



Independent Statistics & Analysis
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Administration

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

Number 24 in a series of reports required by section 1245(d)(4)(A)
of the National Defense Authorization Act for Fiscal Year 2012

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This is the 24th 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.

For additional information on global oil markets, readers may review the latest oil market [short-term analysis and forecasting](#). Detailed background and contextual information not repeated here can be found in early [editions of this report](#).

October – November 2015 Update

- The U.S. Energy Information Administration (EIA) estimates that global oil inventories grew by an average of 1.6 million barrels per day (b/d) in October and November, similar to the 1.8-million b/d build during the same time last year (**Table 1**). Typically, there is a draw in global oil inventories at this time of the year, but in 2014 and 2015 global inventories experienced countercyclical builds during these months. Global production averaged 95.9 million b/d in October and November, outpacing global consumption, which averaged 94.3 million b/d. Estimated inventories held by countries in the Organization for Economic Cooperation and Development (OECD) in October and November stood roughly 276 million barrels higher on average compared with last year (**Table 1**).
- Persistent inventory builds are putting downward pressure on crude oil prices. The North Sea Brent front month futures contract averaged \$46 per barrel (/b) in November (**Table 2**), \$3 per barrel lower than October and near the lowest level of the year. Estimates that global inventories continue to build at a robust rate are supported by increased contango (when near-term prices are lower than further dated ones) in the Brent futures curve. In November, the Brent 1st-13th month spread averaged about -\$7.50 per barrel, increasing the discount by \$1 per barrel from the previous month (**Table 2**).
- [Global petroleum and other liquids¹ production](#) in October and November averaged 95.9 million b/d, 1.1 million b/d higher than the same time last year. The Organization of the Petroleum Exporting Countries (OPEC) accounted for the vast majority of the growth, as there was a small net decline to total non-OPEC production caused by the sustained low oil prices. U.S. crude oil production in October and November was only 0.2 million b/d higher than at the same time last year, which was offset by other non-OPEC declines. While overall U.S. production is expected to grow by almost 0.9 million b/d year-over-year (y-o-y) in 2015, it is much lower than the 1.7 million b/d y-o-y growth in 2014. OPEC production experienced robust growth in 2015, following two consecutive years of decline, which has more than offset the reduction in non-OPEC production growth. [Iraq and Saudi Arabia](#) posted the largest y-o-y production gains in 2015, driven by infrastructure capacity expansions and production increases while marketing of Basra light and heavy separately in Iraq, and Saudi Arabia's decision to not cut its oil production to accommodate non-OPEC production growth (**Table 3b** and **Table 3c** of the **Short-Term Energy Outlook (STEO)**).
- [Global petroleum and other liquids consumption²](#) in October and November averaged 94.3 million b/d, 1.3 million b/d higher than the same time last year. More than 0.8 million b/d of global consumption growth was non-OECD growth, led by Asia. The remainder was OECD growth, led by Europe, which is showing some signs of a sustained economic recovery as the region is benefiting from government stimulus and low energy prices (**Table 3d** of the **STEO**).
- [Global surplus crude oil production capacity](#) averaged 1.4 million b/d in October and November, 0.5 million b/d lower than at the same time last year but 0.2 million b/d higher than the previous two-month period. Saudi Arabia, currently the only holder of significant surplus capacity, reduced its production slightly in October and November, reflecting the end to the summer increase in crude oil burn for power generation (**Table 3c** of the **STEO**). Spare capacity is typically an indication of market conditions, with surplus capacity below 2.5 million b/d indicating a tight market. However, the current

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 due to independent rounding.

inventory builds and high global oil inventories makes the current low surplus capacity level less significant.

- Global unplanned supply disruptions averaged almost 3.5 million b/d in October and November, similar to the previous two-month period. [Unplanned OPEC crude oil supply disruptions](#) averaged almost 2.8 million b/d, reflecting continued outages in Saudi Arabia and Kuwait, where the Neutral Zone production at the Khafji and Wafra fields was shut in, along with outages in Libya, Iran, Iraq, and Nigeria (**Figure 1**). [Unplanned non-OPEC liquid fuels supply disruptions](#) averaged 0.7 million b/d, a less than 0.1 million b/d decrease from the previous two-month period. Although an earlier disruption to Canada's Syncrude oil sands development in northern Alberta ended, it was more than offset by a new disruption in Brazil in November due to an oil workers' strike organized by various unions, which has since ended (**Figure 2**).
- Iran's petroleum and other liquids production averaged 3.5 million b/d in October and November, of which 2.8 million b/d was crude oil and the remainder was condensate and natural gas plant liquids (**Table 1**). Iran's production is 0.1 million b/d higher than at the same time last year due to growth in condensate and natural gas plant liquids production.
- EIA revised the preliminary estimates of petroleum and other liquids production and consumption for the previous two-month period. Global petroleum and other liquids production for August and September was revised upward by 0.2 million b/d to average 96.5 million b/d. Global consumption was also revised higher by 0.1 million b/d to average of 94.6 million b/d. Global supply disruptions in August and September were lowered by 0.2 million b/d to 3.5 million b/d mostly because of a revision to Libya's capacity in 2015 and a small revision to Nigeria's disruption. Libya's crude oil production capacity was lowered by 150,000 b/d to 1.4 million b/d. The change reflects the extensive damage at oil fields in the Sirte Basin caused by militant groups.

