

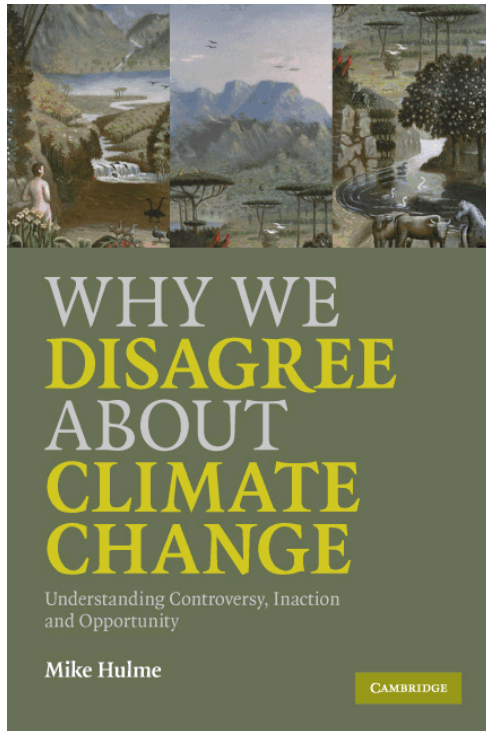
Re-Structuring Climate Policy: the Hartwell Approach

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**Victorian Centre for Climate Change Adaptation Research
Annual Forum, Bendigo, Monday 2 May 2011**

So why my book?



In 2007, my two questions were

Why has climate change become ‘the mother of all issues’?

Why has climate change seemingly been such a difficult phenomenon to comprehend and tackle?

Is climate change a problem to ‘solve’?

*“I do not believe we will ever have a final agreement on climate change, certainly not in my lifetime... If we ever have a final, conclusive, all-answering agreement, **then we will have solved this problem. I don’t think that’s on the cards**”*



Christiana Figueres, executive secretary of UN FCCC, 9 June 2010

'The Kyoto Protocol has failed'

Not slowed emissions, or warming
Stifled discussion ('thought communities')
Almost ignored adaptation

