

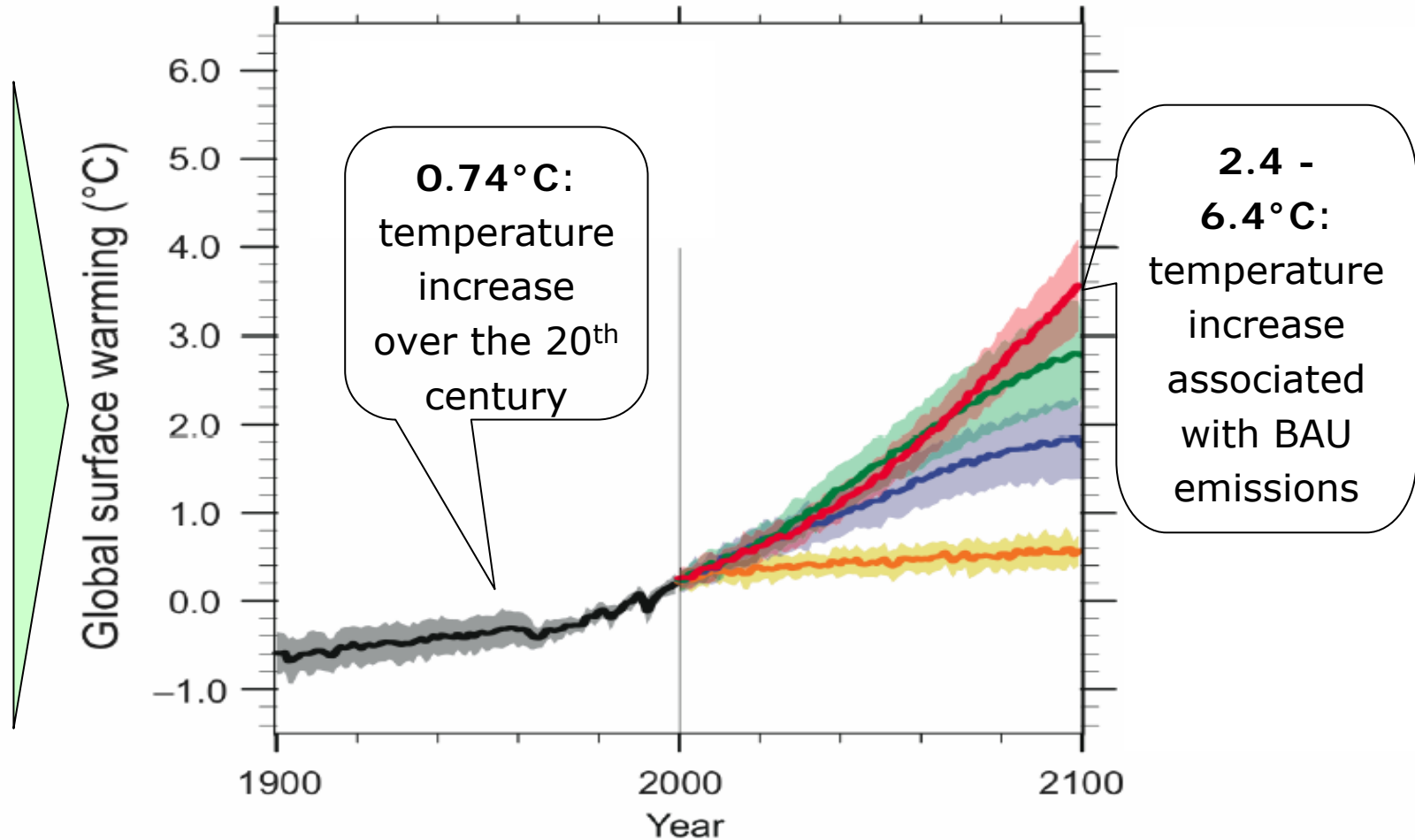
Climate change and UK policy

Jonathan Brearley

Director – Office Of Climate Change

Temperatures could rise up to 6°C by the end of the century

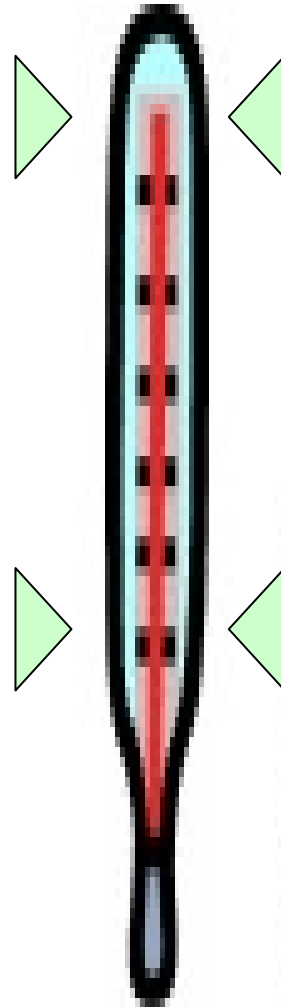
- Carbon dioxide
- Methane
- Nitrous oxide
- F gases



Unchecked, temperature rises will take us beyond the realms of human experience

