



*Independent Statistics & Analysis*  
U.S. Energy Information  
Administration

---

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

Number 25 in a series of reports required by section 1245(d)(4)(A)  
of the National Defense Authorization Act for Fiscal Year 2012

February 9, 2016



## Table of Contents

December 2015 – January 2016 Update.....	2
Tables.....	4
Figures.....	6

As of January 16, 2016, the implementation day of the Joint Comprehensive Plan of Action (JCPOA), the United States is no longer pursuing efforts to reduce Iran’s sales of crude oil. The restriction on use of proceeds of sales of Iranian petroleum and petroleum products for bilateral trade with Iran, which previously applied to the 20 jurisdictions with a so-called “significant reduction exception”, no longer apply. In addition, the restrictions on Iranian oil revenues held abroad have been lifted. In light of these developments, EIA is suspending issuance of future editions of the enclosed report.

For information on global oil markets going forward, readers may review EIA’s monthly oil market [short-term analysis and forecasting](#).

This is the 25<sup>th</sup> 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.

Detailed background and contextual information not repeated here can be found in early [editions of this report](#).

## December 2015 – January 2016 Update

- The U.S. Energy Information Administration (EIA) estimates that global oil inventories grew by an average of 1.7 million barrels per day (b/d) in December and January, similar to the 2.1-million b/d build during the same time last year and the previous two-month average of 2.0 million b/d (**Table 1**). Although some major producers outside of the Organization of the Petroleum Exporting Countries (OPEC) are starting to experience production declines as a result of sustained low oil prices, robust OPEC supply growth, coupled with moderate global demand growth, continue to bolster record-high inventory builds. Estimated inventories held by countries in the Organization for Economic Cooperation and Development (OECD) in December and January stood at more than 3.0 billion barrels, the highest amount on record (**Table 1**).
- Crude oil prices declined in January as global oil inventories continued to grow. The North Sea Brent front month futures contract averaged \$32 per barrel (/b) in January (**Table 2**), \$7 per barrel lower than December. Estimates that global inventories continue to build at a robust rate are supported by contango (when near-term prices are lower than further dated ones) in the Brent futures curve. In December and January, the Brent 1<sup>st</sup>-13<sup>th</sup> spread averaged about -\$8 per barrel (**Table 2**).
- [Global petroleum and other liquids production](#)<sup>1</sup> averaged 95.3 million b/d in December and January, 0.6 million b/d higher than the same time last year. Total OPEC production, led by Iraq and Saudi Arabia, accounted for all the growth, offsetting a 0.5 million b/d decline to total non-OPEC production, led by producers in Eurasia. Although U.S. production was flat compared with the same time last year, it declined by 0.3 million b/d in December and January compared with the previous two-month period, reflecting a decline in Lower 48 onshore production driven by persistently low oil prices ([Table 3b](#) and [Table 3c](#) of the **Short-Term Energy Outlook (STEO)**).
- [Global petroleum and other liquids consumption](#)<sup>2</sup> averaged 93.7 million b/d in December and January, 0.9 million b/d higher than the same time last year. Total non-OECD consumption, led by Asia, accounted for all the growth ([Table 3d](#) of the **STEO**).
- Iran's petroleum and other liquids production averaged 3.5 million b/d in December and January, of which 2.8 million b/d was crude oil and the remainder was condensate and natural gas plant liquids (**Table 1**). International sanctions related to Iran's nuclear program were lifted on January 16, following verification from the International Atomic Energy Agency that Iran had completed the key physical steps required to trigger sanctions relief. [Nuclear-related sanctions relief will lead to an increase in Iran's oil production and exports](#), although it's uncertain how quickly Iran will ramp up its production and exports. Initial post-sanction increases in Iranian exports will most likely come from storage, while meaningful production increases will occur after some of the storage is cleared.
- Global unplanned supply disruptions averaged almost 2.3 million b/d in January 2016, 0.9 million b/d lower than in December 2015 because of changes to Iran's disruption and Libya's estimated production capacity. Iran's crude oil production disruption, which was estimated at 0.8 million b/d, ended in January 2016 when nuclear-related sanctions were lifted. Going forward, any difference between Iran's crude oil production capacity and its crude oil production level will henceforth be considered surplus capacity. Libya's disruption, which is calculated as [the difference between effective](#)

<sup>1</sup> 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.

