



Independent Statistics & Analysis
U.S. Energy Information
Administration

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

Number 19 in a series of reports required by section 1245(d)(4)(A)
of the National Defense Authorization Act for Fiscal Year 2012

February 26, 2015



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This is the 19th 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.

January – February 2015 Update

- Despite a 30% drop in the U.S. crude oil rig count since the start of 2015 and announced planned reductions in 2015 capital expenditures by major international oil companies, estimates show average production during January and February continued to outpace consumption. There remains a large amount of uncertainty as to how quickly the combination of slower production growth and higher demand will rebalance global crude oil markets, which is reflected in the highest levels of crude oil price volatility since the first quarter 2009.
- The U.S. Energy Information Administration (EIA) estimates that commercial oil inventories held by countries in the Organization for Economic Cooperation and Development (OECD) in January and February were 208 million barrels higher on average compared with the same time last year (**Table 1**), the largest year-over-year growth in January and February at least since 1989. Global oil inventories built by an average of 0.6 million bbl/d in January and February, 0.1 million bbl/d higher than last year and 0.2 million bbl/d higher than the previous three-year average (**Table 1, Figure 1**).
- Although the decline in international crude oil prices halted in February, prices remain below previous levels. The Brent front month futures contract averaged \$60 per barrel for the five-trading-days ending February 24 (**Figure 2**), about \$11 per barrel below the November and December 2014 average and \$48 per barrel lower than the January and February 2014 average. Current market looseness is also reflected in the stronger contango (when near-term prices are lower than farther dated ones) in the Brent futures curve. The Brent 1st-13th month spread averaged -\$8 per barrel for the five-trading-days ending February 24, a departure from the backwardation (when near-term prices are higher than farther dated ones) that persisted in the Brent market from 2011 through the first half of 2014 (**Figure 3**).
- The increase of U.S. crude oil prices in February was smaller compared to other benchmarks, widening the differential between domestic and international crude oil prices. The West Texas Intermediate (WTI) front month futures price averaged \$50 per barrel for the five-trading-days ending February 24 (**Figure 2**), an average discount of \$9 per barrel to Brent and the largest Brent-WTI spread since February 2014. U.S. commercial crude oil inventories in February are at the highest level since the 1930s (providing the most days of forward coverage since February 1986) and are applying downward pressure on inland crude oil prices.
- Global petroleum and other liquids¹ consumption in January and February averaged 92.3 million bbl/d, 1.0 million bbl/d higher than the same time last year. Non-OECD consumption grew by almost 0.6 million bbl/d, led by Asia, and OECD consumption grew by almost 0.5 million bbl/d, led by Europe and the United States. Global petroleum and other liquids production,² which averaged 92.9 million bbl/d in January and February, grew by almost 1.2 million bbl/d compared with the same time last year. Non-OPEC production increased by more than 1.3 million bbl/d, while OPEC production decreased by almost 0.2 million bbl/d compared to the year-ago period (**Table 2, Table 3**).
- Global surplus crude oil production capacity averaged 2.1 million bbl/d in January and February, unchanged from the previous two-month period and almost 0.2 million bbl/d more than this time

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.

last year (**Table 3**). Surplus capacity is typically an indication of market conditions, and surplus capacity below 2.5 million bbl/d is an indicator of a tight market. However, the current volume of global oil inventories makes the current low surplus capacity level less significant.