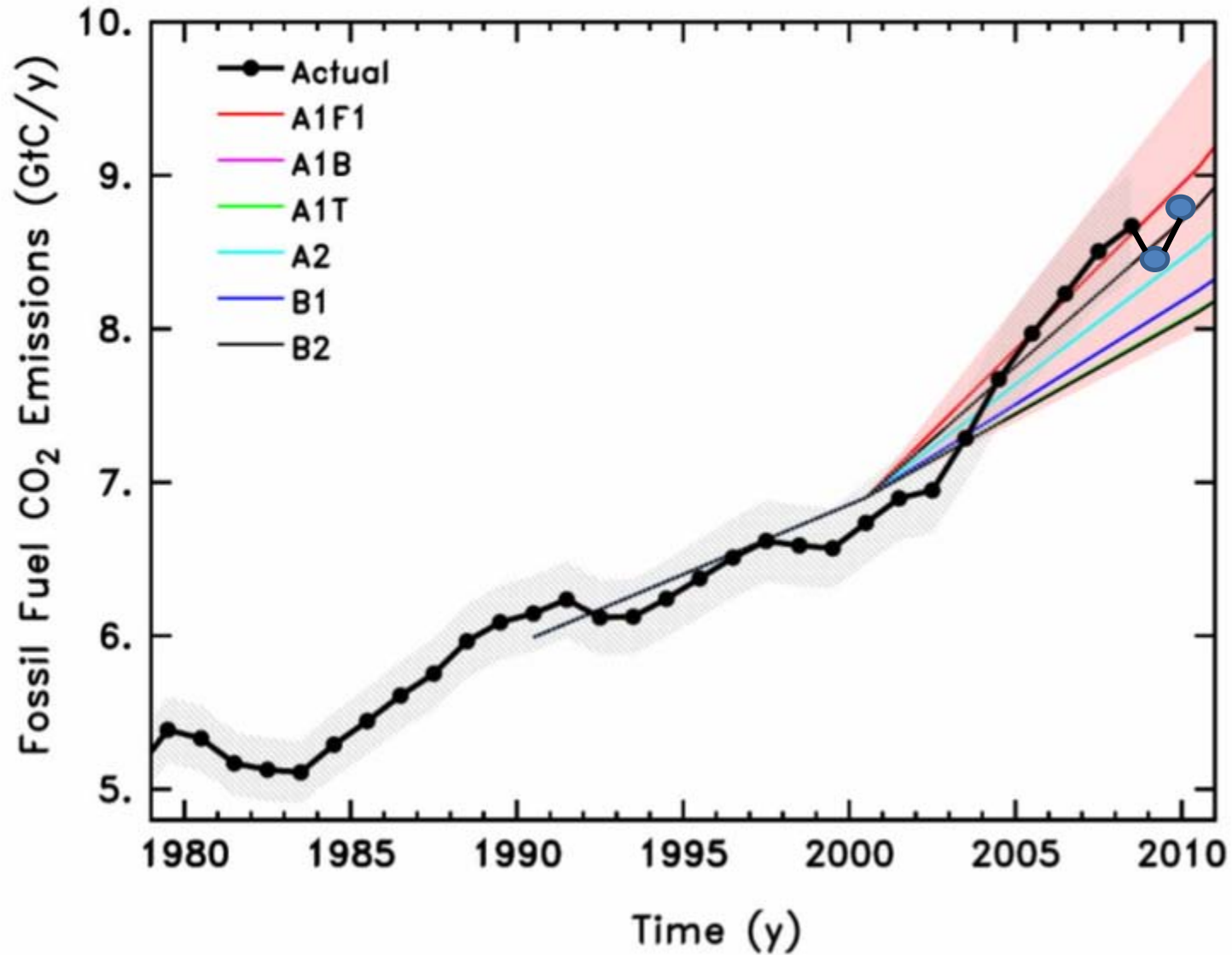


“The global climate change regime is digging itself into ever deeper ‘holes’ of rancorous relationships, stagnating issues and stifled debates”

Depledge, J. (2006) *Global Environmental Politics* 6(1), 1-22

**Reasons ... 1980s ‘summitry’ and Montreal Protocol;
targets & timetables; baselines and game-playing**

How carbon emissions have risen ...



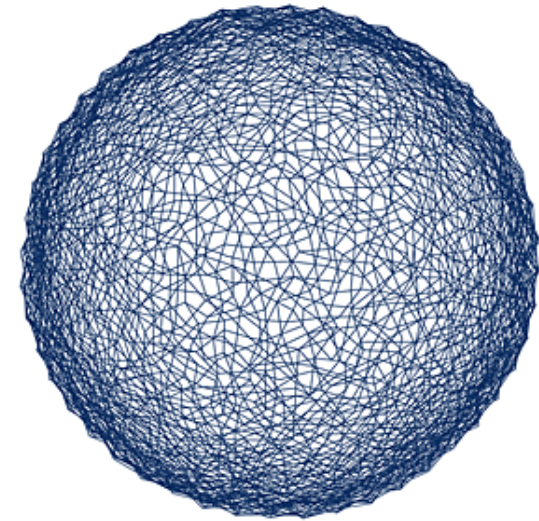
What has been achieved?

What have been the tangible benefits of 19 yrs of UNFCCC?



- **who has benefited from EU ETS or from the CDM?**
- **expansion of wind turbines, nuclear energy renaissance**
- **some new adaptation strategies been designed (what lives and costs have been saved?)**
- **new jobs in the carbon industry (traders, offset companies)**
- **Earth system models have ‘improved’**

The 'tipping-point'

