A New Dawn?

Mike Beveridge - Managing Director
January 2017… Fit at 50?
January 2018… Life Begins At 70?

**FINANCIAL TIMES**

**Brent breaks above $70 a barrel to hit highest since 2014**

Falling crude stockpiles and possible US sanctions on Iran bolster market

---

Oil has increasingly found support as stockpiles have fallen

**Anjli Raval and David Sheppard**

**JANUARY 11, 2018**
What A Difference A Year Makes: From $55/bbl to $70/bbl

LTM Max: $70
LTM Avg: $55
LTM Min: $44

Source: Capital IQ as at 22/01/2018
Example Oil Price Macro Influences

- Demand growth (EVs)?
- Record L48 production
- Non-OPEC production growth
- Global inventories

- Saudi Arabia
- OPEC cuts
- Non-OPEC accord
- Political tensions in Iran

Are we heading towards a more balanced oil market in 2018?
From Peak Oil Supply..... To Peak Oil Demand

2005

TWILIGHT IN THE DESERT
THE COMING SAUDI OIL SHOCK AND THE WORLD ECONOMY
MATTHEW R. SIMMONS

2017

FINANCIAL TIMES

Big energy fears peak oil demand is looming

Electric cars, renewables and gas could end the era of rising crude consumption
A Sign Of The Times

“Schlumberger plans to exit the marine and land seismic acquisition business”
Jan-18

“Weatherford plans to divest assets to ease debt load”
Nov-17

“Maersk Drilling in "extensive talks" about the future”
Aug-17
Global Oil Demand 2009 – 2018

Global Oil Demand:
- 85.4 mb/d in 2009
- Expected to grow to 99.1 mb/d by 2018

CAGR: 1.88%

Source: IEA Report as at 19/01/2018
“A Tale Of Two Cities”

**OECD Demand**

- Y/Y Demand Change (mb/d)
- Brent Price ($/bbl)
- United States
- North America ex US
- Europe
- Pacific
- Average Brent Price

**Non-OECD Demand**

- Y/Y Demand Change (mb/d)
- Brent Price ($/bbl)
- Africa
- Middle East
- Latin America
- Other Asia
- Europe
- China
- FSU

Source: IEA, SCI
Demand Drivers Are Shifting

Change In Demand By Sector, 2015 – 2040

-4 -3 -2 -1 0 1 2 3 4 5

Power Generation
Buildings
Passenger Cars
Maritime
Freight
Aviation
Petrochemicals

Source: IEA

Million bbl/day
Electric Vehicles: Impact On Oil Demand?

Source: IEA, SCI
Fuel Demand From Cars Continues To Rise

Decomposing Changes In Liquids Demand From Cars: 2015 - 2035

- **2015**: 19 Mb/d
- **Growth in demand for travel**: 23 Mb/d
- **Gains in fuel efficiency**: (17) Mb/d
- **Switching to natural gas vehicles**: (0.2) Mb/d
- **Switching to electric vehicles**: (1.2) Mb/d
- **2035**: 23 Mb/d

Source: BP 2017 Energy Outlook
Lower 48 Crude Oil Production¹

L48 Production Forecasts (Black Oil)

¹ Source: Simmons, IEA, EIA, BHI
International Non-OPEC Supply

International Non-OPEC Y/Y Change

Source: SCI
OPEC Resolve…. And Non-OPEC Accord

“OPEC agrees to extend oil supply cuts into 2018”

“Russia And Saudi Arabia: A New Oil Bromance?”
OPEC Compliance: 9/10 Ain’t Bad

OPEC Crude Production Cuts

(million barrels per day)

<table>
<thead>
<tr>
<th>Country</th>
<th>Actual Cut in Nov 17</th>
<th>Agreed Cut</th>
<th>2017 Average Compliance¹</th>
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<tbody>
<tr>
<td>Saudi Arabia</td>
<td>~ 90%</td>
<td>120%</td>
<td></td>
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<tr>
<td>Iraq</td>
<td>44%</td>
<td></td>
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<tr>
<td>UAE</td>
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<td></td>
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<tr>
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<td>Qatar</td>
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<td>Ecuador</td>
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<tr>
<td>Gabon</td>
<td>27%</td>
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<td>~ 90%</td>
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</table>

Source: IEA, SCI
¹ As at Nov 2017
Heightened Geopolitical Risk

Iran protests: US urges release of 'peaceful' demonstrators

Iran nuclear deal: sanctions waived as Trump begins countdown to keep US in

President waives sanctions, keeping US in deal for now, but begins four-month countdown until it ceases to comply with its obligations under the agreement

Saudi Arabia graft settlements may top $100 billion as probe nears end

Saudi Arabia authorities may recover more than $100 billion in settlement agreements with corruption suspects in a probe that has implicated princes and billionaires

Saudi Arabia Puts an End to 35-Year Movie Ban — For 'The Emoji Movie'

About 350 people have been summoned for questioning since King Salman ordered the anti-graft probe on 4 November. Photo: Reuters
Global Rig Count¹

1 Baker Hughes
2 Note: Excludes Russia and China
Offshore Rig Count

1 Spears and Associates
Subsea Construction Backlog

Source: Company Documents
# Recent Major Project Sanctions

<table>
<thead>
<tr>
<th>Project</th>
<th>Peak Oil Production (kb/d)</th>
<th>Peak Total Production (kboe/d)</th>
<th>Year of Sanction</th>
<th>Expected Start Up</th>
<th>Country</th>
<th>Oil/Gas</th>
<th>Project Type</th>
<th>Operator</th>
<th>Development Capex ($B)</th>
<th>Recoverable Resources (bboe)</th>
<th>Implied Development Costs ($/boe)</th>
<th>$k/boed of Flowing Barrel</th>
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</tbody>
</table>

Source: SCI, Company Documents
Average Breakeven Oil Prices

Break-even prices for non-producing assets
Break-even price, USD/bbl

Source: Rystad Energy UCube

Current $50/bbl

Total 2020 liquid production, million boe/d

Onshore Middle East
Offshore Shelf
Deepwater
Onshore Row
NAM Shale
Ultra Deepwater
Oil Sands
Artic

Source: Rystad Energy UCube
Public Company Trading Performance

Source: Capital IQ as at 22/01/2018
M&A Activity This Time Last Year!
Deal Activity In 2017

Consolidations

Logos for example only, not exhaustive
Deal Activity In 2017 (Continued)

Mergers & Acquisitions

Logos for example only, not exhaustive
* Denotes transactions where PJL advised
Deal Activity In 2017 (Continued)

New Entrants

Balance Sheet Restructurings

Logos for example only, not exhaustive
Evolution Of The OFS Landscape

Market Cap - Select OFS Companies (Dec 2014 Vs. Dec 2017)

Combined Market Cap (Dec 2014): $232 billion\(^2\)

Combined Market Cap (Dec 2017): $178 billion\(^2\)

1 Including Minority Interests
2 Excludes Baker Hughes / GE
Changing Face Of The UKCS

“UK offshore licensing round attracts offers from 68 oil & gas companies”
OGA

“Shell’s redevelopment of Penguins will deliver a ‘significant boost’ to north-east communities”
Scottish Government

Logos for example only, not exhaustive
Plenty To Look Forward To

New Project Investments
Decommissioning
Offshore Wind
Role Of Technology
Tax Reforms
Global Centre Of Excellence