

OIL MARKET REPORT – OCTOBER 2016

EXECUTIVE SUMMARY

November 30 meeting in Vienna will be an answer for further price direction. The most probable outcome is expected to be some minor actions from Saudi Arabia and its allies. This scenario looks already priced in. It is also our base-case and we retain our expectation for \$40-50 range-bound trading till the end of this year.

By the end of October, the price has returned to the level prior OPEC announcement of its intentions to balance the market. Oil fundamentals have weakened sharply since September. It became obvious in the middle of October that oversupply is more extensive than it had been believed before. Brent crude oil spot price had surged by \$4.1 per bbl or 8.3% to \$53.1 per bbl by October 10 to fall by \$0.8 per bbl or 1.5% mom as the result of the reporting month.

The main problem with OPEC intention to balance the market is that the overall production has increased substantially from the beginning of discussion and the proposed production cut of 0.5-1 mln bbl / d looks insufficient for achieving balance in 2017:

• Crude oil from Libya and Nigeria is returning to the market.

 \checkmark Libya plans to boost production to 900 thsd bbl / d at end-2016 and 1.1 mln bbl / d in 2017 from current 600 thsd bbl / d, announced NOC's chairman Mustafa Sanalla.

 \checkmark Nigeria has got some success in its struggle to recover production despite militants' attacks.

- While Saudi Arabia is remaining its oil production on 10.6 mln bbl / d level, despite usual reduction in demand after summer season, Iran surged its production by 250 kbpd in October.
- Non-Opec producers are also increasing activity:
 - ✓ Russia's oil output set a new post-Soviet era record high in October, rising
 0.1 percent from September to 11.2 mln bbl / d, energy ministry data showed.

✓ Forecasts for U.S. oil production in 2017 from Energy Information Administration have risen steadily over the last four months. Crude oil production in the USA increased in October by 137 thsd bbl / d or 1.6% in comparison with September data and decreased by 534 thsd bbl / d or 5.7% in comparison with October 2015 figures.

According to the most recent EIG assessments of worldwide crude oil production total crude oil output in non-OPEC states grew in October by 466 thsd bbl / d or 1.0% to 48.68 mln bbl / d. Non-OPEC oil production in October was even higher comparing to the numbers of October, 2014 (48.52 mln bbl / d) and October 2015 (48.42 mln bbl / d).

China is one of the few places with lowering production. October production in China was 3.78 mln bbl / d, the lowest since May 2009, and down from 3.89 mln bbl / d in September, according to the National Bureau of Statistics report.

Supply from the Organization of the Petroleum Exporting Countries has risen to 33.82 mln bbl / d in October from a revised 33.69 mln bbl / d in September, according to the survey based on shipping data and information from industry sources.

According to Bloomberg assessments, total OPEC oil production in October grew by another 0.5% mom or 170 thsd bbl / d to new record high of 34.02 mln bbl / d. The largest



contribution to the increase in OPEC oil production increase was made by Nigeria (+170 thsd bbl / d), Libya (+180 thsd bbl / d), Iran (+50 thsd bbl / d) and Iraq (+50 thsd bbl / d), while Saudi Arabia, Qatar and Venezuela slightly reduced output by 20 thsd bbl / d each. Angola marked the most noticeable change to its production, decreasing output by 230 thsd bbl / d. From a y-o-y basis in October the cartel ramped up its total output by 6.2%. Iran demonstrated the most annual crude oil production growth (+880 thsd bbl / d or 31.4%), followed by Iraq (+373 thsd bbl / d or +8.8%) and Saudi Arabia (+280 thsd bbl / d or +2.7%). The most significant annual production decrease was observed in Nigeria (-349 thsd bbl / d or -17.3%) due to continuous NDA attacks and leaks. Angola and Venezuela also produced less crude oil in October than a year ago. Libya finally recovered some of its lost export, increasing output by 90 thsd bbl / d or +20.9 y-o-y.

Ministers are expected to discuss the proposed production cap of 32.5-33 mln bbl / d during a Nov. 30 meeting in Vienna.

Production cut is anticipated by the market, but its volume will likely be insufficient. If the meeting is completely unsuccessful, the price will have a chance to go below \$40 per bbl, potentially to test this year's minimum. Hence, it is in the interests of Saudi Arabia and its Gulf's neighbors to prove their intentions with some actual deal. Our base-case scenario for meeting's output is the minor production cut (no more than 0.5 mln bbl / d) with Saudi and its allies to burden the bulk of that.

Three meeting's scenarios and crude oil price reaction:

- 1. **Our base-case: minor production cut**. Crude oil keeps on trading in the \$40-50 per bbl range.
- 2. **No deal.** Short-side traders will start a new cycle of growing short positions in the market and eventually lowering price till some announcement of the next extraordinary meeting by crude oil exporters.
- 3. Saudi Arabia gives up on its market share strategy. The high end of trading range will be finally at risk of breaking out.

Global oil inventories in highly developed states (OECD) are still on very elevated levels although the general pace of oil stocks build-up decreased in recent months.

Pursuant to the most recent IEA monthly report, total OECD commercial oil stocks declined in August 2016 (the last reported month on oil stocks) by 10.0 mln bbl (-0.3%). The most part of the decline was the result of crude oil inventories fall by 26.9 mln bbl (-2.2% mom), while total OECD products stocks were added 18.7 mln bbl (+1.2% mom). The same time in comparison with a year ago figures total OECD commercial oil stocks in August 2016 jumped on 145.3 mln bbl or 4.9% yoy with crude oil stocks grew by 49.9 mln bbl (+4.4% yoy) and oil products stocks increased by 98.0 mln bbl (+6.6% yoy).

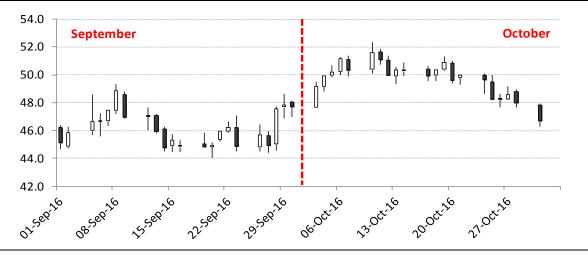


1. MARKET PERFORMANCE

By the end of October 2016, the crude oil price has given up the entire premium after OPEC decision to balance the market in Algiers. Oil fundamentals have weakened sharply since September. It became obvious in the middle of October, that oversupply is more extensive than it had been believed before.

Brent crude oil spot price had surged by \$4.1 per bbl or 8.3% to \$53.1 per bbl by October 10 to fall by \$0.8 per bbl or 1.5% mom as the result of the reporting month. WTI Cushing crude oil achieved its maximum more than a week later on October 19 and fell by \$1.4 per bbl or 2.9% mom.





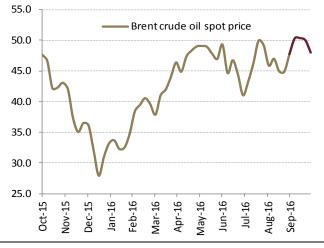
Source: Bloomberg

The rise in price was enhanced by covering of speculative short positions in oil futures after positive results of Energy International Forum in Algiers in the very end of September. Hedge funds have been also increasing long positions. Speculative nature of climbing above \$50 per bbl in October was followed by narrowing contango in oil futures. Time spread between 12-months and 1-months futures in Brent crude oil shrank from \$4.5 per bbl to \$3.2 or from 9.2% to 5.9% on October 10. By the end of October, it almost returned back to \$3.9 or 8%.

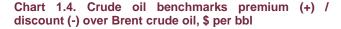
To be more precise, time spread between Brent 1 months futures and spot price rose to \$1.6 per bbl from \$1.4 per bbl (+\$0.3 per bbl or +19.3%). However, spread between 3 months futures and spot decreased considerably from \$3.0 per bbl to \$2.6 per bbl (-\$0.4 per bbl or -14.1%).

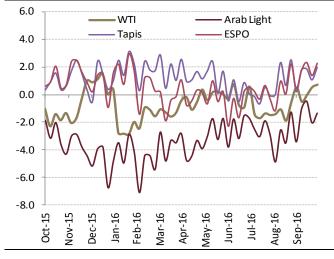


Chart 1.2. Brent crude oil price performance over last 12 months, \$ per bbl



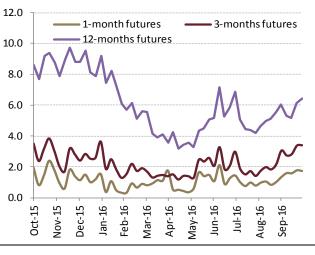
Source: Bloomberg





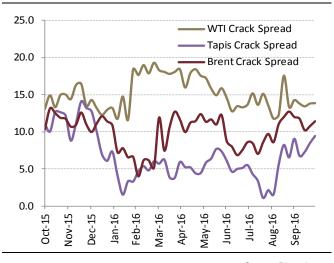
Source: Bloomberg

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



Chart 2.2. Different assessments of OPEC crude oil

2. OPEC PRODUCTION

According to Bloomberg assessments, total OPEC oil production in October grew by another 0.5% mom or 170 thsd bbl / d to new record high of 34.02 mln bbl / d. The largest contribution to the increase in OPEC oil production increase was made by Nigeria (+170 thsd bbl / d), Libya (+180 thsd bbl / d), Iran (+50 thsd bbl / d) and Iraq (+50 thsd bbl / d), while Saudi Arabia, Qatar and Venezuela slightly reduced output by 20 thsd bbl / d each. Angola marked the most noticeable change to its production, decreasing output by 230 thsd bbl / d.

From a y-o-y basis in October the cartel ramped up its total output by 6.2%. Iran demonstrated the most annual crude oil production growth (+880 thsd bbl / d or 31.4%), followed by Iraq (+373 thsd bbl / d or +8.8%) and Saudi Arabia (+280 thsd bbl / d or +2.7%). The most significant annual production decrease was observed in Nigeria (-349 thsd bbl / d or -17.3%) due to continuous NDA attacks and leaks. Angola and Venezuela also produced less crude oil in October than a year ago. Libya finally recovered some of its lost export, increasing output by 90 thsd bbl / d or +20.9 y-o-y.

