



# Oil Market Update

October 2019

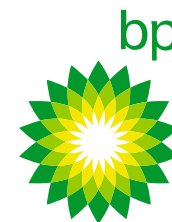
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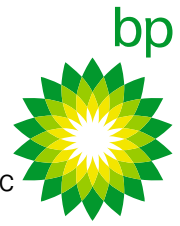
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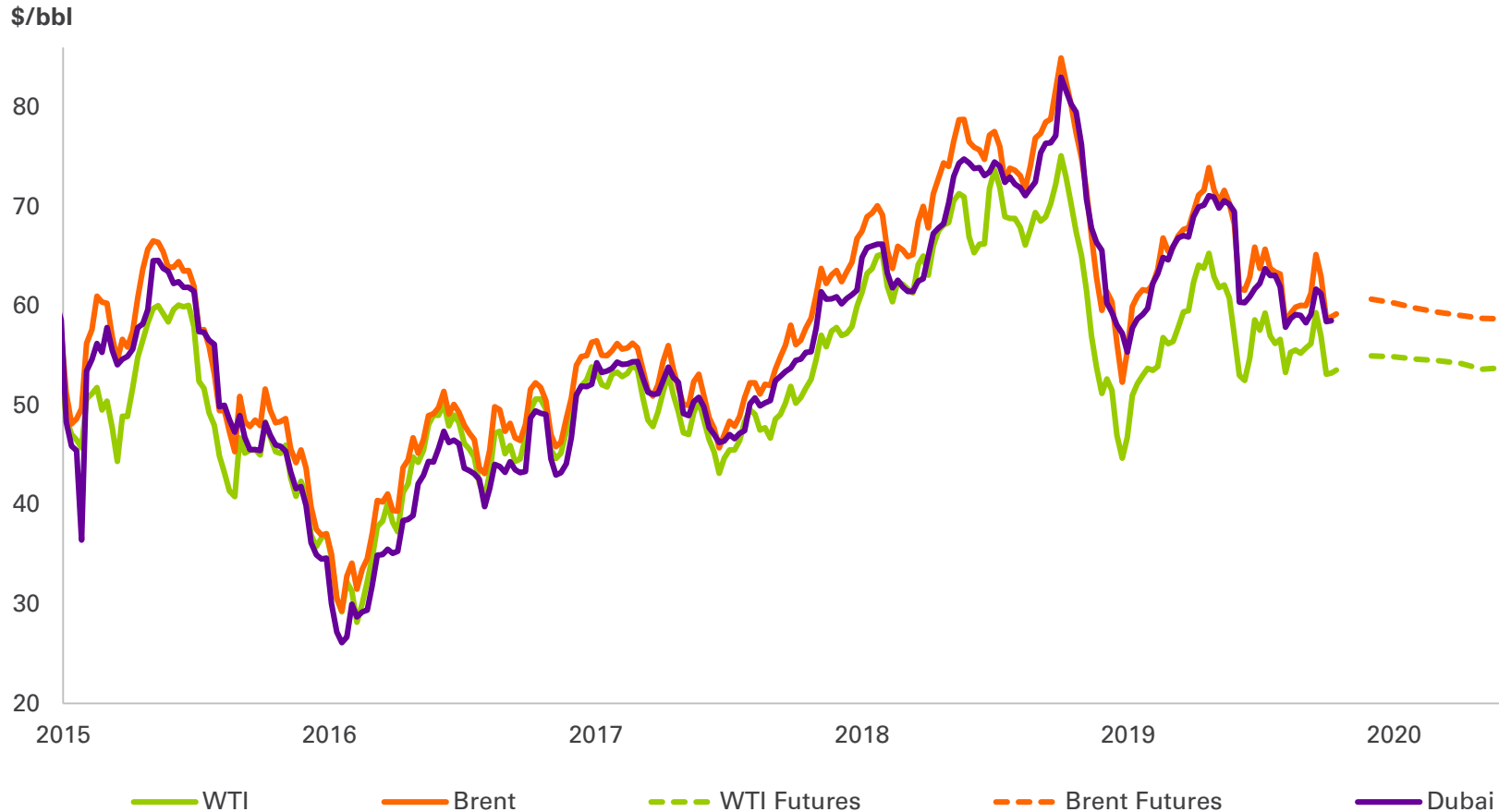
- **Brent** is currently trading around **\$62/bbl**, falling from highs of \$69/bbl after drone strikes in Saudi Arabia in September amid supply concerns. However, normal levels of oil production resumed faster than market expectations, resulting in a downwards price correction.
- Middle Eastern tensions have increased following the **drone strike in Saudi Arabia**, prompting the US to deploy additional troops and equipment to the region. Additionally, the bombing of an Iranian oil tanker and Turkish aggression in Syria have highlighted the political tensions in the region.
- The **US-China trade dispute** has contained Brent prices on concerns that the sanctions from both sides could contribute to a global economic slowdown and lower oil demand growth. However, there have been recent reports that a “Phase 1” trade deal is progressing and a planned increase in US tariffs on Chinese goods has been averted.
- The **Vienna Alliance** of OPEC and non-OPEC producers agreed to extend current output cuts, initially implemented from Jan-Jun 2019, to the end of Mar-20. The decision to continue restricting output by 1.2 mbd comes against a backdrop of sustained increases in US oil supply. They will meet again in Dec-19 to decide on supply levels for 2020.
- **Refining margins** had a volatile 3Q19, with lows of \$11/bbl and recent highs of nearly \$19/bbl. The strength in global RMM is largely supported by a recovering gasoline crack and a steadily increasing diesel crack.

# Crude prices remain volatile following middle eastern tensions and global trade disputes



- After a strong start to the year crude prices have felt downward pressure following evidence of slower economic expansion and below expectation oil demand growth.
- The ongoing geopolitical tensions in the Middle East has increased the risk premium on oil supply, providing moderate crude price support. However, the impact of the US/China trade dispute has been illustrated in weak economic data released from the US, China and the EU.

## Global Crude Prices



# WTI finds price support relative to Brent



- The Brent-WTI differential has remained narrow at around \$6/bbl in 3Q19, reaching under \$4/bbl for the first time this year.
- WTI has strengthened from significant stock draws at Cushing as increased pipeline capacity has reduced the bottleneck of crude supply to US Gulf Coast refineries.
- From late June 2019, the fire and subsequent closure of the Philadelphia Energy Solutions refinery in the US tightened the gasoline market and increased WTI prices, which has a high gasoline yield.

