

Towards a one-planet economy

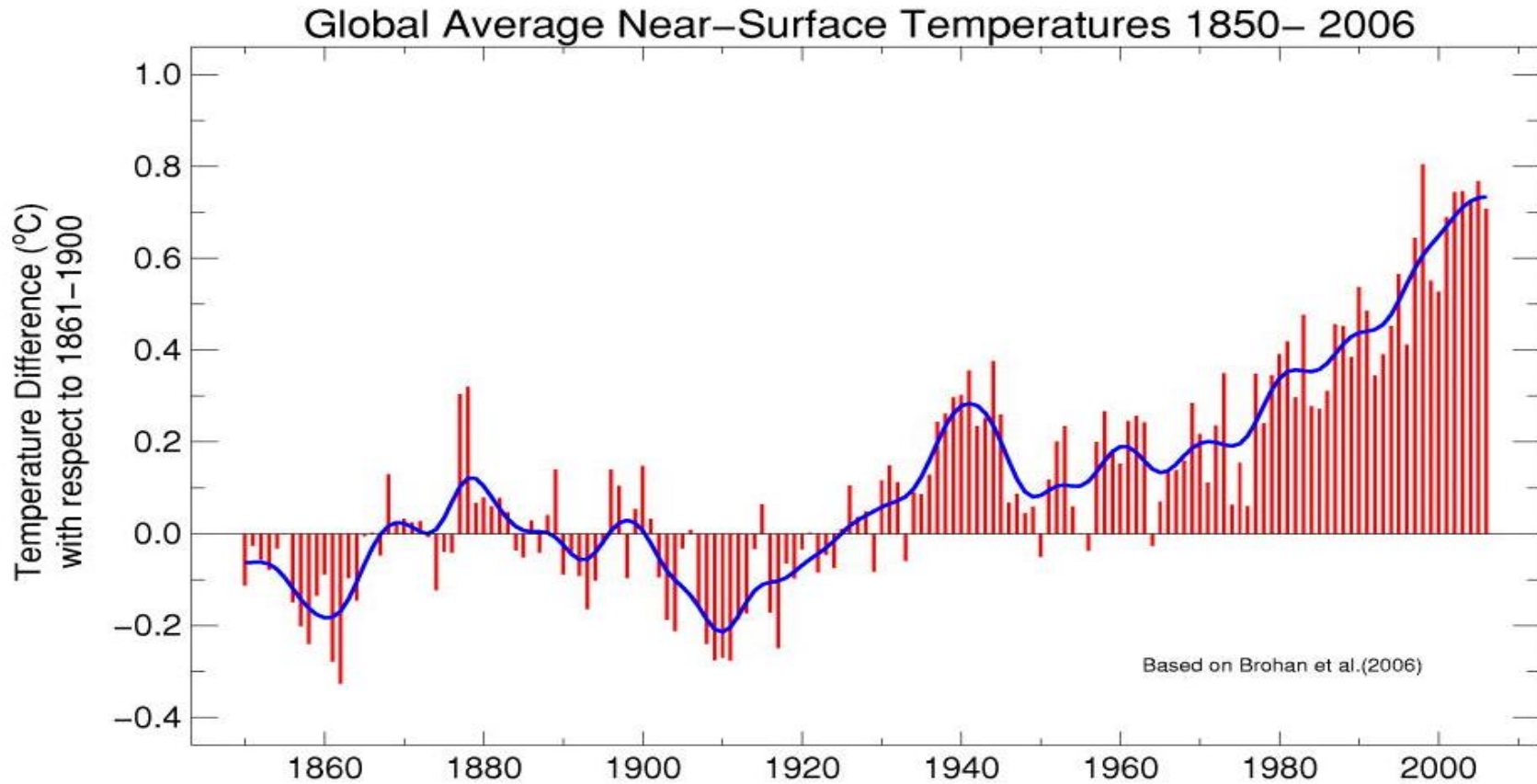
Rt. Hon. David Miliband MP

Secretary of State for Environment, Food and Rural Affairs

TUC Climate Change Conference

5th June 2007

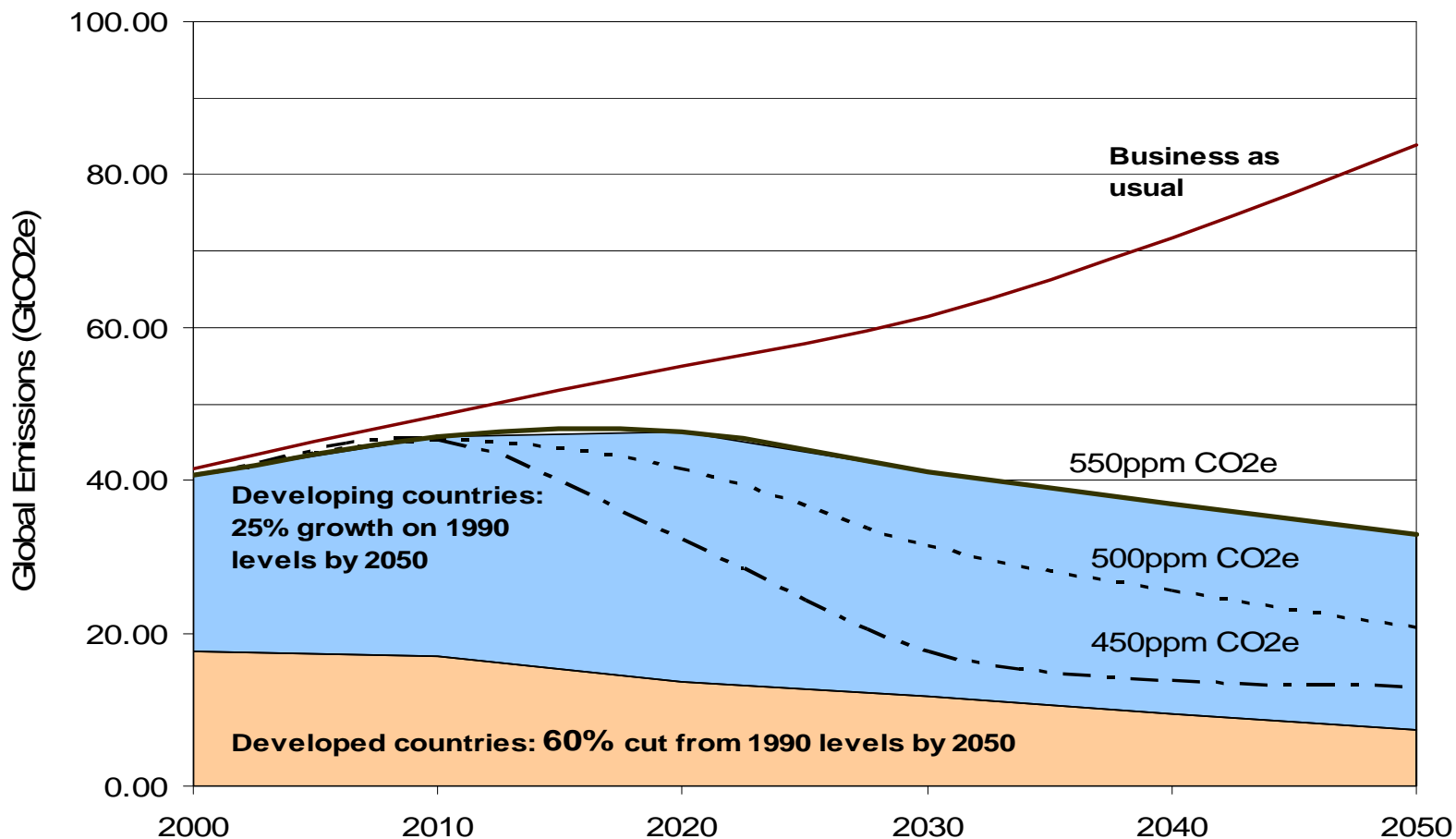
Global temperatures have been rising – particularly over the last few decades



Global average surface temperature increased over the last hundred years (1906–2005) by 0.74°C with particularly strong warming since the 1970s



The global challenge is to stabilise global emissions at levels which avoid the risk of dangerous climate change





The costs of stabilising the climate are manageable – delay would be dangerous and much more costly

1% GDP

Costs of mitigation to stabilise emissions at 550ppm by 2050

vs

5% GDP

Income losses if we do nothing:
market impacts only



20% GDP