By 2100, business as usual means 50:50 chance of 5°C temperature increase

By 2035, business as usual means at least 2°C warming by around the end of the century



5°C

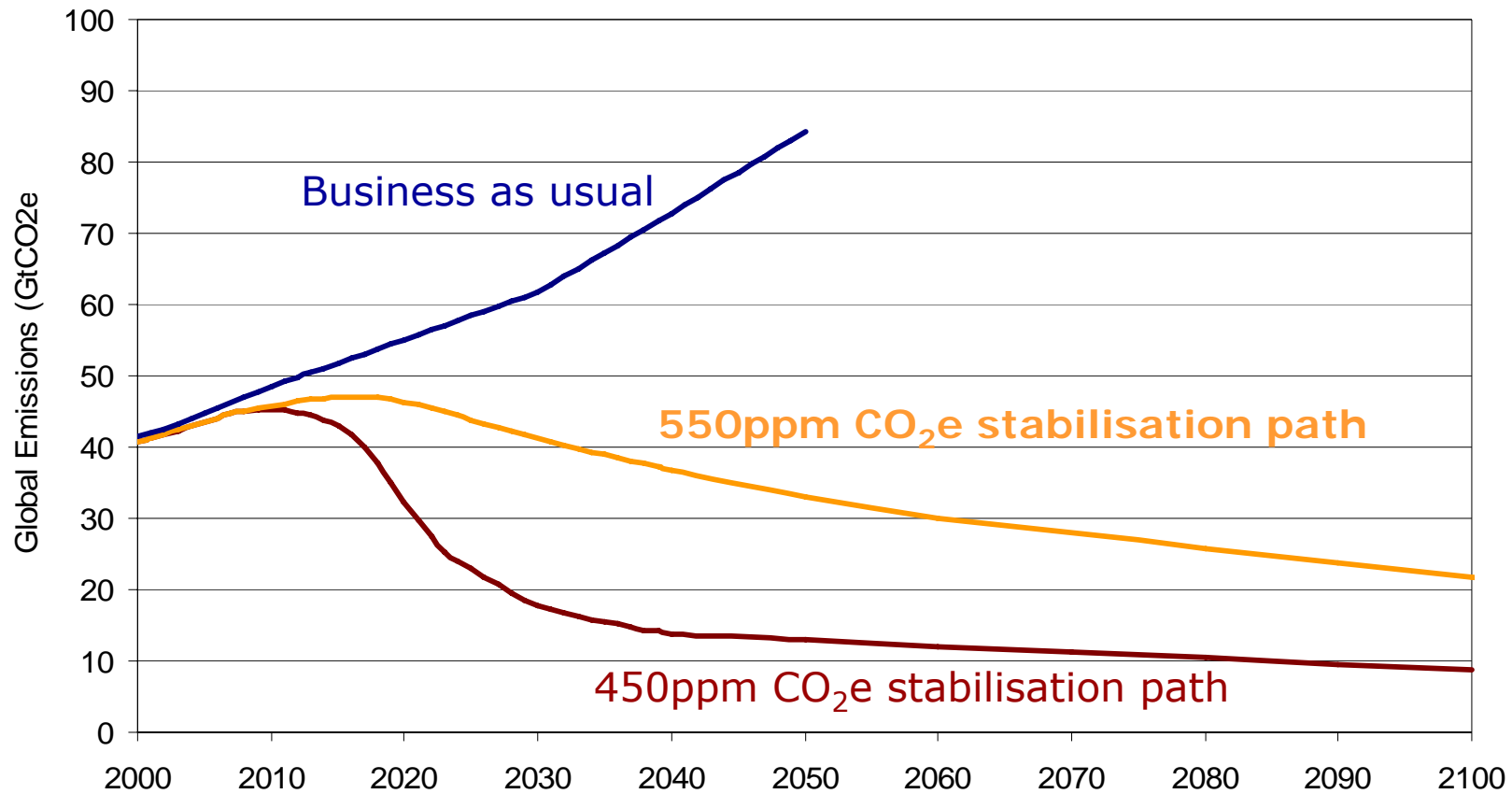
Impacts are greater and less certain:

- 150m + extra people risk hunger
- Scarce resources lead to migration and insecurity
- Sea level threatens London, New York and Tokyo.

