



Independent Statistics & Analysis
U.S. Energy Information
Administration

The Availability and Price of Petroleum and Petroleum Products Produced in Countries Other Than Iran

Number 15 in a series of reports required by section 1245(d)(4)(A)
of the National Defense Authorization Act for Fiscal Year 2012

June 26, 2014



Table of Contents

May – June 2014 Update	2
Tables	4
Figures	10

This is the 15th in a series of reports prepared in fulfillment of section 1245(d)(4)(A) of the National Defense Authorization Act (NDAA) for Fiscal Year 2012, as amended. The law requires the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy, to submit to Congress a report on the availability and price of petroleum and petroleum products produced in countries other than Iran in the two-month period preceding the submission of the report. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the U.S. Government. The views in this report, therefore, should not be construed as representing those of the U.S. Department of Energy or other federal agencies. However, EIA consulted with the U.S. Department of the Treasury, the U.S. Department of State, and the intelligence community in the process of developing this report. Readers may review early editions of this report for detailed background and contextual information not repeated here.

May – June 2014 Update

- The U.S. Energy Information Administration (EIA) estimates that the global petroleum and other liquids¹ production outpaced consumption in May and June, resulting in a 0.2-million-barrel per day (b/d) average implied build in global oil stocks (**Table 1, Figure 1**). Despite the implied build in global stocks, unplanned global supply disruptions remain elevated and surplus crude oil production capacity remains low relative to the previous three-year average, contributing to continued general market tightness in the context of rising geopolitical uncertainty.
- North Sea Brent crude oil prices increased in June to their highest levels so far this year on concerns that recent unrest in parts of Iraq could adversely affect Iraq's oil production in the near future. The Brent front month futures contract averaged about \$114.50 per barrel for the five-trading-days ending June 24, nearly \$5/barrel higher compared with the average price for the five-trading-days ending April 24 (**Figure 2**).
- The escalation of violence in northern Iraq that started in June has not reduced the availability of oil to the global market as southern exports have been unaffected and northern exports were already halted since early March 2014. The northern Baiji refinery (which had been averaging runs of approximately 0.2 million b/d in the first half of 2014) was shut down during the second half of June, which led to the almost complete halt in northern Iraqi crude and petroleum product production (not including volumes being produced in the Kurdistan Regional Government areas). The northern crude production loss contributed to an average monthly increase of 0.1 million b/d to Iraq's unplanned crude oil supply disruptions, estimated to average 0.5 million b/d in June. The remainder of the outage volume reflects the effective capacity of the Iraq-Turkey pipeline, which transported northern Iraqi crude to global markets but has been offline since early March 2014 due to attacks by militants that reduced crude oil production.
- The situation in Iraq is critical for oil markets because the country has been, and is projected to remain, the main source of crude oil production capacity growth among members of the Organization of the Petroleum Exporting Countries (OPEC) due to rising export capability in the south. EIA estimates show that Iraq's crude production grew by roughly 0.7 million b/d from 2011 to the first quarter of 2014. EIA has projected that Iraq's crude oil production should grow by an average of 0.3 million b/d in both 2014 and 2015. However, if the crisis spreads to the southern Basrah region, the oil sector will be at a greater risk of a major supply disruption and the forecast short-term growth, which was already a conservative projection, may not be realized. EIA will monitor the situation and make adjustments to its forecast accordingly.
- Global petroleum and other liquids² consumption in May and June averaged 91.4 million b/d, 0.6 million b/d higher than the previous two-month period and 1.4 million b/d higher than the same time last year. Developing and emerging countries accounted for almost all of the consumption growth, led by China (**Table 2**).
- Global petroleum and other liquids production in May and June averaged 91.6 million b/d, 0.6 million b/d higher than the previous two-month period and 1.2 million b/d higher than the same time last

¹ The term "petroleum and other liquids" encompasses petroleum and petroleum products and close substitutes, including crude oil, lease condensate, natural gas liquids, biofuels, coal-to-liquids, gas-to-liquids, and refinery processing gain.

² The growth rates referenced in this report may not exactly match corresponding values in tables as a result of independent rounding.

year. Non-OPEC production grew by 2.0 million b/d compared with the same time last year, more than offsetting lower crude oil output from OPEC countries, particularly Libya (**Table 3**).