- Global unplanned supply disruptions averaged 3.3 million bbl/d in January and February, returning back to the higher levels seen in the second quarter 2014, which contributed to a higher crude oil price at that time. However, with continuous growth in non-OPEC production and the level of OPEC production, the current volume of supply disruptions has become less significant. Unplanned supply disruptions could still affect crude oil prices going forward, but the threshold that the market can bear has risen in light of robust OPEC and non-OPEC production. Unplanned OPEC crude oil supply disruptions increased in January and February by 0.2 million bbl/d to 2.7 million bbl/d compared to the previous 60 days because of more outages in Libya and Iraq (**Figure 4**). Unplanned liquid fuels supply outages in non-OPEC countries were virtually the same compared with the previous 60 days, averaging 0.6 million bbl/d (**Figure 5**).
- Iran's petroleum and other liquids production averaged more than 3.3 million bbl/d in January and February, of which 2.8 million bbl/d was crude oil. EIA estimates that Iran's petroleum and other liquids production averaged almost 3.4 million bbl/d in 2014, nearly 0.2 million bbl/d above the 2013 level but the same level as the 2012-14 average (**Table 1**).
- EIA revised historical global supply and demand levels to reflect improved data estimates for various countries. Global petroleum and other liquids production for November and December 2014 published in the previous edition of this report was revised upward by 1.8 million bbl/d to average 94.0 million bbl/d, while global consumption was revised upward by 0.7 million bbl/d to average 93.2 million bbl/d. Global unplanned supply disruptions were revised downward by almost 0.2 million bbl/d to average 3.1 million bbl/d in November and December because of revisions to outages in Nigeria and Iraq.

Tables

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

	January 2015	February 2015	January – February 2015 Average	January – February 2014 Average	2012 – 2014 Average
Global Petroleum and Other Liquids (million barrels per day)					
Global Petroleum and Other Liquids Production (a)	93.0	92.8	92.9	91.8	91.4
Global Petroleum and Other Liquids Consumption (b)	91.8	92.8	92.3	91.3	91.0
Biofuels Production (c)	1.7	1.6	1.6	1.6	1.9
Biofuels Consumption (c)	1.9	2.0	2.0	1.9	1.9
Iran Liquid Fuels Production	3.3	3.3	3.3	3.4	3.4
Iran Liquid Fuels Consumption	1.9	1.9	1.9	2.1	1.8
Petroleum and Petroleum Products Produced and Consumed in Countries Other Than Iran (million barrels per day)					
Production (d)	88.0	87.9	88.0	86.8	86.1
Consumption (d)	87.9	89.0	88.4	87.3	87.3
Production minus Consumption	0.1	-1.1	-0.5	-0.4	-1.2
World Inventory Net Withdrawals Including Iran	-1.2	0.0	-0.6	-0.5	-0.4
Estimated OECD Inventory Level (e) (million barrels)	2,769	2,767	2,768	2,560	2,653
Surplus Production Capacity (million barrels per day)					
OPEC Surplus Crude Oil Production Capacity (f)	2.1	2.1	2.1	2.0	2.1
Oil Price Level					
WTI Front Month Futures Price (g) (\$ per barrel)	47.33	50.93	48.93	97.62	95.04
Brent Front Month Futures Price (h) (\$ per barrel)	49.76	58.33	53.57	107.93	106.61
RBOB Front Month Futures Price (i) (\$ per gallon)	1.34	1.58	1.45	2.70	2.80
Oil Price Time Spread					
WTI 1st - 13th Month Futures Spread (\$ per barrel)	-8.60	-10.20	-9.31	8.44	3.19
Brent 1st - 13th Month Futures Spread (\$ per barrel)	-10.56	-8.79	-9.77	5.09	4.29

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: February prices include data through market close on February 24, 2015.

Source: U.S. Energy Information Administration.