In comparison with October OPEC oil output figures by Bloomberg, EIG evaluated total OPEC production equal to 34.28 mln bbl / d (260 thsd bbl / d more than Bloomberg). In particular EIG printed significantly lower numbers for Venezuela (-277 thsd bbl / d), and Nigeria (-229 thsd bbl / d) relative to Bloomberg ones. The overall upbeat was possible mostly due to considerable upward assessment for Iran crude oil output (+162 thsd bbl / d versus Bloomberg) and Angola (+393 thsd bbl / d).

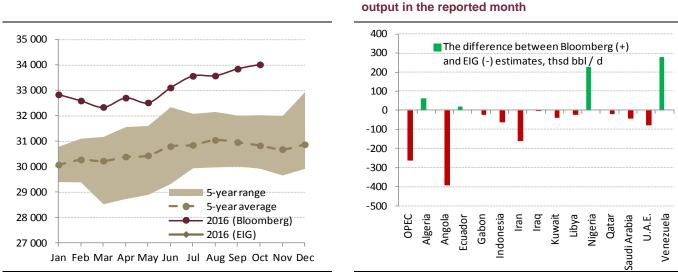


Chart 2.1. OPEC crude oil output, thsd bbl / d

Source: Bloomberg, EIG

Source: Bloomberg, EIG

In accordance with EIG figures, in October OPEC as a whole increased its share in a world crude oil output by significant 23 bps m-o-m to 41.33%. Generally, despite to continuous output ramping up the OPEC share at global crude oil market had stood close to 41% for 5 months in a row before. Production problems in Nigeria and to lesser degree in Libya had limited OPEC capacities to pump its production further. Returning export from both Nigeria and Libya in October took OPEC market share even higher.



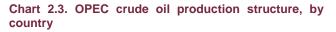
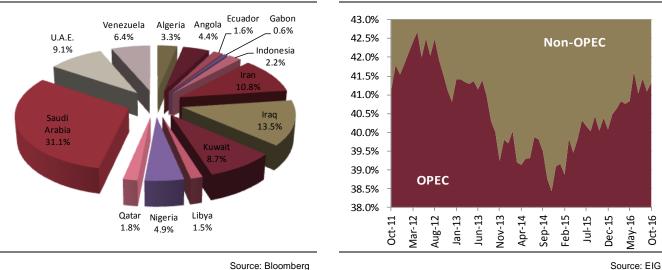
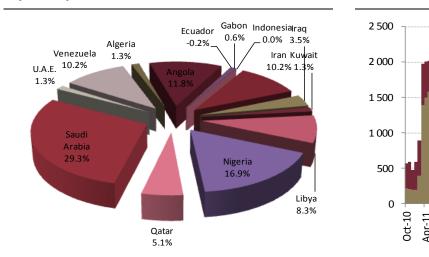


Chart 2.4. OPEC share, as % of world crude oil production

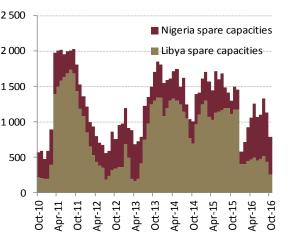


Source: Bloomberg

In October the Bloomberg estimated OPEC's total spare capacities at roughly 3.1 mln bbl / d. About 80% of OPEC's potential to ramp up crude oil production were located just in 5 states, namely Saudi Arabia (920 thsd bbl / d or 29.3% of total), Nigeria (530 thsd bbl / d or 16.9% of total), Angola (370 thsd bbl / d or 11.8% of total), Iran (320 thsd bbl / d or 10.2% of total) and Venezuela (320 thsd bbl / d or 10.2% of total).







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 due to the fact that it still has not fully recovered its output 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

by country



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. Firstly, it would be exactly the opposite thing to what they do during last 2 years after oil market began to crush in the middle of 2014. And secondly, it's a common knowledge nowadays that such a strategy would not work in modern circumstances.

That's why we consider Algiers oil freeze agreement that was achieved in the late of September as an another example of verbal interventions whereby major oil producing countries that suffers badly after oil prices halved tries to uplift or at least to hold world oil prices above crucial for them level of \$40 per bbl. The real deal to curb or freeze oil output by leading oil producing countries (at least OPEC + Russia) would be associated with a lot of great obstacles, namely and so seems less probable.

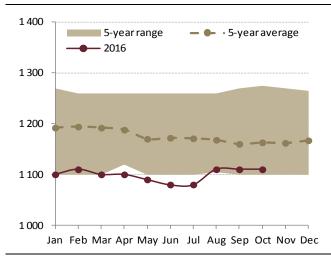
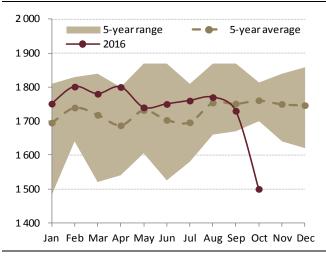
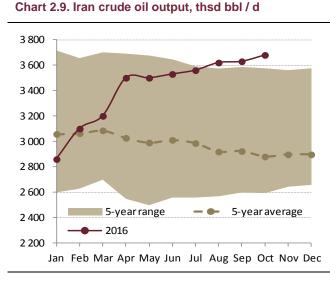


Chart 2.7. Algeria crude oil output, thsd bbl / d





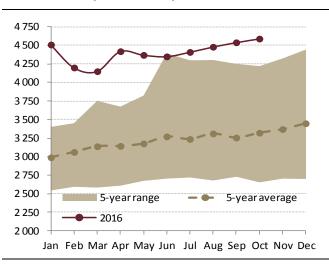
Source: Bloomberg



Source: Bloomberg

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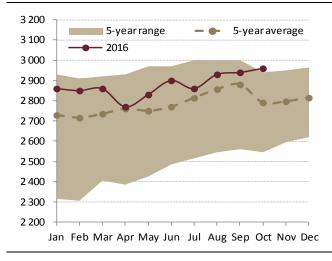




Source: Bloomberg

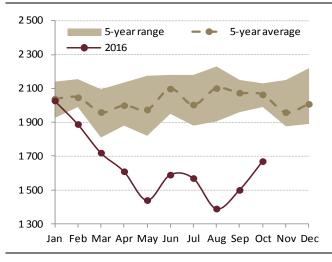


Chart 2.11. Kuwait crude oil output, thsd bbl / d



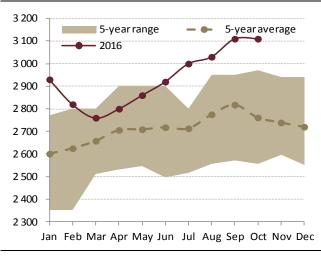
Source: Bloomberg

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



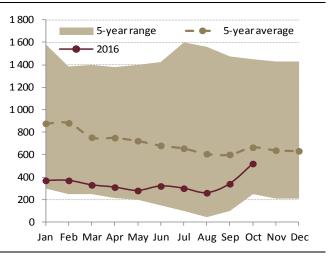
Source: Bloomberg

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



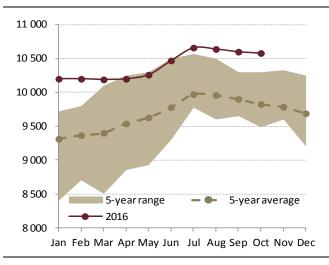
Source: Bloomberg

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



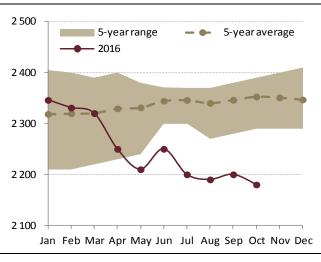
Source: Bloomberg

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



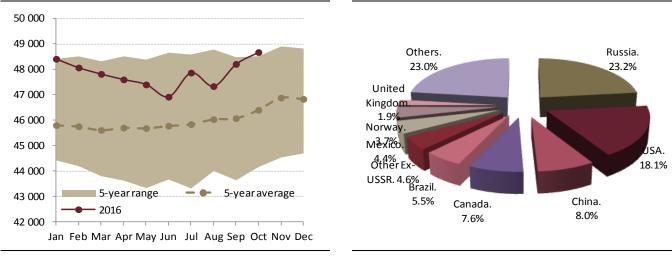
Chart 3.2. Non-OPEC crude oil production structure,

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 October by 466 thsd bbl / d or 1.0% to 48.68 mln bbl / d. So October became the 4th month in a row of non-OPEC crude oil production increase from the low of 46.92 mln bbl / d printed in June 2016. Non-OPEC oil production in October was even higher comparing to the numbers of October 2014 (48.52 mln bbl / d) and October 2015 (48.42 mln bbl / d). The most considerable production growth in October relative to the previous months among the non-OPEC oil producing countries was achieved in the USA (+137 thsd bbl / d), Russia (+123 thsd bbl / d) and Norway (+161 thsd bbl / d), while the U.K., Malaysia and China reduced their oil output by 27 thsd bbl / d, 25 bbl / d and 21 bbl / d respectively.

The same time from the longer-term point of view (in terms of y-o-y) non-OPEC crude oil output in October increased by more than 0.25 mln bbl / d or 0.5% with Russia (+489 thsd bbl / d or +4.5% yoy), Canada (+295 thsd bbl / d or +8.7% yoy), Brazil (+256 thsd bbl / d or +10.6% yoy) and Norway (+114 thsd bbl / d or +6.7% yoy) being the main drivers of this positive tendency. This output fall was partly offset by annual production decline in the USA (-534 thsd bbl / d or -5.7% yoy), China (-372 thsd bbl / d or -8.7% yoy) and Mexico (-155 thsd bbl / d or -6.8% yoy).