Income loss including non-market impacts, risk and equity

- Delay is dangerous because damages from climate change rise disproportionately with temperature.
- Adaptation is crucial to respond to unavoidable climate change
- There are limits to how much it is possible to adapt to the worst effects.

The draft Climate Change Bill will help us move to a low carbon economy

Targets and budgets

- Long and medium term targets: CO₂ emission reductions of 60% by 2050 and 26-32% by 2020, through action in the UK and abroad.
- Five-year carbon budgets to set out our trajectory.

Committee on Climate Change

- An independent body to advise Government on its carbon budgets and where least cost savings could be made.

Enabling powers

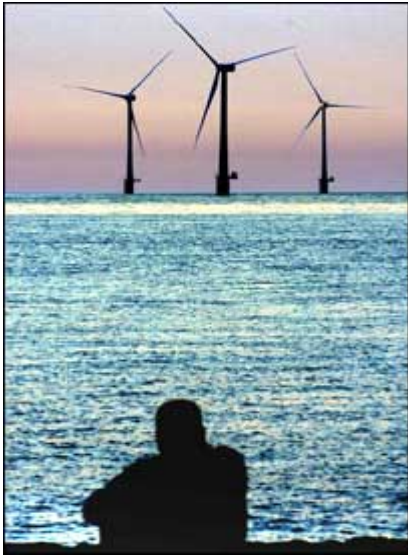
- To introduce emissions trading schemes more quickly and easily.

