Business as usual

- Coal demand keep growing
- And so, too, coal trade
China is coal. Coal is China

* The increase in US oil demand in 2012 is caused by differing definitions. While historic data for US oil demand are based on IEA’s Oil Information, projections of US demand refer to US50 oil demand as defined in Table 2 of IEA’s Medium-Term Oil Market Report 2012.
Power generation in non-OECD is crucial

Total coal-based electricity production in 2009 and 2010

- Relative growth 2009/10
- Absolute growth 2009/10

<table>
<thead>
<tr>
<th>Country</th>
<th>2009 TWh</th>
<th>2010 TWh</th>
<th>Relative Growth 2009/10</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>620</td>
<td>630</td>
<td>1.6%</td>
</tr>
<tr>
<td>South Africa</td>
<td>210</td>
<td>220</td>
<td>4.7%</td>
</tr>
<tr>
<td>Russia</td>
<td>150</td>
<td>160</td>
<td>6.7%</td>
</tr>
<tr>
<td>Chinese Taipei</td>
<td>100</td>
<td>110</td>
<td>10.0%</td>
</tr>
<tr>
<td>Indonesia</td>
<td>90</td>
<td>100</td>
<td>11.1%</td>
</tr>
<tr>
<td>Ukraine</td>
<td>80</td>
<td>90</td>
<td>12.5%</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>70</td>
<td>80</td>
<td>14.3%</td>
</tr>
<tr>
<td>Malaysia</td>
<td>60</td>
<td>70</td>
<td>16.7%</td>
</tr>
<tr>
<td>Thailand</td>
<td>50</td>
<td>60</td>
<td>20.0%</td>
</tr>
<tr>
<td>Rest of non-OECD</td>
<td>40</td>
<td>50</td>
<td>25.0%</td>
</tr>
<tr>
<td>China</td>
<td>300</td>
<td>350</td>
<td>16.7%</td>
</tr>
</tbody>
</table>
US shale gas switches on coal in Europe

- **Higher transportation costs for gas hinders regional integration**

- **In Europe, coal reacts stronger than gas to US low prices**
A golden age of coal in Europe?

- Low carbon prices: the Eurozone crisis is a surprise, but the renewable ramp up is not
- Gas to coal switch is already limited by system operation constrains
- The need for conventional generation is declining
- Decommissioning of old plants is sure, but economics of new coal to build is questionable
Moving East

Seaborne imports to the Atlantic Basin (218 Mt)

Seaborne exports from Russia (93 Mt)

Seaborne exports from the Atlantic Basin (128 Mt)

Seaborne exports from the Pacific Basin (498 Mt)

Seaborne imports to the Pacific Basin (573 Mt)

Seaborne exports from South Africa (71 Mt)

Atlantic Basin

Suppliers to both markets

Pacific Basin

Quantities:
- 59 Mt
- 109 Mt
- 19 Mt
- 20 Mt
- 29 Mt
- 42 Mt
- 478 Mt
- 34 Mt
Coal prices are back in sync

[Graph showing coal prices from Jan 10 to Jul 12, with three lines representing different types of coal: Newcastle steam coal (FOB), Ultra-low volatile PCI coal (FOB), and Australian prime hard coking coal (FOB).]
Indonesia-China, a good partnership

- Indonesia meets much of Chinese demand
- For Chinese utilities, Indonesian coal is a good option
- For low cost Indonesian producers, Chinese coal thirst was good business
From Beijing to India?

### Selected investments of Indian companies in coal assets

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of investments</th>
<th>Acquired resources/reserves (Mt)</th>
<th>Capital expenditure (USD Million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>9</td>
<td>17 138</td>
<td>7 612</td>
</tr>
<tr>
<td>Indonesia</td>
<td>28</td>
<td>6 271</td>
<td>4 526</td>
</tr>
<tr>
<td>South Africa</td>
<td>4</td>
<td>377</td>
<td>3 300</td>
</tr>
<tr>
<td>United States</td>
<td>3</td>
<td>348</td>
<td>820</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44</strong></td>
<td><strong>24 134</strong></td>
<td><strong>16 258</strong></td>
</tr>
</tbody>
</table>
Chinese slow-down can affect seaborne coal trade

**Diagram:**
- **Title:** Thermal coal and Metallurgical coal
- **Axes:** Mtce (Metric tons of coal equivalent)
- **Years:** 2017
- **Countries:**
  - Exporters:
    - Australia
    - Russia
    - United States
    - Other exporters
  - Importers:
    - China
    - Other importers

**Legend:**
- Higher in the BCS
- Lower in the BCS
Two steps forward

Outlook for global export capacity utilisation for seaborne hard coal until 2017

- Existing export capacity
- Probable expansions
- Potential expansions
- Port capacity
- Exports historic
- Exports - CSDC
- Exports - BCS

Mtpa

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Is slow-down already happening?

BREAKING NEWS

Anglo American to cut Moranbah North jobs
29 August

Rio cutting more coal jobs in wake of royalty rise
18 September

Xstrata confirms job cuts at Bowen Basin
16 October

Ensham to slash coal mining jobs
17 October

BHP rules out new mining projects in QLD
18 October

Spring Creek mine shut, staff made redundant
28 November
KEY MESSAGES

- Coal demand rises over the outlook period, approaching oil
- Driven mainly by power generation in non OECD countries
- Shale gas revolution led to decline in coal consumption in the US, and to increased use of coal in Europe
- The large gas-to-coal switch in Europe is projected to peak in 2013
- Whereas China will surpass the rest of the world in coal consumption, India will gain importance in coal market, becoming the largest seaborne coal importer
- Seaborne coal trade will continue to increase unless there is a slowdown in Chinese economy
- Announcements of cuts and layoffs, despite many projects in the pipeline
Thank you for your attention