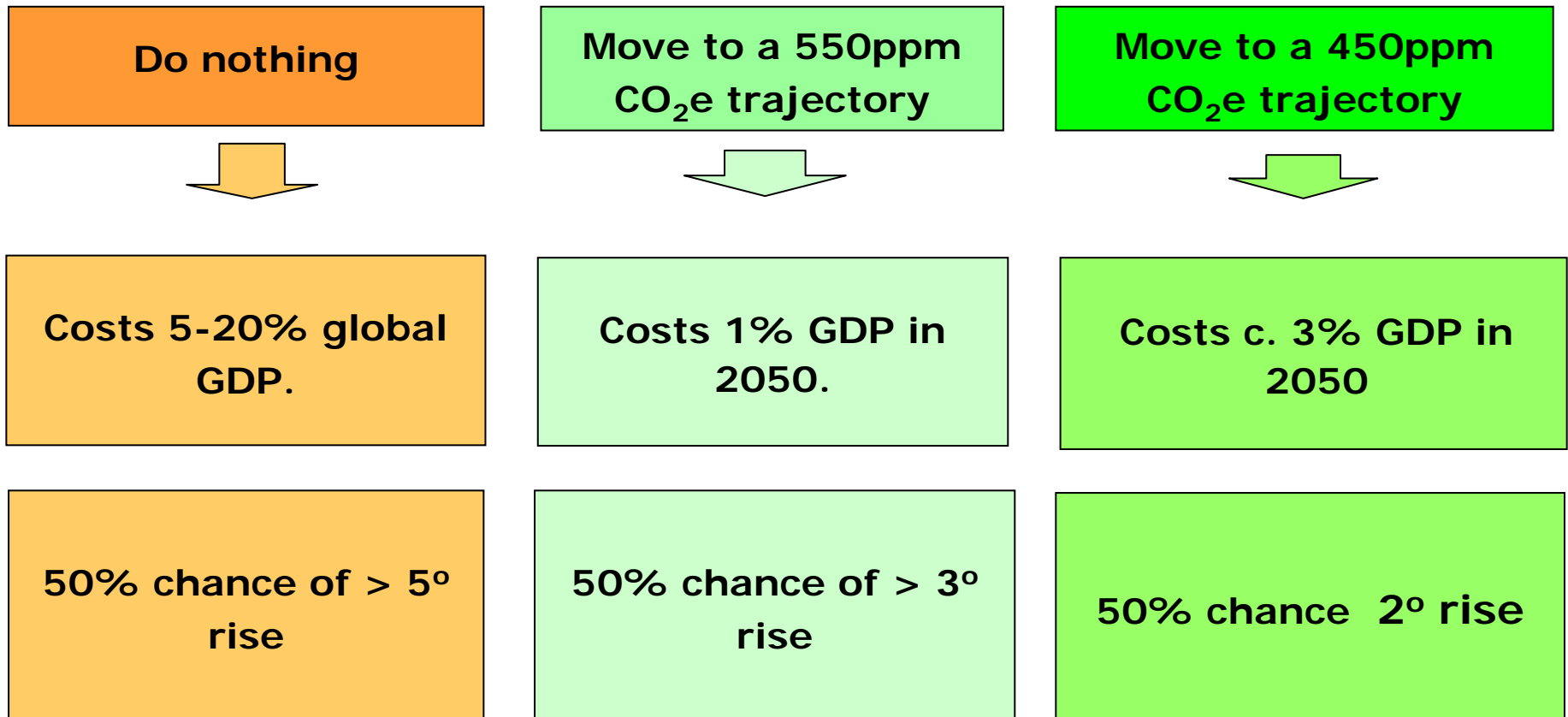
2°C

- 40-60m more people exposed to malaria in Africa.
- 15-40% of species facing extinction