- Global surplus crude oil production capacity averaged 2.1 million b/d in May and June, roughly the same as the average during the previous two-month period and the year-ago level (**Table 3**). The estimate of effective surplus capacity does not include additional capacity that may be technically available in Iran, but which is offline because of the effects of U.S. and European Union (EU) sanctions on Iran's ability to sell its oil.
- Although global inventory builds are similar to this time last year, global crude oil markets remain tight due to current and potential future unplanned production outages. In response, backwardation (when near-term prices are greater than further dated ones) in the Brent futures curve has increased. The 1st-13th month spread for the Brent futures curve averaged about \$6/barrel for the five-trading-days ending June 24, \$0.50/barrel higher compared with the five-trading-day-period ending April 24 and about \$2/barrel higher compared with this time last year (**Figure 3**).
- OPEC crude oil supply disruptions averaged 2.7 million b/d in May and June, 0.1 million b/d higher than the previous two-month average and 1.2 million b/d higher the same time last year, mainly due to substantial disruptions to Libya's production since late-July 2013 (**Figure 4**). Unplanned supply disruptions among non-OPEC producers averaged 0.7 million b/d in May and June, slightly higher than the previous two-month average but more than 0.2 million b/d lower than the same time last year, when there were outages in the United States, Canada, and China (**Figure 5**). EIA's estimates of unplanned outages account for crude oil only among OPEC producers and all liquid fuels among non-OPEC producers. These estimates of unplanned outages exclude normal maintenance and reflect the level of volumes shut in relative to an assessment of effective production capacity, which is periodically updated.
- Iran's petroleum and other liquids production averaged 3.4 million b/d in May and June, of which 2.8 million b/d was crude oil. Iran's liquid fuels production remains below the previous three-year average of 3.6 million b/d, but 0.2 million b/d higher than the year-ago level of 3.2 million b/d (**Table 1**). Export data for 2014 shows a corresponding increase in Iran's crude oil and condensate exports compared with last year. Iran's crude oil production and exports in 2012 and 2013 were reduced by sanctions that impeded its ability to carry out investment in oil projects necessary to offset natural declines in production and also limited Iran's ability to sell oil. The Joint Plan of Action (JPOA) between the five permanent members of the United Nations Security Council (the United States, United Kingdom, France, Russia, and China) plus Germany (P5+1) and Iran that came into effect on January 20, 2014, provides limited sanctions relief to Iran, while leaving in place the core oil sector sanctions.
- EIA has revised the preliminary estimates of petroleum and other liquids production and consumption for March and April 2014 published in the previous edition of this report. Global petroleum and other liquids production was revised upward by 0.1 million b/d to average 90.9 million b/d, while global consumption was revised downward by 0.2 million b/d to average 90.7 million b/d. EIA has also reduced its estimate for Iranian total liquid fuels production in 2013 by 0.2 million b/d to 3.2 million b/d based on a review of annual production and export data from multiple sources.

Tables

Table 1. Summary of Estimated Petroleum and Other Liquids Quantities and Prices

	May 2014	June 2014	May – June 2014 Average	May – June 2013 Average	2011 – 2013 Average
Global Petroleum and Other Liquids (million barrels per day)					
Global Petroleum and Other Liquids Production (a)	91.5	91.6	91.6	90.3	89.3
Global Petroleum and Other Liquids Consumption (b)	90.9	91.8	91.4	89.9	89.4
Biofuels Production (c)	2.2	2.2	2.2	2.2	1.9
Biofuels Consumption (c)	1.9	2.0	1.9	1.9	1.8
Iran Liquid Fuels Production	3.4	3.3	3.4	3.2	3.6
Iran Liquid Fuels Consumption	1.6	1.7	1.7	1.7	1.7
Petroleum and Petroleum Products Produced and Consumed in Countries Other Than Iran (million barrels per day)					
Production (d)	85.9	86.1	86.0	84.9	83.8
Consumption (d)	87.4	88.2	87.7	86.3	85.8
Production minus Consumption	-1.4	-2.0	-1.7	-1.3	-2.1
World Inventory Net Withdrawals Including Iran	-0.6	0.2	-0.2	-0.4	0.1
Estimated OECD Inventory Level (e) (million barrels)	2,606	2,613	2,610	2,641	2,659
Surplus Production Capacity (million barrels per day)					
OPEC Surplus Crude Oil Production Capacity (f)	2.1	2.1	2.1	2.1	2.4
Oil Price Level					
WTI Front Month Futures Price (g) (\$ per barrel)	101.79	104.98	103.26	95.28	95.77
Brent Front Month Futures Price (h) (\$ per barrel)	109.24	111.67	110.36	103.31	110.43
RBOB Front Month Futures Price (i) (\$ per gallon)	2.96	3.03	2.99	2.83	2.86
Oil Price Time Spread					
WTI 1st - 13th Month Futures Spread (\$ per barrel)	9.67	10.29	9.96	4.24	0.41
Brent 1st - 13th Month Futures Spread (\$ per barrel)	6.05	6.03	6.04	3.82	4.86

Note: The term "petroleum and other liquids" encompasses crude oil, lease condensate, natural gas liquids, biofuels, coal-to-liquids, gas-to-liquids, and refinery processing gains, which are important to consider in concert due to the inter-related supply, demand, and price dynamics of petroleum, petroleum products, and related fuels.