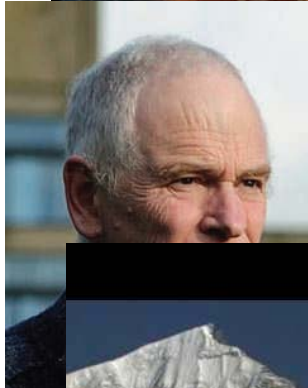
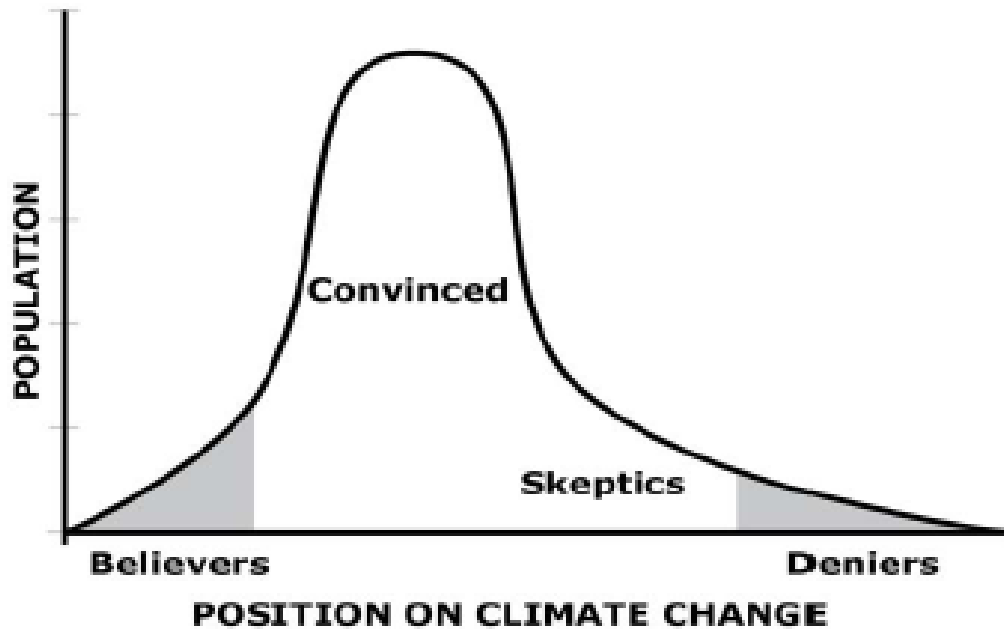
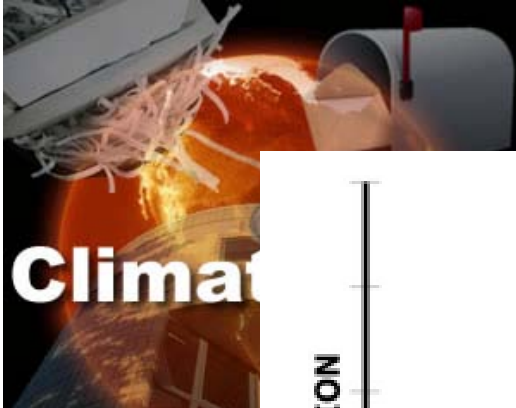


COP15
COPENHAGEN
UN CLIMATE CHANGE CONFERENCE 2009

*"It is being said that the Copenhagen UN Climate Change Conference, Dec 7th-18th 2009, will be the **most important single event in the history of humanity**"*

Phil England: 'Switch-Off' Global Carbon Reduction Fortnight, December 2009

The poverty of scientism



The crisis of delivery ...

*“ ... diplomats and greens are in a state of serious cognitive dissonance, attempting to [reconcile] the seriousness of the problem with **the total lack of a meaningful government response**. They do so ... by creating a simulacrum of action to substitute for any meaningful action to reduce emissions”*
Nordhaus & Shellenberger, The Breakthrough Institute, 2009



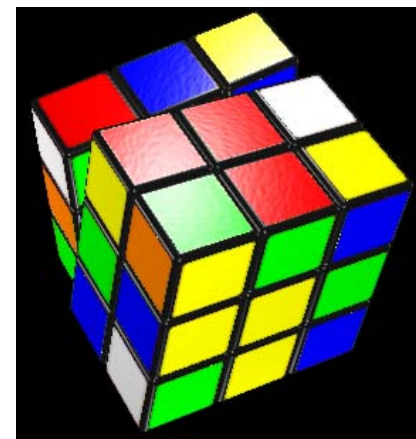
*“As our understanding of the scale of environmental challenges deepens, so we are also forced to contemplate **the inadequacy of the current responses to these challenges**”*

Tom Crompton WWF, 2008

'The Wrong Trousers'

So maybe we've got the framing of the problem and the policy framework 'wrong' – wrong in the sense that its not working.

