Growing engagement

Corporate responses to climate change

Rod Oram’s presentation to the Australia-New Zealand Climate Change & Business Conference Auckland, October 20th, 2015

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Themes

1. Clean technology accelerating
2. Economics improving
3. Corporate engagement growing
4. Financial risks sharpening
5. Focus broadening to sustainability
6. Pushback still strong
7. Volkswagen
1. Clean technology accelerating

- Big commitments to renewable electricity…e.g:
  - Apple investing over US$1bn on renewable generation
  - Google committed to getting to 100% renewable electricity

- Low fossil fuel prices has had mixed impact on renewables development
  - Some disincentives
  - …but improving cost-effectiveness of more low carbon technologies
  - ..also, e.g, renewables offer predictability of price, lack of volatility

- Stability of government policies essential
  - Sudden, retrospective changes in UK have eroded confidence
  - “Any government policy now gets heavily discounted”

- Zeitgeist difficult in Europe
- Very low growth, unemployment, migration, loss of competitiveness
  - “Anything that adds complexity and constraints is one thing too many”
2. Economics improving
China

- Big commitment to reducing carbon intensity
- …but making its boldest economic transformation in 35 years
- …great tensions between old and new

Table 1. Comparison of key results from the “continued” and “accelerated” emissions reduction scenarios in the NCE China Study’s energy modelling

<table>
<thead>
<tr>
<th>Variable</th>
<th>2010 (actual)</th>
<th>Continued Emissions Reduction Scenario</th>
<th>Accelerated Emissions Reduction Scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Energy Consumption (billion tonnes of coal equivalent)</td>
<td>3.25</td>
<td>4.92</td>
<td>6.25</td>
</tr>
<tr>
<td>Energy Intensity of GDP (2010 = 100)</td>
<td>100</td>
<td>73.4</td>
<td>54.6</td>
</tr>
<tr>
<td>CO₂ emissions from energy (GT)</td>
<td>7.25</td>
<td>10.4</td>
<td>12.7</td>
</tr>
<tr>
<td>CO₂ intensity (energy) of GDP (2010 = 100)</td>
<td>100</td>
<td>69.6</td>
<td>51.1</td>
</tr>
<tr>
<td>Proportion of non-fossil energy (%)</td>
<td>8.6</td>
<td>14.5</td>
<td>20</td>
</tr>
<tr>
<td>Total GHG emissions (GT CO₂e)*</td>
<td>9.4</td>
<td>13.5</td>
<td>16.5</td>
</tr>
</tbody>
</table>
3. Corporate engagement growing

- Since 2013, London Stock Exchange has required carbon disclosure
- Strong growth of participants in the Carbon Disclosure Project
  - …and 437 corporates using carbon pricing internally, a trebling
  - …and widening to water and forestry
New Zealand companies in the Carbon Disclosure Project: 15

$53,000,000,000
This year 308 cities have participated in CDP to better manage their climate change strategies.

109 cities are setting renewable energy or electricity targets.

96 cities are taking actions to decarbonize their energy supply.
China, too
4. Financial risks sharpening

• “Potentially huge” losses from “literally unburnable” reserves of fossil fuels is a potential threat to financial stability
  - Governor Mark Carney, Bank of England

• Fossil fuel divestment campaign: 436 institutions in 43 countries
  - …investors with US$2.6tr in total assets (not just fossil fuels)

• £1bn of value lost by UK pension funds in past 18 months because of falling coal share prices – a recent UK report
5. Broadening focus to sustainability

- UK: Growing number of companies thinking long term

- ...and placing climate change in much broader sustainability framework
Revolution

- Led by John Elkington and others
  - [www.breakthroughcapitalism.com/](http://www.breakthroughcapitalism.com/)
### Breakthrough Criteria

A Breakthrough solution meets the following criteria

#### Key Concepts

<table>
<thead>
<tr>
<th>Future-Ready</th>
<th>Ambitious</th>
<th>Fair</th>
<th>Disruptive</th>
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</thead>
<tbody>
<tr>
<td>Works well in a world of 7-going-on-9 billion people, providing affordable access to needed products or services, while respecting planetary boundaries.</td>
<td>Aims to transform key aspects of capitalism—and drive radically better outcomes across the triple bottom line.</td>
<td>Helps tackle critical equity issues, including the transfer of intergenerational debt created by public borrowing, natural resource extraction and environmental destabilization.</td>
<td>Promises (or threatens, depending on your viewpoint) to disrupt the current economic or governance system, moving the needle from incrementalism to system change.</td>
</tr>
<tr>
<td>Ecological Footprinting</td>
<td>Environmental Profit &amp; Loss</td>
<td>Access to X</td>
<td>Biomimicry</td>
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<tr>
<td>Global Footprint Network</td>
<td>PUMA/PPR</td>
<td>Where X might be medicines, clean water, renewable energy, education or finance</td>
<td>B Corporation</td>
</tr>
<tr>
<td>One Planet Living</td>
<td>The B Team</td>
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<td>Biomimicry 3.8</td>
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<td>Bioregional</td>
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<td></td>
<td>Circular Economy</td>
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<tr>
<td>Planetary Boundaries</td>
<td>Impact Investment</td>
<td></td>
<td>Ellen Macarthur Foundation</td>
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<td>Stockholm Resilience Centre</td>
<td>Global Impact Investing Network</td>
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<tr>
<td>Stranded Assets</td>
<td>Zero</td>
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<td>Cradle-to-Cradle</td>
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<td>Carbon Tracker</td>
<td>Interface Mission Zero</td>
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<td>Design</td>
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<tr>
<td>Generation Investment Management</td>
<td>Zero Discharge of Hazardous Chemicals</td>
<td></td>
<td>MBDC</td>
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<tr>
<td>‘X’</td>
<td>‘X’ Prize Foundation</td>
<td></td>
<td>Sharing Economy / Collaborative Consumption</td>
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<td>The X Prize</td>
<td>Solve for X</td>
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<td>Oxfam</td>
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<td>Google X</td>
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<td>Marks &amp; Spencer</td>
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6. Pushback...and paradoxes

• Particularly from energy-intensive sectors
  • …but with some disruptors within

• Tensions within broadly-based business associations
  • E.g. Confederation of British Industry, UK Institute of Directors, Business Europe

• Paradoxes, too:
  • European car markers aren’t keen on collaborative economy
    • Potential drop of 1/3 in car sales thanks to car sharing, Uber etc.

• Tesla is entirely committed to electric cars
  • …but on old model of “defining desire and modernism”
11m noxious cars
7. Volkswagen

- **Company:**
  - Recalling 11m cars
  - Euro 100bn of costs to the company, some estimates suggest
  - Already lost Euro 35bn, 1/3 of its market cap
  - Already lost US$10bn, 1/3 of its brand value
  - Pushed Germany out of top 10 of national brands

- **Wider sector issues:**
  - Failure of self-testing of fuel efficiency & emissions standards
  - European gap between tests and actual fuel efficiency
    - 2003: 10 %  
    - 2014: 30%  
    - Tests of 600,000 cars
  - International Council on Clean Technologies

- Other makers vulnerable to legal action?
- Future of diesels threatened?
- Fast-forward electric and plug-in hybrid cars?

- **Public trust in companies damaged?**