Reporting

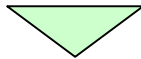
- The Committee on Climate Change to report annually on progress towards targets and budgets.
- Government to report at least every 5 years on adaptation.

Low carbon electricity is already possible – and new technologies will be key to our longer term success

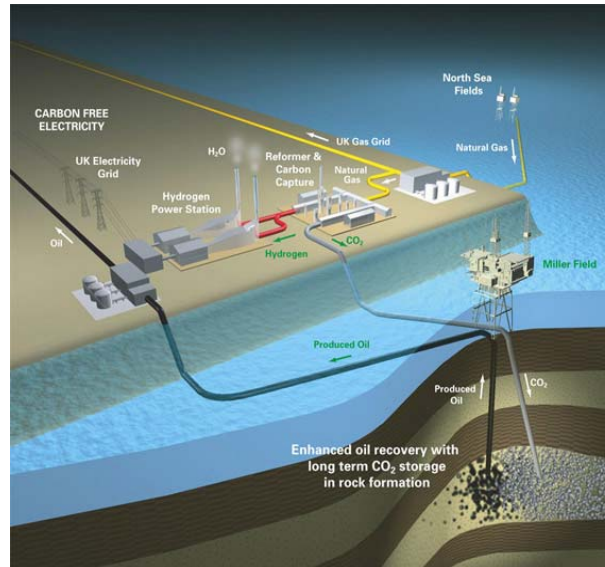
Current



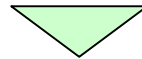
Renewables & Nuclear



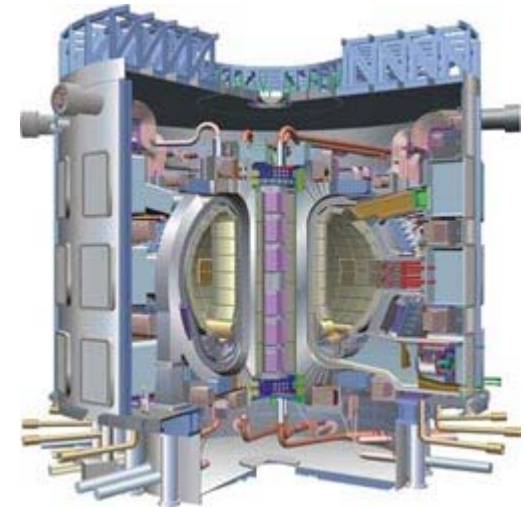
Emerging



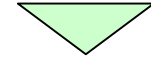
Carbon capture and storage (CCS)



Future



Nuclear fusion



‘Even with very strong expansion of the use of renewable energy ...extensive carbon capture and storage will be necessary’*

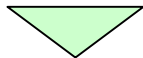
* Stern Review (2006). This is not an exhaustive list of current or future technologies.

For heating, decentralised power generation and energy efficiency will drive decarbonisation

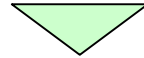
Current → Emerging → Future



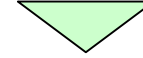
**Traditional
insulation**



**Community Combined Heat and
Power (CHP)**



**Zero carbon
buildings**



Demand and supply of win-win energy efficiency measures could be improved through regulation and better take-up incentives

In transport, we will need a transition to a post-oil economy

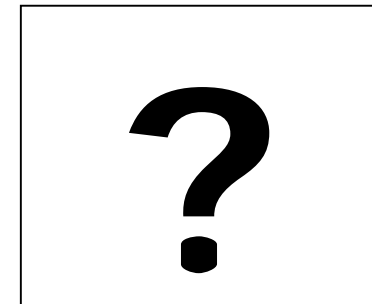
Current



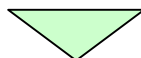
Emerging



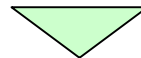
Future



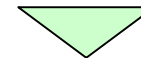
**Petrol hybrids &
bio-fuels**



**Electric/
hydrogen**



**Decarbonised
fuel supply?**



**< 2050: Hybrids, bio-fuels, fuel efficiency of
conventional vehicles and some
electric/hydrogen**

**> 2050: Totally decarbonised
through electric/hydrogen?**

**Innovation is required to deliver low-carbon alternatives –
especially in aviation where global emissions are estimated to
grow three-fold in absolute terms by 2050***

* Stern Review (2006). This is not an exhaustive list of current or future technologies.

The global strategy to meet this challenge has five main elements...

Stabilisation goal based on common but differentiated responsibilities

Global carbon market

Investments in new technologies/ technology transfer

Slowing deforestation

Adaptation

...and Trade Unions have key role in mobilising a global consensus

'One planet living' encapsulates our vision

