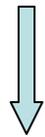
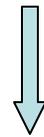


A shared vision:  
Towards a fair and sustainable  
climate deal

$$G = AI + \text{non-AI}$$



\$A



\$M

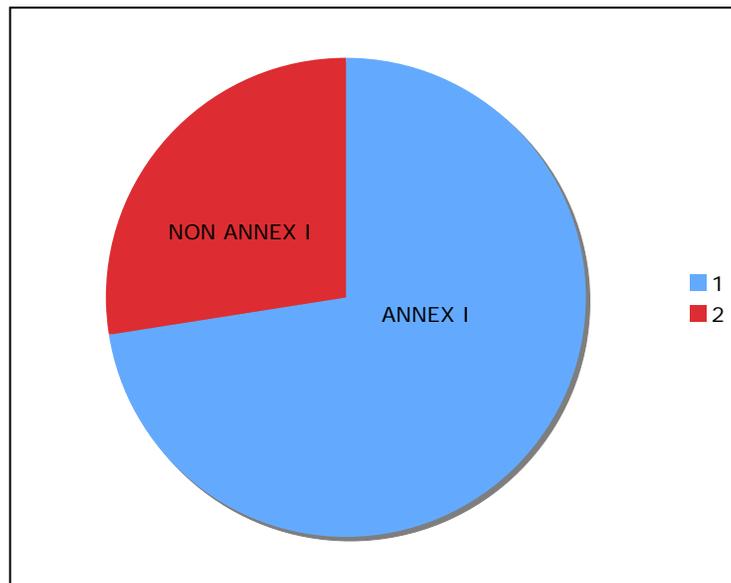
G: Global emissions

AI: Annex I emissions

