



Independent Statistics & Analysis
U.S. Energy Information
Administration

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

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

June 27, 2013



Table of Contents

May – June 2013 Update	2
Tables	4
Figures	10

This is the ninth 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 are encouraged to consult previous editions of this report for detailed background and contextual information not repeated here.

May – June 2013 Update

- The U.S. Energy Information Administration (EIA) estimates that global liquid fuels¹ production outpaced consumption in May and June 2013, resulting in a 0.2-million-barrel-per-day (bbl/d) average build in global oil stocks (**Table 1, Figure 1**). Inventories in the United States were estimated to average 1.1 billion barrels, 2 percent higher than at the same time last year. However, commercial inventories in other Organization for Economic Cooperation and Development (OECD) countries were roughly unchanged from their year-ago level.
- Despite the global inventory build during May and June, crude oil prices were relatively unchanged compared to year-ago levels, with some of the price support likely coming from geopolitical risks associated with the Middle East. The Brent front month futures price averaged about \$102 per barrel for the five-trading-day period ending June 25, a rise of about \$0.50 per barrel compared to the five-trading-day average ending April 26 (**Figure 2**). In May and June 2013, Brent averaged about \$103 per barrel, at about the same level as the May-June period last year (**Table 5**).
- Global liquid fuels supply during May and June was 0.8 million bbl/d² higher than in the comparable 2012 period, and 0.9 million bbl/d higher than the average during March and April. This was mainly due to increases in production from countries outside of the Organization of the Petroleum Exporting Countries (OPEC). Non-OPEC producers supplied 1.4 million bbl/d more liquids than in the same two-month period last year. North America accounted for most of the growth, with tight oil plays contributing to most of the 1.0-million-bbl/d increase in U.S. production. OPEC liquid fuels production fell by 0.5 million bbl/d from the comparable year-ago period, as a net result of lower crude oil output in Saudi Arabia, Iran, and to a lesser extent, Algeria, Libya, and Nigeria (**Table 3**). Production of non-crude liquids among OPEC members increased by 0.3 million bbl/d in May and June compared with year-ago levels.
- Global liquid fuels consumption during May and June averaged 0.5 million bbl/d higher than its average during May and June 2012. Consumption during May and June was approximately 0.5 million bbl/d higher than the average consumption for March and April 2013, consistent with typical seasonal patterns (**Table 1**). Non-OECD countries accounted for the increase in total world consumption over year-ago levels and the three-year average (**Table 2**). On the other hand, European members of OECD saw consumption decrease by 0.6 million bbl/d on average compared with the same time period last year.
- The total volume of production that is off line due to unplanned outages in non-OPEC countries averaged nearly 0.8 million bbl/d in May and June 2013, somewhat lower than the previous two-month period. Although unplanned outages in Sudan and South Sudan fell in May and June, new production shut-ins occurred in June in the aftermath of floods in Alberta, Canada, which forced a disruption on a number of pipelines and production areas. This resulted in an average of 190,000 bbl/d of disrupted production volume for June. Unplanned

¹ The term “liquid fuels” encompasses petroleum and petroleum products and close substitutes, including crude oil, lease condensate, natural gas plant 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.

non-OPEC outages continue to exceed the more typical levels that prevailed in the fourth quarter of 2011 (**Figure 3**). 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 revised to reflect EIA's current understanding.

- Iran's liquid fuels production averaged 3.4 million bbl/d in May and June, of which 2.8 million bbl/d was crude oil, remaining at the same average level as in March and April. Nonetheless, Iran's liquid fuels production remains well below its year-ago level of 3.6 million bbl/d and the three-year average production total of 4.0 million bbl/d (**Table 1**).
- Global surplus crude oil production capacity in May and June was 2.4 million bbl/d, which is 0.3 million bbl/d above the year-ago level, but still remains 0.6 million bbl/d lower than the historical three-year average (**Table 3**). The estimate of effective surplus capacity does not include additional capacity that may be technically available in Iran, but which is off line due to the impacts of U.S. and European Union (EU) sanctions on Iran's ability to sell its oil.
- Growth in surplus production capacity over the last year and a robust build in global crude oil inventories in May and June likely contributed to a flatter Brent futures curve, a sign of an expectation of a looser world waterborne crude oil market compared to earlier this year. Backwardation (when near-month prices are higher than farther dated prices) in the Brent futures curve was relatively constant during May and June 2013 and averaged about \$3.75 per barrel over the two-month period, less than \$1 per barrel higher compared to the average during May and June 2012 when backwardation was at its lowest point over the last three years (**Figure 4**).
- EIA has revised the preliminary estimates for March and April liquid fuels production and stock draws published in the previous edition of this report. World liquid fuels production was revised upward by 0.7 million bbl/d to average 88.9 million bbl/d, while the estimated global stock draw was reduced to average 0.3 million bbl/d for the two months. The change in total production was mainly the result of a 0.3-million-bbl/d revision to U.S. liquid fuels production and numerous small revisions throughout the world. Total world consumption was revised down by approximately 0.1 million bbl/d.

