

Developmental Equity

Fair-shares global differentiation after Durban

開発の衡平性 ダーバン後の地球規模での公平な差異化

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The logo for EcoEquity, featuring the word "EcoEquity" in a bold, green, sans-serif font.The logo for Greenhouse Development Rights, featuring a yellow semi-circle on the left and the text "Greenhouse Development Rights" in a blue, sans-serif font on the right.

After Rio+20 リオ + 20の後

- The Rio+20 meeting was not a failure
 - The principle of Common but Differentiated Responsibilities was reaffirmed
 - Potentially important new processes (e.g. Sustainable Development Goals) were put into motion
- The Rio+20 meeting was not a success
 - The sustainability crisis is extremely challenging
 - This is particularly true today - decades of inaction, an aggressive fossil cartel, an unstable global economy, a global inequality crisis . . .
- The climate talks remain the key to the future
 - Rio-style processes could accomplish more - much more - if there was a breakthrough in the climate negotiations
 - There will not be a breakthrough in the climate negotiations without a breakthrough on the "equity" question

Equity in the UNFCCC context

UNFCCCにおける衡平性

- The adequacy principle

- Any regime or strategy that cannot deliver an ambitious global mobilization cannot be accepted as equitable. Ambition is the key equity principle.
- 2C is now the official global goal. It is sign of our desperation that we support it.

- CBDR/RC

- We need a common understanding of equitable effort sharing -- that reconciles the abstract principle of CBDR/RC with a concrete model of global differentiation that is adequate to the complexities of the emerging world system.
- Such an approach must give due account to both *historic responsibility* for the climate problem and the *capability* to act to solve it.

- The right to sustainable development

- This principle -- and its reach beyond "poverty eradication" -- is inevitably controversial, but it is just as inevitably essential to the solution.
- "Equitable access to sustainable development" does not imply a right to pollute. Such a misinterpretation conflicts with the fundamental objective of the Convention (to protect the climate system). Emissions must be constrained.

"Equitable Access to Sustainable Development"

持続可能な開発への衡平なアクセス (EASD)

"... Agrees that Parties should cooperate in achieving **the peaking of global and national greenhouse gas emissions** as soon as possible, recognizing that **the time frame for peaking will be longer in developing countries**, and bearing in mind that **social and economic development and poverty eradication are the first and overriding priorities** of developing countries and that a low-carbon development strategy is indispensable to sustainable development; in this context, further agrees to work towards identifying **a time frame for global peaking of greenhouse gas emissions based on the best available scientific knowledge and equitable access to sustainable development**, and to consider it at the seventeenth session of the Conference of the Parties;"

The Cancun Agreements [Decision 1/CP.16, para. 1.6]

