

The Right to Development in a Climate Constrained World

The Greenhouse Development Rights Framework

Sivan Kartha

Stockholm Environment Institute

Paul Baer

Tom Athanasiou

EcoEquity



10 December, 2007
COP-13, Bali, Indonesia

Acknowledgements

The Right to Development in a Climate Constrained World: The Greenhouse Development Rights Framework

- **Collaborator**

- Eric Kemp-Benedict (SEI)

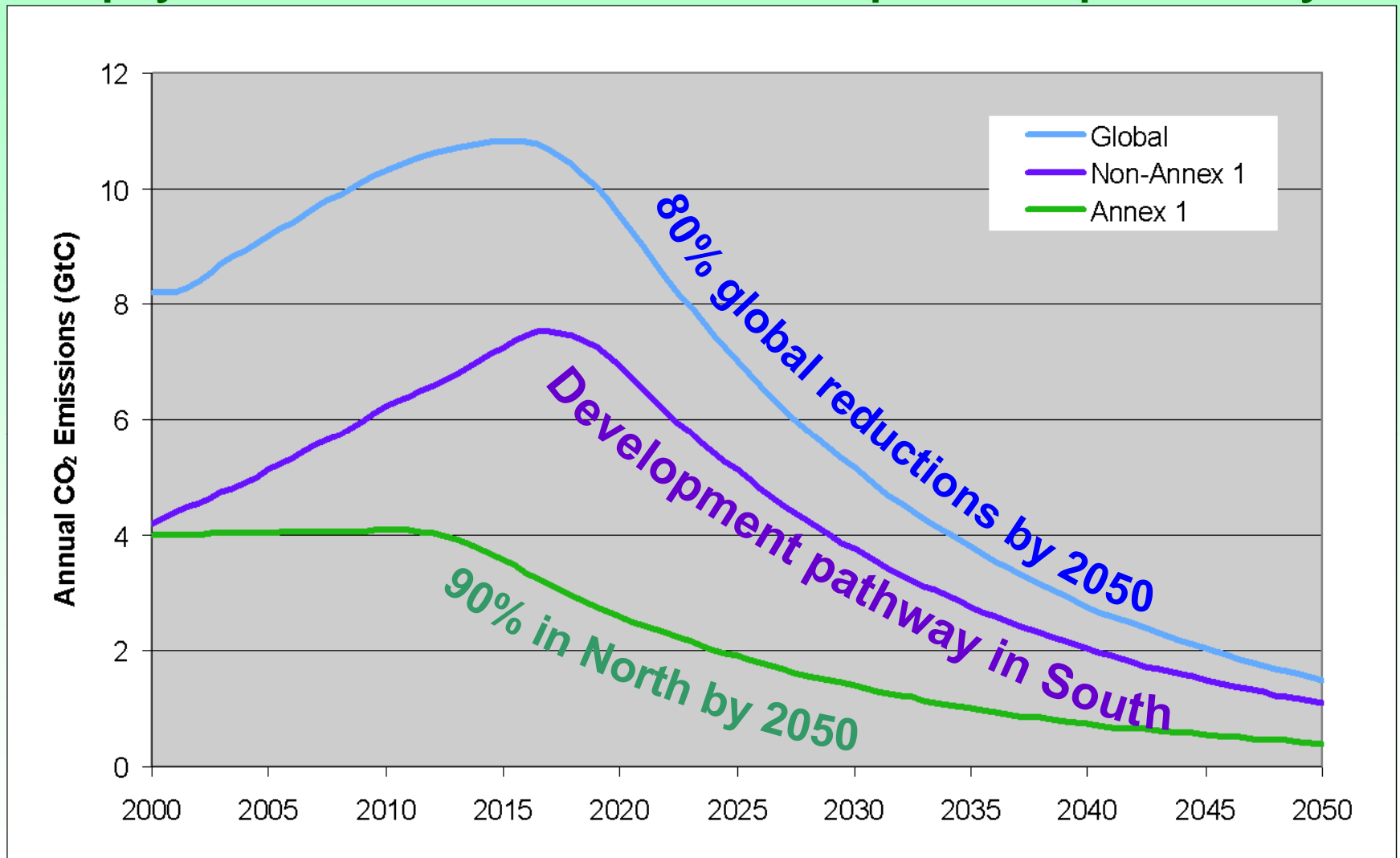


- **Support**

- Heinrich Böll Foundation (Germany)
- Christian Aid (UK)
- Mistra - Foundation for Strategic Environmental Research (Sweden)



What does an “Emergency Climate Program” imply for the South’s development pathway?



