America	337.7	263.3	101.3	44.8	35.3
	Asia and Pacific	111.9	92.3	81.6	42.1	36.6
	Latin America	5.7	28.7	38.7	18.5	26.4
	Africa	–	–	–	–	–
	Middle East	–	–	–	–	–
Angola		1,545.6	1,663.3	1,669.4	1,607.9	1,710.9
	Europe	220.3	200.7	313.3	340.6	435.6
	North America	401.4	236.8	159.0	132.1	114.0
	Asia and Pacific	863.8	1,102.5	1,103.2	1,011.3	1,058.9
	Latin America	18.6	47.1	49.9	61.5	31.3
	Africa	41.6	76.2	44.0	62.4	71.2
	Middle East	–	–	–	–	–
Ecuador		334.0	357.7	388.2	422.4	432.9
	Europe	–	–	4.9	1.0	–
	North America	207.0	229.3	255.8	248.7	284.8
	Asia and Pacific	11.0	20.6	20.3	15.7	27.1
	Latin America	116.0	107.8	107.1	147.4	121.0
	Africa	–	–	–	9.7	–
	Middle East	–	–	–	–	–
Indonesia		256.9	228.9	228.6	255.9	315.1
	Europe	–	–	–	–	–
	North America	15.7	5.9	16.1	20.0	37.4
	Asia and Pacific	241.2	223.0	212.5	235.9	277.7
	Latin America	–	–	–	–	–
	Africa	–	–	–	–	–
	Middle East	–	–	–	–	–
IR Iran		2,537.3	2,102.0	1,215.4	1,109.2	1,081.1
	Europe	780.1	162.0	128.0	117.0	111.4
	North America	–	–	–	–	–
	Asia and Pacific	1,630.4	1,839.0	1,085.2	992.2	969.7
	Latin America	–	–	–	–	–
	Africa	126.7	101.0	2.2	–	–
	Middle East	–	–	–	–	–
Iraq		2,165.7	2,423.4	2,390.4	2,515.5	3,004.9
	Europe	474.0	546.7	534.9	625.2	844.8
	North America	455.6	559.0	432.7	411.7	220.0
	Asia and Pacific	1,125.2	1,205.2	1,412.9	1,465.9	1,876.2
	Latin America	102.9	105.4	–	12.7	63.8
	Africa	–	–	–	–	–
	Middle East	8.0	7.1	9.8	–	–
Kuwait		1,816.1	2,070.0	2,058.5	1,994.8	1,963.8
	Europe	78.8	99.0	84.2	105.9	118.0
	North America	195.2	220.0	320.3	277.3	196.5
	Asia and Pacific	1,499.9	1,699.0	1,613.5	1,550.6	1,561.1
	Latin America	–	–	–	3.0	–
	Africa	42.1	52.0	40.6	58.0	88.2
	Middle East	–	–	–	–	–

Table 5.1

Oil trade

OPEC Members' crude oil exports by destination (1,000 b/d)

	Destination	2011	2012	2013	2014	2015
Libya		299.5	962.0	589.1	319.0	235.0
	Europe	220.3	716.9	533.7	289.0	212.9
	North America	–	27.5	5.2	2.8	2.1
	Asia and Pacific	46.1	211.7	45.0	24.4	17.9
	Latin America	–	4.2	1.7	0.9	0.7
	Africa	33.2	1.7	3.5	1.9	1.4
	Middle East	–	–	–	–	–
Nigeria		2,377.0	2,368.0	2,193.0	2,120.1	2,114.0
	Europe	744.0	744.0	965.0	968.9	992.3
	North America	1,233.0	1,224.0	395.0	74.2	83.6
	Asia and Pacific	91.0	91.0	373.0	558.0	550.3
	Latin America	206.0	206.0	263.0	248.4	209.1
	Africa	103.0	103.0	197.0	270.6	278.7
	Middle East	–	–	–	–	–
Qatar		587.9	588.3	598.7	595.5	490.7
	Europe	–	–	–	–	–
	North America	–	–	–	–	–
	Asia and Pacific	571.1	588.3	598.7	595.5	488.7
	Latin America	2.0	–	–	–	–
	Africa	13.7	–	–	–	2.0
	Middle East	1.1	–	–	–	–
Saudi Arabia		7,218.1	7,556.8	7,570.7	7,153.5	7,163.3
	Europe	889.8	990.8	951.9	952.1	877.3
	North America	1,313.3	1,423.4	1,459.0	1,251.3	1,190.8
	Asia and Pacific	4,486.7	4,577.4	4,586.2	4,416.7	4,592.0
	Latin America	74.7	68.4	79.6	68.9	70.0
	Africa	169.4	216.1	221.9	191.0	147.0
	Middle East	284.3	280.6	272.2	273.4	286.3
United Arab Emirates		2,457.0	2,445.2	2,701.4	2,496.7	2,441.5
	Europe	16.9	1.7	6.4	9.9	17.0
	North America	66.0	–	2.5	13.4	–
	Asia and Pacific	2,324.4	2,402.9	2,661.8	2,446.7	2,385.5
	Latin America	–	–	–	–	–
	Africa	49.7	38.2	30.6	22.3	32.0
	Middle East	–	2.5	0.1	4.5	7.0
Venezuela		1,553.4	1,724.8	1,528.0	1,964.9	1,974.0
	Europe	87.4	68.6	41.5	109.1	88.3
	North America	419.5	478.6	328.9	694.3	670.6
	Asia and Pacific	322.6	555.2	626.8	569.4	662.3
	Latin America	724.0	622.4	530.8	592.0	552.8
	Africa	–	–	–	–	–
	Middle East	–	–	–	–	–
OPEC		23,991.3	25,298.7	23,875.3	23,178.3	23,569.5
	Europe	3,899.3	3,954.8	4,086.3	4,036.2	4,241.6
	North America	4,644.3	4,667.7	3,475.6	3,170.6	2,834.9
	Asia and Pacific	13,325.3	14,607.9	14,420.6	13,924.3	14,504.2
	Latin America	1,249.8	1,189.9	1,070.9	1,153.4	1,075.0
	Africa	579.3	588.2	539.7	616.0	620.5
	Middle East	293.3	290.1	282.2	277.8	293.2

Notes:

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

Table 5.2**Oil trade**

OPEC Members' petroleum products exports by destination (1,000 b/d)

	Destination	2011	2012	2013	2014	2015
Algeria		492.2	449.2	453.0	582.6	605.4
	Europe	204.7	188.9	196.2	246.3	243.3
	North America	128.7	106.2	81.2	114.8	111.9
	Asia and Pacific	12.5	25.1	59.4	90.4	114.0
	Latin America	91.5	75.5	54.1	69.7	65.7
	Africa	54.8	52.9	60.8	60.7	67.6
	Middle East	–	0.6	1.3	0.6	2.9
Angola		31.4	29.9	32.2	31.0	36.7
	Europe	9.5	12.0	6.3	6.7	7.3
	North America	10.2	11.2	13.3	13.2	17.5
	Asia and Pacific	–	4.1	10.7	10.1	10.9
	Latin America	8.5	1.8	1.3	–	–
	Africa	3.2	0.8	0.6	1.0	1.0
	Middle East	–	–	–	–	–
Ecuador		28.8	27.4	19.7	7.7	15.6
	Europe	–	–	–	–	–
	North America	28.8	6.1	3.4	1.0	4.9
	Asia and Pacific	–	–	–	–	–
	Latin America	–	21.3	16.3	6.7	10.7
	Africa	–	–	–	–	–
	Middle East	–	–	–	–	–
Indonesia		83.8	70.5	87.4	88.4	74.4
	Europe	–	–	–	–	–
	North America	–	–	–	–	–
	Asia and Pacific	83.8	70.5	87.4	88.4	74.4
	Latin America	–	–	–	–	–
	Africa	–	–	–	–	–
	Middle East	–	–	–	–	–
IR Iran		441.3	456.0	394.0	469.9	514.3
	Europe	–	–	–	–	–
	North America	–	–	–	–	–
	Asia and Pacific	441.3	456.0	394.0	469.3	513.6
	Latin America	–	–	–	–	–
	Africa	–	–	–	0.6	0.7
	Middle East	–	–	–	–	–
Iraq		1.1	2.2	11.5	9.3	13.7
	Europe	–	–	–	–	–
	North America	–	–	–	–	–
	Asia and Pacific	–	–	–	–	–
	Latin America	–	–	–	–	–
	Africa	–	–	–	–	–
	Middle East	1.1	2.2	11.5	9.3	13.7
Kuwait		759.1	804.2	805.3	751.1	739.4
	Europe	185.5	83.6	125.1	296.3	291.7
	North America	7.4	14.3	33.3	7.5	7.4
	Asia and Pacific	566.3	706.4	647.0	447.2	440.3
	Latin America	–	–	–	–	–
	Africa	–	–	–	–	–
	Middle East	–	–	–	–	–

OPEC Members' petroleum products exports by destination (1,000 b/d)

	Destination	2011	2012	2013	2014	2015
Libya		20.6	39.5	75.9	38.0	30.0
	Europe	16.6	37.6	57.1	28.6	22.6
	North America	2.2	0.9	–	–	–
	Asia and Pacific	–	0.2	9.3	4.7	3.7
	Latin America	–	–	3.5	1.7	1.4
	Africa	1.8	0.2	1.5	0.7	0.6
	Middle East	0.1	0.6	4.5	2.2	1.8
Nigeria		23.6	8.2	23.1	49.3	18.0
	Europe	23.6	7.6	–	–	–
	North America	–	0.6	–	30.8	11.3
	Asia and Pacific	–	–	–	18.5	6.7
	Latin America	–	–	23.1	–	–
	Africa	–	–	–	–	–
	Middle East	–	–	–	–	–
Qatar		510.2	465.9	511.0	522.1	521.0
	Europe	27.3	–	–	–	–
	North America	–	–	–	–	–
	Asia and Pacific	427.9	465.9	511.0	522.1	521.0
	Latin America	2.0	–	–	–	–
	Africa	4.6	–	–	–	–
	Middle East	48.4	–	–	–	–
Saudi Arabia		902.2	862.1	794.0	987.8	1,154.7
	Europe	117.0	110.8	76.4	112.7	180.7
	North America	4.5	1.5	–	12.9	–
	Asia and Pacific	496.5	490.7	499.9	548.7	578.9
	Latin America	25.8	12.4	8.3	13.0	4.1
	Africa	97.9	95.3	91.5	114.3	195.2
	Middle East	160.4	151.4	117.8	186.1	195.8
United Arab Emirates		604.3	653.8	803.5	760.1	950.3
	Europe	89.2	86.0	79.9	75.2	0.5
	North America	1.4	5.7	8.1	5.2	–
	Asia and Pacific	452.9	522.6	649.1	625.9	730.3
	Latin America	10.0	–	–	0.1	2.0
	Africa	16.6	15.6	24.3	33.3	0.4
	Middle East	34.2	23.9	42.0	20.4	217.0
Venezuela		786.3	674.5	713.2	312.4	318.0
	Europe	35.4	47.9	42.7	6.5	9.8
	North America	427.7	335.7	402.1	58.1	54.1
	Asia and Pacific	2.7	–	15.2	–	–
	Latin America	312.4	270.0	246.0	242.5	246.9
	Africa	8.1	20.9	7.3	5.3	7.1
	Middle East	–	–	–	–	–
OPEC		4,684.9	4,543.2	4,723.6	4,609.7	4,991.6
	Europe	708.7	574.5	583.6	772.4	755.9
	North America	610.9	482.1	541.2	243.4	207.2
	Asia and Pacific	2,483.9	2,741.4	2,883.1	2,825.3	2,993.8
	Latin America	450.2	381.0	352.6	333.8	330.8
	Africa	187.0	185.7	186.0	216.0	272.7
	Middle East	244.2	178.6	177.1	218.7	431.2

Notes:

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

Table 5.3**Oil trade**

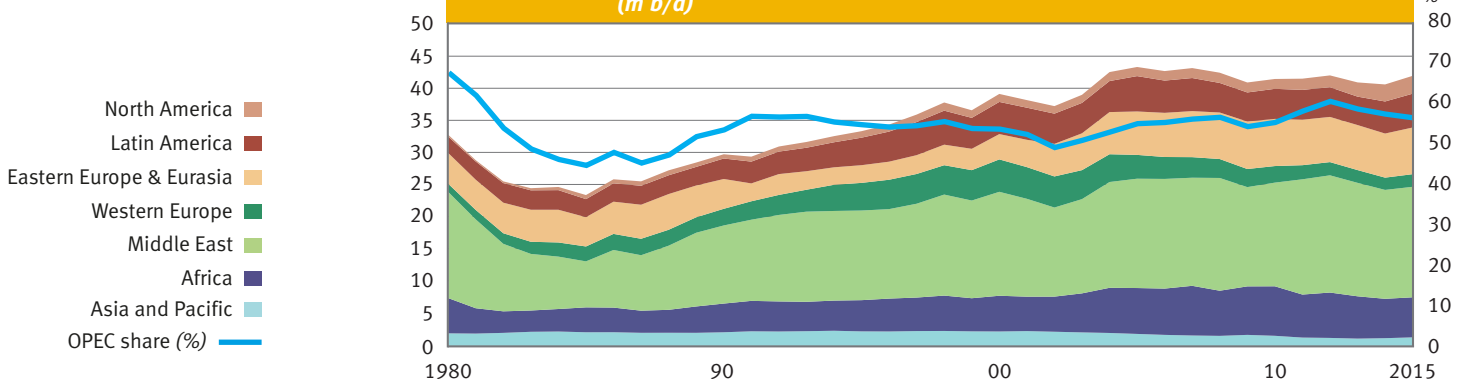
World crude oil exports by country (1,000 b/d)

	2011	2012	2013	2014	2015	% change 15/14
North America	1,731.1	1,823.9	2,192.7	2,627.2	2,754.7	4.9
Canada	1,684.1	1,756.9	2,058.7	2,276.2	2,296.7	0.9
United States	47.0	67.0	134.0	351.0	458.0	30.5
Latin America	4,600.1	4,578.4	4,382.3	4,944.4	5,213.3	5.4
Columbia	558.3	555.0	703.3	722.0	736.1	2.0
Ecuador	334.0	357.7	388.2	422.4	432.9	2.5
Mexico	1,419.5	1,333.1	1,270.7	1,219.8	1,247.1	2.2
Trinidad & Tobago	39.5	30.8	38.2	34.2	29.1	-14.9
Venezuela	1,553.4	1,724.8	1,528.0	1,964.9	1,974.0	0.5
Others	695.4	577.1	454.0	581.1	794.1	36.7
Eastern Europe and Eurasia	7,011.5	6,967.7	6,943.4	6,800.3	7,196.8	5.8
Russia	4,786.3	4,757.1	4,689.4	4,488.8	4,897.5	9.1
Others	2,225.2	2,210.6	2,254.0	2,311.4	2,299.3	-0.5
Western Europe	2,176.5	2,038.4	1,968.8	1,891.9	1,949.4	3.0
Norway	1,423.0	1,303.0	1,198.5	1,203.2	1,234.7	2.6
United Kingdom	563.0	576.1	614.4	570.7	594.7	4.2
Others	190.4	159.3	155.9	117.9	120.0	1.8
Middle East	17,772.3	18,076.7	17,497.1	16,792.8	17,037.3	1.5
IR Iran	2,537.3	2,102.0	1,215.4	1,109.2	1,081.1	-2.5
Iraq	2,165.7	2,423.4	2,390.4	2,515.5	3,004.9	19.5
Kuwait	1,816.1	2,070.0	2,058.5	1,994.8	1,963.8	-1.6
Oman	742.1	768.3	838.0	804.3	788.0	-2.0
Qatar	587.9	588.3	598.7	595.5	490.7	-17.6
Saudi Arabia	7,218.1	7,556.8	7,570.7	7,153.5	7,163.3	0.1
United Arab Emirates	2,457.0	2,445.2	2,701.4	2,496.7	2,441.5	-2.2
Others	248.2	122.8	124.0	123.4	104.0	-15.7
Africa	6,635.4	6,996.9	6,525.7	6,071.4	6,178.1	1.8
Algeria	842.9	808.6	744.0	622.9	642.2	3.1
Angola	1,545.6	1,663.3	1,669.4	1,607.9	1,710.9	6.4
Congo	264.3	252.0	240.7	260.9	227.0	-13.0
Egypt	83.1	91.0	96.5	117.0	155.8	33.1
Gabon	235.3	227.0	211.0	225.1	210.0	-6.7
Libya	299.5	962.0	589.1	319.0	235.0	-26.3
Nigeria	2,377.0	2,368.0	2,193.0	2,120.1	2,114.0	-0.3
Sudans	362.9	60.0	133.0	168.0	166.0	-1.2
Others	624.7	565.1	649.1	630.5	717.3	13.8
Asia and Pacific	1,291.7	1,238.9	1,131.4	1,199.9	1,324.6	10.4
Australia	272.0	260.9	205.6	244.3	222.4	-9.0
Brunei	154.3	139.0	114.6	108.0	112.0	3.7
China	50.5	48.8	32.3	12.2	57.0	368.0
Indonesia	256.9	228.9	228.6	255.9	315.1	23.1
Malaysia	280.0	267.8	263.4	278.4	365.5	31.3
Vietnam	164.5	185.0	170.3	173.4	143.6	-17.2
Others	113.4	108.6	116.6	127.7	108.9	-14.7
Total world	41,218.4	41,720.9	40,641.3	40,327.8	41,654.2	3.3
<i>of which</i>						
OPEC	23,991.3	25,298.7	23,875.3	23,178.3	23,569.5	1.7
<i>OPEC percentage</i>	<i>58.2</i>	<i>60.6</i>	<i>58.7</i>	<i>57.5</i>	<i>56.6</i>	
OECD	5,647.6	5,488.5	5,666.4	6,019.0	6,213.2	3.2
FSU	6,990.7	6,944.3	6,928.2	6,760.0	6,976.8	3.2

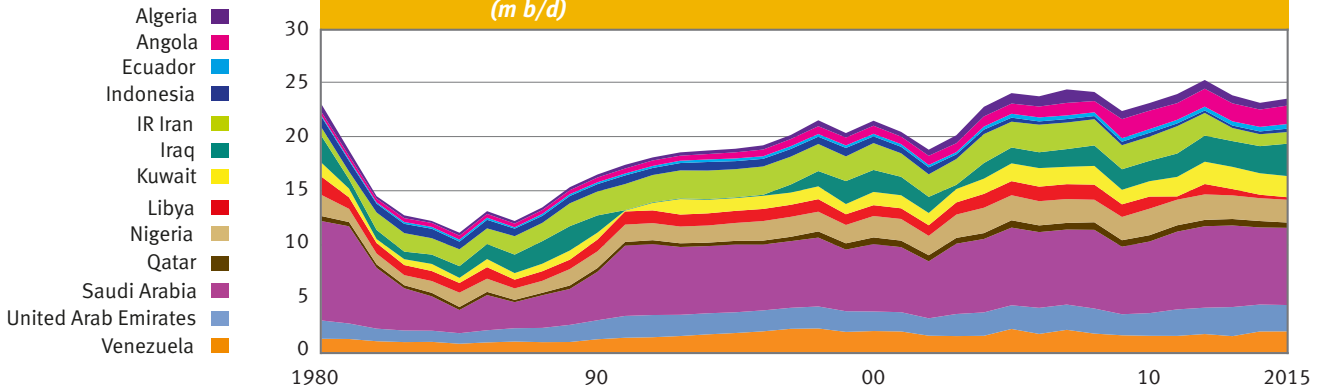
Notes:

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

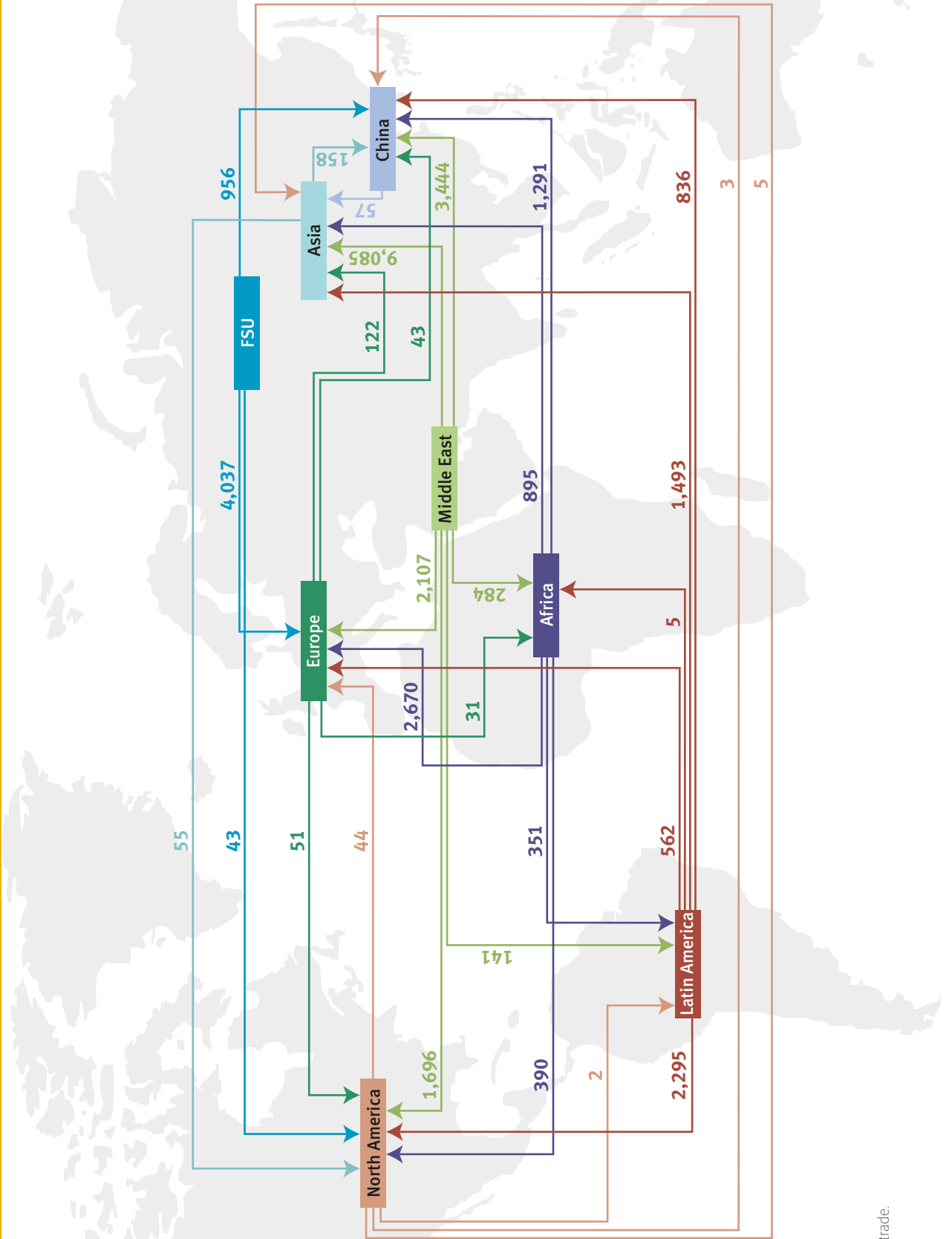
Graph 5.1: World crude oil exports by region
(m b/d)



Graph 5.2: OPEC Members' crude oil exports
(m b/d)



Graph 5.3: World interregional trade of crude oil, 2015
(1,000 b/d)



Notes:
Excluding intraregional trade.

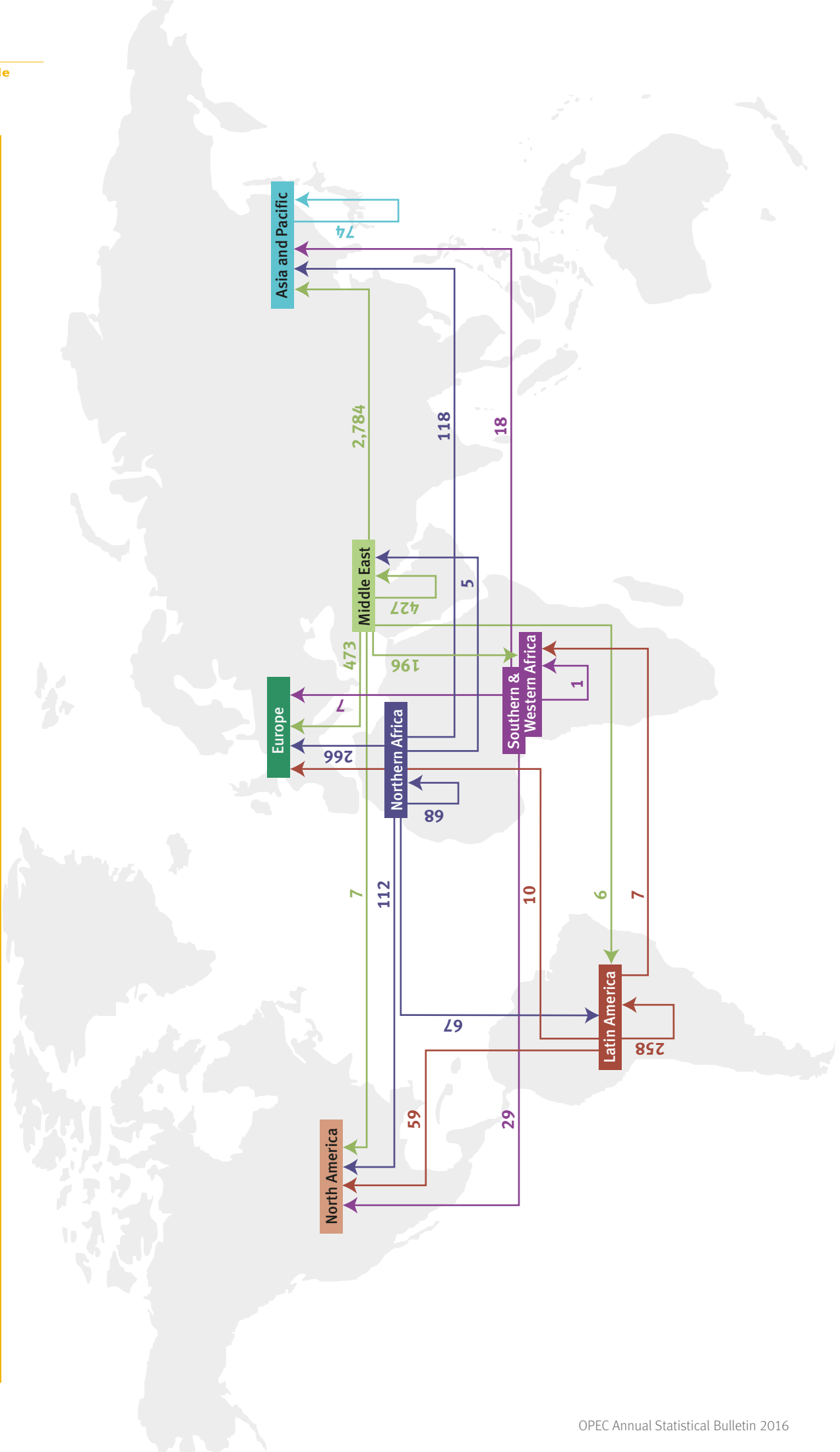
World exports of petroleum products by country (1,000 b/d)

	2011	2012	2013	2014	2015	% change 15/14
North America	3,328.4	3,606.2	3,995.2	4,289.0	4,775.9	11.4
Canada	389.6	468.2	505.2	464.0	483.9	4.3
United States	2,938.9	3,138.0	3,490.0	3,825.0	4,292.0	12.2
Latin America	1,856.4	1,628.2	1,674.0	1,202.4	1,132.9	-5.8
Brazil	140.4	164.3	155.2	160.0	130.2	-18.7
Ecuador	28.8	27.4	19.7	7.7	15.6	101.4
Mexico	197.5	143.2	183.0	201.6	196.1	-2.8
Trinidad & Tobago	114.1	69.9	91.7	69.9	65.3	-6.6
Venezuela	786.3	674.5	713.2	312.4	318.0	1.8
Others	589.3	548.9	511.2	450.7	407.8	-9.5
Eastern Europe and Eurasia	3,137.1	3,194.6	3,223.6	3,325.3	3,529.7	6.1
Romania	68.0	66.8	68.8	88.8	89.5	0.8
Russia	1,926.7	1,979.3	2,118.0	2,174.0	2,270.5	4.4
Others	1,142.4	1,148.6	1,036.8	1,062.4	1,169.7	10.1
Western Europe	6,025.6	6,357.7	6,355.2	6,358.5	6,929.9	9.0
Belgium	385.9	390.3	493.7	523.9	529.4	1.1
France	439.5	426.2	405.7	411.3	441.0	7.2
Germany	370.9	384.0	413.6	433.5	452.0	4.3
Italy	544.0	585.8	490.4	417.5	565.5	35.5
Netherlands	2,033.3	2,112.5	2,079.3	2,081.0	2,245.3	7.9
United Kingdom	584.3	568.9	553.2	483.8	486.7	0.6
Others	1,667.7	1,889.9	1,919.4	2,007.5	2,209.9	10.1
Middle East	3,669.3	3,648.4	3,682.5	3,874.5	4,249.9	9.7
Bahrain	242.1	245.9	247.5	248.6	250.8	0.9
IR Iran	441.3	456.0	394.0	469.9	514.3	9.4
Iraq	1.1	2.2	11.5	9.3	13.7	47.5
Kuwait	759.1	804.2	805.3	751.1	739.4	-1.6
Qatar	510.2	465.9	511.0	522.1	521.0	-0.2
Saudi Arabia	902.2	862.1	794.0	987.8	1,154.7	16.9
United Arab Emirates	604.3	653.8	803.5	760.1	950.3	25.0
Others	209.0	158.4	115.7	125.6	105.7	-15.8
Africa	785.0	750.7	832.2	937.8	921.6	-1.7
Algeria	492.2	449.2	453.0	582.6	605.4	3.9
Angola	31.4	29.9	32.2	31.0	36.7	18.5
Egypt	69.7	58.4	48.6	53.0	63.8	20.2
Gabon	5.8	6.1	3.1	7.6	10.0	32.0
Libya	20.6	39.5	75.9	38.0	30.0	-21.1
Nigeria	23.6	8.2	23.1	49.3	18.0	-63.5
Others	141.7	159.4	196.4	176.4	157.8	-10.6
Asia and Pacific	6,371.8	6,374.0	6,834.3	6,812.0	7,039.0	3.3
Australia	56.3	63.9	57.4	55.8	46.6	-16.4
China	609.9	569.6	665.8	692.7	836.4	20.7
India	1,266.7	1,288.7	1,475.1	1,374.1	1,246.4	-9.3
Indonesia	83.8	70.5	87.4	88.4	74.4	-15.8
Japan	475.5	439.5	513.3	509.3	559.5	9.9
Malaysia	310.2	401.8	492.1	494.4	452.7	-8.4
Singapore	1,963.9	1,731.1	1,742.5	1,772.3	1,884.5	6.3
South Korea	1,101.2	1,194.9	1,158.8	1,205.6	1,279.3	6.1
Others	504.4	614.1	642.0	619.5	659.1	6.4
Total world	25,173.7	25,559.8	26,596.9	26,799.5	28,578.9	6.6
<i>of which</i>						
OPEC	4,684.9	4,543.2	4,723.6	4,609.7	4,991.6	8.3
<i>OPEC percentage</i>	<i>18.6</i>	<i>17.8</i>	<i>17.8</i>	<i>17.2</i>	<i>17.5</i>	
OECD	11,430.2	12,064.4	12,579.5	12,945.8	14,125.8	9.1
FSU	2,732.1	2,772.6	2,758.8	2,830.8	2,997.1	5.9