<sup>2</sup> The growth rates referenced in this report may not exactly match corresponding values in tables due to independent rounding.

---

[production capacity and production](#), was 0.1 million b/d lower in January 2016 compared with the previous month as Libya's capacity was revised downward while production was unchanged. The reduction to Libya's production capacity reflects curtailed storage capacity at the Es Sidra and Ras Lanuf terminals, which were extensively damaged in January (**Figure 1 and Figure 2**).

- [Global surplus crude oil production capacity](#) averaged 1.8 million b/d in December and January, 0.3 million b/d lower than at the same time last year but 0.3 million b/d higher than the previous two-month period. Most of the increase is attributed to Iran, as the country ramps up its capacity in preparation of increasing its production now that key sanctions are lifted. Saudi Arabia, currently the largest holder of surplus capacity, reduced its production slightly in December and January, reflecting decreased demand for crude oil burn in Saudi Arabia's electricity sector (**Table 3c of the STEO**). Surplus capacity is typically an indication of market conditions, with an amount below 2.5 million b/d indicating a tight market. However, the high global oil inventory level and continuous inventory builds make the current low surplus capacity level less significant.
- 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 was revised upward by 0.3 million b/d to average 96.2 million b/d and global consumption was revised down by 0.1 million b/d to average 94.3 million b/d in October and November 2015.

## Tables

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

	December 2015	January 2016	December 2015 – January 2016 Average	December 2014 – January 2015 Average	2012 – 2014 Average
<b>Global Petroleum and Other Liquids (million barrels per day)</b>					
Global Petroleum and Other Liquids Production (a)	95.5	95.2	95.3	94.8	91.6
Global Petroleum and Other Liquids Consumption (b)	94.2	93.1	93.7	92.7	91.3
Biofuels Production (c)	1.9	1.7	1.8	1.8	1.9
Biofuels Consumption (c)	2.1	2.0	2.0	1.9	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
<b>Petroleum and Petroleum Products Produced and Consumed in Countries Other Than Iran (million barrels per day)</b>					
Production (d)	90.2	89.9	90.0	89.6	86.3
Consumption (d)	90.3	89.3	89.8	88.9	87.6
Production minus Consumption	-0.1	0.5	0.2	0.6	-1.3
World Inventory Net Withdrawals Including Iran	-1.4	-2.0	-1.7	-2.1	-0.2
Estimated OECD Inventory Level (e) (million barrels)	3,029	3,066	3,047	2,733	2,670
<b>Surplus Production Capacity (million barrels per day)</b>					
OPEC Surplus Crude Oil Production Capacity (f)	1.8	1.9	1.8	2.1	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	December 2015	January 2016	December 2015 – January 2016 Average	December 2014 – January 2015 Average	2012 – 2014 Average
Brent Front Month Futures Price (\$ per barrel)	38.90	31.93	35.67	56.84	87.25
WTI Front Month Futures Price (\$ per barrel)	37.33	31.78	34.76	53.59	79.91
Dubai Front Month Futures Price (\$ per barrel)	34.18	27.60	31.13	54.13	84.58
Brent 1st - 13th Month Futures Spread (\$ per barrel)	-8.09	-7.75	-7.93	-8.63	0.15
WTI 1st - 13th Month Futures Spread (\$ per barrel)	-7.81	-8.26	-8.02	-6.26	1.52
RBOB Front Month Futures Price (\$ per gallon)	1.25	1.09	1.18	1.49	2.37
Heating Oil Front Month Futures Price (\$ per gallon)	1.18	1.00	1.10	1.85	2.47
RBOB - Brent Futures Crack Spread (\$ per gallon)	0.33	0.33	0.33	0.13	0.29
Heating Oil - Brent Futures Crack Spread (\$ per gallon)	0.25	0.24	0.25	0.49	0.40