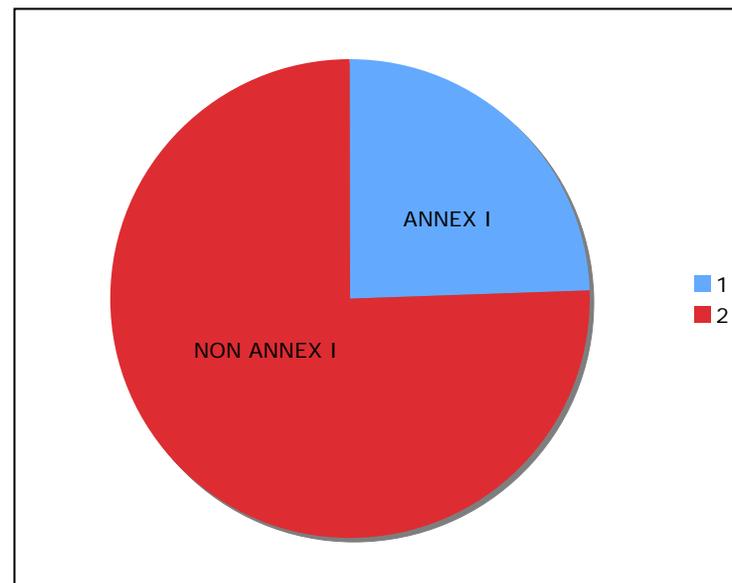
non-AI: non-Annex I emissions

# Past emissions

- Actual emissions 1850-2008

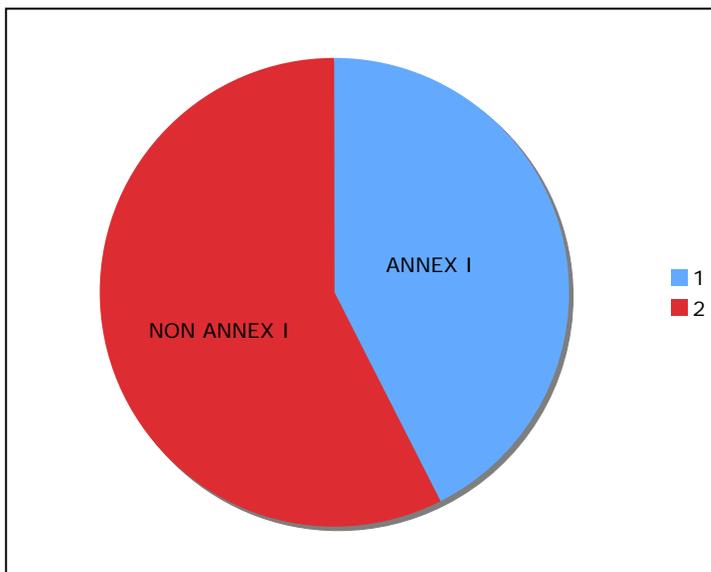


- Equal individual shares

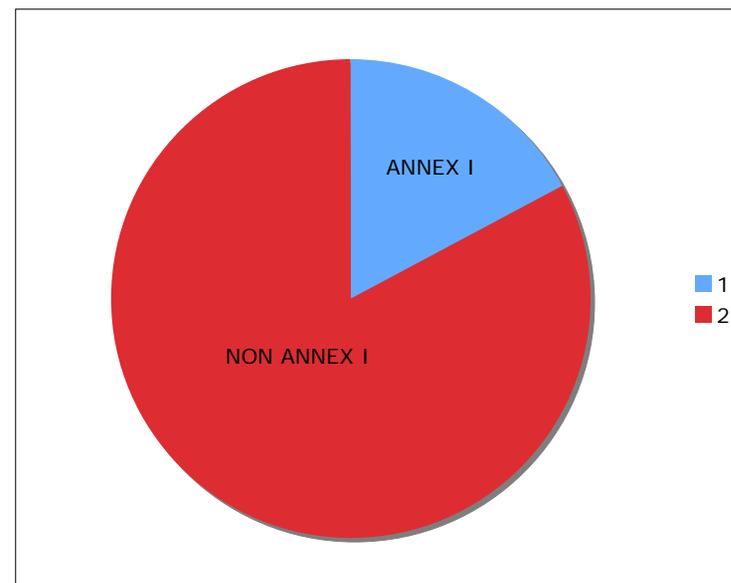


# Proposed emissions

- Proposed emissions 2009-2050