Notes:

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

Graph 5.4: OPEC Members' petroleum products exports by destination, 2015
(1,000 b/d)



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

	2011	2012	2013	2014	2015	% change 15/14
North America	3,328.4	3,606.2	3,995.2	4,289.0	4,775.9	11.4
Gasoline	648.1	645.2	649.4	690.5	791.1	14.6
Kerosene	102.3	141.7	165.9	171.3	181.4	5.9
Distillates	979.6	1,164.2	1,292.0	1,236.6	1,334.0	7.9
Residuals	477.3	458.2	445.3	430.0	382.9	-10.9
Others	1,121.1	1,196.9	1,442.6	1,760.6	2,086.5	18.5
Latin America	1,856.4	1,628.2	1,674.0	1,202.4	1,132.9	-5.8
Gasoline	109.5	110.1	110.3	103.1	96.0	-6.9
Kerosene	96.8	83.3	87.4	71.0	66.3	-6.7
Distillates	171.9	153.7	110.5	87.1	82.9	-4.8
Residuals	647.8	591.4	606.7	598.7	540.4	-9.7
Others	830.3	689.8	759.1	342.5	347.3	1.4
Eastern Europe and Eurasia	3,137.1	3,194.6	3,223.6	3,325.3	3,529.7	6.1
Gasoline	324.2	318.0	342.6	314.7	365.7	16.2
Kerosene	64.2	58.8	68.6	87.9	94.9	8.0
Distillates	1,199.9	1,257.0	1,238.3	1,375.9	1,557.5	13.2
Residuals	1,332.8	1,340.9	1,340.0	1,281.7	1,241.6	-3.1
Others	216.0	220.0	234.1	265.1	270.1	1.9
Western Europe	6,025.6	6,357.7	6,355.2	6,358.5	6,929.9	9.0
Gasoline	1,467.7	1,613.2	1,563.8	1,585.8	1,808.3	14.0
Kerosene	319.7	319.4	335.4	292.0	305.8	4.7
Distillates	1,694.5	1,858.4	1,862.3	1,827.0	1,904.1	4.2
Residuals	1,176.4	1,155.8	1,197.5	1,268.3	1,412.8	11.4
Others	1,367.2	1,410.8	1,396.1	1,385.3	1,498.9	8.2
Middle East	3,669.3	3,648.4	3,682.5	3,874.5	4,249.9	9.7
Gasoline	410.0	524.9	396.8	478.3	712.1	48.9
Kerosene	688.3	671.5	671.4	661.1	626.3	-5.3
Distillates	625.6	580.2	594.8	635.0	626.1	-1.4
Residuals	370.4	469.4	381.6	448.7	664.0	48.0
Others	1,575.1	1,402.5	1,638.0	1,651.5	1,621.4	-1.8
Africa	785.0	750.7	832.2	937.8	921.6	-1.7
Gasoline	18.4	13.4	17.4	7.6	7.4	-2.5
Kerosene	34.9	42.9	71.0	59.5	58.7	-1.3
Distillates	3.7	6.2	9.0	11.8	11.3	-4.0
Residuals	186.0	181.5	199.7	220.9	217.6	-1.5
Others	542.1	506.8	535.1	638.1	626.7	-1.8

Table 5.5**Oil trade**

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

	2011	2012	2013	2014	2015	% change 15/14
Asia and Pacific	6,371.8	6,374.0	6,834.3	6,812.0	7,039.0	3.3
Gasoline	1,214.6	1,301.7	1,448.1	1,507.0	1,532.7	1.7
Kerosene	627.1	658.0	730.5	720.2	822.4	14.2
Distillates	1,943.4	1,933.5	2,074.5	2,108.9	2,138.3	1.4
Residuals	1,187.4	1,128.9	1,196.1	1,104.2	1,125.4	1.9
Others	1,399.3	1,351.8	1,385.2	1,371.8	1,420.2	3.5
Total world	25,173.7	25,559.8	26,596.9	26,799.5	28,578.9	6.6
Gasoline	4,192.5	4,526.4	4,528.3	4,687.1	5,313.2	13.4
Kerosene	1,933.3	1,975.5	2,130.3	2,063.0	2,155.7	4.5
Distillates	6,618.6	6,953.2	7,181.3	7,282.2	7,654.1	5.1
Residuals	5,378.2	5,326.0	5,366.9	5,352.4	5,584.6	4.3
Others	7,051.1	6,778.6	7,390.2	7,414.8	7,871.1	6.2
<i>of which</i>						
OPEC	4,684.9	4,543.2	4,723.6	4,609.7	4,991.6	8.3
Gasoline	129.5	108.8	94.2	155.5	272.0	74.9
Kerosene	591.6	605.4	594.3	600.2	576.3	-4.0
Distillates	493.2	481.5	460.3	631.7	803.9	27.3
Residuals	906.3	977.0	958.8	952.3	998.5	4.8
Others	2,564.3	2,370.5	2,616.1	2,269.9	2,340.7	3.1
OECD	11,430.2	12,064.4	12,579.5	12,945.8	14,125.8	9.1
Gasoline	2,338.6	2,484.6	2,515.2	2,580.7	2,942.6	14.0
Kerosene	712.8	770.9	824.5	784.0	854.7	9.0
Distillates	3,381.7	3,723.2	3,858.0	3,814.9	4,017.8	5.3
Residuals	1,955.6	1,873.8	1,911.8	1,982.4	2,054.4	3.6
Others	3,041.5	3,211.9	3,470.0	3,783.8	4,256.3	12.5
FSU	2,732.1	2,772.6	2,758.8	2,830.8	2,997.1	5.9
Gasoline	188.3	178.1	190.2	169.4	199.8	17.9
Kerosene	41.8	44.1	53.5	67.3	74.6	11.0
Distillates	1,093.9	1,139.6	1,110.5	1,226.9	1,392.4	13.5
Residuals	1,277.9	1,283.6	1,269.7	1,198.7	1,169.2	-2.5
Others	130.3	127.2	134.9	168.5	161.1	-4.3

Notes:

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

Table 5.6

Oil trade

World exports of crude oil and petroleum products by country (1,000 b/d)

	2011	2012	2013	2014	2015	% change 15/14
North America	5,059.5	5,430.1	6,187.8	6,916.1	7,530.6	8.9
Canada	2,073.6	2,225.1	2,563.8	2,740.1	2,780.6	1.5
United States	2,985.9	3,205.0	3,624.0	4,176.0	4,750.0	13.7
Latin America	6,456.5	6,206.5	6,056.3	6,146.8	6,346.2	3.2
Brazil	739.9	651.9	520.8	677.3	866.2	27.9
Colombia	680.3	654.2	789.8	827.7	808.2	-2.4
Ecuador	362.8	385.1	407.9	430.2	448.5	4.3
Mexico	1,617.0	1,476.3	1,453.7	1,421.5	1,443.1	1.5
Trinidad & Tobago	153.6	100.7	129.9	104.1	94.4	-9.3
Venezuela	2,339.7	2,399.2	2,241.2	2,277.2	2,292.0	0.6
Others	563.2	539.1	513.1	408.9	393.8	-3.7
Eastern Europe and Eurasia	10,148.6	10,162.3	10,167.0	10,125.6	10,726.5	5.9
Romania	69.6	68.0	69.8	89.8	90.5	0.7
Russia	6,713.0	6,736.3	6,807.4	6,662.8	7,168.0	7.6
Others	3,366.0	3,358.0	3,289.8	3,372.9	3,468.0	2.8
Western Europe	8,202.1	8,396.1	8,324.0	8,250.4	8,879.2	7.6
Belgium	385.9	390.3	493.7	523.9	529.4	1.1
France	443.4	426.2	407.2	411.3	441.0	7.2
Germany	378.4	387.9	414.3	434.1	458.7	5.7
Italy	552.8	600.4	500.9	424.6	579.8	36.5
Netherlands	2,041.3	2,123.6	2,090.3	2,093.3	2,251.2	7.5
Norway	1,799.4	1,681.0	1,558.6	1,575.7	1,636.9	3.9
United Kingdom	1,147.3	1,145.0	1,167.6	1,054.5	1,081.4	2.6
Others	1,453.5	1,641.6	1,691.4	1,732.9	1,900.8	9.7
Middle East	21,441.6	21,725.1	21,179.6	20,667.3	21,287.2	3.0
Bahrain	242.1	245.9	247.5	248.6	250.8	0.9
IR Iran	2,978.6	2,558.0	1,609.4	1,579.1	1,595.5	1.0
Iraq	2,166.8	2,425.5	2,401.9	2,524.8	3,018.6	19.6
Kuwait	2,575.3	2,874.2	2,863.8	2,745.9	2,703.2	-1.6
Oman	782.6	815.8	871.6	838.2	822.9	-1.8
Qatar	1,098.0	1,054.1	1,109.7	1,117.5	1,011.7	-9.5
Saudi Arabia	8,120.3	8,418.9	8,364.7	8,141.3	8,318.1	2.2
United Arab Emirates	3,061.3	3,099.0	3,504.9	3,256.8	3,391.8	4.1
Others	416.8	233.7	206.1	215.0	174.8	-18.7
Africa	7,420.4	7,747.6	7,357.9	7,009.2	7,099.7	1.3
Algeria	1,335.2	1,257.7	1,196.9	1,205.5	1,247.6	3.5
Angola	1,576.9	1,693.2	1,701.6	1,638.9	1,747.6	6.6
Congo	279.0	264.9	256.4	282.4	241.9	-14.4
Egypt	152.8	149.4	145.1	170.0	219.5	29.1
Gabon	241.2	233.1	214.1	232.7	220.0	-5.5
Libya	320.1	1,001.5	664.9	357.0	265.0	-25.8
Nigeria	2,400.6	2,376.2	2,216.1	2,169.4	2,132.0	-1.7
Sudans	372.9	66.0	142.0	176.0	174.0	-1.1
Others	741.8	705.6	820.7	777.4	852.1	9.6
Asia and Pacific	7,663.5	7,612.9	7,965.7	8,011.9	8,363.5	4.4
Australia	328.4	324.7	262.9	300.1	269.0	-10.4
Brunei	155.3	140.6	117.3	110.3	114.8	4.1
China	660.3	618.4	698.1	704.9	893.4	26.7
India	1,266.7	1,288.7	1,475.1	1,374.1	1,246.4	-9.3
Indonesia	340.7	299.4	316.0	344.3	389.6	13.1
Japan	475.5	439.5	513.3	509.3	559.5	9.9
Malaysia	590.2	669.6	755.5	772.8	818.2	5.9
Singapore	1,968.9	1,737.1	1,744.5	1,774.3	1,902.3	7.2
South Korea	1,101.2	1,194.9	1,158.8	1,205.6	1,279.3	6.1
Vietnam	196.5	220.0	203.3	206.4	175.6	-14.9
Others	579.8	680.1	720.9	709.9	715.4	0.8
Total world	66,392.1	67,280.7	67,238.3	67,127.3	70,233.1	4.6
<i>of which</i>						
OPEC	28,676.2	29,841.9	28,598.9	27,787.9	28,561.0	2.8
<i>OPEC percentage</i>	<i>43.2</i>	<i>44.4</i>	<i>42.5</i>	<i>41.4</i>	<i>40.7</i>	
OECD	17,077.8	17,552.9	18,245.9	18,964.8	20,339.0	7.2
FSU	9,722.8	9,716.9	9,687.0	9,590.8	9,974.0	4.0

Notes:

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

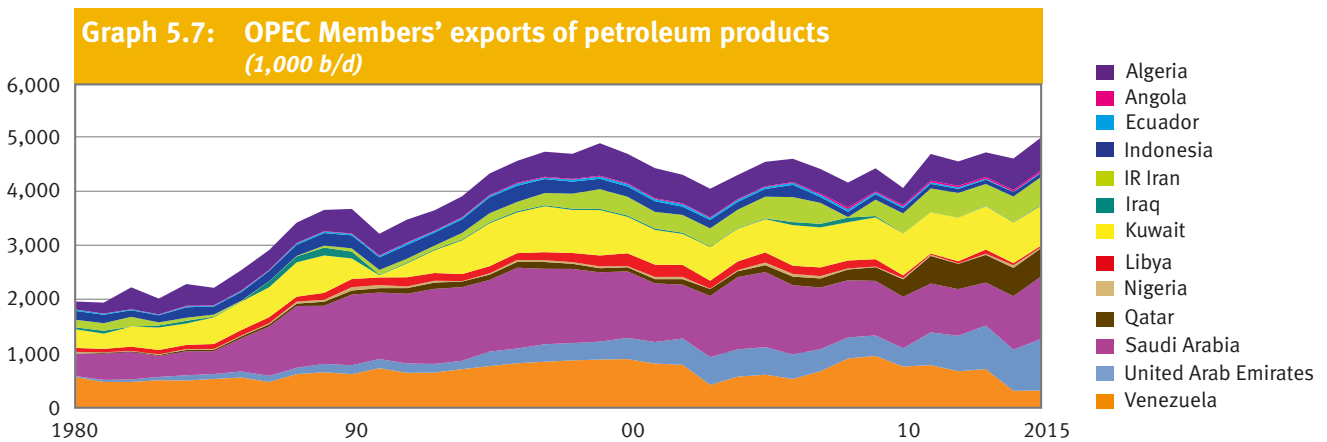
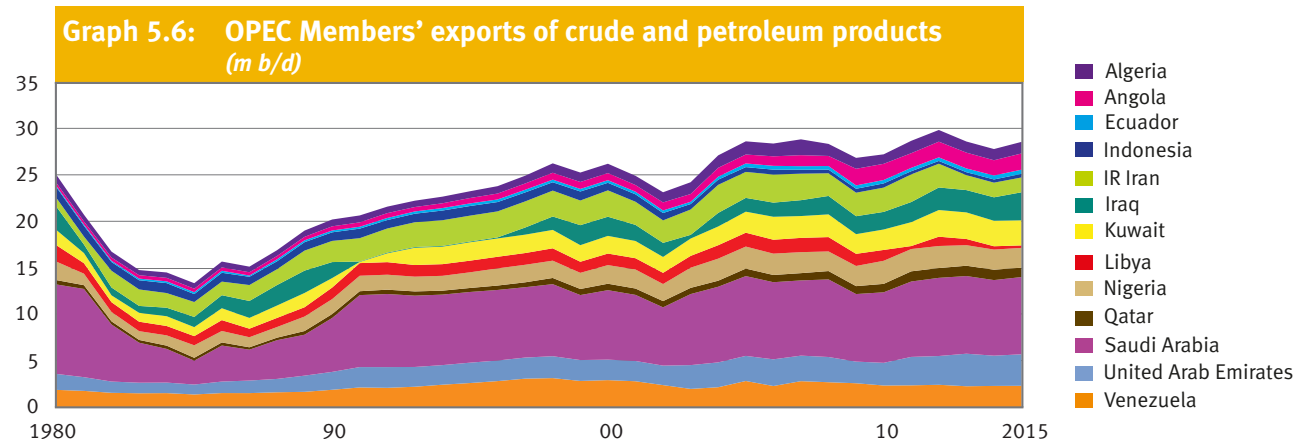
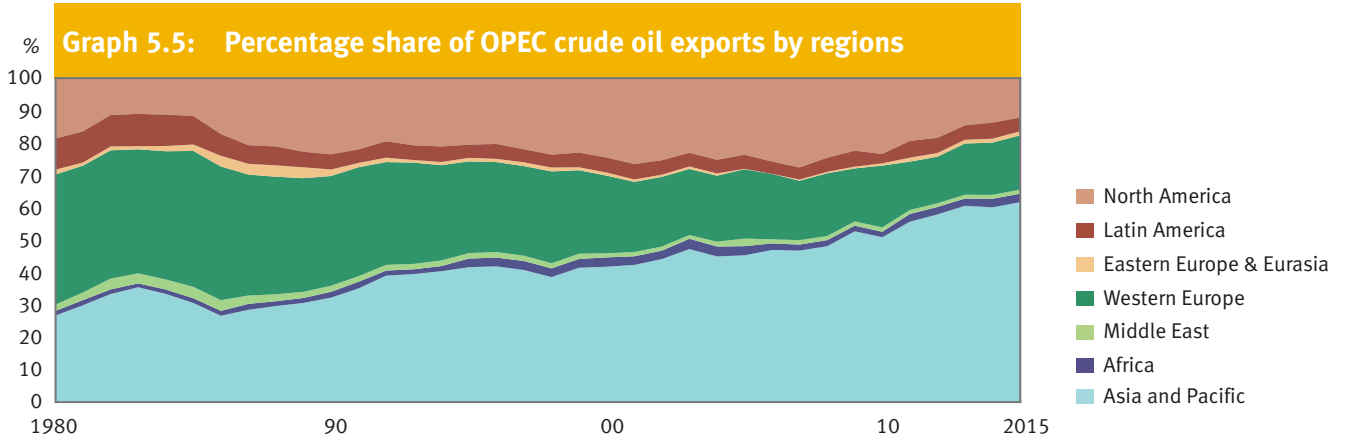


Table 5.7

Oil trade

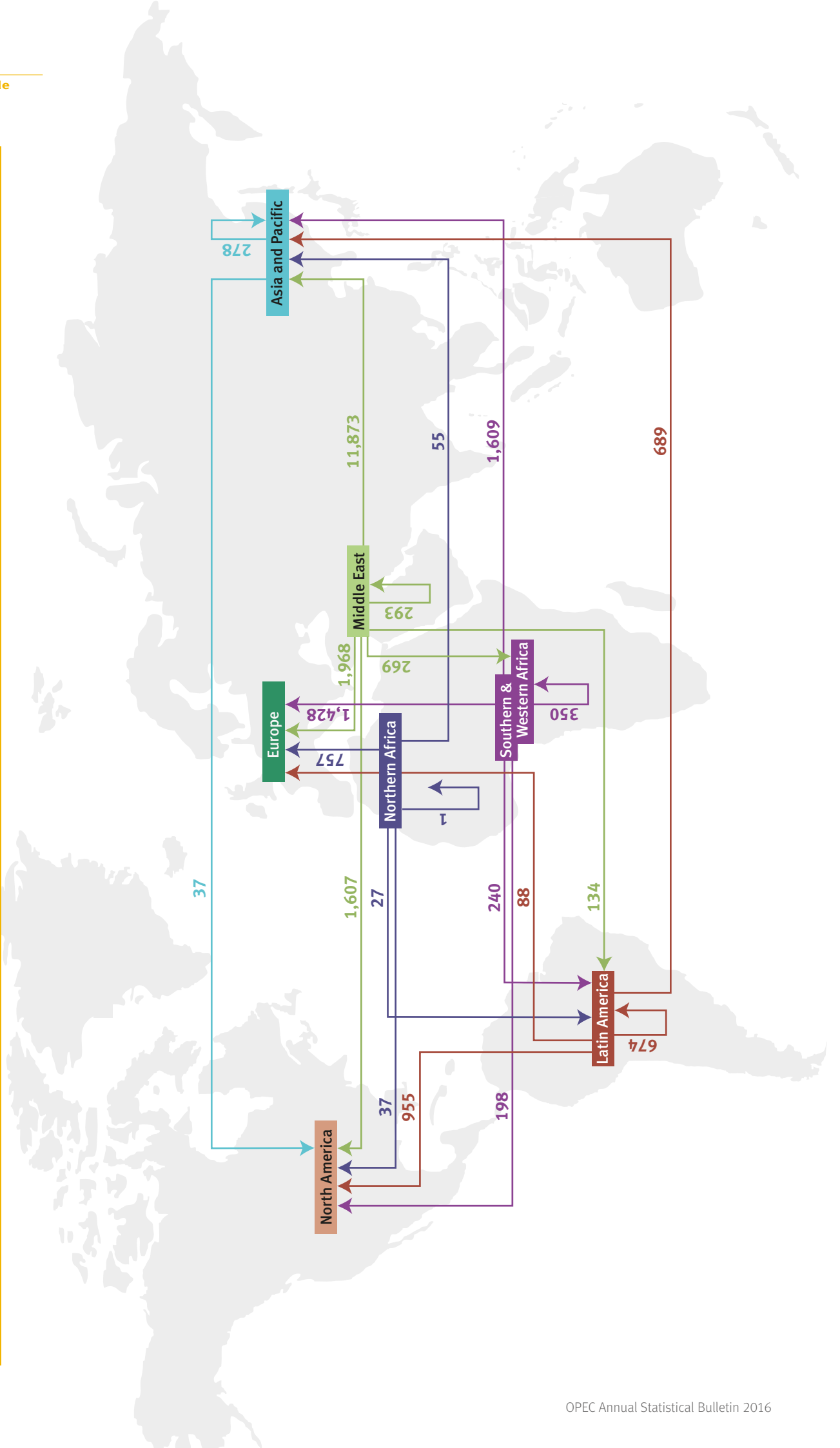
World imports of crude oil by country (1,000 b/d)

	2011	2012	2013	2014	2015	% change 15/14
North America	9,606.6	9,241.1	8,381.4	7,907.6	7,929.3	0.3
Canada	671.6	714.1	651.4	563.6	578.3	2.6
United States	8,935.0	8,527.0	7,730.0	7,344.0	7,351.0	0.1
Latin America	1,176.3	1,038.2	1,085.5	1,023.4	928.6	-9.3
Brazil	318.2	311.5	363.5	333.3	251.7	-24.5
Chile	173.5	160.3	178.6	173.2	158.4	-8.5
Cuba	98.0	98.3	114.6	107.3	109.3	1.9
Trinidad & Tobago	83.3	62.4	80.9	59.1	76.7	29.7
Others	503.4	405.8	347.9	350.5	332.5	-5.1
Eastern Europe and Eurasia	1,861.1	1,839.2	1,752.0	1,820.3	1,943.6	6.8
Bulgaria	100.2	124.6	113.3	102.4	121.4	18.6
Czech Republic	139.8	142.4	132.3	148.7	144.1	-3.1
Hungary	119.0	109.7	108.7	122.0	125.1	2.5
Romania	111.8	103.8	108.7	138.4	135.5	-2.1
Others	1,390.4	1,358.6	1,289.1	1,308.7	1,417.6	8.3
Western Europe	10,171.1	10,417.6	9,908.8	9,748.9	10,432.4	7.0
Belgium	605.1	639.5	558.4	650.0	647.9	-0.3
France	1,294.3	1,142.8	1,110.1	1,076.7	1,145.8	6.4
Germany	1,827.1	1,882.9	1,828.4	1,806.8	1,846.5	2.2
Greece	330.9	419.3	392.1	420.5	445.7	6.0
Italy	1,452.7	1,381.1	1,178.7	1,085.9	1,261.6	16.2
Netherlands	987.1	1,004.1	952.1	957.2	1,056.5	10.4
Spain	1,053.9	1,183.0	1,168.5	1,191.5	1,306.0	9.6
Sweden	379.7	416.6	338.8	378.0	406.2	7.5
Turkey	365.1	392.4	374.8	353.1	505.9	43.3
United Kingdom	1,008.9	1,080.5	1,017.6	940.2	856.2	-8.9
Others	866.3	875.4	989.1	888.9	954.0	7.3
Middle East	497.2	516.8	506.5	491.6	521.4	6.1
Bahrain	219.3	219.9	218.9	211.1	246.4	16.7
Others	277.9	296.9	287.6	280.5	275.0	-2.0
Africa	766.3	842.0	736.8	801.5	660.7	-17.6
Côte d'Ivoire	46.2	68.2	70.1	61.0	60.0	-1.6
Morocco	99.0	105.0	113.0	104.9	85.4	-18.6
Others	621.1	668.8	553.8	635.7	515.3	-18.9
Asia and Pacific	18,255.6	19,443.4	19,521.7	19,845.9	20,631.6	4.0
Australia	488.2	498.3	450.7	440.9	317.6	-28.0
China	5,066.9	5,423.8	5,657.7	6,177.5	6,730.9	9.0
India	3,365.6	3,682.2	3,792.6	3,791.4	3,935.5	3.8
Indonesia	316.7	329.5	401.7	383.2	374.4	-2.3
Japan	3,497.1	3,651.6	3,627.5	3,442.8	3,375.3	-2.0
New Zealand	103.2	106.0	104.2	100.2	103.2	3.0
Philippines	183.4	185.3	151.8	183.6	188.8	2.8
Singapore	716.0	832.2	782.8	784.7	804.8	2.6
South Korea	2,520.6	2,555.0	2,450.3	2,475.7	2,781.1	12.3
Thailand	793.6	860.3	868.0	805.8	874.0	8.5
Others	1,204.3	1,319.2	1,234.5	1,260.2	1,146.0	-9.1
Total world	42,334.2	43,338.4	41,892.8	41,639.2	43,047.6	3.4
<i>of which</i>						
OECD	27,586.1	27,659.6	26,100.0	25,328.8	26,192.8	3.4
FSU	773.2	752.6	618.4	545.2	613.2	12.5

Notes:

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

Graph 5.8: OPEC Members' crude oil exports by destination, 2015
(1,000 b/d)



World imports of petroleum products by country (1,000 b/d)

	2011	2012	2013	2014	2015	% change 15/14
North America	2,817.8	2,339.8	2,401.8	2,202.5	2,346.8	6.6
Canada	316.8	268.8	272.8	305.5	296.8	-2.8
United States	2,501.0	2,071.0	2,129.0	1,897.0	2,050.0	8.1
Latin America	2,424.0	2,416.1	2,406.6	2,543.9	2,638.3	3.7
Brazil	682.6	570.0	563.0	611.1	556.6	-8.9
Ecuador	104.0	117.9	133.2	157.4	153.6	-2.4
Mexico	659.5	648.4	567.3	618.3	712.9	15.3
Panama	50.9	61.5	59.5	63.4	58.4	-7.9
Venezuela	68.0	145.0	133.0	158.3	187.0	18.1
Others	859.0	873.4	950.7	935.3	969.6	3.7
Eastern Europe and Eurasia	867.6	815.1	811.4	958.3	913.4	-4.7
Bulgaria	25.8	31.0	32.1	33.6	37.6	11.9
Hungary	45.6	40.7	45.2	48.0	57.0	18.8
Poland	129.6	104.2	107.7	120.6	126.8	5.2
Russia	91.5	49.8	39.3	47.7	51.0	7.0
Others	575.1	589.5	587.0	708.5	641.0	-9.5
Western Europe	6,741.9	6,706.6	7,039.4	7,004.6	7,272.3	3.8
Belgium	427.8	389.3	545.8	490.1	546.7	11.6
France	814.9	900.1	881.4	897.3	857.0	-4.5
Germany	701.6	688.6	802.1	791.9	797.6	0.7
Italy	232.9	205.7	260.2	252.5	261.9	3.7
Netherlands	1,752.6	1,870.9	1,843.3	1,792.5	1,900.5	6.0
United Kingdom	494.8	538.2	595.4	607.8	652.4	7.3
Others	2,317.4	2,113.8	2,111.2	2,172.6	2,256.1	3.8
Middle East	981.1	1,230.2	1,263.8	1,315.6	1,503.2	14.3
IR Iran	30.4	5.9	15.0	39.9	52.5	31.7
Iraq	62.5	103.2	84.0	99.0	81.1	-18.0
Saudi Arabia	196.9	319.9	482.0	465.0	588.0	26.5
Others	691.3	801.3	682.8	711.8	781.6	9.8
Africa	1,551.6	1,696.3	1,578.6	1,650.8	1,880.2	13.9
Algeria	43.0	93.8	102.0	55.3	83.2	50.6
Angola	63.8	92.3	89.2	99.1	134.5	35.8
Egypt	185.6	242.0	198.1	205.1	367.2	79.0
Libya	93.0	95.0	94.2	94.7	72.6	-23.3
Morocco	162.5	160.8	166.3	163.2	161.0	-1.3
Nigeria	412.4	351.6	331.0	438.7	441.0	0.5
Tunisia	72.8	64.0	62.7	70.4	82.8	17.6
Others	518.4	596.8	535.2	524.5	537.8	2.5
Asia and Pacific	8,446.3	8,419.6	8,902.8	9,160.6	9,809.6	7.1
Australia	336.8	378.5	423.2	429.7	545.5	26.9
China	1,011.3	1,017.9	1,093.1	957.7	1,150.9	20.2
India	394.3	405.3	372.3	487.9	636.5	30.5
Indonesia	435.2	467.2	461.4	554.6	506.0	-8.8
Japan	1,025.7	1,089.1	1,003.3	992.7	972.9	-2.0
New Zealand	41.1	39.6	45.6	48.9	46.2	-5.5
Singapore	2,513.2	2,170.3	2,312.5	2,390.6	2,577.6	7.8
South Korea	762.9	852.8	899.4	885.7	844.2	-4.7
Others	1,925.8	1,998.9	2,291.9	2,412.7	2,529.9	4.9
Total world	23,830.3	23,623.6	24,404.5	24,836.3	26,363.7	6.1
<i>of which</i>						
OPEC	1,763.6	2,114.2	2,173.3	2,405.6	2,422.4	0.7
<i>OPEC percentage</i>	7.4	8.9	8.9	9.7	9.2	
OECD	12,634.2	12,302.5	12,647.8	12,459.2	13,069.3	4.9
FSU	504.8	553.4	429.6	477.8	491.1	2.8

Notes:

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

Table 5.9**Oil trade**

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

	2011	2012	2013	2014	2015	% change 15/14
North America	2,817.8	2,339.8	2,401.8	2,202.5	2,346.8	6.6
Gasoline	931.0	742.2	712.4	676.7	751.9	11.1
Kerosene	109.1	97.6	127.8	137.3	177.9	29.5
Distillates	216.0	144.2	179.4	231.4	242.5	4.8
Residuals	344.5	273.4	247.5	196.4	203.4	3.5
Others	1,217.2	1,082.5	1,134.7	960.6	971.1	1.1
Latin America	2,424.0	2,416.1	2,406.6	2,543.9	2,638.3	3.7
Gasoline	733.0	657.5	629.3	855.2	954.9	11.7
Kerosene	54.1	58.8	48.6	56.0	76.8	37.2
Distillates	719.0	732.3	772.3	760.7	710.3	-6.6
Residuals	153.6	172.7	151.0	118.1	101.5	-14.1
Others	764.3	794.8	805.4	754.0	794.8	5.4
Eastern Europe and Eurasia	867.6	815.1	811.4	958.3	913.4	-4.7
Gasoline	190.6	147.0	154.5	200.5	157.1	-21.6
Kerosene	10.6	14.6	10.2	94.6	4.6	-95.1
Distillates	374.3	383.3	378.8	399.3	468.8	17.4
Residuals	69.2	33.6	27.4	24.8	31.9	28.8
Others	222.8	236.7	240.5	239.2	250.9	4.9
Western Europe	6,741.9	6,706.6	7,039.4	7,004.6	7,272.3	3.8
Gasoline	617.4	646.5	583.9	569.5	623.8	9.5
Kerosene	616.4	628.8	693.4	679.4	698.8	2.9
Distillates	2,444.3	2,445.2	2,659.0	2,545.5	2,703.9	6.2
Residuals	1,176.5	1,070.7	1,103.8	1,145.6	1,163.0	1.5
Others	1,887.3	1,915.4	1,999.5	2,064.7	2,082.8	0.9
Middle East	981.1	1,230.2	1,263.8	1,315.6	1,503.2	14.3
Gasoline	410.2	435.0	429.1	508.1	594.6	17.0
Kerosene	3.1	15.6	11.6	44.8	59.5	32.7
Distillates	457.0	569.6	568.8	580.2	571.8	-1.4
Residuals	73.8	172.0	208.3	129.9	194.7	49.8
Others	36.9	37.9	45.9	52.5	82.6	57.3
Africa	1,551.6	1,696.3	1,578.6	1,650.8	1,880.2	13.9
Gasoline	541.8	549.0	575.6	709.7	506.3	-28.7
Kerosene	127.9	147.1	130.0	161.8	114.5	-29.2
Distillates	444.5	612.2	592.3	492.4	674.1	36.9
Residuals	102.1	95.1	81.8	171.1	205.9	20.3
Others	335.2	292.9	199.0	115.8	379.4	227.6