It doesn't have to be the way it is.



In 2007 - *'The Wrong Trousers: radically rethinking climate policy'*

A Joint Discussion Paper of the James Martin Institute for Science and Civilization, University of Oxford and the MacKinder Centre for the Study of Long-Wave Events, London School of Economics

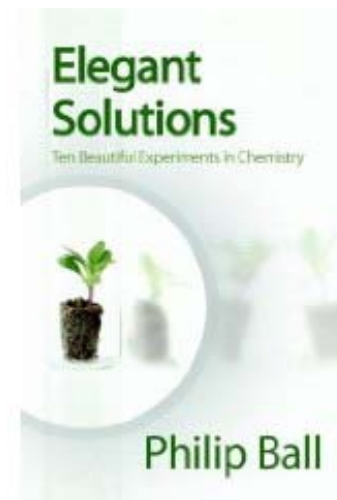
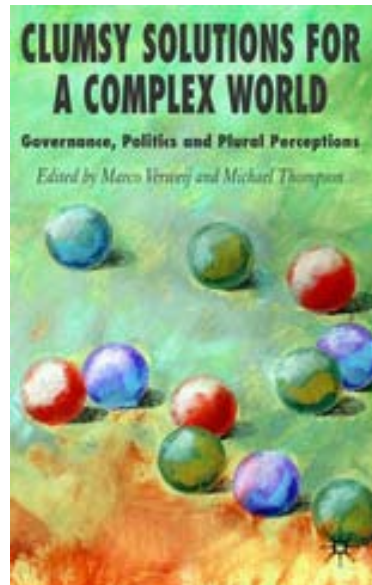


'Clumsy solutions' for climate change



'Clumsy institutions' coined by American law professor Michael Shapiro ...

... clumsiness allows for contradictory goals and policies to be simultaneously pursued ... pragmatism



Verweij, M. and Thompson, M. (eds) (2006) *Clumsy solutions for a complex world: governance, politics and plural perceptions* Palgrave MacMillan, 288pp.

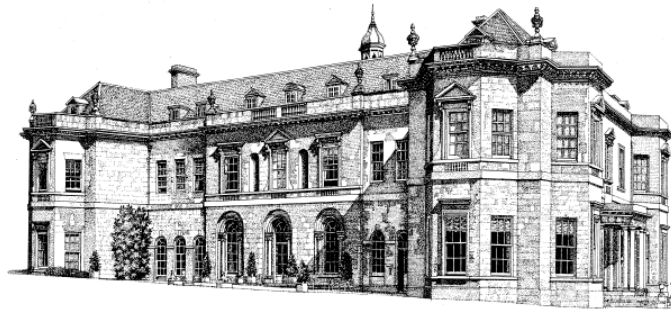
The 'Right' Trousers



- **Use silver buckshot : disaggregate climate policy goals**
- **Abandon universalism : diplomacy amongst the few**
- **Devise trading from the bottom-up : Madisonian**
- **Problems at lowest-level of decision-making : non-state**
- **Invest in energy technology R&D : scale-up**
- **Spending on adaptation : 'no-regrets' management; local**
- **Don't focus on climate : focus on manageable, tractable goals**

