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Scrutinizing Carbon Offsets

Suppressed Demand

An NGO Perspective

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www.cdm-watch.org

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- CDM: a Climate Mitigation mechanism
- CDM: a Development mechanism
- Can suppressed demand methodologies marry the two concepts?
- Discussion and Recommendations

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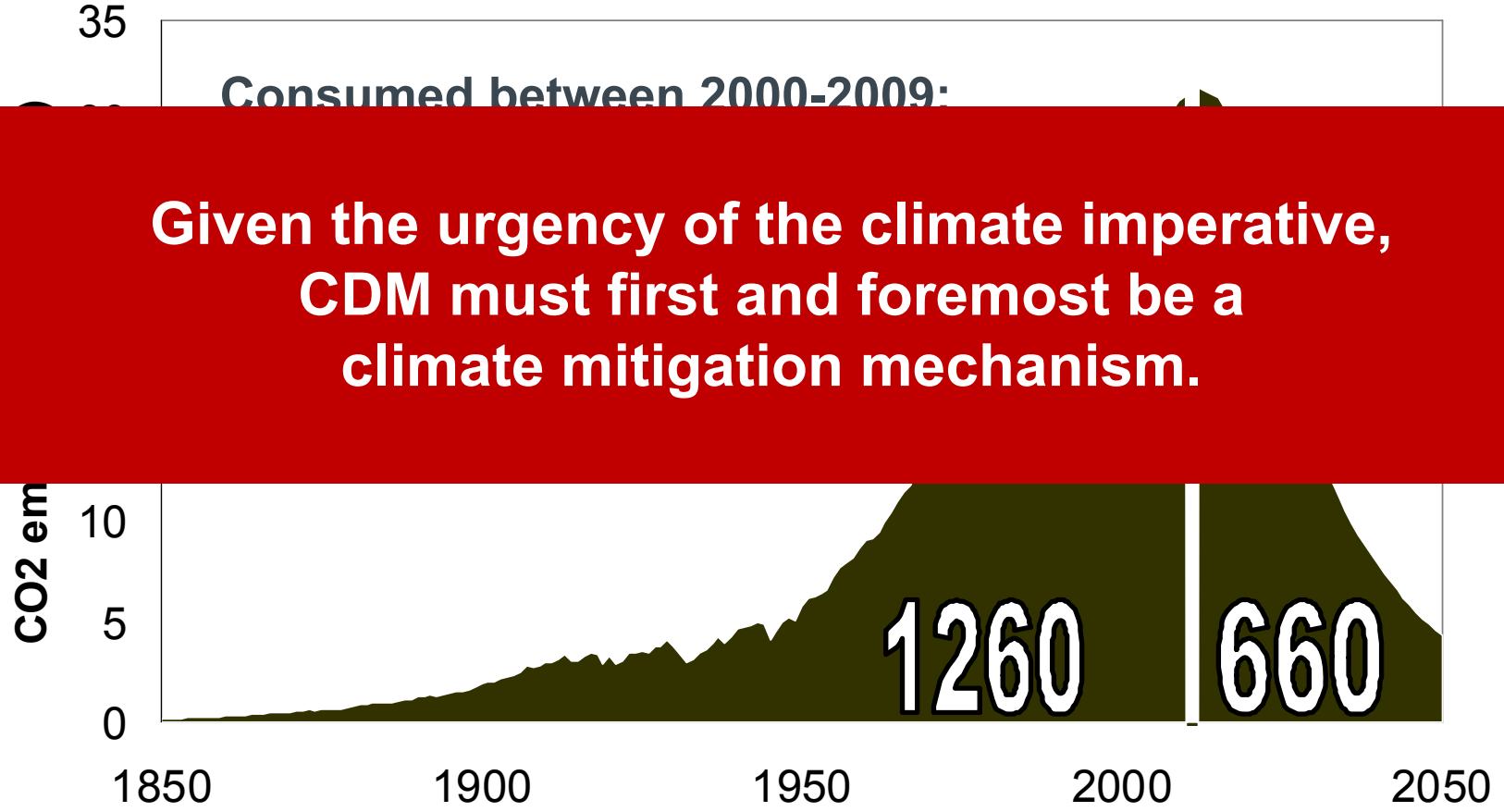
CDM: A climate mitigation mechanism

Zero-sum: emissions must be ‘real and measurable’ in order to not compromise mitigation caps.



Given the urgency of the climate imperative, CDM must first and foremost be a climate mitigation mechanism.

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CDM: A development mechanism

SODIS method used in the water purification project in Senanga, Zambia (Monika Tobler, copyright by SODIS/Eawag)

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Can suppressed demand methodologies finally marry the two concepts?