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

	2011	2012	2013	2014	2015	% change 15/14
Asia and Pacific	8,446.3	8,419.6	8,902.8	9,160.6	9,809.6	7.1
Gasoline	938.2	1,006.5	1,093.5	1,162.9	1,228.1	5.6
Kerosene	401.6	364.7	402.1	368.1	394.3	7.1
Distillates	1,100.9	1,020.2	1,076.4	1,101.8	1,103.1	0.1
Residuals	2,307.5	2,314.1	2,424.9	2,300.0	2,445.5	6.3
Others	3,698.1	3,714.0	3,905.8	4,227.7	4,638.6	9.7
Total world	23,830.3	23,623.6	24,404.5	24,836.3	26,363.7	6.1
Gasoline	4,362.2	4,183.7	4,178.3	4,682.6	4,816.7	2.9
Kerosene	1,322.9	1,327.2	1,423.6	1,541.9	1,526.4	-1.0
Distillates	5,756.1	5,907.0	6,227.0	6,111.2	6,474.6	5.9
Residuals	4,227.3	4,131.5	4,244.8	4,085.9	4,345.8	6.4
Others	8,161.8	8,074.2	8,330.7	8,414.6	9,200.2	9.3
<i>of which</i>						
OPEC	1,763.6	2,114.2	2,173.3	2,405.6	2,422.4	0.7
Gasoline	766.6	822.8	875.8	1,067.1	962.6	-9.8
Kerosene	76.4	91.7	79.9	108.2	117.9	8.9
Distillates	555.9	650.6	731.2	687.6	607.4	-11.7
Residuals	95.4	126.2	123.5	97.2	143.5	47.6
Others	269.2	422.8	362.9	445.5	591.1	32.7
OECD	12,634.2	12,302.5	12,647.8	12,459.2	13,069.3	4.9
Gasoline	2,099.4	1,923.2	1,785.3	1,756.0	1,984.2	13.0
Kerosene	109.8	78.6	94.6	86.5	86.5	-
Distillates	3,187.9	3,151.6	3,403.7	3,384.3	3,644.2	7.7
Residuals	1,680.0	1,617.7	1,628.9	1,571.3	1,559.5	-0.8
Others	5,557.1	5,531.3	5,735.3	5,661.1	5,794.9	2.4
FSU	504.8	553.4	429.6	477.8	491.1	2.8
Gasoline	149.3	125.0	109.5	142.7	119.5	-16.3
Kerosene	7.1	13.9	7.3	5.8	2.4	-59.5
Distillates	212.1	278.1	230.5	255.3	272.9	6.9
Residuals	66.0	34.3	21.8	20.0	29.1	45.7
Others	70.3	102.1	60.6	53.9	67.2	24.7

Notes:

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

Table 5.10**Oil trade**

World imports of crude oil and petroleum products by country (1,000 b/d)

	2011	2012	2013	2014	2015	% change 15/14
North America	12,424.5	11,580.9	10,783.3	10,110.1	10,276.2	1.6
Canada	988.5	982.9	924.3	869.1	875.2	0.7
United States	11,436.0	10,598.0	9,859.0	9,241.0	9,401.0	1.7
Latin America	3,600.3	3,454.4	3,492.1	3,567.4	3,566.8	–
Brazil	1,000.7	881.5	926.5	944.5	808.3	–14.4
Chile	307.6	290.5	315.2	306.4	306.9	0.1
Cuba	125.0	123.3	142.6	137.3	139.3	1.5
Ecuador	104.0	117.9	133.2	157.4	153.6	–2.4
Mexico	659.5	648.4	567.3	618.3	712.9	15.3
Panama	50.9	61.5	71.5	66.4	63.4	–4.6
Trinidad & Tobago	89.3	71.4	89.9	67.1	86.7	29.2
Venezuela	91.5	170.3	157.5	199.8	227.7	13.9
Others	1,171.8	1,089.7	1,088.6	1,070.1	1,068.0	–0.2
Eastern Europe and Eurasia	2,728.6	2,654.3	2,563.4	2,778.6	2,857.0	2.8
Bulgaria	125.9	155.6	145.4	136.0	159.0	16.9
Czech Republic	203.5	203.1	202.1	218.3	223.8	2.5
Hungary	164.6	150.5	153.9	170.0	182.1	7.1
Poland	609.2	600.2	579.1	599.4	660.8	10.2
Romania	143.4	142.9	141.8	172.3	178.9	3.9
Russia	91.5	49.8	39.3	89.9	123.2	37.0
Others	1,390.4	1,352.2	1,301.8	1,392.8	1,329.2	–4.6
Western Europe	16,913.0	17,124.2	16,948.2	16,753.5	17,704.7	5.7
Belgium	1,032.9	1,028.7	1,104.2	1,140.1	1,194.6	4.8
France	2,109.2	2,042.9	1,991.6	1,974.0	2,002.7	1.5
Germany	2,528.7	2,571.5	2,630.5	2,598.7	2,644.1	1.7
Greece	330.9	419.3	392.1	420.5	445.7	6.0
Italy	1,685.5	1,586.9	1,438.9	1,338.4	1,523.5	13.8
Netherlands	2,739.7	2,874.9	2,795.4	2,749.7	2,957.0	7.5
Spain	1,512.8	1,511.5	1,452.6	1,521.8	1,610.1	5.8
Sweden	563.2	567.8	490.9	557.6	573.4	2.8
Turkey	768.0	836.9	836.0	833.3	1,008.0	21.0
United Kingdom	1,503.7	1,618.7	1,613.0	1,548.0	1,508.6	–2.5
Others	2,138.4	2,065.1	2,203.0	2,071.5	2,236.8	8.0

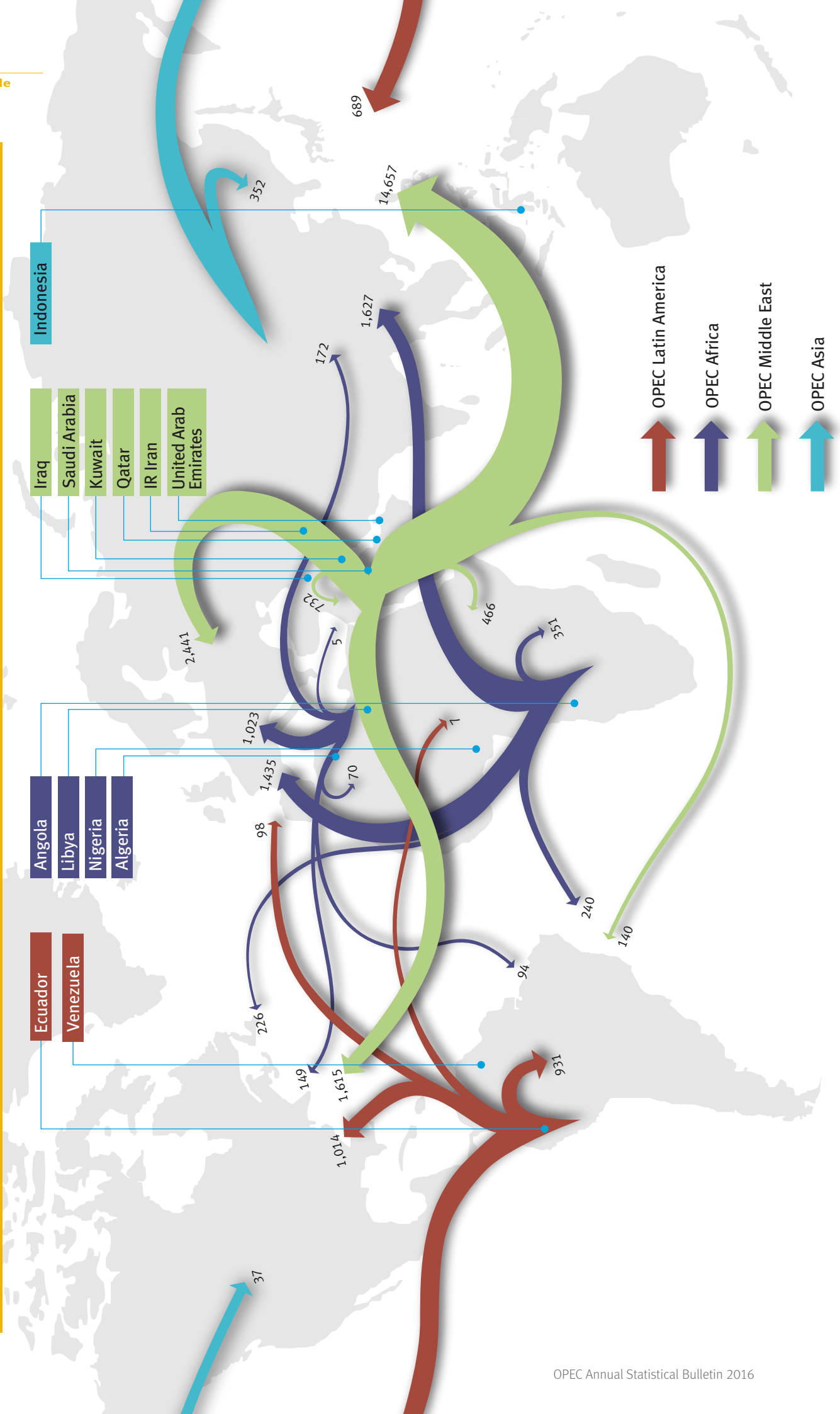
World imports of crude oil and petroleum products by country (1,000 b/d)

	2011	2012	2013	2014	2015	% change 15/14
Middle East	1,478.3	1,747.0	1,770.3	1,807.2	2,024.6	12.0
Bahrain	231.0	234.0	232.0	225.0	259.4	15.3
IR Iran	34.4	6.9	15.0	39.9	52.5	31.7
Iraq	62.5	103.2	84.0	99.0	81.1	-18.0
Saudi Arabia	196.9	319.9	482.0	465.0	588.0	26.5
Others	953.5	1,083.1	957.3	978.4	1,043.6	6.7
Africa	2,317.9	2,538.2	2,315.5	2,452.3	2,540.9	3.6
Algeria	47.0	99.8	102.0	55.3	88.9	60.8
Angola	63.8	92.3	89.2	99.1	134.5	35.8
Côte d'Ivoire	49.0	71.0	73.0	64.0	63.0	-1.6
Egypt	237.1	343.8	255.4	289.6	458.7	58.4
Morocco	261.5	265.8	279.3	268.1	246.4	-8.1
Nigeria	412.4	351.6	331.0	438.7	441.0	0.5
Tunisia	99.5	89.2	86.7	95.1	103.5	8.8
Others	1,147.6	1,224.7	1,098.9	1,142.6	1,004.9	-12.1
Asia and Pacific	26,701.9	27,863.0	28,424.5	29,006.4	30,441.2	4.9
Australia	824.9	876.8	873.8	870.6	863.1	-0.9
China	6,078.3	6,441.7	6,750.7	7,135.2	7,881.8	10.5
India	3,759.9	4,087.5	4,164.9	4,279.3	4,572.0	6.8
Indonesia	751.9	796.7	863.1	937.8	880.4	-6.1
Japan	4,522.8	4,740.7	4,630.8	4,435.5	4,348.2	-2.0
New Zealand	144.3	145.6	149.8	149.1	149.4	0.2
Philippines	310.1	331.3	334.9	368.4	394.9	7.2
Singapore	3,229.2	3,002.4	3,095.3	3,175.3	3,382.3	6.5
South Korea	3,283.6	3,407.8	3,349.7	3,361.4	3,625.3	7.9
Thailand	890.0	973.9	1,008.6	983.5	1,025.8	4.3
Others	2,907.1	3,058.5	3,202.8	3,310.3	3,317.9	0.2
Total world	66,164.5	66,961.9	66,297.3	66,475.6	69,411.3	4.4
<i>of which</i>						
OPEC	2,111.8	2,476.0	2,599.5	2,830.4	2,843.1	0.4
OECD	40,220.4	39,962.1	38,747.8	37,788.0	39,262.0	3.9
FSU	1,278.0	1,306.0	1,048.0	1,023.0	1,104.4	8.0

Notes:

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

Graph 5.9: OPEC Members' flows of crude and refined oil (1,000 b/d)





SECTION 6

Oil transportation

Table 6.1**Oil transportation**

Tanker fleet development in OPEC Members (1,000 dwt)

	2011		2012		2013		2014		2015	
	number	dwt	number	dwt	number	dwt	number	dwt	number	dwt
Algeria	1	160	1	160	1	160	1	160	1	160
Angola	8	1,186	31	2,363	31	2,363	27	2,498	27	2,498
Ecuador	10	579	14	957	18	1,231	20	1,457	9	638
Indonesia	15	2,903	15	2,903	17	3,226	18	3,313	23	3,829
IR Iran	47	10,994	47	10,994	47	10,994	46	10,982	46	10,982
Iraq	4	53	4	53	4	50	4	53	4	53
Kuwait	16	2,223	21	3,404	19	3,547	26	4,825	26	4,825
Libya	5	548	5	548	5	548	5	548	5	548
Nigeria	2	409	2	409	2	409	2	409	2	409
Qatar	6	528	6	528	6	528	5	397	5	397
Saudi Arabia	32	5,766	20	5,051	23	6,004	23	6,004	23	6,004
United Arab Emirates	13	660	13	660	13	660	19	1,139	19	1,139
Venezuela	18	1,348	19	1,452	22	2,066	26	2,627	26	2,627
OPEC	177	27,357	198	29,482	208	31,786	222	34,412	216	34,109
Total world	4,494	422,849	4,734	453,168	4,912	472,169	5,153	482,975	5,359	499,922
<i>OPEC percentage</i>		6.5		6.5		6.7		7.1		6.8

Notes:

Figures as at year-end.

Table 6.2

World tanker fleet by year of build and categories (1,000 dwt)

Tanker size	up to 2000		2001–05		2006–10		2011–15		Total	
	no	dwt	no	dwt	no	dwt	no	dwt	no	dwt
GP 16.5–24.9	169	2,844	104	1,848	344	5,359	110	2,023	726	12,074
MR 25.0–44.9	275	10,557	337	13,172	385	15,490	251	10,627	1,248	49,846
LR1 45.0–79.9	157	8,075	275	15,678	611	34,617	318	17,267	1,361	75,636
LR2 80.0–159.9	264	31,377	336	40,393	438	52,712	295	38,218	1,333	162,700
VLCC 160.0–319.9	109	32,216	179	51,178	233	64,949	171	51,322	692	199,665
Total world	974	85,069	1,231	122,270	2,010	173,126	1,145	119,457	5,359	499,922

Notes:

Figures as at year-end. Data is adjusted to take in account different categories of vessels. Data includes clean, dirty and chemical tankers.

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

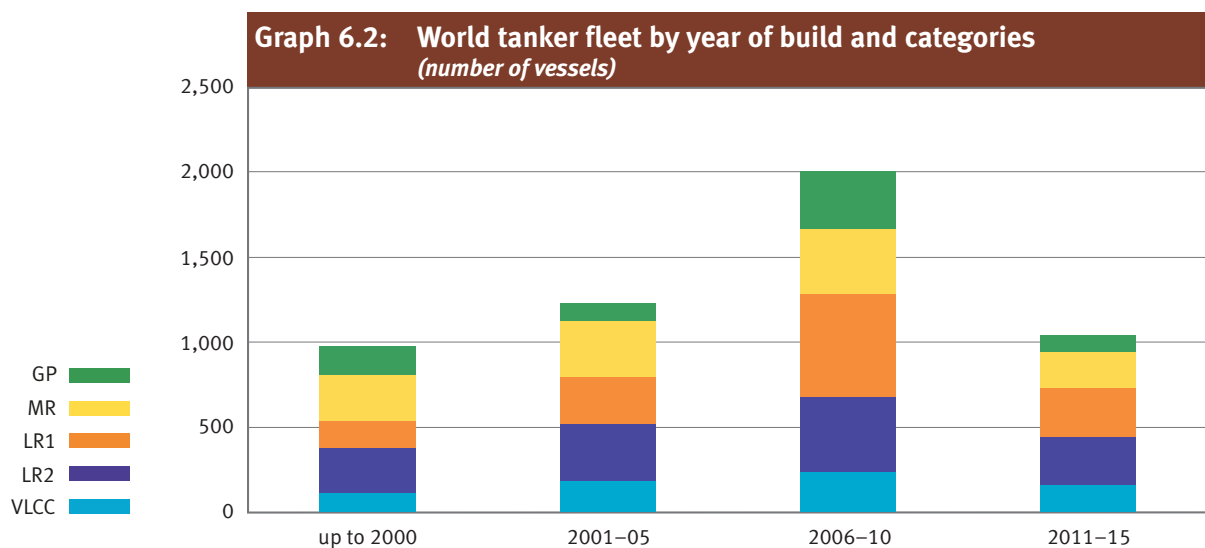
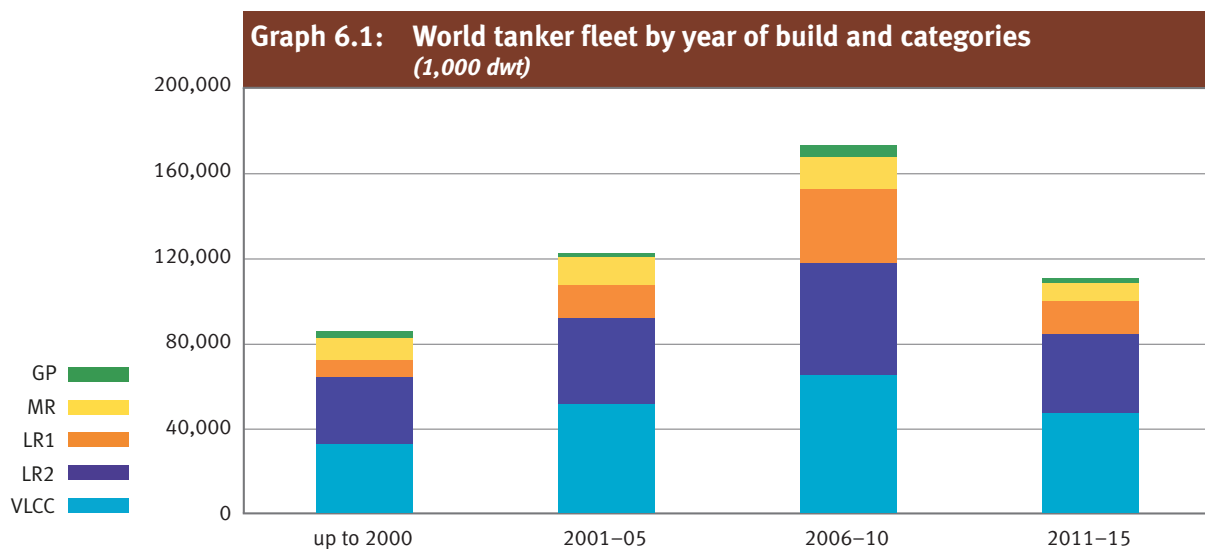


Table 6.3**Oil transportation**

LPG carrier fleet in OPEC Members (1,000 cu m)

	2011		2012		2013		2014		2015	
	no	capacity	no	capacity	no	capacity	no	capacity	no	capacity
Algeria	8	324	8	324	8	324	8	324	8	324
Angola	4	23	5	51	5	51	6	48	6	54
Ecuador	4	67	5	110	5	145	5	145	2	109
Indonesia	7	778	7	778	7	778	1	19	1	19
IR Iran	1	12	1	12	1	12	1	12	1	12
Iraq	–	–	–	–	–	–	–	–	–	–
Kuwait	4	321	4	321	4	321	4	215	4	215
Libya	2	8	2	8	2	8	2	8	2	8
Nigeria	2	157	2	157	2	157	–	–	–	–
Qatar	4	328	4	328	4	328	4	328	4	328
Saudi Arabia	–	–	–	–	–	–	–	–	–	–
United Arab Emirates	1	3	1	3	1	3	1	9	1	9
Venezuela	2	24	2	24	2	24	–	–	–	–
OPEC	39	2,045	41	2,116	41	2,151	32	1,108	29	1,078
Total world	1,184	19,338	1,207	19,628	1,220	19,947	1,253	21,322	1,277	22,303
<i>OPEC percentage</i>		<i>10.6</i>		<i>10.8</i>		<i>10.8</i>		<i>5.2</i>		<i>4.8</i>

Notes:
Figures as at year-end.

Table 6.4

World LPG carrier fleet by size and type (1,000 cu m)

	2011		2012		2013		2014		2015	
	no	capacity	no	capacity	no	capacity	no	capacity	no	capacity
up to 19,999	917	3,760	931	3,857	940	3,958	955	4,102	963	4,169
20,000–39,999	106	3,090	116	3,338	118	3,394	123	3,552	131	3,797
40,000–59,999	21	1,241	20	1,184	20	1,184	20	1,184	20	1,184
60,000–99,999	140	11,247	140	11,249	142	11,411	155	12,484	163	13,153
100,000 and over	–	–	–	–	–	–	–	–	–	–
Total world	1,184	19,338	1,207	19,628	1,220	19,947	1,253	21,322	1,277	22,303

Notes:
Figures as at year-end.

World combined carrier fleet by size (1,000 dwt)

	2011		2012		2013		2014		2015	
	no	dwt	no	dwt	no	dwt	no	dwt	no	dwt
10,000–39,999	2	42	2	42	2	42	1	28	1	28
40,000–49,999	4	182	3	135	2	87	2	87	2	87
50,000–59,999	1	55	–	–	–	–	–	–	–	–
60,000–69,999	2	132	1	66	–	–	–	–	–	–
70,000–79,999	4	300	3	225	–	–	6	435	6	435
80,000–99,999	6	510	4	333	–	–	–	–	–	–
100,000–119,999	12	1,304	10	1,098	10	1,098	10	1,098	10	1,098
120,000–129,999	2	241	2	241	2	241	2	241	2	241
130,000–319,999	7	1,915	5	1,599	5	1,599	5	1,599	–	–
Total world	40	4,681	30	3,739	21	3,066	26	3,490	21	1,890

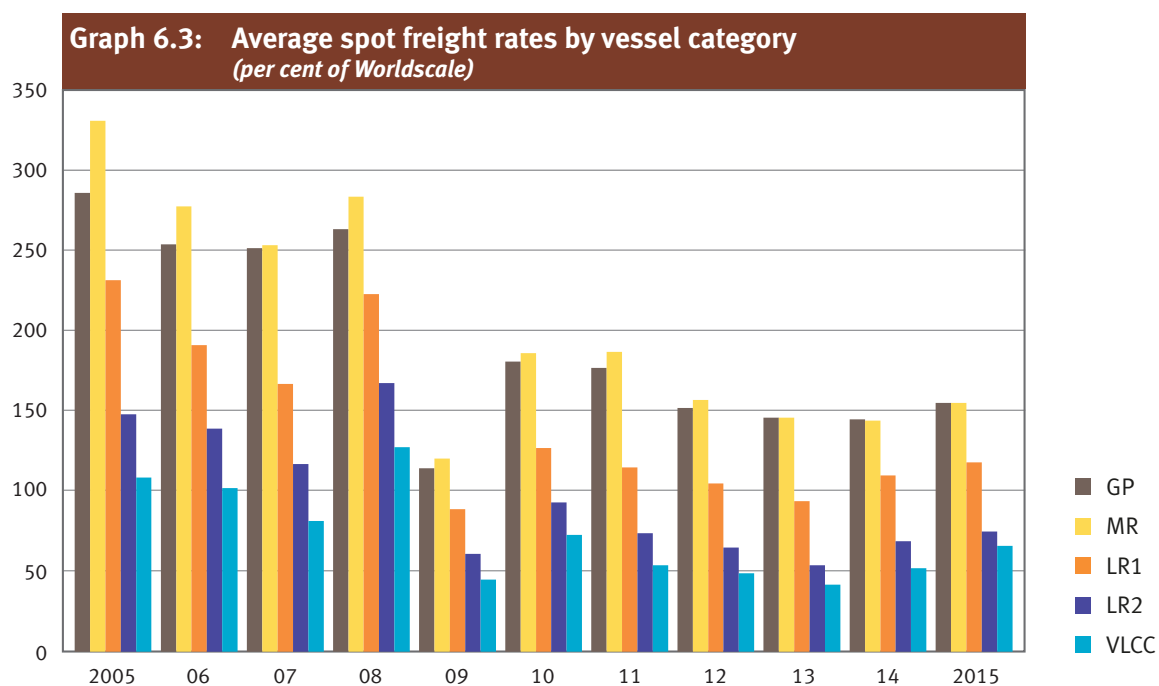
Notes:
Figures as at year-end.

Table 6.6**Oil transportation**Average spot freight rates by vessel category (*% of Worldscale*)

	Tanker size (1,000 dwt)	2011	2012	2013	2014	2015
GP	16.5–24.9	177.4	151.9	146.2	144.7	154.6
MR	25.0–44.9	186.7	157.3	145.7	144.2	154.9
LR1	45.0–79.9	115.5	105.1	94.4	110.3	117.9
LR2	80.0–159.9	74.4	65.2	54.0	68.9	75.1
VLCC	160.0–319.9	54.4	48.8	41.7	52.5	66.0

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.



Dirty tanker spot freight rates (% of Worldscale and \$/t)

	2011		2012		2013		2014		2015	
	%	\$/t	%	\$/t	%	\$/t	%	\$/t	%	\$/t
ME/EAST	53	7.0	48	7.5	41	7.1	49	7.9	65	10.3
ME/WEST	39	14.2	33	14.2	26	12.4	30	11.8	38	13.4
WAF/EAST	53	17.5	49	19.3	41	17.7	50	20.1	64	25.0
WAF/USGC	77	16.0	67	16.7	57	15.4	73	18.6	81	20.3
WEST/USGC	72	12.7	60	12.6	52	11.8	65	14.2	66	14.3
INDO/EAST	99	12.5	91	13.7	79	13.0	99	15.2	112	16.8
CAR/USEC	108	8.9	105	10.2	102	10.8	127	12.8	134	13.3
MED/MED	101	5.5	88	5.6	81	5.4	104	6.8	108	7.1
MED/WEST	100	10.6	88	10.9	77	10.2	97	12.3	102	12.8

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.