The Hartwell Paper

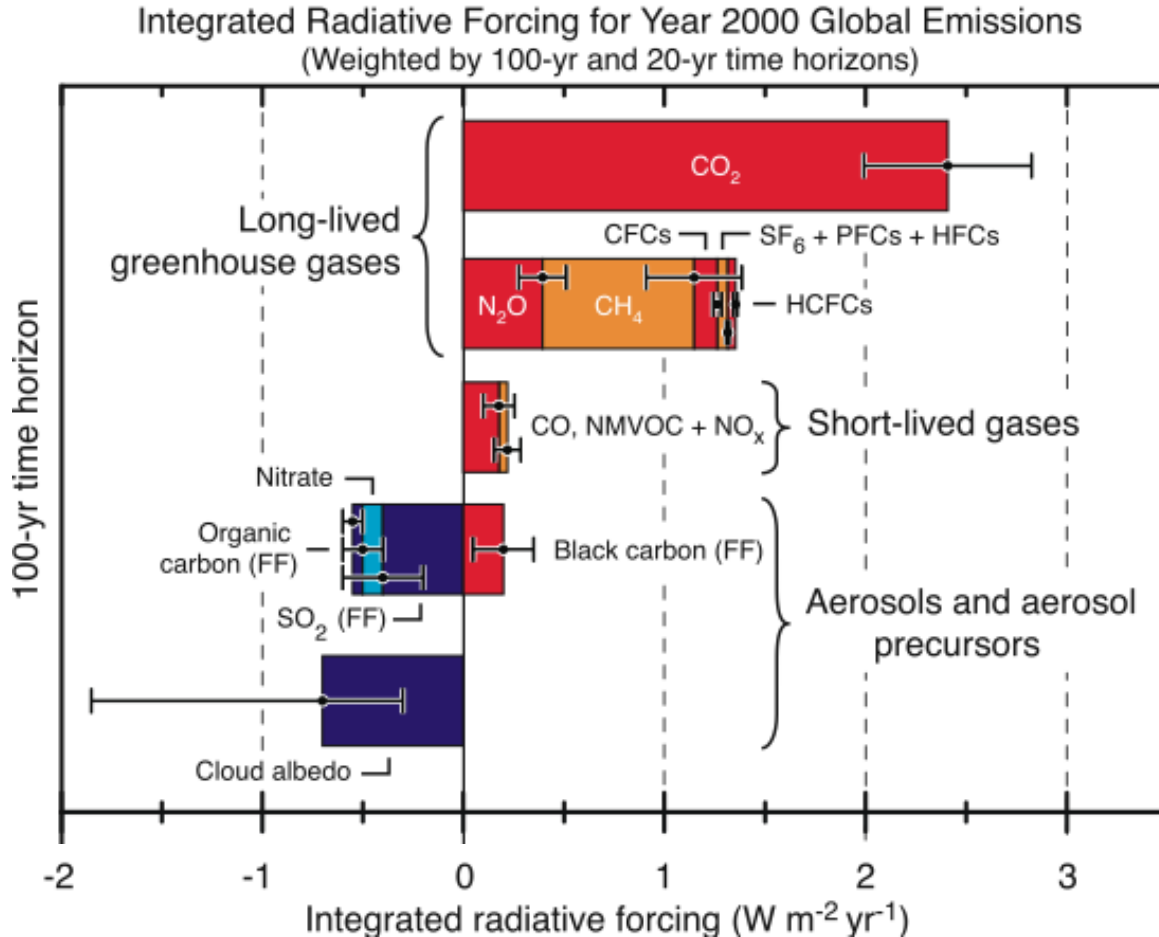
A new direction for climate policy
after the crash of 2009



What is Hartwell?

- **Group of scholars and analysts from Asia, Europe and North America**
- **Published first paper in April 2010**
- **Funded by the Japan Iron and Steel Federation, Japan Automobile Manufacturers Association, the Nathan Cummings Foundation and the Fondation Hoffmann**

It's not just fossil carbon



Contribution to forcing

~58% (forests ~15%)

