



Independent Statistics & Analysis
U.S. Energy Information
Administration

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

Number 16 in a series of reports required by section 1245(d)(4)(A)
of the National Defense Authorization Act for Fiscal Year 2012

August 28, 2014



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This is the 16th 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.

July – August 2014 Update

- The U.S. Energy Information Administration (EIA) estimates that global oil inventory draws averaged 0.2 million barrels per day (bbl/d) in July and August, with inventories declining by 0.7 million bbl/d in July and building by 0.4 million bbl/d in August (**Table 1, Figure 1**). The recent inventory builds are somewhat atypical for this time of year and signal a relatively loose global crude oil market compared with conditions over the past three years. Weaker oil demand and lower refinery runs compared to last year in European and Asian countries within the Organization for Economic Cooperation and Development (OECD) have reduced market tightness. Nevertheless, these conditions may be temporary and the risk for tighter markets in the future remains elevated due to persistently high supply disruptions and relatively low surplus crude oil production capacity.
- A reduction in geopolitical risks surrounding Iraqi and Libyan oil supplies in July, coupled with generally weak demand in August, pushed North Sea Brent crude oil prices to their lowest levels of the year. The Brent front month futures contract averaged \$102.50 per barrel for the five-trading-days ending August 26, about \$12 per barrel lower compared with the average price for the five-trading-days ending June 26 (**Figure 2**). The July and August 2014 average price for Brent was nearly \$3 per barrel lower compared to the same time last year.
- Geopolitical risks to near-term supply have abated somewhat since June when violence in northern Iraq escalated causing northern production (outside of Iraqi Kurdistan) to come to a near-halt and Libya's production and exports were at a minimal level. Iraq's southern crude oil exports still remain unaffected by the unrest in northern Iraq, averaging 2.44 million bbl/d in July, 0.2 million bbl/d higher than the average during first quarter 2014. In Libya, crude oil exports restarted at the country's two major eastern ports, Es Sidra and Ras Lanuf, after being blocked by protestors for about a year. Libya's production averaged 0.5 million bbl/d during July and August, more than 0.2 million bbl/d higher than the previous two months (**Table 3, Figure 4**). However, the situation in Libya is still very precarious as the security situation remains volatile, with a significant possibility of intermittent disruptions.
- Global petroleum and other liquids¹ consumption in July and August averaged 92.2 million bbl/d, 0.9 million bbl/d higher than the previous two-month period and 1.0 million bbl/d higher than the same time last year. Non-OECD consumption averaged 46.3 million bbl/d, 1.6 million bbl/d higher compared with the same time last year, more than offsetting lower consumption from the OECD, particularly Europe and Japan (**Table 2**).
- Global petroleum and other liquids² production in July and August averaged 92.0 million bbl/d, 0.4 million bbl/d higher than the previous two-month period and 1.1 million bbl/d higher than the same time last year. Non-OPEC production averaged 56.1 million bbl/d, 1.8 million bbl/d higher compared with the same time last year, more than offsetting lower crude oil output from OPEC countries (**Tables 2 and 3**).
- Global surplus crude oil production capacity averaged 1.8 million bbl/d in July and August, 0.3 million bbl/d lower than the previous two-month period but 0.2 million bbl/d higher than the same time last year (**Table 3**). Surplus capacity tends to be lower in the summer months because Saudi Arabia, the

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.

only significant surplus capacity holder, increases production for direct crude oil burn for power generation. 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.

