

OIL MARKET REPORT – DECEMBER 2016

EXECUTIVE SUMMARY

Since OPEC end-November meeting the price has been trading above \$50 per bbl. Implementation of the deal and new promises from Saudi Arabia will be important for the price to stay above this floor.

Following the agreement, OPEC had to cut its production from January 1. The price is high and only traders' mistrust in OPEC promises does not allow it to go above last year records. While Middle East allies (Saudi Arabia, Kuwait, Qatar, U.A.E.) are announcing implementation of their parts of the cut, the market keep calm and waiting for the stats in February. Additionally, the implementation of the deal by these countries has been mostly expected. It is the other members of the organization who matters.

In other news, Russia has cut oil production in the first week of January by 100 thsd bbl / d from December levels. Surprisingly positive sign at first glance, it should not be viewed as a completely voluntarily act given extremely low temperatures (-60 Celsius) in West Siberia these days. Late last month and in early January, temperatures fell as low as minus 60 Celsius (minus 76 Fahrenheit) across Siberia, rendering metal brittle, causing power supply disruptions, halting cars' engines and making it impossible for people to work outside in the open air, according to Reuters article.

"Usually, all the working activity is stopped when it is minus 48 (Celsius). Otherwise, you have to face the consequences," an oilman who makes regular work trips to Western Siberia said by phone, requesting anonymity as he was not authorized to talk to the media.

Russia registered one of the sharpest drops in its oil output in the winter of 2005/2006, when Siberia experienced comparable low temperatures. In January 2006, Russian production declined by 180,000 barrels per day, at the time the biggest monthly drop in seven years.

The risks for breaking below in the nearest future are mostly from U.S. oil production recovery. According to the weekly data of U.S. Department of Energy, it has grown by about 300 thsd bbl / d to 8.77 mln bbl / d at the end of last year from September levels after OPEC first announcement of the deal in Algiers. The more oil is coming from the USA the more oil should be cut by Saudi to support the price. OPEC calculated its balance for 2017 given decline of U.S. oil production by 150 thsd bbl / d.

U.S. Energy Information Administration (EIA) expected oil production in the USA to rise by 110 thsd bbl / d to 9 mln b / d. In 2018 output is predicted to rise to 9.3 mln b / d. It is possible that the prediction from EIA is too cautious. The market is used to surprises from U.S. oil production.

For the first week of this year Department of Energy reported a surge in U.S. oil production by 176 thsd bbl / d. Petromatrix noticed that U.S. oil output is now roughly at the same level as in Nov 2014, when OPEC declared war on shale producers. According to BTU Analytics, at current rig count and rig efficiency, the Permian Basin is on a trajectory to grow almost 0.6 MMb/d in 2017.

Additionally, crude oil price usually declines in the beginning of the year. Last year the Iran nuclear deal made the price to sink to record lows due to lifting the sanctions and oil production recovery from the country. This time Iran could be the factor to push prices



higher.

Upside risks for the price include Iran-USA conflict escalation after Mr. Trump's inauguration. The future of the nuclear deal is uncertain now. The Wall Street Journal has analyzed recently the situation around the deal:

"Mr. Trump attacked the deal repeatedly during the presidential campaign and has appointed critics to top positions in his administration, according to. However, Mr. Trump has only mentioned the agreement once since winning the election—describing it as a "horrible" deal in a December tweet—leading European officials to hope that he won't tear up the accord.

The Iran nuclear deal is a politically binding agreement reached in 2015, but it was not signed by the parties. European and U.S. diplomats have expressed concerns that the agreement could unravel if the Trump administration seeks to take fresh measures against Iran, including new nonnuclear sanctions and efforts to crimp its regional influence. "

Fresh measures against Iran from Trump administration could be enough for the deal to be broken and oil embargo to be reinstalled. In that case the price will no doubt skyrocket in high \$60s.

The point of supply/demand balance in the market is close, according to energy agencies, but high storage levels put a pressure on the price. The OPEC cut is purposed to remove oversupply from crude oil inventories.

EIA revised upward petroleum demand for 2016 by 140 thsd bbl / d and raised 2017 demand by 210 thsd bbl / d. Their view on demand growth in 2018 is also very optimistic. Demand is expected to grow in 2018 with the pace even higher than in 2016. Demand growth for 2016-2018 is 1.43 mln b /d, 1.63 mln b /d and 1.51 mln bbl / d or (+1.5%, +1.7% and +1.6%) year-over-year respectively.

On the other side, expectations for non-OPEC crude oil production in 2017 was raised just by 60 thsd bbl / d, with a year-over-year increase of 0.41 mln b / d (+0.7%). In 2018 non-OPEC supply is expected to grow 0.66 mln b / d (+1.2%) to average 57.92 mln b /d.

OECD total oil stocks covered 66 days of supply at the end of December. Inventory coverage was 3.3 days higher than a year ago and 8.3 days above the five-year average.

Surprisingly, EIA's forecasts for the price of WTI in 2017-18 are not far at all from current price levels. The agency predicted \$52.5 and \$55.2 per bbl respectively. Brent premium is \$1 per bbl over WTI forecast.

WTI Dec17-Dec18 spread has returned to contango for the first time since OPEC end-November meeting. It looks like another sign of market's skepticism in OPEC's abilities to remove the oversupply in stocks.



1. MARKET PERFORMANCE

Since OPEC end-November meeting the prices of WTI and Brent have been trading above \$50 per bbl. Post OPEC meeting rally had brought spot price of Brent 11.1% higher to \$55.4 per bbl and WTI 8.7% higher to \$53.7 per bbl by the end of December.

The positive effect on crude oil benchmarks of key export regions was even stronger. Arab Light spot price, Saudi Arabia pricing benchmark, rallied 20.6% to \$54.8 per bbl. Discount of Arab Light to Brent shrank to \$0.6 per bbl in December from \$4.4 per bbl in November and ESPO spot, Russian East Siberia pricing benchmark, rose 18.2% to \$57.7 per bbl. As a result, ESPO is trading with substantial premium to Brent (\$2.3 per bbl) from \$1 per bbl discount in November. However, it was not a big surprise, because these export countries are the "task force" of OPEC and non-OPEC oil production cut. Tapis spot, a pricing benchmark in Singapore, increased by 14.4% to \$57.3 per bbl (\$1.9 per bbl premium to Brent from \$0.3 per bbl in November).

Effective monthly trade range of Brent spot price shrank to about \$3.6 per bbl (6.7% to average price of \$53.9) in comparison with more than \$6 per bbl range (13.2% to average price of \$46.5) in November. Volatility usually declines in December along with trading volumes ahead of holidays.

Crack spreads increased considerably in December. Brent 3-2-1 crack spread surged 38% to \$9.6 per bbl, WTI 3-2-1 crack spread rose 22.1% to \$17.3 per bbl and Tapis 3-2-1 crack spread rose 20.8% to \$6.5 per bbl. This is likely a positive fundamental sign behind crude oil price rally. However, refining margins might have been enhanced partly by strong heating demand at the cold start of the winter.

WTI Dec17-Dec18 spread has returned to contango for the first time since OPEC end-November meeting. It looks like another sign of market's skepticism in OPEC's abilities to remove the oversupply in stocks. BTU Analytics suggested increased price volatility in 2017 and perhaps even into 2018. Any supply increase on the part of OPEC or a rebound in Libyan and Nigerian production will be enough to tip the market back into a supply long case.