Chart 3.1. Non-OPEC crude oil output, thsd bbl / d



by country

Source: EIG

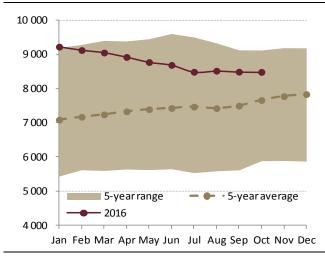
Source: EIG

USA

Crude oil production in the USA increased in October by 137 thsd bbl / d or 1.6% in comparison with September data and decreased by 534 thsd bbl / d or 5.7% in comparison with October 2015 figures. According to the most recent EIG data, the USA was accounted for 10.6% of global crude oil output that is nearly 160 bps lower relative to the record high of 12.20% printed in February 2015. The same time natural gas liquids (NGL) production in the USA in October fell by 34 thsd bbl / d or 0.9% on the month-to-month basis and grew by 300 thsd bbl / d or 9.1% on the year-on-year basis. Crude oil net imports from the US in October fell by 3.1% mom to 7.26 bn bbl /d, while crude oil exports sharply contracted to 435 thsd bbl / d comparing to 488 thsd bbl / d or 14.5% mom, while net imports of refined oil products to the US raised by 582 thsd bbl / d to -1.9 mln bbl / d.

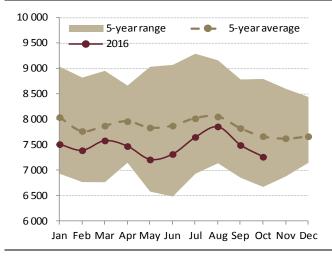


Chart 3.3. USA crude oil production, thsd bbl / d



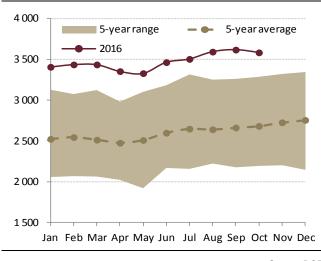
Source: DOE

Chart 3.5. USA crude oil net import, thsd bbl / d



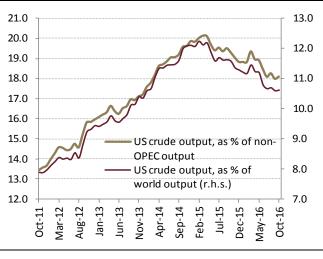
Source: DOE

Chart 3.7. USA NGL production, thsd bbl / day



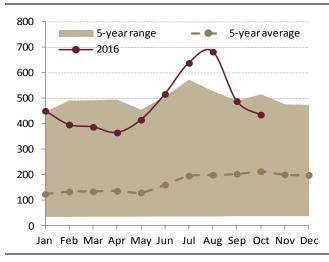
Source: DOE

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



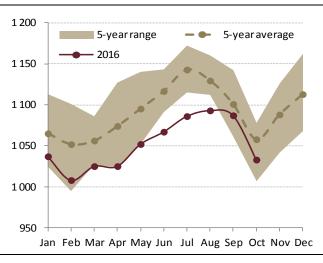
Source: EIG

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



Source: DOE

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

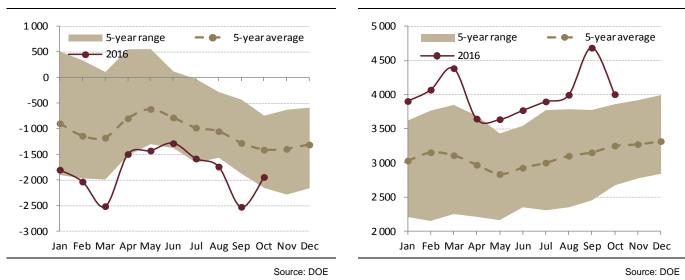


Source: DOE



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

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



Total production of shale oil in the US in October increased by insignificant 21 thsd bbl /d against September data, but on the year-on-year basis the decline rate was equal to 11.0% or 591 thsd bbl / d.

The most output contraction was observed on the Eagle Ford deposit, where crude oil production in October decreased both on month-to-month and year-on-year basis by 0.9% and 22.8% respectively. Significant annual output shrinkage was also detected on the Bakken deposit, where crude oil extraction in October 2016 was 16.3% lower than a year ago.

However, crude oil production on the largest shale oil deposit, namely Permian, in October was higher both in m-o-m and y-o-y terms and was equal to 1.93 mln bbl / d. It seems that the Permian deposit has 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 (\$40-50 per bbl range) oil prices. So, total oil production on the Permian deposit demonstrates no decline on opposite to Eagle Ford, Bakken and so on.

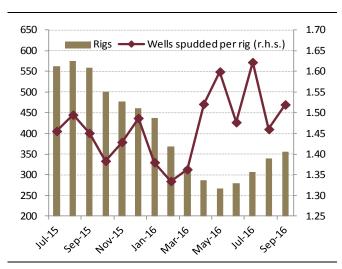


Chart 3.11. USA rigs and wells spudded

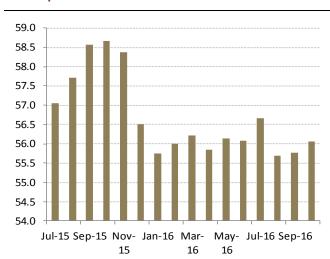


Chart 3.12. Shale oil production, as % of total US crude oil output

Source: DOE

Source: Rystad Energy, Bloomberg



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

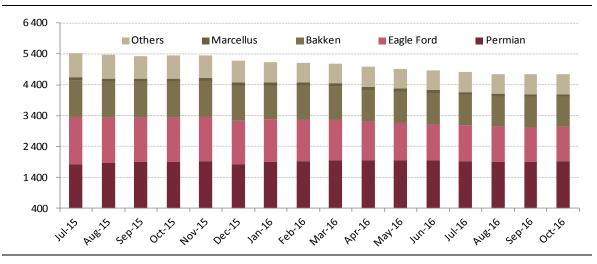
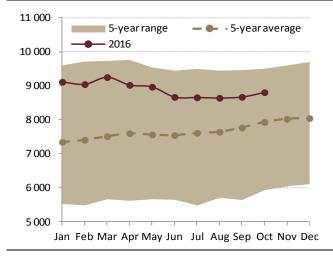
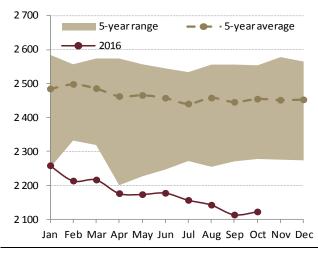


Chart 3.14. USA crude oil output, thsd bbl / d



Source: EIG

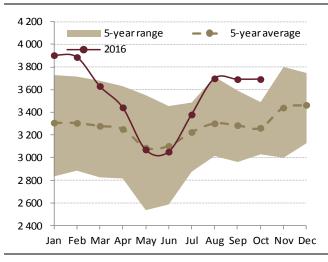
Chart 3.16. Mexico crude oil output, thsd bbl / d



Source: EIG

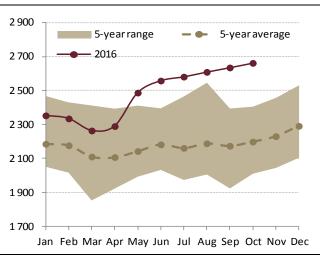
Source: Rystad Energy, Bloomberg

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

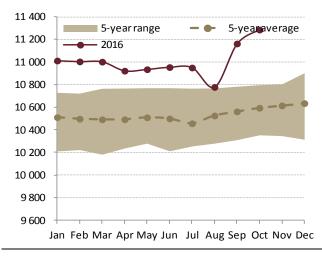
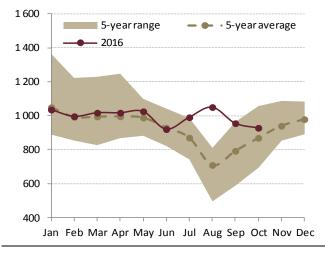


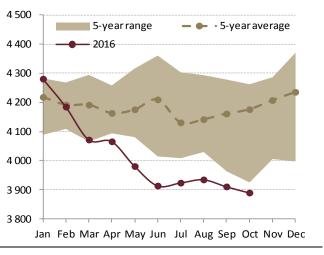


Chart 3.20. UK crude oil output, thsd bbl / d



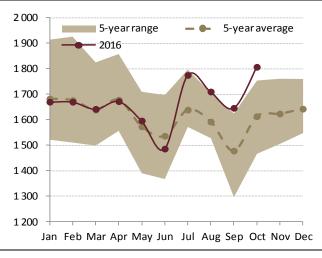
Source: EIG

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 was a little new information regarding global oil demand in October as IEA refreshes its world oil demand estimations on quarterly basis. So the most up-to-date IEA's data on global oil demand is still figures for the 2nd quarter of 2016.

According to these IEA's numbers total world demand for oil in the 2^{nd} quarter increased by 290 thsd bbl / d or 0.3% over against the 1^{st} quarter of 2016. Comparing to the 2^{nd} quarter of 2015 global demand for oil grew by 1.32 mln bbl / d or 1.4%, partly encouraged by relatively low oil prices. The main source of global oil demand growth in the latest EIA reported quarter was non-OECD countries whose aggregate demand raised by 970 thsd bbl / d (+2.0% qoq), while the demand from OECD states soften by comparable 690 thsd bbl / d (-1.5% qoq).

As for demand from single states and regions, the most significant demand shrinkage in the 2^{nd} quarter was observed in Japan, where demand for oil dropped by 770 thsd bbl / d (-17.4% qoq / - 3.7% yoy). Also negative demand tendencies had a place in Korea (-110 thsd bbl / d or -4.2% qoq). The same time among the non-OECD states in the 2^{nd} quarter of 2016 demand for crude oil increased in China by 160 thsd bbl / d (+0.6% qoq / +3.0% yoy), in Brazil and Latin America in general by 50 thsd bbl / d (+1.7% qoq, but -3.2% yoy) and 190 thsd bbl / d (+2.9% qoq, -1.3% yoy) respectively and in the Middle East by 510 thsd bbl / d (+6.5% qoq, but -1.4% yoy). Surprisingly, in the considering period there was a very strong demand for crude oil in Europe, where oil consumption grew by 300 thsd bbl / d or 2.2% qoq (+2.7% yoy).

So, world oil demand is healthy, but not as strong as it was expected in the previous IEA's report. The IEA said it expected a «marked slowdown» in oil demand growth as the stimulus from lower prices faded and as economic activity weakened in countries dependent on commodity revenues.

Also, according to the IEA opinion current supply-demand dynamic may not change significantly in the coming months. So, as a result, supply will continue to outpace demand at least through the first half of next year.