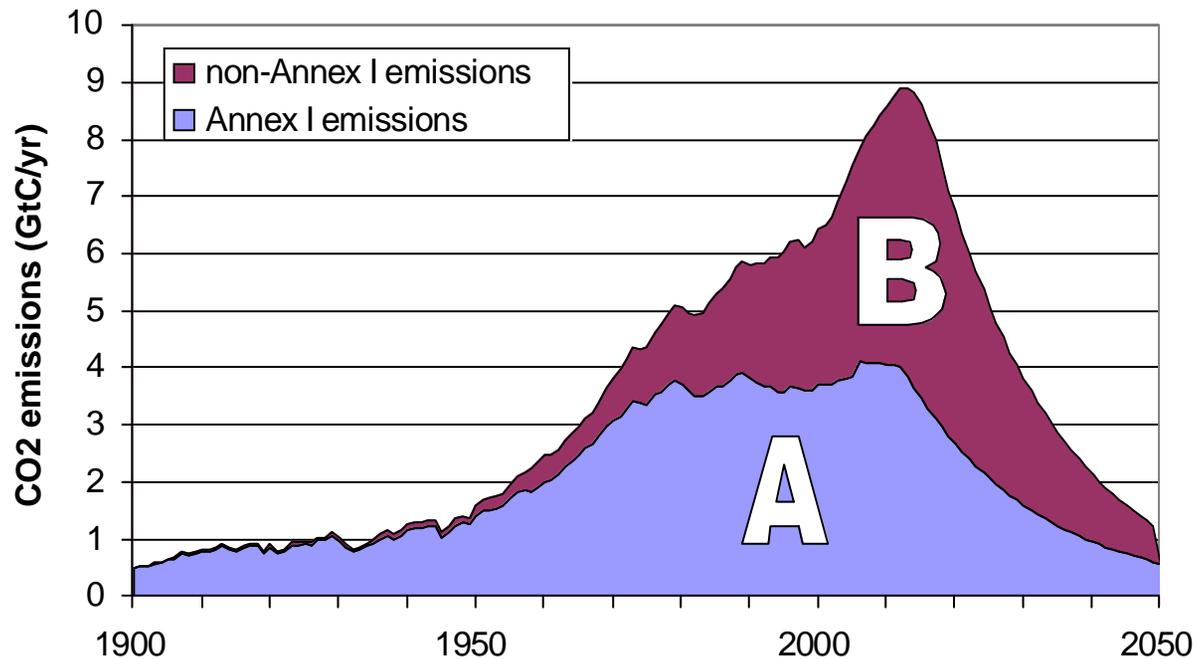


- Equal individual shares



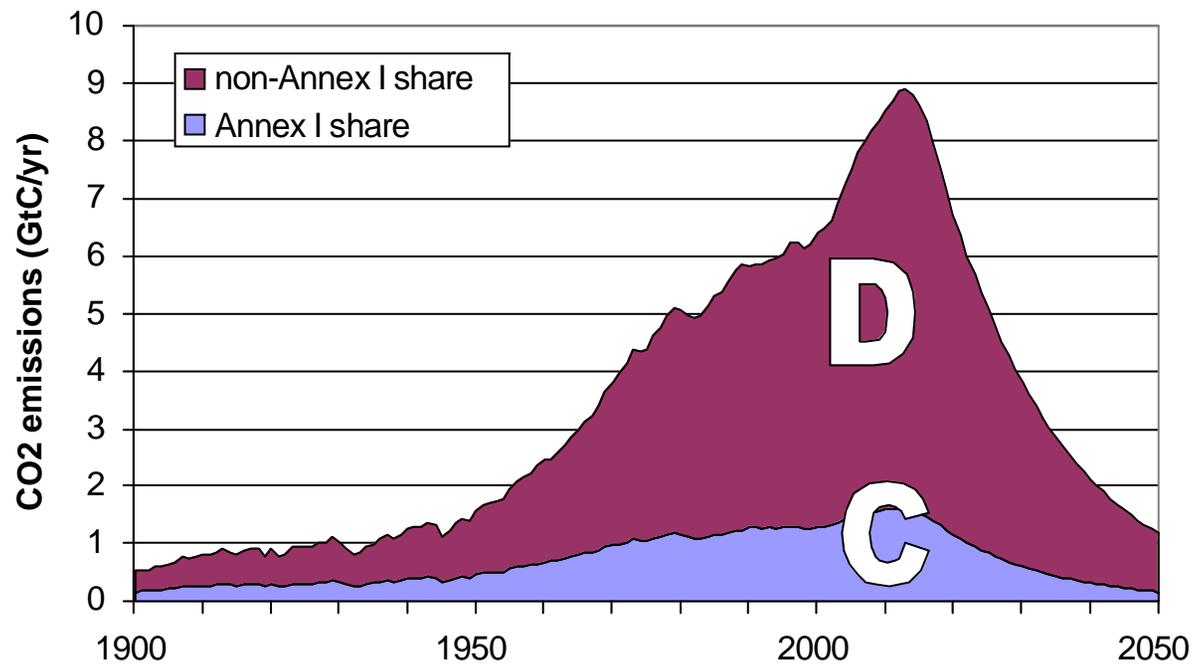
# Actual and proposed emissions

Annual emissions with 80% global reductions by 2050  
(historic emissions and 85% reduction by 2050 by Annex 1)