Tables

Table 1. Summary of Estimated Liquid Fuels Quantities and Prices

	May 2013	June 2013	May – June 2013 Average	May – June 2012 Average	2010 – 2012 Average
Total Global Liquid Fuels					
Total Global Liquid Fuels Production (a) (million bbl/d)	89.9	89.8	89.9	89.0	87.8
Total Global Liquid Fuels Consumption (b) (million bbl/d)	89.3	90.1	89.7	89.2	88.3
Biofuels Production (c) (million bbl/d)	2.1	2.2	2.2	2.1	1.8
Biofuels Consumption (c) (million bbl/d)	1.8	1.8	1.8	1.8	1.7
Iran Liquid Fuels Production (million bbl/d)	3.4	3.4	3.4	3.6	4.0
Iran Liquid Fuels Consumption (million bbl/d)	1.7	1.8	1.8	1.7	1.7
Petroleum and Petroleum Products Produced and Consumed in Countries Other Than Iran					
Production (d) (million bbl/d)	84.4	84.2	84.3	83.3	82.0
Consumption (d) (million bbl/d)	85.3	86.5	86.1	85.7	84.9
Production minus Consumption	-1.4	-2.2	-1.8	-2.3	-2.9
World Inventory Net Withdrawals Including Iran (million bbl/d)	-0.6	0.2	-0.2	0.1	0.5
Estimated OECD Inventory Level (e) (million barrels)	2,644	2,653	2,649	2,669	--
Surplus Production Capacity					
OPEC Surplus Crude Oil Production Capacity (f) (million bbl/d)	2.4	2.4	2.4	2.1	3.0
Oil Price Level					
WTI Front Month Futures Price (g) (\$ per barrel)	94.80	95.67	95.18	88.71	89.62
Brent Front Month Futures Price (h) (\$ per barrel)	103.28	103.42	103.34	103.28	100.98
RBOB Front Month Futures Price (i) (\$ per gallon)	2.84	2.82	2.83	2.80	2.62
Oil Price Time Spread					
WTI 1st - 13th Month Futures Spread (\$ per barrel)	3.72	4.47	4.05	-1.86	-3.16
Brent 1st - 13th Month Futures Spread (\$ per barrel)	3.66	3.83	3.73	2.94	1.31

Note: The term "liquid fuels" encompasses crude oil, lease condensate, natural gas plant 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 plant 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 2011 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 since ethanol production in Brazil reaches its seasonal peak and tends to be 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 25, 2013.

Source: U.S. Energy Information Administration.

Table 2. International Liquid Fuels Production, Consumption, and Inventory Estimates