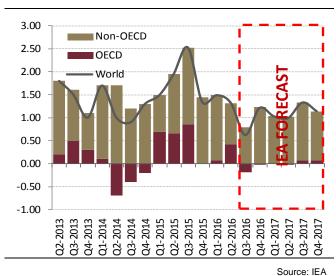
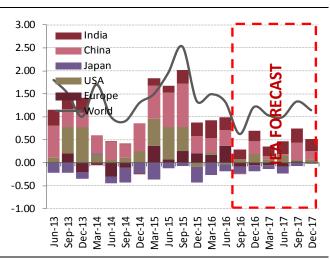


Chart 4.1. World oil demand yoy change, mln bbl / d

Chart 4.2. Regional oil demand yoy change, mln bbl / d



Source: IEA



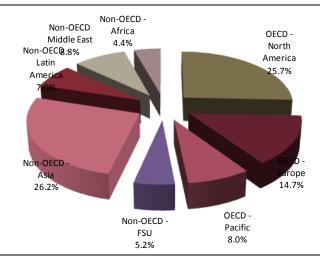
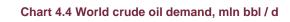
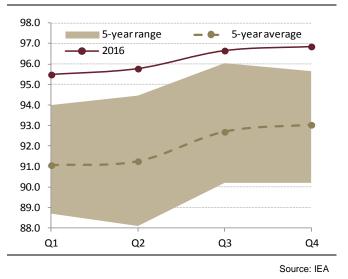


Chart 4.3. World oil demand structure, by region









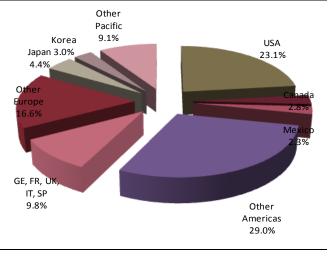
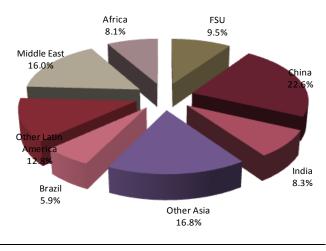


Chart 4.6. Non-OECD oil demand structure, by country



Source: IEA

Source: IEA

China

Total apparent demand for oil in China in September recovered a bit by 52 kbd or 0.5% mom / -0.4% yoy. In absolute terms total apparent demand in China dropped to mid-2014 levels and barely exceeded 10 mbd. Despite to such a dismal tendency in Chinese apparent oil demand, the IEA still expected oil demand in China to grow by 1.5% yoy in the 3rd quarter and by 2.4% yoy in the 4th quarter of this year. The most obvious explanation of this divergence is the continuing Strategic Petroleum Reserves (SPR) accumulation, while the final demand for oil and oil products in China is really weak.

In support of this point of view the import of crude oil to China in September reached 33.06 mln metric tons (equals to 8.07 mbd) according to China's General Administration of customs. 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.



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 before October 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 October the number of SUVs sold surged to 879.

The same time Chinese refineries in September increased export of both gasoline and diesel fuel by 170 and 530 thsd metric tons respectively. China exported in this September roughly 36.5% and 44.1% higher volumes of gasoline and diesel fuel than a year ago. Total export of refined oil products from China in September surged by almost 16% relative to August record of more than 3.7 mln metric tons and stood nearly 21% higher than it was a year ago.

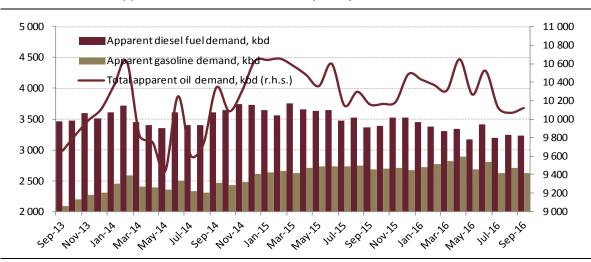


Chart 4.7. Chinese apparent oil demand, thsd barrels per day

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

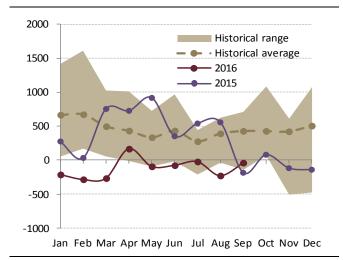
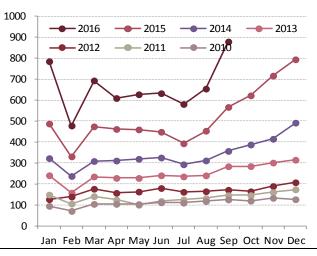


Chart 4.9. Chinese SUVs sales, thsd vehicles

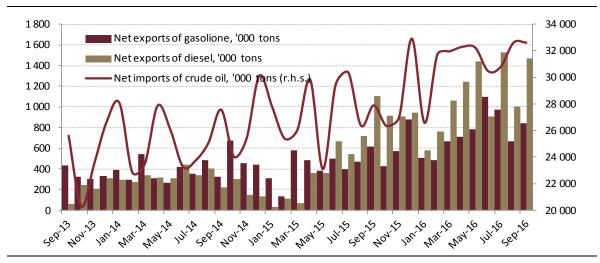


Source: China Passenger Car Association, Bloomberg

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







Source: Customs General Administration PRC, Bloomberg



5. INVENTORIES

Pursuant to the most recent IEA monthly report, total OECD commercial oil stocks declined in August 2016 (the last reported month on oil stocks) by 10.0 mln bbl (-0.3%). The most part of the decline was the result of crude oil inventories fall by 26.9 mln bbl (-2.2% mom), while total OECD products stocks were added 18.7 mln bbl (+1.2% mom). The same time in comparison with a year ago figures total OECD commercial oil stocks in August 2016 jumped on 145.3 mln bbl or 4.9% yoy with crude oil stocks grew by 49.9 mln bbl (+4.4% yoy) and oil products stocks increased by 98.0 mln bbl (+6.6% yoy).

From the standpoint of the regional structure of oil product glut the weakest situation in August was observed in the Americas and the Pacific region, where oil products stocks raised both in m-o-m (+12.8 mln bbl and +8.3 mln bbl) and y-o-y (+46.5 mln bbl and +14.1 mln bbl) terms. However, these rise in product stocks was completely offset by crude oil inventories decline (-11.3 mln bbl and -12.9 mln bbl respectively). In Europe crude oil and oil product stocks was almost flat m-o-m and rose 18.2 mln bbl or 5.3% yoy and 37.3 mln bbl or 6.8% yoy respectively. Stocks of crude oil in the Pacific region in July fell both in m-o-m and y-o-y terms on 6.5 mln bbl (-3.3% mom) and 9.2 mln bbl (-4.7% yoy) respectively.

As for the by-product inventories structure, the largest build-up in OECD inventories in August due to seasonal factor was noticed in middle distillates that stocks grew by 8.2 mln bbl (+1.3%) monthly and 34.7 mln bbl (+5.8%) yearly. The smallest stocks increase took place in heavy fuel that OECD inventories were nearly flat both on month-to-month and year-on-year basis. Gasoline OECD stocks decreased by 10.3 mln bbl (-2.6%) comparing to July 2016, but went up 25.2 mln bbl (+7.0%) relative to August 2015.

To sum these all up we should conclude that global oil inventories in highly developed states (OECD) are still on very elevated levels although the general pace of oil stocks build-up decreased in recent months.

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 2017 (and now brokers are talking more and more about the 2nd part of next year).

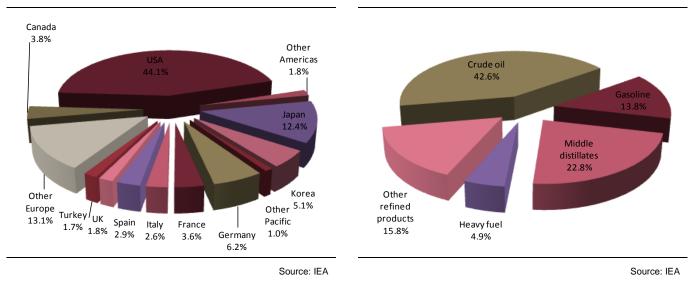
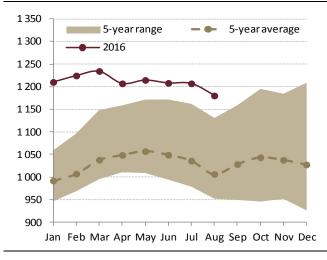


Chart 5.1. OECD oil stocks structure, by country

Chart 5.2. OECD oil stocks structure, by product

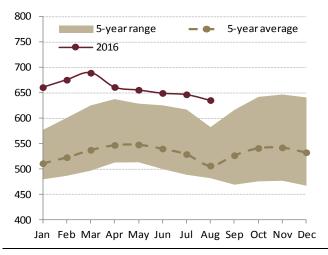


Chart 5.3. OECD crude oil stocks, mln bbl



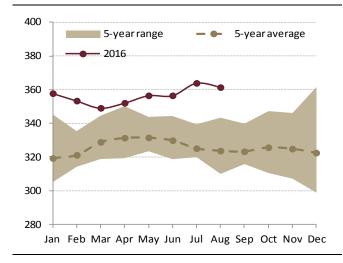
Source: IEA

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



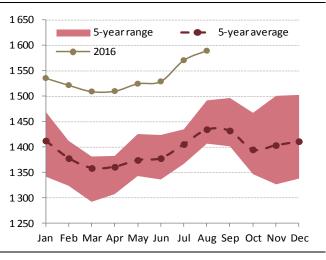
Source: IEA

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



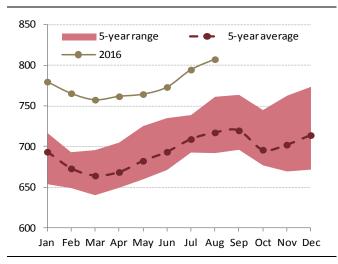
Source: IEA

Chart 5.4. OECD oil products stocks, mln bbl



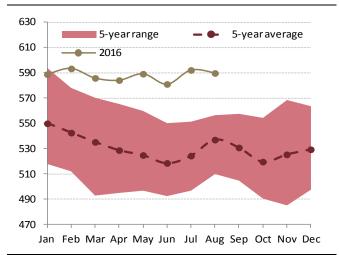
Source: IEA

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



Source: IEA

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

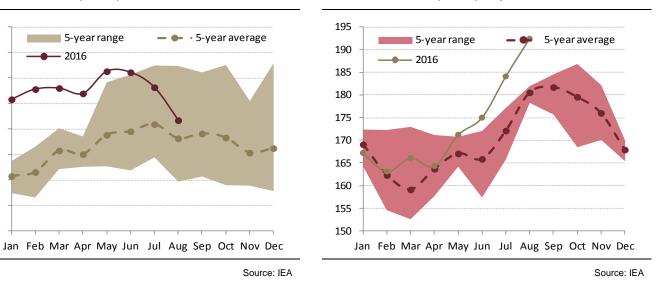


Source: IEA



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

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



38

36

USA

220

210

200

190

180

170

160

150

140

According to DOE's weekly data total commercial crude oil stocks in the USA in October finally climbed 13.5 mln bbl or 2.9% comparing to the previous month after the five months of commercial stocks decline in a row.