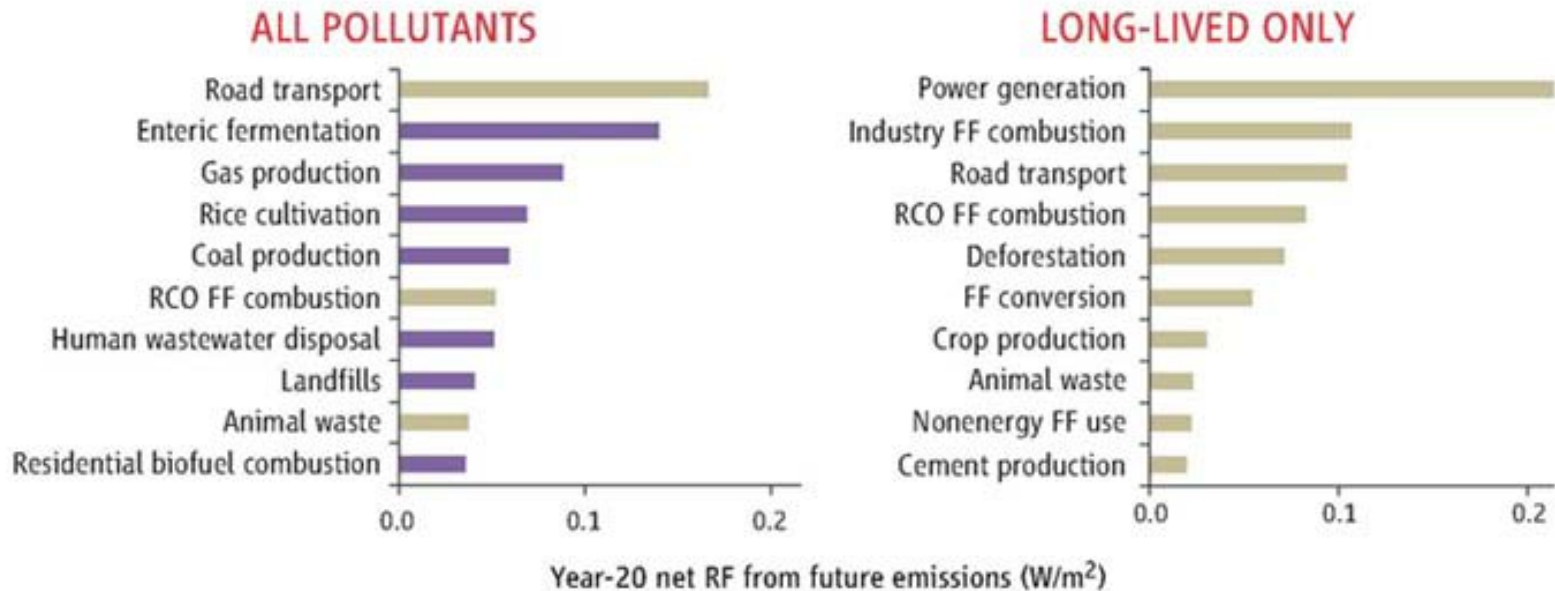
~30%

~6%

~6%

Fossil-based carbon is responsible for less than 50% of current forcing

1 Separate short-lived from long-lived species



*‘Such a two-pronged institutional framework would reflect the evolving scientific understanding of near-term climate change, the scientific certainty around long-term climate change, and the **opportunity to separately adjust the pace of near-term and long-term mitigation efforts**’*

S. C. Jackson *Science* 326, 526-527 (2009)

2 Drive out black carbon

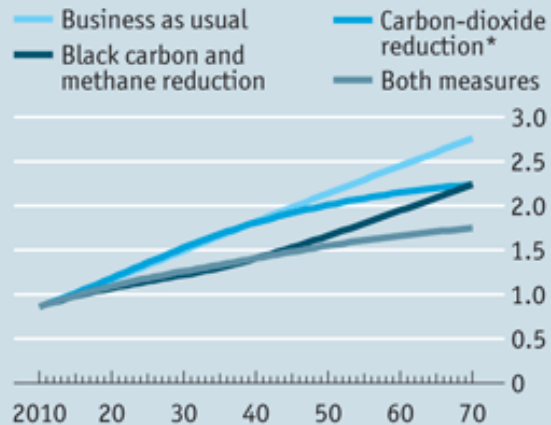
Eliminating present-day black carbon over 50 yrs equivalent to removing 25GtC from the atmosphere

1.8m die annually from exposure to indoor air pollution



Cooling complications

Forecast temperature increase
From 1890-1910 average, °C



Sources: Drew Shindell; UNEP
*International Energy Agency "450 scenario"

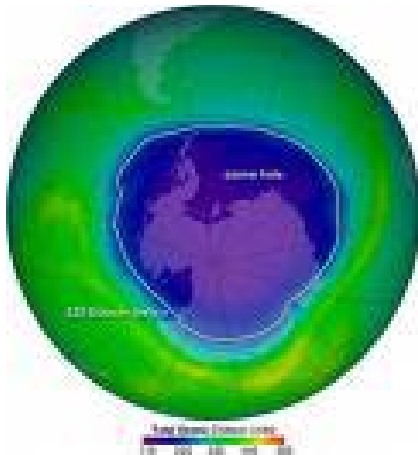
UNEP (2011) *Measures to limit near-term climate change and improve air quality*