What kind of climate regime can enable this to happen...?

... in the midst of a development crisis?

- 2 billion people are without access to clean cooking fuels
- More than 1.5 billion without electricity
- More than 1 billion people have inadequate access to fresh water
- Approximately 800 million people are chronically undernourished
- 2 million children die per year from diarrhea
- HIV/AIDS kills 6,000 people each day and another 8,200 people are infected.

A viable climate regime must...

- Ensure mitigation consistent with an **emergency climate stabilization program globally**
- Enable the depth and extent of adaptation **inevitably needed**
- While at the same time safeguarding the **right to development**

A “Greenhouse Development Rights” approach

- Asserts a *development threshold*
- Assigns national obligations “progressively” in terms of that threshold
- Obliges people (whether in the North or the South) with incomes and emissions *above* the threshold to *pay the full costs* of mitigation and adaptation
- Allows people with incomes and emissions *below* the threshold to *prioritize development*

Development threshold?

What should a “Right to Development” preserve?

- Traditional poverty line: \$1/day? ...\$2/day?
(World Bank’s “destitution line” and “extreme poverty line”)
- \$16/day?
(Global poverty line after Pritchett (2006))
- Let’s say: \$25/day (PPP \$9,000/yr)
(~150% × global poverty line, PPP-adjusted)

Quantifying Obligations based on Capacity and Responsibility

Obligation: National share of global mitigation and adaptation burdens

Capacity: resources to pay w/o sacrificing necessities

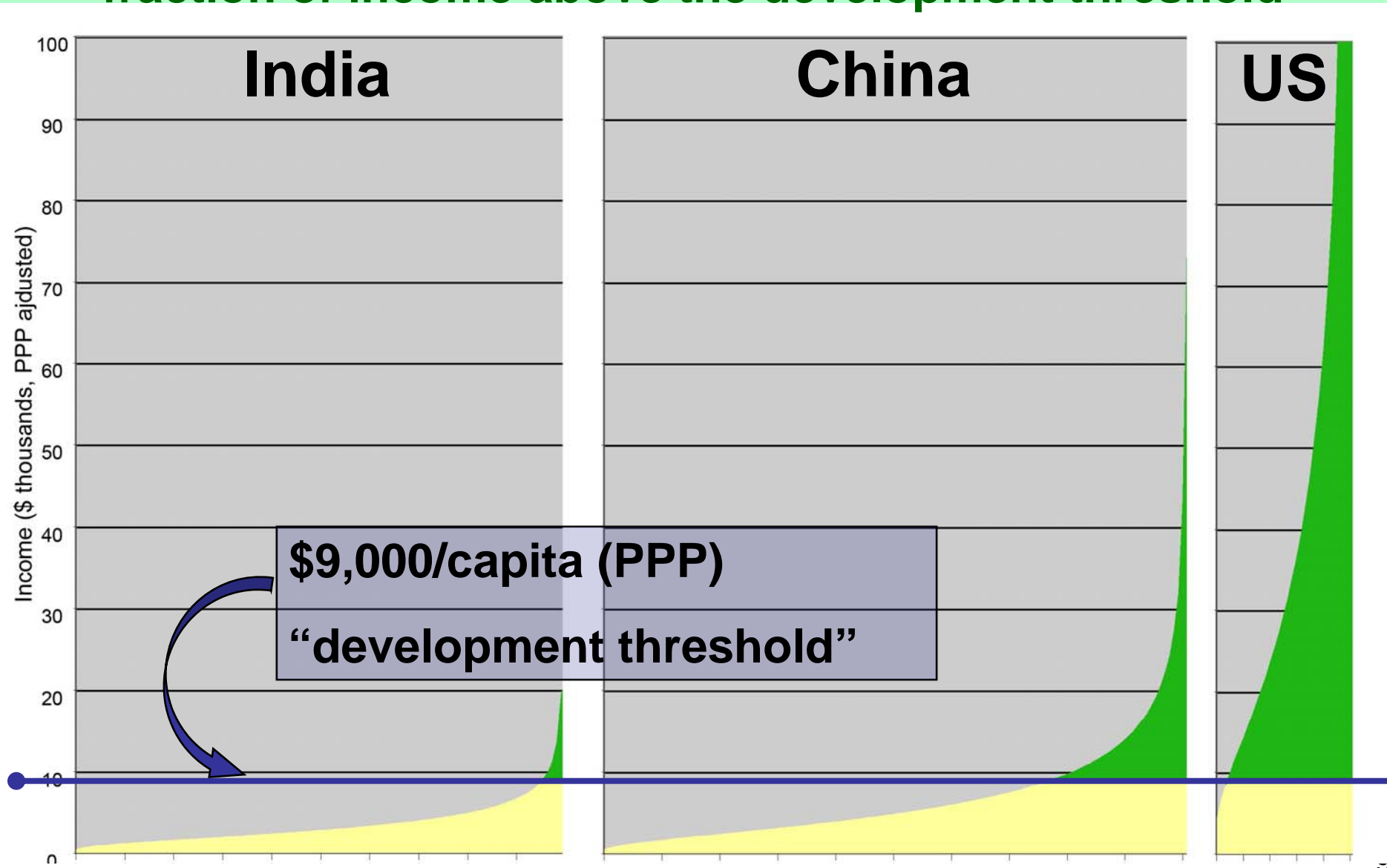
We use income (PPP), **excluding** income below the \$9,000 development threshold