Crude oil stocks in September stood 31.7 mln bbl (or +7.0%) higher than they were a year ago. As for crude oil inventories in Cushing oil storage in Oklahoma, they fell in October by 4.2 mln bbl or 6.7% mom, but still were 5.3 mln bbl or 10.0% 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 October decreased on 3.6 mln bbl or 1.6% mom, while inventories of distillates deteriorated by 10.2 mln bbl or 6.3% mom. In comparison with the figures a year ago gasoline stocks in the USA rose on 8.5 mln bbl or 3.9% yoy and distillates stocks climbed by 9.8 mln bbl or 7.0% yoy.

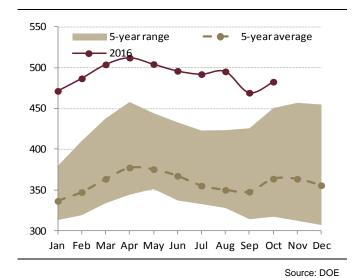


Chart 5.11. US commercial crude oil stocks, mln bbl

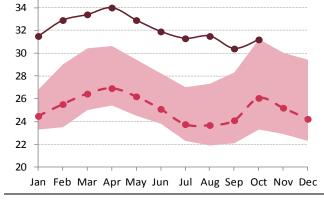


Chart 5.12. US commercial crude oil stocks, days of supply

5-year range

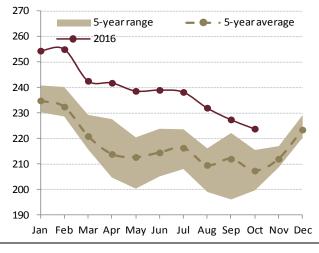
2016

Source: DOE

5-year average

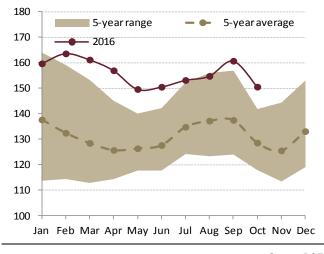


Chart 5.13. US gasoline stocks, mln bbl



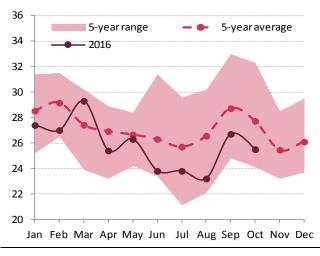
Source: DOE

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

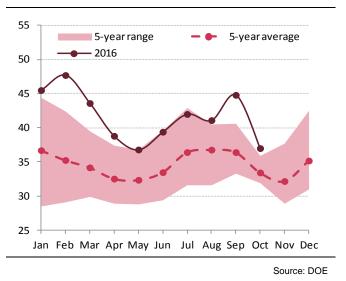
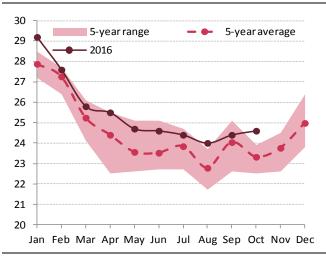
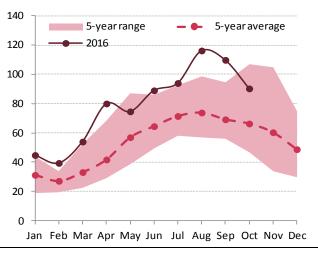


Chart 5.16. US distillate fuel stocks, days of supply



Source: DOE

Chart 5.18. US propane stocks, days of supply



Source: DOE



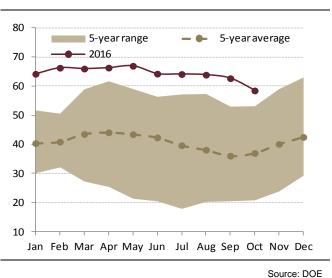


Chart 5.19. Cushing Oklahoma crude oil stocks, mln bbl

FLOATING STORAGE

structure, by country

According to Bloomberg Energy assessments in October 2016 total crude oil stocks stored on floating storages (including oil in transportation) was equal to 185.9 mln bbl, 37.9 mln bbl more than in September 2016 (+25.6% mom) and 10.9 mln bbl more than a year ago (+6.2% yoy). The most significant increasing on the month-to-month basis took place in South East Asia (+9.8 mln bbl or +26.3%), Middle East Gulf (+12.5 mln bbl or +27.1%), Japan + Korea (+5.4 mln bbl or +297.0%) and West Africa (+2.9 mln bbl +26%). From the year-on-year basis the most drop was observed in China (-8.6 mln bbl or -54.7%). Relative to last year floating storages surged te most in North West Europe (+5.9 mln bbl or 114.2%) and Japan + Korea (+5.2 mln bbl or +247.4. The same time total stocks of refined oil products stored on floating storages (including oil products in transportation) in October fell to 71.5 mln bbl, 2.0 mln bbl less than in the previous month (-2.7% mom) and 3.3 mln bbl more than a year ago (+4.8%). South East Asia (+2.7 mln bbl) and India (-1.7 mln bbl) were the regions where refined oil stocks grew and dropped the most relative to September figures.

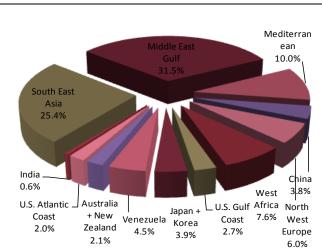
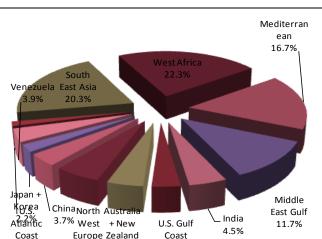


Chart 5.20. Crude oil stocks held on floating storages

1.4%

5.5%

4.3%



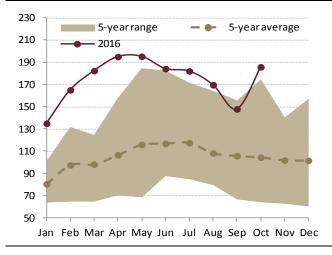
3.4%

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

Source: Bloomberg Energy

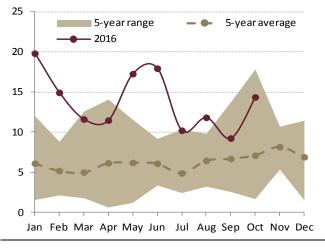


Chart 5.22. Global crude oil floating storage, mln bbl



Source: Bloomberg Energy

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



Source: Bloomberg Energy

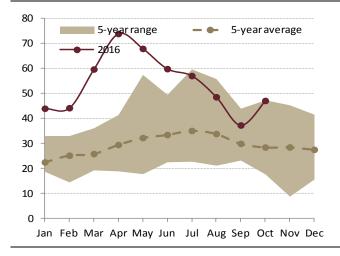
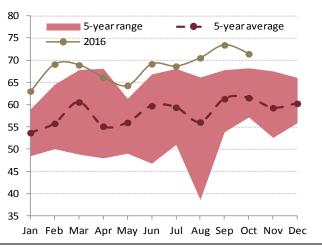


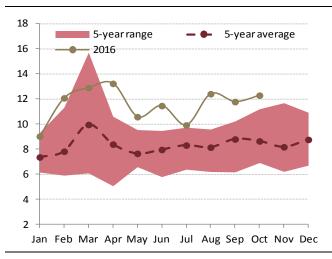
Chart 5.26. South East Asia crude oil floating storage, mln bbl

Chart 5.23. Global refined oil floating storage, mln bbl



Source: Bloomberg Energy





Source: Bloomberg Energy

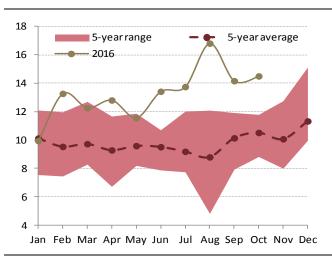
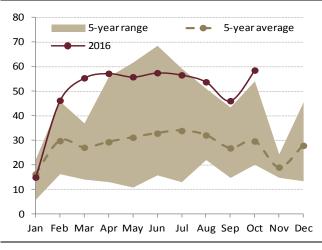