Grieshop, A.P., Reynolds, C.C.O., Kandlikar, M. and Dowlatabadi, H. (2009) A black-carbon mitigation wedge
Nature Geoscience 2(8), 533

3 Use the Montreal Protocol

‘The climate protection already achieved by the Montreal Protocol alone is **far larger than the reduction target of the first commitment period of the Kyoto Protocol**’

Velders et al. (2007)



To drive the destruction of remaining ODS banks

To extend the Protocol to include substitute gases which are climate warming, but not ozone-depleting ... HFCs, PFCs and SF6

4 Attend to poverty through MDGs



*“We recognise that a substantial increase in ODA and other resources will be required if developing countries are to achieve the ... development goals and objectives ... contained in the UN Millennium Declaration ... **we urge developed countries to make concrete efforts** towards the target of 0.7% of GNI as ODA”*

[Paragraphs 41 and 42 of The Monterrey Consensus, March 2002]

*“... analysis indicates that 0.7% of rich world GNI can provide enough resources to meet the MDGs, but developed **countries must follow through on [1970] commitments** and begin increasing ODA volumes today.”*

[Millennium Project web-site, 2007]



5 Tropical forest management

Destruction of tropical forests account ~20% of CO₂ (10-15% of total RF)



“ ... through careful targeting of REDD funds, allocation solutions can be found that come close to maximizing both objectives simultaneously”

6 Promote adaptation as risk management

Adaptation to climate is its own agenda, necessary without climate change, necessary without anthropogenic climate change, but even more necessary with anthropogenic climate change



Global Framework for Climate Services - *“to strengthen production, availability, delivery and application of science-based climate prediction and services”*