(a) Production includes crude oil (including lease condensates), natural gas liquids, other liquids, and refinery processing gains.

(b) Consumption of petroleum by the OECD countries is synonymous with "products supplied," defined in the glossary of the EIA Petroleum Supply Monthly, DOE/EIA-0109. Consumption of petroleum by the non-OECD countries is "apparent consumption," which includes internal consumption, refinery fuel, and loss, and bunkering.

(c) Biofuels production and consumption are based on EIA estimates as published in the International Energy Statistics. Biofuels production in the third quarter tends to be at its highest level in the year as ethanol production in Brazil reaches its seasonal peak and is typically lowest in the first quarter as seasonal production falls in the South/South-Central region of Brazil.

(d) Global production of petroleum and petroleum products outside of Iran is derived by subtracting biofuels production and Iran liquid fuels production from global liquid fuels production. The same method is used to calculate global consumption outside of Iran.

(e) Estimated inventory level is for OECD countries only.

(f) EIA defines surplus oil production capacity as potential oil production that could be brought online within 30 days and sustained for at least 90 days, consistent with sound business practices. This does not include oil production increases that could not be sustained without degrading the future production capacity of a field. It also does not include additional capacity that may be available in Iran, but which is currently offline due to the impacts of U.S. and EU sanctions on Iran's ability to sell its oil.

(g) WTI refers to West Texas Intermediate crude oil traded on the New York Mercantile Exchange (NYMEX), owned by Chicago Mercantile Exchange (CME) Group.

(h) Brent refers to Brent crude oil traded on the Intercontinental Exchange (ICE).

(i) RBOB refers to reformulated blendstock for oxygenate blending traded on the NYMEX.

Note: June prices include data through market close on June 24, 2014.

Source: U.S. Energy Information Administration.

Table 2. Global Petroleum and Other Liquids Production, Consumption, and Inventory Estimates

	May 2014	June 2014	May – June 2014 Average	May – June 2013 Average	2011 – 2013 Average
Production (million barrels per day) (a)					
OECD (b)	25.0	25.1	25.0	23.1	22.6
U.S. (50 States)	13.5	13.5	13.5	12.0	11.2
Canada	4.3	4.4	4.3	3.8	3.9
Mexico	2.9	2.9	2.9	2.9	2.9
North Sea (c)	2.8	2.8	2.8	2.9	3.1
Other OECD	1.5	1.5	1.5	1.5	1.6
Non-OECD	66.6	66.5	66.5	67.3	66.7
OPEC (d)	35.9	35.7	35.8	36.6	36.3
Crude Oil Portion	29.6	29.5	29.5	30.4	30.2
Non-crude liquids	6.3	6.2	6.3	6.2	6.1
Former Soviet Union (e)	13.7	13.7	13.7	13.4	13.4
China	4.5	4.5	4.5	4.5	4.4
Other non-OECD	12.5	12.5	12.5	12.7	12.6
Total World Production	91.5	91.6	91.6	90.3	89.3
Non-OPEC Production	55.6	55.9	55.7	53.7	53.0
Consumption (million barrels per day) (f)					
OECD	45.0	45.6	45.3	45.3	46.1
U.S. (50 States)	18.8	18.9	18.8	18.6	18.8
U.S. territories	0.3	0.3	0.3	0.3	0.3
Canada	2.3	2.3	2.3	2.3	2.3
Europe	13.3	13.7	13.5	13.7	13.9
Japan	4.0	3.9	4.0	4.0	4.6
Other OECD	6.3	6.4	6.3	6.3	6.3
Non-OECD	45.9	46.3	46.1	44.6	43.3
Former Soviet Union	4.5	4.5	4.5	4.5	4.5
Europe	0.7	0.7	0.7	0.7	0.7
China	11.1	11.3	11.2	10.6	10.3
Other Asia	11.7	11.6	11.7	11.3	11.0
Other non-OECD	17.8	18.1	18.0	17.5	16.9
Total World Consumption	90.9	91.8	91.4	89.9	89.4
Inventory Net Withdrawals (million barrels per day)					
U.S. (50 States)	-0.4	-0.5	-0.5	-0.2	0.0 (g)
Other OECD	-0.1	0.3	0.1	0.4	0.1
Other Stock Draws and Balance	-0.1	0.5	0.2	-0.7	0.0 (g)
Total Stock Draw	-0.6	0.2	-0.2	-0.4	0.1
End-of-period Inventories (million barrels)					
U.S. Commercial Inventory	1,102	1,117	1,110	1,122	--
OECD Commercial Inventory	2,606	2,613	2,610	2,641	2,659

- a) Production includes production of crude oil (including lease condensates), natural gas liquids, biofuels, other liquids, and refinery processing gains.
 - b) OECD = Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovakia, Slovenia, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.
 - c) North Sea includes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.
 - d) OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.
 - e) Former Soviet Union = Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. Estonia is included in "Other OECD" totals.
 - f) Consumption of petroleum by the OECD countries is synonymous with "products supplied," defined in the glossary of the EIA Petroleum Supply Monthly, DOE/EIA-0109. Consumption of petroleum by the non-OECD countries is "apparent consumption," which includes internal consumption, refinery fuel and loss, and bunkering.
 - g) The estimates are 0.03 million b/d and -0.3 million b/d, respectively.
- Note: The sum of individual countries or regions may not add to the totals because of independent rounding.
Source: U.S. Energy Information Administration.