Responsibility: contribution to the climate problem

We use cumulative per capita CO₂ emissions, **excluding** “subsistence” emissions (i.e., emissions corresponding to consumption below the development threshold)

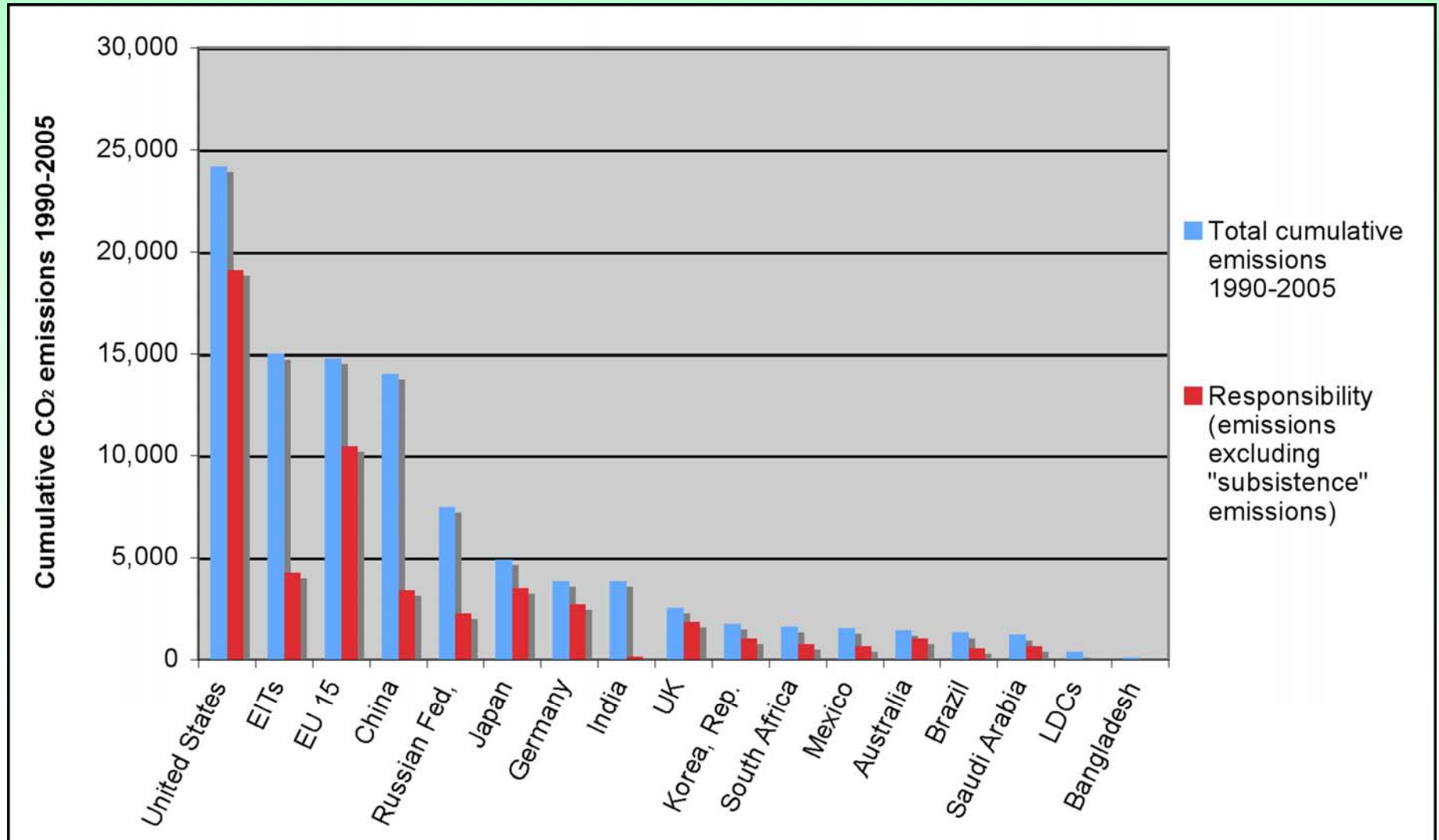
Income and Capacity

National income distributions showing capacity (in green) as fraction of income above the development threshold