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

	January 2015	February 2015	January – February 2015 Average	January – February 2014 Average	2012 – 2014 Average
Production (million barrels per day) (a)					
OECD (b)	25.9	25.9	25.9	24.9	23.9
U.S. (50 States)	14.5	14.5	14.5	13.0	12.5
Canada	4.3	4.3	4.3	4.4	4.1
Mexico	2.8	2.8	2.8	2.9	2.9
North Sea (c)	2.6	2.7	2.7	3.0	2.9
Other OECD	1.6	1.6	1.6	1.5	1.6
Non-OECD	67.2	66.9	67.1	66.9	67.5
OPEC (d)	36.4	36.3	36.4	36.5	36.8
Crude Oil Portion	30.0	29.9	30.0	30.2	30.4
Non-crude liquids	6.4	6.4	6.4	6.4	6.4
Eurasia (e)	13.9	13.8	13.8	13.9	13.8
China	4.5	4.5	4.5	4.5	4.4
Other non-OECD	12.4	12.3	12.4	12.0	12.5
Total World Production	93.0	92.8	92.9	91.8	91.4
Non-OPEC Production	56.6	56.6	56.6	55.3	54.6
Consumption (million barrels per day) (f)					
OECD	46.0	46.9	46.4	45.9	45.9
U.S. (50 States)	19.2	19.2	19.2	19.0	18.8
U.S. territories	0.4	0.4	0.4	0.3	0.3
Canada	2.3	2.4	2.4	2.5	2.4
Europe	13.1	13.5	13.3	12.9	13.6
Japan	4.7	4.9	4.8	5.1	4.5
Other OECD	6.4	6.5	6.5	6.1	6.2
Non-OECD	45.9	46.0	45.9	45.3	45.1
Eurasia	4.7	4.6	4.6	4.8	4.8
Europe	0.7	0.7	0.7	0.7	0.7
China	10.7	10.5	10.6	10.3	10.3
Other Asia	11.8	12.0	11.8	11.6	11.4
Other non-OECD	18.0	18.2	18.1	17.9	17.9
Total World Consumption	91.8	92.8	92.3	91.3	91.0
Inventory Net Withdrawals (million barrels per day)					
U.S. (50 States)	-0.3	0.1	-0.1	0.3	-0.1
Other OECD	-0.3	0.0	-0.2	-0.5	0.0
Other Stock Draws and Balance	-0.6	-0.1	-0.3	-0.3	-0.2
Total Stock Draw	-1.2	0.0	-0.6	-0.5	-0.4
End-of-period Inventories (million barrels)					
U.S. Commercial Inventory	1,174	1,171	1,173	1,047	--
OECD Commercial Inventory	2,769	2,767	2,768	2,560	2,653

- 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)	January 2015	February 2015	January – February 2015 Average	January – February 2014 Average	2012 – 2014 Average
Crude Oil					
Algeria	1.1	1.1	1.1	1.2	1.2
Angola	1.8	1.8	1.8	1.6	1.7
Ecuador	0.6	0.6	0.6	0.6	0.5
Iran	2.8	2.8	2.8	2.8	2.8
Iraq	3.5	3.3	3.4	3.2	3.1
Kuwait	2.5	2.6	2.5	2.6	2.6
Libya	0.4	0.3	0.3	0.4	0.9
Nigeria	2.1	2.1	2.1	2.0	2.0
Qatar	0.7	0.7	0.7	0.7	0.7
Saudi Arabia	9.6	9.6	9.6	9.9	9.7
United Arab Emirates	2.7	2.7	2.7	2.7	2.7
Venezuela	2.4	2.4	2.4	2.4	2.4
OPEC Total	30.0	29.9	30.0	30.2	30.4
Non-crude liquids	6.4	6.4	6.4	6.4	6.4
Total OPEC Supply	36.4	36.3	36.4	36.5	36.8
Crude Oil Production Capacity					
Africa	5.3	5.2	5.3	5.2	5.8
South America	3.0	3.0	3.0	2.9	2.9
Middle East	23.9	23.8	23.9	23.9	23.8
OPEC Total	32.2	32.0	32.1	32.1	32.5
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	2.0	2.1
OPEC Total	2.1	2.1	2.1	2.0	2.1