Table 3. OPEC Crude Oil (Excluding Condensates) and Other Liquids Production Estimates

Production (million barrels per day)	May 2014	June 2014	May – June 2014 Average	May – June 2013 Average	2011 – 2013 Average
Crude Oil					
Algeria	1.2	1.2	1.2	1.2	1.2
Angola	1.7	1.7	1.7	1.8	1.7
Ecuador	0.5	0.5	0.5	0.5	0.5
Iran	2.8	2.8	2.8	2.7	3.1
Iraq	3.3	3.2	3.3	3.1	2.9
Kuwait	2.6	2.6	2.6	2.6	2.6
Libya	0.2	0.2	0.2	1.3	0.9
Nigeria	1.9	1.9	1.9	1.9	2.1
Qatar	0.8	0.8	0.8	0.7	0.8
Saudi Arabia	9.7	9.7	9.7	9.7	9.6
United Arab Emirates	2.7	2.7	2.7	2.7	2.6
Venezuela	2.2	2.2	2.2	2.2	2.2
OPEC Total	29.6	29.5	29.5	30.4	30.2
Non-crude liquids	6.3	6.2	6.3	6.2	6.1
Total OPEC Supply	35.9	35.7	35.8	36.6	36.3
Crude Oil Production Capacity					
Africa	5.0	5.0	5.0	6.2	5.9
South America	2.7	2.7	2.7	2.7	2.7
Middle East	23.9	23.8	23.9	23.6	24.0
OPEC Total	31.7	31.6	31.6	32.5	32.6
Surplus Crude Oil Production Capacity (a)					
Africa	0.0	0.0	0.0	0.0	0.0
South America	0.0	0.0	0.0	0.0	0.0
Middle East	2.1	2.1	2.1	2.1	2.4
OPEC Total	2.1	2.1	2.1	2.1	2.4

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Libya, and Nigeria (Africa); Ecuador and Venezuela (South America); Iran, Iraq, Kuwait, Qatar, Saudi Arabia, and the United Arab Emirates (Middle East).

a) EIA defines surplus crude oil production capacity as potential oil production that could be brought online within 30 days and sustained for at least 90 days, consistent with sound business practices. This does not include oil production increases that could not be sustained without degrading the future production capacity of a field. It also does not include additional capacity that may be available in Iran, but which is currently offline because of the effects of U.S. and EU sanctions on Iran's ability to sell its oil.

Note: The sum of individual countries may not add to the totals because of independent rounding.

Source: U.S. Energy Information Administration.

Table 4. Non-OPEC Petroleum and Other Liquids Production Estimates

Production (million barrels per day)	May 2014	June 2014	May – June 2014 Average	May – June 2013 Average	2011 – 2013 Average
North America	20.7	20.8	20.7	18.7	18.0
Canada	4.3	4.4	4.3	3.8	3.9
Mexico	2.9	2.9	2.9	2.9	2.9
United States	13.5	13.5	13.5	12.0	11.2
Central and South America	5.1	5.1	5.1	5.2	4.9
Argentina	0.7	0.7	0.7	0.7	0.7
Brazil	2.9	2.9	2.9	3.0	2.7
Colombia	1.0	1.0	1.0	1.0	1.0
Other Central and South America	0.5	0.5	0.5	0.5	0.5
Europe	3.7	3.7	3.7	3.8	4.0
Norway	1.8	1.8	1.8	1.8	1.9
United Kingdom (offshore)	0.7	0.7	0.7	0.9	0.9
Other North Sea	0.3	0.2	0.3	0.2	0.2
Former Soviet Union (FSU) (a)	13.7	13.7	13.7	13.4	13.4
Azerbaijan	0.8	0.8	0.8	0.9	0.9
Kazakhstan	1.7	1.7	1.7	1.6	1.6
Russia	10.6	10.6	10.6	10.5	10.4
Turkmenistan	0.3	0.3	0.3	0.3	0.2
Other FSU	0.3	0.3	0.3	0.2	0.2
Middle East	1.2	1.2	1.2	1.2	1.4
Oman	1.0	1.0	1.0	0.9	0.9
Syria (b)	0.0	0.0	0.0	0.1	0.2
Yemen	0.1	0.1	0.1	0.1	0.2
Asia and Oceania	8.9	9.0	9.0	9.0	9.0
Australia	0.5	0.5	0.5	0.5	0.5
China	4.5	4.5	4.5	4.5	4.4
India	1.0	1.0	1.0	1.0	1.0
Indonesia	0.9	0.9	0.9	1.0	1.0
Malaysia	0.6	0.6	0.6	0.6	0.6
Vietnam	0.4	0.4	0.4	0.4	0.3
Africa	2.3	2.3	2.3	2.4	2.4
Egypt	0.7	0.7	0.7	0.7	0.7
Equatorial Guinea	0.3	0.3	0.3	0.3	0.3
Gabon	0.2	0.2	0.2	0.2	0.2
Sudan and South Sudan	0.3	0.3	0.3	0.3	0.3
Total non-OPEC liquids	55.6	55.9	55.7	53.7	53.0
OPEC non-crude liquids (c)	6.3	6.2	6.3	6.2	6.1
Non-OPEC + OPEC non-crude liquids	61.9	62.1	62.0	59.9	59.1