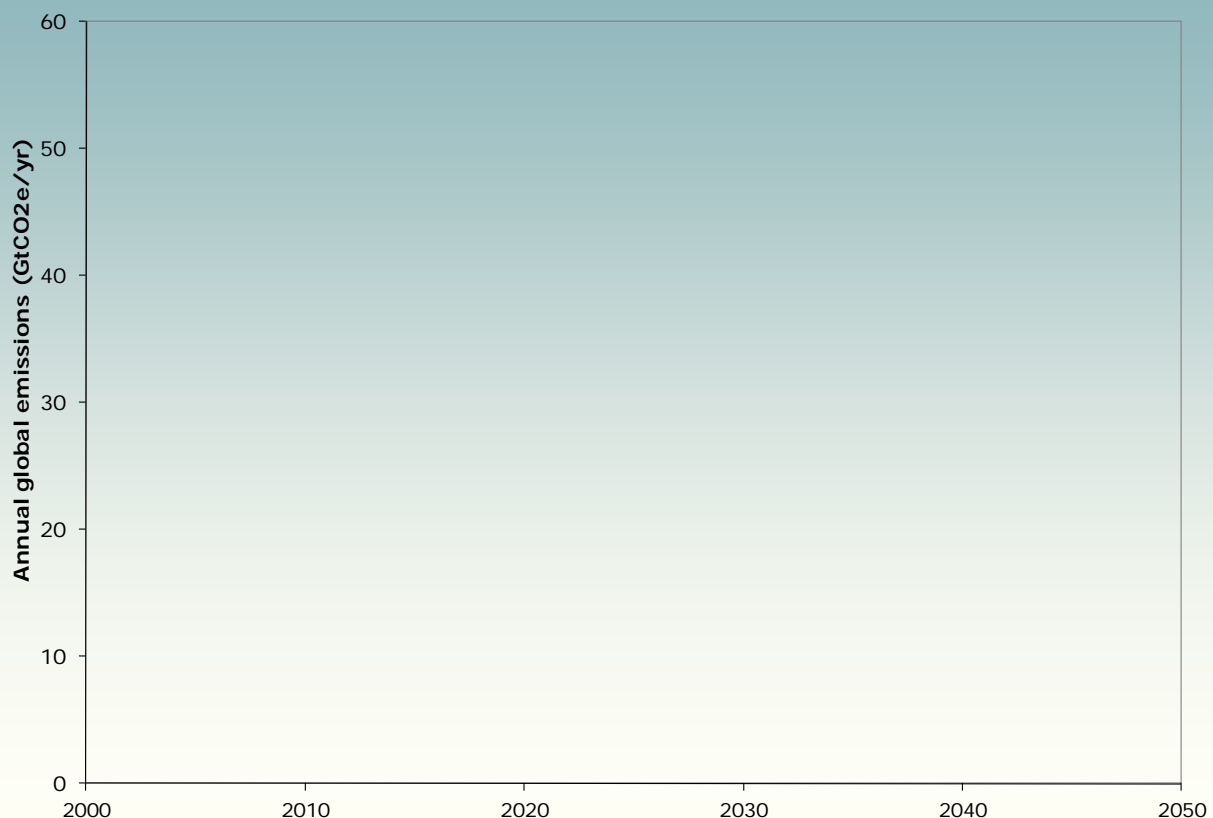
Three key components of EASD

EASDにおける三つの主要構成要素

1. The global emissions peak (and subsequent rate of decline) must be consistent with keeping climate change below the agreed maximum level.
2. Each country must have a sufficient share of the limited remaining greenhouse gas budget, as this determines how soon its national emissions must peak and how quickly they must decline.
3. Each country must have adequate financial & technological means to keep within the available greenhouse gas budget, without compromising poverty eradication and legitimate development needs.

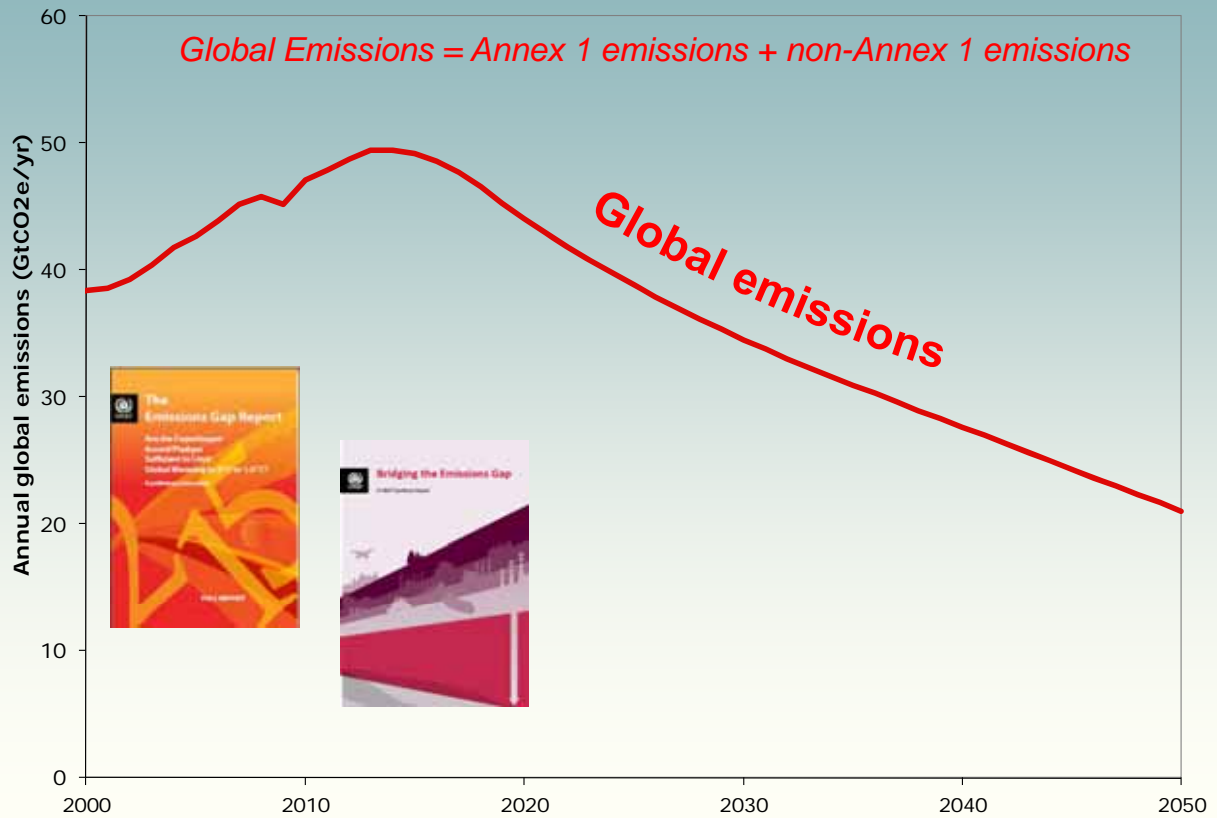
Peaking in the context of a 2°C limit

2 目標へ向けたピーク(排出量の頭打ち)