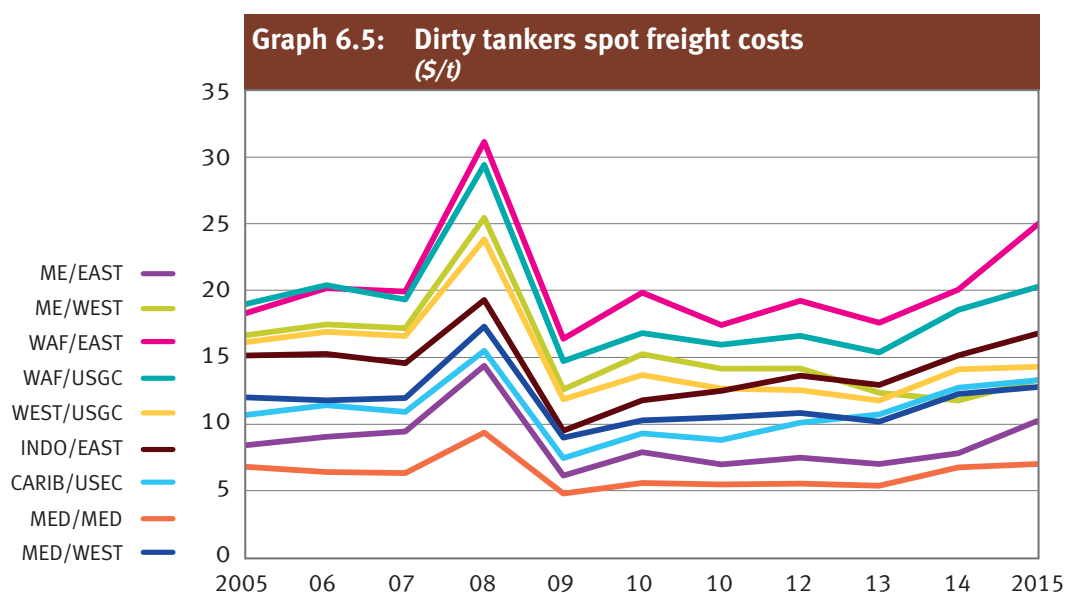
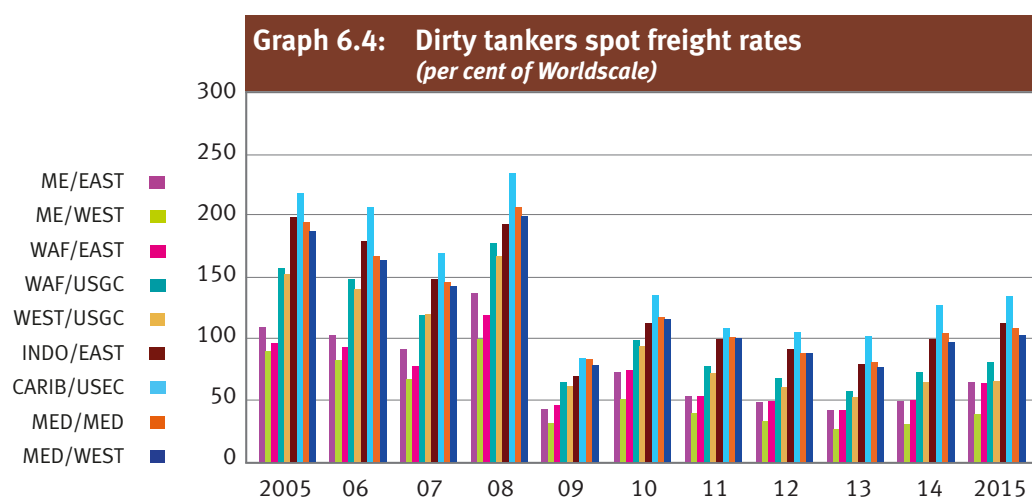


Table 6.8

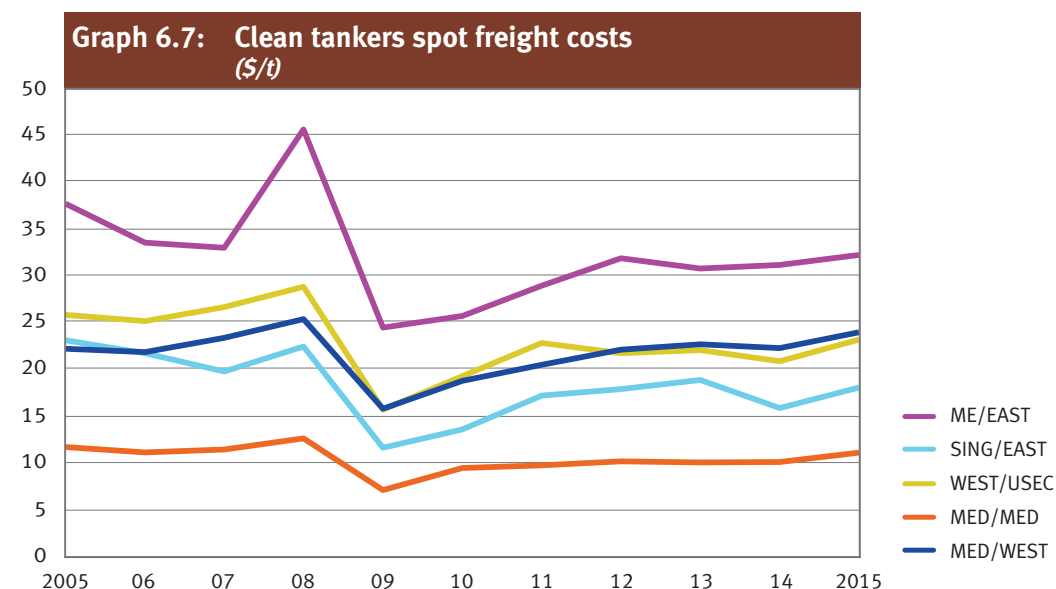
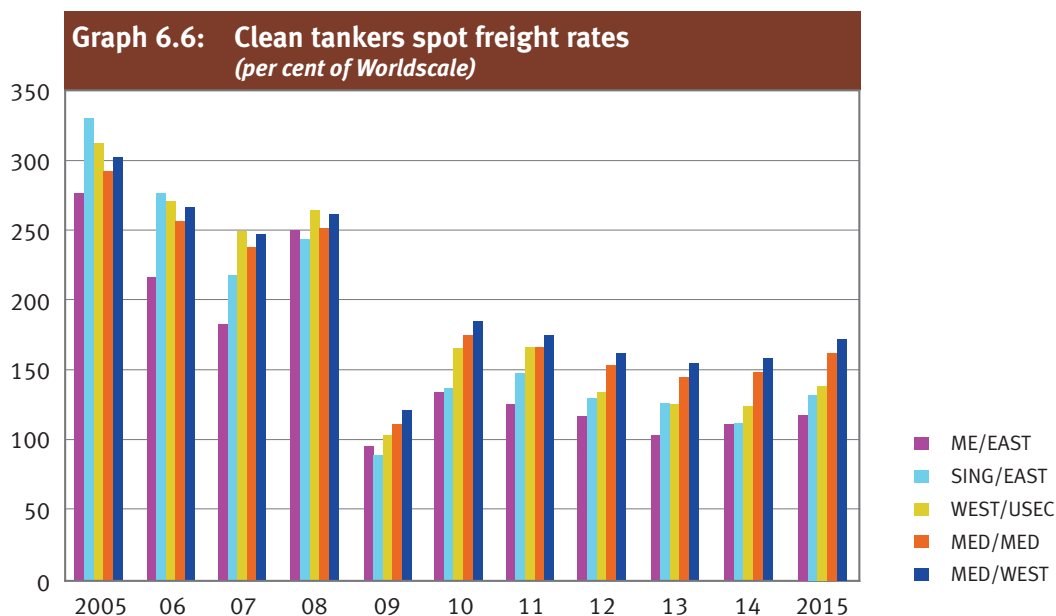
Oil transportation

Clean tanker spot freight rates (% of *Worldscale* and \$/t)

	2011		2012		2013		2014		2015	
	%	\$/t	%	\$/t	%	\$/t	%	\$/t	%	\$/t
ME/EAST	125	28.6	117	31.6	103	30.4	111	30.8	118	31.9
SING/EAST	148	16.6	130	17.3	126	18.3	112	15.3	132	17.5
WEST/USEC	167	22.3	134	21.2	125	21.6	124	20.4	139	22.7
MED/MED	167	9.0	153	9.5	145	9.3	149	9.4	162	10.4
MED/WEST	175	20.0	162	21.6	155	22.2	159	21.8	172	23.5

Notes:

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



Main crude oil pipelines in OPEC Members, 2015

Connection from/to	Owner or operator	Length (miles)	Diameter (inches)
Algeria			
Haoud El Hamra/Arzew (2)	Sonatrach/TRC	498, 511	28, 34
Haoud El Hamra/Bejaia	Sonatrach/TRC	415	24
Haoud El Hamra/Skikda	Sonatrach/TRC	400	34
In Amenas/La Skhirra (Tunisia)	Sonatrach/TRC	165	24
Angola			
Block 0: Banzala Platform 'A'/GS-Mike platform	Chevron	14	12
Block 0: East Kokongo/Malongo terminal	Chevron	65	24
Block 0: GS-M platform/GS-N platform	Chevron	11	20
Block 0: GS-N platform/Malongo terminal	Chevron	35	30
Block 0: PPP/Malongo tank farm	Chevron	45	18
Block 0: South Nemba/East Kokongo	Chevron	22	18
Block 0: South Sanha/East Kokongo	Chevron	16	12
Block 14: Tombua Landana CPT/East Kokongo	Chevron	27	18
Block 14: Lianzi DC-A/BBLT	Chevron	43	13
Block 15/06: PLET M2/PLET M1	Eni	15	8
Block 15: FLET production line/FLET production line (4)	Esso	4 x 13	4 x 12
Block 15: Kizomba C1/Kizomba A SHR	Esso	24	10
Block 15: Kizomba MV1 (North)/Kizomba B SHR	Esso	13	10
Block 17: FLET P10/SSU Zinia	Total	34	10
Block 17: P20/FPSO Girassol	Total	17	8
Block 17: P50/FPSO Girassol	Total	11	8
Block 17: P60/FPSO Girassol	Total	11	8
Block 17: P70/FPSO Girassol	Total	26	8
Block 17: P80/FPSO Girassol	Total	40	8
Block 18: Greater Plutonio Project (2)	BP	20, 22	2 x 12
Block 2/85: Bagre B/Bagre F	Snl P & P	13	16
Block 2: Essungo/Quinfuquena terminal	Snl P & P	22	18
Block 2: Lombo East/Essungo	Snl P & P	76	16
Block 3: IPSF1/PLAP2	Snl P & P	13	10
Block 3: Lombo East/PALP2	Snl P & P	14	16
Block 3: PACF1/PALP1	Snl P & P	15	12
Block 3: PAMF1/PALP 2	Snl P & P	23	16
Block 31: PSVM Project (3)	BP	19, 33, 35	11, 2 x 13
Ecuador			
Lago Agrio/Esmeraldas	Oleoducto Transecuatoriano SOTE (State)	311	26/20/26
Lago Agrio/Esmeraldas	Oleoducto de crudos pesados OCP (Private)	303	24, 2 x 32, 34, 36
Indonesia			
AW platform/Ke-30 platform	Pertamina EP	25	12
BKO-DMI/terminal Dumai	Chevron Pasific Indonesia	76	30
Booster CLM/booster CMS	Pertamina EP	69	8
Booster CMS/terminal Balongan	Pertamina EP	28	8
Duri CPS/terminal Dumai	Chevron Pasific Indonesia	47, 50	30, 36
JOB P-GSIL/PPP Pangabuan	Pertamina EP	13	4
K Barat & K Timur (PTM)/SPU K Asam (PPP Tempino)	Pertamina EP	46	4
KHT/SPU CMR	Pertamina EP	13	6
Kota Batak/NBS (2) (Duri CPS – terminal Dumai)	Chevron Pasific Indonesia	23	12
Langgak/Petapahan (Kota Batak – NBS (2) – Duri CPS – terminal Dumai)	Chevron Pasific Indonesia	13	12
Lindai/Petapahan (Kota Batak - NBS (2) – Duri CPS – terminal Dumai)	Chevron Pasific Indonesia	14	8
NBS/Duri CPS (terminal Dumai)	Chevron Pasific Indonesia	21, 22, 36	26, 2 x 30
No Menggala/terminal Dumai	Chevron Pasific Indonesia	28	8
Petani/Duri CPS (terminal Dumai)	Chevron Pasific Indonesia	21	18

Table 6.9**Oil transportation****Main crude oil pipelines in OPEC Members, 2015**

Connection from/to	Owner or operator	Length (miles)	Diameter (inches)
Indonesia (cont'd)			
Pinang/Bangko (terminal Dumai)	Chevron Pasific Indonesia	30	10
Poleng processing platform (PPP)/Ke-38 platform	Pertamina EP	22	16
Poleng processing platform (PPP)/ORF Gresik	Pertamina EP	70	16
PPP Sangatta/loading terminal Sangatta	Pertamina EP	13	6
PPP Tempino/Kilang Plaju	Pertamina EP	65, 100, 192, 257	6, 3 x 8
SB-I Batubutok/SB-II Longikis	Pertamina EP	75	20
SB-II Longikis/Tanki RU V Balikpapan	Pertamina EP	79	20
SP BJR/Tanki booster CLM – booster CLM	Pertamina EP	8	4
SP SBG/SPU PGD	Pertamina EP	32	3
SP Tambun/booster TGD	Pertamina EP	35	8
SPU Bajubang/PPP Tempino	Pertamina EP	27	4
SPU Jirak/booster Talang Akar (PPP Pangabuan)	Pertamina EP	14	5,5
SPU K Asam/PPP Tempino	Pertamina EP	27	6
SPU Manunggal (mixing device)/SB-I Batubutok	Pertamina EP	78	20
Suram/Petapahan (Kota Batak – NBS (2) – Duri CPS – terminal Dumai)	Chevron Pasific Indonesia	14	18
Tanki terminal/SBM (darat)	Pertamina EP	14, 18	2 x 30
Terantam/Petapahan (Kota Batak – NBS (2) – Duri CPS – terminal Dumai)	Chevron Pasific Indonesia	19	12
Topaz – Petapahan/Kota Batak (NBS (2) – Duri CPS – terminal Dumai)	Chevron Pasific Indonesia	20	18
Waduk – So Libo/NBS (2) (Duri CPS – terminal Dumai)	Chevron Pasific Indonesia	36	10
IR Iran			
Ahwaz/Ray	NIOC	934	30/26
Ahwaz/Abadan (2)	NIOC	121, 137	12/20, 24
Cheshmeh Khosh/Ahwaz	NIOC	154	18
Darkhoin/Abadan	NIOC	60	16
Esfahan/Ray	NIOC	225	24
Gachsaran/Shiraz	NIOC	228	10
Genaveh/Kharg	NIOC	47	30/42/52
Goreh/Genaveh	NIOC	33	26/30/42
Marun/Esfahan	NIOC	440	30/32
Naftshahr/Kermanshah	NIOC	231	8
Neka/Sari/Ray	NIOC	320	30/32
Omidieh/Abadan	NIOC	103	12
Ray/Tabriz	NIOC	607	16
Tang-e-Fani/Kermanshah	NIOC	241	10–16
Iraq			
(IT1) Station/Al-Fat'ha (Tigris river crossing)	North Oil Company	46	40
(IT1) Station/North Refinery Company	Oil Pipeline Company	52	26
(IT1A) Station/Iraqi-Turkish border	North Oil Company	139	46
(K3) Station/Iraqi-Syrian border (2)	North Oil Company	2 x 98	32, 30
Ahdeb/PS2	SOC	131	24
Ahdeb/Wassit P P (2)	OPC	42, 45	16, 10
Al-Fat'ha (Tigris river crossing)/(IT1A) Station	North Oil Company	29	40
Badra/PS2 (Section 1)	MOC	103	24
Badra/PS2 (Section 2)	SOC	59	28
BUT/Haammdan	MOC	139	28
BUT/Halfaya junction	Petrochina & CNOOC	32	32
East Baghdad/Daura refinery	OPC	44	16
FAO/SPM1, SPM2, SPM3 (3)	SOC	36, 38, 39	3 x 48
Halfaya junction/SOC	Petrochina & CNOOC	169	42
MOC/SOC	Petrochina & CNOOC	181	28
Neft-Khana/Daura refinery	OPC	81	12

Main crude oil pipelines in OPEC Members, 2015

Connection from/to	Owner or operator	Length (miles)	Diameter (inches)
Iraq (cont'd)			
PS1/Basrah terminal	SOC	115	48
PS2/Tuba (Warehouse)	SOC	124	36
Tuba/SPM1, SPM2, SPM3 (3)	SOC	96, 95, 99	3 x 48
Valves Site Alekhala/Haammdan	MOC	103	28
West Al-Fat'ha/(IT1A) Station (3)	North Oil Company	3 x 27	20, 28, 34
West Al-Fat'ha/(K3) Station	North Oil Company	84	12
ZB1/Al-Umaya terminal	SOC	114	42
ZB1/Basrah terminal	SOC	99	42
Kuwait			
Kadma/Doha P S	KOC	14	20
KADMA/MF-CR181R	KOC	48	30
MF-CPHMAA/CALM 21	KOC	14	56
MF-CR125L/MF-CR125R	KOC	34	16
MF-GC27L/R/MF-TWK	KOC	24	24
MF-GC28L/R/MF-TWK	KOC	28	24
MF-NPP MS/CALM 20	KOC	14	56
MF-PointA/MF-CR119R	KOC	73	48
MF-Ratqa1/SC-130	KOC	22	36
MF-T18/MF-TWK	KOC	22	20
MF-TB1/2/MF-CR088R	KOC	16	36
Point-A/KADMA	KOC	24	30
Wafra/MF/TB1	KGOC/KOC	24	16
Libya			
El-Sharara/Az-Zawiyah	Akakus	451	30
El-Sharara/Mellitah	Mellitah Oil & Gas	451	30
Sarir/Tobruk	Arabian Oil	318	34
Hamada/Az-Zawiyah	Arabian Oil	240	18
Amal/Ras Lanuf (2)	Harouge	2 x 169	36/30
Zaggut/Es-Sider	Waha Oil	166	24
Intesar/Zueitina	Zuetina	136	40
Messla/Amal	Arabian Oil	128	42
Samah/Dahra	Waha Oil	114	32
Nasser/Al-Brayqah	Sirte	107	36
Gialo/Waha	Waha Oil	94	30
Ora-Beda gathering/Aseida gathering	Harouge	84	24
Bu-Attifel/Intesar	Mellitah Oil & Gas	82	30
Zella/Hofra	Zuetina	70	20
Magid/Nafoora	Arabian Oil	65	14
Sabah/Zella	Zuetina	56	16
Raguba/'Nasser – Al-Brayqah' Line	Sirte	55	20
Aseida gathering/Ras Lanuf	Harouge	55	30
Dor Marada/Ora	Harouge	51	10
Rimal/Bu-Attifel	Mellitah Oil & Gas	47	12
El-Feel/El-Sharara	Mellitah Oil & Gas	47	24
Bahi gathering/Es-Sider (2)	Waha Oil	2 x 44	30
Dahra/Bahi gathering	Waha Oil	43	30
Faregh/Gialo	Waha Oil	40	12
Waha/Samah	Waha Oil	40	24
Hofra/Aseida gathering	Harouge	35	24
Nafoora/Amal	Arabian Oil	32	32
Waha/Zaggut	Waha Oil	27	24
Zaggut/Samah	Waha Oil	22	24

Table 6.9**Oil transportation**

Main crude oil pipelines in OPEC Members, 2015

Connection from/to	Owner or operator	Length (miles)	Diameter (inches)
Nigeria			
Escravos/Warri/Kaduna	NNPC/PPMC	421	24/16
Obriafu/Oben node	NNPC/PPMC	130	48
Drill Center 2/Drill Center North	MPNU	100	11
Ogoda/Brass	NAOC	62	24
Okoro 2/IMA terminal	AMNI	60	12
Tebidaba/Brass	NAOC	57	24
Bonny/Port Harcourt refinery	NNPC/PPMC	34	24
Brass Creek/Forcados	SPDC	34	24
Oso/Qit/tanker berth 2 & Oso SPM	MPN/MPNU	31, 37, 45	18, 36, 42
Rapele manifold/Forcados terminal	SPDC	31	28
Edop/Qit	MPN	30	24
Alakiri/Bonny	SPDC	21	24
Buguma Creek/Alakiri	SPDC	20	29
Idoho/Qit (2)	MPNU	19, 48	2 x 24
Forcados/CLP	SPDC	19	48
Ughelli PS/WRM LL	SPDC	19	20
Bonny terminal/offshore SBM (1 & 2)	SPDC	2 x 19	2 x 48
Bonny/CLP	SPDC	18	48
Forcados terminal/offshore SBM	SPDC	18	48
Brass manifold/Brass offshore terminal	NAOC	16	36
Qatar			
Mile 32/storage tank Mesaieed (3)	QP	3 x 60	16, 20, 24
Bul Hanine/Halule Island	QP	43	20
DP (1 & 2)/Halule Island (3)	Total	3 x 40	2 x 12, 20
GIP/PS3	QPD	41	10
Idd El Shargi/Halule Island (2)	OXY	20, 24	20, 12
Um Bab/Mile 32 (4)	QP	4 x 25	2 x 14, 16, 24
Saudi Arabia			
Abqaiq/Yanbu	Saudi Aramco	748	56
Shaybah/Abqaiq	Saudi Aramco	397	46
Hawtah/Hawtah stabilizer	Saudi Aramco	206	24
Safaniyah/Juaymah	Saudi Aramco	123	46/48
Ghawar/Abqaiq (3)	Saudi Aramco	2 x 110, 134	18/20/24/30/31, 46/48, 36/40/42
AY-1L KP 65.628/Rabigh	Saudi Aramco	90	36
Khurais/Riyadh	Saudi Aramco	88	26
Safiniyah/Khursaniyah (4)	Saudi Aramco	4 x 66	22, 30, 40/42, 40/42/48
Khursaniyah/Ras Tanura (4)	Saudi Aramco	53, 63, 65, 67	40/42/48, 22, 40/42, 30
Abqaiq/Qatif junction (5)	Saudi Aramco	2 x 44, 3 x 34	30/32, 46/48, 30, 40/42
Abqaiq Plants/Dhahrab (3)	Saudi Aramco	39, 2 x 38	14, 12/14
Berri/Ras Tanura	Saudi Aramco	37	40/42
KM 50/Qatif junction	Saudi Aramco	31	46/48
Neutral Zone: Wafra field/Mina Saud (3)	SAC	3 x 31	10, 16, 20
Aindar/Abqaiq plants (3)	Saudi Aramco	3 x 28	20/22, 24/26/28, 24/26/30/32
Qatif junction/Ju'aymah terminal (3)	Saudi Aramco	3 x 24	48, 2 x 46/48

Main crude oil pipelines in OPEC Members, 2015

Connection from/to	Owner or operator	Length (miles)	Diameter (inches)
United Arab Emirates			
ABK/Das Island	ABK	33	10
AR site terminal Mubarraz terminal	ADOC	10	8
ASAB (MOL3)/BAB	ADCO	58	36
BAB (MOL 1.1–4.1)/MP21 (2)	ADCO	2 x 21	24, 36
BIDA QEMZAN/Bu Hasa	ADCO	12	16
Buhasa spur line 1–2/MP21 (2)	ADCO	2 x 22	2 x 24
Bunduq/Das Island	Bunduq	16	18
Dhabbiya/BAB	ADCO	63	20
Huwaila/remote degassing station 3	ADCO	17	10
Intermediate pumping station/Fujeirah main oil terminal	ADCO/IPIC	92	48
Main pumping station/intermediate pumping station	ADCO/IPIC	146	48
MP21 (MOL 1.2)/Jebel Dhanna	ADCO	49	24
MP21 (MOL 3.4)/Mile post 48	ADCO	27	32
MP21 (MOL 3.5)/Jebel Dhanna	ADCO	22	36
MP21 (MOL 4.2)/Jebel Dhanna	ADCO	49	36
MP21/MPS	ADCO/IPIC	12	48
Mubarraz field/Mubarraz terminal	ADOC	22	14
Nasr field/TABK	ADMA-OPCO	24	20
Qushawira/ASAB	ADCO	50	14
Rumaita (Neb El 2)/Tie in to Dy-BAB main pipeline	ADCO	4	12
Sahil/ASAB	ADCO	28	16
Satah/Zirku Island	ZADCO	36	14
Shah/ASAB	ADCO	37	16
Umm Al Dalkh/Upper Zakum	ZADCO	41	14
Umm Lulu field/UAD	ADMA-OPCO	10	12
Umm-Shaif field/Das Island (2)	ADMA-OPCO	21, 22	18, 36
Upper Zakum/Zirku (2)	ZADCO	2 x 37	2 x 42
Zakum field (ZWSC)/Das Island	ADMA-OPCO	57	30
Venezuela			
Bachaquero/PT Miranda (2)	PDVSA	2 x 66	30/31, 30/34
EPM-1/PT Officina	PDVSA	91	36
ERB-II/PT la Cruz	PDVSA	32	16
ERB-II/T Jose	PDVSA	29	36
ERB-II, PT Oficina/PT Anaco	PDVSA	34, 35	2 x 16
La Victoria/Las Monas	PDVSA	40	16
Lagunillas/La Salina	PDVSA	26	34
Mata Larga/PT Silvestre	PDVSA	165	20
PT Miranda/Cardon	PDVSA	141	30
PT Oficina/PT la Cruz (3)	PDVSA	2 x 97, 62	30, 26, 16
PT Oficina/T Jose (2)	PDVSA (31%/30%)	2 x 93	42/20
PT Silvestre/El Palito	PDVSA	213	20
PT Travieso/ERB-II	PDVSA	62	16
PT Travieso/Naricual	PDVSA	84	30
PT Travieso/T Jose	PDVSA	94	26
Pta de Palma/PT Miranda	PDVSA	42	24
Ule/Amuya (2)	PDVSA	2 x 143	24/26, 26

Notes: .../... — Pipeline with changing diameter.

Table 6.10**Oil transportation**

Main petroleum product pipelines in OPEC Members, 2015

Connection from/to	Owner or operator	Length (miles)	Diameter (inches)
Algeria			
Arzew/Oran	Naftal	19	8
Arzew/Sidi Bel Abbès (2)	Naftal	45, 45 (LPG)	12, 10
El Khroub/El Eulma	Naftal	64	16
Sidi Abdeli/Remchi	Naftal	14	8
Sidi Arcine/Blida (2)	Naftal	30, 24 (LPG)	2 x 10
Sidi Bel Abbès/Sidi Abdeli	Naftal	32	10
Sidi Bel Abbès/Tlemcen	Naftal	44 (LPG)	8
Skikda/Berrahal (2) ¹	Naftal	53, 53 (LPG)	12, 8
Skikda/El Khroub (3)	Naftal	65 ¹ , 56, 57 (LPG)	16 ¹ , 12, 10
Angola			
Lobito-Lusaka (Zambia) ¹	Sonangol	868	na
Ecuador			
Beaterio (Quito)/Ambato	EP Petroecuador	69	6
Esmeraldas/Santo Domingo	EP Petroecuador	101	16
Libertad/Barbasquilo	EP Petroecuador	104	6
Libertad/Pascuales	EP Petroecuador	78	10
Monteverde/Chorrillos	EP Petroecuador	77	10
Quito/Ambato	EP Petroecuador	69	6
Santo Domingo/Beaterio	EP Petroecuador	55	12
Santo Domingo/Pascuales	EP Petroecuador	170	10
Shushufindi/Beaterio	EP Petroecuador	187	6/4
Indonesia			
TBBM Balongan/TBBM Cikampek	TBBM Balongan	76	16
TBBM Balongan/TBBM Plumpang	TBBM Balongan	130	16
TBBM Lomanis/TBBM Rewulu	TBBM Lomanis	112	8
TBBM Lomanis/TBBM Boyolali	TBBM Lomanis	153	12
TBBM Lomanis/TBBM Tasikmalaya	TBBM Lomanis	80	10
TBBM Lomanis/TBBM Bdg Group	TBBM Lomanis	168	16
TBBM Tuban/TBBM Surabaya Grp	TBBM Tuban	87	16
IR Iran			
Abadan/Ahwaz	NIOC	94	12, 16
Ahwaz/Rey (2)	NIOC	510, 469	10/14/10, 16/20/16
Arak/Hamadan	NIOC	107	12
Arak/Rey	NIOC	160	10, 16
Esfahan/Rey (2)	NIOC	2 x 231	18, 24
Gazvin/Rasht	NIOC	109	6
Imam – Taghy/Torbat Haidar	NIOC	58	8
Mahshahr/Abadan	NIOC	63	16
Rey/Karadj	NIOC	36	8
Rey/Rasht	NIOC	195	14, 16, 18
Rey/Sary	NIOC	178	12, 16
Rey/Tabriz	NIOC	476	14

Main petroleum product pipelines in OPEC Members, 2015

Connection from/to	Owner or operator	Length (miles)	Diameter (inches)
IR Iran (cont'd)			
Rey/Mashhad	NIOC	523	20, 22
Shahrood/Gorgan	NIOC	103	8, 10
Shahrood/Mashhad	NIOC	275	8
Tabriz/Orumieh	NIOC	174	8, 10
Iraq			
Baiji/Hamam Alil	OPC	167	16
Baiji/Kirkuk	OPC	86	12
Baiji/Mushahdah (2)	OPC	2 x 168	22, 8
Baiji/T1	OPC	242	16
Basrah refinery/Hartha and Najibia electric stations	OPC	30	8/12
Daura refinery/Baghdad int airport	OPC	28	8
Daura refinery/Rusafa	OPC	51	10
Hamam Alil/Felfel	OPC	65	32
Huzairan depot/Cement Al Tamem	OPC	42	6
Karkh/Habania	OPC	156	(16 x 31)(12 x 125)
Khour Al- Zubair/Shuaiba (2)	OPC	2 x 45	10, 8/10
Mushahdah/Karkh	OPC	111	12
Mushahdah/Rusafa	OPC	52	12
Nasuria/Daura refinery	OPC	379	10
Nasuria/Kut	OPC	186	8
North Gas/Sallah Al-Dean refinery	OPC	86	8
Rusafa/Diala	OPC	25	8
Shuaiba/Abu – Phlooce	OPC	38	10/24
Shuaiba/Khour Al-Zubair	OPC	45	16/24
Shuaiba/Muftia	OPC	21	10
Shuaiba/Nasuria (2)	OPC	161, 164	14, 10
Kuwait			
Mina al Ahmadi refinery/Al-Zour/Doha	KNPC	52	2 x 18, 2 x 20
Mina al Ahmadi/Kafco	KNPC	25	12
Mina al Ahmadi refinery/al Ahmadi (2)	KNPC	12	8, 2 x 6
Mina al Ahmadi refinery/Subhan (2)	KNPC	2 x 12	12, 8
Libya			
Azzawya/Elwettia depot	Elbrega Co	56	16
Azzawya/Eljmail depot	Elbrega Co	40	16
Azzawya/Airport road depot (2)	Elbrega Co	2 x 34	16, 10
Azzawya/Janzour depot	Elbrega Co	21	8
Nigeria			
Atlas Cove/Moisimi	PPMC	30	16
Auchi/Benin	PPMC	66	12
Auchi/Suleja	PPMC	155	12
Benin/Ore	PPMC	71	14

Table 6.10**Oil transportation**

Main petroleum product pipelines in OPEC Members, 2015

Connection from/to	Owner or operator	Length (miles)	Diameter (inches)
Nigeria (cont'd)			
Enugu/Auchi	PPMC	105	12
Ibadan/Ilorin	PPMC	106	6
Moisimi/Ibadan	PPMC	49	12
Ore/Moisimi	PPMC	94	12
Suleja/Kaduna	PPMC	93	12
Suleja/Minna	PPMC	50	8
Warri/Benin	PPMC	56	16
Qatar			
QP refinery, Mesaieed/Q-Jet, Doha	QP Refinery	33	16
QP refinery, Mesaieed/WOQOD, Doha (2)	QP Refinery	19, 26	6, 18
Saudi Arabia			
Dharan/Riyadh	Saudi Aramco	246	20
Riyadh/Qasim	Saudi Aramco	225	16
Yanbu/Madina	Saudi Aramco	93	14
Ras Tanura/Dhahran (3)	Saudi Aramco	66, 2 x 23	20, 2 x 12
Abqaiq/Alhasa	Saudi Aramco	40	8
United Arab Emirates			
Abu Dhabi refinery/ADIA (S)	Takreer	11	10
Eil Jebel Ali Tml/JIFF	EPPCO Aviation	22	10
HEJAP/DIA	HEJP/ENOC	34	20, 16
Abu Dhabi refinery/Mussaffah	Takreer	11 (LPG)	8
Mussaffah/ADIA (S)	Takreer	11	10
Mussaffah/ADIA (N)	Takreer	19	20
Mussaffah/Al Ain (2)	Takreer	2 x 100	10, 12
Ruwais refinery/Mussaffah (2)	Takreer	2 x 127	16, 28
Ruwais/Shuweihat	Takreer	13	16
Tarif/Madinat Zayed	Takreer	26	10
Venezuela			
San Tomé/Puerto Ordaz	PDVSA	124	12
San Lorenzo/El Vigía	PDVSA	104	12
PT La Cruz/San Tomé	PDVSA	99	16
San Tomé/Maturín	PDVSA	99	8
El Palito refinery/Barquisimeto	PDVSA	95	12
Bajo Grande/San Lorenzo	PDVSA	70	12
Carenero/Guatire	PDVSA	45	16
Puerto Ordaz/Bolívar	PDVSA	44	8
El Palito refinery/Yagua	PDVSA	29	16

Notes:

1. Project underway.

.../... — Pipeline with changing diameter.