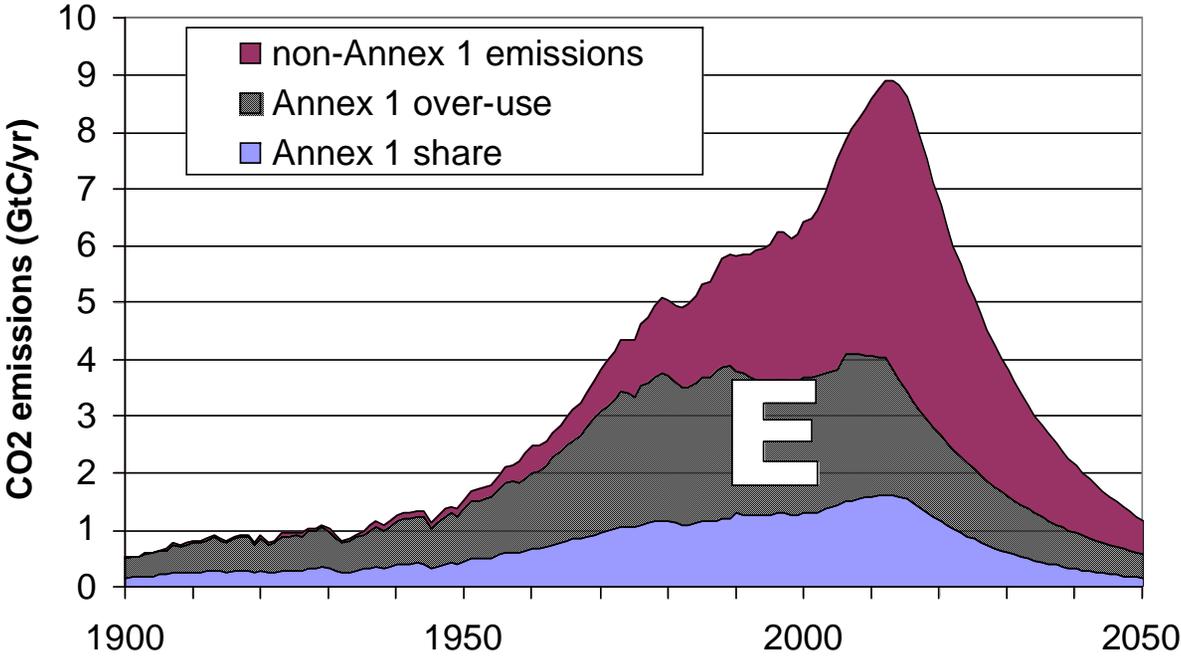
# Equal per capita shares

Annual emissions with 80% reductions by 2050  
(equal per capita shares)



# Over-use by Annex I countries

Annual emissions with 80% global reductions by 2050  
(showing Annex 1 over-use)



# Per capita emission since 1850

QuickTime™ and a  
decompressor  
are needed to see this picture.

# Per capita emissions today

QuickTime™ and a  
decompressor  
are needed to see this picture.

# Allocation studies

**Box 13.7 The range of the difference between emissions in 1990 and emission allowances in 2020/2050 for various GHG concentration levels for Annex I and non-Annex I countries as a group<sup>a</sup>**

Scenario category	Region	2020	2050
<i>A-450 ppm CO<sub>2</sub>-eq<sup>b</sup></i>	Annex I	-25% to -40%	-80% to -95%
	Non-Annex I	Substantial deviation from baseline in Latin America, Middle East, East Asia and Centrally-Planned Asia	Substantial deviation from baseline in all regions
<i>B-550 ppm CO<sub>2</sub>-eq</i>	Annex I	-10% to -30%	-40% to -90%
	Non-Annex I	Deviation from baseline in Latin America and Middle East, East Asia	Deviation from baseline in most regions, especially in Latin America and Middle East
<i>C-650 ppm CO<sub>2</sub>-eq</i>	Annex I	0% to -25%	-30% to -80%
	Non-Annex I	Baseline	Deviation from baseline in Latin America and Middle East, East Asia