- a) Former Soviet Union = Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.
- b) The estimates are 0.04 million b/d in both months.
- c) OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

Note: The sum of individual countries may not add to regional totals because of independent rounding.

Source: U.S. Energy Information Administration.

Table 5. Crude Oil and Petroleum Product Price Data

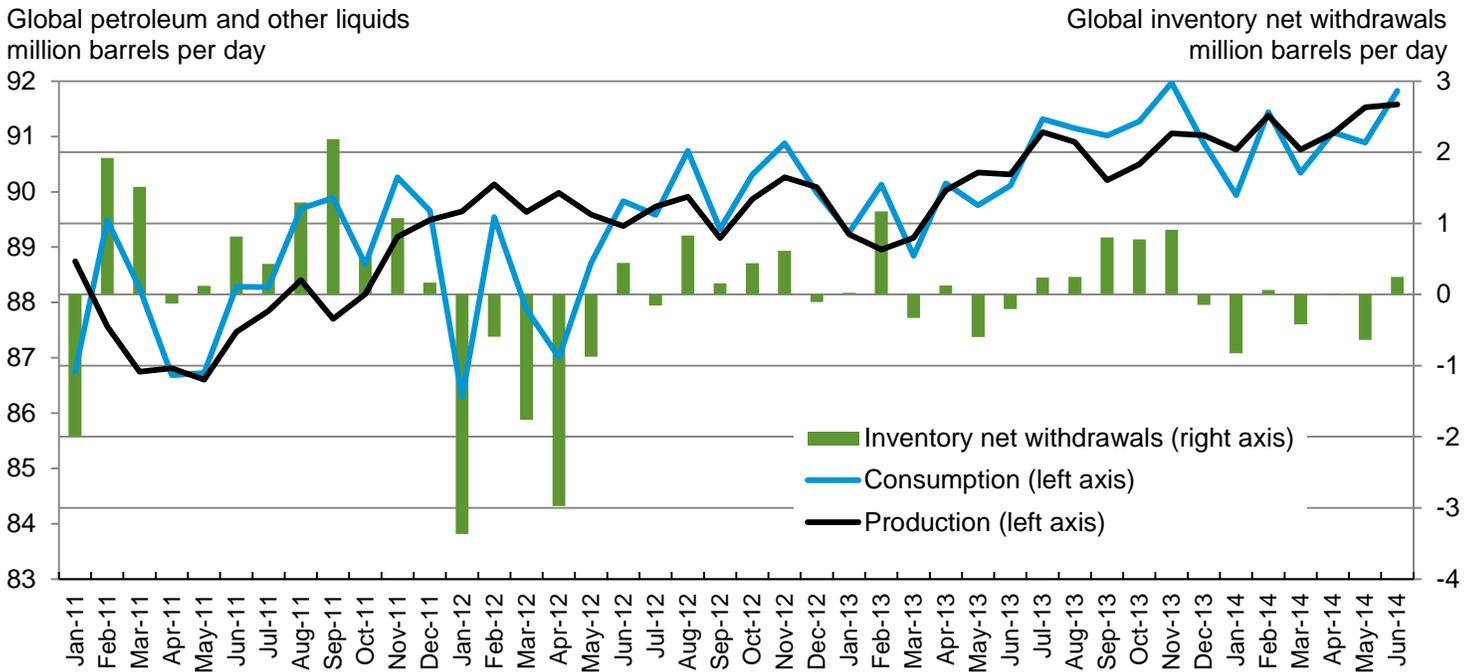
Item	May 2014	June 2014	May – June 2014 Average	May – June 2013 Average	2011 – 2013 Average
Brent Front Month Futures Price (\$ per barrel)	109.24	111.67	110.36	103.31	110.43
WTI Front Month Futures Price (\$ per barrel)	101.79	104.98	103.26	95.28	95.77
Dubai Front Month Futures Price (\$ per barrel)	105.70	107.78	106.66	100.55	107.21
Brent 1st - 13th Month Futures Spread (\$ per barrel)	6.05	6.03	6.04	3.82	4.86
WTI 1st - 13th Month Futures Spread (\$ per barrel)	9.67	10.29	9.96	4.24	0.41
RBOB Front Month Futures Price (\$ per gallon)	2.96	3.03	2.99	2.83	2.86
Heating Oil Front Month Futures Price (\$ per gallon)	2.93	2.95	2.94	2.89	2.99
RBOB - Brent Futures Crack Spread (\$ per gallon)	0.36	0.38	0.37	0.37	0.23
Heating Oil - Brent Futures Crack Spread (\$ per gallon)	0.33	0.30	0.31	0.43	0.36

