Energy and environment in a Green Economy: Bringing actors together

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Secretary General
Geneva, September 2016
There are Limits to Growth

1: Population
2: Food output
3: Industrial output
4: Pollution level
5: Nonrenewable resources
We are in overshoot

- Planet's initial carrying capacity
- Planet's current carrying capacity
- Sustainable path
- Limits to Growth
Thanks to the current economic system

Yes, you’re homeless...

But this is GREAT for the GDP!
Wrong-headed economics

- The market economy requires continuous growth to function
  - Increased resources and energy
  - Which generates pollution
- The drive for higher productivity increases long term unemployment
- Because the rewards flow to the rich, the system increases inequality and poverty
- Externalities are ignored
We believe (wrongly) that growth reduces poverty

<table>
<thead>
<tr>
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<th>1980</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living on $1.25 a day</td>
<td>1.9bn</td>
<td>1.2bn</td>
</tr>
<tr>
<td>% of global pop</td>
<td>42%</td>
<td>18%</td>
</tr>
<tr>
<td>Excl China</td>
<td>1.1bn</td>
<td>1.1bn</td>
</tr>
<tr>
<td>% of global population</td>
<td>25%</td>
<td>16%</td>
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But accounting properly for inflation....

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<table>
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<tbody>
<tr>
<td>Living on $2.65 a day</td>
<td>3.6bn</td>
</tr>
<tr>
<td>% of global pop</td>
<td>53%</td>
</tr>
</tbody>
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The most serious consequence is climate change
Without change, a +2°C rise will become inevitable in around 20 years.

Source: Randers, 2052 model
Two degrees is a lot

Likely loss over time of all ice sheets.

Likely loss over time of Greenland & West Antarctic ice

PETM 55 million years ago.


Ian Durlop 2012
We're already living through a warm period
Two degrees is a lot

Likely loss over time of all ice sheets.

Likely loss over time of Greenland & West Antarctic ice

PETM 55 million years ago.

There is already a direct economic cost from the 200% increase in climactic events over 30 years.
Government spending will be diverted progressively towards repairs

Source: Randers, 2052 model
The only way to avoid collapse is by reducing carbon emissions (and CCT)
But it is not just an energy challenge – to solve the problem requires us to rethink economics and social development.
Without change, steadily rising instability

- higher migration flows
- more sea defences
- need to reinforce buildings in areas unused to extremes of temperature and humidity
- increased incidence of infectious diseases and poverty
- water shortages, floods and food chain disruption
- finance sector instability and economic shocks
- civil disorder and the rise of political extremism
A green economy would help restore balance, but only if it reduces the ecological footprint

- A green economy should REDUCE resource use and pollution not just slow their growth
- The Circular economy, sharing economy, wealth redistribution, technology transfer from the rich world, more services (though this is not strictly green, nor is decoupling)
- GDP can still grow as it is a measure of value
A green economy is generally more expensive and needs government support

- If green was always cheaper, we'd be doing it more
- It can be made cheaper, though not always
- To compete broadly it needs government support – incentives or legislation – market intervention
- That takes political leadership and cooperation with the private sector
- But....there is no other way....