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)	January 2015	February 2015	January – February 2015 Average	January – February 2014 Average	2012 – 2014 Average
North America	21.7	21.6	21.6	20.3	19.5
Canada	4.3	4.3	4.3	4.4	4.1
Mexico	2.8	2.8	2.8	2.9	2.9
United States	14.5	14.5	14.5	13.0	12.5
Central and South America	4.9	4.9	4.9	4.5	5.0
Argentina	0.7	0.7	0.7	0.7	0.7
Brazil	2.7	2.6	2.7	2.3	2.8
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	3.6	3.7	3.7	4.0	3.9
Norway	1.8	1.8	1.8	1.9	1.9
United Kingdom (offshore)	0.7	0.7	0.7	0.9	0.8
Other North Sea	0.2	0.2	0.2	0.2	0.2
Eurasia (a)	13.9	13.8	13.9	14.0	13.8
Azerbaijan	0.8	0.8	0.8	0.9	0.9
Kazakhstan	1.7	1.7	1.7	1.7	1.7
Russia	10.9	10.9	10.9	10.9	10.7
Turkmenistan	0.3	0.3	0.3	0.3	0.3
Other Eurasia	0.2	0.2	0.2	0.2	0.2
Middle East	1.2	1.2	1.2	1.2	1.2
Oman	1.0	1.0	1.0	0.9	0.9
Syria (b)	0.0	0.0	0.0	0.0	0.1
Yemen	0.1	0.1	0.1	0.1	0.1
Asia and Oceania	9.1	9.1	9.1	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	0.9	0.9
Malaysia	0.7	0.7	0.7	0.7	0.7
Vietnam	0.3	0.3	0.3	0.3	0.3
Africa	2.2	2.2	2.2	2.3	2.3
Egypt	0.6	0.6	0.6	0.7	0.7
Equatorial Guinea	0.2	0.2	0.2	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	0.2
Total non-OPEC liquids	56.6	56.6	56.6	55.3	54.6
OPEC non-crude liquids (c)	6.4	6.4	6.4	6.4	6.4
Non-OPEC + OPEC non-crude liquids	63.0	63.0	63.0	61.6	61.0