Note: June prices include data through market close on June 24, 2014.

Source: U.S. Energy Information Administration, based on Chicago Mercantile Exchange (CME), Intercontinental Exchange (ICE), and Dubai Mercantile Exchange (DME).

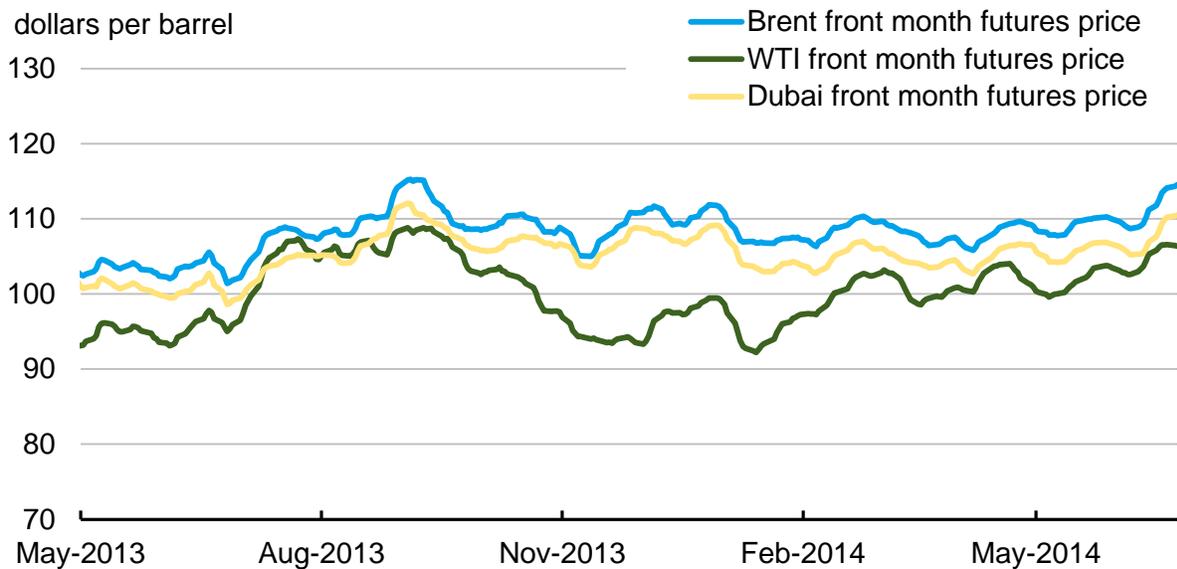
Figures

Figure 1. Global Petroleum and Other Liquids Production, Consumption, and Inventory Net Withdrawals, January 2011 – June 2014



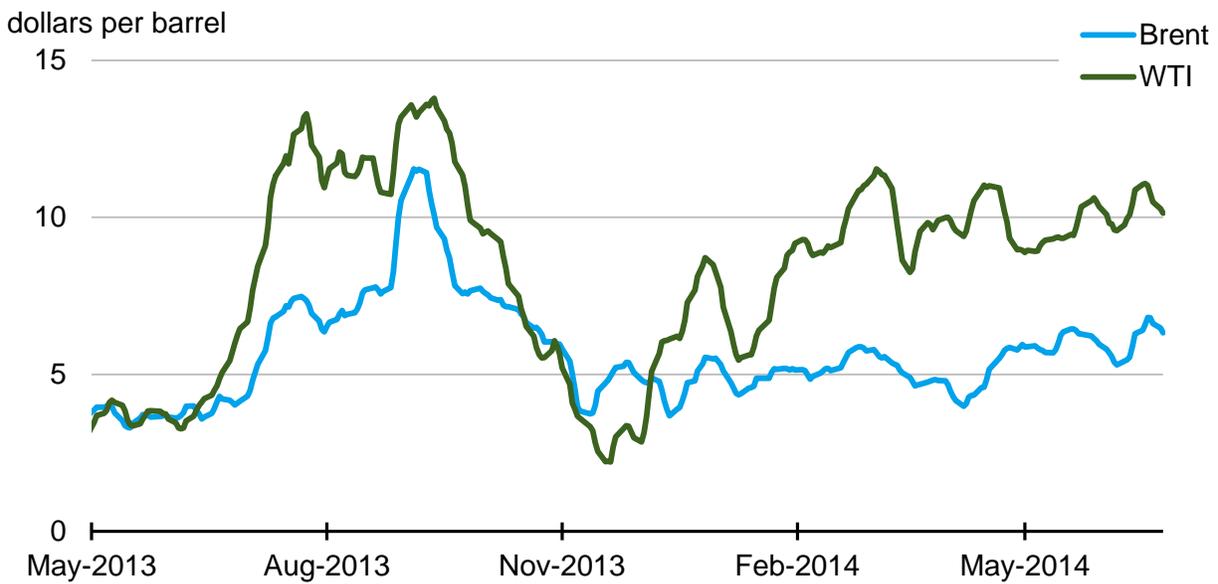
Note: See Table 1 footnotes for definitions of petroleum and other liquids, production, and consumption.
 Source: U.S. Energy Information Administration.