To avoid the worst risks, we need to stabilise emissions at 450-550ppm CO₂e



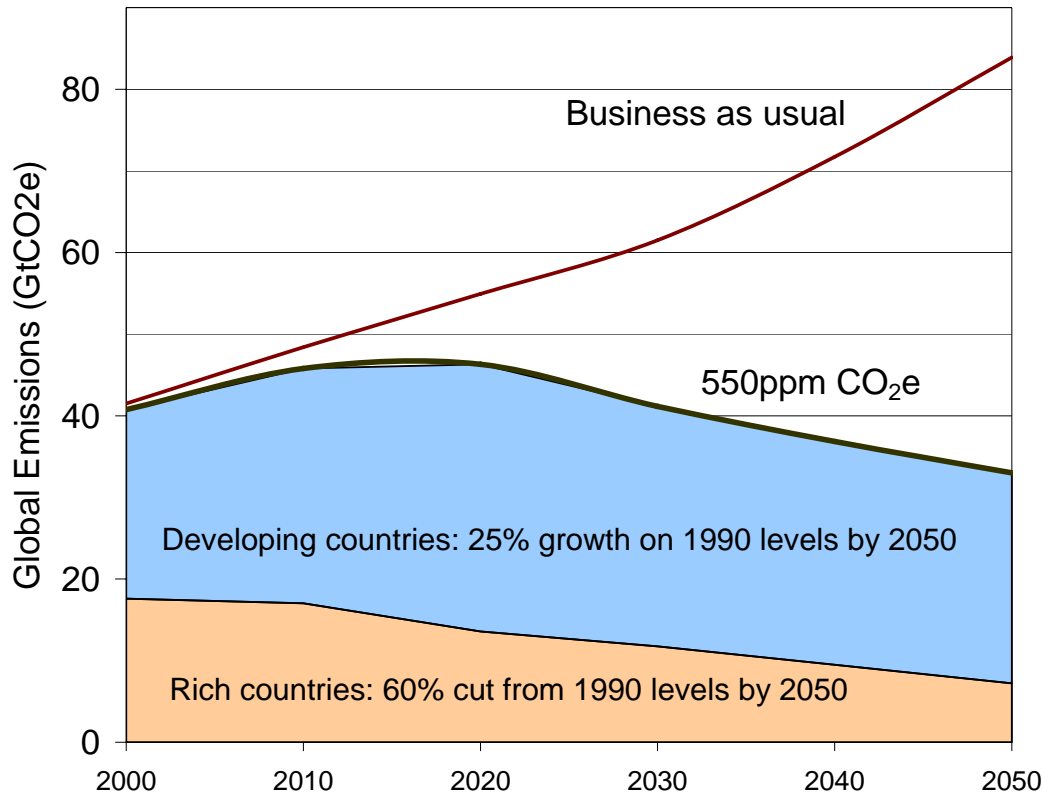
Stern has shown that doing so is cost effective relative to inaction



All temperature changes quoted are relative to pre-industrial temperature levels. ^Temperature increases by end of the next century.