- 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

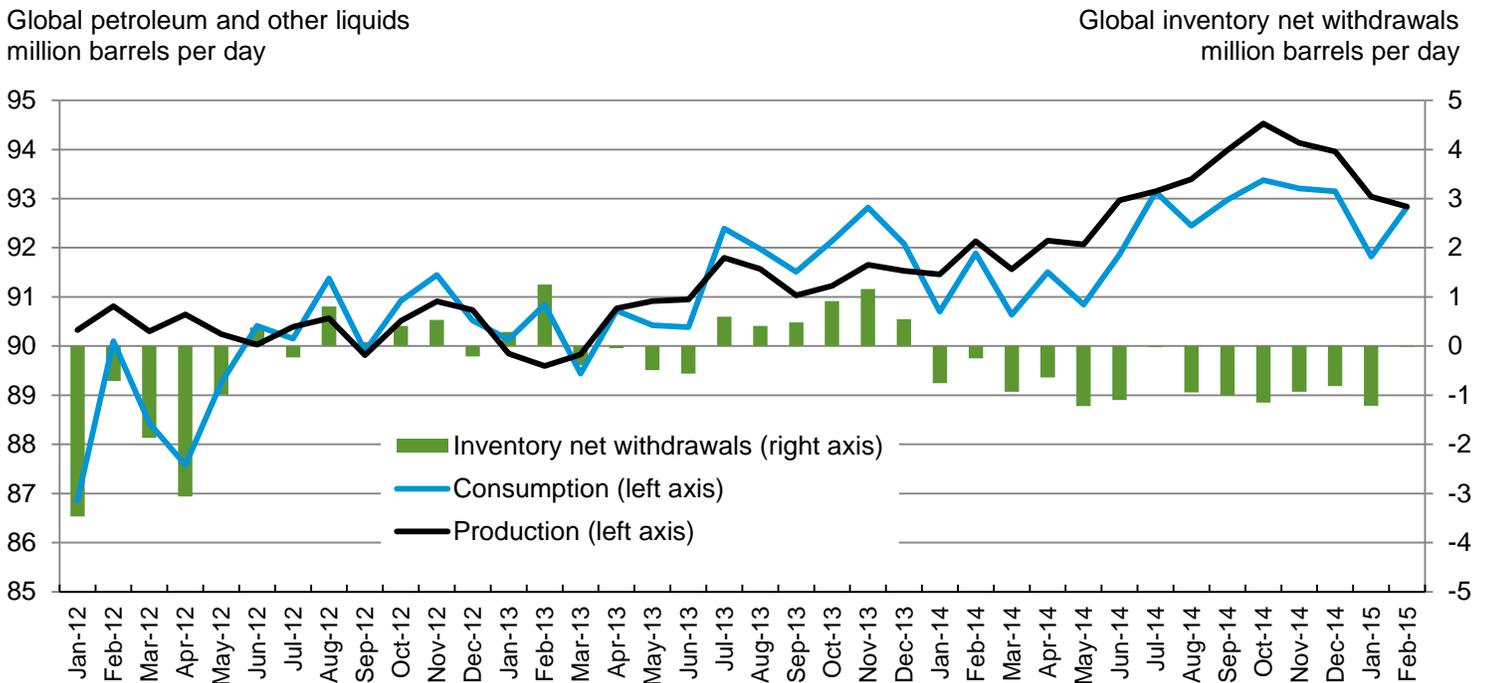
Item	January 2015	February 2015	January – February 2015 Average	January – February 2014 Average	2012 – 2014 Average
Brent Front Month Futures Price (\$ per barrel)	49.76	58.33	53.57	107.93	106.61
WTI Front Month Futures Price (\$ per barrel)	47.33	50.93	48.93	97.62	95.04
Dubai Front Month Futures Price (\$ per barrel)	46.79	56.46	51.09	104.50	103.92
Brent 1st - 13th Month Futures Spread (\$ per barrel)	-10.56	-8.79	-9.77	5.09	4.29
WTI 1st - 13th Month Futures Spread (\$ per barrel)	-8.60	-10.20	-9.31	8.44	3.19
RBOB Front Month Futures Price (\$ per gallon)	1.34	1.58	1.45	2.70	2.80
Heating Oil Front Month Futures Price (\$ per gallon)	1.67	1.92	1.78	3.05	2.93
RBOB - Brent Futures Crack Spread (\$ per gallon)	0.16	0.19	0.17	0.13	0.26
Heating Oil - Brent Futures Crack Spread (\$ per gallon)	0.49	0.53	0.51	0.48	0.39

Note: February prices include data through market close on February 24, 2015.