- The Brent futures curve moved into contango (when near-term prices are less than longer-dated ones) for the first time this year in early August, supporting estimates that global inventories grew in August. The 1st-13th month spread for the Brent futures curve averaged about -\$1 per barrel for the five-trading-days ending August 26, almost \$7 per barrel lower than the five-trading-day-period ending June 26 (**Figure 3**). This is in contrast to the steep \$8-per-barrel backwardation in the Brent futures curve during August 2013, when global inventories declined and geopolitical risks were higher.
- OPEC crude oil supply disruptions averaged 2.5 million bbl/d in July and August, 0.2 million bbl/d lower than the previous two-month average but 0.5 million bbl/d higher than the same time last year, mainly due to an escalation in disruptions to Libya's production since late-July 2013 (**Figure 4**). Unplanned supply disruptions among non-OPEC producers averaged 0.6 million bbl/d in July and August, almost 0.1 million bbl/d lower than the previous two-month average and almost 0.4 million bbl/d lower than the same time last year, as there were no outages in the United States, Canada, China, and North Sea and fewer outages in Brazil in July and August compared with the same time last year (**Figure 5**). EIA's estimates of unplanned outages account for all liquid fuels among non-OPEC producers, but include crude oil only among 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 3.3 million bbl/d in July and August, of which 2.8 million bbl/d was crude oil. Iran's liquid fuels production remains below the previous three-year average of 3.6 million bbl/d, but 0.1 million bbl/d higher than the year-ago level of 3.2 million bbl/d (**Table 1**). Iran's petroleum and other liquids production declined by 0.1 million bbl/d compared with the previous two-month period because of maintenance at gas processing facilities that curtailed non-crude oil production.
- EIA has revised the preliminary estimates of petroleum and other liquids consumption and production for May and June 2014 published in the previous edition of this report. Global petroleum and other liquids consumption was revised downward by 0.1 million bbl/d to average 91.2 million bbl/d, while global production was unchanged at 91.6 million bbl/d, resulting in a global oil inventory build of 0.3 million bbl/d.

Tables

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

	July 2014	August 2014	July – August 2014 Average	July – August 2013 Average	2011 – 2013 Average
Global Petroleum and Other Liquids (million barrels per day)					
Global Petroleum and Other Liquids Production (a)	91.6	92.5	92.0	90.9	89.3
Global Petroleum and Other Liquids Consumption (b)	92.3	92.1	92.2	91.2	89.4
Biofuels Production (c)	2.1	2.4	2.3	2.3	1.9
Biofuels Consumption (c)	2.0	2.0	2.0	1.9	1.8
Iran Liquid Fuels Production	3.3	3.3	3.3	3.2	3.6
Iran Liquid Fuels Consumption	1.7	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)	86.2	86.8	86.5	85.4	83.7
Consumption (d)	88.6	88.4	88.5	87.6	85.8
Production minus Consumption	-2.5	-1.6	-2.0	-2.2	-2.1
World Inventory Net Withdrawals Including Iran	0.7	-0.4	0.2	0.3	0.1
Estimated OECD Inventory Level (e) (million barrels)	2,603	2,608	2,606	2,659	2,659
Surplus Production Capacity (million barrels per day)					
OPEC Surplus Crude Oil Production Capacity (f)	2.0	1.7	1.8	1.7	2.4
Oil Price Level					
WTI Front Month Futures Price (g) (\$ per barrel)	102.39	96.29	99.65	105.62	95.77
Brent Front Month Futures Price (h) (\$ per barrel)	108.19	103.50	106.08	108.94	110.43
RBOB Front Month Futures Price (i) (\$ per gallon)	2.91	2.73	2.83	2.99	2.86
Oil Price Time Spread					
WTI 1st - 13th Month Futures Spread (\$ per barrel)	7.54	4.18	6.03	11.60	0.41
Brent 1st - 13th Month Futures Spread (\$ per barrel)	2.43	-0.51	1.11	7.38	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: August prices include data through market close on August 26, 2014.

Source: U.S. Energy Information Administration.