Chart 1.1. Brent crude oil price performance over last 2 months, \$ per bbl

Source: Bloomberg



Chart 1.2. Brent crude oil price performance over last 12 months, \$ per bbl



Source: Bloomberg





Source: Bloomberg

Chart 1.3. Contango (+) / backwardation (-) in Brent crude oil futures, \$ per bbl



Source: Bloomberg

Chart 1.5. Crude oil 321 crack spread, \$ per bbl



Source: Bloomberg



2. OPEC PRODUCTION

Indonesia was not suspended from OPEC in end-November meeting. In its OPEC oil production assessments Bloomberg just excluded Indonesia volumes without revision of overall OPEC production before that. On the chart 2.1 it looks like total OPEC oil production in December sank by about 1 mln bbl / d. OPEC production actually fell in December, according to Bloomberg assessments, but 0.31 mln bbl / d or 0.9% mom. The largest contribution to the drop was made by Nigeria (-200 thsd bbl / d or -12.1% mom). The only members who increased production this month were Libya (+50 thsd bbl / d or 8.6% mom) and U.A.E (+10 thsd bbl / d or 0.3% mom).

From a y-o-y basis in December Iran demonstrated the most annual crude oil production growth (+930 thsd bbl / d or 33.2%), followed by Libya (+255 thsd bbl / d or +68.0%), Saudi Arabia (+230 thsd bbl / d or +2.2%) and Iraq (+170 thsd bbl / d or +3.8%). The most significant annual production decrease was observed in Nigeria (-469 thsd bbl / d or -24.4%) due to continuous NDA attacks and leaks. Angola, Kuwait, Qatar and Venezuela also produced less crude oil in December than a year ago. Venezuela oil production fell by 276 thsd bbl / d or -11.7% yoy.

By the same token Energy Intelligence Group (EIG) in December realized its estimates of crude oil production around the world for the previous month (November, 2016). In comparison with earlier November OPEC oil output figures by Bloomberg, EIG evaluated total OPEC production equal to 34.18 mln bbl / d (767 thsd bbl / d more than Bloomberg). In particular EIG printed significantly lower numbers for Venezuela (-213 thsd bbl / d), and Nigeria (-83 thsd bbl / d) relative to Bloomberg ones. Considerable upward assessments were made for U.A.E. crude oil output (+135 thsd bbl / d versus Bloomberg) and Saudi Arabia (+190 thsd bbl / d versus Bloomberg). Gabon, Indonesia, Qatar and Libya made the positive difference for EIG assessment of OPEC crude oil production in November.



Chart 2.1. OPEC crude oil output, thsd bbl / d





Source: Bloomberg, EIG

Source: Bloomberg, EIG

In accordance with EIG figures, in November OPEC as a whole increased its share in a world crude oil output by insignificant 5 bps to 41.25%. Generally, despite to continuous output ramping up the OPEC share at global crude oil market has stood slightly above 41% for 6 months in a row.



Probably, this factual OPEC's inability to expand crude oil production at a faster pace and to take more market share lied behind the unexpected oil freeze agreement in Algiers in late September. All in all, thanks to its «pump as much oil as possible» strategy OPEC significantly increased its share at world crude oil market from its February, 2016 lows of 38.5% and returned to the pre-crisis status-quo with non-OPEC producers.

In December the Bloomberg estimated OPEC's total spare capacities at roughly 3.4 mln bbl / d. More than 60% of OPEC's potential to ramp up crude oil production were located just in 5 states, namely Saudi Arabia (1020 thsd bbl / d or 30.9% of total), Nigeria (750 thsd bbl / d or 22.7% of total), Angola (200 thsd bbl / d or 6.1% of total), Iran (270 thsd bbl / d or 8.2% of total) and Venezuela (420 thsd bbl / d or 12.7% of total).





Chart 2.4. OPEC share, as % of world crude oil production



Source: Bloomberg

Chart 2.5. OPEC crude oil spare capacities structure, by country



Chart 2.6. Nigeria & Libya oil production disruptions, thsd bbl $\!/\,d$



Source: Bloomberg

Source: Bloomberg

However, all these OPEC's free capacities are not the same. Saudi Arabia has a large room to build up production due to its unique main oil-fields characteristics and historical role of main world oil market balancing producer in the Cartel's strategy. And Iran has capabilities as well as a strong wish to increase its crude oil output to at least 4 mln bbl / d



just after a prolonged period of oil embargo. The same time a presence of spare capacities in Nigeria and Libya are much more a matter of forced necessity than a conscious choice. So these spare capacities are in fact just output disruptions. Continuous civil war in Libya and permanent NDA (Niger Delta Avengers) insurgents attacks in Nigeria wiped out between 1.0 to 2.0 mln bbl / d of crude oil production in these two countries for nearly 5 last years.

So if Saudi Arabia really wants to implement some ceiling on OPEC's oil production, it would potentially have to cut its own production considerably to make a room for Nigeria and Libya if / when they will restore oil output to much higher «normal» levels. We really doubt that the Kingdom is ready to sacrifice itself so hard now in attempt to restore price control on the world crude oil market.





Chart 2.8. Angola crude oil output, thsd bbl / d



Source: Bloomberg

Source: Bloomberg





Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

Source: Bloomberg



Source: Bloomberg



Chart 2.11. Kuwait crude oil output, thsd bbl / d



Source: Bloomberg

Chart 2.13. Nigeria crude oil output, thsd bbl / d





Chart 2.15. U.A.E. crude oil output, thsd bbl / d



Source: Bloomberg

Chart 2.12. Libya crude oil output, thsd bbl / d



Source: Bloomberg

Chart 2.14. Saudi Arabia crude oil output, thsd bbl / d



Source: Bloomberg

Chart 2.16. Venezuela crude oil output, thsd bbl / d



Source: Bloomberg



3. NON-OPEC PRODUCTION

According to the most recent EIG assessments of worldwide crude oil production total crude oil output in non-OPEC states grew in November by 472 thsd bbl / d or 1.0% to 48.67 mln bbl / d. So November became the 4th month in a row of non-OPEC crude oil production increase from the low of 47.05 mln bbl / d printed in August, 2016. Nevertheless, non-OPEC oil production in December was significantly lower comparing to the records of December, 2014 (48.72 mln bbl / d), but surpassed December 2015 level (48.54 mln bbl / d). The most considerable production growth in August relative to the previous months among the non-OPEC oil producing countries was achieved in Canada (+98 thsd bbl / d), the UK (+115 thsd bbl / d) and Brazil (+113 thsd bbl / d), while China was a main cutback with oil output reduce of 40 thsd bbl / d.

The same time from the longer-term point of view (in terms of y-o-y) non-OPEC crude oil output in November increased only by 0.1 mln bbl / d or 0.03% with the USA (-387 thsd bbl / d or -4.2% yoy), China (-387 thsd bbl / d or -9.1% yoy) and Mexico (-221 thsd bbl / d or - 9.7% yoy) being the main drivers of this negative tendency. This output fall was partly offset by annual production growth in the North Sea, so crude oil production in Norway and the UK rose by 125 and 52 thsd bbl / d respectively. Other non-OPEC oil-extracting countries with positive annual output change in November were Russia and Brazil which added 490 thsd bbl / d and 357 thsd bbl / d respectively.