Chart 5.27. South East Asia refined oil floating storage, mln bbl

Source: Bloomberg Energy

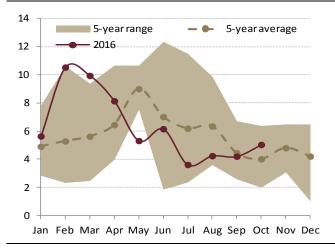


Chart 5.28. Middle East crude oil floating storage, mln bbl



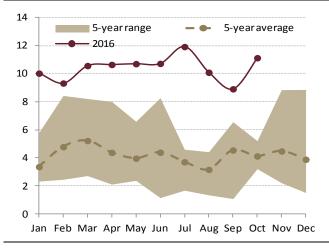
Source: Bloomberg Energy





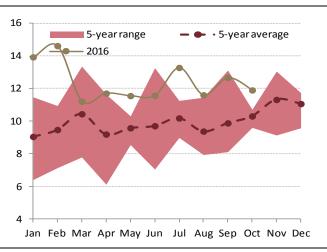
Source: Bloomberg Energy



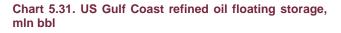


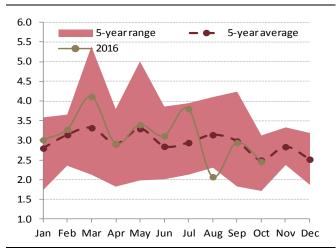
Source: Bloomberg Energy





Source: Bloomberg Energy





Source: Bloomberg Energy



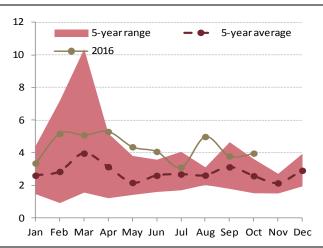
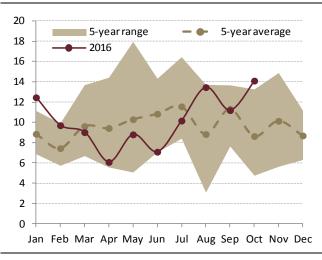


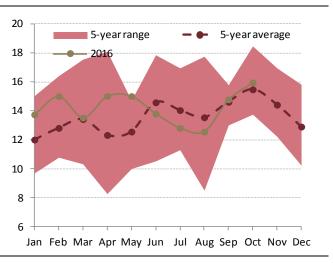


Chart 5.34. West Africa crude oil floating storage, mln bbl



Source: Bloomberg Energy





Source: Bloomberg Energy



APPENDIX

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

	Q1- 2015	Q2- 2015	Q3- 2015	Q4- 2015	Q1- 2016	Q2- 2016	Q3- 2016	Q4- 2016	Q1- 2017	Q2- 2017	Q3- 2017	Q4- 2017	2015	2016	2017	Δ 2015	Δ 2016	Δ 2017
USA	19.41	19.47	19.83	19.42	19.45	19.43	19.90	19.61	19.52	19.59	19.92	19.69	19.42	19.61	19.69	-0.09	0.19	0.08
Canada	2.43	2.33	2.45	2.40	2.39	2.37	2.43	2.37	2.37	2.31	2.43	2.34	2.40	2.37	2.34	-0.01	-0.03	-0.03
Mexico	1.94	1.97	2.07	2.05	1.98	1.94	1.94	1.98	1.95	1.97	1.94	1.98	2.05	1.98	1.98	0.03	-0.07	0.00
North America	24.46	24.42	24.99	24.53	24.48	24.40	24.91	24.62	24.52	24.51	24.94	24.67	24.53	24.62	24.67	-0.07	0.09	0.05
Brazil	3.17	3.17	3.22	3.20	3.02	3.07	3.14	3.17	3.02	3.05	3.14	3.18	3.20	3.17	3.18	-0.11	-0.03	0.01
Other LatAm ex. Mexico	3.45	3.60	3.64	3.59	3.47	3.61	3.69	3.63	3.47	3.62	3.67	3.62	3.59	3.63	3.62	0.00	0.04	-0.01
LatAm ex. Mexico	6.62	6.77	6.86	6.79	6.49	6.68	6.83	6.80	6.49	6.67	6.81	6.80	6.79	6.80	6.80	-0.11	0.01	0.00
Total Europe	13.46	13.57	14.16	13.71	13.64	13.94	14.07	13.65	13.59	13.85	14.10	13.65	13.71	13.65	13.65	0.21	-0.06	0.00
Japan	4.70	3.80	3.85	4.14	4.43	3.66	3.71	4.02	4.34	3.52	3.63	3.99	4.14	4.02	3.99	-0.34	-0.12	-0.03
Korea	2.46	2.29	2.36	2.52	2.59	2.48	2.48	2.59	2.68	2.56	2.56	2.63	2.52	2.59	2.63	0.14	0.07	0.04
Australia, New Zealand, Israel	1.52	1.49	1.50	1.52	1.52	1.50	1.52	1.51	1.53	1.51	1.51	1.52	1.52	1.51	1.52	0.08	-0.01	0.01
OECD Asia Pacific	8.68	7.58	7.71	8.18	8.54	7.64	7.71	8.12	8.55	7.59	7.70	8.14	8.18	8.12	8.14	-0.12	-0.06	0.02
China	11.32	11.45	11.54	11.57	11.63	11.79	11.52	11.84	11.70	11.82	11.90	12.01	11.57	11.84	12.01	0.37	0.27	0.17
India	3.97	4.04	3.85	4.10	4.36	4.32	4.06	4.33	4.57	4.60	4.38	4.60	4.10	4.33	4.60	0.30	0.23	0.27
Other non-OECD Asia	8.33	8.56	8.45	8.70	8.74	8.78	8.74	9.07	9.03	9.10	9.02	9.30	8.70	9.07	9.30	0.40	0.37	0.23
Total Asia	23.62	24.05	23.84	24.37	24.73	24.89	24.32	25.24	25.30	25.52	25.30	25.91	24.37	25.24	25.91	1.07	0.87	0.67
FSU	4.66	4.91	5.07	4.98	4.94	4.93	5.21	5.11	4.95	5.07	5.24	5.18	4.98	5.11	5.18	-0.02	0.13	0.07
Total Middle East	7.76	8.46	8.74	8.26	7.83	8.34	8.76	8.36	8.07	8.47	8.87	8.49	8.26	8.36	8.49	0.06	0.10	0.13
Total Africa	4.08	4.05	3.97	4.12	4.16	4.22	4.16	4.31	4.34	4.40	4.28	4.43	4.12	4.31	4.43	0.32	0.19	0.12
OECD demand	46.59	45.56	46.86	46.41	46.66	45.97	46.68	46.39	46.66	45.95	46.75	46.46	46.41	46.39	46.46	0.01	-0.02	0.07
Non-OECD demand	47.40	48.89	49.17	49.23	48.82	49.79	49.97	50.47	49.86	50.81	51.23	51.53	49.23	50.47	51.53	1.43	1.24	1.06
World demand	93.99	94.45	96.03	95.64	95.48	95.77	96.65	96.85	96.51	96.76	97.98	97.99	95.64	96.85	97.99	1.34	1.21	1.14

Source: IEA, Bloomberg

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

	Q1- 2015	Q2- 2015	Q3- 2015	Q4- 2015	Q1- 2016	Q2- 2016	Q3- 2016	Q4- 2016	Q1- 2017	Q2- 2017	Q3- 2017	Q4- 2017	2015	2016	2017	Δ 2015	∆ 2016 ·	∆ 2017
OPEC Crude*	31.40	32.40	32.70	32.60	32.80	33.00	33.10	32.80	32.90	32.80	33.60	33.60	32.60	32.80	33.60	2.10	0.20	0.80
OPEC NGLs	6.70	6.70	6.80	6.80	6.80	6.90	6.90	7.10	7.00	7.00	7.10	7.10	6.80	7.10	7.10	0.40	0.30	0.00
OPEC production	38.10	39.20	39.50	39.50	39.60	39.90	40.00	39.90	39.90	39.80	40.70	40.70	39.50	39.90	40.70	2.60	0.40	0.80
															-			
Americas	20.00	19.60	20.00	20.10	19.90	18.90	19.10	19.30	19.40	19.30	19.40	19.50	20.10	19.30	19.50	0.40	-0.80	0.20
Europe	3.40	3.50	3.40	3.60	3.60	3.40	3.40	3.50	3.50	3.40	3.30	3.40	3.60	3.50	3.40	0.10	-0.10	-0.10
Pacific	0.40	0.40	0.50	0.50	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.50	0.50	0.40	0.50	0.00	-0.10	0.10
OECD	23.80	23.50	23.90	24.10	24.00	22.80	22.90	23.30	23.30	23.20	23.10	23.30	24.10	23.30	23.30	0.40	-0.80	0.00
FSU	14.00	14.00	13.90	14.10	14.20	14.00	13.90	14.10	14.20	14.20	14.20	14.40	14.10	14.10	14.40	0.20	0.00	0.30
Europe	3.40	3.50	3.40	3.60	3.60	3.40	3.40	3.50	3.50	3.40	3.30	3.40	3.60	3.50	3.40	0.10	-0.10	-0.10
China	4.30	4.40	4.30	4.30	4.20	4.10	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	2.80	2.70	2.80	2.80	2.70	2.70	2.70	2.60	2.60	2.70	2.60	2.80	2.70	2.60	-0.80	-0.10	-0.10
Latin America	4.60	4.60	4.60	4.60	4.40	4.50	4.60	4.70	4.70	4.70	4.80	4.80	4.60	4.70	4.80	0.00	0.10	0.10
Middle East	1.30	1.30	1.20	1.20	1.20	1.20	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	2.10	2.00	2.00	2.00	1.90	2.00	2.10	2.10	2.10	2.10	2.10	2.00	2.10	2.10	-0.30	0.10	0.00
Non-OECD	29.30	29.20	29.00	29.10	28.90	28.60	28.70	29.00	29.00	29.00	29.00	29.20	29.10	29.00	29.20	-1.00	-0.10	0.20
Non-OPEC Crude	53.10	52.70	52.90	53.20	52.90	51.40	51.60	52.30	52.30	52.20	52.10	52.50	53.20	52.30	52.50	-0.60	-0.90	0.20
Processing Gains	2.20	2.20	2.20	2.20	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	1.80	2.40	2.60	2.30	1.90	2.40	2.80	2.40	2.00	2.50	2.90	2.50	2.30	2.40	2.50	0.00	0.10	0.10
Non-OPEC production	57.20	57.30	57.60	57.90	57.00	56.00	56.60	57.00	56.60	57.00	57.30	57.30	57.90	57.00	57.30	-0.40	-0.90	0.30
World production	95.30	96.50	97.10	97.40	96.60	95.90	96.60	96.90	96.50	96.80	98.00	98.00	97.40	96.90	98.00	2.20	-0.50	1.10