## Brent-WTI spread



Futures as of 21/10/19

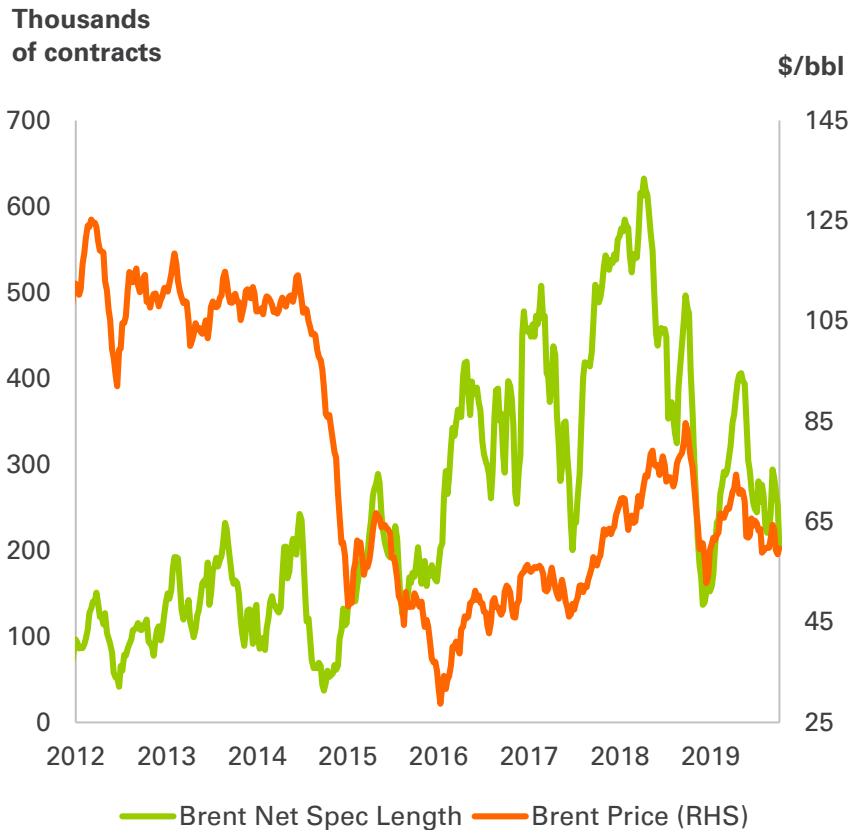
Source: NYMEX, ICE, S&P Global Platts®

# Net speculative length has fallen sharply from recent highs bp

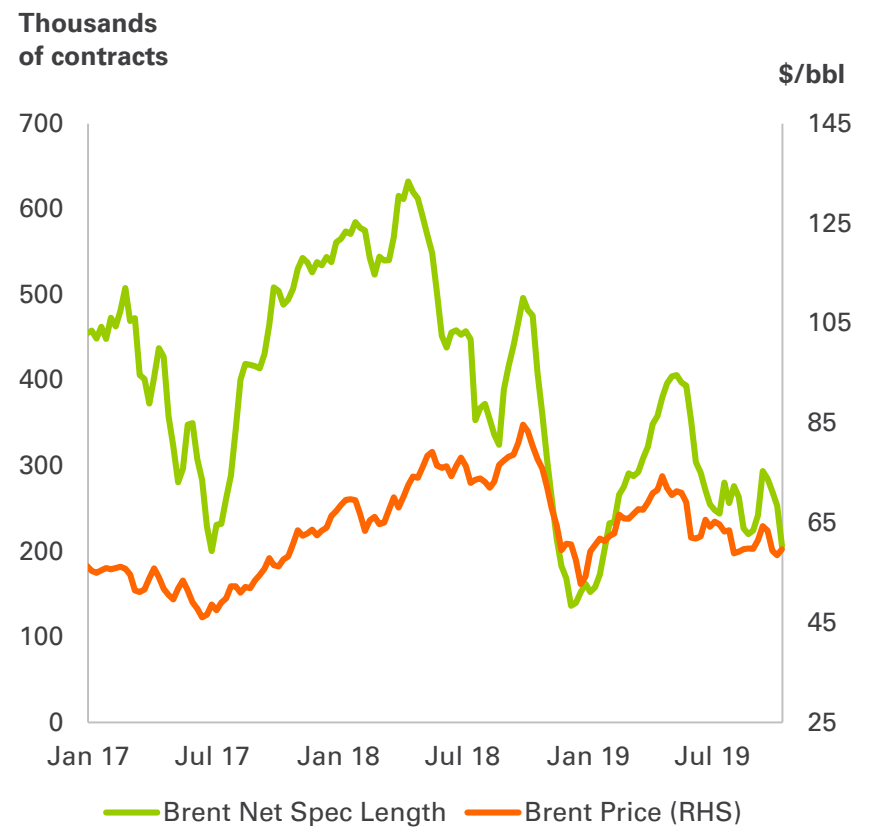


- After reaching over 400K contracts in May-19, net speculative length fell sharply throughout Jun-19, with the initial fall largely exacerbating the sell-off in Brent seen early in the month.
- After steadying at around 250 thousand contracts for a number of weeks, net speculative length increased in Sep-19 following the Saudi Arabia drone attacks, but reduced to pre-attack levels by the end of the month.
- Contracts volume remains low relative to average levels observed in 2017 and 2018.

## Net Speculative Length (2012-2019)



## Net Speculative Length (2017-2019)

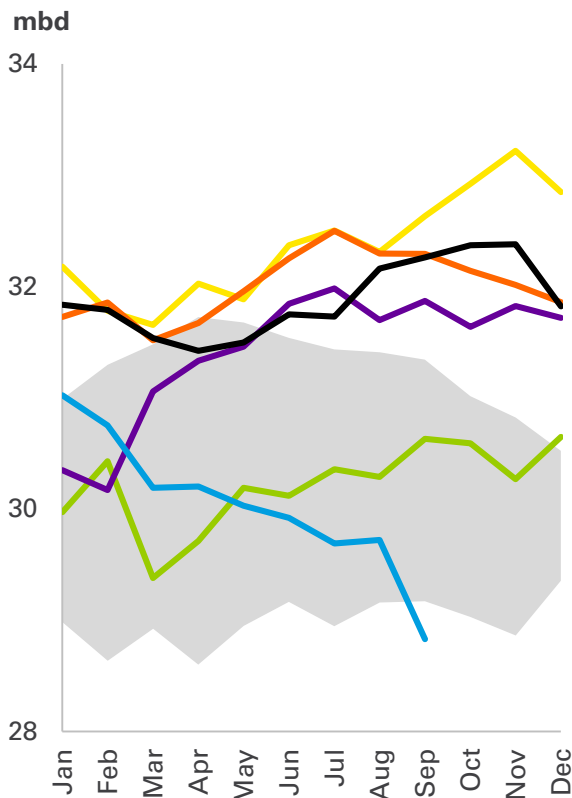


# OPEC+ crude supply falls, led by Saudi Arabia reduction

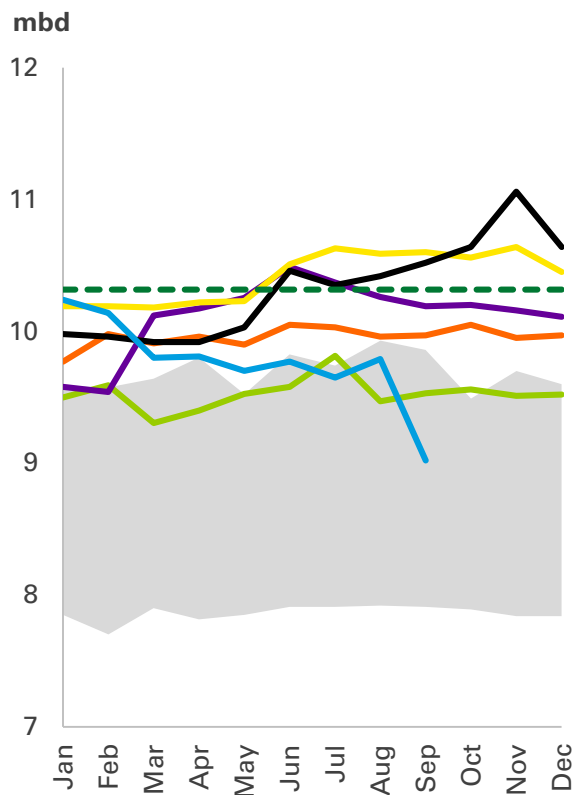


- OPEC+ have granted higher baselines and supply targets for several countries, with the largest change for Nigeria (+180kb/d), but the total agreed cut remains at 1.2 mbd.
- Compliance in September, following the Saudi outage, increased to 202% versus 127% in August.
- OPEC production stood at 28.8 mbd in Sep-19, down from 32.3 mbd in Sep-18.

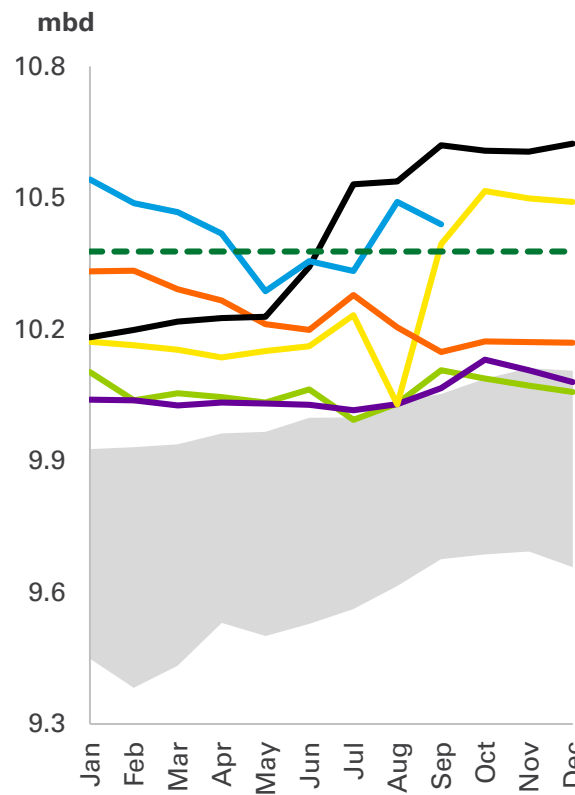
## OPEC Crude Supply



## Saudi Crude Supply



## Russia Crude Supply



'09-'13    2014    2015    2016    2017    2018    2019    - - - - Announced cut

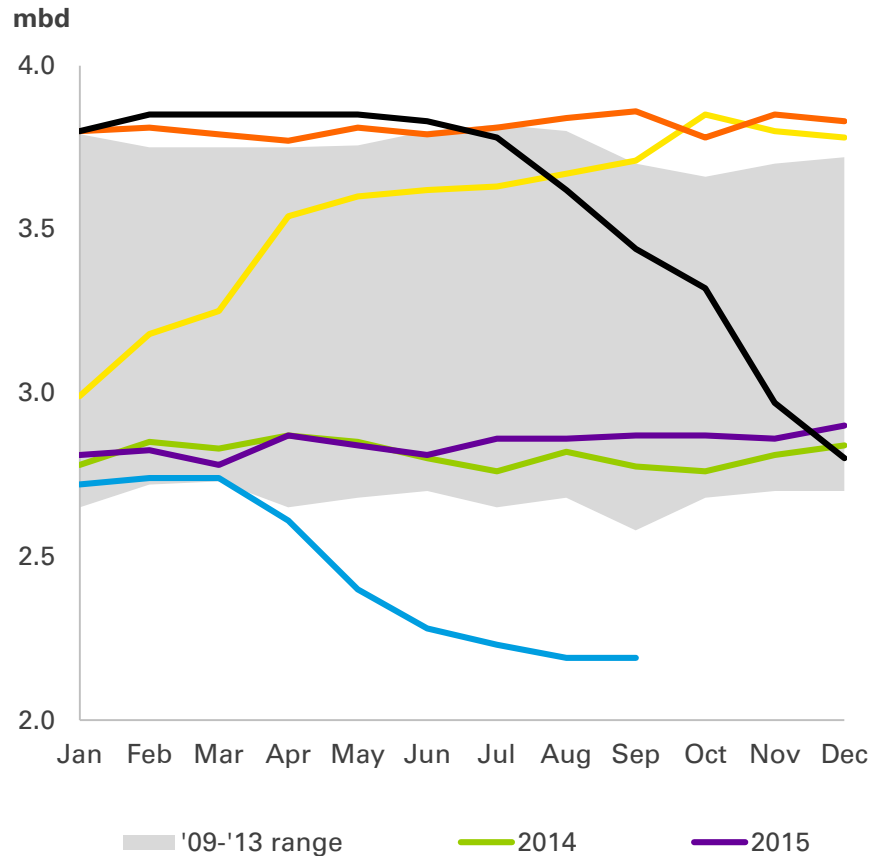
*NB: assumes 100% of production cut applied to crude oil*

