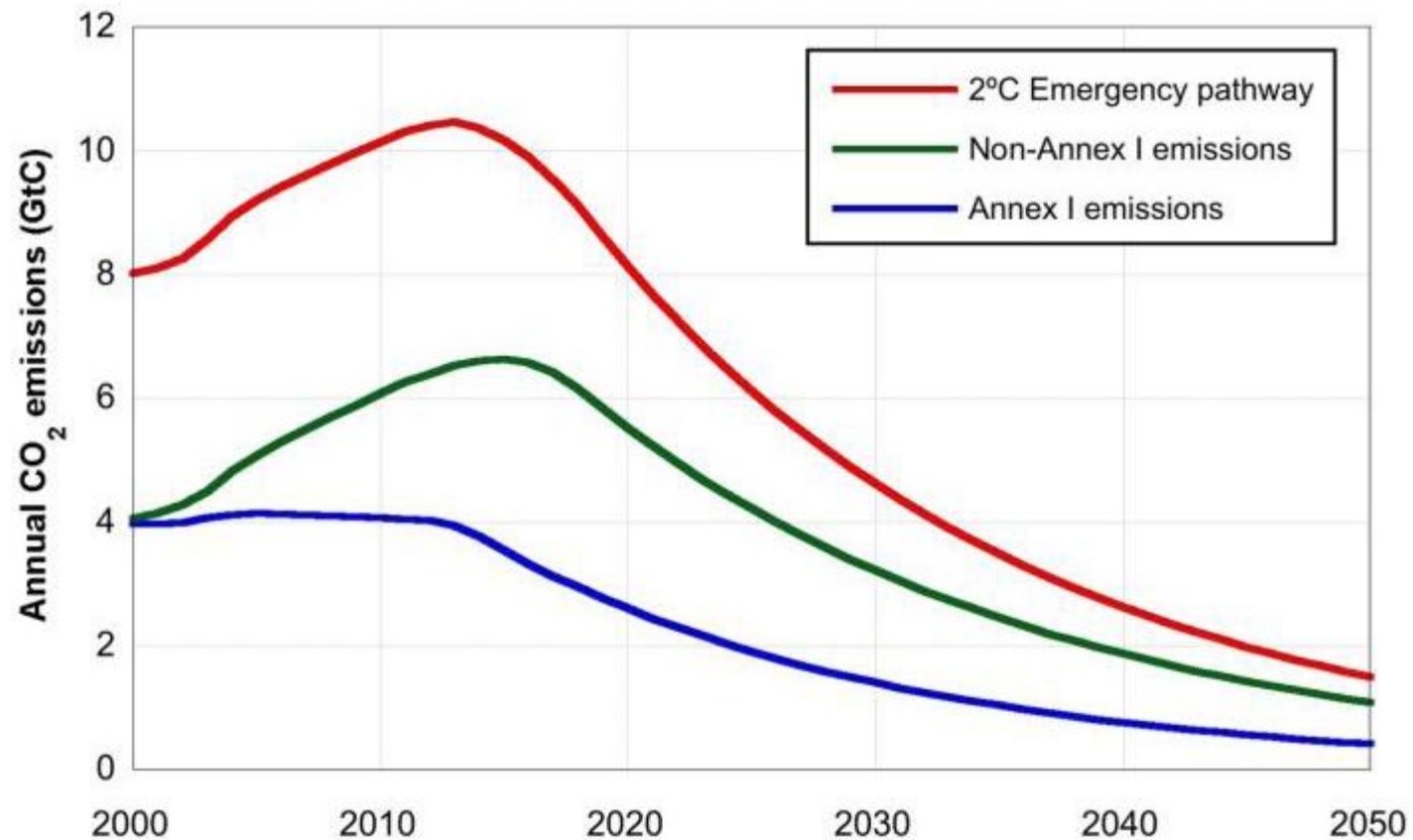


Greenhouse development rights

The Right to Development in a
Climate Constrained World

A framework by Ecoequity and
Swedish Environment Institute

- Developed by Ecoequity and Stockholm Environment Institute with the support of Heinrich Böll Foundation and Christian Aid
- A framework designed to illustrate a rapid climate stabilization program while conserving the right to a dignified level of sustainable human development free of poverty
- Source: Greenhouse Development Rights, Paul Baer et al. 2008
- <http://www.ecoequity.org/GDRs>



Source: Bauer et al. 2008

Figure 2: The South's Dilemma. The red line shows a 2°C emergency stabilization pathway, in which global CO₂ emissions peak in 2013 and fall to 80% below 1990 levels in 2050. The blue line shows Annex 1 emissions declining to 90% below 1990 levels in 2050. The green line shows, by subtraction, the emissions space that would remain for the developing countries. (Note that the Y-axis is in gigatonnes of carbon, not carbon dioxide, and represents CO₂ only. The all greenhouse-gas figure would be about 30% higher.)