Source: EIG

Source: EIG

USA

Crude oil production in the USA rose in December by 89 thsd bbl / d or 1.0% in comparison with November data and decreased by 400 thsd bbl / d or 4.4% in comparison with December 2015 figures. December was the second month of increasing production in a row from lows 8.49 mln bbl / d in October. Drilling activity in the USA is on the rise after OPEC decision to stabilize crude oil market and support the price.

According to the most recent EIG data, the USA was accounted for 10.71% of global crude oil output that is nearly 150 bps lower relative to the record high of 12.50% printed in February 2015. The same time natural gas liquids (NGL) production in the USA in December grew by 21 thsd bbl / d or 0.6% on the month-to-month basis and by 77 thsd bbl / d or 2.3% on the year-on-year basis. Crude oil net imports from the US in December fell



by 1.1% mom to 7.2 bn bbl /d, while crude oil exports surged to 589 thsd bbl / d comparing to 459 thsd bbl / d in November. Oil products exports to the US in December raised by 700 thsd bbl / d or 15.4% mom, while net imports of refined oil products from the US in December declined by 1067 thsd bbl / d to -3.3 mln bbl / d.





Source: DOE





Source: DOE





Source: DOE

Chart 3.4. The share of the USA in oil production, %



Source: EIG

Chart 3.6. USA crude oil export, thsd bbl / d



Source: DOE

Chart 3.8. USA oil processing gain, thsd bbl / day



Source: DOE



Chart 3.9. USA oil product net import, thsd bbl / d

Chart 3.10. USA oil product export, thsd bbl / d



Source: DOE



Total production of shale oil in the US in December reduced by insignificant 6 thsd bbl /d over against November data, but on the year-on-year basis the decline rate was much higher and was equal to 6.4% or 344 thsd bbl / d.

The most output contraction was observed on the Eagle Ford deposit, where crude oil production in December decreased both on month-to-month and year-on-year basis by 0.8% and 26.3% respectively. Significant annual output shrinkage was also detected on the Bakken deposit, where crude oil extraction in December 2016 was 11.2% lower than a year ago.

However, crude oil production on the largest shale oil deposit, namely Permian, in December was roughly flat in m-o-m terms, but with substantial increase in y-o-y terms. Oil production was equal to 2.1 bn bbl / d. The Permian deposit is believed to have a relatively low total cost of oil extraction (including drilling) regarding other US shale oil deposit, so on average it's profitable to pump oil here even at current (\$50 per bbl) oil prices. So, total oil production on the Permian deposit demonstrates no decline on opposite to Eagle Ford, Bakken and so on.



Chart 3.11. USA rigs and wells spudded



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Chart 3.12. Shale oil production, as % of total US crude oil output

Source: Rystad Energy, Bloomberg

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Chart 3.13. USA shale oil production by regions, thsd bbl / d



Chart 3.14. USA crude oil output, thsd bbl / d



Source: EIG

Chart 3.16. Mexico crude oil output, thsd bbl / d



Source: EIG

Source: Rystad Energy, Bloomberg

Chart 3.15. Canada crude oil output, thsd bbl / d



Source: EIG

Chart 3.17. Brazil crude oil output, thsd bbl / d



Source: EIG



Chart 3.18. Russia crude oil output, thsd bbl / d





Chart 3.20. UK crude oil output, thsd bbl / d



Source: EIG

Chart 3.19. China crude oil output, thsd bbl / d



Source: EIG

Chart 3.21. Norway crude oil output, thsd bbl / d



Source: EIG



4. DEMAND

Global

There is a little new information regarding global oil demand as IEA refreshes its world oil demand estimations on quarterly basis. So the most up-to-date EIA's data on global oil demand is still figures for the 3rd quarter of 2016.

According to these EIA's numbers total world demand for oil in the 3rd quarter increased by 1190 thsd bbl / d or 1.2% over against the 2nd quarter of 2016. Comparing to the 3rd quarter of 2015 global demand for oil grew by 0.86 mln bbl / d or 0.9%, partly encouraged by relatively low oil prices. The main source of global oil demand growth in the latest EIA reported quarter was OECD countries whose aggregate demand raised by 990 thsd bbl / d (+2.2% qoq), while the demand from non-OECD states rose by 200 thsd bbl / d (+0.4% qoq). Interestingly on the year-on-year basis OECD and non-OECD countries in the 3rd quarter of 2016 showed different pace of growth of 0.2% and 1.6% respectively.

As for demand from single states and regions, the most significant demand shrinkage in the 3rd quarter was observed in China and India, where demand for oil dropped by 270 thsd bbl / d (-2.3% qoq / + 0.1% yoy) and 280 thsd bbl / d (-6.5% qoq / + 4.9% yoy). Also negative demand tendencies had a place in Africa (-110 thsd bbl / d or -2.6% qoq). The same time among the OECD states in the 3rd quarter of 2016 demand for crude oil increased in Europe by 410 thsd bbl / d (+2.9% qoq / +1.2% yoy.

Surprisingly, given 3rd quarter statistics, IEA found positive signs for demand in China, increasing forecast for 2017. The agency increased its forecast for global oil demand in 2017 by 100,000 barrels a day. Consumption will rise by 1.3 million barrels a day, or 1.4 percent, to 97.6 million a day:

"Following revisions to Chinese and Russian data, we have raised our 2016 global net demand growth number to 1.4 mb/d and that for 2017 to 1.3 mb/d."











Chart 4.3. World oil demand structure, by region



Chart 4.4 World crude oil demand, mln bbl / d



Source: IEA

Chart 4.5. OECD oil demand structure, by country



Source: IEA

Chart 4.6. Non-OECD oil demand structure, by country



Source: IEA

China

Total apparent demand for oil in China in November slightly lowered by 91 kbd or 0.9% mom, but increased comparing to prior year by 300 kbd or 2.2% yoy. Perhaps return to yoy rising in apparent demand in October and November made IEA to look more positively on China demand in 2017.

The import of crude oil to China in November reached 32.35 mln metric tons (equals to 7.9 mln b / d) according to China's General Administration of customs, pretty high level. But the data do not look so bright taking into consideration the fact that no less than 15% of imported crude oil nowadays China forwards to its SPR. So any delays or temporary suspensions of reserve accumulation process in China may result in significant drop of Chinese demand for crude oil.



Chart 4.7. Chinese apparent oil demand, thsd barrels per day



Source: National Bureau of Statistics of China, Customs General Administration PRC, Bloomberg

Chart 4.8. Annual changes in Chinese apparent oil demand, thsd bbl / d



Source: National Bureau of Statistics of China, Customs General Administration PRC, Bloomberg

Chart 4.9. Chinese SUVs sales, thsd vehicles



Source: China Passenger Car Association, Bloomberg



Chart 4.10. China crude oil net imports Vs net exports of gasoline & diesel

Source: Customs General Administration PRC, Bloomberg



Chinese interest to SUV vehicles was encouraged by retail gasoline price fall in 2015 and still has stood at rather high levels. This year each month Chinese citizens bought another roughly 600 thsd of SUVs, so the total amount of these gas-guzzlers in China grows at a very rapid pace. In November number of sold of SUVs in China surged above 1000, possibly another positive signal for IEA to look more positively in 2017.

The same time Chinese refineries in November increased export of oil products by 780 thsd metric tons. China exported in this November roughly 18% higher volumes of oil products than a year ago.