# Iranian and Venezuelan output remains low

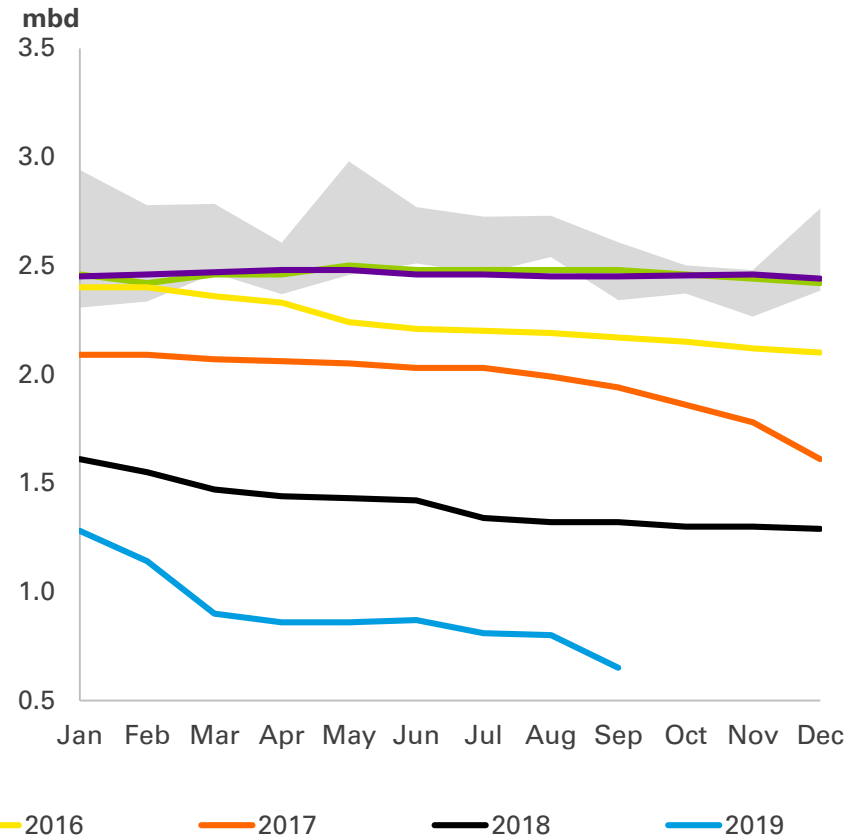


- Iranian crude supply remains low at 2.2 mbd in Sep-19 (a three-decade low), as US sanctions suppress the country's oil exports.
- The IEA states that Iranian crude exports stood at 260 kbd, down from 1.8 mbd in Sep-18.
- Venezuelan output fell further to 650 kbd in Sep-19, due to ongoing operational difficulties and the pressure of international sanctions.

## Iran Crude Supply



## Venezuela Crude Supply



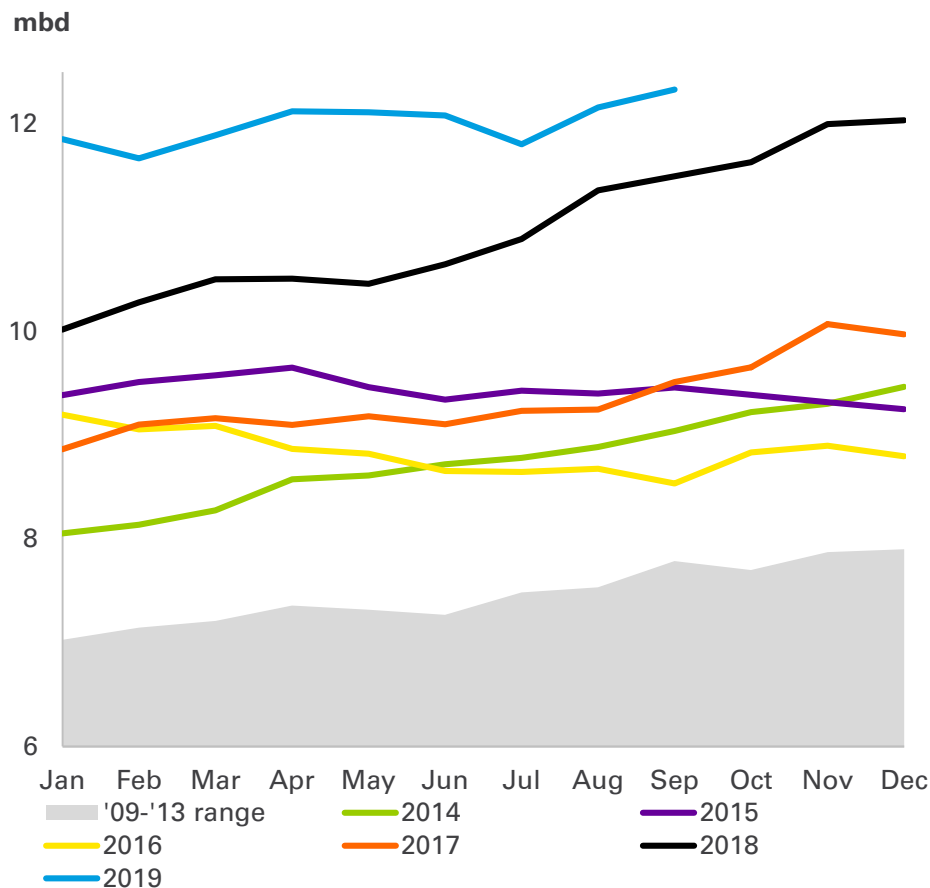


# However, US production growth continues to offset losses elsewhere

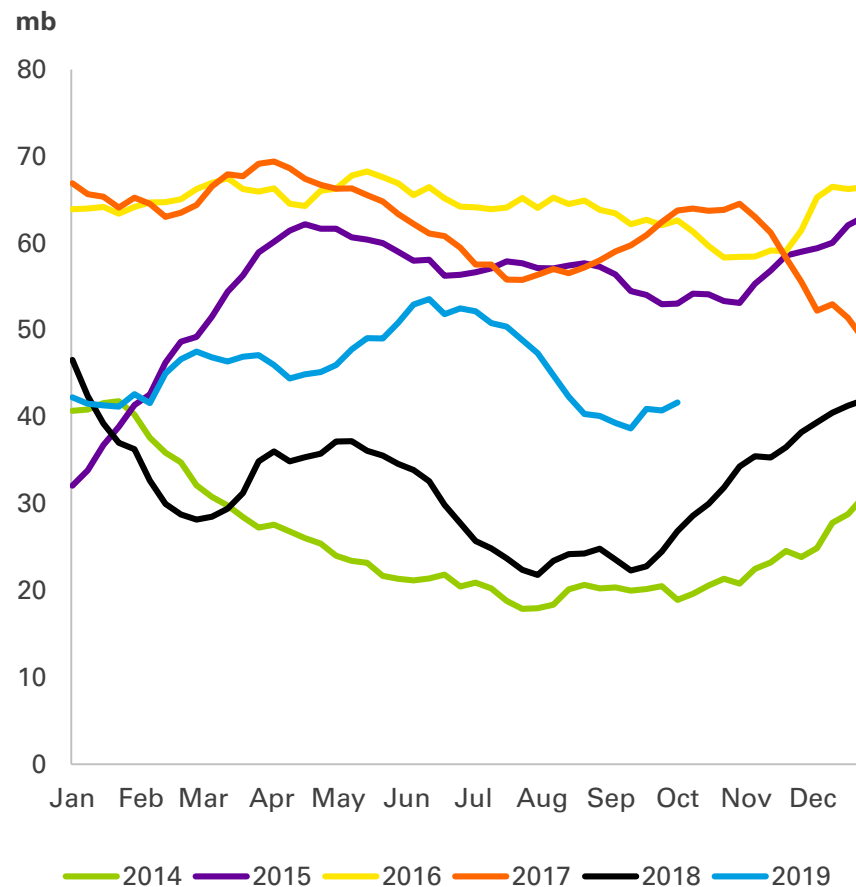


- US crude supply continues to reach new highs, hitting over 12.3 mbd in Sep-19.
- Hurricane Barry in the Gulf of Mexico resulted in some supply disruption in early Jul-19, however production has largely recovered since.
- Cushing stocks remain higher than this time last year but are significantly below 2015-2017 levels.