Emissions vs. Responsibility

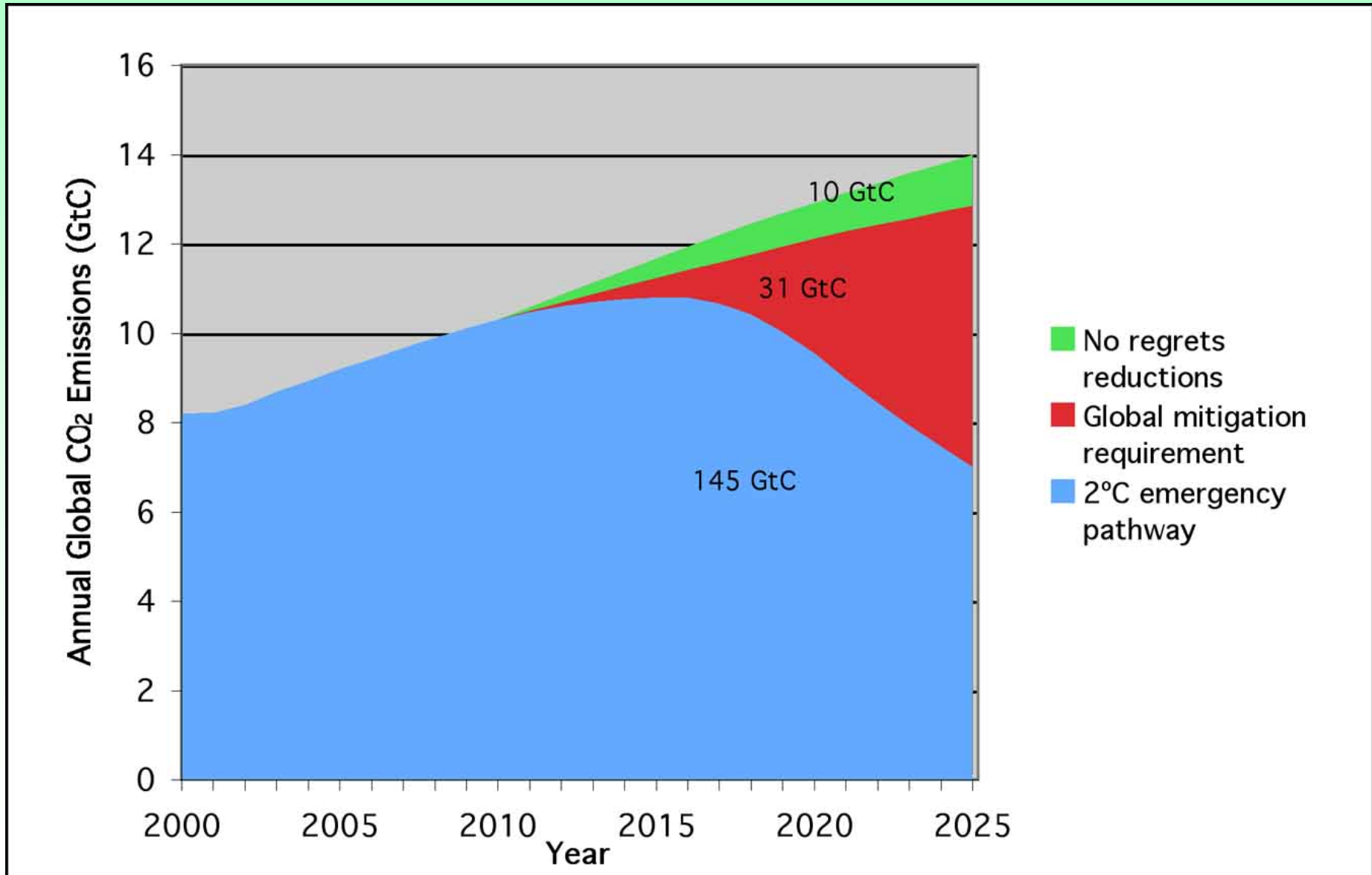
Cumulative fossil CO₂ emissions since 1990 compared to responsibility, which excludes “subsistence” emissions