5. INVENTORIES

Pursuant to the most recent IEA monthly report, total OECD commercial oil stocks dropped in September 2016 (the last reported month on oil stocks) by 17.1 mln bbl (-0.6%). The most part of the decrease were the result of total oil products inventories drop by 12.2 mln bbl (-0.8% mom), while total OECD crude oil stocks were fell by 1.7 mln bbl (-0.1% mom). The same time in comparison with a year ago figures total OECD commercial oil stocks in September 2016 jumped on 113.8 mln bbl or 3.9% yoy with crude oil stocks grew by 52.3 mln bbl (+4.6% yoy) and oil products stocks increased by 113.8 mln bbl (+3.9% yoy).

From the standpoint of the regional structure of oil inventories the weakest situation in September was observed in the Pacific region, where crude oil stocks surged by 11.4 mln bbl sequentially and slightly fell y-o-y by 2.1 mln bbl. In the Americas region crude oil stocks fell 14.5 mln bbl m-o-m and rose 38.4 mln bbl or 6.6% yoy, while stocks of refined oil products added 2.5 mln bbl (+0.3%) on m-o-m and 38.2 mln bbl (+5.0%) on y-o-y basis. Stocks of crude oil in Europe in September rose both in m-o-m and y-o-y terms on 1.4 mln bbl (+0.4% mom) and 16.0 mln bbl (+4.7% yoy) respectively. However these crude oil inventories increase was partly offset by drop of refined oil products stocks on 10.4 mln bbl (-1.4%) m-o-m.

As for the by-product inventories structure, the largest decline in OECD inventories in September was noticed in heavy fuel that stocks fell by 3.2 mln bbl (-2.4%) monthly and 6.3 mln bbl (-4.5%) yearly. The smallest monthly stocks decline took place in distillates, but it grew 40.8 mln bbl or 6.9% comparing to last year figure. Gasoline OECD stocks decreased by 2.7 mln bbl (-0.7%) comparing to August 2016, but went up 5.9 mln bbl (+1.6%) relative to September 2015.

To sum these all up we should conclude that global oil inventories in highly developed states (OECD) are still on very elevated levels.

That's why we see limited upside on crude oil market from current levels as these large inventories will be an additional pressure for the market for the prolonged period of time even when supply and demand for crude oil will be finally balanced. And this is expected only in the second half of 2017 (or likely earlier with the full realization of the cut from OPEC and non-OPEC countries).



Chart 5.1. OECD oil stocks structure, by country

Chart 5.2. OECD oil stocks structure, by product



Source: IEA

Source: IEA



Chart 5.3. OECD crude oil stocks, mln bbl



Source: IEA

Chart 5.5. Americas (OECD) crude oil stocks, mln bbl



Source: IEA

Chart 5.7. Europe (OECD) crude oil stocks, mln bbl



Source: IEA

Chart 5.4. OECD oil products stocks, mln bbl



Source: IEA

Chart 5.6. Americas (OECD) oil products stocks, mln bbl



Source: IEA

Chart 5.8. Europe (OECD) oil products stocks, mln bbl



Source: IEA



Chart 5.10. Pacific (OECD) oil products stocks, mln bbl

Chart 5.9. Pacific (OECD) crude oil stocks, mln bbl



USA

According to DOE's weekly data total commercial crude oil stocks in the USA in December dropped by 9.1 mln bbl or 1.9% comparing to the previous month. Storage levels usually declines in December due to tax optimization. Crude oil inventories fell by 33 mln bbl from its peak value of 512 mln bbl printed in April 2016.

However crude oil stocks in December were 23.9 mln bbl (or +5.3%) higher than they were a year ago. As for crude oil inventories in Cushing oil storage in Oklahoma, they rose in December by 6.0 mln bbl or 9.8% mom and were 4.5 mln bbl or 7.2% higher than a year ago. So the oil glut still has a place in the USA, although the negative impact of excessive stocks has been weakening for some recent months.

US gasoline inventories in December increased on 9.3 mln bbl or 4.1% mom, while inventories of distillates grew by 7.5 mln bbl or 4.9% mom. In comparison with the figures a year ago gasoline stocks in the USA rose on 14.0 mln bbl or 6.3% yoy and distillates stocks climbed by 8.6 mln bbl or 5.6% yoy.

Source: DOE

38

36

34



Chart 5.11. US commercial crude oil stocks, mln bbl



5-year range

2016

Chart 5.12. US commercial crude oil stocks, days of supply

5-year average



Chart 5.13. US gasoline stocks, mln bbl





Chart 5.15. US distillate fuel stocks, mln bbl



Source: DOE

Chart 5.17. US kerosene stocks, days of supply



Source: DOE

Chart 5.14. US gasoline stocks, days of supply



Source: DOE

Chart 5.16. US distillate fuel stocks, days of supply



Source: DOE

Chart 5.18. US propane stocks, days of supply



Source: DOE







Source: DOE

FLOATING STORAGE

According to Bloomberg Energy assessments in December 2016 total crude oil stocks stored on floating storages (including oil in transportation) was equal to 180.8 mln bbl, 32.2 mln bbl more than in November 2016 (21.7% mom) and 23.3 mln bbl more than a year ago (14.8% yoy). The most significant rise on the month-to-month basis took place in South East Asia (+12.2 mln bbl or +32.2%), India (+6.8 mln bbl or +347.6%), China (+4.4 mln bbl or +67.6%) and U.S. Gulf Coast (+4.5 mln bbl +110.6%). From the year-on-year basis the most dramatic drop was observed in Middle East Gulf (-7.4 mln bbl or 16.4%) and U.S. Atlantic Coast (-1.5 mln bbl or -64.6%), while floating storages inventories in West Africa and North West Europe increased on 5.2 mln bbl and 3.5 mln bbl b / d (+46.9% and +39.1% respectively). The same time total stocks of refined oil products stored on floating storages (including oil products in transportation) in December climbed to 77.4 mln bbl, 5.4 mln bbl more than in the previous month (+7.6% mom) and 11.4 mln bbl more than a year ago (+17.2%). U.S. Gulf Coast (+1.5 mln bbl) and Middle East Coast (-2.6 mln bbl) were the regions where refined oil stocks grew and dropped the most relative to November figures. The drop of floating storages in Middle East region mostly explained Iran selling-off its stocks in tankers (13 mln bbls were sold from 29 mln bbls in storage).



Chart 5.20. Crude oil stocks held on floating storages structure, by country



Chart 5.21. Refined oil products stocks held on floating storages structure, by country





Chart 5.22. Global crude oil floating storage, mln bbl



Source: Bloomberg Energy

Chart 5.24. China + Japan + Korea crude oil floating storage, mln bbl



Source: Bloomberg Energy



Chart 5.26. South East Asia crude oil floating storage, mln bbl

Chart 5.23. Global refined oil floating storage, mln bbl



Source: Bloomberg Energy





Source: Bloomberg Energy



Chart 5.27. South East Asia refined oil floating storage, mln bbl

Source: Bloomberg Energy



Chart 5.28. Middle East crude oil floating storage, mln bbl



Source: Bloomberg Energy





Source: Bloomberg Energy





Source: Bloomberg Energy





Source: Bloomberg Energy





Source: Bloomberg Energy







Chart 5.34. West Africa crude oil floating storage, mln bbl



Source: Bloomberg Energy





Source: Bloomberg Energy



APPENDIX

Table 1. Global oil demand, mln bbl / d (quarterly data)