... not as hair-splitting science



‘human-caused’ weather ... and ‘tough-luck’ or ‘Act-of-God’ weather

Climate Funds Update

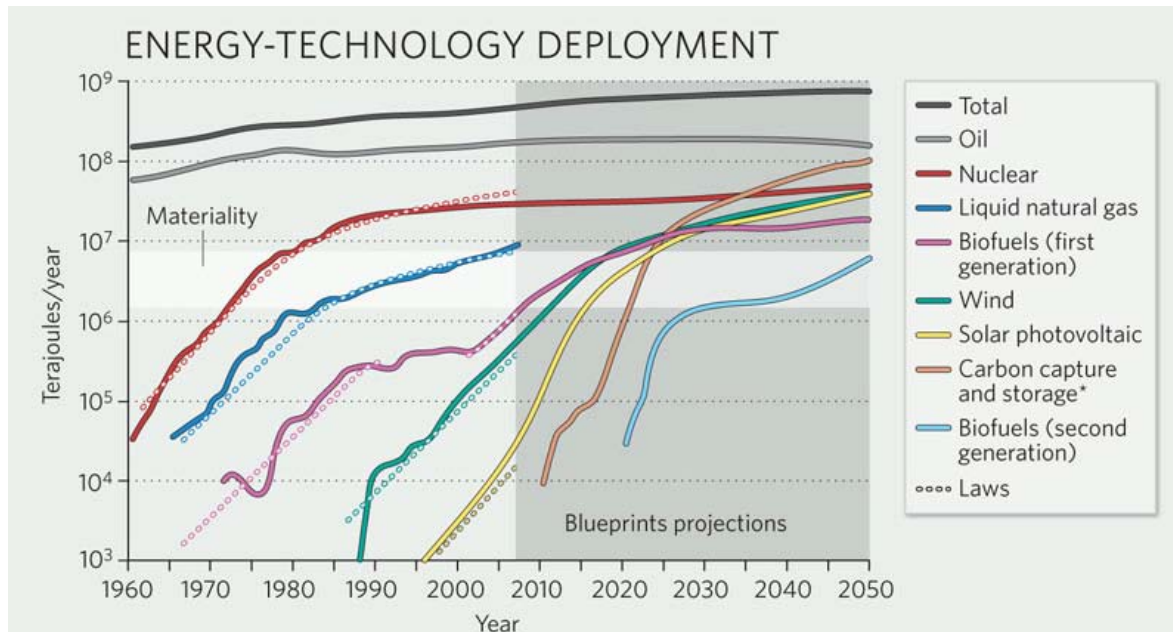


*“Because that money is on the table, it is suddenly going to be in everyone’s interest to be a victim of climate change ... so we need urgently to develop the science base to be able to **distinguish genuine impacts of climate change from unfortunate consequences of bad weather**” [Myles Allen, February 2011]*

7 Long-term energy technology innovation

- Energy innovation
- Energy diversification
- Energy access

“We're telling America's scientists and engineers that if they assemble teams of the best minds in their fields, and focus on the hardest problems in clean energy, we'll fund the Apollo projects of our time”



Source: Kramer and Haigh, 2009

7 Long-term energy technology innovation

Long-term commitments to energy technology innovation

Financed by hypothecated 'low' carbon tax; e.g. \$5/t CO₂

Revenue disbursed through independent foundations/trusts; cf. health, agriculture

Long-term price signal through doubling of carbon tax every, say, 10 years

An Analysis of a Technology-led Climate Policy as a Response to Climate Change

Isabel Gallana & Christopher Green



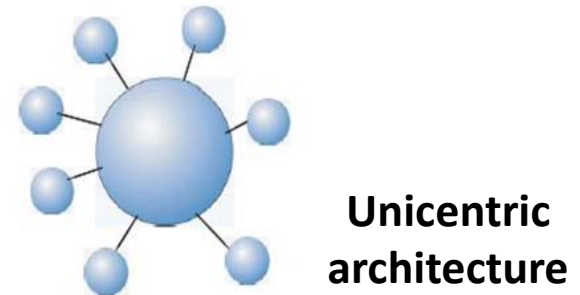
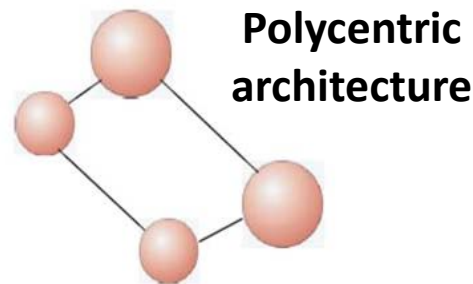
Shellenberger, M. and Nordhaus, T. (2011) *Why climate science divides us but energy technology unites us*

http://thebreakthrough.org/blog/2011/01/why_climate_science_divides_us.shtml

Polycentrism and pluralism



*“ ... many analysts have presumed that an enforceable global agreement is the only way to address the threat of climate change ... it would be better to self-consciously **adopt a polycentric approach** ... in order to ... to encourage experimentation and learning from diverse policies adopted at multiple scales”* **Elinor Ostrom, 2010**



**‘Plural, partial and provisional knowledge’ (Valerie Brown)
... leads to ‘plural and conditional advice’ (Andy Stirling)**



WHY WE
DISAGREE
ABOUT
**CLIMATE
CHANGE**

Understanding Controversy, Inaction
and Opportunity

Mike Hulme

CAMBRIDGE

Professor Mike Hulme

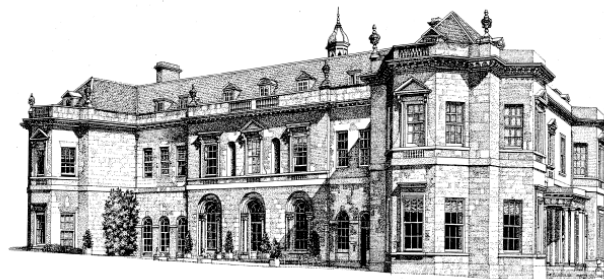
www.mikehulme.org

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The Hartwell Paper

A new direction for climate policy
after the crash of 2009



<http://www2.lse.ac.uk/researchAndExpertise/units/mackinder/theHartwellPaper/Home.aspx>