Opening address for dinner-debate

Mohammed Barkindo
Acting for the OPEC Secretary General

European Parliament
Strasbourg, France
4 July 2006
Outline

- Importance of EU-OPEC Energy Dialogue
- Current oil market developments
- Longer-term outlook
- Energy security
- EU Green Paper
- Cleaner oil and gas technologies
- Poverty eradication
OPEC Reference Basket price (nominal and real) and non-energy commodity prices

The real price is still well below historical highs

Non-energy commodity prices have also risen
High volatility in oil prices, US $/b

- Strong global economic and, in turn, oil demand growth ('03-'05 increase: 5.4 mb/d)
- High capacity utilization in the supply chain, tightness in the refining sector
- Heightened geopolitical concerns –fears of supply disruptions
- Increasing activity in futures market (new wave of capital movement by funds)
Recent oil market developments: high demand growth
Supply chain tightness: downstream bottlenecks

Refinery capacity utilization rates

*/ Asia = Japan, South Korea, China, India and Singapore

EU**/ Data reflects only sixteen countries due to availability.
Increasing activity in futures market

- Open interest surpassed 1 million contracts recently, reflecting sustained high interest by funds in oil futures!
- EU-OPEC Workshop on financial markets (Dec 06)

<table>
<thead>
<tr>
<th>Year (end)</th>
<th>Open interest (1000 contracts)</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>2003</td>
<td>587</td>
<td>7</td>
</tr>
<tr>
<td>2004</td>
<td>656</td>
<td>69</td>
</tr>
<tr>
<td>2005</td>
<td>819</td>
<td>162</td>
</tr>
<tr>
<td>2006 (June)</td>
<td>1044</td>
<td>225</td>
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</table>

June 30, 2006
NYMEX WTI open interest & price

- OPEN Interest
- Price
OPEC crude oil supply has risen by 4.5 mb/d since 2002.
OECD commercial oil stocks

million barrels

2001-2005 Max/Min

2004
2005
Avg. 01-05

2006

2003
2002
2001

days of forward cover

2001-2005 Max/Min

2004
2005
Avg. 01-05

2006

2003
2002
2001
Commercial oil stock levels in the USA
week-ending, \( mb \)

Crude oil

Total Products

2001-2005 Max/Min

2004

2005

2006

Avg. 01-05

2001-2005 Max/Min

2004

2005

2006

Avg. 01-05
OPEC crude capacity continues to expand
3D seismic costs have doubled in the last 24 months.
Deepwater drilling day rigs up at least 50% in 12 months. Contracts at $500k/d for 2008.
Wage pressure is escalating with growing shortage of skilled labor (~15% rise in 2005)
Steel is a major component of infrastructure & facilities, with prices up 40% since 2004.
Long-term oil demand outlook, *mb/d*

<table>
<thead>
<tr>
<th></th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD</td>
<td>49.8</td>
<td>51.5</td>
<td>52.8</td>
<td>53.8</td>
<td>54.6</td>
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<tr>
<td>DCs</td>
<td>28.7</td>
<td>34.2</td>
<td>40.0</td>
<td>46.3</td>
<td>52.9</td>
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<tr>
<td>Transition economies</td>
<td>4.7</td>
<td>5.0</td>
<td>5.3</td>
<td>5.5</td>
<td>5.7</td>
</tr>
<tr>
<td>World</td>
<td>83.2</td>
<td>90.7</td>
<td>98.0</td>
<td>105.6</td>
<td>113.1</td>
</tr>
</tbody>
</table>

- Reference case sees oil demand rise by 30 mb/d by 2025
- Four-fifths of increase in demand in developing countries
- However, OECD remains dominant consumer
- Developing countries will consume, on average, five times less oil per person, compared with OECD countries
Conventional liquid resource base is sufficient

Date of assessment release

USGS estimates of remaining resources

Cumulative production

billion barrels

0 500 1000 1500 2000 2500 3000 3500


Date of assessment release
### Long-term oil supply outlook, $mb/d$

<table>
<thead>
<tr>
<th>Region</th>
<th>2005</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD</td>
<td>20.5</td>
<td>20.6</td>
<td>20.7</td>
<td>20.5</td>
<td>19.5</td>
</tr>
<tr>
<td>DCs, excl. OPEC</td>
<td>16.1</td>
<td>18.6</td>
<td>19.7</td>
<td>20.0</td>
<td>19.9</td>
</tr>
<tr>
<td>Transition economies</td>
<td>11.7</td>
<td>14.4</td>
<td>15.5</td>
<td>16.1</td>
<td>16.5</td>
</tr>
<tr>
<td>Total non-OPEC</td>
<td>50.1</td>
<td>55.8</td>
<td>58.3</td>
<td>59.4</td>
<td>58.9</td>
</tr>
<tr>
<td>OPEC (incl. NGLs)</td>
<td>33.1</td>
<td>34.9</td>
<td>39.7</td>
<td>46.2</td>
<td>54.3</td>
</tr>
<tr>
<td>World</td>
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Non-OPEC increases: Latin America, Africa, Russia, Caspian
Energy security