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

	July 2014	August 2014	July – August 2014 Average	July – August 2013 Average	2011 – 2013 Average
Production (million barrels per day) (a)					
OECD (b)	25.4	25.5	25.5	23.8	22.6
U.S. (50 States)	13.9	13.9	13.9	12.4	11.2
Canada	4.3	4.4	4.4	4.1	3.9
Mexico	2.9	2.9	2.9	2.9	2.9
North Sea (c)	2.8	2.8	2.8	2.8	3.1
Other OECD	1.5	1.6	1.5	1.5	1.5
Non-OECD	66.1	67.0	66.6	67.1	66.7
OPEC (d)	35.7	36.2	36.0	36.6	36.3
Crude Oil Portion	29.6	30.0	29.8	30.4	30.2
Non-crude liquids	6.1	6.2	6.2	6.2	6.1
Eurasia (e)	13.6	13.6	13.6	13.5	13.4
China	4.5	4.5	4.5	4.4	4.4
Other non-OECD	12.4	12.7	12.5	12.7	12.6
Total World Production	91.6	92.5	92.0	90.9	89.3
Non-OPEC Production	55.9	56.3	56.1	54.3	53.0
Consumption (million barrels per day) (f)					
OECD	45.9	45.8	45.9	46.4	46.1
U.S. (50 States)	19.1	19.2	19.1	19.1	18.8
U.S. territories	0.3	0.3	0.3	0.3	0.3
Canada	2.4	2.4	2.4	2.3	2.3
Europe	13.7	13.4	13.6	14.0	13.9
Japan	4.1	4.1	4.1	4.4	4.6
Other OECD	6.3	6.4	6.3	6.4	6.3
Non-OECD	46.4	46.2	46.3	44.7	43.3
Eurasia	4.9	4.8	4.9	4.8	4.5
Europe	0.7	0.7	0.7	0.7	0.7
China	11.1	11.0	11.0	10.4	10.2
Other Asia	11.3	11.2	11.2	10.9	11.0
Other non-OECD	18.4	18.5	18.4	17.9	16.9
Total World Consumption	92.3	92.1	92.2	91.2	89.4
Inventory Net Withdrawals (million barrels per day)					
U.S. (50 States)	0.0	-0.1	0.0	0.0	0.0
Other OECD	0.3	-0.1	0.1	-0.2	0.1
Other Stock Draws and Balance	0.5	-0.2	0.1	0.5	0.0
Total Stock Draw	0.7	-0.4	0.2	0.3	0.1
End-of-period Inventories (million barrels)					
U.S. Commercial Inventory	1,122	1,124	1,123	1,123	--
OECD Commercial Inventory	2,603	2,608	2,606	2,659	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) Eurasia = 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.

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)	July 2014	August 2014	July – August 2014 Average	July – August 2013 Average	2011 – 2013 Average
Crude Oil					
Algeria	1.2	1.2	1.2	1.2	1.2
Angola	1.6	1.7	1.6	1.7	1.7
Ecuador	0.5	0.6	0.6	0.5	0.5
Iran	2.8	2.8	2.8	2.7	3.1
Iraq	3.0	3.1	3.1	3.2	2.9
Kuwait	2.6	2.6	2.6	2.6	2.6
Libya	0.4	0.5	0.5	0.8	0.9
Nigeria	2.0	2.0	2.0	2.0	2.1
Qatar	0.8	0.8	0.8	0.7	0.8
Saudi Arabia	9.8	10.0	9.9	10.1	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	30.0	29.8	30.4	30.2
Non-crude liquids	6.1	6.2	6.2	6.2	6.1
Total OPEC Supply	35.7	36.2	36.0	36.6	36.3
Crude Oil Production Capacity					
Africa	5.1	5.3	5.2	5.6	5.9
South America	2.7	2.7	2.7	2.7	2.7
Middle East	23.7	23.7	23.7	23.6	24.0
OPEC Total	31.5	31.7	31.6	32.0	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	2.0	1.7	1.8	1.7	2.4
OPEC Total	2.0	1.7	1.8	1.7	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)	July 2014	August 2014	July – August 2014 Average	July – August 2013 Average	2011 – 2013 Average
North America	21.1	21.1	21.1	19.4	18.0
Canada	4.3	4.4	4.4	4.1	3.9
Mexico	2.9	2.9	2.9	2.9	2.9
United States	13.9	13.9	13.9	12.4	11.2
Central and South America	5.0	5.3	5.2	5.2	4.9
Argentina	0.7	0.7	0.7	0.7	0.7
Brazil	2.8	3.0	2.9	3.0	2.7
Colombia	1.0	1.1	1.0	1.1	1.0
Other Central and South America	0.5	0.5	0.5	0.5	0.5
Europe	3.8	3.7	3.7	3.8	4.0
Norway	1.8	1.8	1.8	1.9	1.9
United Kingdom (offshore)	0.7	0.7	0.7	0.7	0.9
Other North Sea	0.2	0.3	0.3	0.2	0.2
Eurasia (a)	13.6	13.6	13.6	13.5	13.4
Azerbaijan	0.8	0.8	0.8	0.9	0.9
Kazakhstan	1.6	1.6	1.6	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 Eurasia	0.3	0.2	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	8.9	8.9	8.8	9.0
Australia	0.5	0.5	0.5	0.5	0.5
China	4.5	4.5	4.5	4.4	4.4
India	1.0	1.0	1.0	1.0	1.0
Indonesia	0.9	0.9	0.9	0.9	1.0
Malaysia	0.6	0.6	0.6	0.6	0.6
Vietnam	0.3	0.3	0.3	0.3	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	55.9	56.3	56.1	54.3	53.0
OPEC non-crude liquids (c)	6.1	6.2	6.2	6.2	6.1
Non-OPEC + OPEC non-crude liquids	62.0	62.5	62.2	60.5	59.1