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

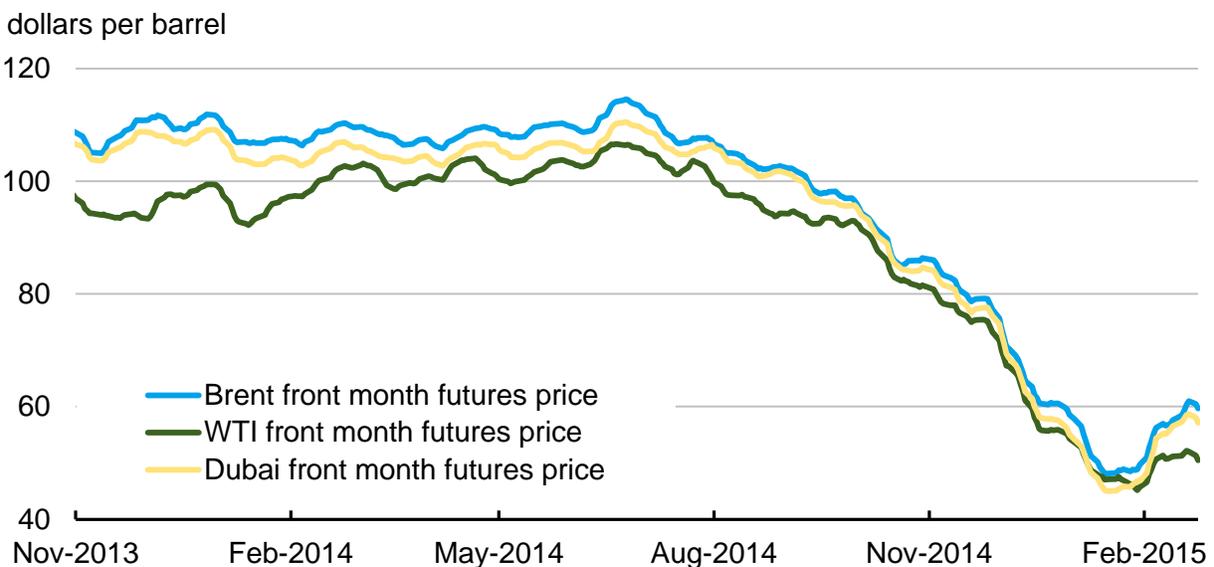
Figures

Figure 1. Global Petroleum and Other Liquids Production, Consumption, and Inventory Net Withdrawals, January 2012 – February 2015



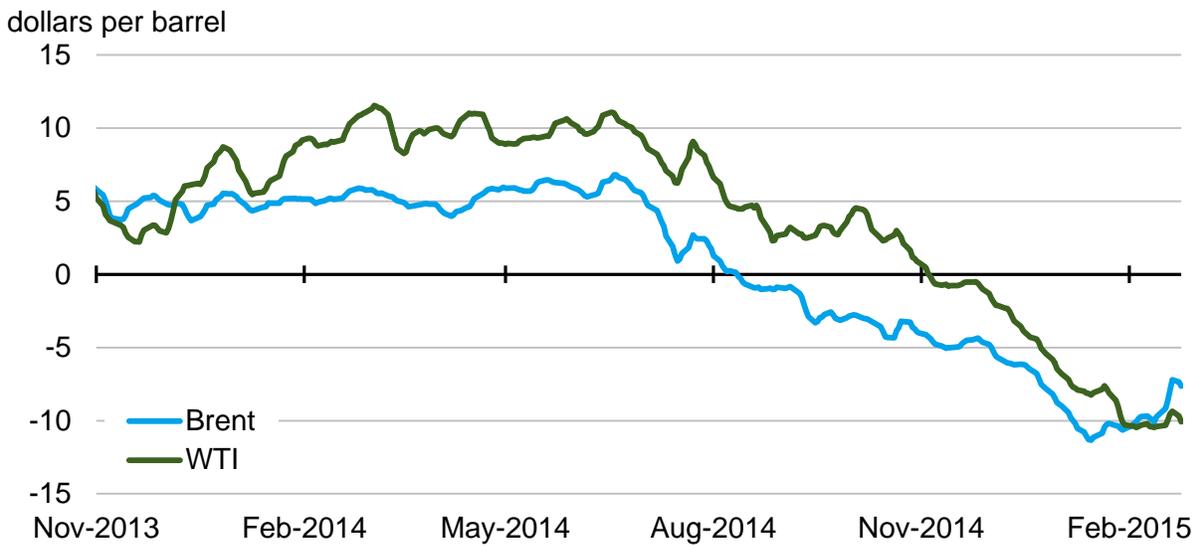
Note: See Table 1 footnotes for definitions of petroleum and other liquids, production, and consumption.
 Source: U.S. Energy Information Administration.

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).