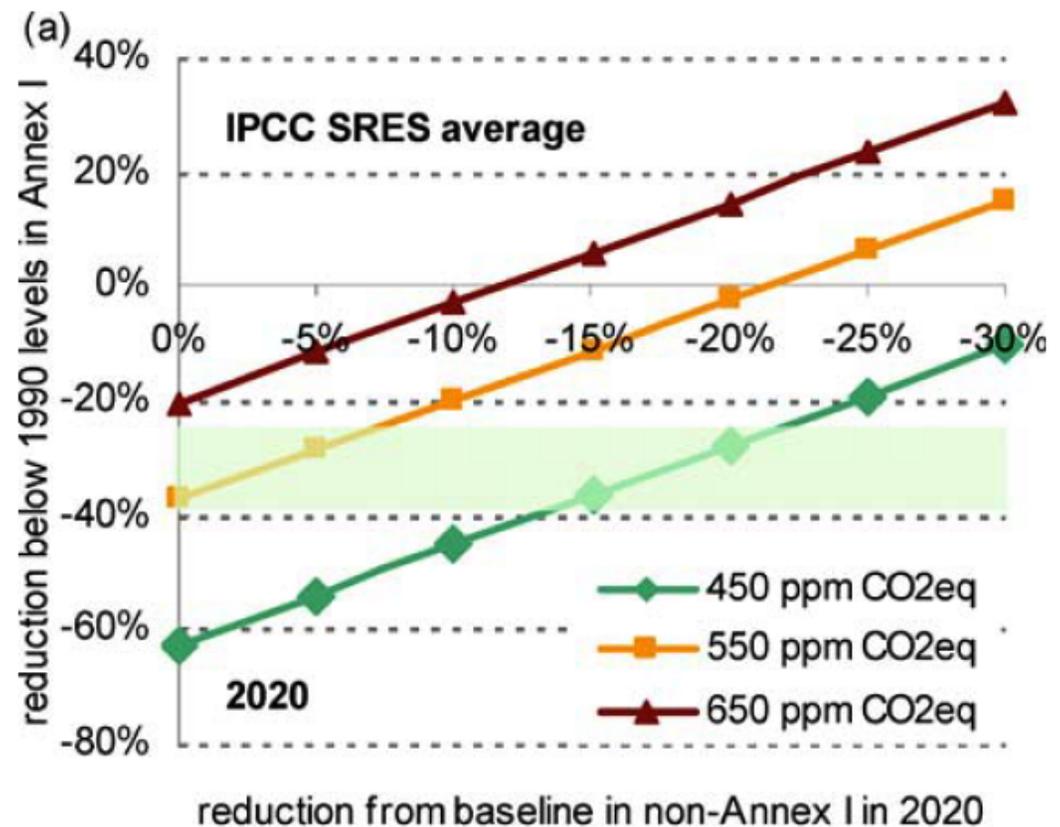
**Notes:**

- <sup>a</sup> The aggregate range is based on multiple approaches to apportion emissions between regions (contraction and convergence, multistage, Triptych and intensity targets, among others). Each approach makes different assumptions about the pathway, specific national efforts and other variables. Additional extreme cases – in which Annex I undertakes all reductions, or non-Annex