Fifth IEA-IEF-OPEC Symposium on Energy Outlooks

Session I
Recent Market Developments and Near-term Prospects

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Outline

Review of market for 2014 and outlook for 2015

Price developments

Concluding remarks
Performance of the world economy, percentage change from the previous year

**GDP growth in selected countries, %**

- **World**: 2014 - 3.0, 2015 (forecast) - 3.4
- **US**: 2014 - 2.0, 2015 (forecast) - 2.5
- **Japan**: 2014 - 2.0, 2015 (forecast) - 2.5
- **Euro-zone**: 2014 - 0.0, 2015 (forecast) - 3.0
- **China**: 2014 - 3.3, 2015 (forecast) - 3.6
- **India**: 2014 - 3.3, 2015 (forecast) - 3.6
- **Russia**: 2014 - 4.0, 2015 (forecast) - 3.0
- **Brazil**: 2014 - 3.0, 2015 (forecast) - 3.0
- **OPEC**: 2014 - 3.3, 2015 (forecast) - 3.3

**Average growth rates (2010-2014)**

- World: 3.8%
- OECD: 1.9%
- DCs: 4.6%

**World GDP growth comparison**

- **OPEC**: 2014 - 3.3%, 2015 (forecast) - 3.3%
- **IMF**: 2014 - 3.3%, 2015 (forecast) - 3.5%
- **Consensus Forecast**: 2014 - 3.3%, 2015 (forecast) - 3.6%
Recent improvements, mainly from developed economies

Sources: HSBC, Markit, Netherlands Bureau of Economic Policy Analysis and Haver Analytics.
World oil demand growth in 2015 higher than in 2014

Annual oil demand growth 2005-2015*

<table>
<thead>
<tr>
<th>Year</th>
<th>OECD</th>
<th>Non-OECD</th>
<th>World</th>
</tr>
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<tbody>
<tr>
<td>2005</td>
<td>1.4</td>
<td>1.2</td>
<td>1.4</td>
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<tr>
<td>2006</td>
<td>1.2</td>
<td>1.3</td>
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<tr>
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<td>1.4</td>
<td>0.9</td>
<td>1.3</td>
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<tr>
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<tr>
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<td>1.0</td>
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<tr>
<td>2015*</td>
<td>1.2</td>
<td>1.0</td>
<td>1.1</td>
</tr>
</tbody>
</table>

*Forecast.

US gasoline demand & retail prices, 3-month moving average

Gain in efficiency in China

Oil intensity (barrels/US$ mn MERs GDP)
Non-OPEC supply growth in 2015 lower than 2013 & 2014

Annual non-OPEC supply growth 2005-2015*

-0.01 0.32 0.55 0.71 1.30 1.40 2.04 0.85

*Forecast.

US crude oil production

2015 US supply growth forecast trend lower, y-o-y growth

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OPEC supply

OPEC NGLs
2009-2015*

mb/d

0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8 2.0 2.2 2.4 2.6 2.8 3.0 3.2 3.4 3.6 3.8 4.0 4.2 4.4 4.6 4.8 5.0 5.2 5.4 5.6 5.8 6.0 6.2 6.4 6.6 6.8 7.0

2009 2010 2011 2012 2013 2014 2015*

OPEC NGLs
Cumulative growth

* Forecast.

Demand for OPEC crude

mb/d

25.0 26.0 27.0 28.0 29.0 30.0 31.0 32.0

1Q13 2Q13 3Q13 4Q13 1Q14 2Q14 3Q14 4Q14 1Q15* 2Q15* 3Q15* 4Q15*

Quarterly demand for OPEC crude
OPEC production
Yearly demand for OPEC crude

* Forecast.
Global oil inventories

OECD commercial oil stocks

Days of forward cover in OECD

US & Cushing crude commercial stocks

Estimated Chinese oil stocks

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Sources: CNPC/Xinhua News Agency and OPEC Secretariat.
Crude price development

OPEC Reference Basket (ORB)
2008 to date

Price changes of various assets in Dec 14/Jun 14

* Year-to-date.

* Yearly ORB
2013: 105.87
2014: 96.29
2015: 50.09

Index

Yearly volatility index

* Forecast.
Crude price developments

ICE Brent & Nymex WTI, monthly

US$/b

Jan 08 May 08 Sep 08 Jan 09 May 09 Sep 09 Jan 10 May 10 Sep 10 Jan 11 May 11 Sep 11 Jan 12 May 12 Sep 12 Jan 13 May 13 Sep 13 Jan 14 May 14 Sep 14 Jan 15

ICE Brent
Nymex WTI
Brent-WTI spread (RHS)

ICE Brent vs. US$ index

US$/b


ICE Brent (LHS)
US$ index (RHS)

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Widening contango leads to a build in storage

Sources: Energy Aspects analysis.
Crude oil futures prices and speculation

Nymex WTI price vs. managed money net positions

ICE Brent price vs. managed money net positions

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Concluding remarks

OECD economies continue improving, while emerging and developing economies are facing additional headwinds with a few exceptions; mainly India is tentatively recovering from past year’s lower growth levels.

Total oil demand growth for 2015 continues to come from non-OECD countries, while OECD oil demand is contracting marginally. Non-OPEC oil supply is forecast to grow less than last year.

Imbalanced fundamentals, record high crude oil inventories and a strong US dollar have contributed to the recent decline in crude oil prices.

Market fundamentals are expected to be more balanced in 2H15.
Thank you