- a) Eurasia = Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.
- b) The estimates are 0.03 million bbl/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

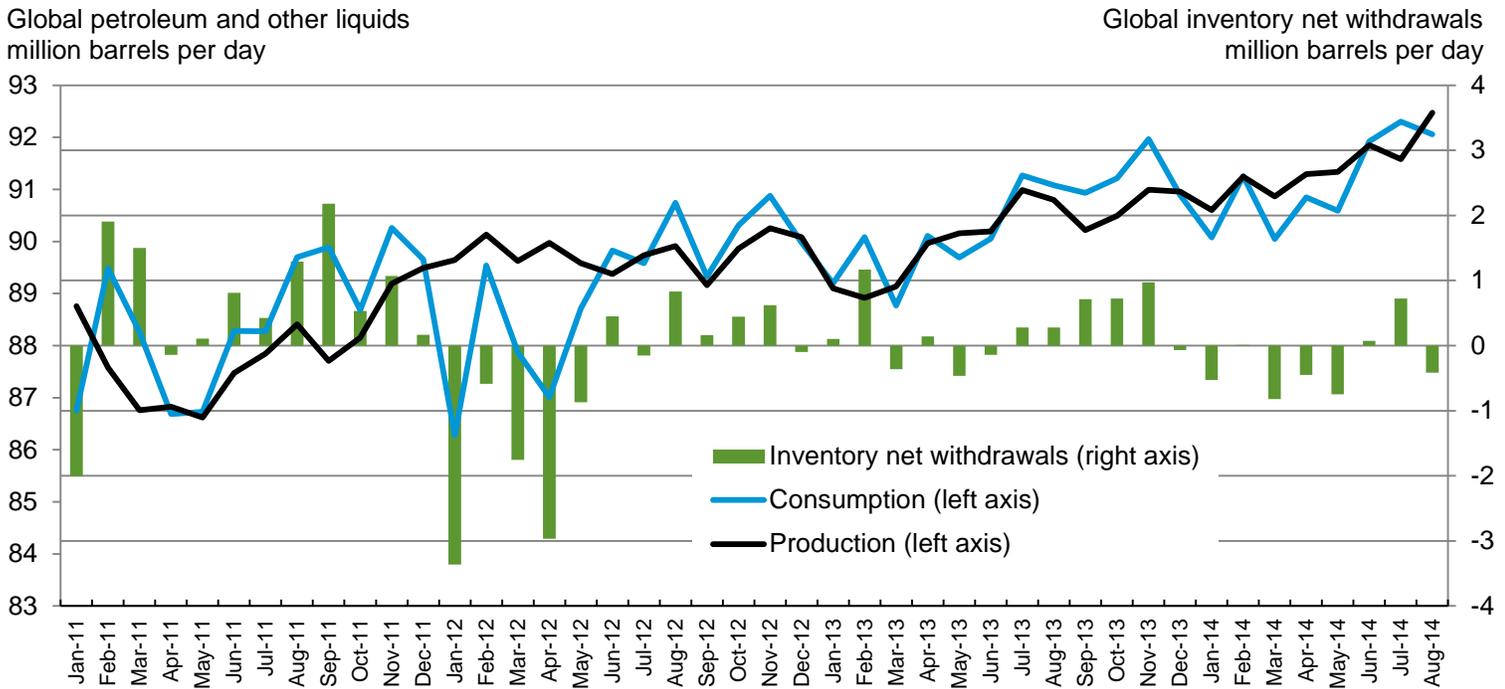
Item	July 2014	August 2014	July – August 2014 Average	July – August 2013 Average	2011 – 2013 Average
Brent Front Month Futures Price (\$ per barrel)	108.19	103.50	106.08	108.94	110.43
WTI Front Month Futures Price (\$ per barrel)	102.39	96.29	99.65	105.62	95.77
Dubai Front Month Futures Price (\$ per barrel)	106.15	102.25	104.40	105.60	107.21
Brent 1st - 13th Month Futures Spread (\$ per barrel)	2.43	-0.51	1.11	7.38	4.86
WTI 1st - 13th Month Futures Spread (\$ per barrel)	7.54	4.18	6.03	11.60	0.41
RBOB Front Month Futures Price (\$ per gallon)	2.91	2.73	2.83	2.99	2.86
Heating Oil Front Month Futures Price (\$ per gallon)	2.89	2.85	2.87	3.04	2.99
RBOB - Brent Futures Crack Spread (\$ per gallon)	0.33	0.26	0.30	0.39	0.23
Heating Oil - Brent Futures Crack Spread (\$ per gallon)	0.31	0.39	0.34	0.45	0.36