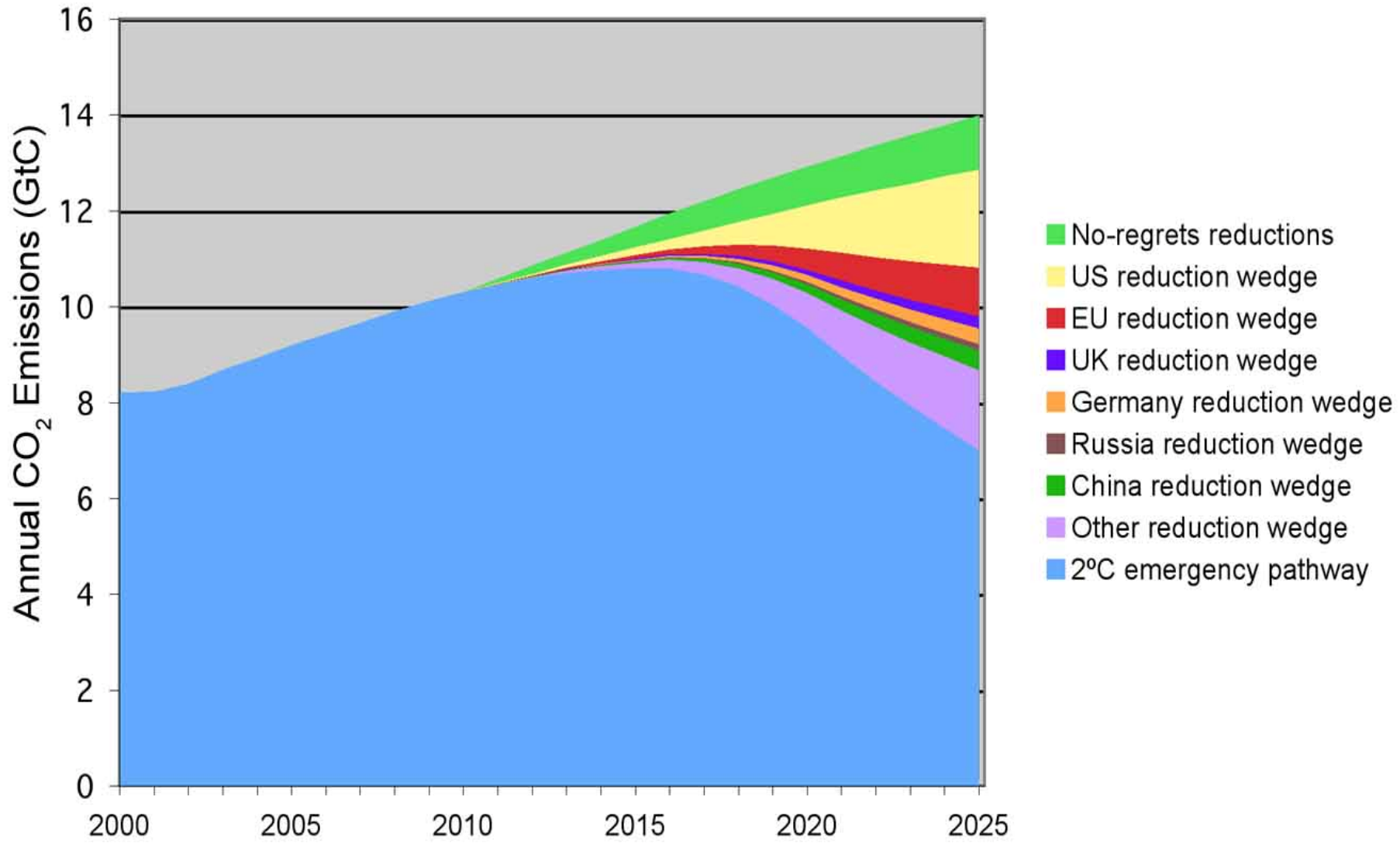
National Obligations

	population	income	capacity	Cumulative emissions 1990-2005	responsibility	national obligation
United States	4.7	20.2	31.8	23.7	37.0	34.3
EU (27)	7.7	21.5	29.0	17.8	23.1	26.6
United Kingdom	0.9	3.3	4.7	2.5	3.6	4.3
Germany	1.3	4.0	5.6	3.8	5.2	5.5
Russia	2.2	2.5	1.5	7.4	4.3	2.3
Brazil	2.9	2.6	2.1	1.3	1.0	1.6
China	20.4	14.7	7.1	13.8	6.6	7.0
India	17.0	6.1	0.4	3.8	0.3	0.3
South Africa	0.7	0.9	0.8	1.6	1.5	1.1
LDCs	8.3	1.4	0.1	0.4	0.0	0.0
All high income	15.6	53.9	78.8	52.7	76.9	78.5
All middle Income	47.7	36.6	20.7	41.1	22.8	21.1
All low Income	36.7	9.5	0.5	6.2	0.4	0.5
World	100	100	100	100	100	100