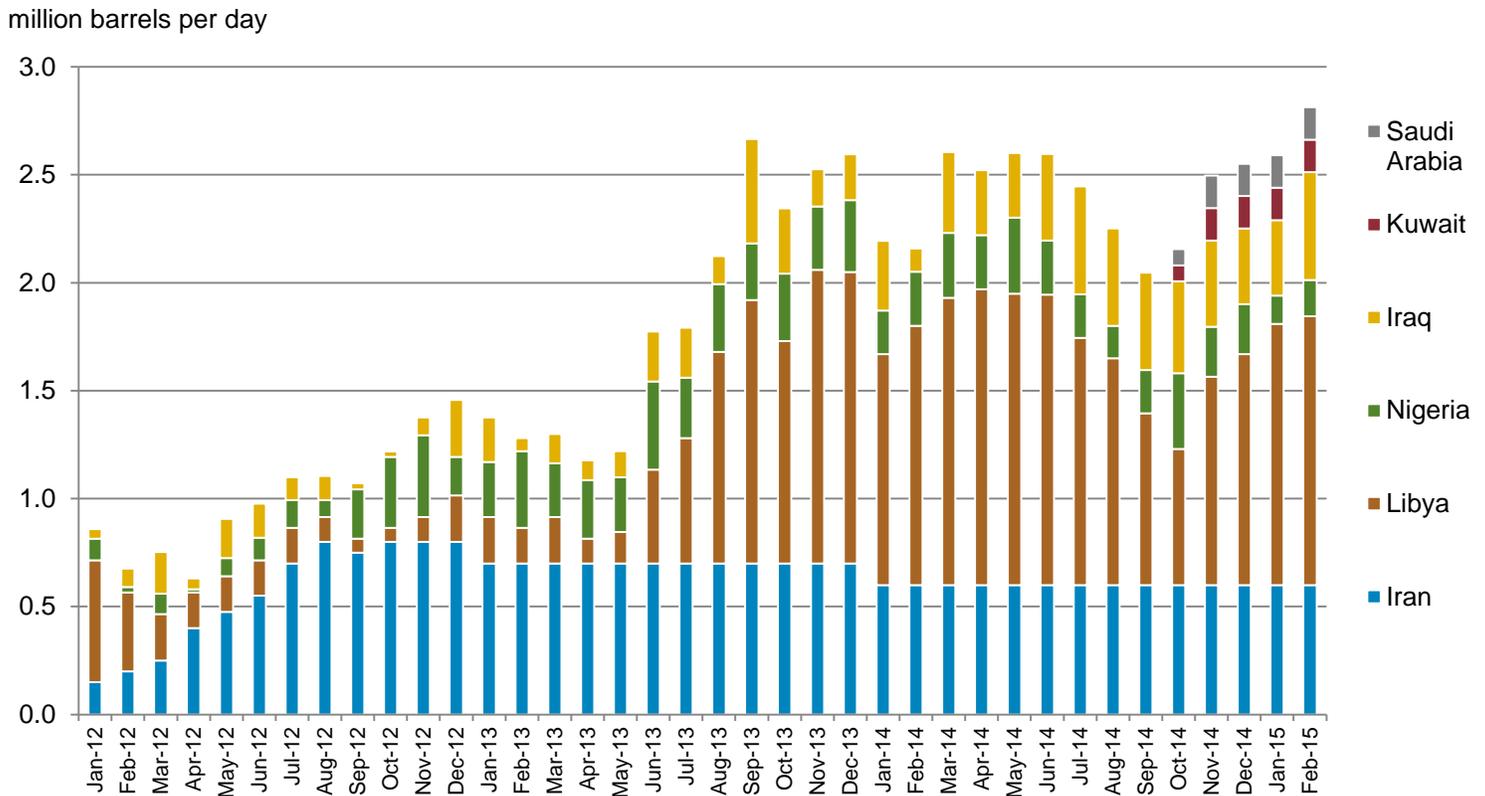
Figure 3. Crude Oil 1st - 13th Month Futures Price Spread



Note: All prices represent rolling 5-day averages.