I undertakes all reductions – are not included. The ranges presented here do not imply political feasibility, nor do the results reflect cost variances.
- <sup>b</sup> Only the studies aiming at stabilization at 450 ppm CO<sub>2</sub>-eq assume a (temporary) overshoot of about 50 ppm (See Den Elzen and Meinshausen, 2006).

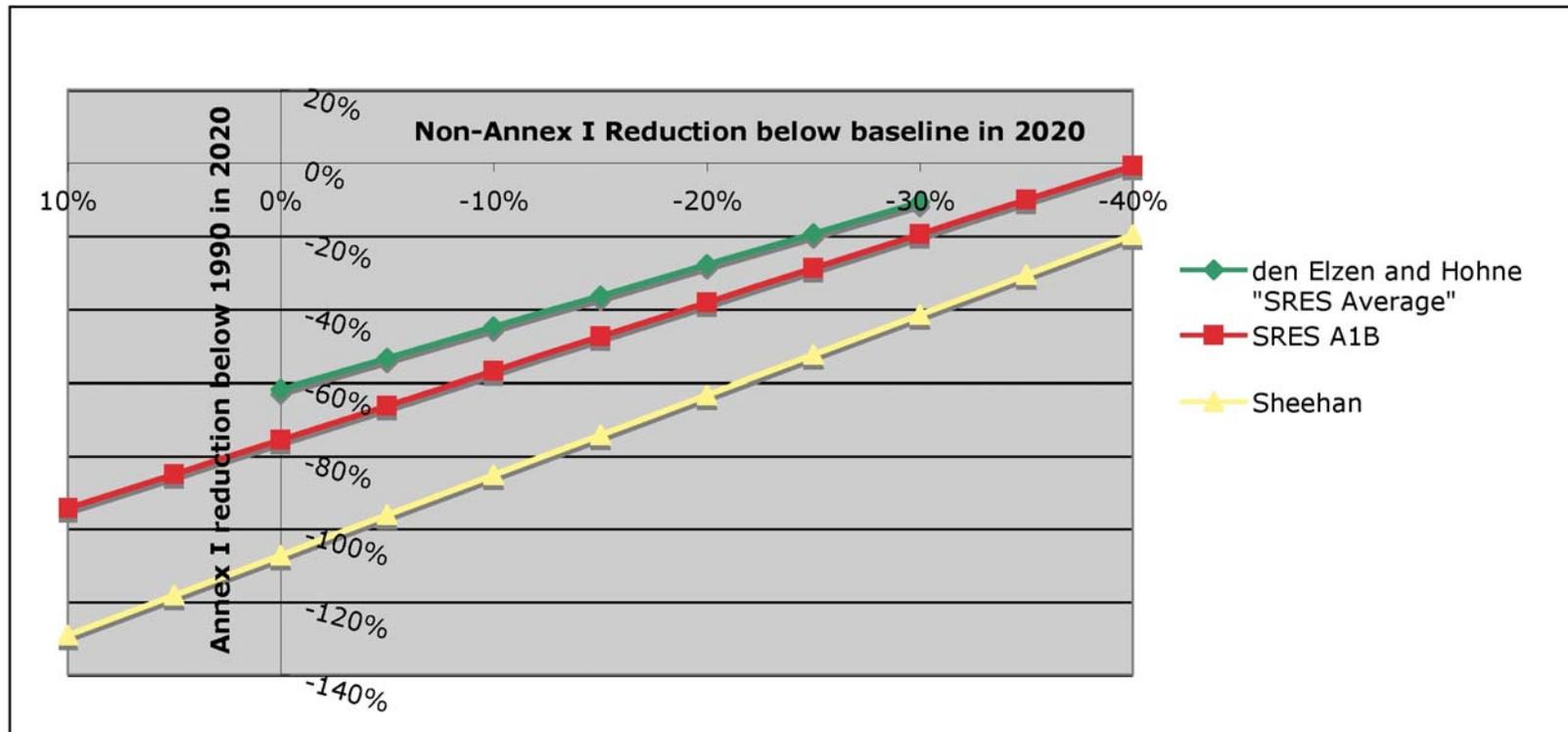
Source: See references listed in first paragraph of Section 13.3.3.3