	Q2- 2015	Q3- 2015	Q4- 2015	Q1- 2016	Q2- 2016	Q3- 2016	Q4- 2016	Q1- 2017	Q2- 2017	Q3- 2017	Q4- 2017	Q1- 2018	2015	2016	2017	۵ 2015	Δ 2016	∆ 2017
USA	19.47	19.83	19.42	19.45	19.43	19.76	19.90	19.61	19.52	19.59	19.92	19.69	19.45	19.61	19.69	0.04	0.16	0.08
Canada	2.33	2.45	2.40	2.39	2.37	2.49	2.43	2.37	2.37	2.31	2.43	2.34	2.39	2.37	2.34	-0.04	-0.02	-0.03
Mexico	1.97	2.07	2.05	1.98	1.94	1.93	1.94	1.98	1.95	1.97	1.94	1.98	1.98	1.98	1.98	0.04	0.00	0.00
North America	24.41	24.98	24.53	24.49	24.39	24.84	24.91	24.62	24.52	24.51	24.94	24.67	24.49	24.62	24.67	0.04	0.13	0.05
Brazil	3.17	3.22	3.20	3.02	3.07	3.14	3.14	3.17	3.02	3.05	3.14	3.18	3.02	3.17	3.18	-0.15	0.15	0.01
Other LatAm ex. Mexico	3.60	3.64	3.59	3.45	3.58	3.64	3.69	3.63	3.47	3.62	3.67	3.62	3.45	3.63	3.62	0.00	0.18	-0.01
LatAm ex. Mexico	6.77	6.86	6.79	6.47	6.65	6.78	6.83	6.80	6.49	6.67	6.81	6.80	6.47	6.80	6.80	-0.15	0.33	0.00
Total Europe	13.57	14.17	13.70	13.64	13.93	14.34	14.07	13.65	13.59	13.85	14.10	13.65	13.64	13.65	13.65	0.18	0.01	0.00
Japan	3.80	3.85	4.14	4.43	3.66	3.75	3.71	4.02	4.34	3.52	3.63	3.99	4.43	4.02	3.99	-0.27	-0.41	-0.03
Korea	2.29	2.36	2.52	2.59	2.48	2.53	2.48	2.59	2.68	2.56	2.56	2.63	2.59	2.59	2.63	0.13	0.00	0.04
Australia, New Zealand, Israel	1.49	1.50	1.52	1.53	1.50	1.50	1.52	1.51	1.53	1.51	1.51	1.52	1.53	1.51	1.52	0.01	-0.02	0.01
OECD Asia Pacific	7.58	7.71	8.18	8.55	7.64	7.78	7.71	8.12	8.55	7.59	7.70	8.14	8.55	8.12	8.14	-0.13	-0.43	0.02
China	11.46	11.55	11.59	11.65	11.83	11.56	11.52	11.84	11.70	11.82	11.90	12.01	11.65	11.84	12.01	0.32	0.19	0.17
India	4.04	3.85	4.10	4.36	4.32	4.04	4.06	4.33	4.57	4.60	4.38	4.60	4.36	4.33	4.60	0.39	-0.03	0.27
Other non-OECD Asia	8.56	8.45	8.70	8.74	8.78	8.76	8.74	9.07	9.03	9.10	9.02	9.30	8.74	9.07	9.30	0.41	0.33	0.23
Total Asia	24.06	23.85	24.39	24.75	24.93	24.36	24.32	25.24	25.30	25.52	25.30	25.91	24.75	25.24	25.91	1.12	0.49	0.67
FSU	4.89	5.05	4.96	4.86	4.85	5.23	5.21	5.11	4.95	5.07	5.24	5.18	4.86	5.11	5.18	0.22	0.25	0.07
Total Middle East	8.49	8.78	8.28	7.86	8.36	8.79	8.76	8.36	8.07	8.47	8.87	8.49	7.86	8.36	8.49	0.07	0.50	0.13
Total Africa	4.06	3.97	4.12	4.16	4.21	4.10	4.16	4.31	4.34	4.40	4.28	4.43	4.16	4.31	4.43	0.08	0.15	0.12
OECD demand	45.56	46.86	46.41	46.68	45.97	46.96	46.68	46.39	46.66	45.95	46.75	46.46	46.68	46.39	46.46	0.09	-0.29	0.07
Non-OECD demand	48.91	49.18	49.23	48.77	49.75	49.95	49.97	50.47	49.86	50.81	51.23	51.53	48.77	50.47	51.53	1.35	1.70	1.06
World demand	94.47	96.05	95.64	95.45	95.72	96.91	96.65	96.85	96.51	96.76	97.98	97.99	95.45	96.85	97.99	1.44	1.40	1.14

Source: IEA, Bloomberg

Table 2. Global oil production, mln bbl / d (quarterly data)

	Q2- 2015	Q3- 2015	Q4- 2015	Q1- 2016	Q2- 2016	Q3- 2016	Q4- 2016	Q1- 2017	Q2- 2017	Q3- 2017	Q4- 2017	Q1- 2018	2015	2016	2017	Δ 2015	∆ 2016	∆ 2017
OPEC Crude*	32.50	32.70	32.70	32.80	33.10	33.50	33.10	32.80	32.90	32.80	33.60	33.60	32.70	32.80	33.60	1.20	0.10	0.80
OPEC NGLs	6.70	6.80	6.80	6.80	6.90	6.90	6.90	7.10	7.00	7.00	7.10	7.10	6.80	6.90	7.10	0.30	0.10	0.20
OPEC production	39.10	39.50	39.40	39.60	39.90	40.40	40.00	39.90	39.90	39.80	40.70	40.70	39.40	39.70	40.70	1.40	0.30	1.00
Americas	19.70	20.10	20.10	19.90	19.00	19.30	19.10	19.30	19.40	19.30	19.40	19.50	20.10	19.10	19.40	0.00	-1.00	0.30
Europe	3.50	3.40	3.60	3.60	3.40	3.30	3.40	3.50	3.50	3.40	3.30	3.40	3.60	3.40	3.30	0.20	-0.20	-0.10
Pacific	0.40	0.50	0.50	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.50	0.50	0.40	0.40	0.10	-0.10	0.00
OECD	23.60	24.00	24.20	24.00	22.80	23.10	22.90	23.30	23.30	23.20	23.10	23.30	24.20	22.90	23.10	0.30	-1.30	0.20
FSU	14.00	13.90	14.10	14.20	14.00	14.00	13.90	14.10	14.20	14.20	14.20	14.40	14.10	13.90	14.20	0.10	-0.20	0.30
Europe	3.50	3.40	3.60	3.60	3.40	3.30	3.40	3.50	3.50	3.40	3.30	3.40	3.60	3.40	3.30	0.20	-0.20	-0.10
China	4.40	4.30	4.30	4.20	4.10	3.90	4.00	4.00	4.00	4.00	3.90	3.90	4.30	4.00	3.90	0.00	-0.30	-0.10
Other Asia	2.80	2.70	2.80	2.80	2.70	2.70	2.70	2.70	2.60	2.60	2.70	2.60	2.80	2.70	2.70	0.00	-0.10	0.00
Latin America	4.60	4.60	4.60	4.40	4.40	4.60	4.60	4.70	4.70	4.70	4.80	4.80	4.60	4.60	4.80	0.00	0.00	0.20
Middle East	1.30	1.20	1.20	1.30	1.30	1.30	1.30	1.30	1.30	1.20	1.20	1.20	1.20	1.30	1.20	-0.10	0.10	-0.10
Africa	2.10	2.00	2.00	2.00	1.90	2.00	2.00	2.10	2.10	2.10	2.10	2.10	2.00	2.00	2.10	-0.10	0.00	0.10
Non-OECD	29.20	29.00	29.10	28.90	28.50	28.60	28.70	29.00	29.00	29.00	29.00	29.20	29.10	28.70	29.00	-0.20	-0.40	0.30
Non-OPEC Crude	52.80	53.00	53.30	52.90	51.30	51.70	51.60	52.30	52.30	52.20	52.10	52.50	53.30	51.60	52.10	0.10	-1.70	0.50
Processing Gains	2.20	2.20	2.20	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.20	2.30	2.30	0.00	0.10	0.00
Global Biofuels	2.40	2.60	2.30	1.90	2.40	2.80	2.80	2.40	2.00	2.50	2.90	2.50	2.30	2.80	2.90	0.50	0.50	0.10
Non-OPEC production	57.30	57.70	57.90	57.00	56.00	56.70	56.60	57.00	56.60	57.00	57.30	57.30	57.90	56.60	57.30	0.70	-1.30	0.70
World production	96.40	97 20	97 30	96 60	95 90	97 10	96 60	96 90	96 50	96 80	98.00	98.00	97 30	96 30	98.00	2 10	-1.00	1.70