Note: August prices include data through market close on August 26, 2014.

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

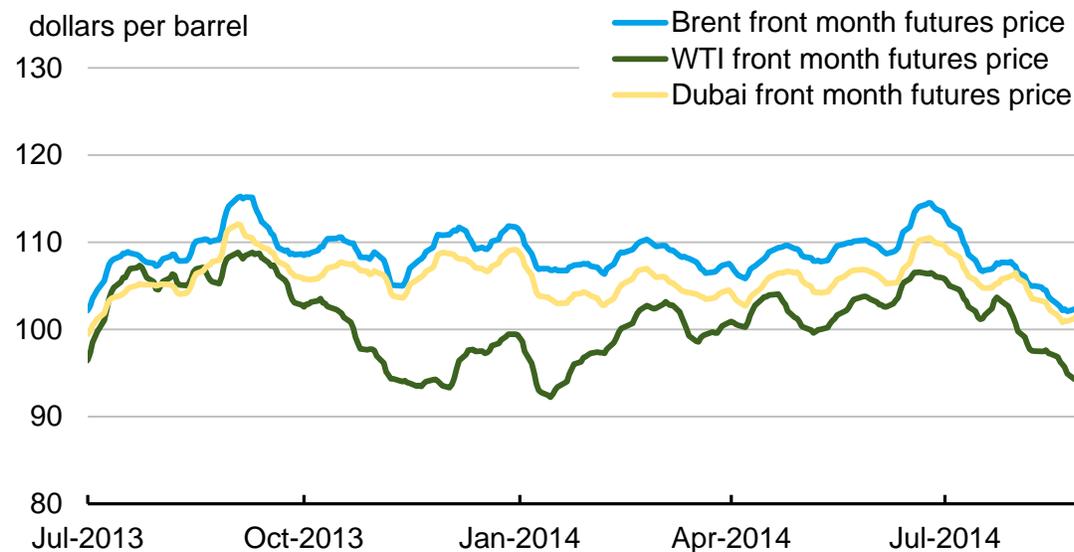
Figures

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



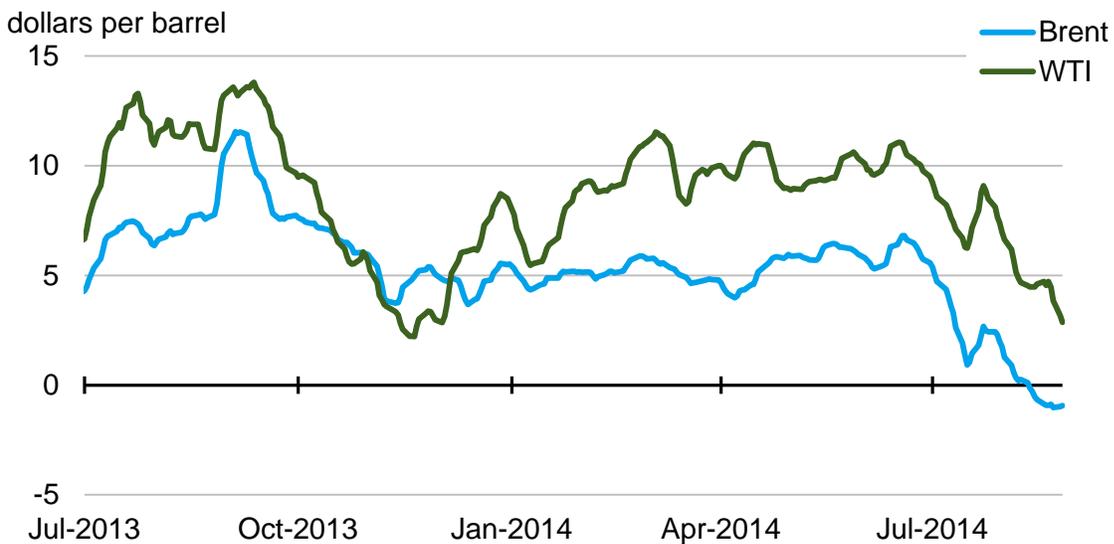
Note: See Table 1 footnotes for definitions of petroleum and other liquids, production, and consumption.
 Source: U.S. Energy Information Administration.