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

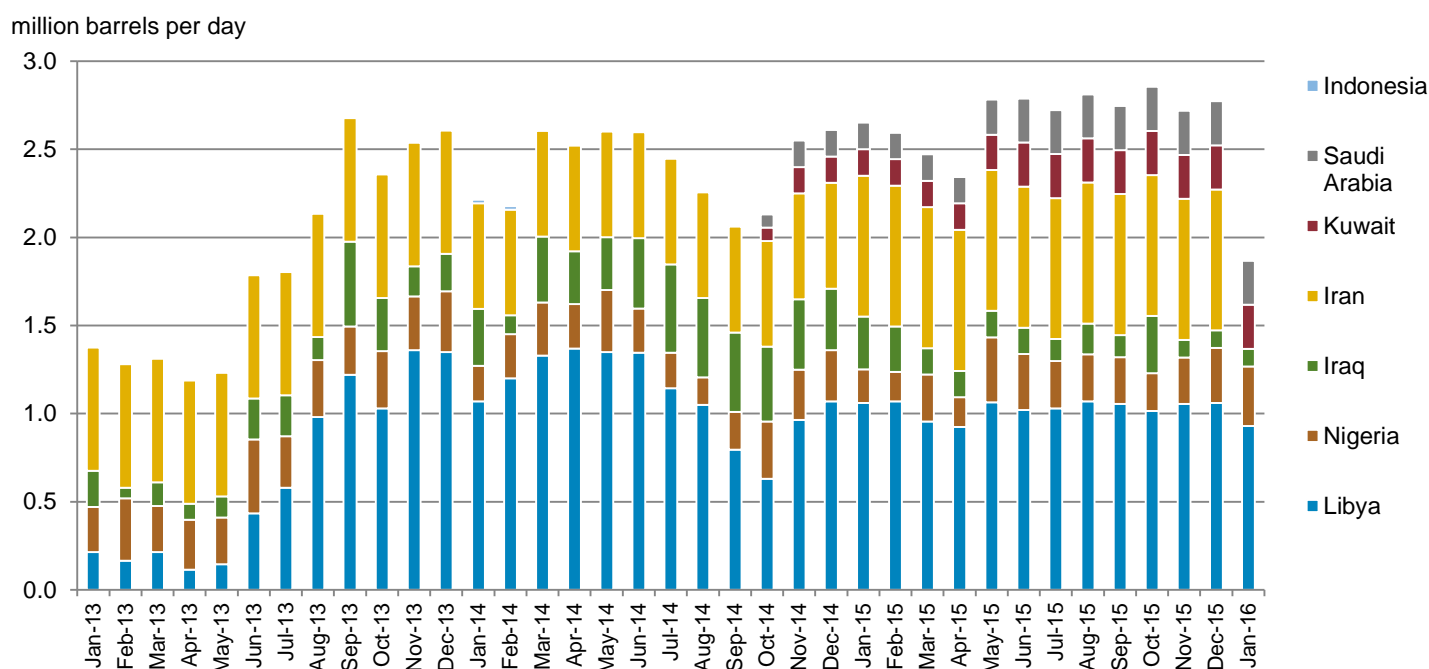
(b) WTI refers to West Texas Intermediate crude oil traded on the New York Mercantile Exchange (NYMEX), owned by Chicago Mercantile Exchange (CME) Group.

(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 2013 – January 2016**



**Figure 2. Estimated Unplanned Petroleum and Other Liquids Production Disruptions Among Non-OPEC Producers, January 2013 – January 2016**