	May 2013	June 2013	May – June 2013 Average	May – June 2012 Average	2010 – 2012 Average
Production (million barrels per day) (a)					
OECD	23.2	23.0	23.1	22.4	21.9
U.S. (50 States)	12.0	11.9	11.9	11.0	10.3
Canada	3.9	3.8	3.8	3.7	3.6
Mexico	2.9	2.9	2.9	2.9	3.0
North Sea (b)	2.9	2.8	2.9	3.2	3.4
Other OECD	1.6	1.6	1.6	1.6	1.6
Non-OECD	66.7	66.8	66.7	66.7	65.9
OPEC	36.2	35.9	36.1	36.6	35.5
Crude Oil Portion	30.4	30.1	30.3	31.1	30.2
Non-crude liquids	5.8	5.8	5.8	5.5	5.4
Former Soviet Union	13.4	13.4	13.4	13.4	13.3
China	4.5	4.6	4.6	4.3	4.3
Other non-OECD	12.6	12.9	12.8	12.4	12.8
Total World Production	89.9	89.8	89.9	89.0	87.8
Non-OPEC Production	53.7	53.9	53.8	52.4	52.3
Consumption (million barrels per day) (c)					
OECD	44.8	45.2	45.0	45.9	46.5
U.S. (50 States)	18.7	18.8	18.7	18.8	18.9
U.S. territories	0.4	0.4	0.4	0.3	0.3
Canada	2.2	2.3	2.2	2.3	2.3
Europe	13.1	13.5	13.3	13.9	14.2
Japan	4.3	4.0	4.2	4.2	4.6
Other OECD	6.2	6.3	6.3	6.3	6.2
Non-OECD	44.5	44.9	44.7	43.3	41.8
Former Soviet Union	4.7	4.7	4.7	4.6	4.5
Europe	0.7	0.7	0.7	0.7	0.7
China	10.4	10.5	10.4	10.0	9.8
Other Asia	10.9	10.8	10.9	10.8	10.5
Other non-OECD	17.8	18.1	18.0	17.2	16.5
Total World Consumption	89.3	90.1	89.7	89.2	88.3
Inventory Net Withdrawals (million barrels per day)					
U.S. (50 States)	-0.3	-0.6	-0.5	-0.5	0.0
Other OECD	-0.1	0.3	0.1	0.2	0.1
Other Stock Draws and Balance	-0.2	0.5	0.2	0.4	0.5
Total Stock Draw	-0.6	0.2	-0.2	0.1	0.5
End-of-period Inventories (million barrels)					
U.S. Commercial Inventory	1,120	1,137	1,128	1,105	--
OECD Commercial Inventory	2,644	2,653	2,649	2,669	--

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.

OPEC = Organization of the Petroleum Exporting Countries: Algeria, Angola, Ecuador, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

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

(a) Supply includes production of crude oil (including lease condensates), natural gas plant liquids, biofuels, other liquids, and refinery processing gains.

(b) Includes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.

(c) 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.

Source: U.S. Energy Information Administration.

Table 3. OPEC Crude Oil (Excluding Condensates) and Liquid Fuels Production Estimates

Production (million barrels per day)	May 2013	June 2013	May – June 2013 Average	May – June 2012 Average	2010 – 2012 Average
Crude Oil					
Algeria	1.2	1.2	1.2	1.3	1.3
Angola	1.8	1.8	1.8	1.7	1.8
Ecuador	0.5	0.5	0.5	0.5	0.5
Iran	2.8	2.8	2.8	3.0	3.5
Iraq	3.1	3.2	3.1	2.9	2.6
Kuwait	2.6	2.6	2.6	2.6	2.4
Libya	1.4	1.2	1.3	1.4	1.2
Nigeria	2.0	1.9	1.9	2.2	2.1
Qatar	0.7	0.7	0.7	0.7	0.8
Saudi Arabia	9.4	9.4	9.4	9.8	9.3
United Arab Emirates	2.7	2.7	2.7	2.7	2.5
Venezuela	2.2	2.2	2.2	2.2	2.2
OPEC Total	30.4	30.1	30.3	31.1	30.2
Non-crude liquids	5.8	5.8	5.8	5.5	5.4
Total OPEC Supply	36.2	35.9	36.1	36.6	35.5
Crude Oil Production Capacity					
Africa	6.4	6.1	6.2	6.5	6.3
South America	2.7	2.7	2.7	2.7	2.7
Middle East	23.7	23.8	23.7	23.9	24.3
OPEC Total	32.8	32.5	32.7	33.1	33.2
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	2.4	2.4	2.4	2.1	3.0
OPEC Total	2.4	2.4	2.4	2.1	3.0

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 due to the impacts of U.S. and EU sanctions on Iran's ability to sell its oil.

Source: U.S. Energy Information Administration.