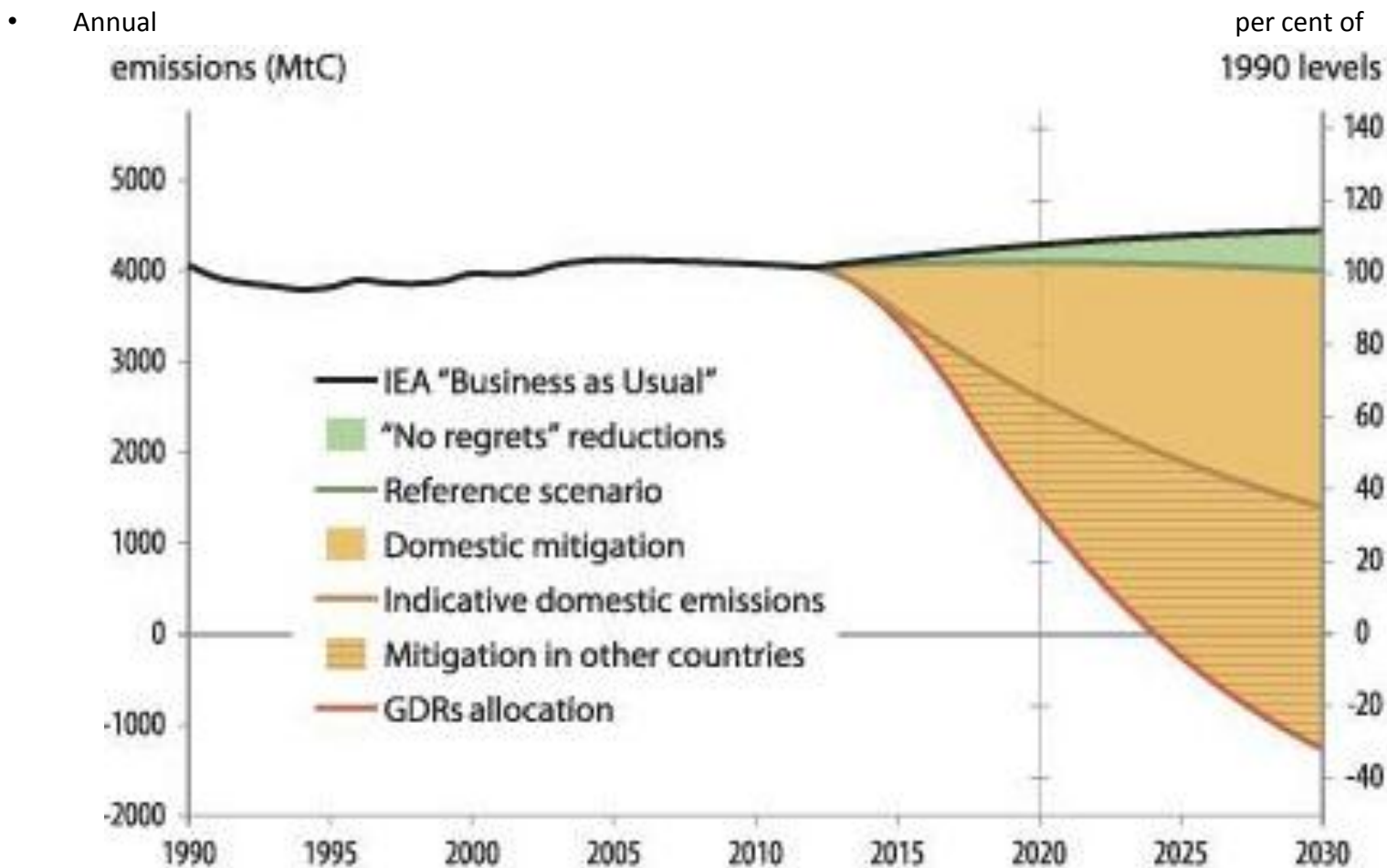
GDR results for representative countries and groups