* IEA Call on OPEC as OPEC Crude forecast

Source: IEA, Bloomberg



APPENDIX

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

	Oct- 2015	Nov- 2015	Dec- 2015	Jan- 2016	Feb- 2016	Mar- 2016	Apr- 2016	May- 2016	Jun- 2016	Jul- 2016	Aug- 2016	Sep- 2016	Oct- 2016	2014	2015	2016 (YTD)	Δ 2014	Δ 2015	Δ 2016 (YTD)
Algeria	1.12	1.12	1.12	1.11	1.07	1.07	1.06	1.05	1.05	1.07	1.05	1.04	1.05	1.17	1.12	1.05	-0.01	-0.05	-0.07
Angola	1.75	1.89	1.81	1.77	1.84	1.80	1.73	1.73	1.86	1.77	1.84	1.79	1.89	1.61	1.81	1.89	-0.20	0.20	0.08
Ecuador	0.54	0.54	0.53	0.53	0.56	0.55	0.55	0.56	0.55	0.55	0.55	0.56	0.54	0.56	0.53	0.54	0.01	-0.03	0.01
Gabon	0.22	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	0.23	0.00	0.01	-0.02
Indonesia	0.76	0.75	0.75	0.79	0.81	0.81	0.79	0.80	0.81	0.81	0.81	0.81	0.80	0.73	0.75	0.80	-0.03	0.02	0.06
Iran	2.92	2.93	2.94	3.01	3.27	3.37	3.50	3.60	3.61	3.65	3.68	3.71	3.84	2.58	2.94	3.84	0.17	0.36	0.91
Iraq	4.01	4.56	4.44	4.53	4.25	4.26	4.33	4.22	4.32	4.35	4.48	4.49	4.59	3.76	4.44	4.59	0.61	0.67	0.16
Kuwait	2.80	2.90	2.93	3.00	3.00	3.00	2.90	2.95	2.95	2.95	2.99	2.97	3.00	2.71	2.93	3.00	0.02	0.22	0.07
Libya	0.47	0.40	0.43	0.45	0.45	0.36	0.38	0.32	0.34	0.35	0.29	0.45	0.55	0.53	0.43	0.55	0.30	-0.10	0.12
Nigeria	1.84	1.79	1.56	1.48	1.69	1.74	1.58	1.24	1.35	1.06	1.17	1.24	1.44	1.81	1.56	1.44	0.09	-0.25	-0.12
Qatar	0.66	0.68	0.63	0.64	0.69	0.70	0.63	0.67	0.66	0.68	0.64	0.61	0.64	0.68	0.63	0.64	-0.05	-0.05	0.01
Saudi Arabia	10.28	10.19	10.14	10.23	10.22	10.22	10.26	10.27	10.55	10.67	10.63	10.65	10.63	9.54	10.14	10.63	-0.03	0.60	0.48
U.A.E.	2.97	3.03	2.99	3.13	2.78	2.91	2.87	3.11	3.17	3.18	3.15	3.19	3.19	3.16	2.99	3.19	0.18	-0.16	0.20
Venezuela	2.01	2.00	1.99	1.99	1.99	1.96	1.96	1.98	2.00	2.00	1.97	1.91	1.90	2.08	1.99	1.90	-0.41	-0.09	-0.09
OPEC Crude	32.34	33.01	32.50	32.92	32.90	33.00	32.76	32.71	33.45	33.32	33.49	33.63	34.29	31.34	32.50	34.29	0.33	1.16	1.78
OPEC NGLs	6.79	6.80	6.70	6.75	6.66	6.73	6.70	6.70	6.77	6.77	6.80	6.88	6.95	6.69	6.70	6.95	0.26	0.02	0.24
OPEC production	39.13	39.81	39.21	39.67	39.56	39.73	39.45	39.41	40.22	40.09	40.29	40.51	41.23	38.03	39.21	41.23	0.59	1.18	2.03
USA	9.34	9.28	9.15	9.11	9.04	9.25	9.02	8.97	8.67	8.65	8.64	8.67	8.81	9.69	9.15	8.81	1.63	-0.55	-0.34
Canada	3.40	3.80	3.75	3.90	3.89	3.63	3.44	3.07	3.05	3.38	3.70	3.69	3.69	3.54	3.75	3.69	0.01	0.21	-0.05
Mexico	2.28	2.28	2.27	2.26	2.21	2.22	2.18	2.17	2.18	2.16	2.14	2.11	2.12	2.35	2.27	2.12	-0.16	-0.08	-0.15
North America	15.02	15.35	15.17	15.27	15.14	15.10	14.64	14.21	13.90	14.19	14.48	14.47	14.62	15.59	15.17	14.62	1.48	-0.42	-0.55
Brazil	2.41	2.38	2.53	2.35	2.34	2.26	2.29	2.49	2.56	2.58	2.61	2.64	2.66	2.50	2.53	2.66	0.39	0.04	0.13
Argentina	0.50	0.50	0.49	0.48	0.45	0.47	0.45	0.46	0.45	0.47	0.48	0.47	0.48	0.50	0.49	0.48	-0.02	0.00	-0.01
Colombia	1.00	0.99	1.00	0.98	0.95	0.86	0.88	0.91	0.90	0.95	0.97	1.01	1.01	1.01	1.00	1.01	0.01	-0.01	0.01
Other Latin America	0.26	0.26	0.26	0.25	0.23	0.24	0.23	0.24	0.22	0.23	0.23	0.23	0.23	0.29	0.26	0.23	0.01	-0.03	-0.03
Non-OPEC Latin America ex. Mexico	4.16	4.13	4.28	4.06	3.97	3.84	3.85	4.09	4.13	4.23	4.29	4.34	4.38	4.29	4.28	4.38	0.39	-0.01	0.10
United Kingdom	0.97	1.00	1.03	1.04	1.00	1.02	1.02	1.03	0.92	0.99	1.05	0.96	0.93	0.93	1.03	0.93	0.03	0.11	-0.11
Norway	1.69	1.66	1.69	1.67	1.67	1.64	1.67	1.60	1.49	1.78	1.71	1.65	1.81	1.61	1.69	1.81	0.00	0.08	0.12
Other Europe	0.60	0.61	0.58	0.58	0.58	0.60	0.53	0.52	0.51	0.50	0.51	0.52	0.56	0.64	0.58	0.56	0.02	-0.06	-0.02
Europe	3.27	3.26	3.30	3.28	3.25	3.26	3.22	3.14	2.92	3.27	3.27	3.12	3.29	3.18	3.30	3.29	0.05	0.12	-0.01
Russia	10.80	10.81	10.90	11.01	11.01	11.00	10.92	10.94	10.96	10.95	10.78	11.16	11.29	10.73	10.90	11.29	0.04	0.17	0.38
Other Ex-USSR	2.19	2.31	2.27	2.30	2.31	2.28	2.25	2.24	2.22	2.26	1.99	2.22	2.26	2.36	2.27	2.26	-0.07	-0.09	0.00
FSU	12.99	13.12	13.17	13.31	13.32	13.29	13.17	13.18	13.18	13.21	12.77	13.38	13.55	13.09	13.17	13.55	-0.04	0.08	0.38
China	4.26	4.24	4.37	4.28	4.19	4.07	4.07	3.98	3.91	3.92	3.94	3.91	3.89	4.32	4.37	3.89	0.05	0.05	-0.48
India	0.76	0.75	0.74	0.73	0.74	0.74	0.73	0.75	0.75	0.75	0.76	0.74	0.75	0.77	0.74	0.75	-0.01	-0.03	0.02
Malaysia	0.56	0.63	0.62	0.64	0.66	0.66	0.66	0.65	0.65	0.64	0.60	0.66	0.64	0.60	0.62	0.64	0.10	0.02	0.02
Australia	0.34	0.36	0.35	0.31	0.33	0.36	0.36	0.31	0.36	0.38	0.36	0.36	0.36	0.36	0.35	0.36	0.01	-0.01	0.01
Other Non-OPEC Asia Pacific	0.85	0.89	0.87	0.94	0.94	0.93	0.92	0.89	0.90	0.91	0.90	0.93	0.88	0.84	0.87	0.88	0.02	0.02	0.01
Non-OPEC Asia Pacific	6.77	6.87	6.94	6.90	6.86	6.75	6.74	6.58	6.58	6.60	6.55	6.60	6.52	6.89	6.94	6.52	0.18	0.05	-0.42
Egypt	0.60	0.62	0.62	0.61	0.60	0.60	0.61	0.61	0.61	0.61	0.61	0.61	0.61	0.60	0.62	0.61	0.01	0.02	-0.01
Oman	0.99	1.00	1.01	1.02	1.01	0.98	1.00	1.01	1.00	1.01	1.01	0.97	0.97	0.93	1.01	0.97	-0.01	0.07	-0.03
Non-OPEC Africa/Mid East	2.89	2.91	2.90	2.90	2.90	2.85	2.90	2.93	2.95	2.95	2.97	2.92	2.92	2.96	2.90	2.92	-0.04	-0.06	0.02
Non-OPEC Crude	48.42	48.73	48.59	48.41	48.07	47.82	47.60	47.40	46.92	47.87	47.34	48.21	48.68	48.82	48.59	48.68	1.92	-0.23	0.09
Non-OPEC NGLs	7.39	7.49	7.48	7.38	7.42	7.50	7.39	7.41	7.60	7.61	7.40	7.62	7.74	7.16	7.48	7.74	0.75	0.32	0.26
Non-OPEC production	55.81	56.22	56.08	55.79	55.49	55.32	54.99	54.82	54.52	55.48	54.74	55.83	56.42	55.98	56.08		2.67	0.09	0.34
World production	94.94	96.03	95.28	95.46	95.05	95.04	94.44	94.23	94.74	95.57	95.02	96.34	97.65		95.28		3.26	1.27	2.37
world production	54.94	50.03	95.28	55.40	-95.05	-95.04	54.44	94.23	54.74	95.57	55.02	50.54	57.05	94.01	-95.28	57.05	5.20	1.27	2.57