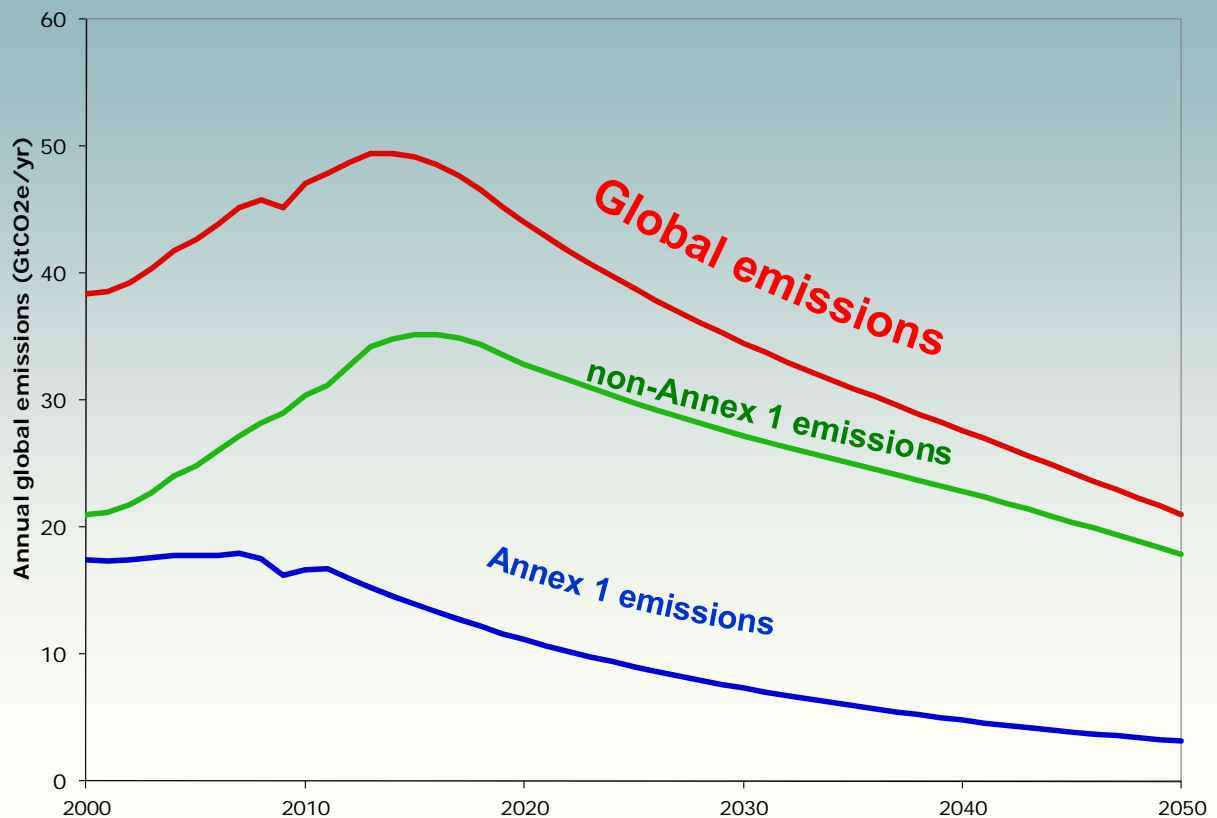
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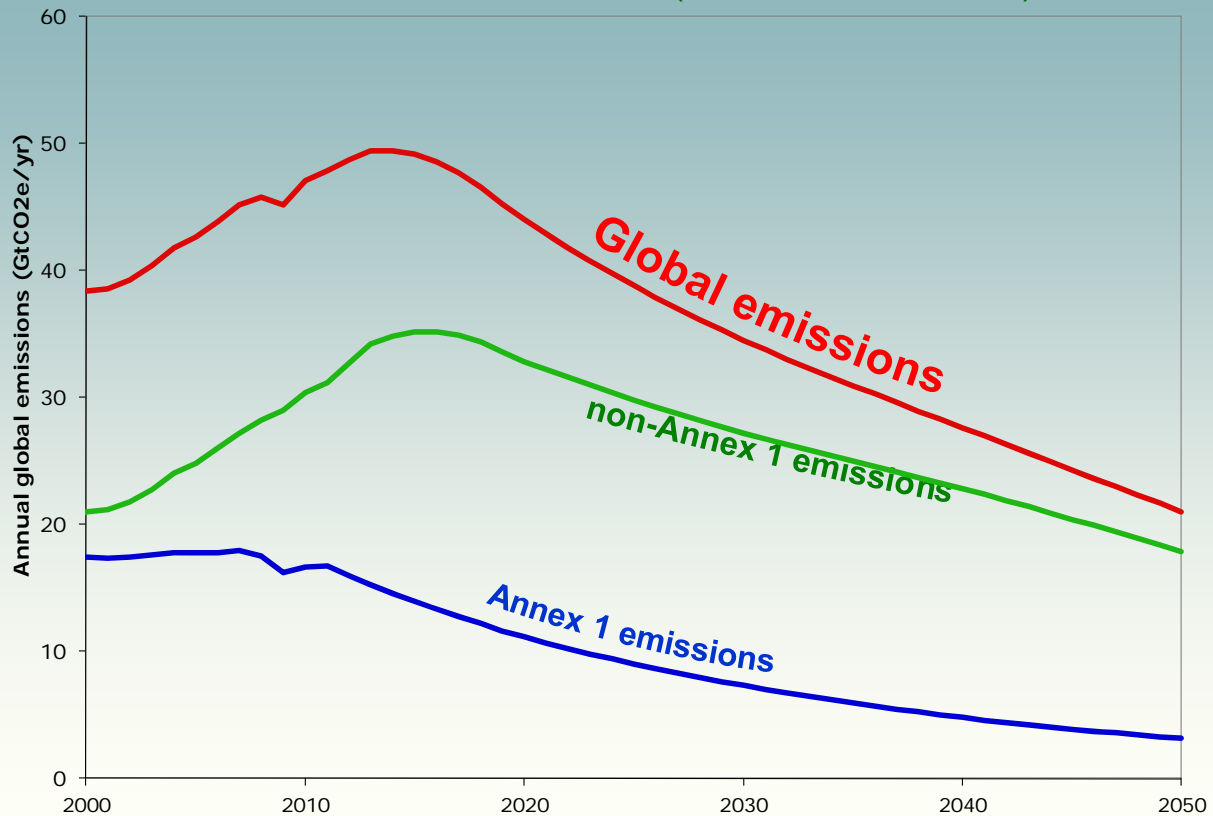