## US Crude Supply



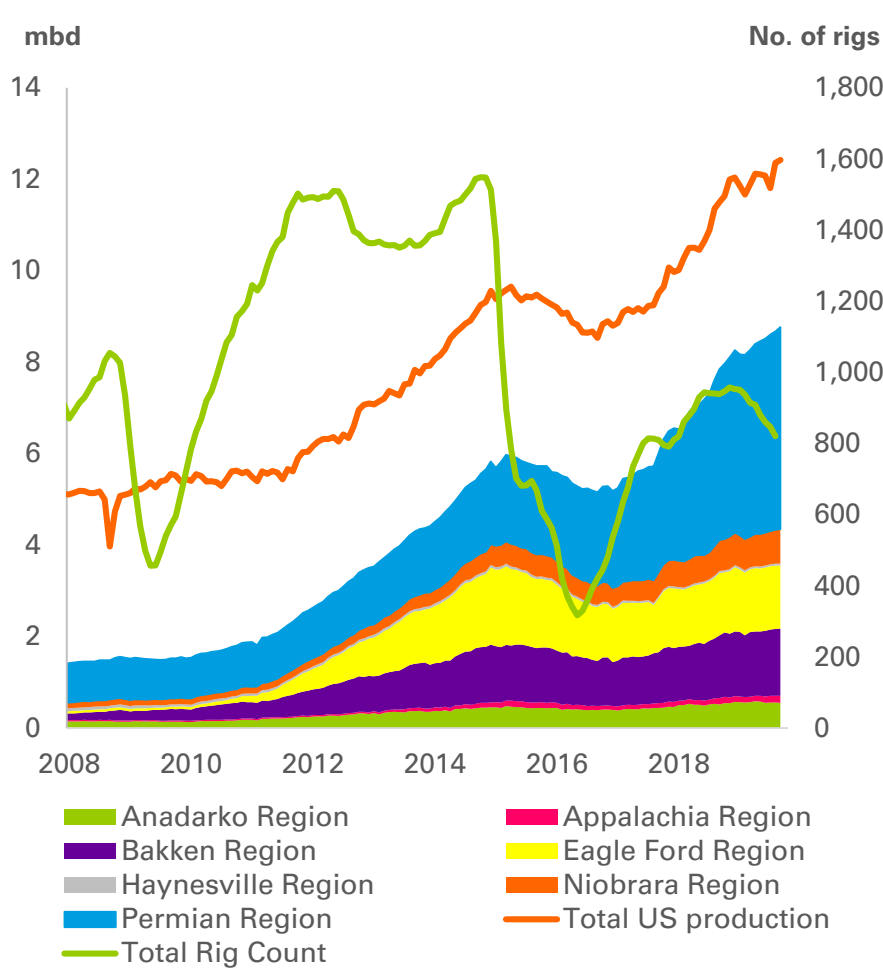
## Cushing Stocks



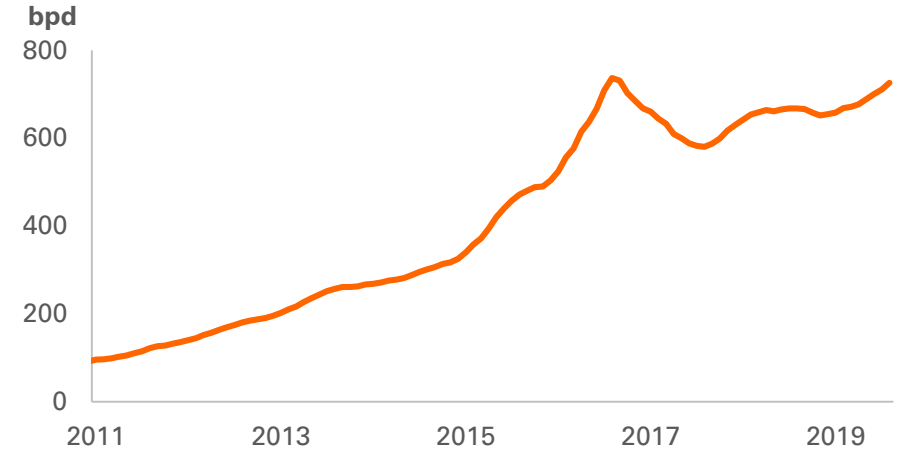
# US rig count decreases whilst production continues to grow

- Significant productivity gains allowed for an increase in US production despite the rig count decreasing
- Despite the rig count falling by 16% since Jan-19, production has increased 4.8% since the beginning of the year.
- In the same period, total Drilled but Uncompleted (DUC) wells decreased by 3% in the major shale regions.

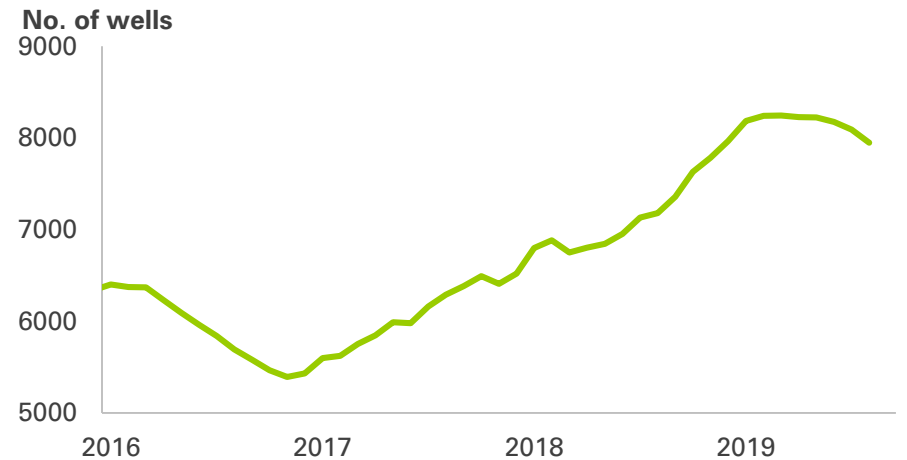
## Rig count vs. crude production



## Average production per rig



## Total DUCs

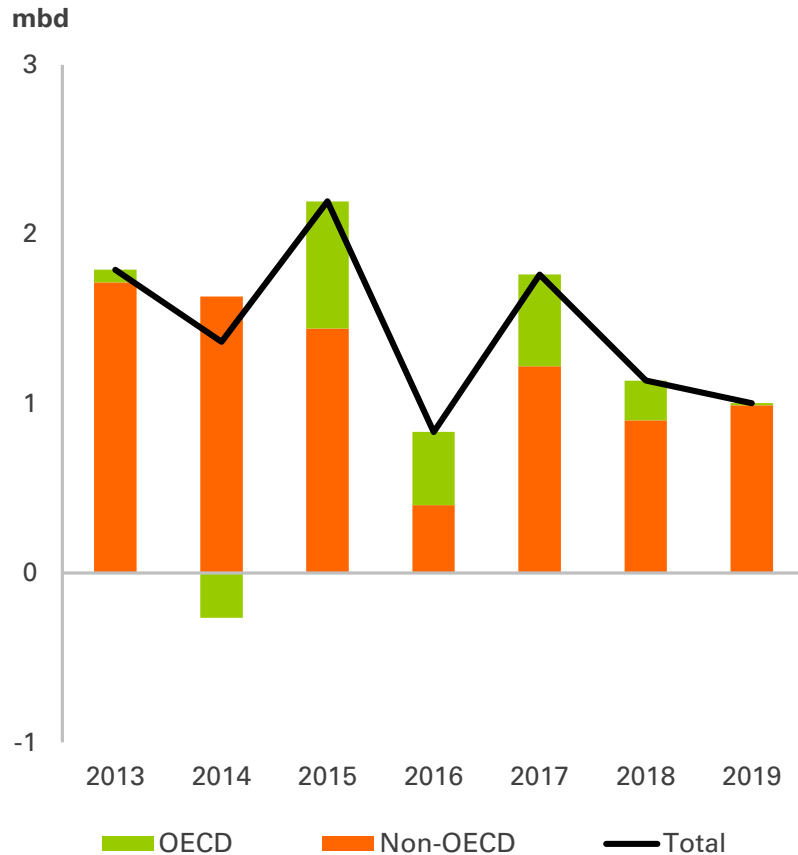


DPR Regions (Anadarko, Appalachia, Bakken, Eagle Ford, Haynesville, Niobrara & Permian) do not represent all hydrocarbon producing areas