Source: IEG



APPENDIX

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

	Aug- 2015	Sep- 2015	Oct- 2015	Nov- 2015	Dec- 2015	Jan- 2016	Feb- 2016	Mar- 2016	Apr- 2016	May- 2016	Jun- 2016	Jul- 2016	Aug- 2016	2014	2015	2016 (YTD)	Δ 2014	Δ 2015	Δ 2016 (YTD)
Americas	1 534	1 571	1 575	1 593	1 590	1 614	1 611	1 620	1 599	1 602	1 609	1 636	1 634	1 446	1 590	1 634	130	144	44
Crude	583	617	642	647	641	661	676	689	661	656	650	647	636	552	641	636	53	89	-6
Products	761	763	745	762	773	780	765	758	762	764	773	795	807	730	773	807	59	43	34
Europe	964	967	971	980	990	1 0 1 5	1 019	1 004	1 006	1 014	1 006	1 025	1 020	886	990	1 020		104	30
Crude	343	340	347	346	361	358	353	349	352	357	357	364	361	319	361	361	3	42	0
Products	552	557	554	568	563	589	593	586	584	589	581	592	590	502	563	590	5	61	26
Asia Pacific	449	445	439	428	435	425	422	421	420	434	438	442	438	405	435	438	13	30	3
Crude	205	202	205	191	206	192	196	196	194	203	202	196	183	173	206	183	18	33	-22
Products	178	176	169	170	166	167	163	166	164	171	175	184	192	169	166	192	-1	-3	27
OECD	2 947	2 982	2 985	3 001	3 015	3 054	3 052	3 046	3 025	3 050	3 052	3 102	3 092	2 738	3 015	3 092	148	278	77
Crude	1 1 30	1 159	1 195	1 184	1 208	1 210	1 225	1 235	1 207	1 215	1 208	1 207	1 180	1 045	1 208	1 180	73	164	-28
Products	1 492	1 496	1 467	1 500	1 502	1 536	1 522	1 509	1 5 1 0	1 525	1 529	1 571	1 590	1 401	1 502	1 590	63	101	87

Source: IEA

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

	Q2- 2013	Q3- 2013	Q4- 2013	Q1- 2014	Q2- 2014	Q3- 2014	Q4- 2014	Q1- 2015	Q2- 2015	Q3- 2015	Q4- 2015	Q1- 2016	Q2- 2016	2014	2015	2016 (YTD)	∆ 2014	Δ 2015	Δ 2016 (YTD)
Canada	174	183	170	174	179	186	193	183	176	183	188	184	175	193	188	175	23	-5	-13
Mexico	50	50	49	48	47	49	53	50	50	50	50	46	49	53	50	49	4	-3	-1
USA	1 820	1 834	1 762	1 754	1 820	1 841	1 862	1 910	1 943	1 973	1 987	2 024	2 049	1 862	1 987	2 049	99	125	62
Americas	2 075	2 101	2 013	2 008	2 079	2 108	2 139	2 176	2 203	2 238	2 257	2 286	2 306	2 139	2 257	2 306	126	118	48
Australia	40	37	37	37	36	39	36	34	36	36	34	37	38	36	34	38	-1	-3	5
Japan	588	591	575	590	589	608	581	568	578	590	582	560	574	581	582	574	5	1	-9
Korea	182	191	178	193	188	197	197	201	225	226	228	236	238	197	228	238	19	31	10
New Zealand	8	8	8	8	10	9	8	9	9	9	8	8	9	8	8	9	0	-1	1
Pacific	818	826	809	828	823	853	822	812	848	860	851	841	859	822	851	859	13	29	8
Germany	288	286	290	288	290	283	284	284	286	281	285	289	288	284	285	288	-6	1	3
France	166	166	168	167	168	171	168	173	170	167	168	166	168	168	168	168	0	0	0
Italy	126	131	125	123	122	123	119	121	117	117	117	120	121	119	117	121	-6	-2	4
Spain	117	120	112	117	118	123	121	132	133	139	131	140	134	121	131	134	10	10	3
UK	84	82	78	76	75	75	78	76	77	79	81	80	83	78	81	83	0	3	2
Turkey	64	63	62	63	62	63	62	65	66	71	75	76	78	62	75	78	0	12	3
Sweden	28	26	28	28	27	28	29	32	31	33	35	35	33	29	35	33	1	6	-2
Other Europe	472	482	489	492	496	501	494	525	531	546	571	576	574	494	571	574	5	77	3
Europe	1 344	1 356	1 351	1 354	1 358	1 366	1 356	1 409	1 411	1 434	1 463	1 481	1 479	1 356	1 463	1 479		107	16
OECD	4 238	4 282	4 174	4 189	4 260	4 327	4 318	4 397	4 462	4 532	4 571	4 608	4 643	4 318	4 571	4 643	144	254	72

Source: IEA



APPENDIX

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

	Oct- 2015	Nov- 2015	Dec- 2015	Jan- 2016	Feb- 2016	Mar- 2016	Apr- 2016	May- 2016	Jun- 2016	Jul- 2016	Aug- 2016	Sep- 2016	Oct- 2016	2014	2015	2016 (YTD)	۵ 2014	Δ 2015	Δ 2016 (YTD)
South East Asia	59.1	55.4	52.0	54.0	57.5	72.0	86.7	79.5	73.3	70.9	65.4	51.5	61.6	47.9	52.0	61.6	13.2	4.1	9.6
Crude	47.3	45.3	41.5	44.0	44.2	59.7	73.9	67.9	59.9	57.1	48.6	37.3	47.1	32.8	41.5	47.1	8.7	8.7	5.6
Products	11.8	10.1	10.5	9.9	13.3	12.3	12.8	11.6	13.4	13.8	16.8	14.2	14.5	15.1	10.5	14.5	4.5	-4.6	4.0
Middle East	61.5	33.1	52.3	20.6	53.1	63.2	65.1	62.0	64.8	63.4	61.2	54.0	66.9	36.6	52.3	66.9	5.5	15.7	14.5
Crude	53.9	24.1	45.3	14.9	46.2	55.4	57.2	55.8	57.5	56.6	53.7	46.1	58.5	31.8	45.3	58.5	8.5	13.5	13.2
Products	7.6	9.0	7.0	5.7	6.9	7.8	7.9	6.2	7.4	6.8	7.4	8.0	8.3	4.8	7.0	8.3	-3.0	2.2	1.3
Mediterranean	31.8	32.4	32.3	32.8	31.4	29.3	28.4	27.3	27.3	31.1	27.9	31.4	30.5	28.9	32.3	30.5	7.4	3.4	-1.9
Crude	21.2	20.2	20.9	18.8	16.8	18.1	16.7	15.8	15.7	17.9	16.2	18.7	18.6	17.9	20.9	18.6	5.9	3.0	-2.4
Products	10.6	12.3	11.4	13.9	14.6	11.2	11.7	11.6	11.6	13.3	11.6	12.7	11.9	11.0	11.4	11.9	1.4	0.4	0.5
North West Europe	8.8	8.4	12.8	13.4	14.5	15.6	15.9	15.1	14.8	15.0	15.1	12.7	15.1	4.1	12.8	15.1	-0.1	8.6	2.3
Crude	5.2	5.7	8.8	10.0	9.3	10.6	10.6	10.7	10.7	11.9	10.1	8.9	11.1	2.2	8.8	11.1	0.7	6.7	2.3
Products	3.6	2.7	3.9	3.4	5.2	5.1	5.3	4.4	4.1	3.1	5.0	3.8	4.0	1.9	3.9	4.0	-0.8	2.0	0.0
West Africa	28.8	28.1	25.9	26.2	24.7	22.5	21.1	23.8	20.9	23.0	26.0	26.0	30.0	25.0	25.9	30.0	6.2	0.9	4.1
Crude	12.7	14.9	11.2	12.5	9.7	9.0	6.1	8.8	7.1	10.2	13.5	11.2	14.1	9.2	11.2	14.1	1.0	2.0	2.9
Products	16.1	13.2	14.7	13.7	15.0	13.5	15.0	15.0	13.8	12.8	12.6	14.8	15.9	15.8	14.7	15.9	5.2	-1.1	1.2
China + Korea + Japan	35.6	21.3	22.8	39.6	29.8	23.2	22.9	34.5	35.9	20.4	23.6	18.5	28.7	14.2	22.8	28.7	-8.5	8.6	5.9
Crude	17.8	10.6	11.4	19.8	14.9	11.6	11.5	17.3	17.9	10.2	11.8	9.2	14.4	7.1	11.4	14.4	-4.2	4.3	3.0
Products	17.8	10.6	11.4	19.8	14.9	11.6	11.5	17.3	17.9	10.2	11.8	9.2	14.4	7.1	11.4	14.4	-4.2	4.3	3.0
US Gulf Coast	8.5	9.2	9.4	8.6	13.8	14.0	11.1	8.7	9.3	7.4	6.3	7.1	7.5	8.7	9.4	7.5	5.8	0.8	-1.9
Crude	6.4	6.5	6.5	5.6	10.5	9.9	8.1	5.3	6.2	3.6	4.2	4.2	5.0	6.0	6.5	5.0	5.0	0.4	-1.4
Products	2.2	2.7	3.0	3.0	3.3	4.1	2.9	3.4	3.1	3.8	2.1	2.9	2.5	2.6	3.0	2.5	0.7	0.3	-0.5
India	8.2	6.7	4.5	3.6	6.7	5.6	5.5	7.8	7.8	9.9	5.5	8.7	4.3	4.3	4.5	4.3	1.5	0.2	-0.2
Crude	3.3	3.3	0.2	0.3	4.0	2.7	3.1	4.3	3.2	5.5	1.3	3.7	1.0	0.5	0.2	1.0	0.0	-0.4	0.9
Products	5.0	3.5	4.3	3.3	2.7	2.9	2.3	3.6	4.6	4.4	4.2	4.9	3.2	3.7	4.3	3.2	1.5	0.6	-1.1
World	243.1	205.7	223.5	198.1	234.3	251.4	261.3	259.7	253.5	250.8	240.2	221.4	257.3	177.0	223.5	257.3	30.8	46.5	33.8
Crude	175.0	140.8	157.5	135.0	165.2	182.4	195.1	195.4	184.3	182.1	169.7	147.9	185.9	112.2	157.5	185.9	21.9	45.3	28.4
Products	68.2	65.0	66.0	63.1	69.1	68.9	66.1	64.3	69.2	68.7	70.5	73.5	71.5	64.8	66.0	71.5	8.9	1.2	5.4



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