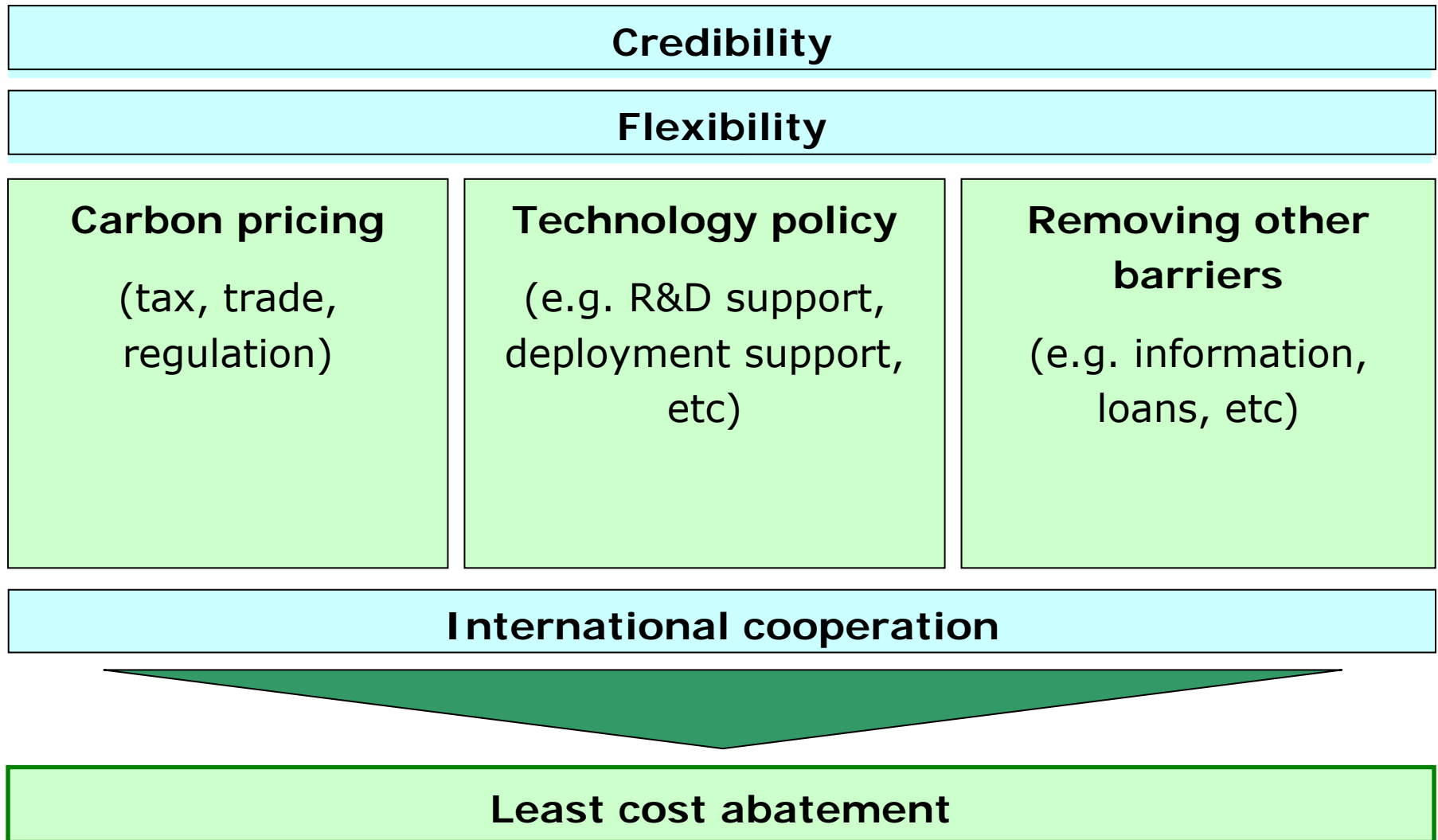
*Global income loss (5-20%) is equivalent to an "average" annual loss of GDP each year now and forever.

Developed countries will need to take a fair share of the burden



- Stern suggests that developed countries need to cut their emissions by at least 60%

Stern recommends the overarching features of mitigation policy



Globally, we are building for a robust international solution – but there is a long way to go