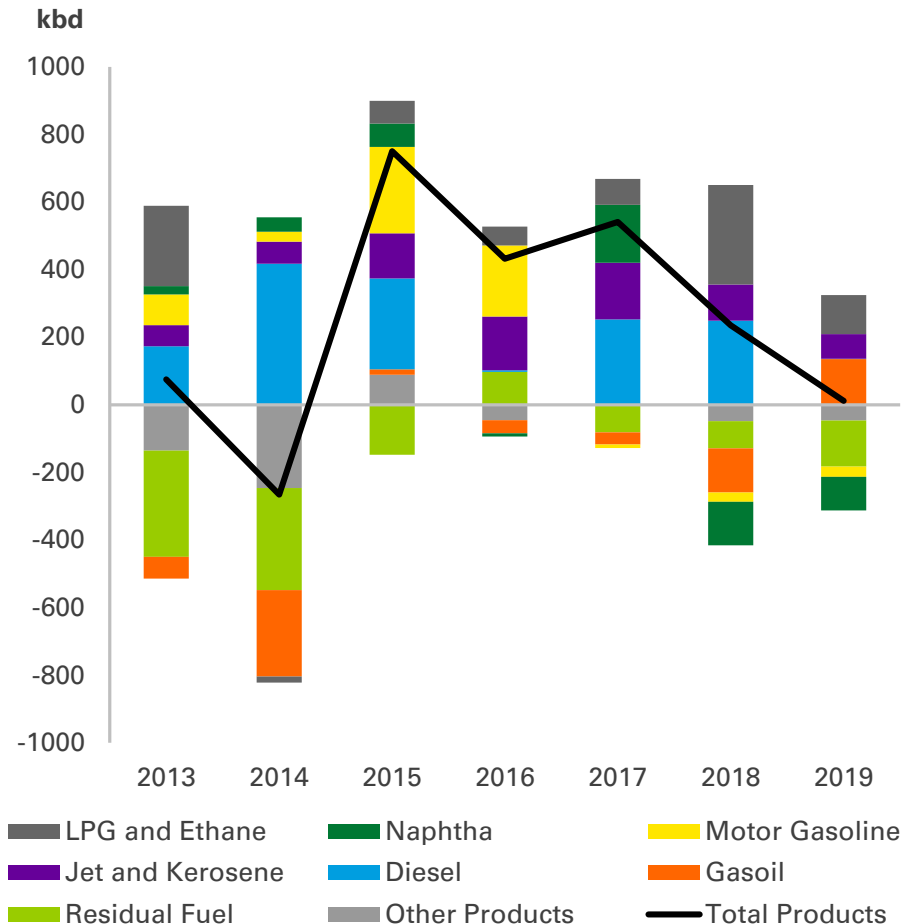
# Oil demand growth has been relatively low so far this year

- The IEA recently revised down their forecast for 2019 oil demand growth by a further 100 kbd to 1.0 mbd, citing an upward revision to 2018 deliveries in the US and weakness in the global economy.
- Despite relatively weak demand in OECD in 2019YTD, many non-OECD countries demand have grown strongly, including China (+870 kb/d in August), India (+155 kb/d in August) and Russia (+215 kb/d in August) according to IEA data.

## Y/Y total oil demand growth



## Y/Y OECD products demand growth



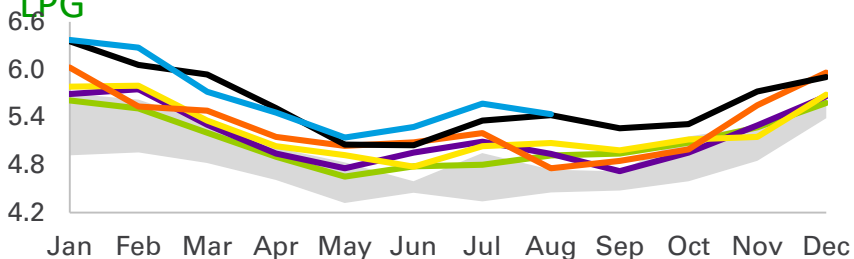
# OECD product demand presents a mixed story

- Across the first eight months of 2019 for which data is available, OECD product demand has been mixed. Naphtha demand increased in 3Q19 supported by a demand jump in Korea by around 100kbd compared with 2Q19, yet is countered by US naphtha demand lower than 2018 levels.
- Gasoline, diesel/gasoil and residuals have seen falls in demand year-on-year, whilst ethane/LPG and distillate demand has grown moderately year-on-year.