* IEA Call on OPEC as OPEC Crude forecast

Source: IEA, Bloomberg



APPENDIX

Table 3. Global crude oil production, mln bbl / d (monthly data)

	Nov- 2015	Dec- 2015	Jan- 2016	Feb- 2016	Mar- 2016	Apr- 2016	May- 2016	Jun- 2016	Jul- 2016	Aug- 2016	Sep- 2016	Oct- 2016	Nov- 2016	2014	2015	2016 (YTD)	∆ 2014	Δ 2015	Δ 2016 (YTD)
Algeria	1.12	1.12	1.11	1.07	1.07	1.06	1.05	1.05	1.07	1.05	1.04	1.05	1.05	1.17	1.12	1.05	-0.01	-0.05	-0.07
Angola	1.89	1.81	1.77	1.84	1.80	1.73	1.73	1.86	1.76	1.78	1.78	1.48	1.69	1.61	1.81	1.69	-0.20	0.20	-0.12
Ecuador	0.54	0.53	0.53	0.56	0.55	0.55	0.56	0.55	0.55	0.55	0.56	0.54	0.54	0.56	0.53	0.54	0.01	-0.03	0.01
Gabon	0.23	0.24	0.27	0.28	0.25	0.23	0.23	0.23	0.23	0.23	0.22	0.23	0.24	0.24	0.24	0.24	0.00	0.01	0.00
Indonesia	0.70	0.69	0.74	0.75	0.76	0.73	0.75	0.76	0.76	0.76	0.76	0.75	0.75	0.68	0.69	0.75	-0.03	0.02	0.06
Iran	2.93	2.94	3.01	3.27	3.37	3.50	3.60	3.61	3.65	3.68	3.71	3.84	3.75	2.58	2.94	3.75	0.17	0.36	0.82
Iraq	4.56	4.44	4.53	4.25	4.26	4.33	4.22	4.32	4.35	4.48	4.49	4.59	4.62	3.76	4.44	4.62	0.61	0.67	0.19
Kuwait	2.90	2.93	3.00	3.00	3.00	2.90	2.95	2.95	2.95	2.99	2.97	3.00	2.90	2.71	2.93	2.90	0.02	0.22	-0.03
Libya	0.40	0.43	0.45	0.45	0.36	0.38	0.32	0.34	0.35	0.29	0.45	0.55	0.59	0.53	0.43	0.59	0.30	-0.10	0.17
Nigeria	1.79	1.56	1.48	1.69	1.74	1.58	1.24	1.35	1.06	1.17	1.24	1.40	1.57	1.81	1.56	1.57	0.09	-0.25	0.00
Qatar	0.68	0.63	0.64	0.69	0.70	0.63	0.67	0.66	0.68	0.64	0.61	0.64	0.65	0.68	0.63	0.65	-0.05	-0.05	0.01
Saudi Arabia	10.19	10.14	10.23	10.22	10.22	10.26	10.27	10.55	10.67	10.63	10.65	10.63	10.72	9.54	10.14	10.72	-0.03	0.60	0.58
U.A.E.	3.03	2.99	3.13	2.78	2.91	2.87	3.11	3.17	3.18	3.15	3.19	3.19	3.20	3.16	2.99	3.20	0.18	-0.16	0.20
Venezuela	2.00	1.99	1.99	1.99	1.96	1.96	1.98	2.00	2.00	1.97	1.91	1.90	1.91	2.08	1.99	1.91	-0.41	-0.09	-0.09
OPEC Crude	32.96	32.45	32.87	32.85	32.95	32.70	32.66	33.39	33.25	33.37	33.57	33.77	34.18	31.29	32.45	34.18	0.33	1.16	1.73
OPEC NGLs	6.78	6.66	6.72	6.63	6.71	6.68	6.68	6.75	6.75	6.78	6.86	6.88	6.87	6.66	6.66	6.87	0.21	0.00	0.21
OPEC production	39.74	39.11	39.60	39.48	39.65	39.38	39.34	40.15	40.00	40.15	40.43	40.65	41.05	37.95	39.11	41.05	0.54	1.17	1.94
USA	9.26	9.15	9.11	9.04	9.23	8.99	8.93	8.63	8.62	8.61	8.64	8.83	8.87	9.69	9.15	8.87	1.63	-0.55	-0.27
Canada	3.80	3.75	3.90	3.89	3.63	3.44	3.07	3.05	3.38	3.70	3.69	3.67	3.77	3.54	3.75	3.77	0.01	0.21	0.02
Mexico	2.28	2.27	2.26	2.21	2.22	2.18	2.17	2.18	2.16	2.14	2.11	2.09	2.06	2.35	2.27	2.06	-0.16	-0.08	-0.22
North America	15.34	15.17	15.27	15.14	15.08	14.61	14.17	13.86	14.16	14.45	14.44	14.59	14.69	15.59	15.17	14.69	1.48	-0.42	-0.47
Brazil	2.38	2.53	2.35	2.34	2.26	2.29	2.49	2.56	2.58	2.61	2.67	2.62	2.74	2.50	2.53	2.74	0.39	0.04	0.21
Argentina	0.50	0.49	0.48	0.45	0.47	0.45	0.46	0.45	0.47	0.48	0.47	0.49	0.47	0.50	0.49	0.47	-0.02	0.00	-0.03
Colombia	0.99	1.00	0.99	0.96	0.92	0.92	0.91	0.89	0.84	0.83	0.86	0.99	0.98	1.01	1.00	0.98	0.01	-0.01	-0.02
Other Latin America	0.26	0.26	0.25	0.23	0.24	0.23	0.24	0.23	0.23	0.23	0.22	0.23	0.24	0.29	0.26	0.24	0.01	-0.03	-0.02
Non-OPEC Latin America ex. Mexico	4.13	4.28	4.07	3.98	3.89	3.89	4.09	4.12	4.13	4.15	4.22	4.33	4.43	4.29	4.28	4.43	0.39	-0.01	0.14
United Kingdom	1.00	1.03	1.04	1.00	1.02	1.02	1.03	0.92	0.99	0.85	0.98	0.93	1.05	0.93	1.03	1.05	0.03	0.11	0.01
Norway	1.60	1.64	1.62	1.63	1.61	1.64	1.57	1.45	1.73	1.57	1.40	1.71	1.73	1.57	1.64	1.73	0.00	0.06	0.09
Other Europe	0.61	0.58	0.58	0.58	0.60	0.53	0.53	0.51	0.50	0.54	0.57	0.55	0.56	0.64	0.58	0.56	0.01	-0.06	-0.02
Europe	3.20	3.25	3.24	3.20	3.23	3.18	3.12	2.88	3.23	2.97	2.95	3.20	3.34	3.14	3.25	3.34	0.05	0.11	0.09
Russia	10.81	10.90	11.01	11.01	11.00	10.92	10.94	10.96	10.95	10.78	11.16	11.31	11.30	10.73	10.90	11.30	0.04	0.17	0.39
Other Ex-USSR	2.31	2.27	2.30	2.31	2.28	2.25	2.24	2.22	2.26	1.99	2.22	2.26	2.45	2.36	2.27	2.45	-0.07	-0.09	0.19
FSU	13.12	13.17	13.31	13.32	13.29	13.17	13.18	13.18	13.21	12.77	13.38	13.57	13.75	13.09	13.17	13.75	-0.04	0.08	0.58
China	4.24	4.37	4.28	4.19	4.07	4.07	3.98	3.91	3.92	3.94	3.91	3.89	3.85	4.32	4.37	3.85	0.05	0.05	-0.52
India	0.75	0.74	0.73	0.74	0.74	0.73	0.74	0.74	0.74	0.74	0.72	0.74	0.74	0.77	0.74	0.74	-0.01	-0.03	0.00
Malaysia	0.63	0.62	0.64	0.66	0.66	0.66	0.65	0.65	0.64	0.60	0.66	0.63	0.64	0.60	0.62	0.64	0.10	0.02	0.02
Australia	0.36	0.34	0.32	0.31	0.30	0.29	0.27	0.28	0.31	0.30	0.28	0.30	0.32	0.36	0.34	0.32	0.01	-0.01	-0.03
Other Non-OPEC Asia Pacific	0.89	0.87	0.94	0.94	0.93	0.92	0.89	0.90	0.91	0.88	0.88	0.84	0.84	0.85	0.87	0.84	0.02	0.02	-0.03
Non-OPEC Asia Pacific	6.87	6.94	6.90	6.84	6.69	6.67	6.53	6.49	6.52	6.45	6.45	6.40	6.39	6.89	6.94	6.39	0.18	0.05	-0.55
Egypt	0.62	0.62	0.61	0.60	0.60	0.61	0.61	0.61	0.61	0.60	0.59	0.59	0.59	0.60	0.62	0.59	0.01	0.02	-0.02
Oman	1.00	1.01	1.02	1.01	0.98	1.00	1.01	1.02	1.03	1.02	0.97	0.97	0.98	0.93	1.01	0.98	-0.01	0.07	-0.03
Non-OPEC Africa/Mid East	2.91	2.90	2.90	2.90	2.85	2.90	2.93	2.92	2.92	2.93	2.90	2.90	2.92	2.90	2.90	2.92	-0.10	0.00	0.02
Non-OPEC Crude	48.65	48.54	48.38	48.01	47.77	47.50	47.29	46.72	47.58	47.05	47.65	48.20	48.67	48.72	48.54	48.67	1.87	-0.18	0.13
Non-OPEC NGLs	7.45	7.45	7.32	7.38	7.44	7.34	7.33	7.52	7.51	7.30	7.17	7.61	7.72	7.16	7.45	7.72	0.75	0.28	0.28
Non-OPEC production	56.11	55.99	55.70	55.38	55.21	54.84	54.62	54.24	55.09	54.35	54.82	55.81	56.39	55.88	55.99	56.39	2.62	0.10	0.41
World production	95.84	95.10	95.30	94.87	94.86	94.22	93.96	94.39	95.09	94.50	95.25	96.46	97.44	93.83	95.10	97.44	3.17	1.27	2.34

