Global energy demand rises by over one-third in the period to 2035, underpinned by rising living standards in China, India & the Middle East
Oil prices matter, and are formed by contradictory forces at play

International crude oil prices and global GDP growth

- Bar chart showing world GDP growth (% 2011, MER) over time from 1970 to 2010.
- Line chart showing average IEA oil import price in real $2011 (right axis) over the same period.
- Black columns indicate recession years in OECD countries.

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Natural gas: towards a globalised market

Major global gas trade flows, 2035

Rising supplies of unconventional gas & LNG help to diversify trade flows, putting pressure on conventional gas suppliers & oil-linked pricing mechanisms

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A power shift to emerging economies

Change in power generation, 2010-2035

China

India

United States

European Union

Japan

The need for electricity in emerging economies drives a 70% increase in worldwide demand, with renewables accounting for half of new global capacity
Renewables growth is led by non-OECD countries

Non-OECD accounts for two-thirds of the overall growth
China, Brazil, India lead; others grow significantly as well

Global renewable electricity production and forecast

© OECD/IEA 2012
The benefits of renewables come at a cost

Global renewable energy subsidies of $4.8 trillion, 2011-2035

- **Biofuels**
  - $1.2 trillion

- **Electricity**
  - $3.6 trillion

*Renewables subsidies were $88 billion in 2011 and will total $4.8 trillion over the period to 2035*
The Efficient World Scenario: a blueprint for an efficient world

Total primary energy demand

<table>
<thead>
<tr>
<th>Year</th>
<th>Coal</th>
<th>Oil</th>
<th>Gas</th>
<th>Others</th>
<th>Total</th>
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<tbody>
<tr>
<td>2010</td>
<td></td>
<td></td>
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<tr>
<td>2015</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2020</td>
<td></td>
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<td>2025</td>
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<td>2030</td>
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<tr>
<td>2035</td>
<td>1350</td>
<td>12.7</td>
<td>680</td>
<td>250</td>
<td>17000</td>
</tr>
</tbody>
</table>

- **New Policies Scenario**
- **Efficient World Scenario**

Economically viable efficiency measures can halve energy demand growth to 2035
Conclusions

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