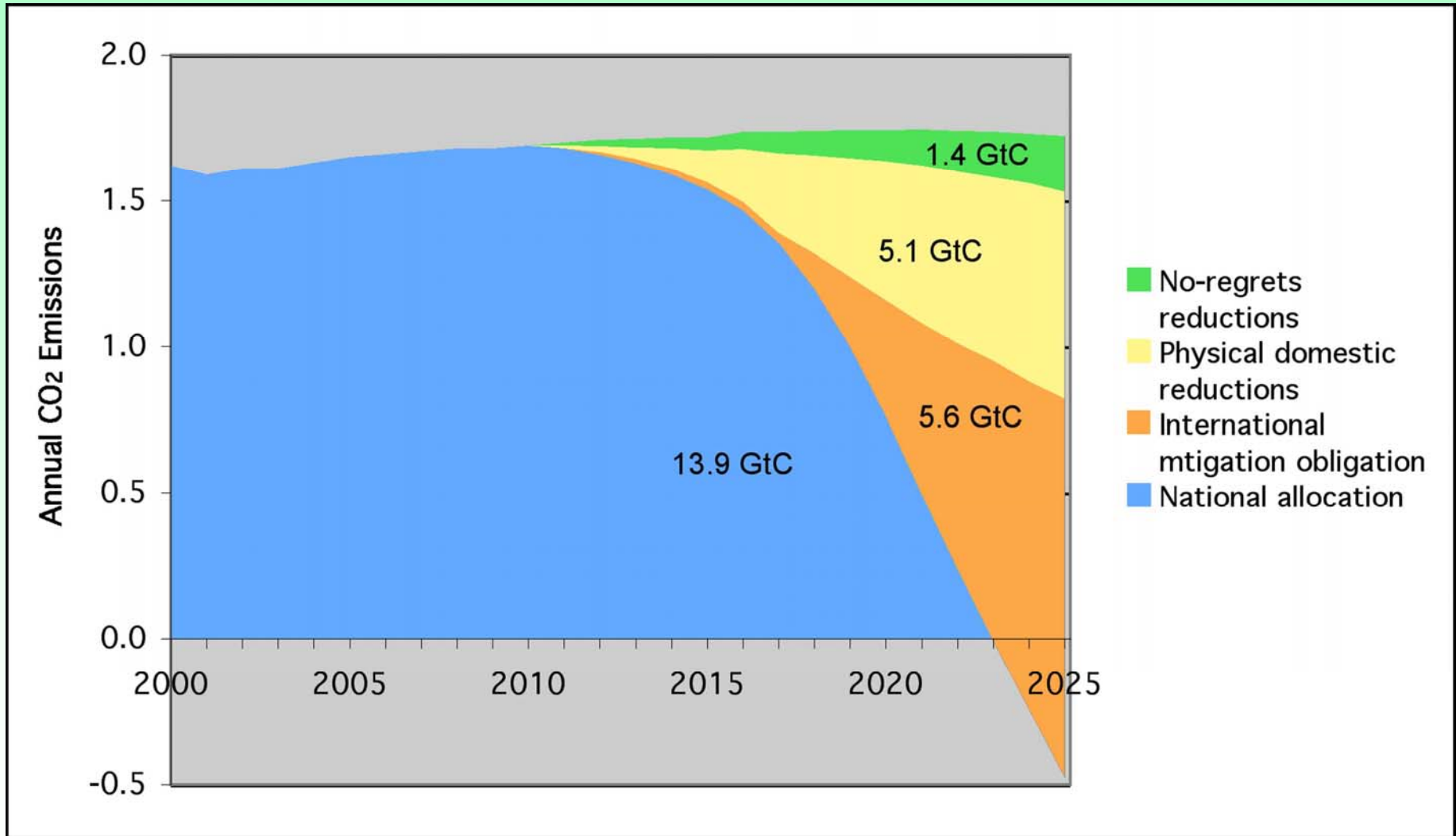
Global Mitigation Burden



National "Obligation Wedges"