SECTION 7

Oil prices

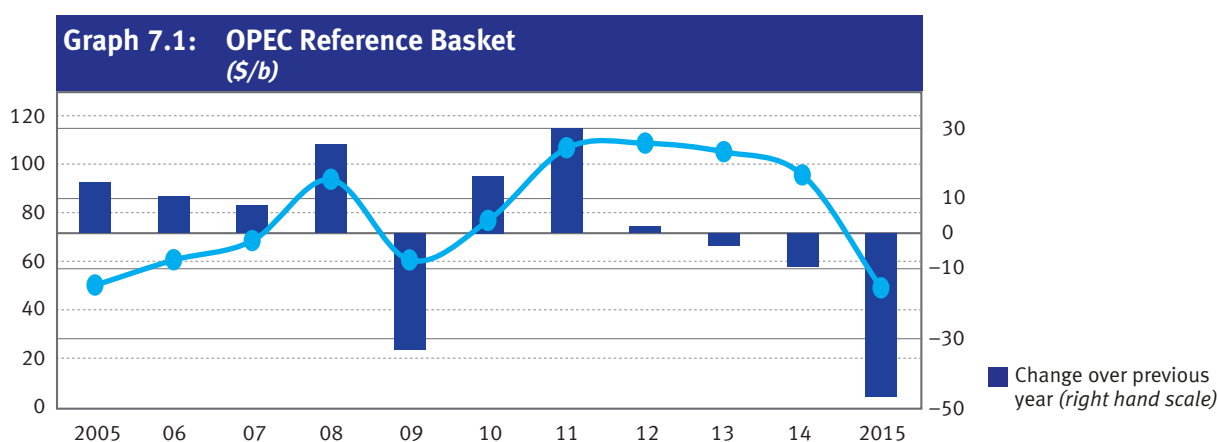
Table 7.1**Oil prices**

OPEC Reference Basket (ORB) and corresponding components spot prices (\$/b)

	Representative crude stream	2011	2012	2013	2014	2015
Algeria	Saharan Blend	112.92	111.49	109.38	99.68	52.79
Angola	Girassol	111.57	112.21	109.14	99.19	52.96
Ecuador	Oriente	101.03	102.76	97.74	87.31	44.94
Iran	Iran Heavy	106.11	109.06	105.73	96.18	48.80
Iraq	Basrah Light	106.17	107.96	103.60	94.45	47.87
Kuwait	Kuwait Export	105.63	108.93	105.04	95.32	48.13
Libya	Ess Sider	111.90	111.86	108.51	98.51	51.38
Nigeria	Bonny Light	114.15	113.66	111.36	100.85	52.95
Qatar	Marine	106.53	109.26	105.32	96.39	50.71
Saudi Arabia	Arab Light	107.82	110.22	106.53	97.18	49.85
United Arab Emirates	Murban	109.77	111.76	108.21	99.45	53.87
Venezuela	Merey	97.94	100.06	96.66	86.88	41.11
OPEC	ORB	107.46	109.45	105.87	96.29	49.49
ORB	Volatility ¹	6.50	7.96	3.93	14.56	8.50
ORB	Coefficient of variation ² , %	6.1	7.3	3.7	15.1	17.2

Notes:

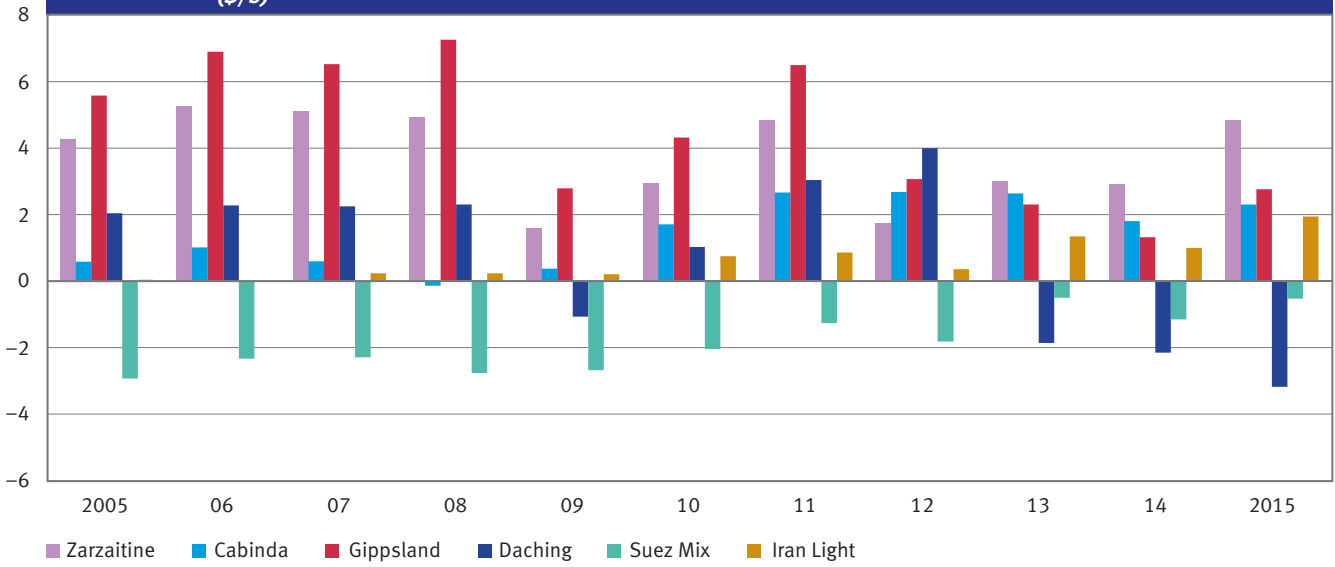
1. Standard deviation of daily prices.
2. Ratio of volatility to annual average price.



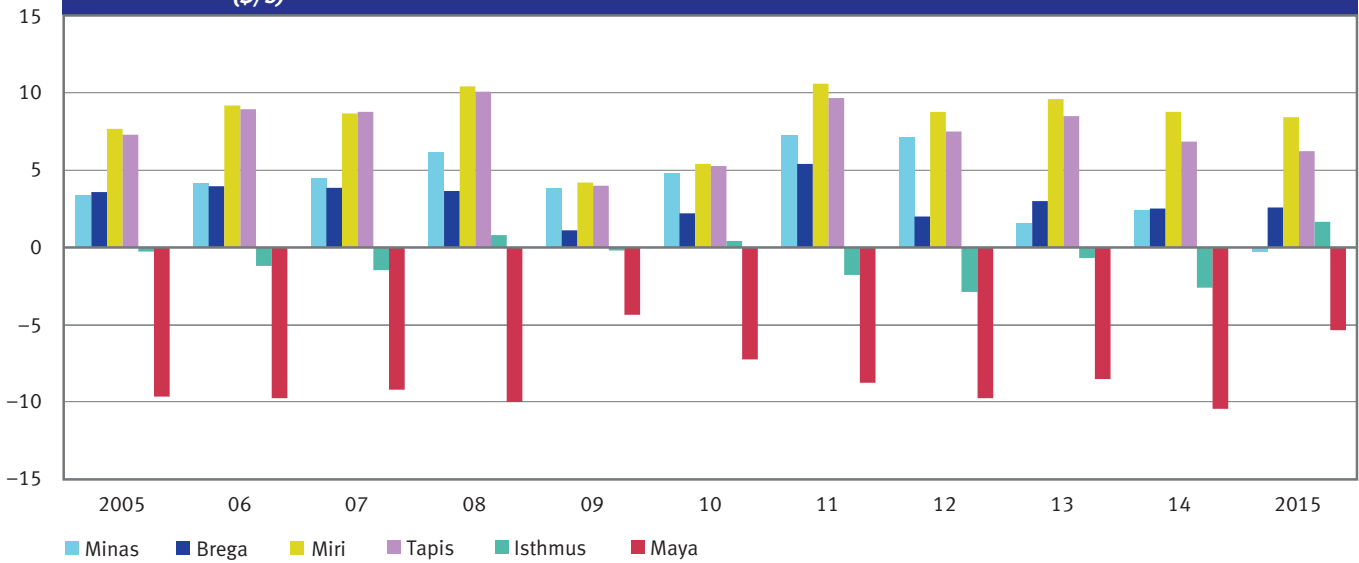
Selected spot crude oil prices (\$/b)

	Crude stream	2011	2012	2013	2014	2015
Algeria	Zarzaitine	112.26	111.18	108.85	99.19	54.30
Angola	Cabinda	110.09	112.10	108.47	98.07	51.77
Australia	Gippsland	113.91	112.49	108.14	97.58	52.22
China	Daching	110.46	113.41	104.00	94.13	46.31
Egypt	Suez Mix	106.18	107.62	105.35	95.13	48.94
IR Iran	Iran Light	108.29	109.79	107.19	97.26	51.40
Indonesia	Minas	114.79	116.60	107.41	98.68	49.17
Libya	Brega	112.89	111.45	108.88	98.79	52.08
Malaysia	Miri	118.08	118.25	115.51	105.10	57.93
Malaysia	Tapis	117.15	116.98	114.39	103.15	55.75
Mexico	Isthmus	105.64	106.55	105.16	93.65	51.14
Mexico	Maya	98.64	99.65	97.31	85.80	44.11
Nigeria	Forcados	113.65	114.21	111.95	101.35	54.41
Norway	Ekosfisk	112.74	112.76	109.88	99.72	53.12
Norway	Oseberg	112.98	112.98	110.04	99.99	53.61
Oman	Oman	106.63	109.35	105.51	97.04	51.21
Qatar	Dukhan	108.86	110.34	107.05	98.44	52.87
Russia	Urals	109.19	110.49	108.00	98.08	51.90
Saudi Arabia	Arab Heavy	104.06	108.32	103.89	93.68	47.01
United Kingdom	Brent Dated	111.36	111.62	108.62	99.08	52.41
United Kingdom	Forties	111.36	111.62	108.65	99.14	52.50
United States	WTI	94.99	94.10	97.96	93.26	48.73
United Arab Emirates	Dubai	106.21	109.07	105.45	96.71	50.94
Venezuela	Mesa 30	107.49	106.91	103.34	97.14	53.55

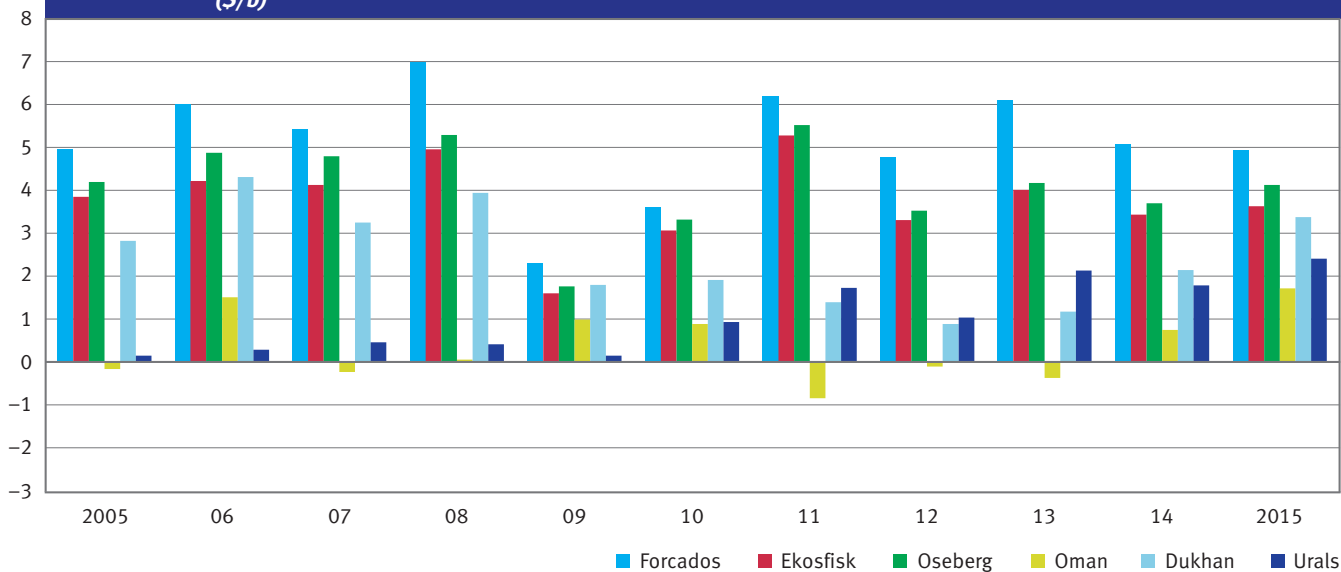
Graph 7.2: Differentials of selected spot crude oil prices to OPEC Reference Basket (1)
(\$/b)



Graph 7.3: Differentials of selected spot crude oil prices to OPEC Reference Basket (2)
(\$/b)



Graph 7.4: Differentials of selected spot crude oil prices to OPEC Reference Basket (3)
(\$/b)



Graph 7.5: Differentials of selected spot crude oil prices to OPEC Reference Basket (4)
(\$/b)

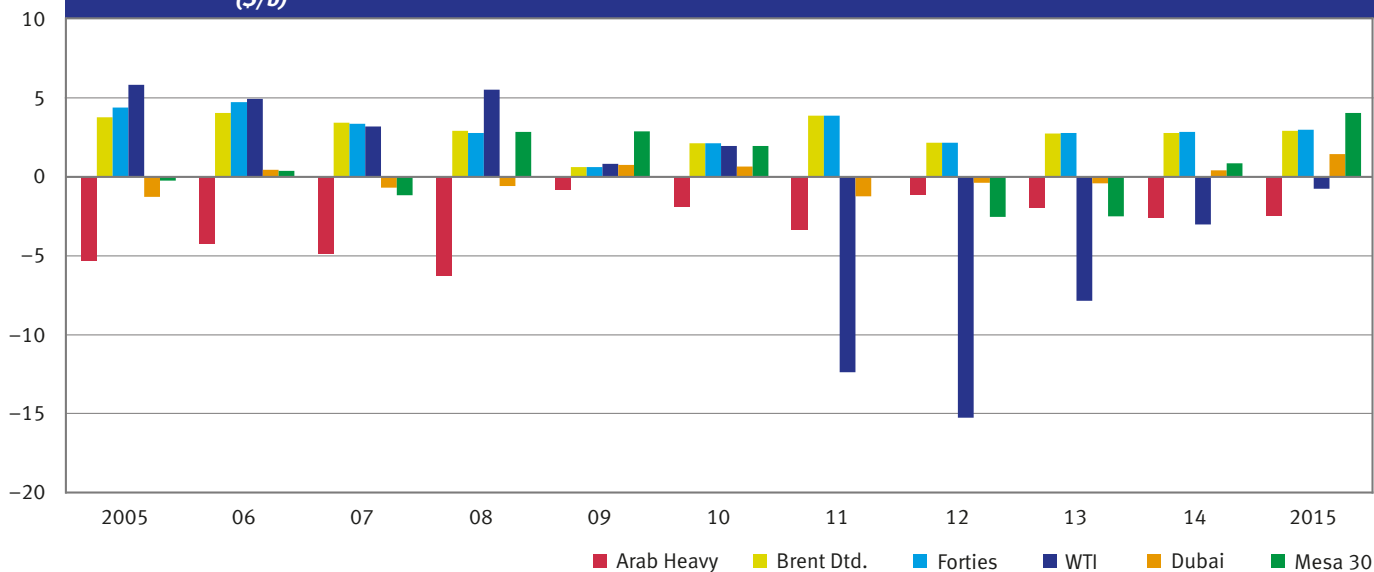


Table 7.3**Oil prices**ICE Brent, NYMEX WTI and DME Oman annual average of the 1st, 6th and 12th forward months (\$/b)

	2011	2012	2013	2014	2015
ICE Brent					
1 st forward month	110.91	111.69	108.69	99.45	53.60
6 th forward month	109.39	109.24	105.91	99.29	57.21
12 th forward month	108.12	106.68	103.02	98.30	60.18
NYMEX WTI					
1 st forward month	95.11	94.17	98.04	92.91	48.73
6 th forward month	97.23	95.99	96.33	90.23	52.56
12 th forward month	97.76	96.02	92.99	87.57	55.08
DME Oman					
1 st forward month	106.81	109.30	105.55	96.86	51.31
6 th forward month	105.53	106.97	103.07	96.61	54.48
12 th forward month	104.60	104.60	100.76	95.55	57.43

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

	2011	2012	2013	2014	2015
Nominal oil price	107.46	109.45	105.87	96.29	49.49
Nominal price adjusted for:					
Exchange rates ¹	80.07	84.90	82.67	75.36	43.35
Inflation ²	89.59	89.42	85.32	76.77	39.40
Combined ³	66.75	69.36	66.62	60.09	34.52

Notes:

Base: 2001 = 100.

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

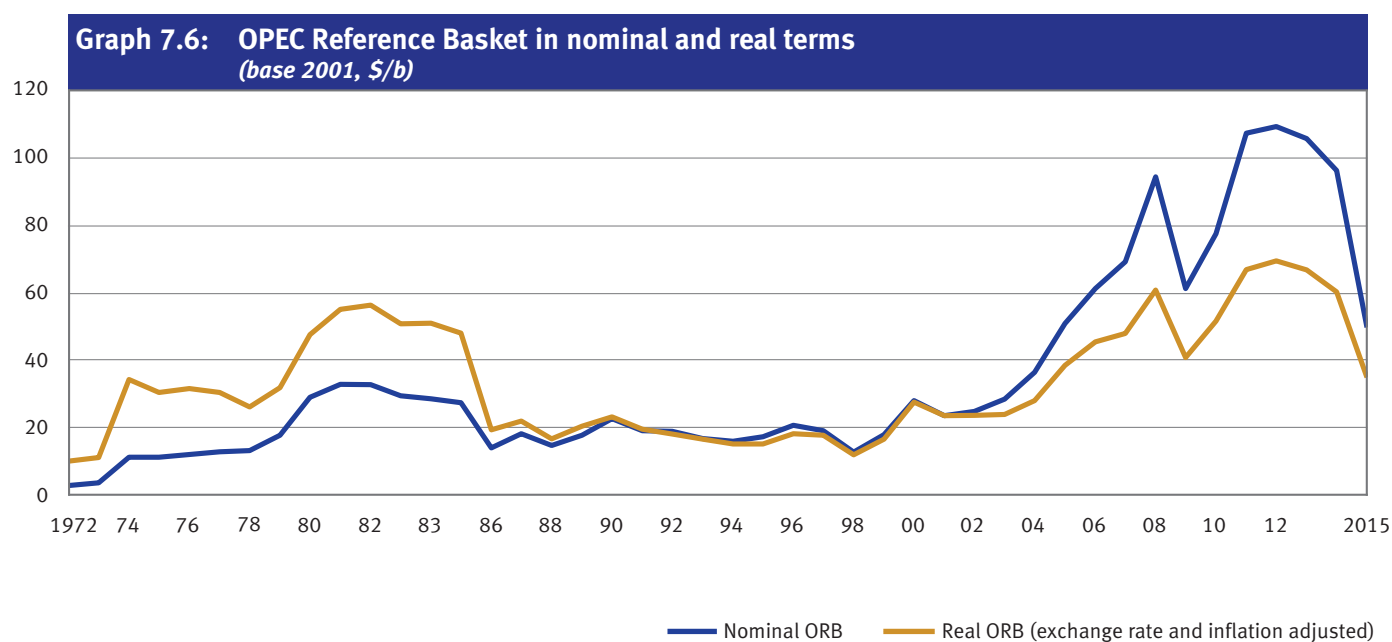


Table 7.5**Oil prices**

Annual average of premium factors for selected OPEC Reference Basket components (\$/b)

		2011	2012	2013	2014	2015
Europe						
Algeria	Saharan Blend	1.56	-0.11	0.75	0.61	0.38
IR Iran	Iran Heavy	-4.31	-3.68	-3.70	-4.60	-5.10
Iraq	Basrah Light	-4.35	-3.88	-4.20	-4.74	-4.83
Libya	Es Sider	0.54	0.25	-0.11	-0.56	-1.04
Nigeria	Bonny Light	2.79	2.05	2.73	1.77	0.54
Saudi Arabia	Arab Light	-2.71	-1.52	-1.52	-2.78	-3.54
Asia						
IR Iran	Iran Heavy	-0.43	0.50	0.48	-0.58	-2.26
Iraq	Basrah Light	0.20	0.72	-0.14	-1.02	-2.83
Kuwait	Kuwait Export	-0.68	0.34	0.33	-0.96	-2.74
Saudi Arabia	Arab Light	1.72	2.20	2.51	1.48	-0.86
US						
Iraq	Basrah Light	-1.67	-1.82	-1.87	0.06	-0.44
Saudi Arabia	Arab Light	0.17	0.42	0.64	2.43	1.06
	Arab Medium	-2.07	-1.85	-1.78	0.05	-0.54
	Arab Heavy	-3.96	-3.54	-3.45	-1.55	-1.14

Notes:

Premium factors are related to corresponding benchmark crudes.

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

	Specifications	2011	2012	2013	2014	2015
US Gulf						
Gasoline	Regular unleaded 87	117.70	121.73	116.55	107.90	67.58
Gasoil	0.2% sulphur	122.83	126.02	121.75	111.39	63.80
Fuel oil	3.0% sulphur	108.01	99.36	93.05	82.67	40.78
Singapore						
Gasoline	Premium unleaded 97	122.04	126.41	121.51	111.96	71.41
Gasoil	0.05% sulphur	126.29	128.15	123.38	112.67	64.57
Fuel oil	380 centistokes	99.87	103.17	95.67	86.58	44.27
Rotterdam						
Gasoline	Premium unleaded 98	120.35	127.29	122.57	115.10	75.53
Gasoil	10ppm sulphur	126.47	129.18	123.87	112.91	66.03
Fuel oil	3.5% sulphur	97.02	100.10	93.89	83.68	40.75

Notes:

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

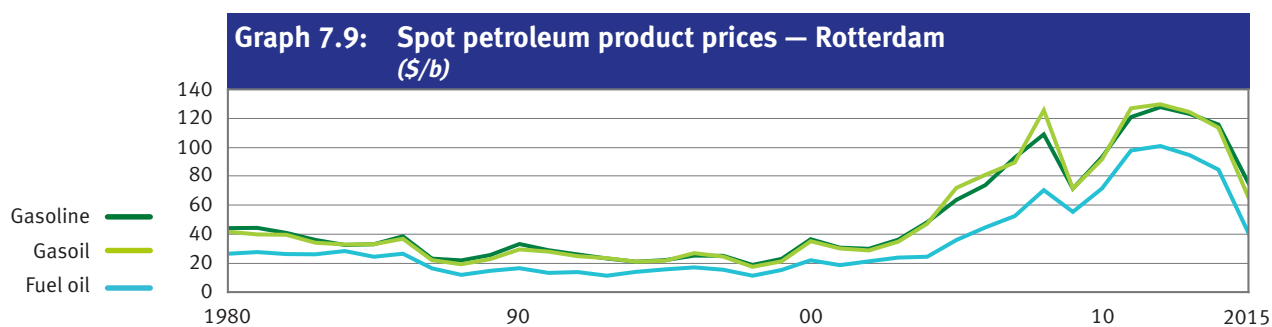
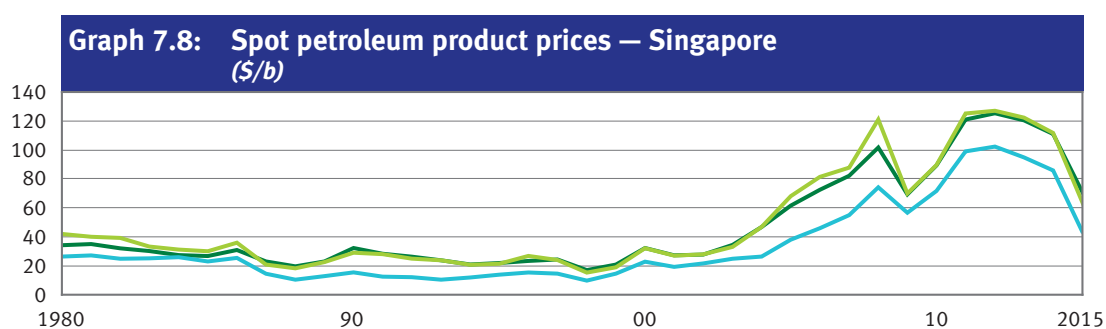
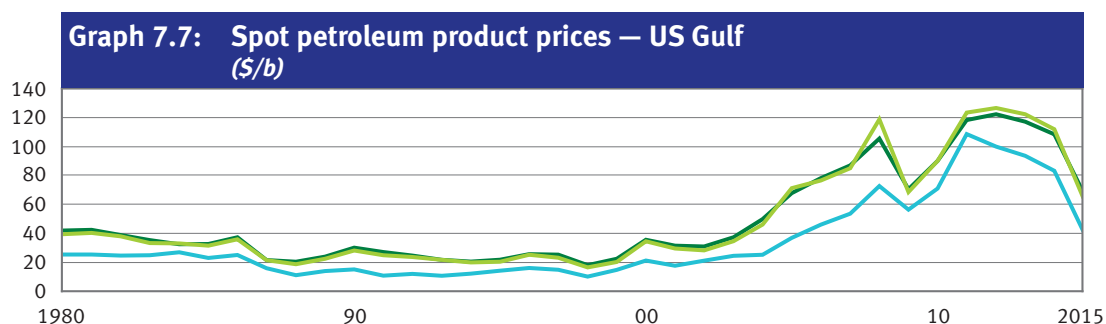


Table 7.7**Oil prices**Retail prices of petroleum products in OPEC Members (*units of national currency/b*)

	2011	2012	2013	2014	2015
Algeria					
Gasoline	2,226.67	2,226.67	2,227.00	2,227.00	2,227.00
Diesel oil	1,370.00	1,370.00	1,370.00	1,370.00	1,370.00
Kerosene	nap	nap	nap	nap	nap
Fuel oil	nap	nap	nap	nap	nap
Angola					
Gasoline	9,540.00	9,540.00	9,540.00	14,310.00	18,285.00
Diesel oil	6,360.00	6,360.00	6,360.00	9,540.00	11,925.00
Kerosene	3,339.00	3,339.00	3,339.00	5,565.00	7,155.00
Fuel oil	8,830.86	8,830.86	8,830.86	7,950.00	12,561.00
Ecuador					
Gasoline	62.79	62.79	63.42	62.79	62.79
Diesel oil	37.80	37.80	39.53	37.80	37.80
Kerosene	37.88	37.88	39.53	37.80	37.80
Fuel oil	23.65	23.65	19.99	19.99	9.10
Indonesia					
Gasoline	1,138,930.11	1,245,500.00	1,555,550.00	1,566,150.00	1,351,500.00
Diesel oil	1,064,670.63	1,176,600.00	1,415,100.00	1,494,600.00	1,323,675.00
Kerosene	nap	nap	nap	nap	nap
Fuel oil	nap	nap	nap	nap	nap
IR Iran					
Gasoline	755,250.00	1,192,500.00	1,192,500.00	1,192,500.00	1,749,000.00
Diesel oil	238,500.00	159,000.00	159,000.00	159,000.00	477,000.00
Kerosene	238,500.00	159,000.00	159,000.00	159,000.00	238,500.00
Fuel oil	318,000.00	318,000.00	318,000.00	318,000.00	477,000.00
Iraq					
Gasoline	71,550.00	71,550.00	71,550.00	71,550.00	na
Diesel oil	63,600.00	63,600.00	63,600.00	63,600.00	na
Kerosene	23,850.00	23,850.00	23,850.00	23,850.00	na
Fuel oil	15,900.00	15,900.00	15,900.00	15,900.00	na
Kuwait					
Gasoline	11.40	11.40	11.40	11.40	11.40
Diesel oil	8.75	8.75	8.75	8.75	24.05
Kerosene	8.75	8.75	8.75	8.75	24.05
Fuel oil	nap	nap	nap	nap	nap
Libya					
Gasoline	23.85	23.85	23.85	23.85	23.85
Diesel oil	27.03	27.03	27.03	27.03	27.03
Kerosene	12.72	12.72	12.72	12.72	12.72
Fuel oil	3.50	3.50	3.50	3.50	3.50
Nigeria					
Gasoline	10,335.00	15,423.00	15,423.00	15,423.00	14,628.00
Diesel oil	24,686.34	25,110.87	24,853.29	24,853.29	18,084.66
Kerosene	26,988.66	7,950.00	7,950.00	7,950.00	7,950.00
Fuel oil	9,978.84	18,585.51	18,394.87	18,394.87	10,654.63

Retail prices of petroleum products in OPEC Members (*units of national currency/b*)

	2011	2012	2013	2014	2015
Qatar					
Gasoline	143.10	143.10	147.08	147.08	194.78
Diesel oil	111.30	111.30	159.00	238.50	238.50
Kerosene	nap	nap	nap	nap	nap
Fuel oil	nap	nap	nap	nap	nap
Saudi Arabia					
Gasoline	83.48	83.48	83.48	83.48	107.33
Diesel oil	39.75	39.75	39.75	39.75	55.65
Kerosene	69.17	69.17	69.17	69.17	82.78
Fuel oil	nap	nap	nap	nap	nap
United Arab Emirates					
Gasoline	218.56	218.56	262.52	262.52	278.25
Diesel oil	300.74	300.74	361.27	361.27	354.57
Kerosene	nap	nap	nap	nap	nap
Fuel oil	nap	nap	nap	nap	nap
Venezuela					
Gasoline	13.28	13.28	13.28	13.28	13.28
Diesel oil	7.63	7.63	7.63	7.63	7.63
Kerosene	422.22	468.88	671.27	648.93	333.87
Fuel oil	9.62	9.62	9.62	9.62	9.62

Table 7.8

Crack spread in major markets (*\$/b*)

Specifications	2011	2012	2013	2014	2015
US Gulf crack spread vs WTI					
Gasoline Regular unleaded 87	24.77	33.13	21.26	20.56	18.73
Gasoil 0.2% sulphur	29.90	37.42	26.46	24.05	14.70
Fuel oil 3.0% sulphur	15.08	10.76	-2.24	-4.67	-8.27
Singapore crack spread vs Dubai					
Gasoline Premium unleaded 97	15.83	17.34	16.06	15.25	20.49
Gasoil 0.05% sulphur	20.08	19.08	17.93	15.96	13.54
Fuel oil 380 centistokes	-6.34	-5.90	-9.78	-10.13	-6.77
Rotterdam crack spread vs Brent					
Gasoline Premium unleaded 98	14.14	18.22	17.12	18.39	24.61
Gasoil 10ppm sulphur	20.26	20.11	18.42	16.20	14.98
Fuel oil 3.5% sulphur	-9.19	-8.97	-11.56	-13.03	-10.28

Notes:

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

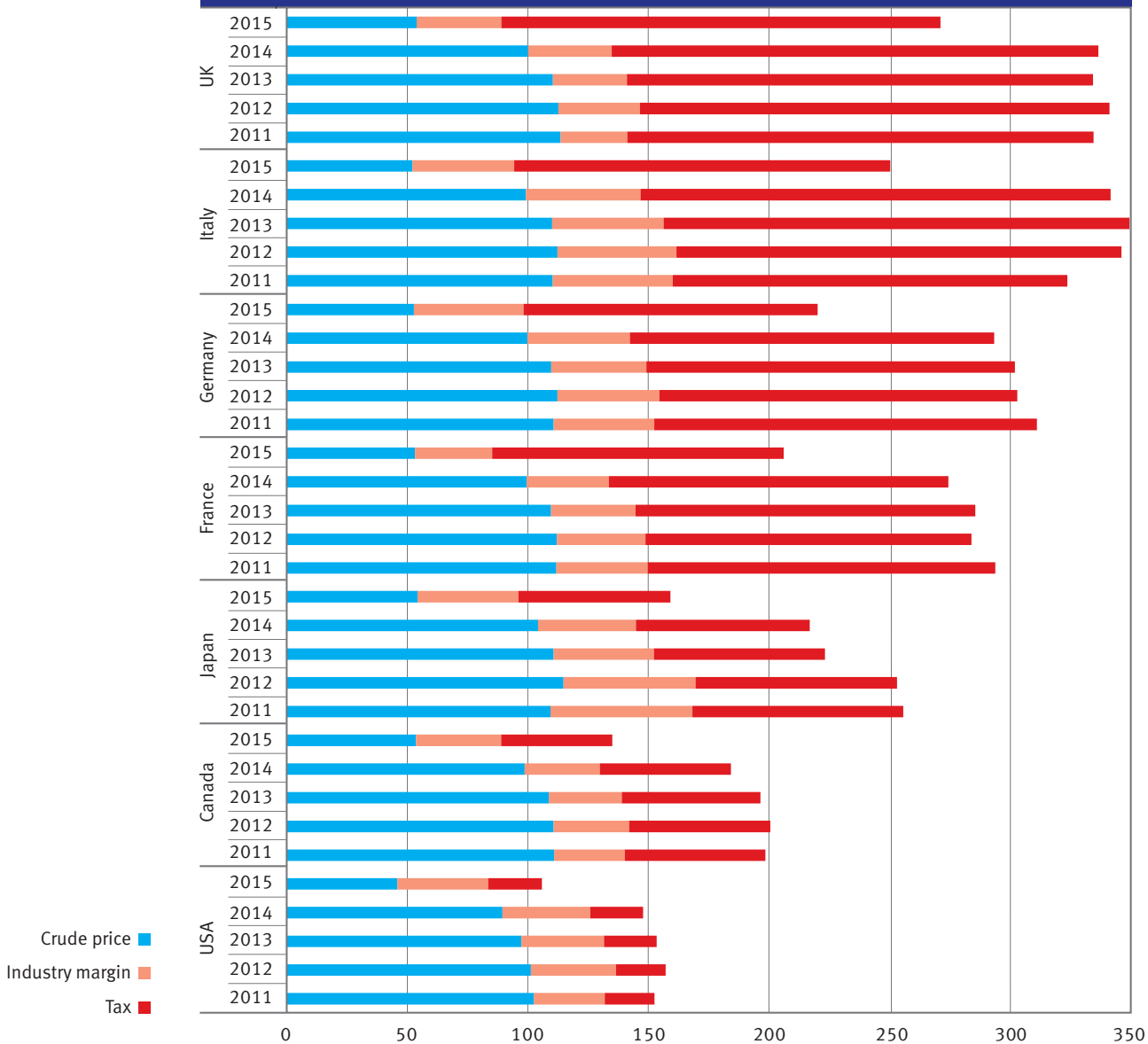
Table 7.9

Oil prices

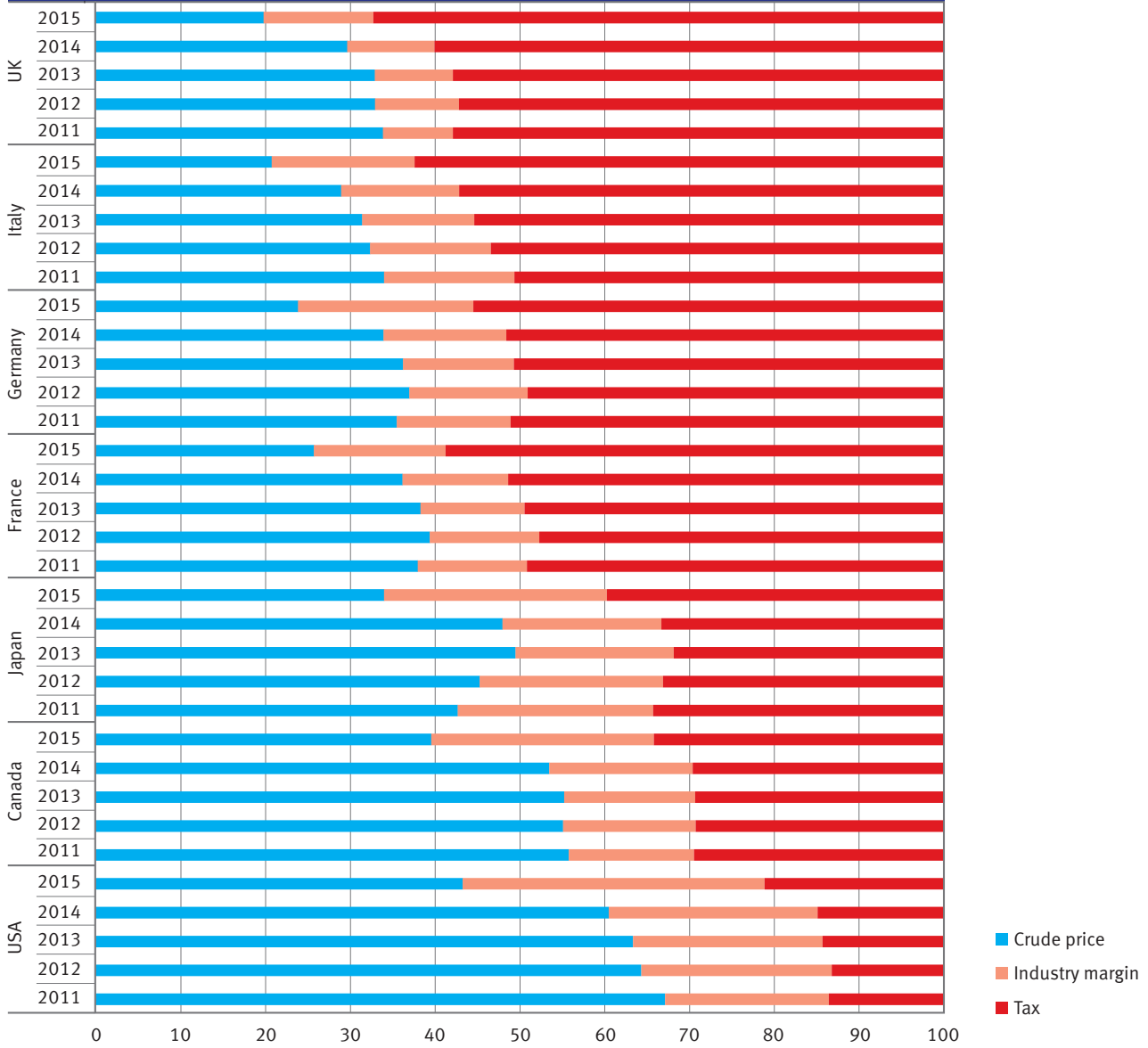
Composite barrel and its components in major consuming countries (\$/b)

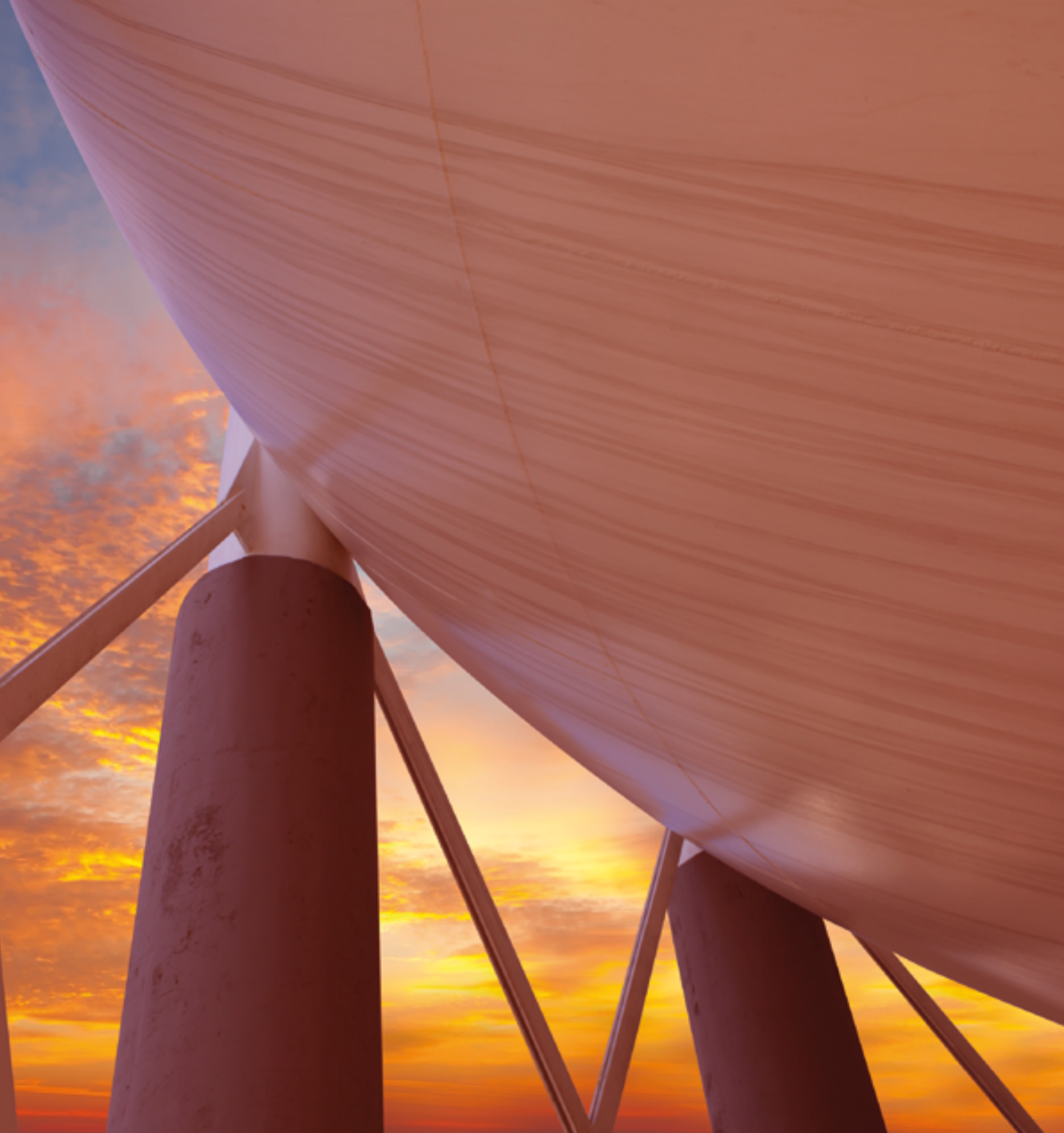
	2011			2012			2013			2014			2015		
	\$/b	% share	% change y-0-y	\$/b	% share	% change y-0-y	\$/b	% share	% change y-0-y	\$/b	% share	% change y-0-y	\$/b	% share	% change y-0-y
United States															
Composite barrel	152.40	67.2	27.8	157.09	64.4	3.1	153.34	63.4	-2.4	147.69	60.6	-3.7	105.72	43.3	-28.4
Crude cif price	102.43	13.5	34.7	101.16	13.1	-1.2	97.25	14.2	-3.9	89.43	14.8	-8.0	45.83	21.1	-48.8
Tax	20.56	19.3	0.8	20.65	22.5	0.5	21.81	22.4	5.6	21.88	24.6	0.3	22.28	35.6	1.8
Industry margin	29.42		29.0	35.28		19.9	34.28		-2.8	36.37		6.1	37.61		3.4
Canada															
Composite barrel	198.43	55.8	26.7	200.46	55.2	1.0	196.36	55.3	-2.0	184.16	53.5	-6.2	134.94	39.6	-26.7
Crude cif price	110.80	29.4	40.0	110.61	29.2	-0.2	108.60	29.2	-1.8	98.60	29.5	-9.2	53.48	34.1	-45.8
Tax	58.30	14.8	21.0	58.52	15.6	0.4	57.43	15.4	-1.9	54.38	16.9	-5.3	46.04	26.2	-15.3
Industry margin	29.32		0.3	31.33		6.8	30.33		-3.2	31.18		2.8	35.42		13.6
Japan															
Composite barrel	255.61	42.8	22.0	253.07	45.3	-1.0	223.12	49.6	-11.8	216.82	48.0	-2.8	159.06	34.1	-26.6
Crude cif price	109.30	34.2	37.6	114.75	33.0	5.0	110.61	31.8	-3.6	104.16	33.2	-5.8	54.20	39.7	-48.0
Tax	87.42	23.0	9.0	83.61	21.6	-4.4	70.91	18.6	-15.2	72.05	18.7	1.6	63.07	26.3	-12.5
Industry margin	58.89		18.2	54.71		-7.1	41.60		-24.0	40.62		-2.4	41.79		2.9
France															
Composite barrel	293.83	38.0	22.0	283.93	39.5	-3.4	285.54	38.4	0.6	274.32	36.2	-3.9	206.02	25.8	-24.9
Crude cif price	111.78	49.1	40.1	112.01	47.6	0.2	109.56	49.4	-2.2	99.40	51.3	-9.3	53.14	58.7	-46.5
Tax	144.21	12.9	11.2	135.23	12.9	-6.2	140.93	12.3	4.2	140.72	12.5	-0.2	120.90	20.7	-14.1
Industry margin	37.84		20.4	36.69		-3.1	35.05		-4.5	34.20		-2.4	31.98		-6.5
Germany															
Composite barrel	311.07	35.6	20.2	302.95	37.0	-2.6	301.96	36.3	-0.3	293.32	34.0	-2.9	220.13	23.9	-25.0
Crude cif price	110.63	51.0	40.9	112.21	49.0	1.4	109.62	50.6	-2.3	99.76	51.5	-9.0	52.65	55.4	-47.2
Tax	158.71	13.4	9.6	148.43	14.0	-6.5	152.84	13.1	3.0	151.09	14.5	-1.1	121.97	20.7	-19.3
Industry margin	41.72		17.4	42.31		1.4	39.50		-6.6	42.47		7.5	45.50		7.1
Italy															
Composite barrel	323.66	34.1	23.0	346.10	32.4	6.9	349.45	31.5	1.0	341.60	29.0	-2.2	250.19	20.8	-26.8
Crude cif price	110.23	50.5	39.0	112.18	53.3	1.8	109.98	55.3	-2.0	99.09	57.1	-9.9	52.06	62.3	-47.5
Tax	163.61	15.4	16.4	184.56	14.3	12.8	193.23	13.2	4.7	194.93	13.9	0.9	155.97	16.9	-20.0
Industry margin	49.82		15.0	49.35		-0.9	46.24		-6.3	47.58		2.9	42.17		-11.4
United Kingdom															
Composite barrel	334.53	33.9	20.3	341.20	33.0	2.0	334.30	33.0	-2.0	336.57	29.7	0.7	271.03	19.9	-19.5
Crude cif price	113.49	57.8	40.8	112.62	57.1	-0.8	110.27	57.8	-2.1	100.07	60.0	-9.3	53.81	67.2	-46.2
Tax	193.37	8.3	12.5	194.79	9.9	0.7	193.28	9.2	-0.8	201.89	10.3	4.5	182.10	13.0	-9.8
Industry margin	27.67		8.3	33.79		22.1	30.75		-9.0	34.61		12.5	35.12		1.5
G7															
Composite barrel	267.07	41.1	22.5	269.26	41.1	0.8	263.44	41.0	-2.2	256.35	38.5	-2.7	192.44	27.1	-24.9
Crude cif price	109.81	44.2	39.1	110.79	43.8	0.9	107.98	45.0	-2.5	98.64	46.6	-8.6	52.17	52.9	-47.1
Tax	118.03	14.7	12.3	117.97	15.0	0.0	118.63	14.0	0.6	119.56	14.9	0.8	101.76	20.0	-14.9
Industry margin	39.24		15.6	40.49		3.2	36.82		-9.1	38.15		3.6	38.51		1.0
OECD															
Composite barrel	269.30	41.0	19.5	271.24	40.9	0.7	272.21	39.9	0.4	264.10	37.6	-3.0	198.29	26.3	-24.9
Crude cif price	110.36	45.0	39.2	111.06	43.9	0.6	108.53	45.0	-2.3	99.25	45.4	-8.6	52.17	50.4	-47.4
Tax	121.29	14.0	9.4	119.19	15.1	-1.7	122.59	15.1	2.9	120.02	17.0	-2.1	99.97	23.3	-16.7
Industry margin	37.65		7.0	40.99		8.9	41.09		0.2	44.83		9.1	46.15		2.9

Graph 7.10: Composite barrel and its components in volume (\$/b)



Graph 7.11: Composite barrel and its components in percentage





SECTION 8

Natural gas data

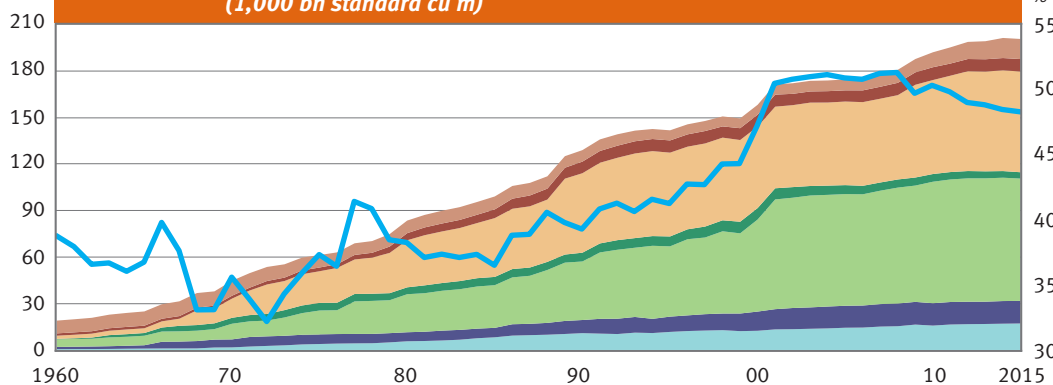
Table 8.1**Natural gas data**World proven natural gas reserves by country (*bn standard cu m*)

	2011	2012	2013	2014	2015	% change 15/14
North America	10,524.2	11,121.0	11,725.5	13,039.0	13,053.0	0.1
Canada	1,897.0	1,660.0	1,700.0	2,028.0	2,041.9	0.7
United States	8,627.2	9,461.0	10,025.5	11,011.0	11,011.0	–
Latin America	7,886.4	7,947.4	7,985.8	7,979.3	8,079.1	1.3
Argentina	359.0	333.0	316.0	309.0	324.5	5.0
Bolivia	281.0	281.0	296.0	300.5	300.5	–
Brazil	417.0	460.0	458.0	471.0	485.1	3.0
Chile	43.0	41.0	41.0	40.0	40.0	–
Colombia	153.0	155.0	156.0	156.0	148.2	–5.0
Ecuador	6.4	6.4	6.0	10.9	10.9	–
Mexico	349.0	360.0	347.0	324.0	317.5	–2.0
Peru	353.0	359.0	425.8	413.9	413.9	–
Trinidad & Tobago	381.0	375.0	346.0	325.0	325.0	–
Venezuela	5,528.0	5,563.0	5,581.0	5,617.0	5,701.5	1.5
Others	16.0	14.0	13.0	12.0	12.0	–
Eastern Europe and Eurasia	62,582.0	64,805.0	64,793.2	65,425.2	65,422.3	–
Armenia	18.0	18.0	18.0	18.0	18.0	–
Azerbaijan	1,317.0	1,317.0	1,300.0	1,291.0	1,291.0	–
Kazakhstan	1,913.0	1,950.0	1,929.0	1,918.0	1,918.0	–
Poland	71.0	69.0	69.0	62.9	60.4	–4.0
Romania	595.0	109.0	113.0	109.2	109.2	–
Russia	46,000.0	48,676.0	48,810.0	49,541.0	49,541.0	–
Turkmenistan	10,000.0	10,000.0	9,933.8	9,904.2	9,904.2	–
Ukraine	969.0	969.0	952.0	944.0	944.0	–
Uzbekistan	1,661.0	1,661.0	1,632.0	1,608.0	1,608.0	–
Others	38.0	36.0	36.4	28.9	28.5	–1.3
Western Europe	4,799.0	4,739.0	4,553.4	4,301.1	4,116.3	–4.3
Denmark	101.0	95.0	90.0	90.0	90.0	–
Germany	87.0	80.0	71.0	63.0	63.0	–
Italy	66.0	62.0	56.0	53.7	53.7	–
Netherlands	1,161.0	1,230.0	1,131.0	1,044.0	981.4	–6.0
Norway	2,762.0	2,685.0	2,654.0	2,547.0	2,445.1	–4.0
United Kingdom	520.0	481.0	452.0	407.0	386.7	–5.0
Others	102.0	106.0	99.4	96.4	96.4	–
Middle East	79,581.0	80,131.0	80,087.0	80,102.2	79,430.3	–0.8
IR Iran	33,620.0	33,780.0	34,020.0	34,020.0	33,500.0	–1.5
Iraq	3,158.0	3,158.0	3,158.0	3,158.0	3,158.0	–
Kuwait	1,784.0	1,784.0	1,784.0	1,784.0	1,784.0	–
Oman	610.0	950.0	950.0	950.0	931.0	–2.0
Qatar	25,110.0	25,069.0	24,681.0	24,531.3	24,299.1	–0.9
Saudi Arabia	8,151.0	8,235.0	8,317.0	8,488.9	8,588.2	1.2
United Arab Emirates	6,091.0	6,091.0	6,091.0	6,091.0	6,091.0	–
Others	1,057.0	1,064.0	1,086.0	1,079.0	1,079.0	–
Africa	14,618.6	14,569.4	14,482.3	14,705.2	14,665.5	–0.3
Algeria	4,504.0	4,504.0	4,504.0	4,504.0	4,504.0	–
Angola	275.0	275.0	275.0	308.1	308.1	–
Cameroon	155.0	153.0	144.0	154.0	154.0	–
Congo	127.0	124.0	115.0	106.0	106.0	–
Egypt	2,210.0	2,190.0	2,185.0	2,168.0	2,168.0	–
Libya	1,547.0	1,549.0	1,506.0	1,504.9	1,504.9	–
Nigeria	5,175.6	5,118.4	5,107.1	5,324.0	5,284.3	–0.7
Others	625.0	656.0	646.2	636.3	636.3	–
Asia and Pacific	16,529.4	16,750.0	16,877.2	17,058.8	17,200.1	0.8
Australia	3,759.0	3,730.0	3,650.0	3,703.0	3,703.0	–
Bangladesh	354.0	474.0	436.0	418.0	418.0	–
Brunei	301.0	288.0	269.7	263.3	263.3	–
China	2,853.0	3,051.0	3,200.0	3,275.0	3,438.8	5.0
India	1,278.0	1,331.0	1,355.0	1,427.0	1,484.1	4.0
Indonesia	2,965.4	2,917.0	2,875.4	2,839.1	2,775.1	–2.3
Malaysia	2,328.0	2,389.0	2,611.0	2,690.0	2,690.0	–
Myanmar	522.0	509.0	496.0	485.0	485.0	–
Pakistan	810.0	766.0	749.0	736.4	736.4	–
Thailand	300.0	285.0	238.0	224.5	224.5	–
Vietnam	288.0	224.0	216.3	210.5	210.5	–
Others	771.0	786.0	780.8	787.0	771.4	–2.0
Total world	196,520.6	200,062.7	200,504.3	202,610.9	201,966.5	–0.3
<i>of which</i>						
OPEC	97,915.4	98,049.8	97,905.4	98,181.2	97,509.1	–0.7
<i>OPEC percentage</i>	<i>49.8</i>	<i>49.0</i>	<i>48.8</i>	<i>48.5</i>	<i>48.3</i>	
OECD	19,830.2	20,329.0	20,677.7	21,759.0	21,563.0	–0.9
FSU	61,883.0	64,596.0	64,579.8	65,229.2	65,229.2	–

Notes: Figures as at year-end.

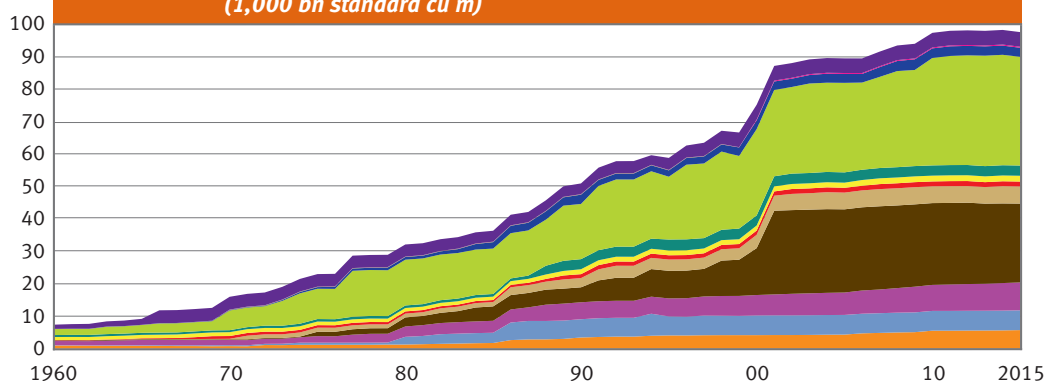
Graph 8.1: World proven natural gas reserves
(1,000 bn standard cu m)

- North America
- Latin America
- Eastern Europe & Eurasia
- Western Europe
- Middle East
- Africa
- Asia and Pacific
- OPEC share (%)



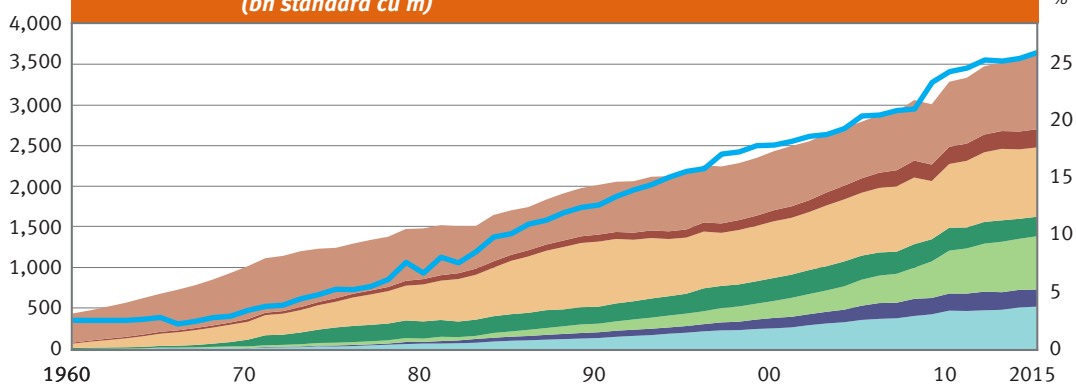
Graph 8.2: OPEC Members' proven natural gas reserves
(1,000 bn standard cu m)

- Algeria
- Angola
- Ecuador
- Indonesia
- IR Iran
- Iraq
- Kuwait
- Libya
- Nigeria
- Qatar
- Saudi Arabia
- United Arab Emirates
- Venezuela



Graph 8.3: World marketed production of natural gas
(bn standard cu m)

- North America
- Latin America
- Eastern Europe & Eurasia
- Western Europe
- Middle East
- Africa
- Asia and Pacific
- OPEC share (%)



Graph 8.4: OPEC Members' marketed production of natural gas
(bn standard cu m)

- Algeria
- Angola
- Ecuador
- Indonesia
- IR Iran
- Iraq
- Kuwait
- Libya
- Nigeria
- Qatar
- Saudi Arabia
- United Arab Emirates
- Venezuela

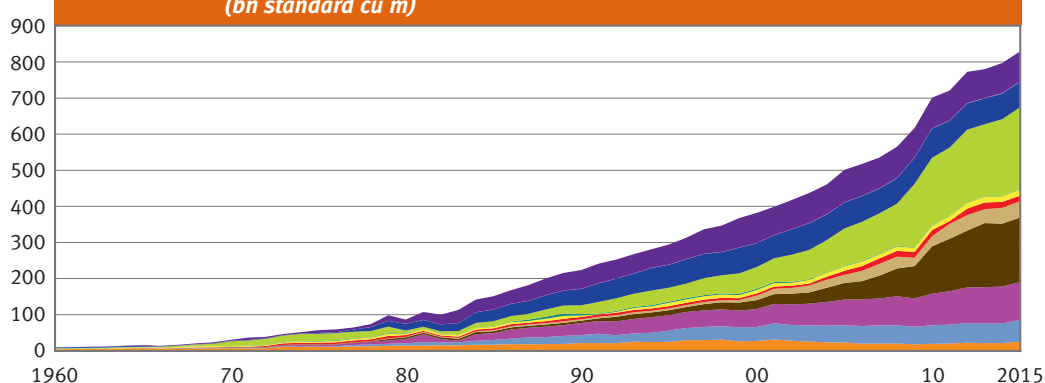


Table 8.2**Natural gas data**Natural gas production in OPEC Members (*m standard cu m*)

	2011	2012	2013	2014	2015	% change 15/14
Algeria						
Gross production	190,127.0	182,599.0	179,489.6	186,724.0	183,824.5	-1.6
Marketed production	82,767.0	86,454.0	79,647.3	83,295.6	83,040.7	-0.3
Flaring	3,604.0	3,495.0	3,661.4	3,947.8	3,514.2	-11.0
Reinjection	88,745.0	77,375.0	76,240.9	81,210.0	77,053.6	-5.1
Shrinkage	15,011.0	15,275.0	19,940.0	18,270.6	20,216.0	10.6
Angola						
Gross production	10,733.0	10,847.2	10,760.2	10,450.2	10,540.5	0.9
Marketed production	752.0	760.0	925.0	732.2	772.5	5.5
Flaring	7,183.0	7,259.4	7,001.2	6,993.7	6,997.0	-
Reinjection	2,599.0	2,626.6	2,579.5	2,530.5	2,555.0	1.0
Shrinkage	199.0	201.1	254.0	193.8	216.0	11.5
Ecuador						
Gross production	1,337.0	1,541.0	1,628.0	1,762.6	1,676.9	-4.9
Marketed production	241.0	517.0	515.0	577.9	496.9	-14.0
Flaring	539.0	512.0	579.0	622.7	666.9	7.1
Reinjection	-	-	-	-	-	-
Shrinkage	557.0	512.0	534.0	562.0	513.0	-8.7
Indonesia						
Gross production	77,567.0	75,620.0	74,338.0	75,648.0	74,226.0	-1.9
Marketed production	74,359.0	72,309.0	71,450.0	70,891.0	70,274.0	-0.9
Flaring	2,452.0	1,085.0	1,758.0	1,886.0	1,863.0	-1.2
Reinjection	694.0	758.0	573.0	512.0	539.0	5.3
Shrinkage	62.0	1,468.0	557.0	2,359.0	1,550.0	-34.3
IR Iran						
Gross production	224,122.0	231,332.0	228,887.0	244,551.0	257,623.0	5.3
Marketed production	188,753.0	202,431.0	199,293.0	212,796.0	226,673.0	6.5
Flaring	-	-	-	-	-	-
Reinjection	35,369.0	28,901.0	29,594.0	31,755.0	30,950.0	-2.5
Shrinkage	-	-	-	-	-	-
Iraq						
Gross production	18,691.0	20,496.0	21,390.1	21,853.1	23,458.1	7.3
Marketed production	876.0	646.0	1,179.0	904.4	1,001.9	10.8
Flaring	9,612.0	11,975.0	12,431.8	12,871.4	14,606.6	13.5
Reinjection	968.0	875.0	335.0	150.1	164.3	9.5
Shrinkage	7,235.0	7,000.0	7,444.4	7,927.2	7,685.4	-3.1
Kuwait						
Gross production	13,750.0	15,742.0	16,529.2	15,249.8	17,131.0	12.3
Marketed production	13,533.0	15,515.0	16,311.2	15,028.8	16,909.0	12.5
Flaring	217.0	227.0	218.0	221.0	222.0	0.5
Reinjection	-	-	-	-	-	-
Shrinkage	-	-	-	-	-	-

Natural gas production in OPEC Members (*m standard cu m*)