Table 4. Non-OPEC Liquid Fuels Production Estimates

Production (million barrels per day)	May 2013	June 2013	May – June 2013 Average	May – June 2012 Average	2010 – 2012 Average
North America	18.7	18.6	18.7	17.7	16.9
Canada	3.9	3.8	3.8	3.7	3.6
Mexico	2.9	2.9	2.9	2.9	3.0
United States	12.0	11.9	11.9	11.0	10.3
Central and South America	5.2	5.3	5.3	4.8	4.8
Argentina	0.7	0.7	0.7	0.7	0.8
Brazil	2.9	3.1	3.0	2.7	2.7
Colombia	1.0	1.0	1.0	1.0	0.9
Other Central and South America	0.5	0.5	0.5	0.5	0.5
Europe	3.8	3.8	3.8	4.1	4.3
Norway	1.8	1.8	1.8	1.9	2.0
United Kingdom (offshore)	0.9	0.8	0.9	1.0	1.1
Other North Sea	0.2	0.3	0.2	0.2	0.3
Former Soviet Union (FSU) (a)	13.4	13.4	13.4	13.4	13.3
Azerbaijan	0.9	0.9	0.9	1.0	1.0
Kazakhstan	1.7	1.7	1.7	1.6	1.6
Russia	10.3	10.3	10.3	10.3	10.3
Turkmenistan	0.3	0.3	0.3	0.2	0.2
Other FSU	0.3	0.3	0.3	0.2	0.2
Middle East	1.2	1.2	1.2	1.4	1.4
Oman	0.9	0.9	0.9	0.9	0.9
Syria	0.1	0.1	0.1	0.2	0.3
Yemen	0.1	0.1	0.1	0.2	0.2
Asia and Oceania	9.0	9.1	9.1	8.9	9.0
Australia	0.5	0.5	0.5	0.5	0.5
China	4.5	4.6	4.6	4.3	4.3
India	1.0	1.0	1.0	1.0	1.0
Indonesia	1.0	1.0	1.0	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	2.4	2.5	2.4	2.3	2.5
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 (b)	0.3	0.4	0.3	0.1	0.4
Total non-OPEC liquids	53.7	53.9	53.8	52.4	52.3
OPEC non-crude liquids (c)	5.8	5.8	5.8	5.5	5.4
Non-OPEC + OPEC non-crude liquids	59.5	59.7	59.6	58.0	57.7

Former Soviet Union = Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

Sudan production represents total production from both Sudan and South Sudan.

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.

Source: U.S. Energy Information Administration.

Table 5. Crude Oil and Petroleum Product Price Data

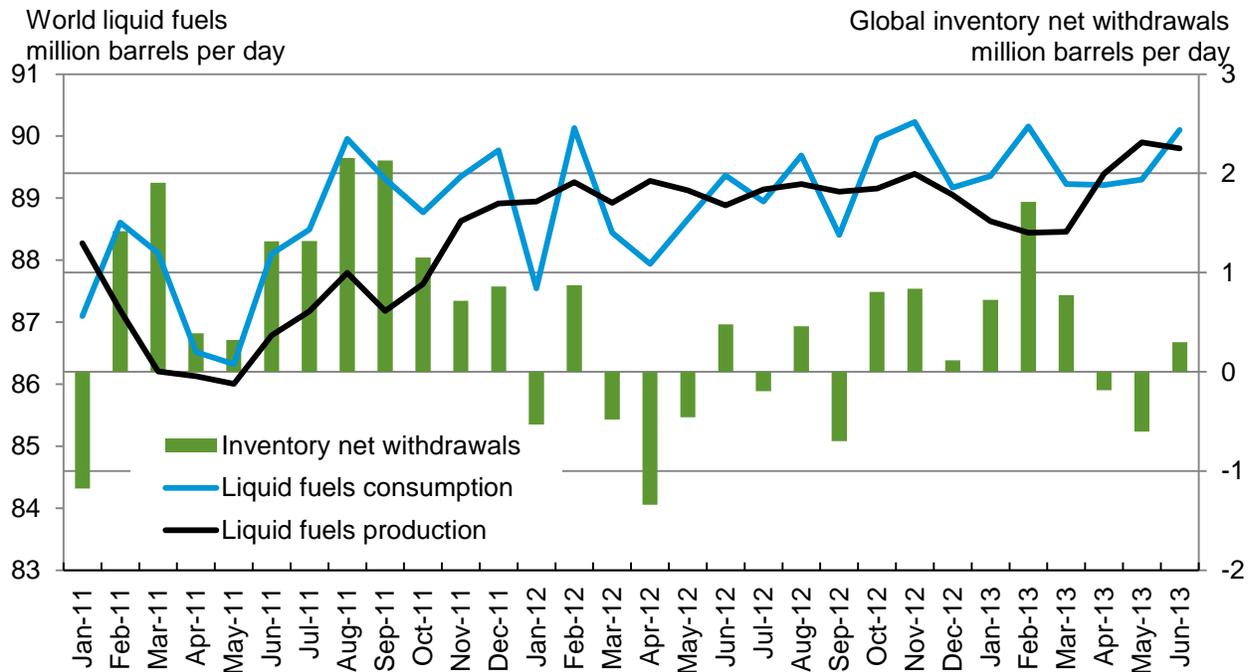
	May 2013	June 2013	May – June 2013 Average	May – June 2012 Average	2010 – 2012 Average
Brent Front Month Futures Price (\$ per barrel)	103.28	103.42	103.34	103.28	100.98
WTI Front Month Futures Price (\$ per barrel)	94.80	95.67	95.18	88.71	89.62
Dubai Front Month Futures Price (\$ per barrel)	100.70	100.42	100.58	100.99	98.17
Brent 1st - 13th Month Futures Spread (\$ per barrel)	3.66	3.83	3.73	2.94	1.31
WTI 1st - 13th Month Futures Spread (\$ per barrel)	3.72	4.47	4.05	-1.86	-3.16
RBOB Front Month Futures Price (\$ per gallon)	2.84	2.82	2.83	2.80	2.62
Heating Oil Front Month Futures Price (\$ per gallon)	2.89	2.89	2.89	2.77	2.71
RBOB - Brent Futures Crack Spread (\$ per gallon)	0.38	0.36	0.37	0.35	0.22
Heating Oil - Brent Futures Crack Spread (\$ per gallon)	0.43	0.43	0.43	0.31	0.31