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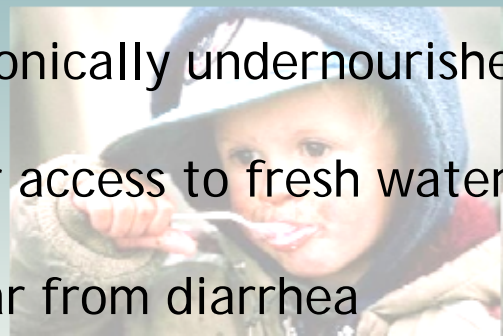
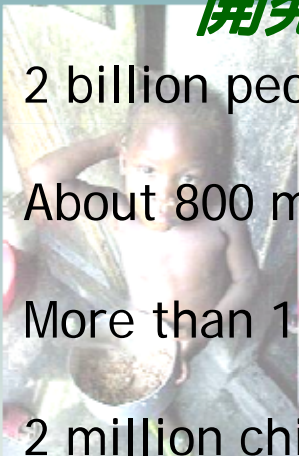


What kind of global climate deal can enable this to happen...?

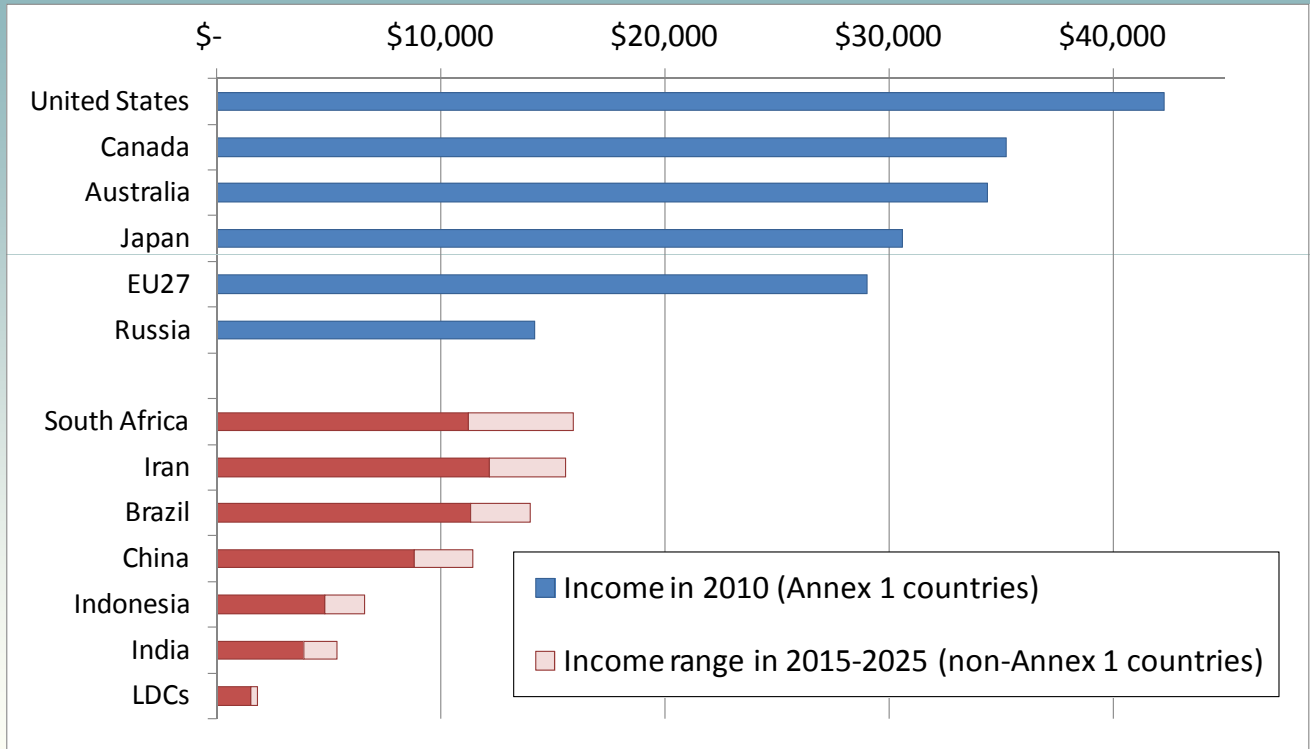
... in the midst of a development crisis?

開発・発展の危機の最中で...

