Return to Balance?

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Re-Balancing Oil Market(s)

Crude Supply
- non-OPEC crude oil production
- OPEC crude oil production
- Field Condensate
- Diluent

Crude Demand
- Refinery throughput
- Strategic Stocking
- Direct Use of Crude
- Field Losses

Petroleum Product Supply
- Refinery Production
- Processing Gains
- LPG from NGLs
- Ethane
- Alternative Fuels
  - Ethanol
  - Biodiesel
  - GTL
  - CNG
  - CTL

Petroleum Product Demand
- End-use consumption
Demand: Asia, Middle East, Europe?

Global Oil Demand Growth by Geographic Region

- Asia
- Europe
- Middle East
- FSU

- Latin America
- North America
- Africa
- Middle East
- FSU

(400) 0 200 400 600 800 1,000 1,200 1,400 1,600 1,800 2,000 2,200 2,400

2013 2014 2015 2016 2017 2018

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Demand: Gasoline, Diesel, LPG?, Ethane??

Global Oil Demand Growth By Main Product

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Product Market Re-Balance is Well Underway

Sources of Oil Supply Growth

- Refinery Throughput
- Processing gain
- Alternative fuels
- Non-Opec NGL (exc ethane)
- Opec NGL
- Non-OPEC Ethane
- Total Product Demand

Refined product surplus of 700 kbd
Refined product Surplus of 600 kbd
Refined product Deficit of 200 kbd
Refined product Deficit of 200 kbd

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Back to Crude: A Good Start for OPEC

OPEC Production (000 b/d)
Meanwhile... Small Recoveries Elsewhere

Non-OPEC Crude and Condensate Annual Growth by Region

OECD  OIL SANDS  FSU  Africa  Latin America  China  Mideast
Crude Market Re-Balance Just Getting Started

Global Crude Oil Supply/Demand Balance and Brent

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Holding Surplus at Bay

Annual CHANGE in Global "Oil" Supply and Demand 2014-2018

(million b/d)

- Oil Demand
- Non-OPEC
- Non-OPEC NGLs and Alternative Fuels
- OPEC NGLs
- OPEC
- Surplus

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2017: One Bright Shining Moment

Product Re-Balancing started in 2016
Crude Re-Balancing is now underway with OPEC deal

BUT, refining capacity expansions threaten product rebalancing during and after 2018.
2017: little net increase in refining capacity
2018: As high as 1.7 million b/d of new refining capacity
2019: As high as 2.4 million b/d of new refining capacity

NGLS supply sufficiency is a close call

OPEC must continue to contain crude supply mindful of the threats to market balance:

• More non-OPEC crude supply
• Demand growth moderating faster in 2018 and beyond
• Product markets remain under pressure from refining capacity expansions.