Short term update: crude prices (excl. WTI) up strongly Aug/Sep

Brent crude tests $80/bbl. US and Canadian differentials fall due to infrastructure constraints.
Short term update: demand growth slows 2Q18; rebounds 2H18

Demand growth 1.40 mb/d in 2018 and 1.47 mb/d in 2019, but trade wars, GDP, growth outlook, currency devaluations, are risks.
Short term update: global oil supply reaches 100 mb/d in August

Higher OPEC output offsets seasonal non-OPEC decline. Non-OPEC output up 2.6 mb/d on a year ago, OPEC down 270 kb/d due to declines from Venezuela, Iran and Angola.
Short term update: Iranian exports tumble 280 kb/d to 1.9 mb/d

Top customers India and China make sharp cuts in August, Europe already at lower levels.
Short term update: Oil market set to tighten late in 2018

Stocks will draw 4Q18 by more than shown unless Iran/Venezuela shortfalls compensated by more output from other producers.

*Note: For scenario purposes, OPEC/non-OPEC cuts remain constant.
Back to the medium term: robust demand growth of 1.2 mb/d

growth by product & fuel oil breakdown y-o-y changes

Very large shift in demand in 2020 and following adjustments reflect IMO induced switch
Petrochemicals drive oil demand growth to 2023

Feedstock requirements for new steam crackers

Petrochemical feedstocks (ethane and naphtha) responsible for 25% of global oil demand growth
IMO 2020 marine fuel specification changes

High Sulfur fuel oil replaced by a new 0.5% fuel and gasoil. Gasoil availability is the main constraint.
Sign of the future? China uses alternative fuels in transport

Likely to replace 20 kb/d of gasoline and 80 kb/d of diesel per year over the forecast.
Supply concerns: limited increase in 2018 upstream spending

Most companies maintain spending, increases focused on US.

*Preliminary based on selection of investment updates
Supply concerns: global oil discoveries fall to 70-year low

Less than 4 billion barrels of crude, condensate and NGLs confirmed.
Supply concerns: industry needs to find a North Sea each year

Output loss from post-peak conventional crude oil fields

Ageing oil fields lose more than 3 mb/d per year despite slowing decline rates.
Supply concerns: Venezuela, Libya, Iran risk factors for OPEC

OPEC crude oil capacity rises by a mere 0.75 mb/d (130 kb/d annual). Iran sanctions make picture very uncertain as does possible collapse of Venezuela.
Strong growth in US, Brazil, Canada drives non-OPEC output

Top three expand by combined 5.5 mb/d by 2023, total non-OPEC rises 5.2 mb/d.
US oil supply hits 16.9 mb/d by 2023, up 3.7 mb/d on 2017

Growth stalls by early 2020s in the absence of higher prices or further technological advances.
Most incremental crude exports come from non-OPEC

US refining capacity has absorbed most of the first wave of the Shale. Second wave goes to exports.
US oil finds new markets

Refiners in Asia and Europe look for suitable crude oil to produce petrochemical feedstocks and low-sulphur fuels.
China net crude oil imports double the US in 2023

Indian imports, too, surpass the US in 2023 as shale growth reduces US import dependence.
Solid demand growth alongside major uncertainties around OPEC capacity & investment elsewhere could lead to shrinking of spare production capacity cushion by 2023. Security of supply risk.
Conclusions: medium term outlook to 2023

• Robust world oil demand growth to 2023 – petrochemicals key driver. IMO disruption?
• More upstream investment needed today to meet future demand and offset 3 mb/d of declines from mature oil fields each year.
• Venezuela, Libya & Iran are major OPEC supply risks
• In non-OPEC, US, Brazil, Canada, Norway dominate output growth.
• US crude finds new markets as refiners seek light, low-sulphur crude to meet petrochemical demand and IMO specifications.
• China & India overtake US as net importers.
• As spare capacity cushion shrinks, supply security concerns remain critical.