- 2 billion people without access to clean cooking fuels
- About 800 million people chronically undernourished
- More than 1 billion have poor access to fresh water
- 2 million children die per year from diarrhea
- 30,000 deaths each day from preventable diseases
- More than 1.5 billion people without electricity



Approximate income (PPP\$/year) at year of peaking 排出量頭打ち年における年収の概算 (PPPドル/年)



Sources: World Development Indicators Databank (World Bank, April 2012); Incomes in 2005 PPP US\$

Looking forward 将来の展望

- **Equity and Ambition are two sides of the same coin**
 - The science is terrifying. This is a 4C (6C?) world. Pessimism is increasing
 - Without at least a rough shared understanding of what can reasonably be expected of others, all countries will fear “free riders”
- **A 3-phase process can build a rough consensus on equity**
 - Deeper dialogue to understand national positions and predicaments
 - Agree *key principles* and *criteria for their operationalization* (adequacy, CBDR/RC, and right to sustainable development)
 - Apply principles to key issues (mitigation, finance, adaptation, loss and damage etc). Between now and 2015, we have to negotiate numbers
- **Equity is back on the menu**
 - Some sort of “equitable access to sustainable development” is clearly necessary if there is going to be a viable “ambition coalition”
 - This will take time to sort out. Meanwhile, only action can build trust

Greenhouse Development Rights 温室効果開発権利

- **GDRs is an “effort sharing” framework**
 - Not a “resource sharing” framework - the resource (“atmospheric space”) is already gone
- **GDRs is a “reference framework”**
 - Operationalizes all three of UNFCCC’s “master equity principles”
 - Provides a solid, if rough, way to understand national “fair shares,” and thus identify countries that are “free riding. This is critical in a pledge and review world
- **GDRs requires no Annexes**
 - Each country is given a “Responsibility and Capacity Index” which determines its “fair share” of the global effort, on both the adaptation and mitigations sides
 - GDRs is a “proof of concept” – it shows that a global, equity-based, “spectrum approach” is actually possible

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The Responsibility and Capacity Index 責任と能力指標

The RCI defines national obligations

National share of global costs (both mitigation and adaptation) is based on both capacity and responsibility

Capacity: resources to pay w/o sacrificing necessities

Income below a “development threshold” of \$20/day PPP (\$7,500/year) is excluded from calculation of national capacity

Responsibility: contribution to climate change

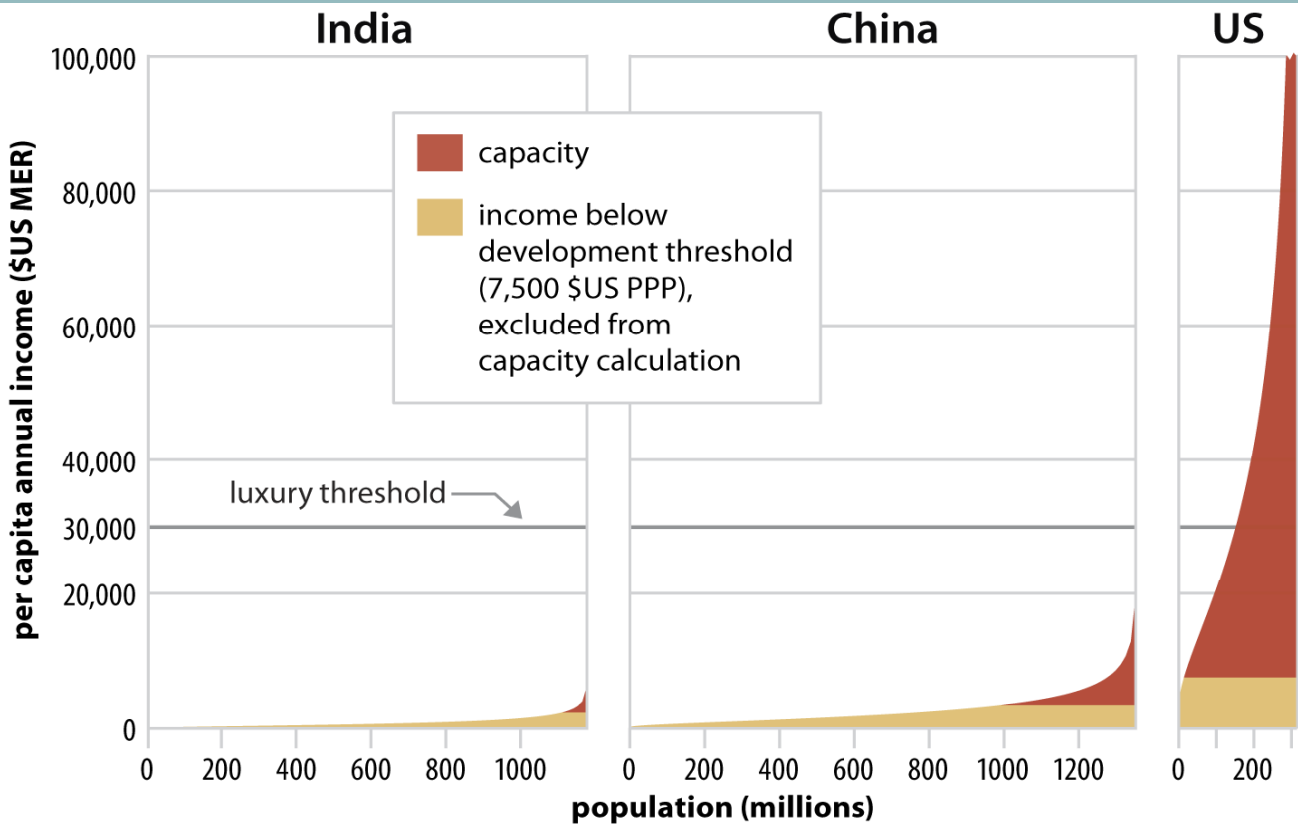
We use *cumulative* CO₂ emissions, excluding “subsistence” emissions (i.e., emissions corresponding to consumption below the development threshold)