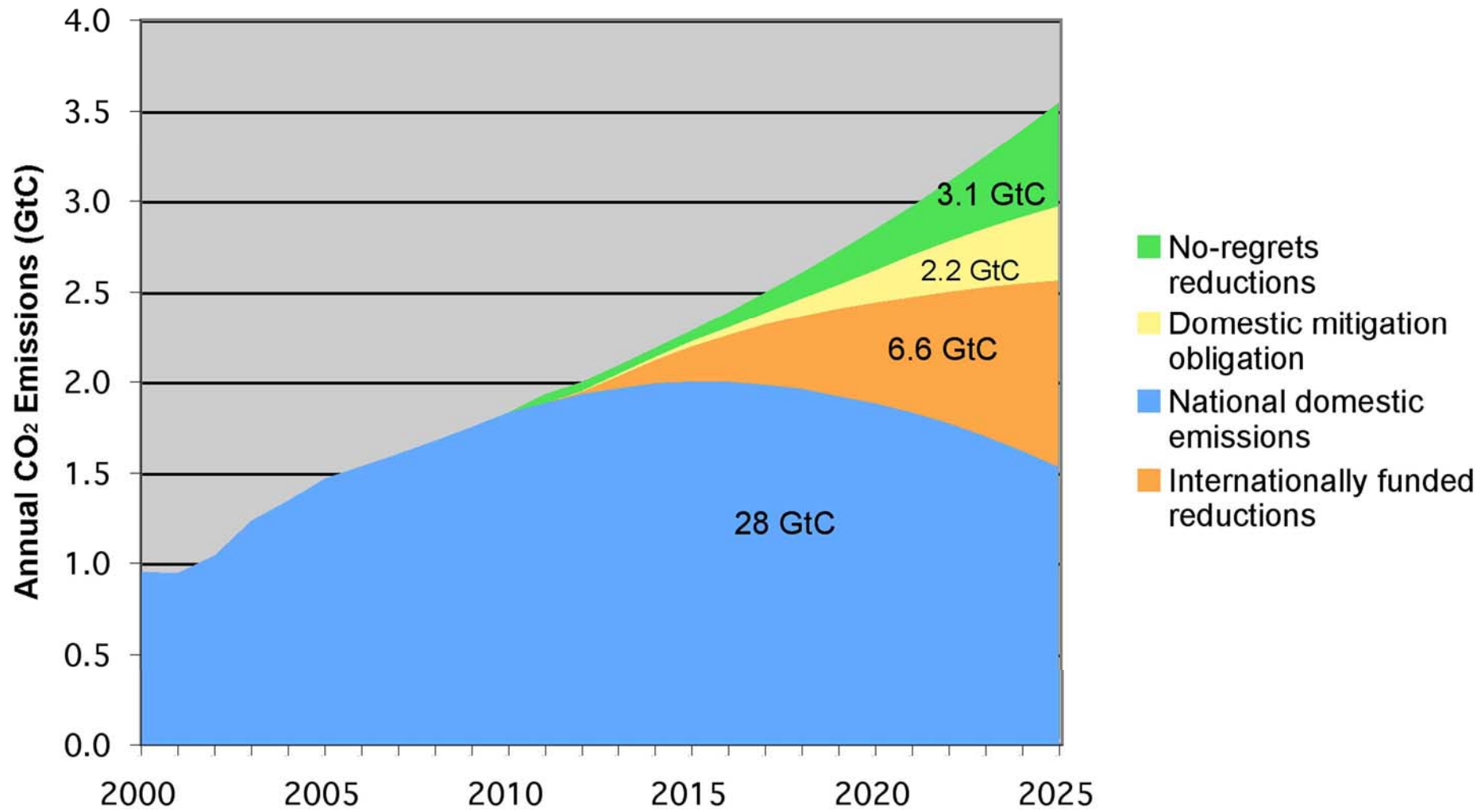


US Obligations under a GDRs Framework



Physical domestic reductions as 90% by 2050, but US obligations are much greater. Must be met internationally.

Chinese participation in a GDRs World



The vast majority of reductions in the South come from **Annex 1** reduction commitments, rather than non-Annex 1 reduction commitments.

The inconvenient truths

- Explicit commitments for large North-South transfers (financial, technological) have to happen.
- Fair burden sharing under a true emergency program requires commitments **even** for the South
 - Proportional to its true capacity and responsibility
- The North hasn't delivered on its funding or emissions commitments to date.
- But there is no time to wait for a third commitment period

Final Comments

- Realistic? Not today
- But in the long run the alternative to “something like GDRs” is a weak regime with little chance of preventing catastrophic climate change
- This is not about equity for its own sake - it is about what is *fair enough* to be politically viable

The Right to Development in a Climate Constrained World

The Greenhouse Development Rights Framework

Paper available online:

www.ecoequity.org/GDRs

Dataset and tool that allows you to examine the calculations presented here and explore alternatives:

GDRs.sourceforge.net