Ideally.... addressing suppressed demand to support a CDM that is:

- **Clean: Leapfrogging to low-carbon development**
- **Pro-poor: enabling projects that benefit the poorest**
- **Fair: equitable among different project types**
  → e.g. many (all?) renewable energy projects satisfy suppressed demand since demand is rising (i.e. new coal plants are avoided but no old ones shut down)

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Addressing SD within the CDM:

The SSC–WG identified the following situations *'may merit consideration in determining baselines'*:

- **Where services to meet the basic human needs were previously completely unavailable;**

  Principally ok but how is 'basic human' need defined?

- **Where a service was previously available to an inadequate level;**

Principally ok but what is 'inadequate' and how much is enough?

- **Where a service is currently provided with a resource that is assumed to result in no emissions.**

  Problematic, unless there is a compelling rationale for why this resource is not scalable or sustainable. → e.g. water purification

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Example: Water Purification Methodology

Baseline activity only to a certain extent energy based:

- People boil only limited quantities of water
- People use other non-energy based purification technologies such as chlorination.

How do you set a baseline in such a case?

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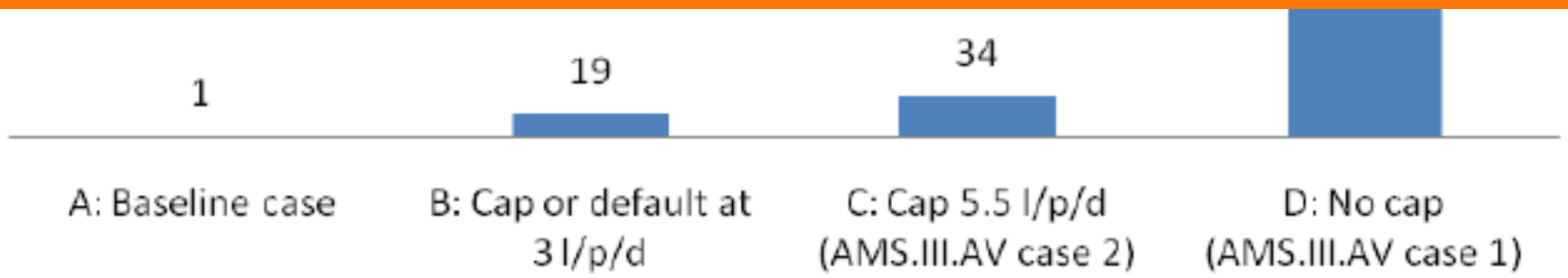
CER generation according to different supressed demand assumption

A= reference case: suppressed demand not taken into account

Baseline activity cannot be an energy-intensive activity, when non- or low energy intensive solutions are viable!!



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How do you set the baseline?

"Use reasonable, adequate service level as baseline activity level."

•This works well if the relationship between energy use and the service is linear:

- E.g. the more you cook, the more fuel you use; the more you watch TV the more electricity you use

→ Is technology dependent ! E.g. Emission intensity may change radically with level of consumption (→ water purification)

→ suitable proxy for "adequate service level" has to be found!

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How to do it: Determine physical requirements based on measurement or reasonable assumptions

E.g. Minimum Lighting Requirement

Research on what constitutes 'minimal service needed' and choose conservative level:

"Rural households are assumed to consume at least 250 kWh per year …In rural areas, this level of consumption could provide for the use…of two compact fluorescent light bulbs and a radio for about five hours per day"(IEA 2010)

Express service level using appropriate technology:

CFL illuminance is 120 lux (lumens/m^2) at typical working distance

Calculate emissions using reasonable baseline technology:

Similar to kerosene pressure lamp (182 lux)

(Source: Randall Spalding-Fecher)

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How not to do it: Cost as a proxy

Comments from a project developer:

"I think it would be important to look at what the costs are to bring these services to the poor […] This would result in a fairer approach because it would be tied to the true costs required to reach the level of service that there is a demand for."

Cost are not a suitable proxy because costs give no information about the level of actual or avoided emissions reductions (and you still need to decide on service levels).

→ Project cost effectiveness cannot be used as a determining factor to determine a baseline

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Summary

1. CDM is must be a mitigation mechanism

- → CDM cannot solve all problems
- → Mitigation has to remain the most important goal
- → Methodologies for suppressed demand project types cannot be overly generous in baseline methodologies
- → Major uptake and (over) crediting of these project types will compromise environmental integrity
- → Some project types may not be suitable for the CDM because is it impossible to make them financially feasible (at current market prices) without compromising the environmental integrity of the CDM

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Summary

2. Conservative approach

→ Financial viability cannot be a determining criteria

→ Non-energy based baseline activities should not be considered

→ Overall guidance on SD may improve consistency but the specific approaches have to be developed for each project type specifically (sectors are very different: e.g. transportation, water purification, rural electrification)

→ Normative decisions have to be clearly referenced and explained

→ Decisions about suppressed demand have to be reevaluated and updated periodically to ensure they are based on realistic assumptions.