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Income and Capacity

Income distributions (relative to development and luxury thresholds)

年収分布 (発展と富裕率との関係から)

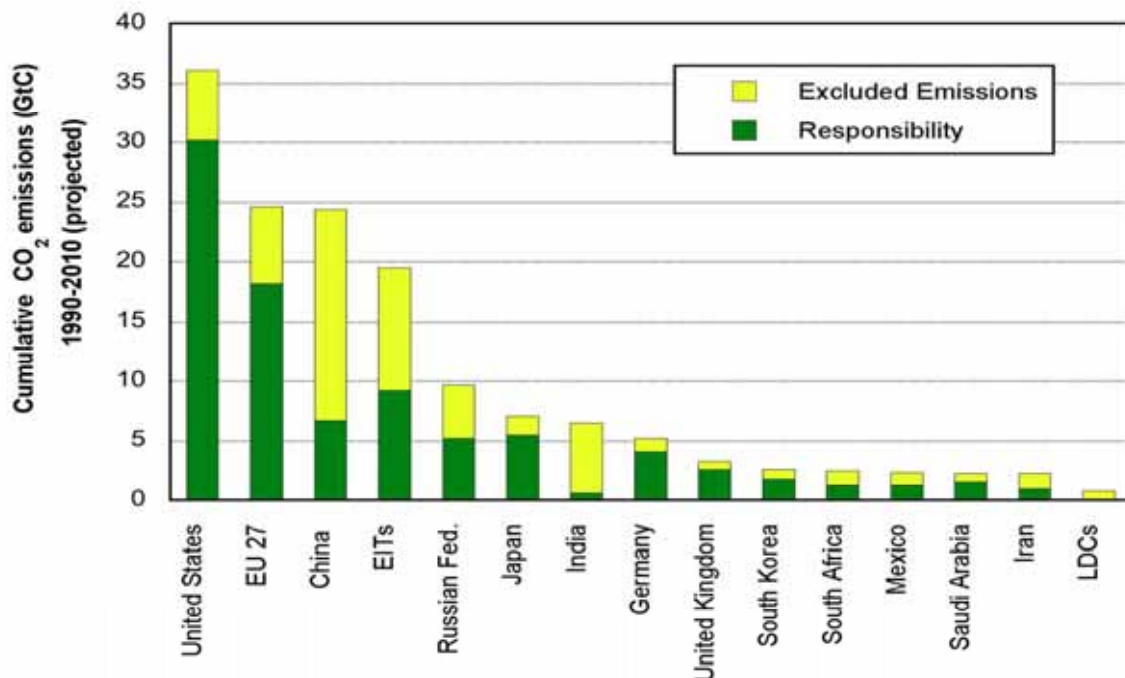


Emissions and Responsibility

fossil CO₂ (since 1990) (showing portion defined as "responsibility")

排出量と責任

化石燃料からのCO₂ 排出量 (1990年より) (責任部分を明示)