Figure 2. Front Month Crude Oil Futures Prices



Note: All prices represent rolling 5-day averages.
 Source: U.S. Energy Information Administration, based on Chicago Mercantile Exchange (CME), Intercontinental Exchange (ICE) and Dubai Mercantile Exchange (DME).

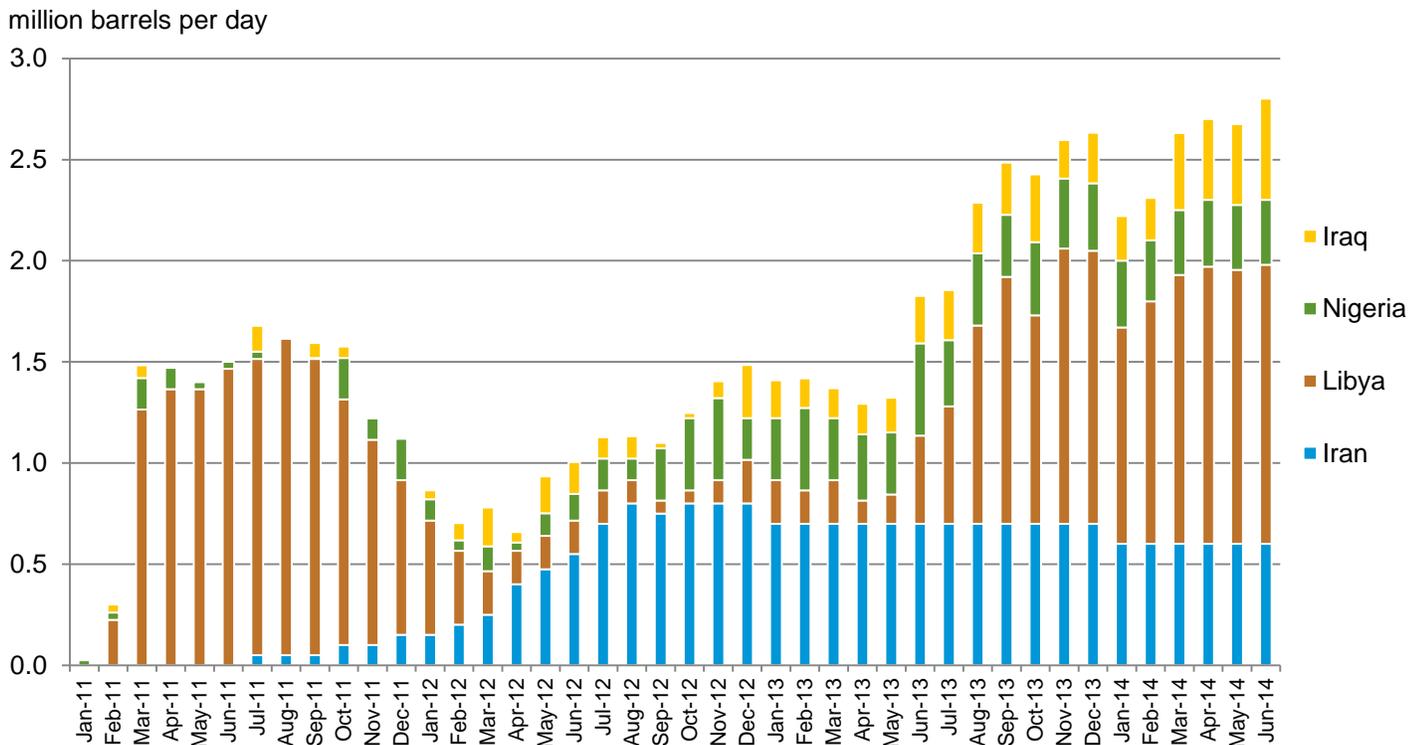
Figure 3. Crude Oil 1st - 13th Month Futures Price Spread



Note: All prices represent rolling 5-day averages.