Achievements

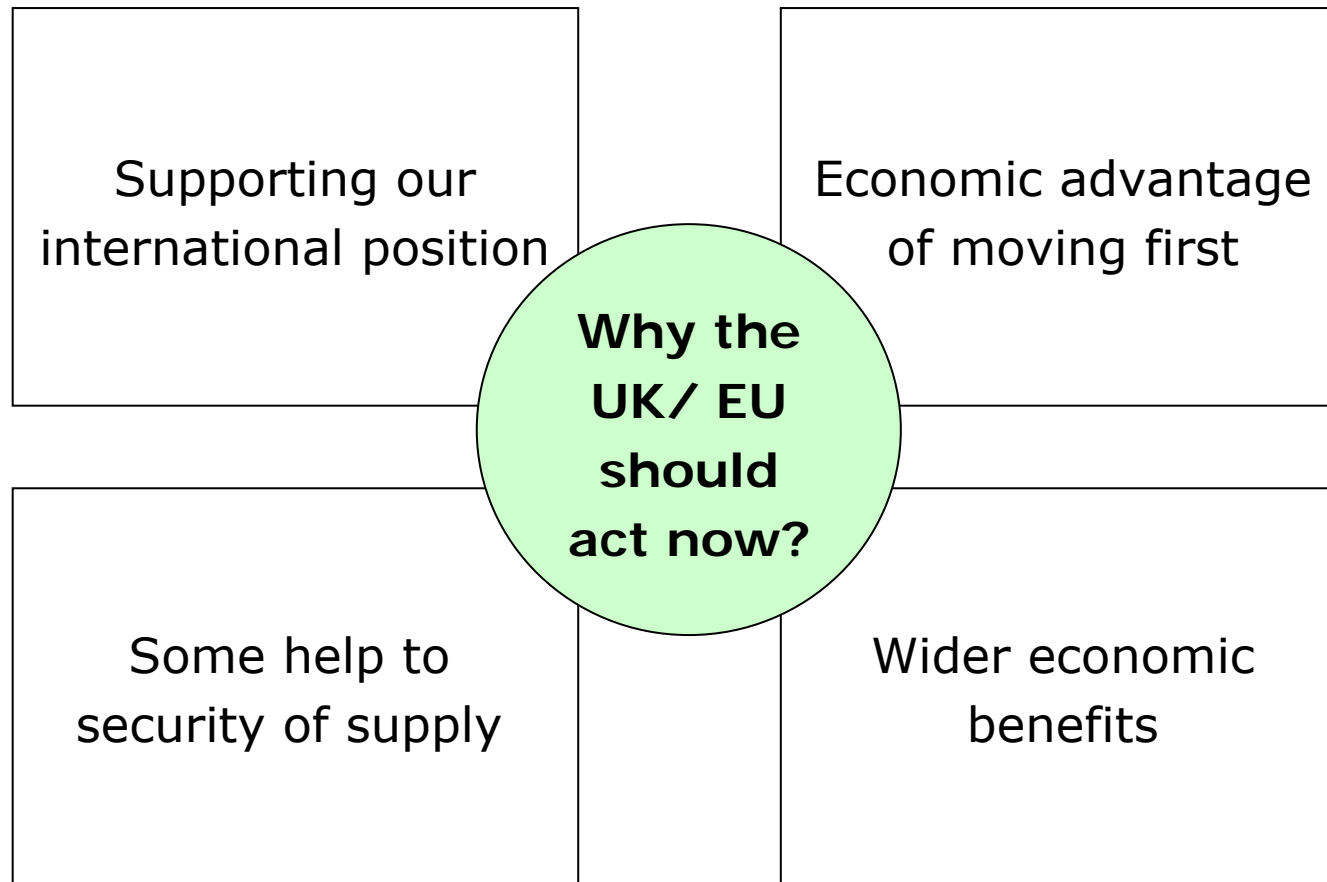
More to do

Kyoto protocol

New EU Commitments

Developing the post 2012 vision

Given climate change now – why act unilaterally now?



The Climate Change Bill and our international commitments provide a framework for action

Climate Change Bill

Climate Change Bill sets UK Framework:

- Emissions 60% below 1990 levels by 2050
- 5 year carbon budgets set on the Committee on Climate Change recommendation
- Enabling powers to roll out emissions trading
- Annual progress reporting

Our international obligations

Ambitious EU Goals:

- 20% reduction in emissions by 2020/ 30% if a robust international agreement
- 20% of all energy from renewable sources
- 20% increase in energy efficiency

Kyoto Goals: UK will go further

At the heart of our strategy is a successful EU Emissions Trading Scheme

European Commission/Member States allocate emissions allowances to participating emitters, and oversee scheme

Emitter A finds it expensive to abate to its allowance level

Trading

Emitter B finds it cheap to abate

However – this is not sufficient – there is more we need to do to tackle wider sectors and barriers

Sector Major emission savings policies

Energy
Supply

EU Emissions trading scheme (2008-12)
Renewables Obligation – Focussed on electricity supply

Business

Climate Change Levy -Tax on energy use in industry, business and the public sector.
Climate Change Agreement – reduction in CCL for those who meet challenging targets

Transport

EU Voluntary Agreements/ moving to obligations? - Voluntary agreement to improve engine efficiency – moving to mandatory standard?
Renewable Transport Fuel Obligation – Increases renewable transport fuels

Domestic

Supplier Obligation* - Electricity and gas suppliers are required to achieve targets for the promotion of energy efficiency improvements in the domestic sector.
Promoting tougher EU standards (e.g. lightbulbs)

Our challenge is to ensure we meet our new goals and to continue to push international progress

Continuing to push internationally

Cost effectively meeting our commitments

Working towards a robust 2012 framework

Delivering change across the UK economy

Questions for you to consider

- Do you agree with a rationale that supports any unilateral action?
- What are the risks of delivering our shared ambitious goals?
- How should the UK and Germany work together on a huge and shared agenda?