National obligations over time

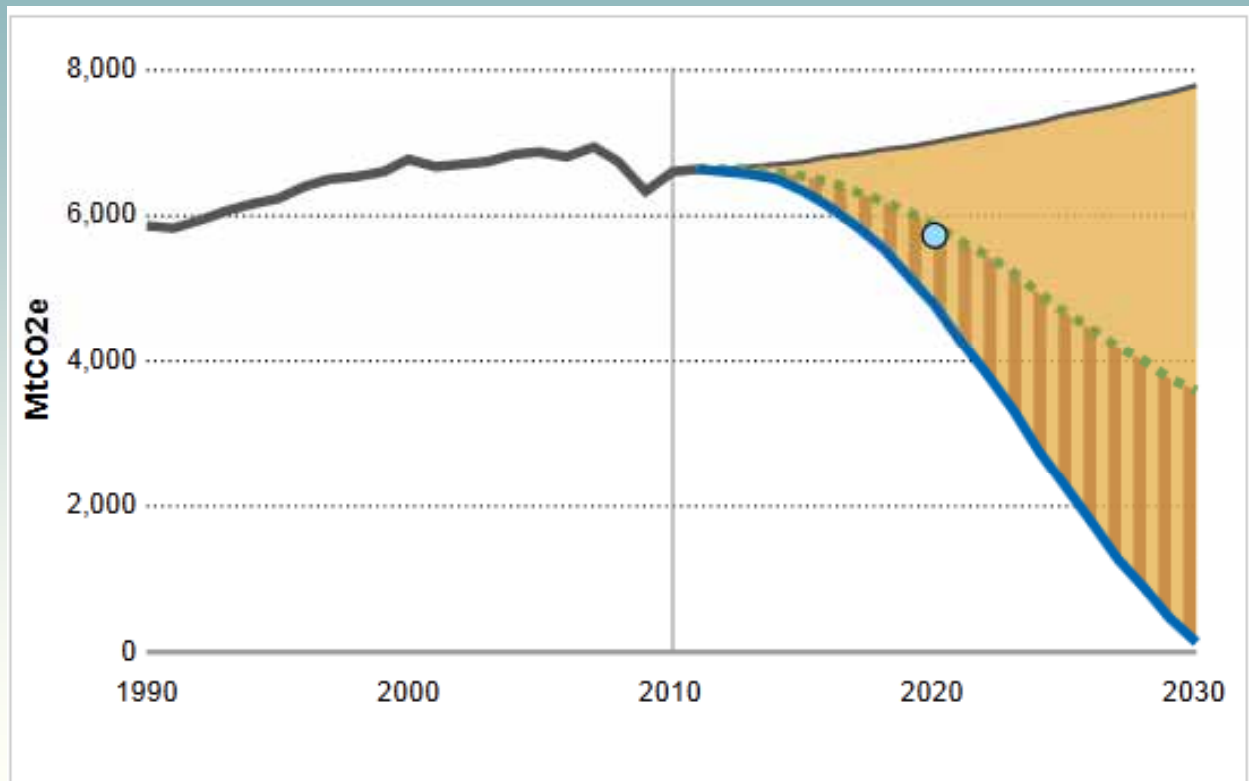
将来における各国の義務

| | 2010 | | | | | 2020 | 2030 |
|---------------|--------------------------|----------------------------|------------------------|------------------------------|-------------------|-------------------|-------------------|
| | Population (% of global) | Income (\$US PPP / capita) | Capacity (% of global) | Responsibility (% of global) | RCI (% of global) | RCI (% of global) | RCI (% of global) |
| EU 27 | 7.3% | 32,101 | 31% | 21% | 26% | 23% | 19% |
| - EU 15 | 5.8% | 35,407 | 29% | 18% | 23% | 20% | 17% |
| - EU +12 | 1.5% | 19,244 | 1.9% | 3.6% | 2.7% | 2.7% | 2.5% |
| United States | 4.6% | 45,922 | 29% | 25% | 29% | 26% | 24% |
| Japan | 1.8% | 33,873 | 10.1% | 5% | 7.6% | 6.3% | 5.1% |
| Russia | 2.0% | 20,036 | 2.3% | 9.4% | 5.9% | 5.5% | 5.5% |
| China | 19.6% | 7,794 | 5.2% | 5.5% | 5.4% | 11.2% | 16.4% |
| India | 17.6% | 3,454 | 0.25% | 0.4% | 0.3% | 0.9% | 2.3% |
| South Africa | 0.7% | 10,465 | 0.45% | 1.3% | 0.86% | 0.86% | 0.82% |
| Brazil | 2.8% | 11,183 | 2.65% | 6.1% | 2.9% | 2.8% | 2.8% |
| LDCs | 11.4% | 1,594 | 0.1% | 0.6% | 0.34% | 0.33% | 0.39% |
| Annex I | 18.6% | 32,729 | 80% | 73% | 76% | 65% | 58% |
| Non-Annex I | 81.4% | 6,130 | 20% | 27% | 24% | 35% | 42% |
| World | 100% | 11,987 | 100% | 100% | 100% | 100% | 100.0% |

All gases. No land-use emissions. No trade-embodied emissions. 2010-based growth projections

Implications for the US (2C "likely")

