Climate policy research needs

David Warrilow, UK

UNFCCC Research Workshop, Bonn, 2-3 June 2011

Some over-arching questions

- What is dangerous climate change?
- What emission pathways will allow the world to avoid dangerous climate change?
- How can we achieve such low emission pathways – technically, economically, socially?

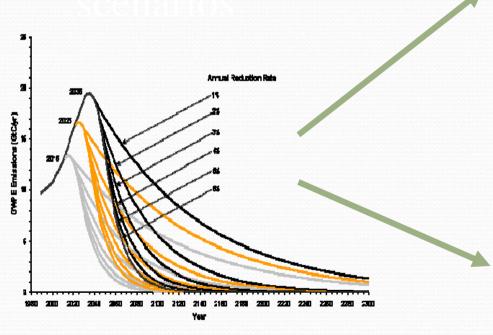
Core of the UK's AVOID Project







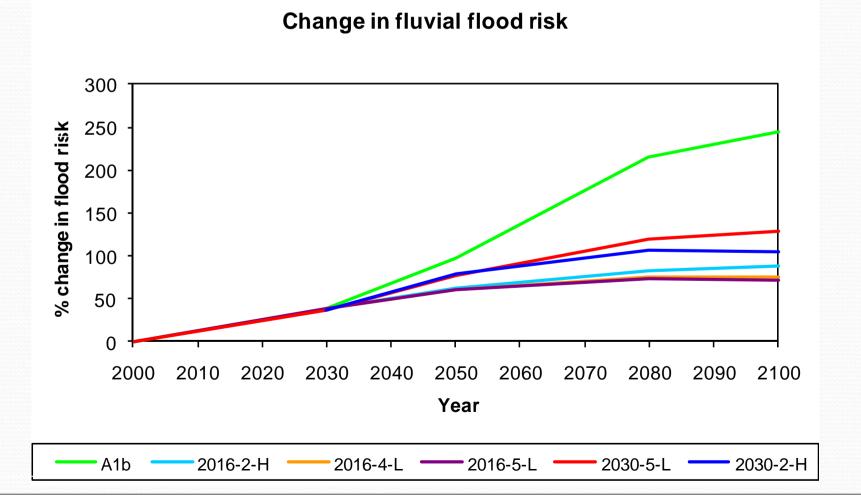
Grantham Institute Imperial College Emission pathways and impacts







Assessing the benefits of mitigation



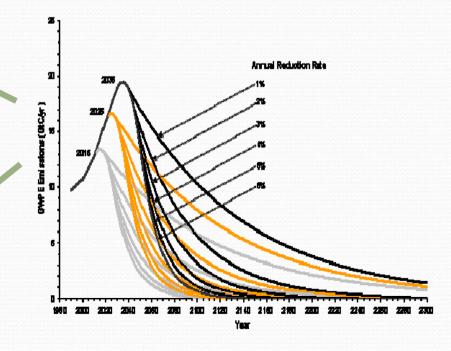
SLR chart replaced with fluvial flood chart. JC1

Remove box around chart and legend. Jolene Cook, 2/12/2009

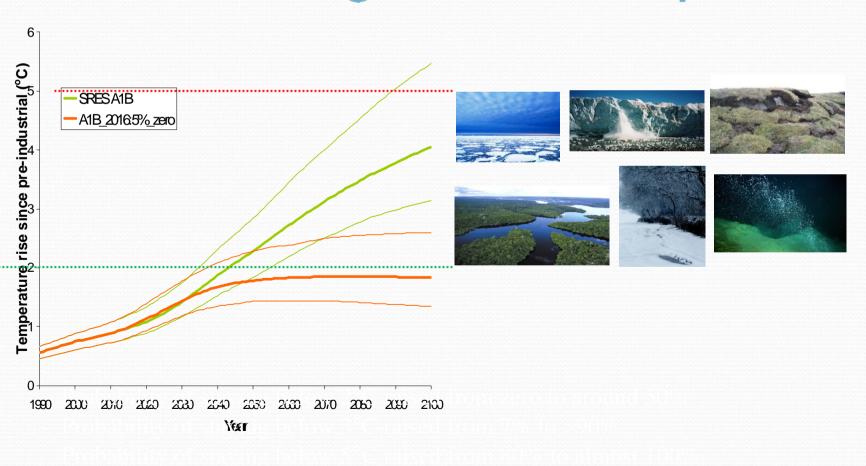
Assessing how emissions reductions might be achieved







Understanding risks of rapid climate change and its impacts



Policy needs and science challenges

- greater clarity on the risks, scale and urgency of climate change
- greater insights around tipping points, rapid and irreversible climate change – and associated impacts
- improved climate predictions at regional and global level
- improved assessments on the options for emission reductions globally, regionally and nationally
- improved methodologies for developing adaptation responses
- advice on geo-engineering proposals

Public communication

- major task to tell a straight and policy neutral story about climate change
- need good spokespersons
- improved training of scientists in public communication