	2010					2020	2030
	Population	GDP	Capacity	Responsibility	RCI	RCI	RCI
USA	4.5	20.9	29.7	36.4	33.1	29.1	25.4
EU (27)	7.3	22.4	28.8	22.6	25.7	22.8	19.6
China	19.7	11.7	5.8	5.2	5.5	10.4	15.3
India	17.2	4.9	0.7	0.3	0.5	1.2	2.3
LDCs	11.7	1.5	0.11	0.04	0.07	0.1	0.12
Annex 1	18.7	58.3	75.8	78	76.9	69.0	60.9
Non-Annex 1	81.3	41.7	24.2	22	23.1	31.0	39.1
Global Total	100%	100%	100%	100%	100%	100%	100%

Percentage shares of total global population, GDP, capacity, responsibility, and RCI for selected countries and groups of countries, based on projected emissions and income for 2010, 2020, and 2030. Source: Baer et al. 2008.

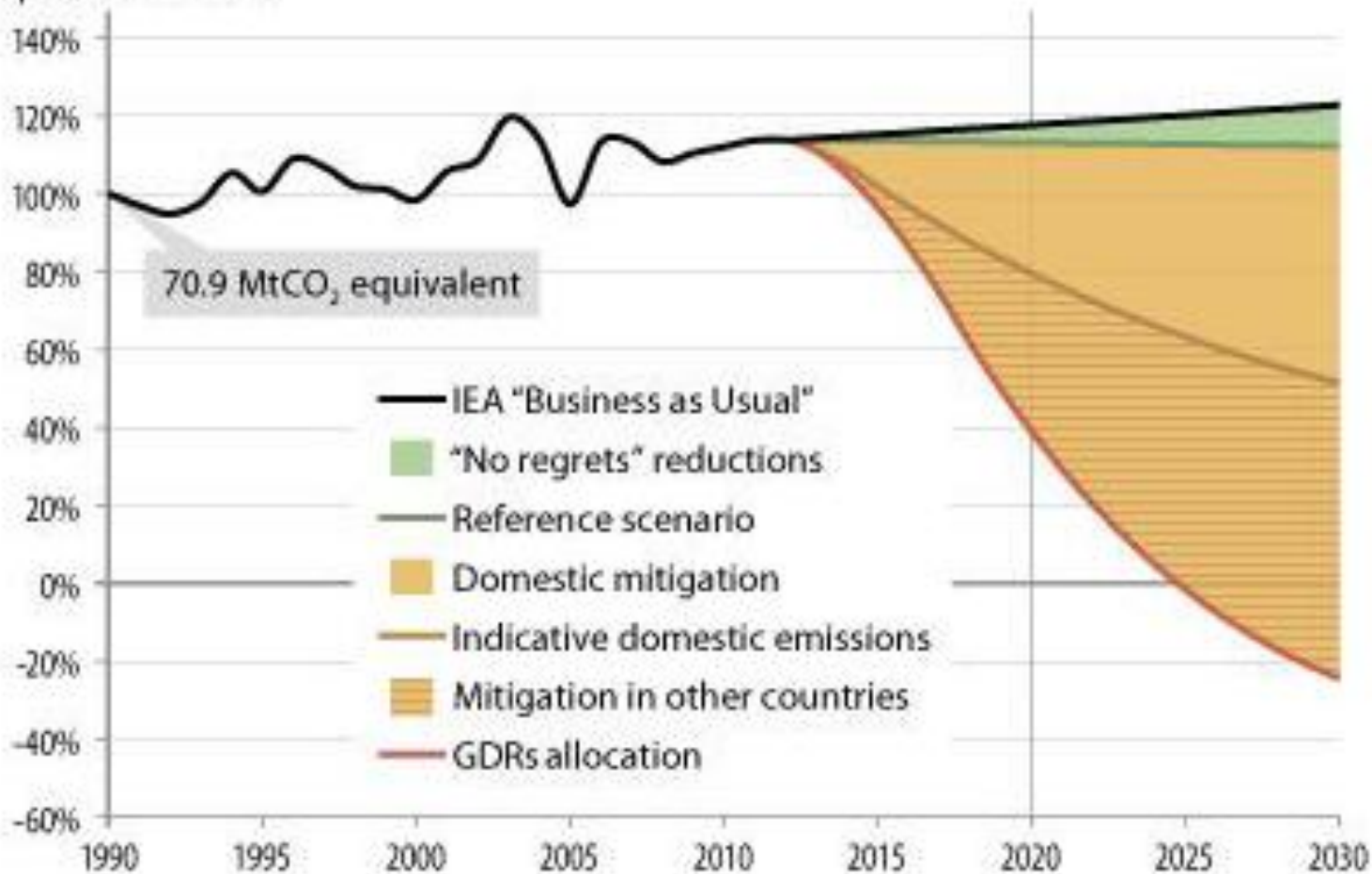
Annex 1 mitigation obligations, as calculated by the GDRs framework in a way consistent with an overall a 2°C emergency stabilization pathway (shown in red). This mitigation obligation is shown divided into a domestic (yellow) mitigation obligation and a (striped) international obligation.