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).

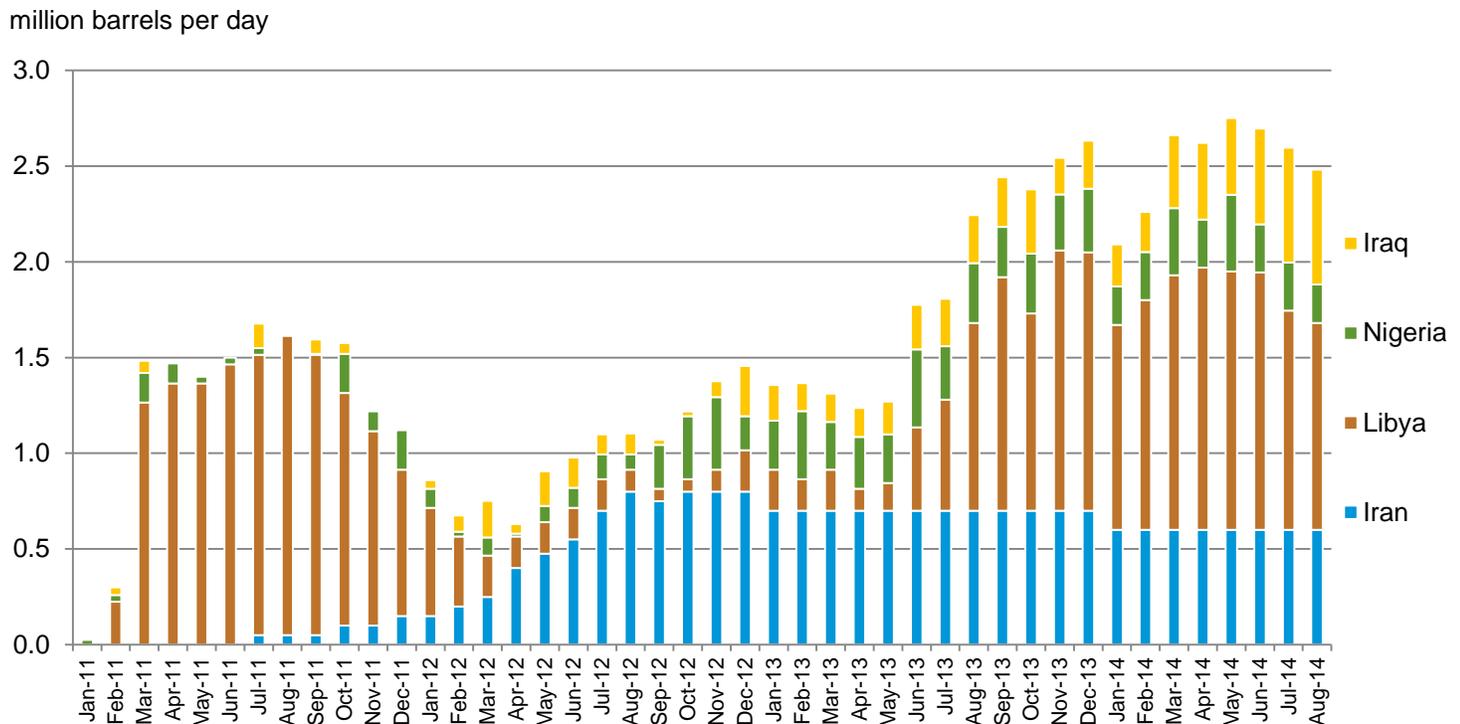
Figure 3. Crude Oil 1st - 13th Month Futures Price Spread



Note: All prices represent rolling 5-day averages.