Source: IEG



APPENDIX

Table 4. OECD commercial oil inventories, mln bbl (monthly data)

	Sep- 2015	Oct- 2015	Nov- 2015	Dec- 2015	Jan- 2016	Feb- 2016	Mar- 2016	Apr- 2016	May- 2016	Jun- 2016	Jul- 2016	Aug- 2016	Sep- 2016	2014	2015	2016 (YTD)	۵ 2014	Δ 2015	Δ 2016 (YTD)
Americas	1,542	1,575	1,593	1,590	1,614	1,611	1,620	1,599	1,602	1,609	1,636	1,634	1,619	1,446	1,590	1,619	130	144	29
Crude	585	642	647	641	661	676	689	661	656	650	646	638	623	552	641	623	53	89	-18
Products	766	745	762	773	780	765	758	762	764	773	795	801	804	730	773	804	59	43	31
Europe	967	971	980	990	1,015	1,019	1,004	1,006	1,014	1,005	1,024	1,008	999	886	990	999		104	9
Crude	340	347	346	361	358	353	349	352	357	357	364	354	356	319	361	356	3	42	-6
Products	557	554	568	563	589	593	586	584	589	581	592	584	574	502	563	574	5	61	10
Asia Pacific	445	439	428	435	425	422	421	420	434	438	442	444	450	405	435	450	13	30	16
Crude	202	205	191	206	192	196	196	194	203	202	197	189	200	173	206	200	18	33	-6
Products	176	169	170	166	167	163	166	164	171	175	184	193	189	169	166	189	-1	-3	23
OECD	2,954	2,985	3,001	3,015	3,054	3,052	3,046	3,025	3,050	3,052	3,102	3,085	3,068	2,738	3,015	3,068	148	278	53
Crude	1,127	1,195	1,184	1,208	1,210	1,225	1,235	1,207	1,215	1,208	1,206	1,181	1,179	1,045	1,208	1,179	73	164	-29
Products	1,499	1,467	1,500	1,502	1,536	1,522	1,509	1,510	1,525	1,529	1,571	1,578	1,566	1,401	1,502	1,566	63	101	63

Source: IEA

Table 5. OECD oil inventories, mln bbl (quarterly data)