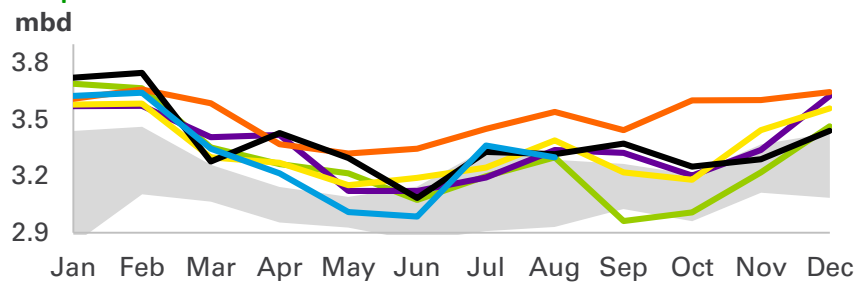


## OECD Product Demand

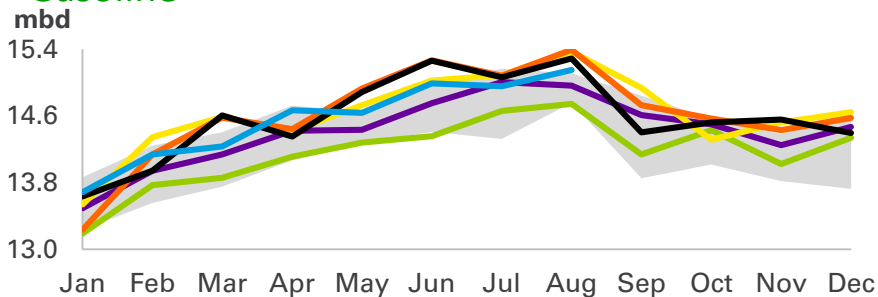
### Ethane and LPG



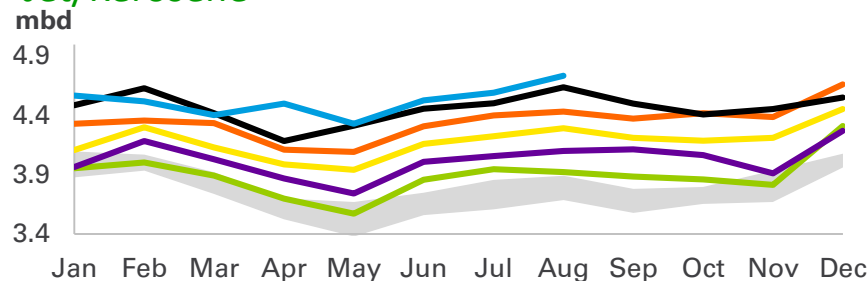
### Naphtha



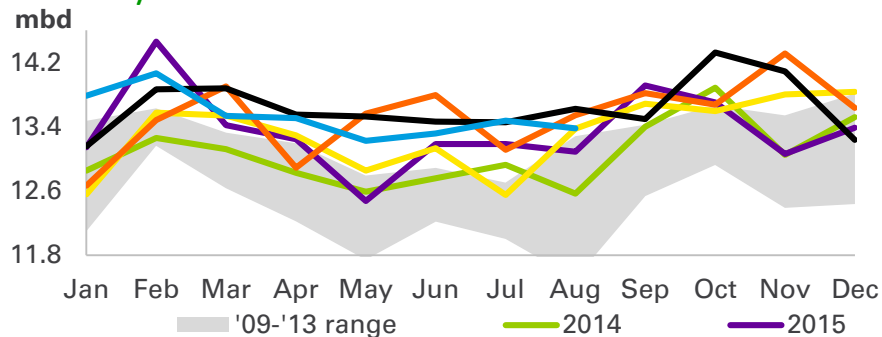
### Gasoline



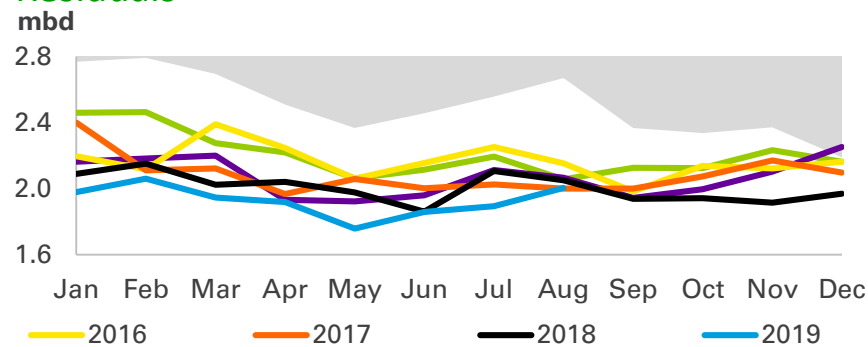
### Jet/Kerosene



### Diesel/Gasoil



### Residuals

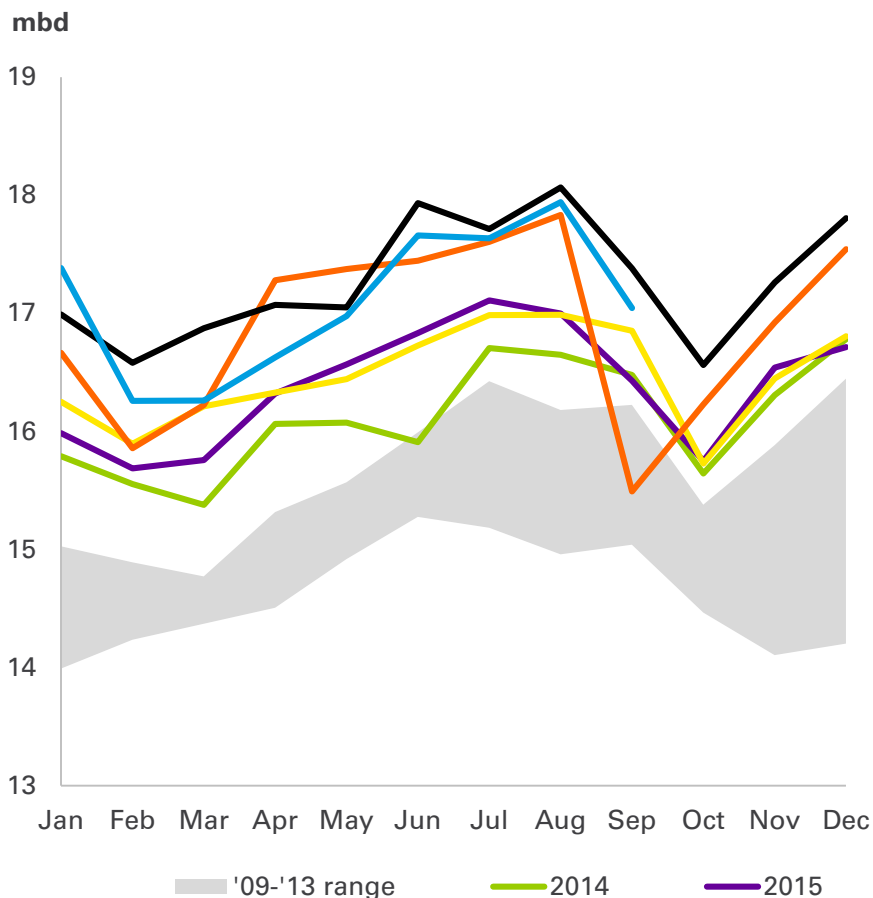


# OECD refinery runs have been impacted by higher than average TARs in 2019

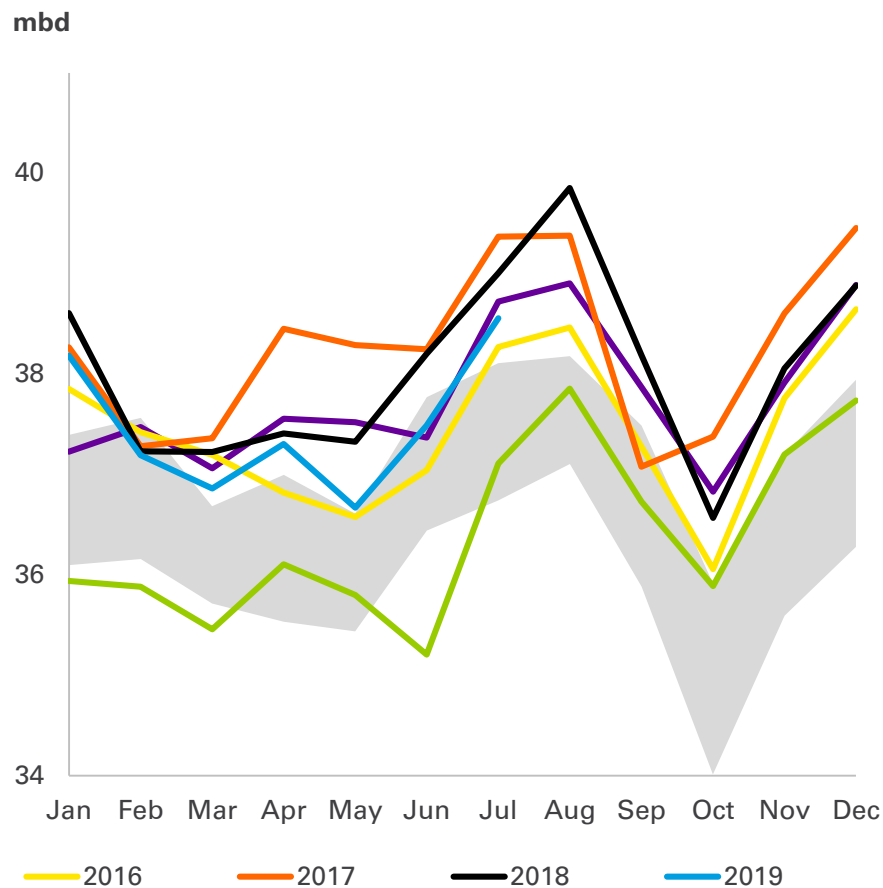


- US crude runs have remained down year on year, despite rising seasonally, with the fire and subsequent closure of the 335 kbd Philadelphia Energy Solutions (PES) refinery affecting runs from late Jun-19.
- Total OECD crude runs have also fallen year-on-year, down by over 600 kbd on average from May-Jul 2019. Along with the US, refinery runs in Germany and Canada were also lower than 2018 levels (with a 7% and 6% decrease respectively relative to last year).