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

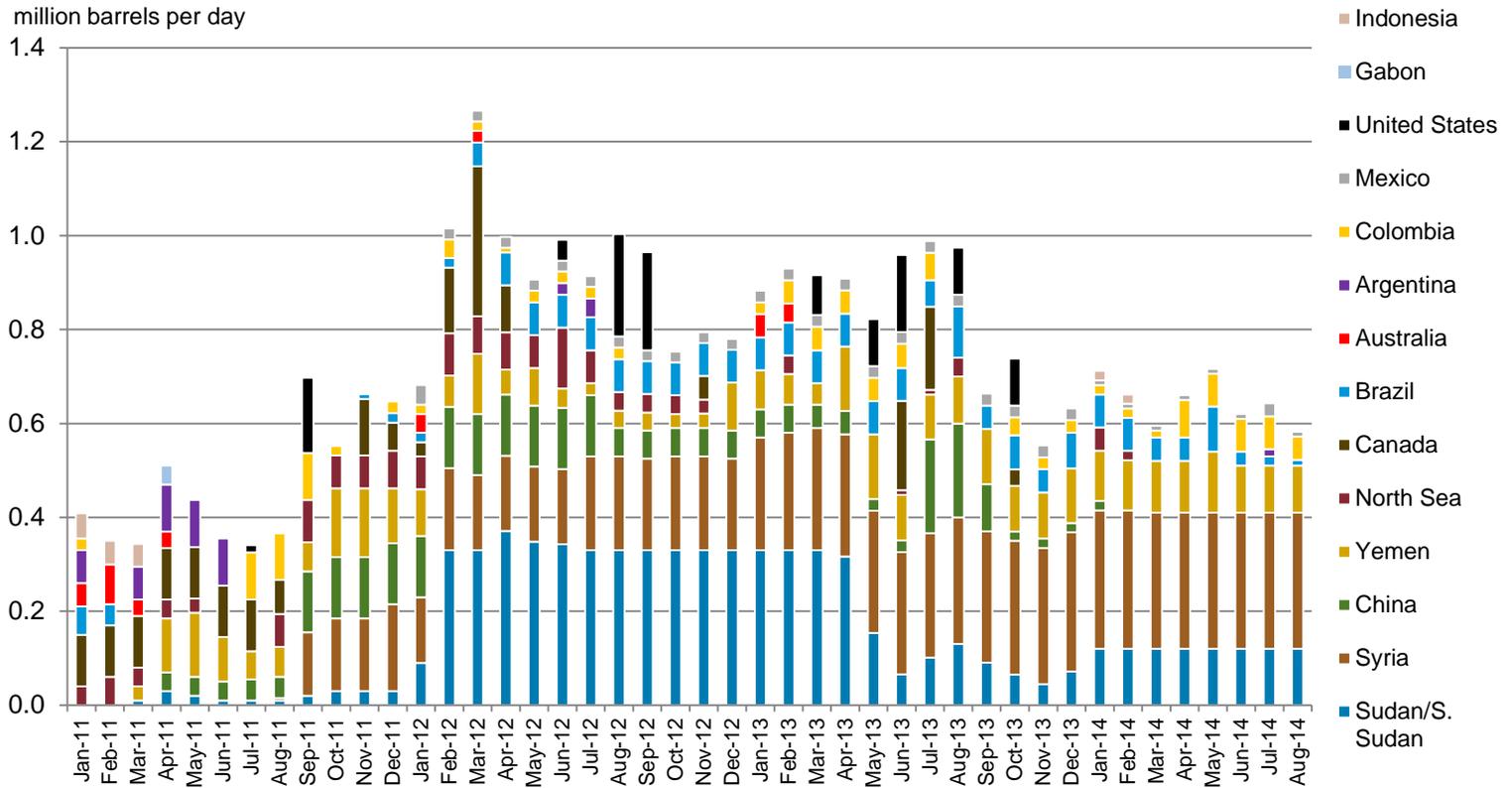
Figure 4. Estimated Unplanned Crude Oil Production Disruptions Among OPEC Producers, January 2011 – August 2014



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 – August 2014



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