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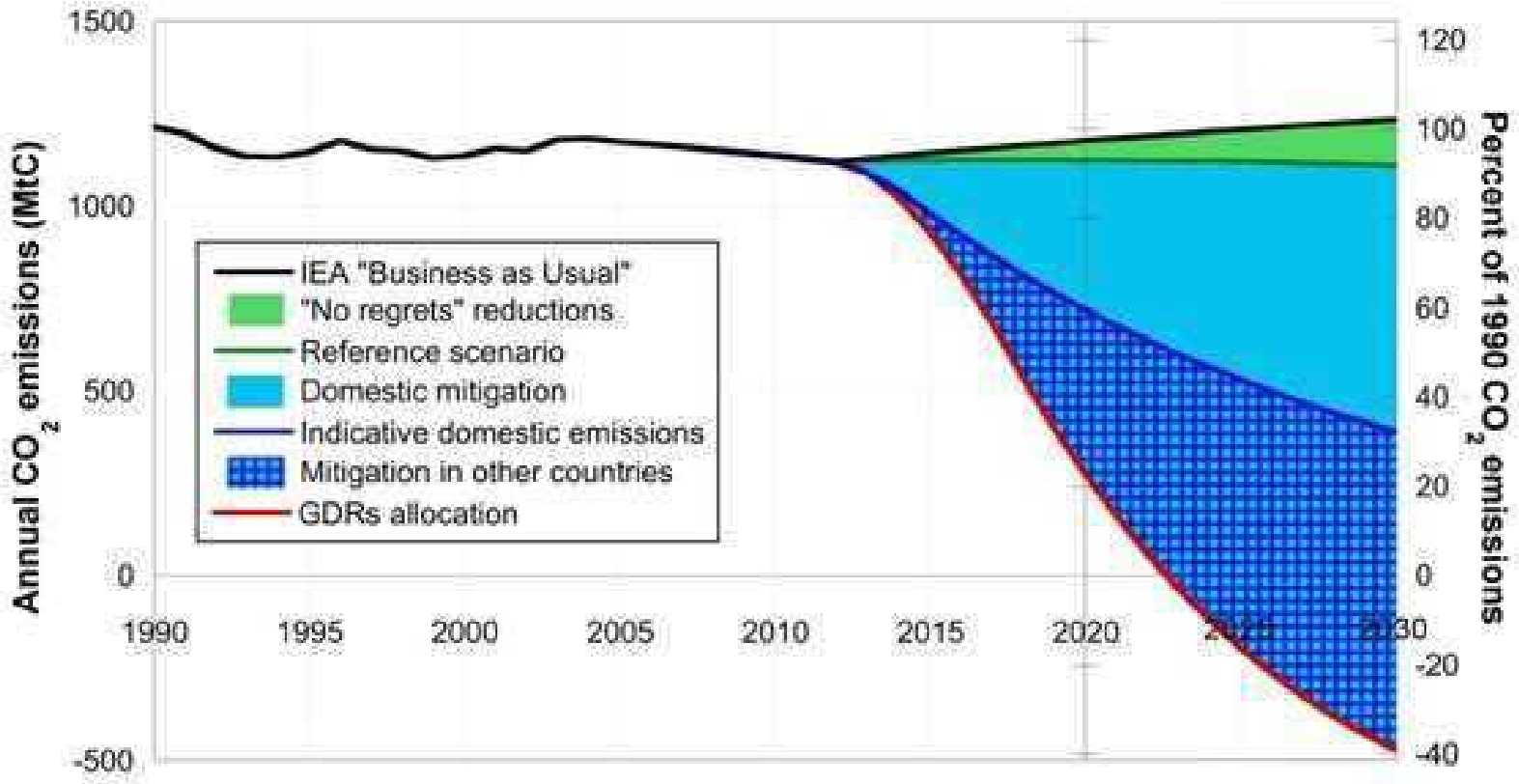
Really reconciling Climate and Development

Increase reduction commitments of wealthy nations

e.g. Greenhouse Development Rights Framework. http://gdrights.org



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The Way Forward:
How to Address Suppressed Demand

Honest, transparent process with input from all relevant stakeholders:

- Technical experts: provide the expertise necessary and
- PP: provide ‘real world’ market perspective and
- DNAs: provide country specific information and
- **NGOs watch over the environmental integrity of the approaches**

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Looking forward to a constructive dialogue!

Thank you!

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