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

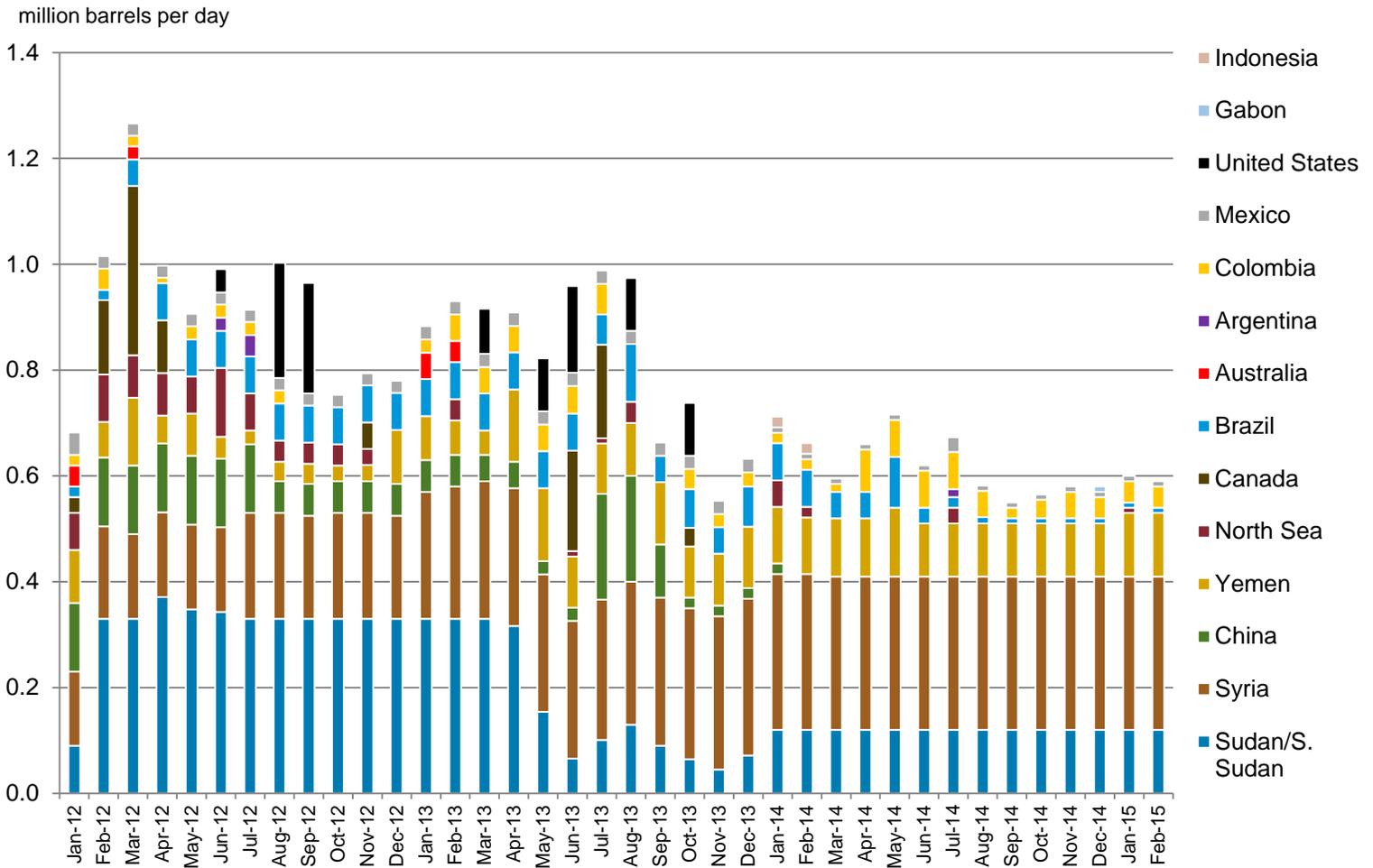
Figure 4. Estimated Unplanned Crude Oil Production Disruptions Among OPEC Producers, January 2012 – February 2015



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 2012 – February 2015



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