Tables

Table 1. Summary of Estimated Petroleum and Other Liquids Quantities

	October 2015	November 2015	October – November 2015 Average	October – November 2014 Average	2012 – 2014 Average
Global Petroleum and Other Liquids (million barrels per day)					
Global Petroleum and Other Liquids Production (a)	96.0	95.9	95.9	94.9	91.5
Global Petroleum and Other Liquids Consumption (b)	94.2	94.5	94.3	93.1	91.3
Biofuels Production (c)	2.4	2.1	2.3	2.2	1.9
Biofuels Consumption (c)	2.1	2.0	2.1	2.0	1.9
Iran Liquid Fuels Production	3.5	3.5	3.5	3.4	3.4
Iran Liquid Fuels Consumption	1.8	1.8	1.8	1.9	1.9
Petroleum and Petroleum Products Produced and Consumed in Countries Other Than Iran (million barrels per day)					
Production (d)	90.1	90.3	90.2	89.2	86.2
Consumption (d)	90.3	90.7	90.5	89.3	87.6
Production minus Consumption	-0.2	-0.4	-0.3	0.0	-1.4
World Inventory Net Withdrawals Including Iran	-1.9	-1.3	-1.6	-1.8	-0.2
Estimated OECD Inventory Level (e) (million barrels)	2,960	2,978	2,969	2,693	2,651
Surplus Production Capacity (million barrels per day)					
OPEC Surplus Crude Oil Production Capacity (f)	1.4	1.5	1.4	1.9	2.1

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.

Source: U.S. Energy Information Administration.

Table 2. Crude Oil and Petroleum Product Price Data

Item	October 2015	November 2015	October – November 2015 Average	October – November 2014 Average	2012 – 2014 Average
Brent Front Month Futures Price (\$ per barrel)	49.29	45.93	47.69	84.24	106.61
WTI Front Month Futures Price (\$ per barrel)	46.29	42.92	44.69	80.48	95.04
Dubai Front Month Futures Price (\$ per barrel)	46.00	42.12	44.15	82.93	103.92
Brent 1st - 13th Month Futures Spread (\$ per barrel)	-6.62	-7.62	-7.10	-4.17	4.29
WTI 1st - 13th Month Futures Spread (\$ per barrel)	-5.30	-6.86	-6.04	0.98	3.19
RBOB Front Month Futures Price (\$ per gallon)	1.34	1.33	1.34	2.16	2.80
Heating Oil Front Month Futures Price (\$ per gallon)	1.50	1.42	1.46	2.48	2.93
RBOB - Brent Futures Crack Spread (\$ per gallon)	0.16	0.24	0.20	0.16	0.26
Heating Oil - Brent Futures Crack Spread (\$ per gallon)	0.33	0.33	0.33	0.47	0.39

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

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

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

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

Figures

Figure 1. Estimated Unplanned Crude Oil Production Disruptions Among OPEC Producers, January 2012 – November 2015

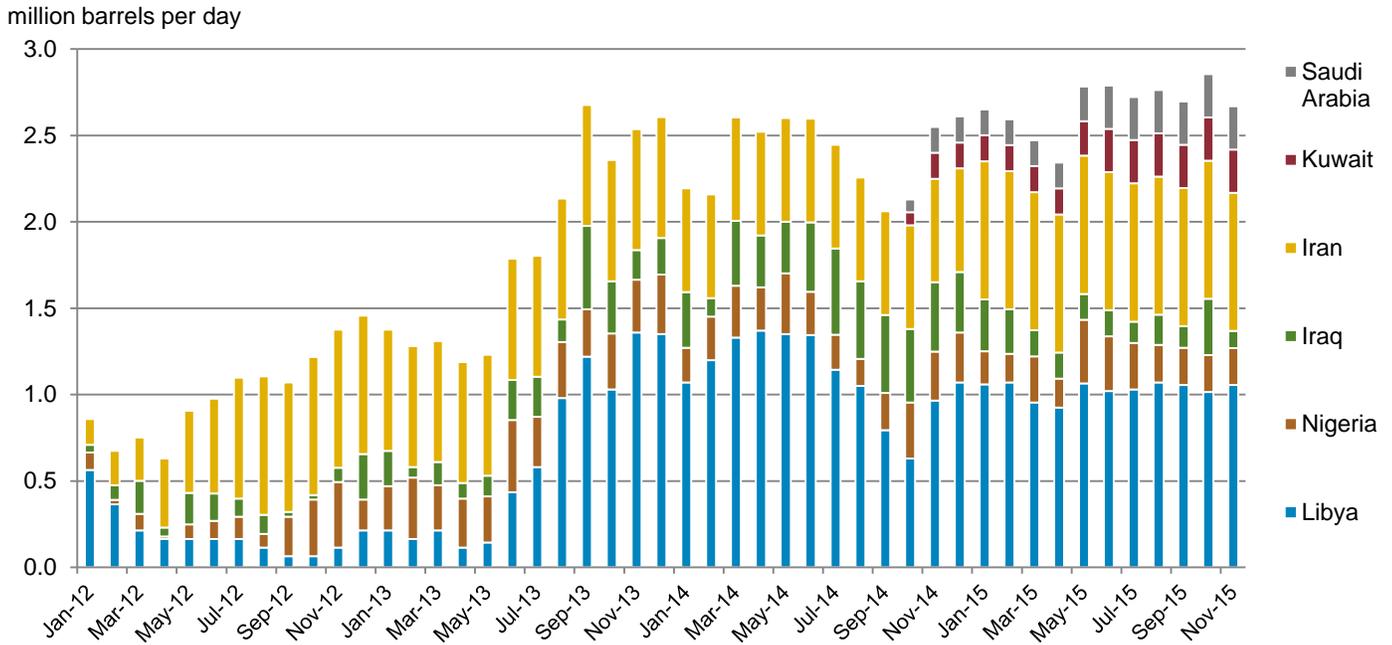


Figure 2. Estimated Unplanned Petroleum and Other Liquids Production Disruptions Among Non-OPEC Producers, January 2012 – November 2015