	Q3- 2013	Q4- 2013	Q1- 2014	Q2- 2014	Q3- 2014	Q4- 2014	Q1- 2015	Q2- 2015	Q3- 2015	Q4- 2015	Q1- 2016	Q2- 2016	Q3- 2016	2014	2015	2016 (YTD)	۵ 2014	Δ 2015	Δ 2016 (YTD)
Canada	183	170	174	179	186	193	183	176	183	188	184	175	0	193	188	0	23	-5	-188
Mexico	50	49	48	47	49	53	50	50	50	50	46	49	0	53	50	0	4	-3	-50
USA	1,834	1,762	1,754	1,820	1,841	1,862	1,910	1,943	1,973	1,987	2,024	2,049	0	1,862	1,987	0	99	125	-1,987
Americas	2,101	2,013	2,008	2,079	2,108	2,139	2,176	2,203	2,240	2,258	2,286	2,306	2,316	2,139	2,258	2,316	126	119	58
Australia	37	37	37	36	39	36	34	36	36	34	37	38	0	36	34	0	-1	-3	-34
Japan	591	575	590	589	608	581	568	578	590	582	560	574	0	581	582	0	5	1	-582
Korea	191	178	193	188	197	197	201	225	226	228	236	238	0	197	228	0	19	31	-228
New Zealand	8	8	8	10	9	8	9	9	9	8	8	9	0	8	8	0	0	-1	-8
Pacific	826	809	828	823	853	822	812	848	860	851	841	859	871	822	851	871	13	29	20
Germany	286	290	288	290	283	284	284	286	281	285	289	288	0	284	285	0	-6	1	-285
France	166	168	167	168	171	168	173	170	167	168	166	168	0	168	168	0	0	0	-168
Italy	131	125	123	122	123	119	121	117	117	117	120	121	0	119	117	0	-6	-2	-117
Spain	120	112	117	118	123	121	132	133	139	131	140	134	0	121	131	0	10	10	-131
UK	82	78	76	75	75	78	76	77	79	81	80	83	0	78	81	0	0	3	-81
Turkey	63	62	63	62	63	62	65	66	71	75	76	78	0	62	75	0	0	12	-75
Sweden	26	28	28	27	28	29	32	31	33	35	35	33	0	29	35	0	1	6	-35
Other Europe	482	489	492	496	501	494	525	531	546	571	576	574	1,475	494	571	1,475	5	77	904
Europe	1,356	1,351	1,354	1,358	1,366	1,356	1,409	1,411	1,434	1,463	1,481	1,479	1,475	1,356	1,463	1,475		107	12
OECD	4,282	4,174	4,189	4,260	4,327	4,318	4,397	4,462	4,533	4,572	4,608	4,643	4,663	4,318	4,572	4,663	144	254	91

Source: IEA



APPENDIX

Table 6. Global oil stocks on floating storages, mln bbl

	Dec- 2015	Jan- 2016	Feb- 2016	Mar- 2016	Apr- 2016	May- 2016	Jun- 2016	Jul- 2016	Aug- 2016	Sep- 2016	Oct- 2016	Nov- 2016	Dec- 2016	2014	2015	2016 (YTD)	Δ 2014	Δ 2015	Δ 2016 (YTD)
South East Asia	52.0	54.0	57.5	72.0	86.7	79.5	73.3	70.9	65.4	51.5	61.6	51.3	64.5	47.9	52.0	64.5	13.2	4.1	12.5
Crude	41.5	44.0	44.2	59.7	73.9	67.9	59.9	57.1	48.6	37.3	47.1	37.8	50.0	32.8	41.5	50.0	8.7	8.7	8.5
Products	10.5	9.9	13.3	12.3	12.8	11.6	13.4	13.8	16.8	14.2	14.5	13.5	14.5	15.1	10.5	14.5	4.5	-4.6	4.1
Middle East	52.3	20.6	53.1	63.2	65.1	62.0	64.8	63.4	61.2	54.0	66.9	46.0	44.5	36.6	52.3	44.5	5.5	15.7	-7.8
Crude	45.3	14.9	46.2	55.4	57.2	55.8	57.5	56.6	53.7	46.1	58.5	37.9	37.9	31.8	45.3	37.9	8.5	13.5	-7.4
Products	7.0	5.7	6.9	7.8	7.9	6.2	7.4	6.8	7.4	8.0	8.3	8.1	6.6	4.8	7.0	6.6	-3.0	2.2	-0.4
Mediterranean	32.3	32.8	31.4	29.3	28.4	27.3	27.3	31.1	27.9	31.4	30.5	32.8	36.1	28.9	32.3	36.1	7.4	3.4	3.8
Crude	20.9	18.8	16.8	18.1	16.7	15.8	15.7	17.9	16.2	18.7	18.6	17.2	21.0	17.9	20.9	21.0	5.9	3.0	0.1
Products	11.4	13.9	14.6	11.2	11.7	11.6	11.6	13.3	11.6	12.7	11.9	15.6	15.1	11.0	11.4	15.1	1.4	0.4	3.7
North West Europe	12.8	13.4	14.5	15.6	15.9	15.1	14.8	15.0	15.1	12.7	15.1	18.7	15.6	4.1	12.8	15.6	-0.1	8.6	2.9
Crude	8.8	10.0	9.3	10.6	10.6	10.7	10.7	11.9	10.1	8.9	11.1	16.2	12.3	2.2	8.8	12.3	0.7	6.7	3.5
Products	3.9	3.4	5.2	5.1	5.3	4.4	4.1	3.1	5.0	3.8	4.0	2.5	3.4	1.9	3.9	3.4	-0.8	2.0	-0.6
West Africa	25.9	26.2	24.7	22.5	21.1	23.8	20.9	23.0	26.0	26.0	30.0	27.4	32.0	25.0	25.9	32.0	6.2	0.9	6.1
Crude	11.2	12.5	9.7	9.0	6.1	8.8	7.1	10.2	13.5	11.2	14.1	12.9	16.4	9.2	11.2	16.4	1.0	2.0	5.2
Products	14.7	13.7	15.0	13.5	15.0	15.0	13.8	12.8	12.6	14.8	15.9	14.5	15.5	15.8	14.7	15.5	5.2	-1.1	0.8
China + Korea + Japan	22.8	39.6	29.8	23.2	22.9	34.5	35.9	20.4	23.6	18.5	28.7	20.6	27.9	14.2	22.8	27.9	-8.5	8.6	5.1
Crude	11.4	19.8	14.9	11.6	11.5	17.3	17.9	10.2	11.8	9.2	14.4	10.3	14.0	7.1	11.4	14.0	-4.2	4.3	2.6
Products	11.4	19.8	14.9	11.6	11.5	17.3	17.9	10.2	11.8	9.2	14.4	10.3	14.0	7.1	11.4	14.0	-4.2	4.3	2.6
US Gulf Coast	9.4	8.6	13.8	14.0	11.1	8.7	9.3	7.4	6.3	7.1	7.5	7.2	13.1	8.7	9.4	13.1	5.8	0.8	3.7
Crude	6.5	5.6	10.5	9.9	8.1	5.3	6.2	3.6	4.2	4.2	5.0	4.1	8.5	6.0	6.5	8.5	5.0	0.4	2.1
Products	3.0	3.0	3.3	4.1	2.9	3.4	3.1	3.8	2.1	2.9	2.5	3.1	4.6	2.6	3.0	4.6	0.7	0.3	1.6
India	4.5	3.6	6.7	5.6	5.5	7.8	7.8	9.9	5.5	8.7	4.3	4.3	12.1	4.3	4.5	12.1	1.5	0.2	7.6
Crude	0.2	0.3	4.0	2.7	3.1	4.3	3.2	5.5	1.3	3.7	1.0	2.0	8.7	0.5	0.2	8.7	0.0	-0.4	8.6
Products	4.3	3.3	2.7	2.9	2.3	3.6	4.6	4.4	4.2	4.9	3.2	2.4	3.3	3.7	4.3	3.3	1.5	0.6	-1.0
World	223.5	198.1	234.3	251.4	261.3	259.7	253.5	250.8	240.2	221.4	257.3	220.5	258.1	177.0	223.5	258.1	30.8	46.5	34.7
Crude	157.5	135.0	165.2	182.4	195.1	195.4	184.3	182.1	169.7	147.9	185.9	148.6	180.8	112.2	157.5	180.8	21.9	45.3	23.3
Products	66.0	63.1	69.1	68.9	66.1	64.3	69.2	68.7	70.5	73.5	71.5	71.9	77.4	64.8	66.0	77.4	8.9	1.2	11.4



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