- OPEC recognises consuming countries concerns over energy supply security, and attaches great seriousness to this

- Security of demand and security of supply are mutually supportive

- Uncertainty over future demand translates into a broad range of potential levels of demand for OPEC oil

- Investment requirements are large, subject to long lead-times and pay-back periods

- More transparency in evolution and implementation of policies
Cumulative investment in OPEC: three scenarios

Uncertain future demand translates into a broad range of possible OPEC investment needs.
EU Green Paper

- Excellent platform for sharing views, ideas and visions
- Should address interests of non-European countries
- Interdependence rather than dependence
- Should recognise importance of security of demand
- Downstream investment issue should be addressed
- Emphasis on carbon capture and storage welcomed
Cleaner oil and gas technology

- Increased fossil fuel use can be consistent with the protection of the environment

- Carbon capture and storage is a promising technology to address climate change concerns

- Developed countries should take lead in providing cleaner oil and gas technologies
Poverty eradication

• Access to modern energy services must be improved upon

• Poverty eradication: first UN Millennium Development Goal

• Comprehensive and balanced approach to the three pillars of sustainable development: economic growth, social progress and protection of the environment

• Energy security applies to all nations
Taxation of oil products
Diesel prices & taxes, December 2005

USA: 19% Crude CIF Price, 25% Industry Margin
Canada: 25% Crude CIF Price, 44% Industry Margin
Japan: 34% Crude CIF Price, 50% Industry Margin
France: 48% Crude CIF Price, 50% Industry Margin
Germany: 50% Crude CIF Price, 44% Industry Margin
Italy: 44% Crude CIF Price, 60% Industry Margin
UK: 60% Crude CIF Price
US gasoline stocks and demand cover

Gasoline Stocks. Week ending (mb)

Days of gasoline demand cover

2001-2005 Max/Min
OPEC 10 capacity expansion plans, (tb/d)

- Over 100 projects with cumulative investments of more than $100 billion!
- 50% of these projects are in partnership with IOC’s
- OPEC-10 cumulative capacity increase > 4 mb/d by 2010, with Iraq: 5-6 mb/d

Source: based on projects and other assumptions including secondary sources
OPEC Downstream expansion plans: 2005-2011
## Regional gasoline quality specification (2005-2010)

<table>
<thead>
<tr>
<th>Region</th>
<th>2005</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sulfur (ppm)</td>
<td>Aromatic (wt%)</td>
</tr>
<tr>
<td>North America</td>
<td>70</td>
<td>28</td>
</tr>
<tr>
<td>Latin America</td>
<td>500</td>
<td>36</td>
</tr>
<tr>
<td>Western Europe</td>
<td>30</td>
<td>34</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>200</td>
<td>38</td>
</tr>
<tr>
<td>Asia Pacific</td>
<td>220</td>
<td>35</td>
</tr>
<tr>
<td>Middle East</td>
<td>500</td>
<td>37</td>
</tr>
<tr>
<td>Africa</td>
<td>500</td>
<td>36</td>
</tr>
</tbody>
</table>

*Sources: Hart forecast and analysis database*
## Regional diesel fuel quality specification (2005-2010)

<table>
<thead>
<tr>
<th>Region</th>
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<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Diesel Sulfur* (ppm)</td>
<td>Centane Index</td>
</tr>
<tr>
<td>North America</td>
<td>330</td>
<td>45</td>
</tr>
<tr>
<td>Latin America</td>
<td>2,000</td>
<td>45</td>
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<tr>
<td>Western Europe</td>
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<tr>
<td>Eastern Europe</td>
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<td>51</td>
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<tr>
<td>Asia Pacific</td>
<td>1,400</td>
<td>47</td>
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<tr>
<td>Middle East</td>
<td>1,800</td>
<td>48</td>
</tr>
<tr>
<td>Africa</td>
<td>1,500</td>
<td>49</td>
</tr>
</tbody>
</table>

*On-road diesel

Sources: Hart forecast and analysis database