The GDRs framework does not, in itself, specify what fraction of a country’s obligation should be met domestically, and what fraction internationally. Here we set Annex 1 domestic reductions so as to put it on a path that would reduce its domestic emissions by 90% relative to 1990 in 2050.



Source: Bauer et al. 2008

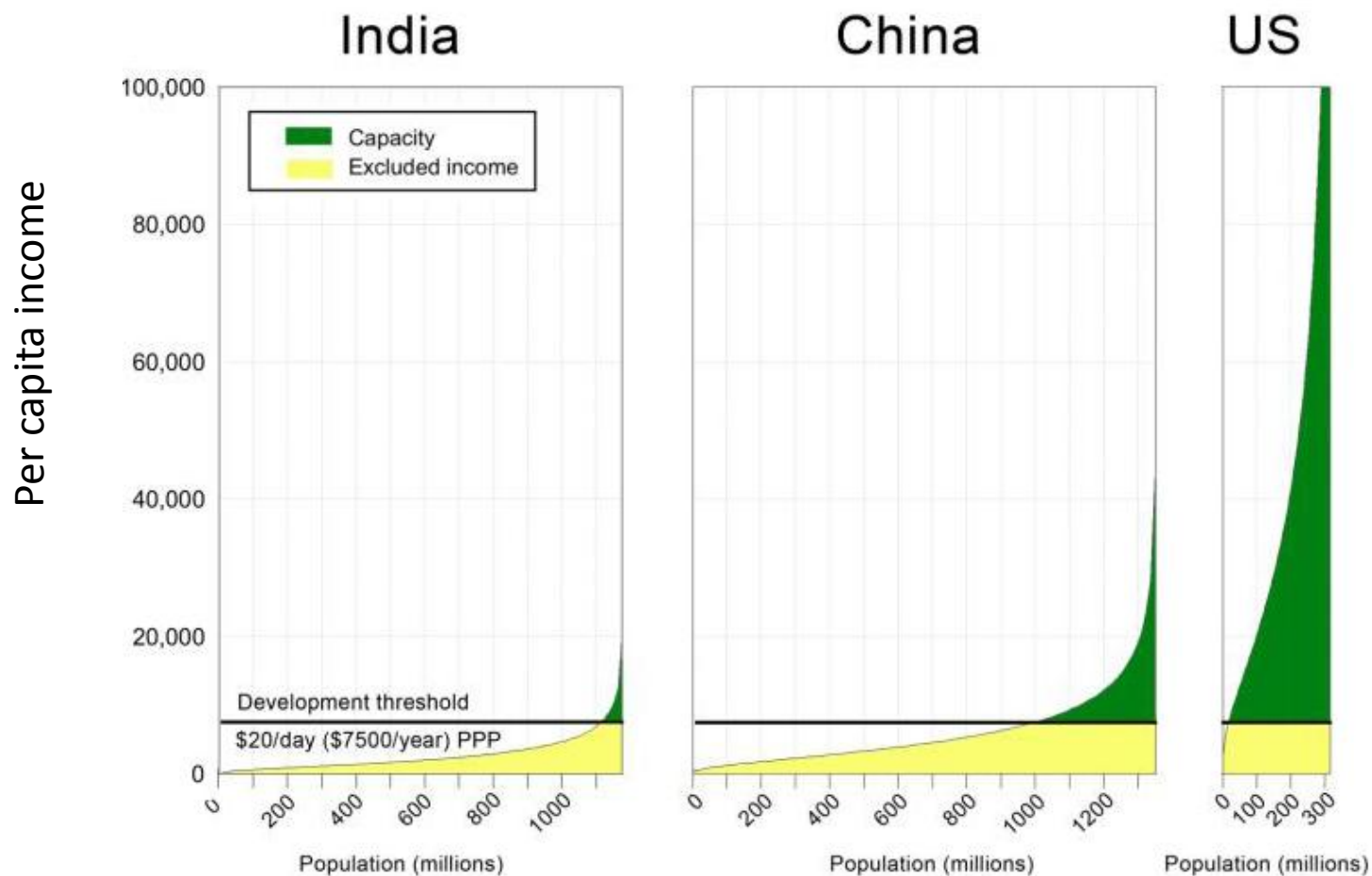
Annual GHG emissions
percent of 1990



Source: Bauer et al. 2008

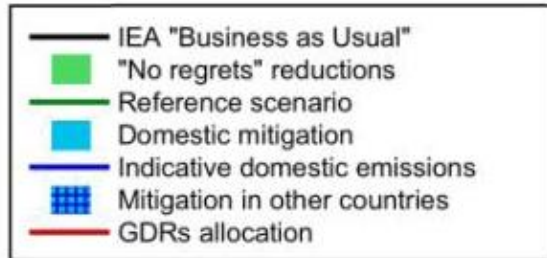
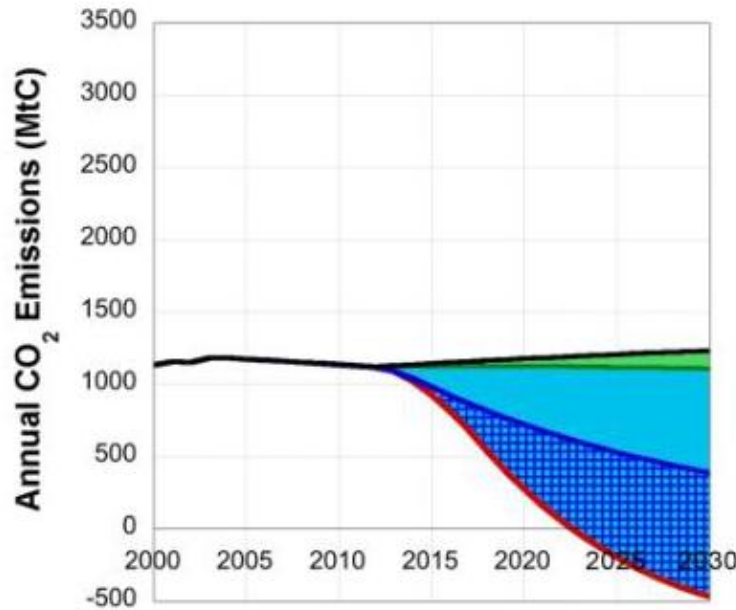
- Example: Finland's mitigation obligation, as calculated by the Greenhouse Development Rights framework, consistent with an overall 2°C stabilization pathway.