	2011	2012	2013	2014	2015	% change 15/14
Libya						
Gross production	9,861.0	23,436.0	22,873.7	21,016.2	19,941.0	-5.1
Marketed production	7,855.0	18,118.0	18,462.6	16,523.3	15,493.0	-6.2
Flaring	1,302.0	3,922.0	3,248.0	4,485.6	4,440.7	-1.0
Reinjection	704.0	1,396.0	1,148.0	7.3	7.3	-
Shrinkage	-	-	15.1	-	-	-
Nigeria						
Gross production	84,004.0	84,846.0	79,626.0	86,325.2	85,223.2	-1.3
Marketed production	41,323.0	42,571.0	38,411.0	43,841.6	45,148.1	3.0
Flaring	14,270.0	13,182.0	12,112.0	10,736.8	9,687.3	-9.8
Reinjection	22,519.0	20,520.0	21,466.0	22,894.3	21,040.2	-8.1
Shrinkage	5,892.0	8,573.0	7,637.0	8,852.6	9,347.6	5.6
Qatar						
Gross production	150,016.4	163,025.3	183,698.0	180,024.1	184,344.6	2.4
Marketed production	145,271.4	157,049.6	177,602.0	174,056.7	178,472.0	2.5
Flaring	558.0	702.7	740.6	709.3	717.6	1.2
Reinjection	2,109.0	2,656.0	2,705.7	2,651.0	2,530.4	-4.5
Shrinkage	2,078.0	2,617.0	2,650.1	2,607.0	2,624.7	0.7
Saudi Arabia						
Gross production	102,430.0	111,220.0	114,120.0	116,720.0	119,830.0	2.7
Marketed production	92,260.0	99,330.0	100,030.0	102,380.0	104,450.0	2.0
Flaring	-	-	-	10.0	40.0	300.0
Reinjection	30.0	10.0	20.0	10.0	-	-100.0
Shrinkage	10,140.0	11,880.0	14,070.0	14,320.0	15,340.0	7.1
United Arab Emirates						
Gross production	82,460.0	82,500.0	83,796.0	83,706.1	90,010.6	7.5
Marketed production	52,308.0	54,300.0	54,600.0	54,244.6	60,181.0	10.9
Flaring	982.0	1,020.0	1,021.0	1,017.2	1,041.9	2.4
Reinjection	23,974.0	22,390.0	23,182.0	23,403.6	23,686.2	1.2
Shrinkage	5,196.0	4,790.0	4,993.0	5,040.7	5,101.6	1.2
Venezuela						
Gross production	73,274.0	75,968.0	76,440.1	76,717.0	80,196.4	4.5
Marketed production	20,769.0	22,726.0	21,819.8	21,878.0	26,004.4	18.9
Flaring	9,284.0	11,347.0	13,724.6	15,319.0	16,539.9	8.0
Reinjection	29,827.0	29,756.0	28,770.0	27,034.0	25,440.6	-5.9
Shrinkage	13,394.0	12,139.0	12,125.8	12,486.0	12,211.5	-2.2
OPEC						
Gross production	1,038,372.4	1,079,172.5	1,093,575.9	1,120,747.3	1,148,025.7	2.4
Marketed production	721,067.4	772,726.6	780,245.8	797,150.1	828,916.3	4.0
Flaring	50,003.0	54,727.1	56,495.6	58,820.5	60,337.0	2.6
Reinjection	207,538.0	187,263.7	186,614.1	192,157.8	183,966.6	-4.3
Shrinkage	59,764.0	64,455.1	70,220.3	72,618.9	74,805.8	3.0

Table 8.3

Natural gas data

World marketed production of natural gas by country (*m standard cu m*)

	2011	2012	2013	2014	2015	% change 15/14
North America	809,923.0	839,521.0	843,040.0	892,336.0	932,778.0	4.5
Canada	159,714.0	156,547.0	156,068.0	162,102.0	163,944.0	1.1
United States	650,209.0	682,974.0	686,972.0	730,234.0	768,834.0	5.3
Latin America	211,975.4	218,041.4	219,059.1	219,563.0	223,800.0	1.9
Argentina	38,770.0	37,640.0	35,560.0	35,530.0	36,500.0	2.7
Bolivia	15,720.0	17,910.0	20,480.0	21,094.4	22,597.0	7.1
Brazil	14,576.4	16,976.4	19,029.2	20,353.3	23,098.0	13.5
Colombia	10,950.0	11,930.0	12,800.0	12,680.0	12,806.8	1.0
Ecuador	241.0	517.0	515.0	577.9	496.9	-14.0
Mexico	55,230.0	53,713.0	52,423.0	50,510.0	45,984.0	-9.0
Peru	11,400.0	11,850.0	11,633.1	12,925.7	13,387.0	3.6
Trinidad & Tobago	42,309.0	42,609.0	42,846.9	42,082.0	40,875.0	-2.9
Venezuela	20,769.0	22,726.0	21,819.8	21,878.0	26,004.4	18.9
Others	2,010.0	2,170.0	1,952.0	1,931.7	2,050.9	6.2
Eastern Europe and Eurasia	819,839.0	857,119.0	879,536.0	854,215.8	852,628.5	-0.2
Azerbaijan	15,350.0	17,236.0	17,851.0	18,633.0	19,365.0	3.9
Hungary	2,730.0	2,462.0	2,001.0	1,854.0	1,758.0	-5.2
Kazakhstan	19,050.0	19,490.0	19,650.0	20,150.0	21,157.5	5.0
Poland	4,150.0	6,193.0	6,206.0	6,081.0	6,080.0	-
Romania	10,707.0	10,979.0	11,017.0	11,186.0	11,494.0	2.8
Russia	628,140.0	656,286.0	671,546.0	642,997.0	637,386.0	-0.9
Turkmenistan	60,950.0	66,000.0	72,000.0	74,160.0	80,162.0	8.1
Ukraine	18,810.0	18,600.0	20,280.0	19,827.8	18,808.0	-5.1
Uzbekistan	58,850.0	58,730.0	58,080.0	58,500.0	55,700.0	-4.8
Others	1,102.0	1,143.0	905.0	827.0	718.0	-13.2
Western Europe	257,812.0	267,474.0	263,289.0	245,950.0	240,184.0	-2.3
Austria	1,770.0	1,910.0	1,370.0	1,247.0	1,233.0	-1.1
Croatia	2,000.0	1,610.0	1,771.0	1,870.0	1,832.0	-2.0
Denmark	6,591.0	5,725.0	4,846.0	4,613.0	4,593.0	-0.4
France	839.0	508.0	323.0	15.0	21.0	40.0
Germany	11,600.0	12,299.0	11,886.0	10,191.0	8,398.0	-17.6
Ireland	356.0	373.0	343.0	151.0	132.0	-12.6
Italy	8,260.0	8,605.0	7,734.0	7,147.0	6,773.0	-5.2
Netherlands	80,574.0	80,145.0	86,401.0	70,190.0	54,375.0	-22.5
Norway	101,420.0	114,055.0	109,040.0	111,014.0	120,589.0	8.6
United Kingdom	43,780.0	40,989.0	38,360.0	38,410.0	41,201.0	7.3
Others	622.0	1,255.0	1,215.0	1,102.0	1,037.0	-5.9
Middle East	555,986.4	590,715.6	621,057.2	627,961.9	655,128.3	4.3
Bahrain	12,620.0	13,740.0	17,220.0	17,564.4	17,757.6	1.1
IR Iran	188,753.0	202,431.0	199,293.0	212,796.0	226,673.0	6.5
Iraq	876.0	646.0	1,179.0	904.4	1,001.9	10.8
Kuwait	13,533.0	15,515.0	16,311.2	15,028.8	16,909.0	12.5

World marketed production of natural gas by country (*m standard cu m*)

	2011	2012	2013	2014	2015	% change 15/14
Middle East (cont'd)						
Oman	28,595.0	31,583.0	32,620.0	30,897.0	31,823.9	3.0
Qatar	145,271.4	157,049.6	177,602.0	174,056.7	178,472.0	2.5
Saudi Arabia	92,260.0	99,330.0	100,030.0	102,380.0	104,450.0	2.0
Syrian Arab Republic	7,870.0	5,800.0	5,300.0	2,650.0	1,855.0	-30.0
United Arab Emirates	52,308.0	54,300.0	54,600.0	54,244.6	60,181.0	10.9
Others	13,900.0	10,321.0	16,902.0	17,440.0	16,005.0	-8.2
Africa	214,012.0	229,483.0	216,368.9	215,420.7	211,146.4	-2.0
Algeria	82,767.0	86,454.0	79,647.3	83,295.6	83,040.7	-0.3
Angola	752.0	760.0	925.0	732.2	772.5	5.5
Egypt	61,260.0	60,717.0	56,181.0	48,791.0	44,328.0	-9.1
Equatorial Guinea	6,880.0	6,370.0	6,550.0	6,160.0	6,555.0	6.4
Côte d'Ivoire	1,500.0	1,650.0	1,996.0	1,996.0	1,998.0	0.1
Libya	7,855.0	18,118.0	18,462.6	16,523.3	15,493.0	-6.2
Mozambique	3,820.0	4,890.0	5,280.0	5,600.0	5,712.0	2.0
Nigeria	41,323.0	42,571.0	38,411.0	43,841.6	45,148.1	3.0
South Africa	3,031.0	3,000.0	3,000.0	2,740.0	2,603.0	-5.0
Tunisia	2,844.0	2,783.0	2,786.0	2,561.0	2,475.0	-3.4
Others	1,980.0	2,170.0	3,130.0	3,180.0	3,021.1	-5.0
Asia Pacific	475,163.5	483,247.7	489,659.1	519,917.0	528,035.9	1.6
Australia	46,970.0	49,940.0	51,690.0	53,771.0	60,223.5	12.0
Bangladesh	20,110.0	22,030.0	22,800.0	23,800.0	25,800.0	8.4
Brunei	12,440.0	11,830.0	12,206.0	11,852.0	12,452.0	5.1
China	102,689.0	106,429.0	111,640.0	128,481.0	133,279.0	3.7
India	47,620.0	41,700.0	35,120.0	34,574.1	32,693.2	-5.4
Indonesia	74,359.0	72,309.0	71,450.0	70,891.0	70,274.0	-0.9
Japan	4,350.0	4,845.0	4,695.0	4,686.0	4,430.0	-5.5
Malaysia	61,700.0	62,000.0	64,000.0	65,421.0	63,433.0	-3.0
Myanmar	12,013.0	11,970.0	13,541.0	18,724.0	19,004.0	1.5
New Zealand	4,374.0	4,646.0	4,866.0	5,177.0	4,975.0	-3.9
Pakistan	39,150.0	41,460.0	42,646.2	41,926.2	42,135.9	0.5
Philippines	3,150.0	2,750.0	3,496.0	3,950.0	3,811.8	-3.5
Thailand	36,975.5	41,306.7	41,802.9	42,102.7	39,818.2	-5.4
Vietnam	7,710.0	8,320.0	8,580.0	8,990.0	9,079.9	1.0
Others	1,553.0	1,712.0	1,126.0	5,571.0	6,626.5	18.9
Total world	3,344,711.3	3,485,601.7	3,532,009.2	3,575,364.3	3,643,701.1	1.9
<i>of which</i>						
OPEC	721,067.4	772,726.6	780,245.8	797,150.1	828,916.3	4.0
<i>OPEC percentage</i>	<i>21.6</i>	<i>22.2</i>	<i>22.1</i>	<i>22.3</i>	<i>22.7</i>	
OECD	1,185,312.0	1,229,131.0	1,227,560.0	1,259,467.0	1,295,545.5	2.9
FSU	801,482.0	836,660.0	859,715.0	834,549.8	832,863.5	-0.2

Table 8.4**Natural gas data**World natural gas exports by country (*m standard cu m*)

	2011	2012	2013	2014	2015	% change 15/14
North America	130,891.0	134,129.0	126,372.0	121,318.0	128,133.0	5.6
Canada	88,210.0	88,290.0	81,931.0	77,968.0	78,253.0	0.4
United States	42,681.0	45,839.0	44,441.0	43,350.0	49,880.0	15.1
Latin America	38,980.0	39,496.0	42,227.0	41,538.6	41,037.2	-1.2
Argentina	200.0	106.0	87.0	63.0	62.0	-1.6
Bolivia	13,320.0	14,720.0	17,110.0	17,802.0	17,597.0	-1.2
Colombia	2,110.0	1,840.0	2,100.0	950.0	950.0	-
Mexico	80.0	10.0	30.0	30.0	30.0	-
Trinidad & Tobago	17,630.0	17,730.0	17,720.0	17,410.0	17,061.8	-2.0
Others	5,640.0	5,090.0	5,180.0	5,283.6	5,336.4	1.0
Eastern Europe and Eurasia	295,680.0	267,080.0	293,209.0	273,456.0	276,369.6	1.1
Azerbaijan	5,610.0	6,100.0	7,009.0	8,066.0	8,140.0	0.9
Kazakhstan	11,240.0	11,030.0	11,400.0	11,860.0	11,978.6	1.0
Russia	231,590.0	203,940.0	218,730.0	192,930.0	196,016.9	1.6
Turkmenistan	35,240.0	35,810.0	41,270.0	45,850.0	45,804.2	-0.1
Uzbekistan	12,000.0	10,200.0	13,500.0	13,500.0	13,230.0	-2.0
Others	0.0	0.0	1,300.0	1,250.0	1,200.0	-4.0
Western Europe	200,863.0	218,165.0	220,809.0	224,079.1	226,867.0	1.2
Austria	4,704.0	3,629.0	4,034.0	3,630.6	3,634.2	0.1
Belgium	9,350.0	9,540.0	13,060.0	13,025.0	13,038.0	0.1
Denmark	3,127.0	2,983.0	2,236.0	2,085.0	2,191.0	5.1
France	6,483.0	5,994.0	5,027.0	4,810.0	4,858.1	1.0
Germany	11,520.0	12,240.0	13,890.0	17,362.5	18,230.6	5.0
Italy	373.0	324.0	226.0	237.0	220.0	-7.2
Netherlands	50,410.0	54,510.0	59,500.0	58,661.0	50,962.0	-13.1
Norway	95,077.0	111,928.0	106,596.0	106,759.0	114,221.0	7.0
Spain	3,098.0	4,414.0	5,832.0	6,032.0	5,047.0	-16.3
United Kingdom	15,960.0	11,971.0	9,754.0	10,844.0	13,841.0	27.6
Others	761.0	632.0	654.0	633.0	624.0	-1.4
Middle East	155,115.0	155,940.0	165,481.0	163,998.3	164,504.9	0.3
IR Iran	9,114.0	9,152.0	9,307.0	8,360.0	8,541.0	2.2
Oman	10,930.0	10,870.0	11,400.0	10,830.0	10,721.7	-1.0
Qatar	113,551.0	115,668.0	122,874.0	122,628.3	129,877.2	5.9
United Arab Emirates	12,770.0	13,420.0	12,590.0	13,520.0	13,200.0	-2.4
Yemen	8,750.0	6,830.0	9,310.0	8,660.0	2,165.0	-75.0
Africa	100,704.0	104,975.0	92,147.0	89,437.0	85,769.4	-4.1
Algeria	52,017.0	54,594.0	46,708.0	44,190.0	43,418.7	-1.7
Angola	-	-	517.0	-	-	-
Egypt	10,520.0	7,570.0	6,056.0	5,147.6	2,573.8	-50.0
Equatorial Guinea	5,260.0	4,720.0	5,090.0	4,560.0	4,514.4	-1.0
Libya	3,666.0	6,225.0	5,513.0	4,961.7	4,664.0	-6.0
Mozambique	3,300.0	3,600.0	3,720.0	3,800.0	3,895.0	2.5
Nigeria	25,941.0	28,266.0	24,543.0	26,777.7	26,703.5	-0.3
Asia and Pacific	114,595.0	110,381.0	114,264.0	117,139.6	124,112.6	6.0
Australia	25,240.0	27,410.0	29,550.0	32,390.0	36,936.0	14.0
Brunei	9,420.0	8,880.0	9,240.0	8,003.0	8,310.0	3.8
Indonesia	38,795.0	32,821.0	31,384.0	29,647.0	29,213.0	-1.5
Malaysia	32,570.0	32,800.0	35,400.0	35,399.6	35,753.6	1.0
Myanmar	8,570.0	8,470.0	8,690.0	11,700.0	13,900.0	18.8
Total world	1,036,828.0	1,030,166.0	1,054,509.0	1,030,966.6	1,046,793.8	1.5
<i>of which</i>						
OPEC	255,854.0	260,146.0	253,436.0	250,084.6	255,617.4	2.2
<i>OPEC percentage</i>	<i>24.7</i>	<i>25.3</i>	<i>24.0</i>	<i>24.3</i>	<i>24.4</i>	
OECD	357,074.0	379,714.0	376,761.0	377,817.1	391,966.0	3.7
FSU	295,680.0	267,080.0	291,909.0	272,206.0	275,169.6	1.1

World natural gas imports by country (*m standard cu m*)

	2011	2012	2013	2014	2015	% change 15/14
North America	127,975	118,033	108,349	98,218	98,648	0.4
Canada	29,740	29,180	26,699	21,890	20,796	-5.0
United States	98,235	88,853	81,650	76,328	77,852	2.0
Latin America	43,529	52,664	54,988	57,004	56,868	-0.2
Argentina	7,560	8,700	11,200	11,312	11,425	1.0
Brazil	10,480	13,730	16,770	17,530	18,144	3.5
Chile	3,920	3,830	3,778	3,715	3,742	0.7
Mexico	18,060	21,827	18,529	19,698	20,084	2.0
Venezuela	1,797	1,877	1,821	1,839	500	-72.8
Others	1,712	2,700	2,890	2,910	2,973	2.2
Eastern Europe and Eurasia	155,380	139,400	131,390	120,170	110,130	-8.4
Armenia	1,950	2,070	1,960	2,080	2,120	1.9
Belarus	21,850	20,252	20,260	20,052	18,790	-6.3
Bulgaria	2,640	2,370	2,590	2,600	2,613	0.5
Czech Republic	11,280	10,220	9,970	8,000	8,200	2.5
Hungary	6,910	6,060	6,130	7,100	5,500	-22.5
Kazakhstan	6,590	6,200	6,501	6,696	6,770	1.1
Latvia	1,550	1,050	1,060	940	931	-1.0
Lithuania	3,000	3,110	2,530	2,490	2,540	2.0
Moldova	2,910	2,910	2,250	2,630	2,656	1.0
Poland	11,170	11,270	12,690	12,424	10,900	-12.3
Romania	2,650	2,040	1,300	1,040	728	-30.0
Russia	33,110	33,770	28,010	27,730	24,957	-10.0
Slovakia	5,830	5,030	5,080	4,100	4,000	-2.4
Tajikistan	180	188	198	306	306	-
Ukraine	42,000	30,890	28,023	19,133	16,263	-15.0
Others	1,760	1,970	2,838	2,850	2,857	0.2
Western Europe	420,478	414,350	412,623	403,145	422,834	4.9
Austria	9,780	7,810	6,390	7,800	6,000	-23.1
Belgium	29,920	28,580	31,850	28,500	34,100	19.6
Bosnia & Herzegovina	260	240	240	240	240	-
Croatia	820	1,280	1,370	1,040	1,044	0.4
Finland	3,940	3,661	3,340	2,910	2,907	-0.1
France	47,400	44,940	47,990	44,250	44,648	0.9
Germany	89,310	90,530	92,550	98,103	100,300	2.2
Greece	4,640	4,340	3,700	2,928	3,161	8.0
Ireland	5,290	5,290	4,880	4,500	4,600	2.2
Italy	69,930	67,802	61,953	55,758	58,200	4.4
Luxembourg	1,250	1,206	1,028	973	877	-9.9

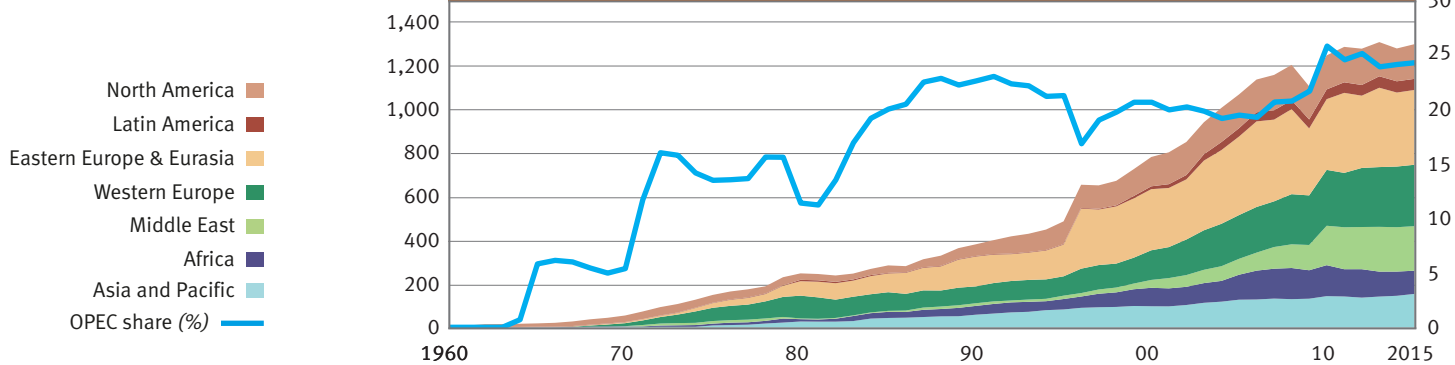
Table 8.5

Natural gas data

World natural gas imports by country (*m standard cu m*)

	2011	2012	2013	2014	2015	% change 15/14
Western Europe (cont'd)						
Netherlands	14,300	15,390	15,560	15,900	25,000	57.2
Portugal	5,120	4,610	4,840	4,200	5,000	19.0
Serbia	1,850	2,240	2,195	1,900	1,815	-4.5
Spain	35,520	36,754	35,399	36,383	36,274	-0.3
Sweden	1,300	1,130	1,120	1,000	1,030	3.0
Switzerland	3,190	3,420	3,650	3,240	3,381	4.4
Turkey	42,560	44,300	43,710	49,043	48,062	-2.0
United Kingdom	52,838	49,100	48,944	43,405	45,087	3.9
Others	1,260	1,727	1,914	1,072	1,109	3.5
Middle East	44,674	38,819	41,823	36,619	44,260	20.9
IR Iran	11,659	6,720	5,329	4,422	9,015	103.9
Jordan	830	810	1,180	1,197	2,200	83.8
Kuwait	688	688	3,517	3,025	3,852	27.3
Oman	1,950	1,950	1,950	1,970	1,988	0.9
Syrian Arab Republic	552	350	250	125	25	-80.0
United Arab Emirates	28,275	28,201	29,047	25,800	27,100	5.0
Others	720	100	550	80	80	-
Africa	6,296	6,580	6,990	7,620	11,464	50.4
Morocco	786	660	580	500	500	-
South Africa	3,300	3,600	3,720	3,800	3,804	0.1
Tunisia	1,380	1,890	2,260	2,890	2,930	1.4
Others	830	430	430	430	4,230	883.6
Asia and Pacific	241,180	272,823	295,569	300,356	299,788	-0.2
China	30,490	39,700	51,800	55,944	59,169	5.8
India	16,390	17,920	17,380	17,378	18,536	6.7
Japan	104,000	122,243	122,489	123,908	122,190	-1.4
South Korea	48,780	48,120	52,980	49,400	44,400	-10.1
Thailand	9,580	9,760	10,360	10,500	10,941	4.2
Others	31,940	35,080	40,560	43,226	44,552	3.1
Total world	1,039,513	1,042,669	1,051,732	1,023,132	1,043,992	2.0
<i>of which</i>						
OPEC	42,419	37,486	39,714	35,086	40,467	15.3
<i>OPEC percentage</i>	<i>4.1</i>	<i>3.6</i>	<i>3.8</i>	<i>3.4</i>	<i>3.9</i>	
OECD	751,293	753,422	745,601	723,698	734,516	1.5
FSU	114,900	102,410	93,630	84,907	78,189	-7.9

Graph 8.5: World natural gas exports
(bn standard cu m)



Graph 8.6: World natural gas imports
(bn standard cu m)

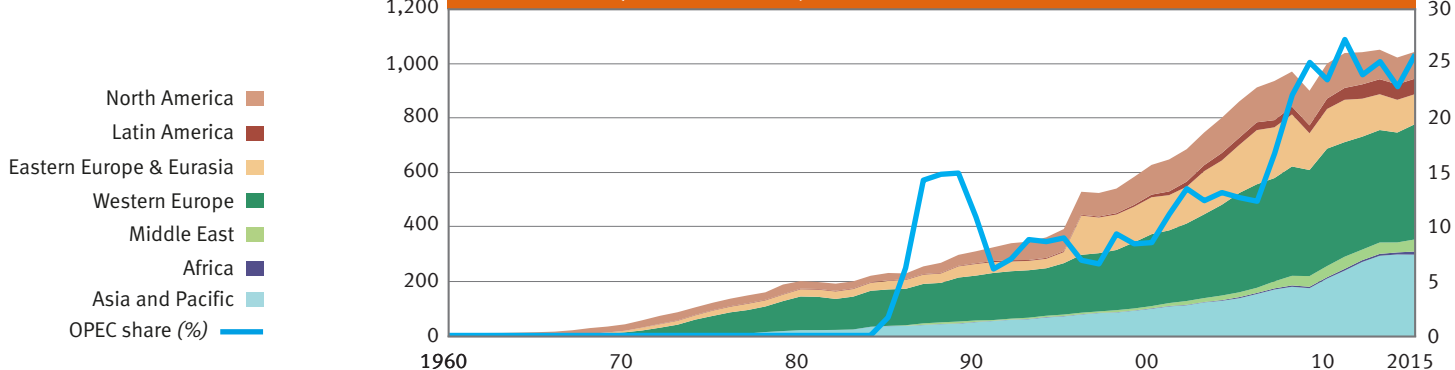


Table 8.6**Natural gas data**World natural gas demand by country (*m standard cu m*)

	2011	2012	2013	2014	2015	% change 15/14
North America	779,585.3	823,542.4	844,598.8	860,514.0	882,342.0	2.5
Canada	86,382.2	100,291.2	103,505.7	104,510.0	104,396.0	-0.1
United States	693,203.1	723,251.2	741,093.2	756,004.0	777,946.0	2.9
Latin America	209,255.6	217,142.7	220,884.2	236,199.6	237,191.8	0.4
Argentina	46,136.5	46,246.5	47,996.8	49,876.0	51,372.3	3.0
Bolivia	2,470.3	3,700.5	3,200.5	4,430.0	4,562.9	3.0
Brazil	25,063.5	30,338.3	38,405.4	41,744.0	43,831.2	5.0
Colombia	8,841.3	7,661.1	7,610.1	7,914.5	8,310.2	5.0
Ecuador	241.0	517.0	515.0	577.9	496.9	-14.0
Mexico	66,735.4	68,580.7	64,589.1	70,169.0	66,040.0	-5.9
Peru	5,710.8	6,610.9	5,900.8	7,350.0	7,570.5	3.0
Trinidad & Tobago	22,973.3	20,002.8	20,202.9	21,763.0	22,045.9	1.3
Venezuela	22,569.2	24,606.5	23,643.3	23,720.4	24,076.2	1.5
Others	8,514.2	8,878.3	8,820.2	8,654.8	8,885.7	2.7
Eastern Europe and Eurasia	684,269.2	688,456.5	678,302.6	644,682.1	651,839.6	1.1
Azerbaijan	9,509.3	7,431.1	10,911.5	11,158.0	11,575.0	3.7
Hungary	11,558.6	10,149.4	9,284.0	8,522.0	9,126.0	7.1
Kazakhstan	12,351.7	14,452.0	15,702.2	15,545.2	15,700.7	1.0
Poland	17,180.4	18,116.6	18,231.6	17,835.0	18,196.0	2.0
Romania	13,771.9	13,477.9	12,599.0	11,544.0	11,471.0	-0.6
Russia	434,099.4	444,943.0	441,772.5	409,257.9	415,396.8	1.5
Turkmenistan	20,102.8	23,003.3	24,003.4	34,200.0	35,294.4	3.2
Ukraine	64,609.1	52,707.5	49,000.0	41,618.0	39,537.1	-5.0
Uzbekistan	51,047.2	52,717.5	46,136.5	48,031.0	48,271.2	0.5
Others	50,038.5	51,458.3	50,661.7	46,971.0	47,271.4	0.6
Western Europe	484,249.9	470,100.9	465,474.2	420,345.4	435,503.4	3.6
Austria	9,448.3	9,034.3	8,529.2	7,752.0	8,334.0	7.5
Croatia	2,324.3	2,890.4	2,900.4	2,343.0	2,471.9	5.5
Denmark	4,182.6	3,893.6	3,721.5	3,159.0	3,170.0	0.3
France	47,296.7	43,131.1	43,774.2	36,279.0	38,788.0	6.9
Germany	86,009.2	84,996.0	88,457.5	77,611.0	81,292.0	4.7
Ireland	4,835.7	4,735.7	4,770.7	4,417.0	4,397.0	-0.5
Italy	77,928.0	74,925.6	70,078.9	61,912.0	67,524.0	9.1
Netherlands	47,887.8	46,057.5	46,365.6	40,605.0	40,136.0	-1.2
Norway	4,560.0	4,340.0	5,150.0	5,970.0	6,268.5	5.0
United Kingdom	80,671.4	77,940.0	77,454.0	70,809.0	72,250.0	2.0
Others	119,105.9	118,156.7	114,272.2	109,488.4	110,872.0	1.3
Middle East	399,020.0	417,446.1	435,538.5	456,308.0	472,103.7	3.5
Bahrain	12,621.8	13,301.9	15,702.2	16,010.0	16,186.1	1.1
IR Iran	153,361.7	157,291.3	157,337.3	174,600.0	184,900.0	5.9
Iraq	880.1	646.1	1,179.2	900.0	1,001.9	11.3

World natural gas demand by country (*m standard cu m*)

	2011	2012	2013	2014	2015	% change 15/14
Middle East (cont'd)						
Kuwait	16,995.4	16,205.3	16,884.4	18,490.0	18,656.4	0.9
Oman	17,542.5	22,606.2	21,923.1	22,654.0	23,356.3	3.1
Qatar	27,413.4	32,453.6	41,120.0	40,500.0	38,400.0	-5.2
Saudi Arabia	92,273.1	99,344.1	100,030.0	102,380.0	104,450.0	2.0
Syrian Arab Republic	8,121.1	6,150.9	5,650.8	4,900.0	3,185.0	-35.0
United Arab Emirates	62,896.9	65,329.2	66,699.4	66,500.0	72,700.0	9.3
Others	6,914.0	4,117.6	9,012.1	9,374.0	9,268.1	-1.1
Africa	110,694.6	127,206.9	131,190.7	129,146.5	129,864.6	0.6
Algeria	32,881.7	36,295.1	36,655.2	37,497.8	39,018.5	4.1
Angola	752.0	760.0	925.0	732.2	772.5	5.5
Egypt	50,757.2	53,147.5	52,727.5	48,080.0	47,118.4	-2.0
Equatorial Guinea	1,620.2	1,780.3	1,490.2	1,600.0	1,601.6	0.1
Cote d'Ivoire	1,500.2	1,780.3	1,780.3	1,900.0	1,938.0	2.0
Libya	5,435.8	5,730.8	6,487.9	5,940.0	5,934.1	-0.1
Mozambique	520.1	97.0	191.0	191.0	191.0	-
Nigeria	5,400.8	14,307.0	15,693.2	18,370.4	18,444.6	0.4
South Africa	4,580.6	4,941.7	4,889.7	4,210.0	4,420.5	5.0
Tunisia	3,310.5	3,760.5	5,318.0	5,423.0	5,191.0	-4.3
Others	3,935.6	4,606.7	5,032.7	5,202.1	5,234.5	0.6
Asia Pacific	616,407.4	639,469.9	658,539.4	680,644.4	682,482.2	0.3
Australia	25,028.0	23,541.0	23,073.0	27,663.0	25,450.0	-8.0
Bangladesh	20,112.8	22,033.1	22,863.2	23,622.0	23,645.6	0.1
Brunei	3,020.4	2,950.4	2,970.4	3,888.0	4,033.0	3.7
China	130,940.5	143,696.3	163,130.1	180,461.6	185,875.4	3.0
India	64,019.1	58,908.3	51,607.3	50,607.2	52,884.5	4.5
Indonesia	37,380.0	39,020.0	42,180.0	41,760.0	40,600.0	-2.8
Japan	126,375.9	126,647.9	127,226.0	124,158.0	122,745.0	-1.1
Malaysia	30,624.3	31,574.5	31,864.5	34,930.0	34,895.1	-0.1
Myanmar	3,340.5	3,530.5	3,048.0	3,540.0	3,717.0	5.0
New Zealand	4,326.6	4,641.7	4,718.7	5,251.0	5,021.0	-4.4
Pakistan	39,155.5	41,265.8	39,975.7	39,070.0	39,550.6	1.2
South Korea	46,466.6	50,791.2	53,162.5	47,587.0	42,960.0	-9.7
Thailand	46,576.6	51,126.9	52,274.3	52,698.1	52,863.5	0.3
Vietnam	7,711.1	8,401.2	8,801.2	11,013.0	11,165.0	1.4
Others	31,329.4	31,341.0	31,644.4	34,395.6	37,076.6	7.8
Total world	3,283,482.0	3,383,365.4	3,434,528.3	3,427,840.1	3,491,327.3	1.9
<i>of which</i>						
OPEC	458,481.0	492,506.0	509,350.0	531,968.7	549,450.9	3.3
<i>OPEC percentage</i>	<i>14.0</i>	<i>14.6</i>	<i>14.8</i>	<i>15.5</i>	<i>15.7</i>	
OECD	1,581,761.7	1,611,992.1	1,631,532.9	1,601,717.5	1,628,047.5	1.6
FSU	624,169.6	629,278.1	620,216.4	591,965.0	596,866.6	0.8

Table 8.7

Natural gas data

LNG carrier fleet in OPEC Members (1,000 cu m)

	2011		2012		2013		2014		2015	
	no	capacity	no	capacity	no	capacity	no	capacity	no	capacity
Algeria	9	1,067	9	1,057	9	1,073	9	1,073	9	1,073
Angola	3	249	3	263	3	263	3	263	3	249
Ecuador	–	–	–	–	–	–	–	–	–	–
Indonesia	4	424	4	424	4	424	4	424	4	424
IR Iran	–	–	–	–	–	–	–	–	–	–
Iraq	–	–	–	–	–	–	–	–	–	–
Kuwait	–	–	–	–	–	–	–	–	–	–
Libya	–	–	–	–	–	–	–	–	–	–
Nigeria	24	3,346	24	3,346	24	3,346	13	1,738	5	767
Qatar	29	5,610	29	5,610	29	5,610	29	5,610	29	5,610
Saudi Arabia	–	–	–	–	–	–	–	–	–	–
United Arab Emirates	8	1,096	8	1,096	8	1,096	8	1,096	8	1,096
Venezuela	–	–	–	–	–	–	–	–	–	–
OPEC	77	11,792	77	11,796	77	11,812	66	10,204	58	9,220
Total world	357	51,683	360	52,006	378	54,545	410	59,699	443	64,573
<i>OPEC percentage</i>		<i>22.8</i>		<i>22.7</i>		<i>21.7</i>		<i>17.1</i>		<i>14.3</i>

Notes:

Figures as at year-end.