Note: June prices include data through market close on June 19, 2013.

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

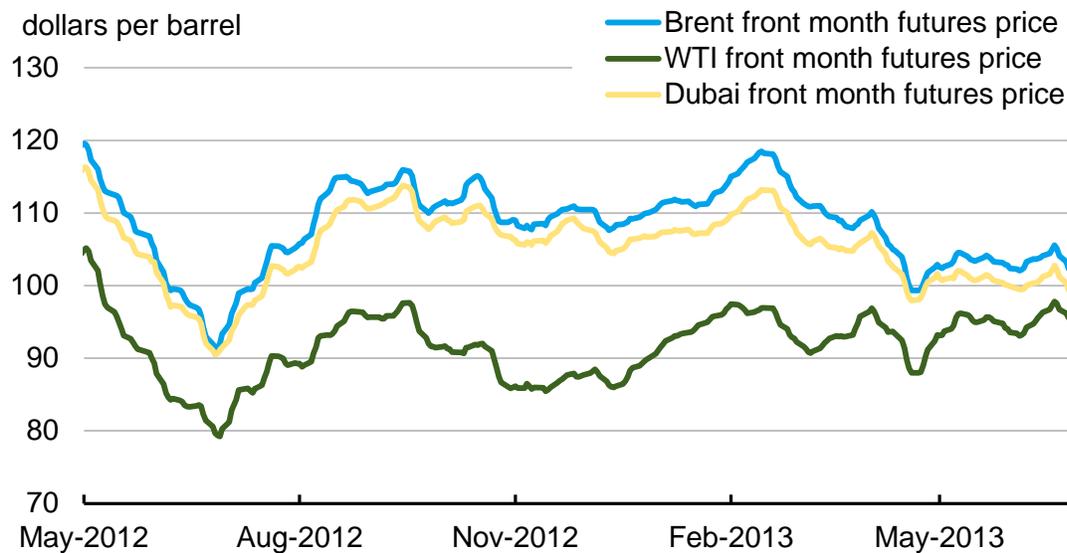
Figures

Figure 1. World Liquid Fuels Production, Consumption, and Net Inventory Withdrawals, January 2011 – June 2013