- Mitigation obligation reaches 60% below 1990 levels by 2020. The solid tan area represents the domestic mitigation obligation and the striped tan area an international obligation.

The green areas represent national incomes above the (\$20 per person per day, PPP) development threshold, GDR definition of national capacity.

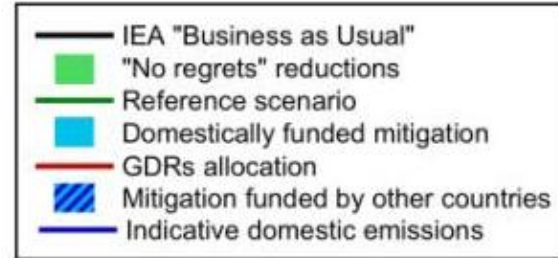
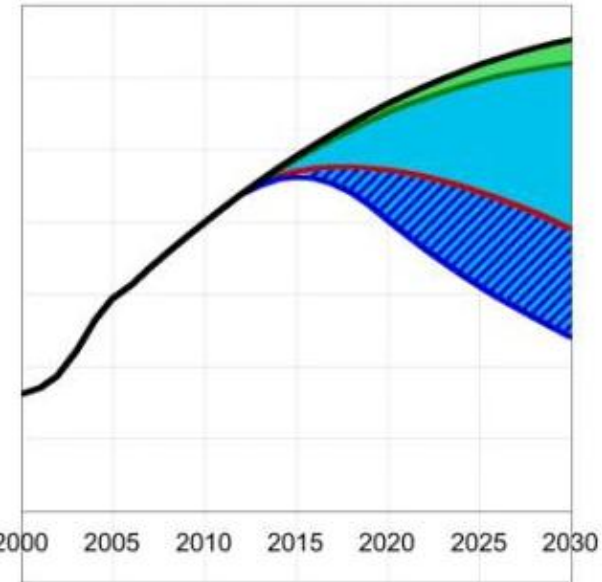


Source: Bauer et al. 2008

GDRs EU obligations



A GDRs China pathway.



Source: Bauer et al. 2008

The relevance to the negotiations

- GDR is a principle-based model to limit warming below 2 degrees
- Principles OR parties' pledges as the basis for effort sharing?
- Other models