Table 8.8

World LNG carrier fleet by size and type (1,000 cu m)

	2011		2012		2013		2014		2015	
	no	capacity	no	capacity	no	capacity	no	capacity	no	capacity
up to 19,999	20	183	21	199	23	208	23	208	23	208
20,000–39,999	1	23	1	23	1	23	1	23	5	137
40,000–59,999	–	–	–	–	–	–	–	–	–	–
60,000–99,999	9	684	9	684	9	684	9	684	9	684
100,000 and over	327	50,792	329	51,100	345	53,630	377	58,784	406	63,544
Total world	357	51,683	360	52,006	378	54,545	410	59,699	443	64,573

Notes:

Figures as at year-end.

Main gas pipelines in OPEC Members, 2015

Connection from/to	Owner or operator	Length (miles)	Diameter (inches)
Algeria			
Alrar/Hassi R'Mel (3)	Sonatrach	2 x 597, 330	2 x 42, 48
Hassi R'Mel/Skikda – El Kala	Sonatrach	433	48
Hassi R'Mel/Skikda (2)	Sonatrach	2 x 357	2 x 42
Hassi R'Mel/O-Safsaf	Sonatrach	—	48
Hassi R'Mel/El Aricha	Sonatrach	324	48
Hassi R'Mel/Arzew - Beni Saf	Sonatrach	321	48
Hassi R'Mel/Arzew (4)	Sonatrach	315, 316, 2 x 318	2 x 40, 24/22, 42
Hassi R'Mel/Arzew – Beni Saf	Sonatrach	272	42
Angola			
Segmetnt A/NB-S WYE	Chevron	20	20
Segment B/NB-S WYE	Chevron	39	22
TL/NB-S WYE	Chevron	19	14
AOKA-PLTG58306/NB-S WYE	Esso	62	18
EL-2/NB-S WYE	Total	42	16
FG451/NB-S WYE	Total	20	12
PLEM 3 A/PLEM 2A	Total	27	24
PLEM 2A/Tie in Point in 20m WD	Total	45	24
Linha de Transporte de Gas/Tie in Point in 20m WD	BP	44	12
Ecuador			
Amistad Platform (Offshore)/Bajo Alto	Petroamazonas EP	44	13
Indonesia			
Arun/Belawan	PT Pertamina	211	24
Balongan/Kandang Haur Timur	PT Pertamina	21	14
Beringin/Limau Timur	PT Pertamina	17	10
Betung/Prabumulih	PT Pertamina	26	20
Bitung/Cilegon	PT Pertamina	46	24
Cambai/Simpang Y	PT Pertamina	36	14, 2 x 20
Cilamaya/Citarik	PT Pertamina	13	18, 24
Citarik/Tegal Gede	PT Pertamina	28	24, 32
Grissik/Duri	TGI (PT PGN Subsidiary)	333	28
Grissik/Pagardewa	PT PGN	122	36
Grissik/Singapore	TGI (PT PGN Subsidiary)	292	28
Kandang Haur Timur/Cilamaya	PT Pertamina	37	14, 18
KIM/KEK Sei Mangke	PT Pertamina	86	12
Lembak/Simpang Y	PT Pertamina	31	14
Nagrak/Bitung	PT Pertamina	32	24
ORF Porong/Gresik	PT Pertamina	33	28
P Brandan/Wampu	PT Pertamina	32	12, 18

Table 8.9

Natural gas data

Main gas pipelines in OPEC Members, 2015

Connection from/to	Owner or operator	Length (miles)	Diameter (inches)
Indonesia (cont'd)			
Pagardewa/Bojonegara	PT PGN	230	32
Pagardewa/Muara Bekasi	PT PGN	268	32
Pagerungan/ORF Porong	PT Pertamina	230	28
Rambutan/Betung	PT Pertamina	13	16
Simpang Y/PUSRI	PT Pertamina	18	12, 14
SKG Mundu/PLTG Mundu Sunyaragi	PT Pertamina	20	8
Tegal Gede/Nagrak	PT Pertamina	17	24
Teras/Rambutan	PT Pertamina	14	14
Tj. Santan/SKG Bontang	PT Pertamina	25	16
Wampu/Belawan	PT PGN	19	16
IR Iran			
Asaluyeh/Lushan	NIGC	734	33
Asaluyeh/Aghajari	NIGC	313	56
Asaluyeh/Bid Boland	NIGC	306	56
Asaluyeh/Iranshahr	NIGC	560	56
Asaluyeh/Naeen	NIGC	489	56
Asaluyeh/Saveh	NIGC	712	56
Bid Boland/Qom/Qazvin/Rasht/Astara	NIGC	685	42/40
Kangan/Gazvin	NIGC	646	56
Kangan/Pataveh	NIGC	262	56
Saveh/Miandoab	NIGC	292	40, 48
Tehran/Dasht-e-Shad	NIGC	327	42, 48
Iraq			
AGP connection/Hilla-2 PWR St	OPC	25	24
Al-Ahdeb/Al-Zubaydia PWR St	OPC	73	16
Baiji/Al-Mashriq	OPC	131	18
Baiji/Al-Qaiem	OPC	268	16
Khor Al-Zubair/Hartha PWR St	OPC	48	24
Kirkuk/Baiji	OPC	90	24
Kirkuk/North Oil	OPC	21	18
Kirkuk/Taji	OPC	272	16
Mishraq cross road/Mousil PWR St	OPC	38	12
North Rumaila/Khor Al-Zubair	OPC	54	42
Rumaila/Nasiriyaha PWR St	OPC	134	24
Strategic Pipeline/Al-Najaf PWR St	OPC	23	16
Strategic Pipeline/Hilla PWR St	OPC	45	16
Strategic Pipeline/Kabesa Cement	OPC	24	10
Taji/South Baghdad PWR St	OPC	35	18

Main gas pipelines in OPEC Members, 2015

Connection from/to	Owner or operator	Length (miles)	Diameter (inches)
Iraq (cont'd)			
Trans-Iraqi dry gas pipeline/Daura PWR St	OPC	29	18
Trans-Iraqi dry gas pipeline/Najaf PWR St	OPC	74	24
Kuwait			
Khafji offshore/Khafji onshore (2)	KJO	68	12, 42
Wafa/KOC booster station ²	WJO	38	18
Libya			
Brega/Al Khums	Sirte Oil	399.9	34
Mellitah/Gela (Italy)	Green Stream	335	32
Wafa/Mellitah (2)	Mellitha Oil & Gas	2 x 326	16, 32
Brega/Benghazi	Sirte Oil	152.52	34
Intisar/Zueitina	Zueitina	136.4	20
Intisar/Brega ¹	Zueitina	129	42
Nasser/Brega	Sirte Oil	107	36
Bu Attifel/Intisar (2)	Mellitha Oil & Gas, Eni Oil	2 x 82	34, 10
Tripoli/Mellitah ¹	Sirte Oil	71	34
Faregh/Intisar	Waha	68	24
Waha/Nasser	Waha	68	24
Al Khums/Tripoli ¹	Sirte Oil	68	34
Bahr es Salam/Mellitah (2)	Mellitha Oil & Gas	2 x 68	10, 36
Nasser/KM-81.5	Sirte Oil	57	30
KM-91.5/Brega (2)	Sirte Oil	2 x 57	16, 36
Raguba/KM-110	Sirte Oil	55	20
KM-81.5/Brega	Sirte Oil	51	30
Jakhira/Intisar (2)	Wintershall	2 x 50	8, 20
Intisar/Sahl	Sirte Oil	50	30
Sahl/KM-81.5	Sirte Oil	30	30
Attahaddy/KM-91.5 (2)	Sirte Oil	2 x 16	12, 30
Bouri offshore/Bahr Es Salam (2)	Mellitha Oil & Gas	2 x 12	4, 10
Nigeria			
Ajaokuta/Obajana	Nigerian Gas Company	56	18
Aladja pipeline system/Aladja	Nigerian Gas Company	65	6, 8, 14, 16
Alagbado/Ewekoro (WAPCO)	Nigerian Gas Company	17	6
Alagbado/Ota-Agbara distribution (SNG)	Nigerian Gas Company	25	24
Alagbado/Ota-Agbara distribution (SNG)	Nigerian Gas Company	25	24
Alakiri/Ikot-Abasi (ALSCON)	Nigerian Gas Company	73	24
Escravos/WGTP	Nigerian Gas Company	36	36
Ewekoro node/Abeokuta (GDZ)	Nigerian Gas Company	20	18
Ikpe Anang/EHGC (UNICEM)	Nigerian Gas Company	67	24

Table 8.9

Natural gas data

Main gas pipelines in OPEC Members, 2015

Connection from/to	Owner or operator	Length (miles)	Diameter (inches)
Nigeria (cont'd)			
Imo River/Aba (SPDC)	Nigerian Gas Company	20	12
Int Scrapper station/Ikot-Abasi (ALSCON)	Nigerian Gas Company	23	24
Kew Metal/Ogijo	Nigerian Gas Company	63	6
KP 331/Itoki	Nigerian Gas Company	25	24
Oben/Ajaokuta	Nigerian Gas Company	123	24
Oben/Geregu (PHCN)	Nigerian Gas Company	123	20/24
Oben/Sapele (PHCN)	Nigerian Gas Company	22	18
Obiafu gas plant (GTS-1)/Ubeta node (GTS-1)	Nigerian LNG Ltd	18	24
PS 4 (Itoki)/Ibese	Nigerian Gas Company	21	18
Rumuji Node (GTS-1)/NLNG Bonny	Nigerian LNG Ltd	53	36
Soku Gas Plant (GTS-1)/Rumuji node (GTS-1)	Nigerian LNG Ltd	25	28
Ubeta node (GTS-1)/Rumuju node (GTS-1)	Nigerian LNG Ltd	21	28
Utorogu/Ughelli (PHCN)	Nigerian Gas Company	22	1
Warri/Egbin node (PS4)	Nigerian Gas Company	214	30
WGTP/WRPC	Nigerian Gas Company	36	36
Qatar			
BRZ-WHPs/Ras Laffan landfall	BRZ	84	32
DOL-1/Ras Laffan landfall	Dolphin/Del	82	36
NF B-PU/Ras Laffan landfall	Qatar Gas	78	32
PEARL-1/Ras Laffan landfall	Shell	58	30
PS-2 Offshore/PS-1 offshore	QP	20	6
PS-3 Offshore/PS-1 offshore	QP	37	10
PS-4/Ras Laffan Landfall (2)	QP	2 x 77	12, 34
Qatargas (-4, -6, -7, -8)/Ras Laffan landfall	Qatar Gas	3 x 73, 91	3 x 38, 34
Ras Laffan/Mesaieed	QP	135	20
Ras Laffan/NFGP (2)	QP	2 x 137	12, 34
Ras Laffan/United Arab Emirates	Dolphin/DEL	363	48
Ras Laffan: Station V/Station S (2)	QP	2 x 124	2 x 36
Ras Laffan: Station V/Station T3	QP	87	36
Rasgas (-4, -6, -7, -8)/Ras Laffan landfall	Ras Gas	4 x 98	4 x 38
RG-A/Ras Laffan landfall	Ras Gas	90	32
Saudi Arabia			
Abqaiq/Yanbu	Saudi Aramco	741	48
UBTG-1/Berri (2)	Saudi Aramco	2 x 155	56, 36/38/40/42
UBTG-1/AY-1 KP 916	Saudi Aramco	152	56
UBTG-1/Ju'aymah	Saudi Aramco	127	28/30/38/40
Safaniya/Ju'aymah	Saudi Aramco	123	40
AY-1 KP 943/Riyadh	Saudi Aramco	95	48

Main gas pipelines in OPEC Members, 2015

Connection from/to	Owner or operator	Length (miles)	Diameter (inches)
Saudi Arabia (cont'd)			
Tanajib/Berri	Saudi Aramco	90	30
Abqaiq/Berri	Saudi Aramco	85	24/36
Haradh/Uthmaniya (2)	Saudi Aramco	77, 87	24/32, 48
UA-1/Uthmaniya	Saudi Aramco	62	24/32
Hawiyah/UBTG-1	Saudi Aramco	35	56
Ju'aymah/Jubail	Saudi Aramco	35	30/38/40
Abqaiq/Shedgum	Saudi Aramco	33	42
Waqr/Haradh	Saudi Aramco	31	30
Hawiyah/Uthmaniyah	Saudi Aramco	29	32
Qatif North/Berri	Saudi Aramco	28	32
Tinat/Haradh	Saudi Aramco	27	20
Haradh/Hawiyah (3)	Saudi Aramco	3 x 27	30
Aindar/Shedgum	Saudi Aramco	21	12
Depco/Abqaiq	Saudi Aramco	20	40
United Arab Emirates			
ABK/USCC	ABK	26	30
Al Ain/Fujirah	Dolphin	108	24
Maqtaa/Jebal Ali	Dolphin	70	48
Maqtaa/Oman	Dolphin	93	30
Maqtaa/Taweelah	Dolphin	31	36
Mubarraz field/Mubarraz terminal	ADOC	22	14
TABK/Umm Shaif field	ADMA OPCO/TABK	27	30
Taweelah/Fujirah	Dolphin	152	48
Umm Shaif Field/Das Island (2)	ADMA OPCO	22, 24	2 x 46
Zakum field/Umm Shaif field	ADMA OPCO	40	18
Zirku Island/Das Island (2)	ADMA OPCO/ZADCO	2 x 27	2 x 10
Venezuela			
Anaco/Barquisimeto	PDVSA	1,453	8, 10, 12, 16, 20, 26, 30, 36
Anaco/Puerto La Cruz, Margarita	PDVSA	364	12, 16, 20, 26, 36
Anaco/Puerto Ordaz	PDVSA	484	16, 20, 26, 36
Compressor plant Orocuai/Plant Jusepin	PDVSA	15	16
ICO Pipeline	PDVSA	164	30/36
Mulata/Sota St	PDVSA	72	26
Quiriquire/Jusepin	PDVSA	32	20
San Genaro de Boconoito/Obispo	PDVSA	27	12
Santa Barbara/Aguasay	PDVSA	41	36
SUA pipeline	PDVSA	222	16/20
Trans-Caribbean pipeline	PDVSA	126	26

Notes:

1. Under construction.
 2. Pipeline length is estimated.
- .../... — Pipeline with changing diameter.



General notes

Definitions

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

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

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

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

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

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

Distillates: middle distillate type 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 Euro, the Japanese yen, the UK pound 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 and 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 (eg Orimulsion), non-hydrocarbon compounds added to or blended with a product to modify fuel properties (octane, cetane, cold properties, etc) of substances like alcohols (methanol, ethanol), ethers (such as MTBE (methyl tertiary butyl ether), ETBE (ethyl tertiary butyl ether), TAME (tertiary amyl methyl ether) or esters (eg rapeseed or dimethylester, etc) and chemical compounds such as TML (tetramethyl lead) or TEL (tetraethyl lead) and detergents.

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

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

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

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

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

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

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

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

Refinery capacity (charge): the input (feed) capacity of the 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 to 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. These are 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.)

North America: Canada, Greenland, St Pierre and Miquelon, United States.

Latin America: Antigua, Argentina, Bahamas, Barbados, Belize, Bermuda, Bolivia, Brazil, British Virgin Islands, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, **Ecuador**, El Salvador, French Guiana, Grenada, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Montserrat, Nicaragua, Panama (including Panama Canal Zone), Paraguay, Peru, Puerto Rico, St Kitts-Nevis-Anguilla, St Lucia, St Vincent, Suriname, Trinidad & Tobago, Turks and Caicos Islands, United States Virgin Islands, Uruguay, **Venezuela** and Other Latin America.

Eastern Europe and Eurasia: Albania, Armenia, Azerbaijan, Belarus, Bulgaria, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovakia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Western Europe: Austria, Belgium, Bosnia and Herzegovina, Cyprus, Croatia, Denmark (including Faroe Islands), Finland, France (including Andorra and Monaco), Germany, Gibraltar, Greece, Iceland, Ireland, Italy (including San Marino and the Holy See), Luxembourg, Malta, Montenegro, Netherlands, Norway (including Svalbard and Jan Mayen Islands), Portugal, Serbia, Slovenia, Spain (including Canary Islands), Sweden, Switzerland (including Liechtenstein), Former Yugoslav Republic of Macedonia, Turkey, and United Kingdom.

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

Africa: **Algeria**, **Angola**, Benin, Botswana, British Indian Ocean Territory, Burkina Faso, Burundi, Cameroon (United Republic of), Cape Verde, Central African Republic, Chad, Comoros, Congo (Republic of the), Congo (Democratic Republic of the), Djibouti, Egypt, Equatorial Guinea, Eritrea, 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), Swaziland, Tanzania, Togo, Tunisia, Uganda, Western Sahara, Zambia and Zimbabwe.

Asia and Pacific: Afghanistan, American Samoa, Antarctica, Australia, Bangladesh, Bhutan, Brunei, Cambodia, Canton and Enderbury Islands, People's Republic of China (PRC), Hong Kong Special Administrative Regions (SAR of the PRC), Macau SAR of the PRC, Christmas Island, Cocos (Keeling) Islands, Cook Islands, Fiji, French Polynesia, Guam, India, **Indonesia**, Japan, Johnston Island, Kiribati, Korea (Democratic People's Republic of), Korea (Republic of), Lao People's Democratic Republic, Malaysia, Maldives, Midway Islands, Mongolia, Myanmar, Nauru, Nepal, New Caledonia, New Zealand, Niue, Norfolk Island, Pacific Islands (Trust Territory), Pakistan, Papua New Guinea, Philippines, Pitcairn Island, Samoa, Singapore, Solomon Islands, Sri Lanka, Thailand, Tokelau, Tonga, Tuvalu, Vanuatu, Vietnam, Wake Island, Wallis, Futuna Islands and Other Asia and Pacific.

Economic organizations

Organization of the Petroleum Exporting Countries (OPEC) — Members: Algeria (1969), Angola (2007), Ecuador (reactivated membership in 2007), Indonesia (reactivated membership in 2016), Islamic Republic of Iran (1960), Iraq (1960), Kuwait (1960), Libya (1962), Nigeria (1971), Qatar (1961), Saudi Arabia (1960), United Arab Emirates (1967) and Venezuela (1960).

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

Former Soviet Union (FSU): Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Abbreviations

Symbols:

na Not available.
 nap Not applicable.
 – Zero, nil or negligible.

Currencies:

\$	US dollar	IDR	Indonesian rupiah	NGN	Nigerian naira
€	Euro	IRR	Iranian rial	QAR	Qatari riyal
DZD	Algerian dinar	IQD	Iraqi dinar	SAR	Saudi Arabian riyal
AOA	Angolan New Kwanza	KWD	Kuwaiti dinar	AED	United Arab Emirates dirham
\$	Ecuador	LYD	Libyan dinar	VEF	Venezuelan bolivar fuerte

Miscellaneous:

b	barrel(s)	cu m	cubic metres	LPG	liquefied petroleum gas
b/d	barrels per day	dwt	deadweight tonnage	m b	million barrels
b/cd	barrels per calendar day	fob	free on board	NOC	national oil company
b/sd	barrels per stream day	ft	feet	NGLs	natural gas liquids
bn b	billion barrels	GDP	gross domestic product	ORB	OPEC Reference Basket
cif	cost, insurance and freight	LNG	liquefied natural gas	t	tonne

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

Selected oil companies

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

Major sources

Direct communications to the OPEC Secretariat	Canadian Energy Research Institute
American Petroleum Institute (API)	Cedigaz, Natural Gas in the World
Arab Oil & Gas	Centre for Global Energy Studies
Asia Pacific Economic Cooperation (APEC)	China: National Bureau of Statistics
Baker Hughes	China: National Petroleum Corporation
Bloomberg	Central Bank reports
BP Statistical Review of World Energy	Clarkson Research Studies: The Liquid Gas Carrier Register
Brazil: Ministry of Mines and Energy	De Golyer & MacNaughton: Twentieth Century Petroleum Statistics
Brazil: National Agency of Petroleum, Natural Gas and Biofuels	Eastern Bloc Research, CIS and East European Energy Databook
Business Monitor International	Economic Intelligence Unit (EIU): country reports and database
Cambridge Energy Research Associates	Energy Detente
Canadian Association of Petroleum Producers	Energy Information Administration, US Department of Energy
Canada: National Energy Board	

General Notes

Eurostat	OECD/IEA: Energy Statistics of OECD countries
Fearnleys, Annual Review	OECD/IEA: Quarterly Energy Prices and Taxes
Financial Times: Oil and Gas International Yearbook	OECD: International Trade by Commodities Statistics
Galbraith's Weekly Tanker Fixtures Report	Oil & Gas Journal
Gas Exporting Countries Forum (GECF)	Oil and Energy Trends: Annual Statistical Review
Haver Analytics	Oil Bulletin Petrolier
IHS Global Insight	Organización Latinoamericana de Energia (OLADE)
IHS Cambridge Energy Research Associates (HIS CERA)	Organization of Arab Petroleum Exporting Countries (OAPEC)
India: Ministry of Petroleum & Natural Gas	Petrobras
Institute Français du Pétrole (IFP): The World Gas Industry	Petroleum Argus
Institute of Energy Economics, Japan (IEEJ)	Petroleum Economist
International Energy Agency (IEA): Energy Prices and Taxes; Energy Statistics and Balances; Monthly Oil/Gas Data Services	Petroleum Intelligence Weekly (PIW)
IEA Monthly Oil Data Service (MODS)	Petrostrategies
International Monetary Fund (IMF): International Financial Statistics, World Economic Outlook Database, Direction of Trade Statistics	Platt's
Japan: Ministry of Economy, Trade and Industry	Port of Fujairah
Joint Organizations Data Initiative	Port of Rotterdam
Middle East Economic Survey	Reuters
National Energy Administration of the People's Republic of China (NEA)	Rystad Energy
National and international oil companies' reports	Secretariat's estimates
National statistical publications	Simpson Spence & Young: World Oil Tanker Trends
National Westminster Bank	Society of Petroleum Engineers (SPE): Petroleum Resources Management System
Norway: Ministry of Petroleum and Energy	United Nations: Energy Statistics Yearbook; Monthly Bulletin of Statistics
NYMEX	United Nations: National Account Statistics
OECD: Trade by Commodities	Wood Mackenzie
OECD/IEA: Energy Balances of non-OECD countries	World Bank: World Development Indicators
OECD/IEA: Energy Balances of OECD countries	World LPG Gas Association
OECD/IEA: Energy Statistics of non-OECD countries	World Oil
	World Petroleum Trends

Conversion factors

Crude oil

Standard factors	Metric tonne	Long ton	Barrels	Cubic metres (<i>kilolitres</i>)
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 (<i>kilolitres</i>)	0.858	0.887	6.289	1

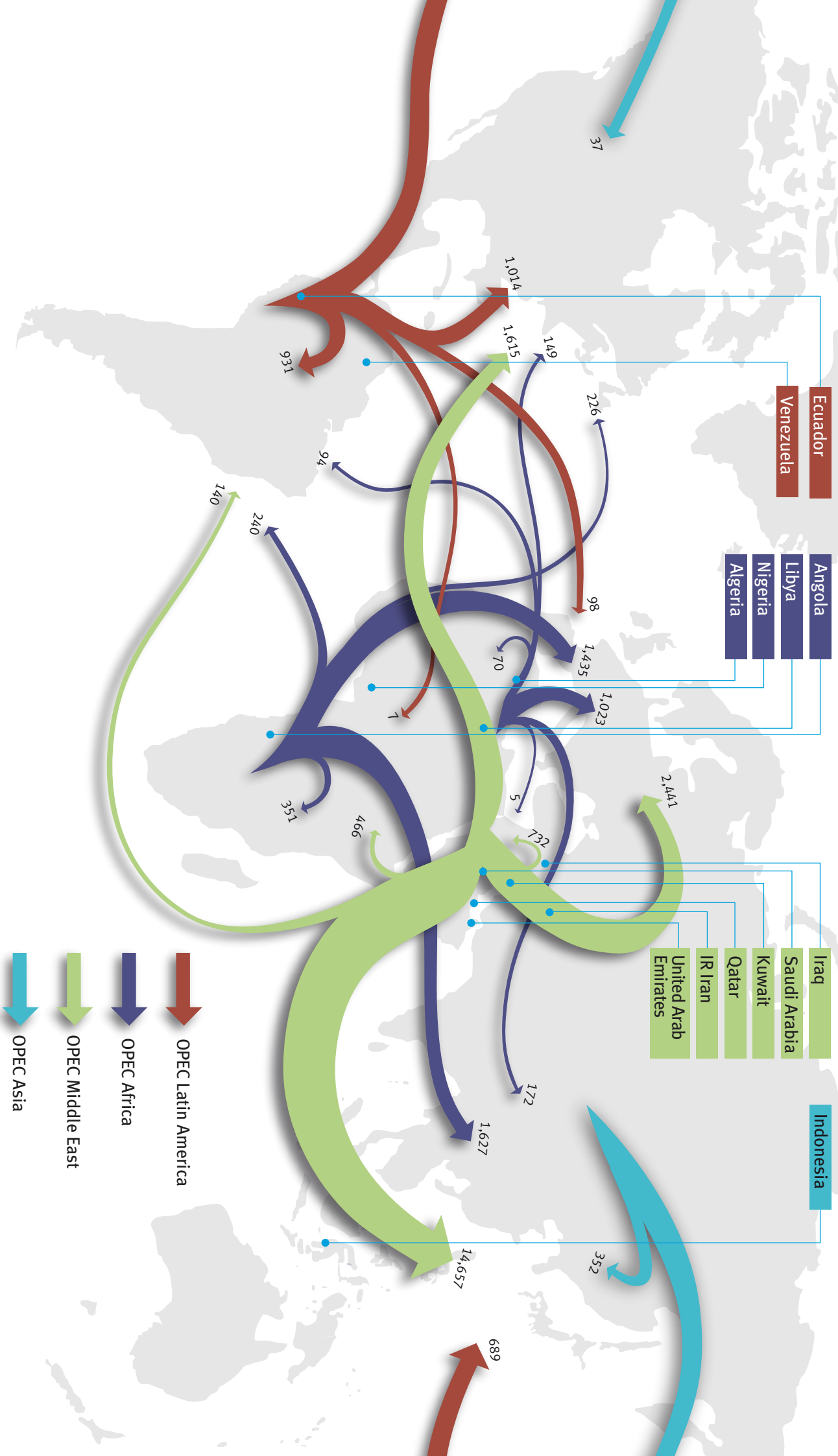
By country (b/tonne)

Algeria	8.05153
Angola	7.12980
Ecuador	6.90632
Indonesia	6.79455
IR Iran	7.38161
Iraq	7.37905
Kuwait	7.27604
Libya	7.57006
Nigeria	7.36997
Qatar	7.32850
Saudi Arabia	7.32271
United Arab Emirates	7.56491
Venezuela	6.68816
OPEC	7.30359

Petroleum products (*b/tonne*)

Gasoline	8.4998
Kerosene	7.7652
Distillates	7.2296
Residuals	6.6208

Major OPEC Members' flows of crude and refined oil (1,000 b/d) 2015





OPEC
Helferstorferstrasse 17, A-1010 Vienna, Austria
www.opec.org