Source: U.S. Energy Information Administration, based on Chicago Mercantile Exchange (CME) and Intercontinental Exchange (ICE).

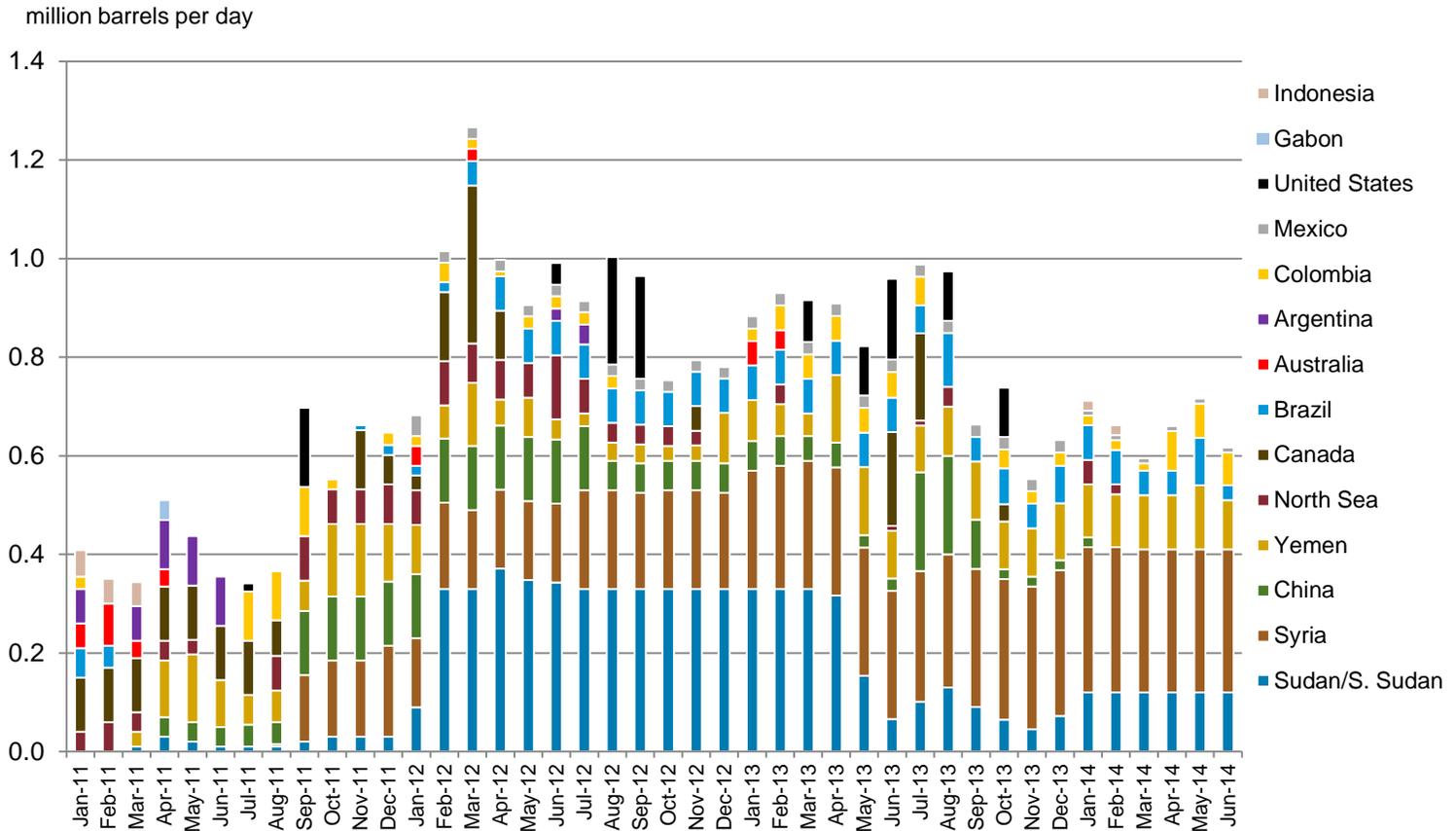
Figure 4. Estimated Unplanned Crude Oil Production Disruptions Among OPEC Producers, January 2011 – June 2014



Note: Estimated unplanned disruptions reflect the level of volumes shut in, accounting for effective production capacity.

Source: U.S. Energy Information Administration.

Figure 5. Estimated Unplanned Petroleum and Other Liquids Production Disruptions Among Non-OPEC Producers, January 2011 – June 2014



Note: Estimated unplanned disruptions reflect the level of volumes shut in, accounting for effective production capacity.
 Source: U.S. Energy Information Administration.