## US crude runs



## OECD crude runs

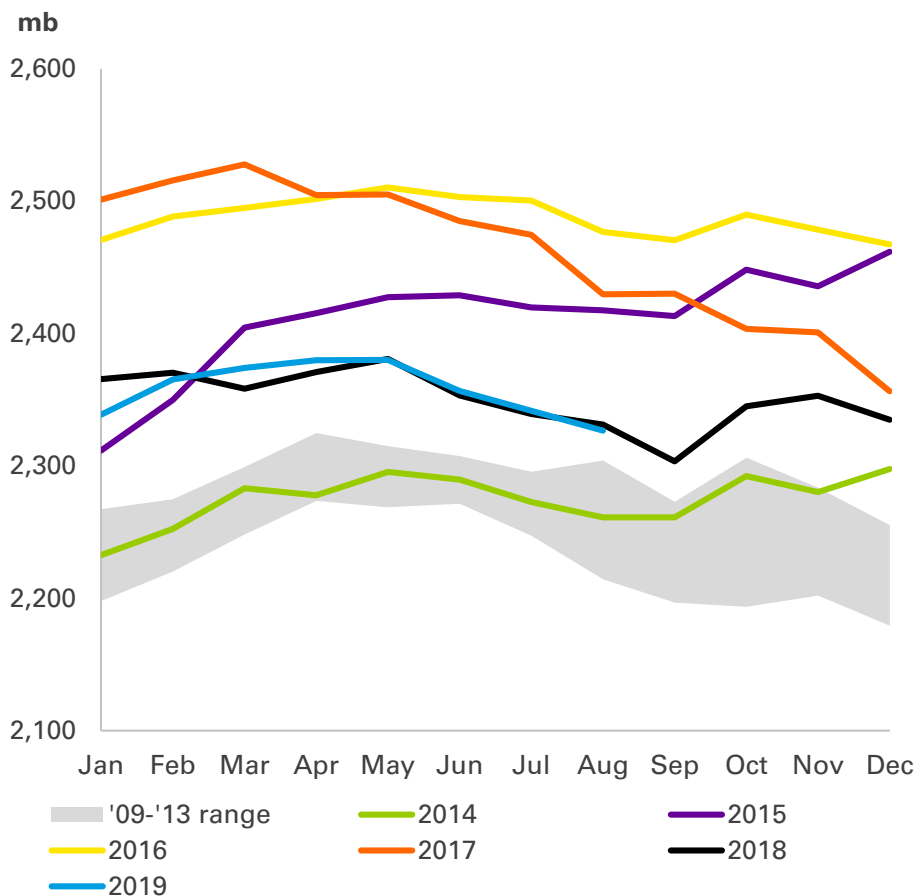


# Total OECD crude stock levels are similar to 2018 levels

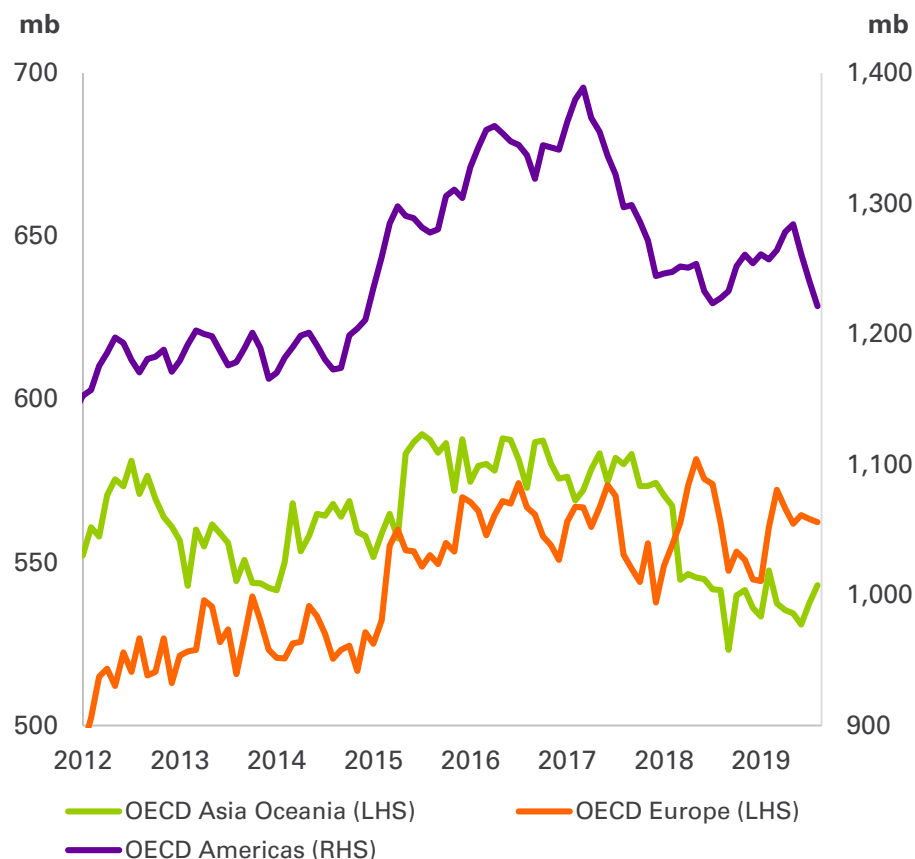


- OECD crude stocks built by over 45 mb from Jan-May 2019, returning to the level they were 12 months earlier.
- Stocks have since decreased over 3Q19, in line with seasonal norms.
- OECD crude stocks trends are not uniform globally; stocks remain at higher than historical norms in Europe and lower than historical norms in Asia.

## Total OECD Crude Stocks



## Regional OECD Total Crude Stocks

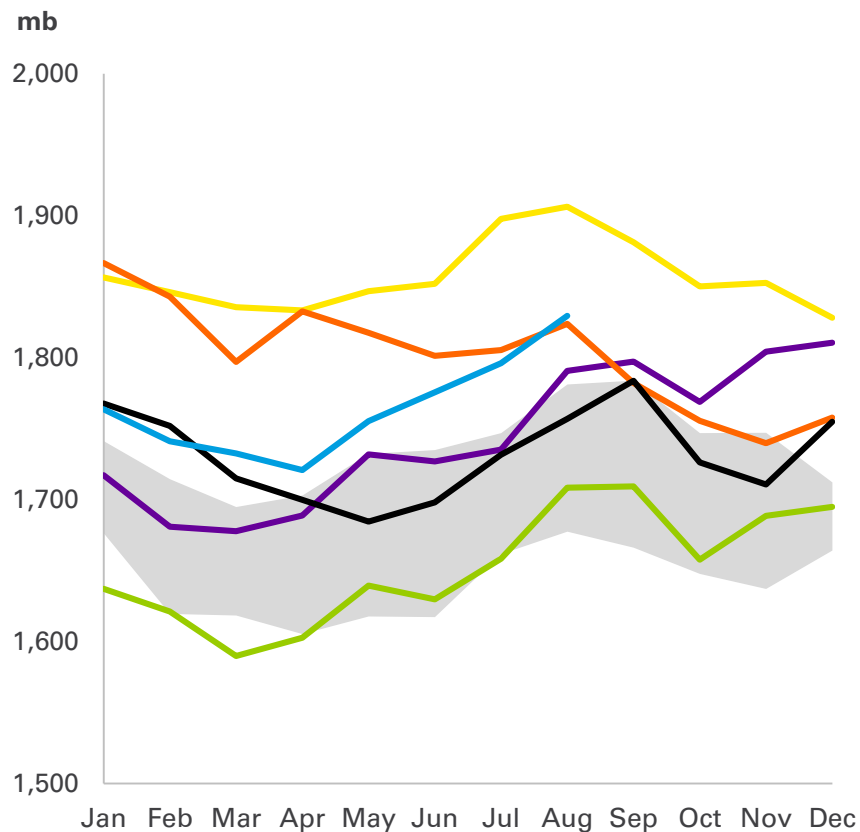


# OECD product stocks build after steady monthly draws between January and April 2019

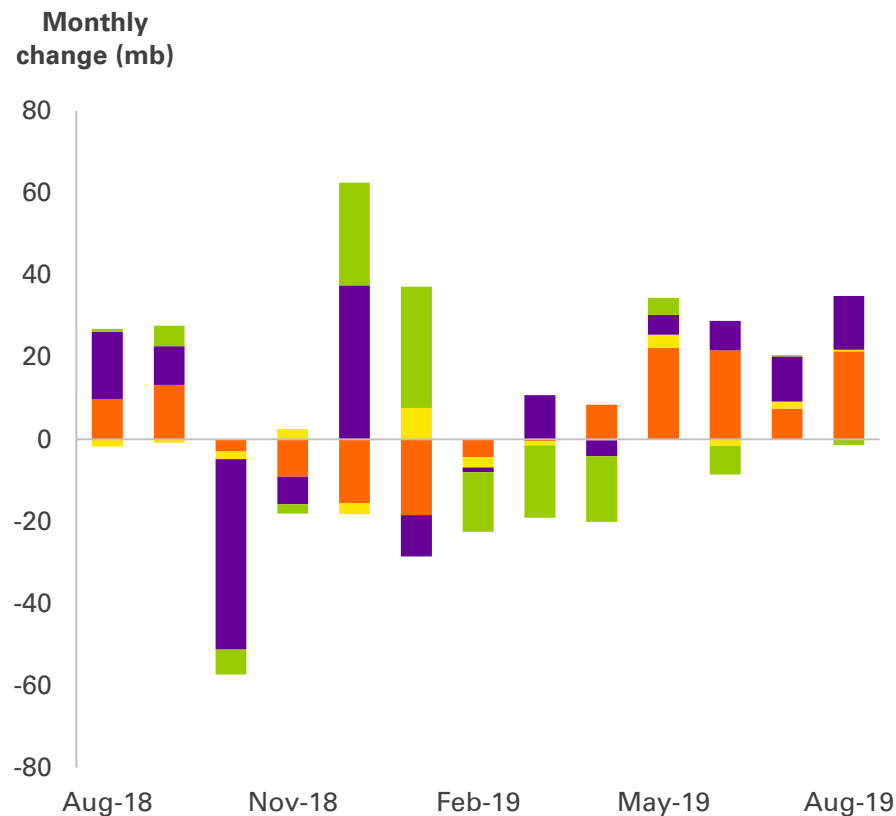


- OECD product stocks built by almost 110 mb from Apr-Aug 2019, reversing the 45 mb draw that occurred earlier in the year.
- In 3Q19, middle distillates and other products contributed to most the stock growth, with a small reduction in gasoline stocks.

## OECD Total Product Stocks



## OECD Total Product Stock Change



'09-'13 range
  2014
  2015
  2016
  2017
  2018
  2019

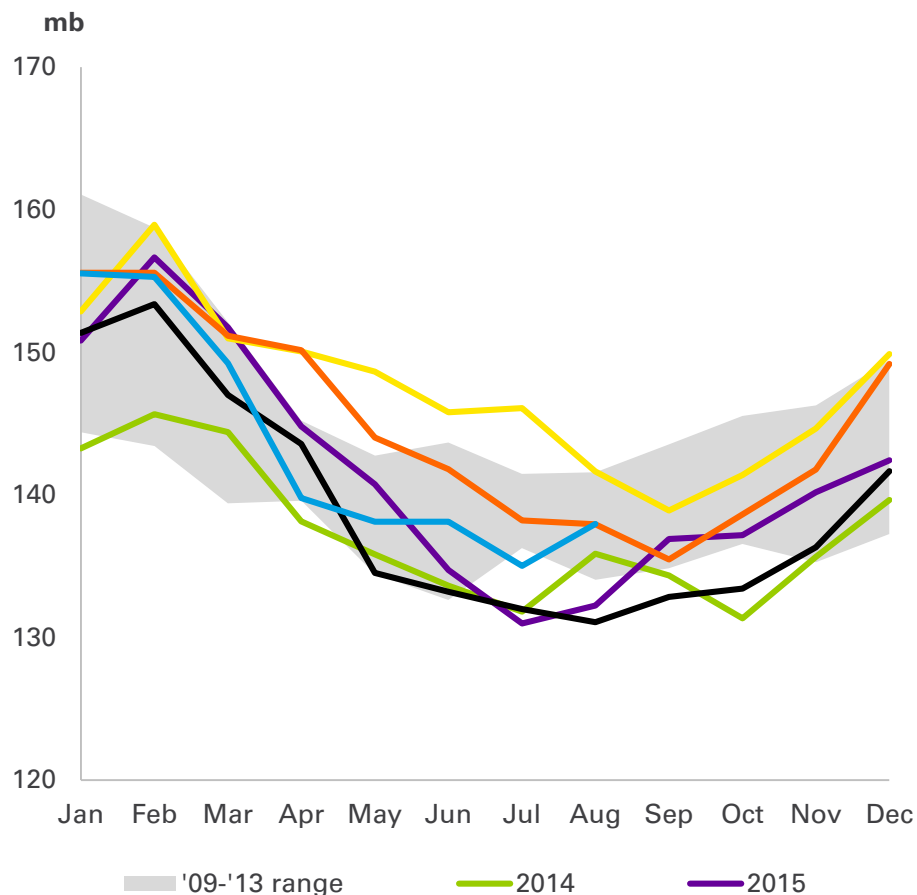
Motor gasoline
  Residual fuel oil
  Middle distillates
  Other products