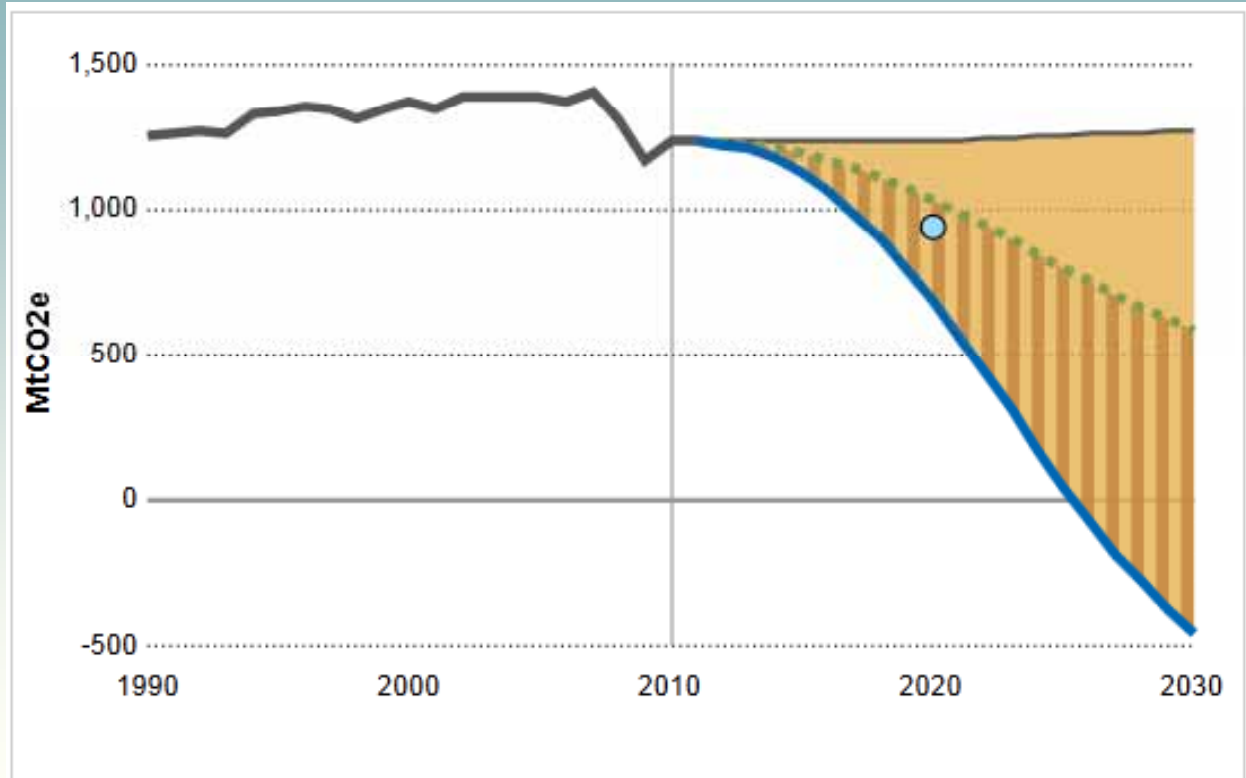
米国への2 達成可能性シナリオの意味



Standard case, "2C likely" pathway, indicative self-funded / supported division

Implications for Japan (2C "likely")

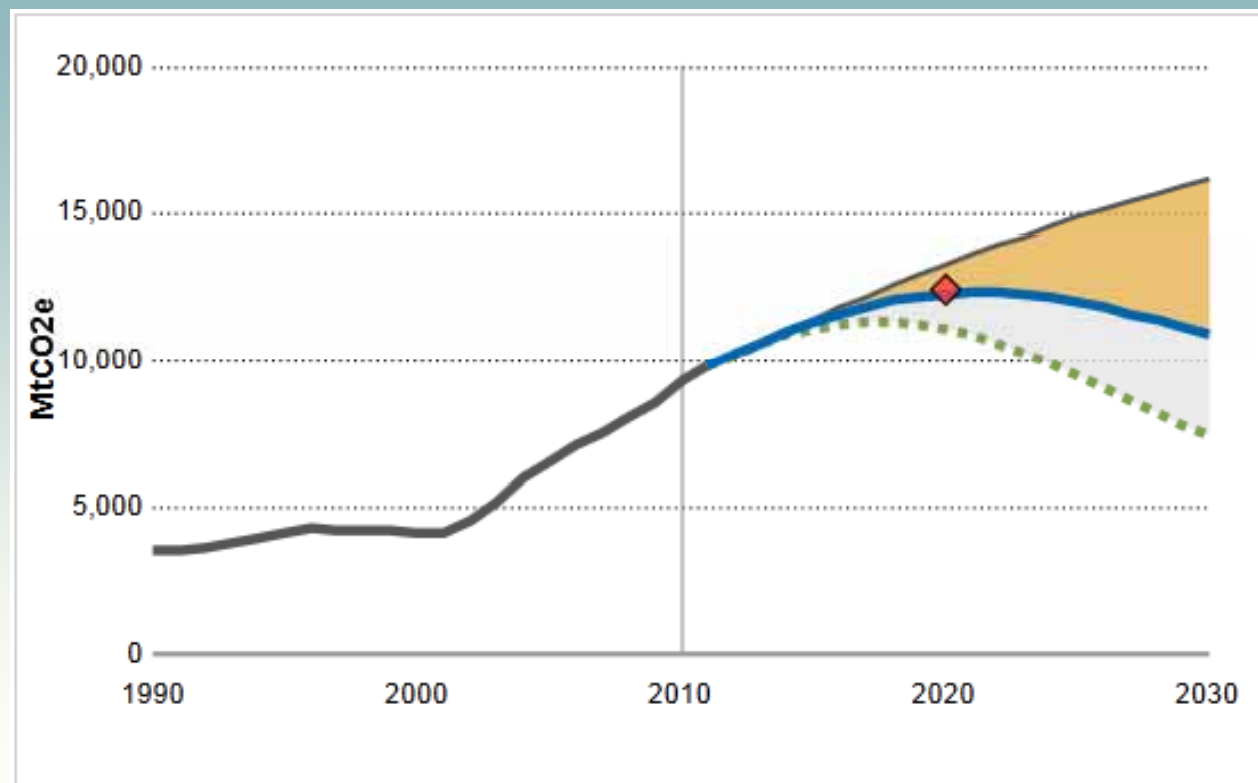
日本への2 達成可能性シナリオの意味



Standard case, "2C likely" pathway, indicative self-funded / supported division

Implications for China (2C "likely")

中国への2 達成可能性シナリオの意味



Standard case, "2C likely" pathway, indicative self-funded / supported division

Summary: Developmental Equity

まとめ: 開発の衡平性

UNFCCC embeds three “master” equity principles

- The adequacy principle
- Common but differentiated responsibilities & respective capabilities
- The right to sustainable development

The equity agenda - a “fair enough” spectrum approach, negotiated in the context of increasing action

“Equitable access to Sustainable Development” is exactly the right name for the political-economic challenge

- A global peak consistent with agreed maximum warming
- All nations to get a fair share of the remaining global budget
- Adequate financial and technological means, for all nations, so that they can hold within strict emissions budgets without compromising their legitimate development needs