# Tradeoff in allocations

**Fig. 2** The trade-off in reductions in 2020 (a) and 2050 (b), in Annex I and non-Annex I countries as a group, for three concentration stabilisation levels. The numbers represent the averaged outcome over separate calculations for each of the six IPCC SRES baselines (IPCC SRES average). The figure also depicts the reduction ranges for Annex I countries for 450 ppm CO<sub>2</sub>-eq as reported in IPCC Box 13.7



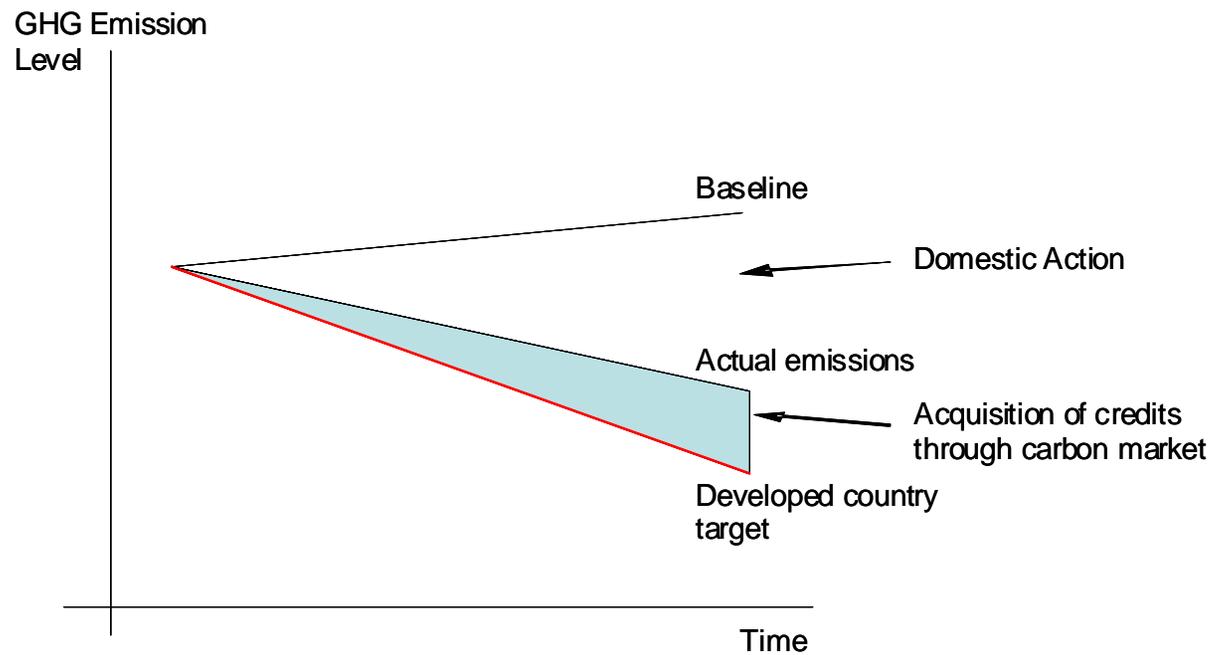
# Alternative tradeoff scenarios



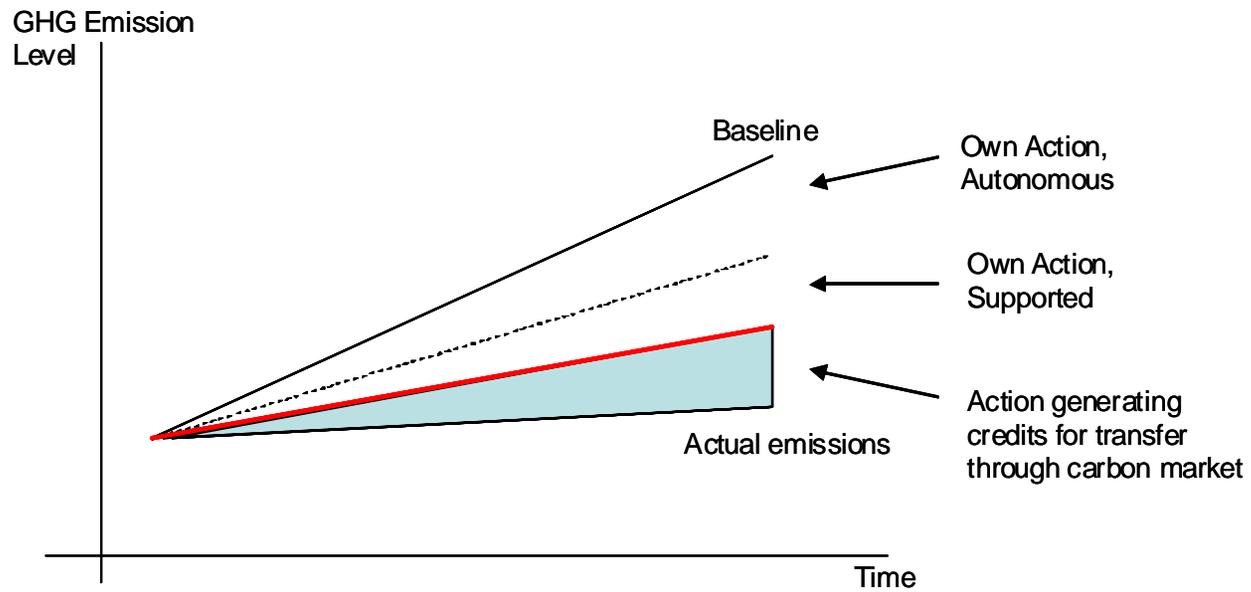
# EU on burden sharing

- The EU's agreed objective is to limit the average global temperature increase to less than 2C compared to pre-industrial levels.
- To have a reasonable chance of staying below the 2C threshold, global GHG emissions must be reduced to less than 50% of 1990 levels by 2050.
- The 4th Assessment report by the Intergovernmental Panel on Climate Change (IPCC) indicates that this would require emission reductions for developed countries in the range of 25-40% by 2020 and 80-95% by 2050.
- To meet the 2C objective, a recent scientific report indicates that developing countries, as a group, will need to limit the rise in their GHG emissions through nationally appropriate actions to 15-30% below baseline by 2020.

# EU Approach: Annex I



# EU Approach: Non-Annex I



# Developing countries on burden sharing

- Contribution to temperature increase (Brazil)
- Cumulative per-capita emissions (China)
- Emission reduction with constant welfare (Algeria)
- Climate debt (Bolivia)