# Gasoline stocks are high in US relative to Europe

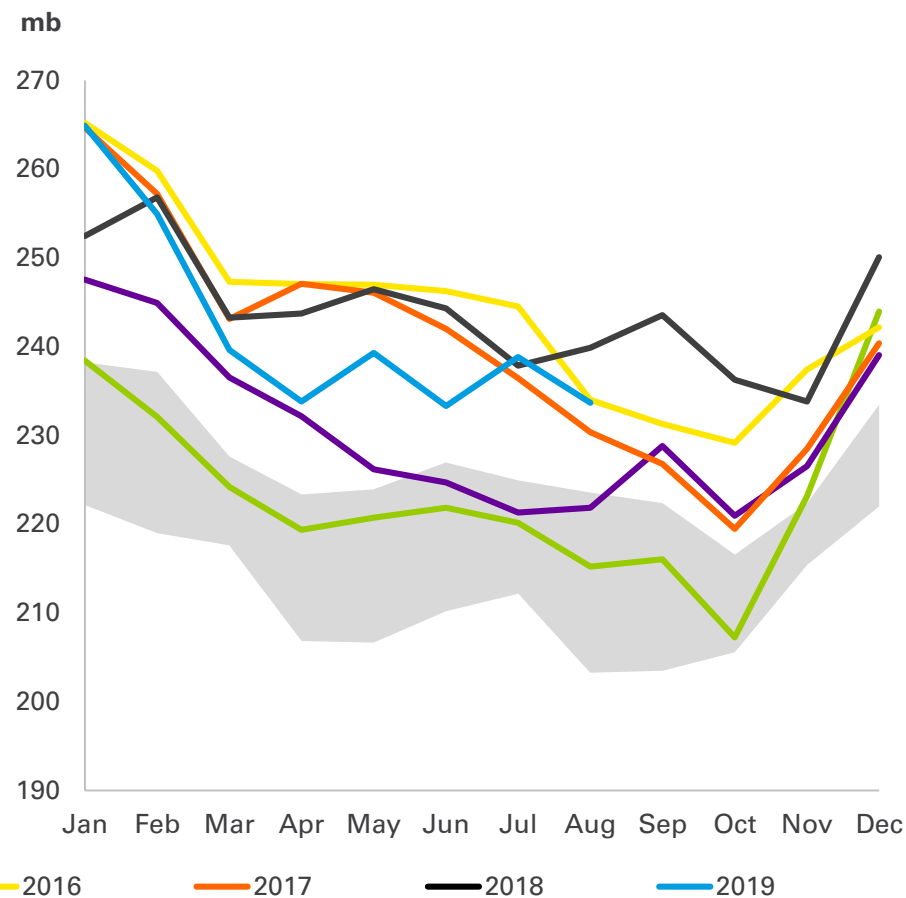


- US Gasoline stocks have fallen since the start of the year but remained above historical averages at around 230 mb in Aug-19, despite being lower than the same time last year.
- OECD European stocks remain within standard historical ranges, at around 140 mb in Aug-19.

## OECD Europe Gasoline Stocks



## US Gasoline Stocks



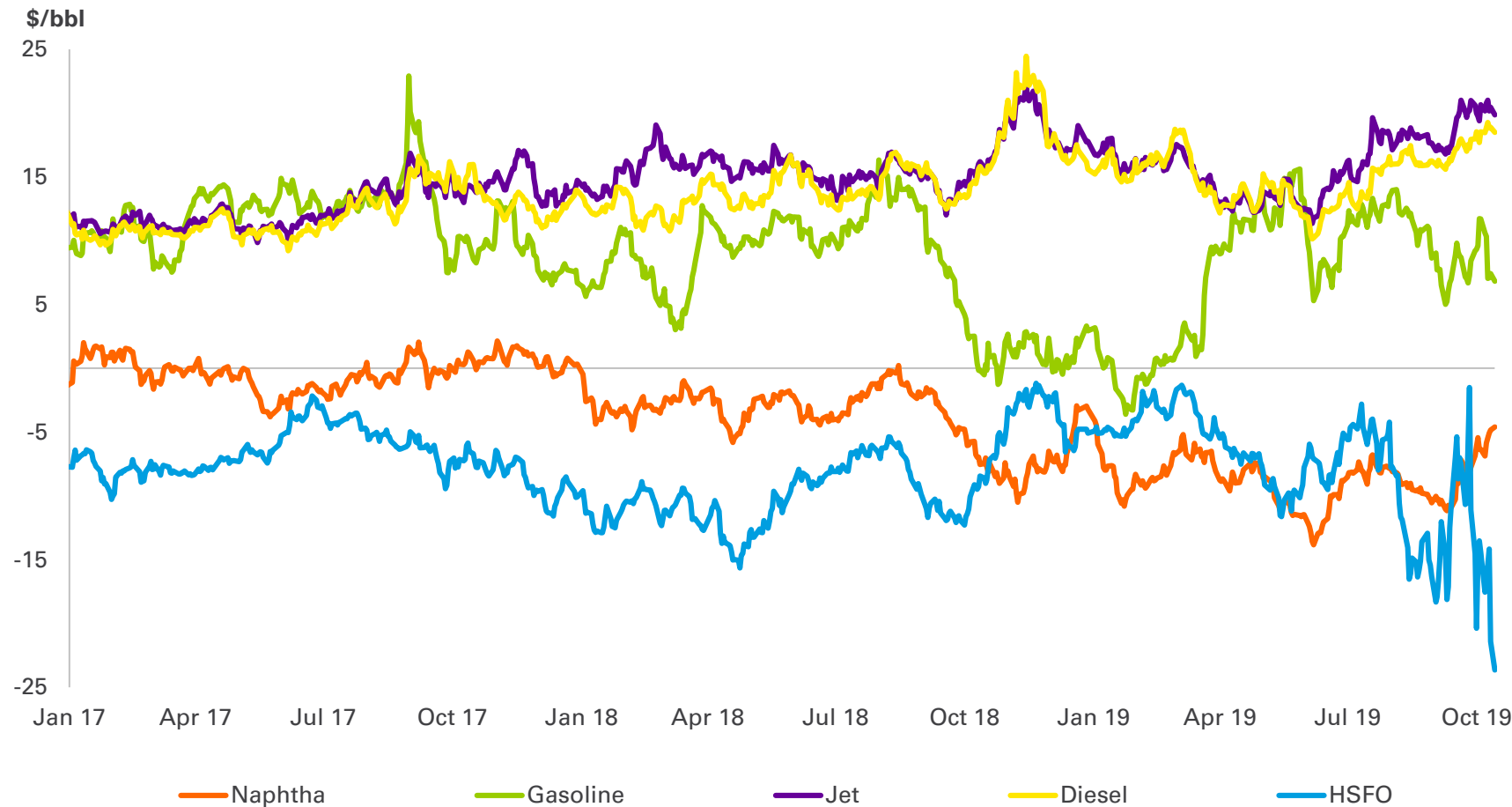


# European products market volatile in run up to IMO 2020



- Fuel oil has been volatile in the run up to IMO 2020, caused by a tight market with a small inventory cushion as storage space is cleared for lower sulphur bunker components.
- Jet and fuel oil rallied in response to high demand, whilst peak demand season for gasoline also coincided with the PES refinery fire, leading to an increase of US imports of gasoline and gasoline cracks.
- Naphtha fell to lows of -\$14/bbl in early June 2019 on weak demand but has since recovered to around -\$5/bbl.

## Product Cracks (NWE FOB)





# Refinery margins build on increasing diesel crack

- Global refinery margins fell by over \$5/bbl at the start of Jun-19 to lows of \$11/bbl as gasoline cracks dropped by over 60%.
- The subsequent recovery in gasoline values and steady increase in diesel crack is reflected in the RMM, which reached \$19/bbl in early Oct-19.
- Global RMM has averaged \$13.6/bbl for the Jan-Oct 2019 period, compared to \$13.1/bbl in 2018.

## BP Global Refining Marker Margin (RMM)



The BP Global Refining Marker Margin (RMM) is a simplified indicator that reflects the margins achieved on gasoline and diesel only. The RMM may not be representative of the margin achieved by BP in any period because of BP's particular refinery configurations and crude and product slates.

# Upcoming events



- IMO 2020: new 0.5% sulphur limit on bunker fuels to come into force on 1st January 2020.
- OPEC are due to meet in Vienna on 5th December 2019, and will be joined by other members of OPEC+ on 6th December 2019
  - The meeting will provide an opportunity to assess the extent to which their production cut has succeeded in rebalancing the market, and to discuss production plans for 2020.
- The 2019 APEC Summit will take place during November at a yet to be confirmed location, after Chile cancelled the summit due to ongoing protests.