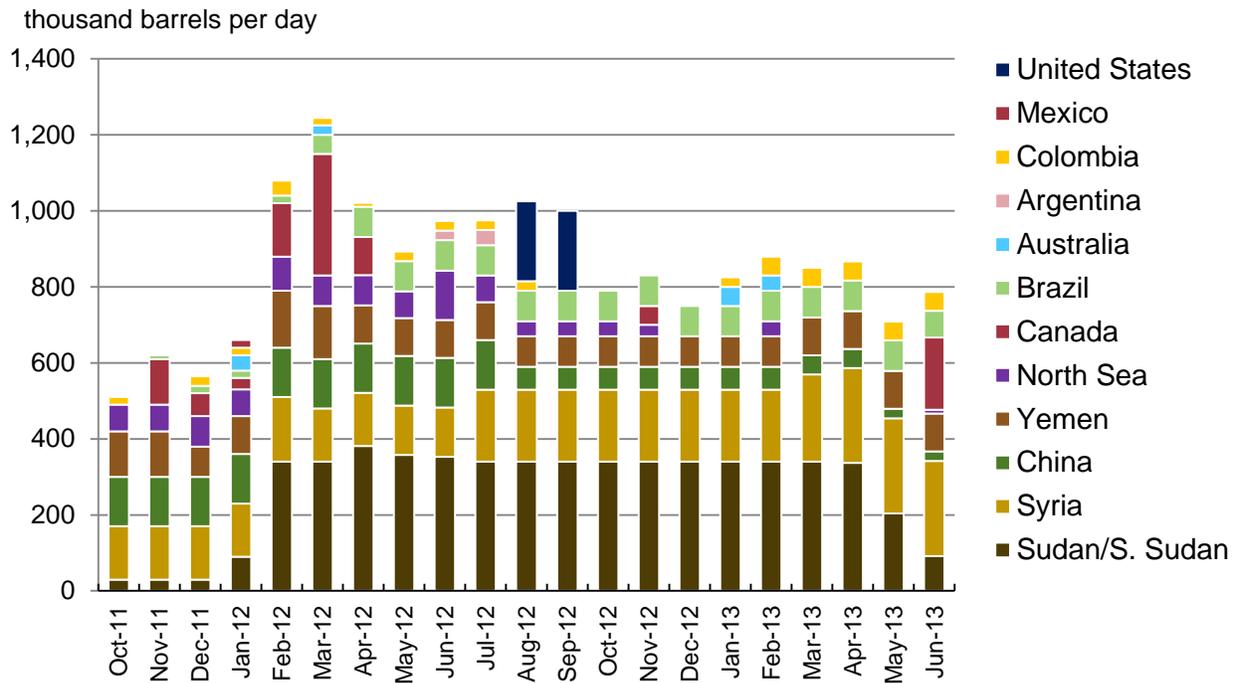
Note: See Table 1 footnotes for definitions of liquid fuels, production, and consumption.
 Source: U.S. Energy Information Administration.

Figure 2. Front Month Crude Oil Futures Prices



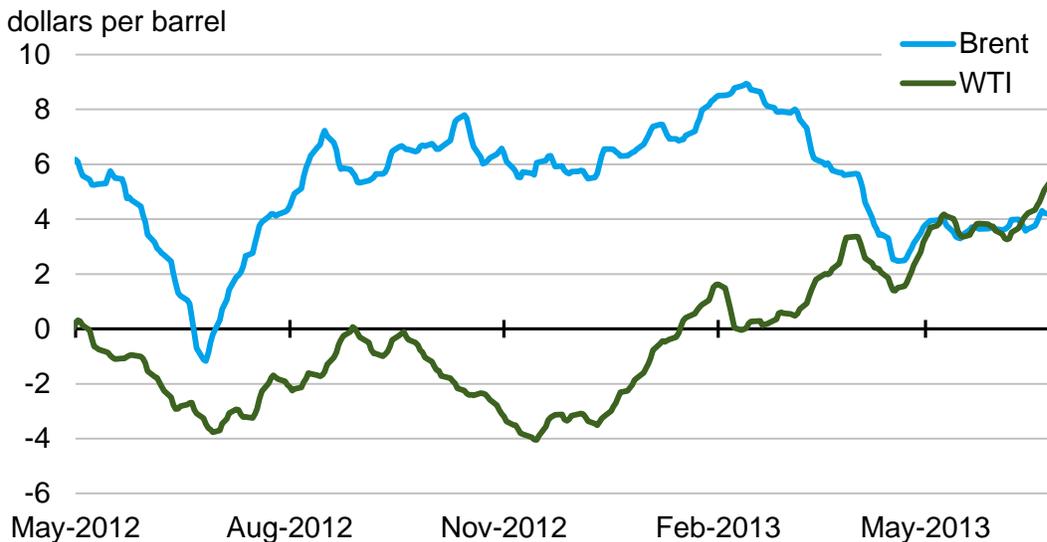
Note: All prices represent rolling 5-day averages.
 Source: U.S. Energy Information Administration, based on Chicago Mercantile Exchange (CME), Intercontinental Exchange (ICE) and Dubai Mercantile Exchange (DME).

Figure 3. Estimated Unplanned Production Disruptions Among Non-OPEC Producers, October 2011 – June 2013



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

Figure 4. 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).