



Seeing REDD: Addressing Additionality, Leakage, and Permanence with a National Approach

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Context

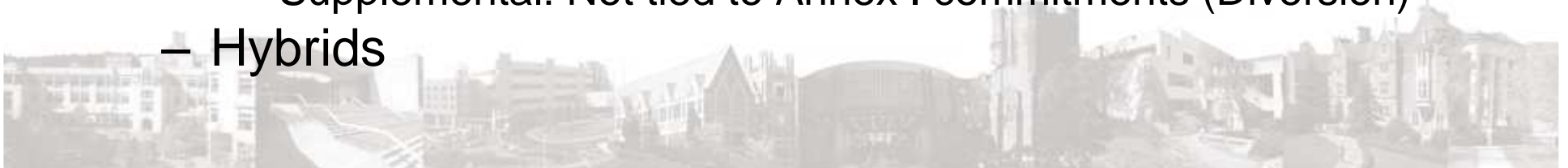
- History: Avoided Deforestation was left out of Clean Development Mechanism (CDM) project-based approach
- Concerns over
 - Sovereignty
 - Diversion from fossil fuel reductions
 - ***Environmental Integrity: Are reductions real***
 - ***Additionality***
 - ***Leakage***
 - ***Permanence***





Current Proposals

- **Targeted Activities: Reduced Emissions from Deforestation**
 - and Degradation if possible (REDD)
- **National- rather than Project-level focus**
 - Policy Measures (Sovereignty)
 - Accounting (Integrity)
- **Alternative Approaches to compensation**
 - Tied to carbon market
 - National Offsets for Annex I commitments
 - “Fund” approach
 - Supplemental: Not tied to Annex I commitments (Diversion)
 - Hybrids

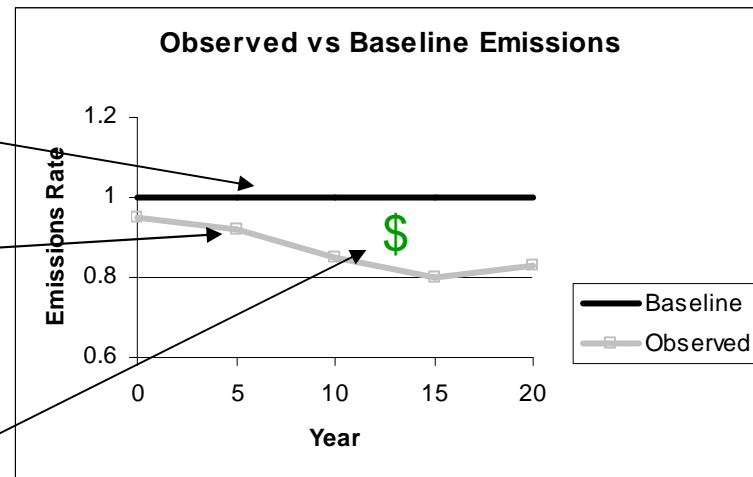




Compensation at the National Level

Establishment of a reference national carbon emissions rate (i.e., baseline)

Direct measurement and monitoring of actual rates after policy in place



Compensation for going below the reference rate





How National System Addresses Project-level Problems

	Project-level problem	National-level solution	Unresolved at national level
Additionality	Activity/reductions might have occurred anyway	Only credit below national reference <i>rate</i> (baseline)	What is the appropriate baseline rate
Leakage	Reductions in project area might shift to outside project area	National accounting captures within-country leakage	International leakage Activity leakage
Permanence	Conserved carbon could be released in future	National-level accountability, no credits under negative balance.	Long-term maintenance of conserved carbon



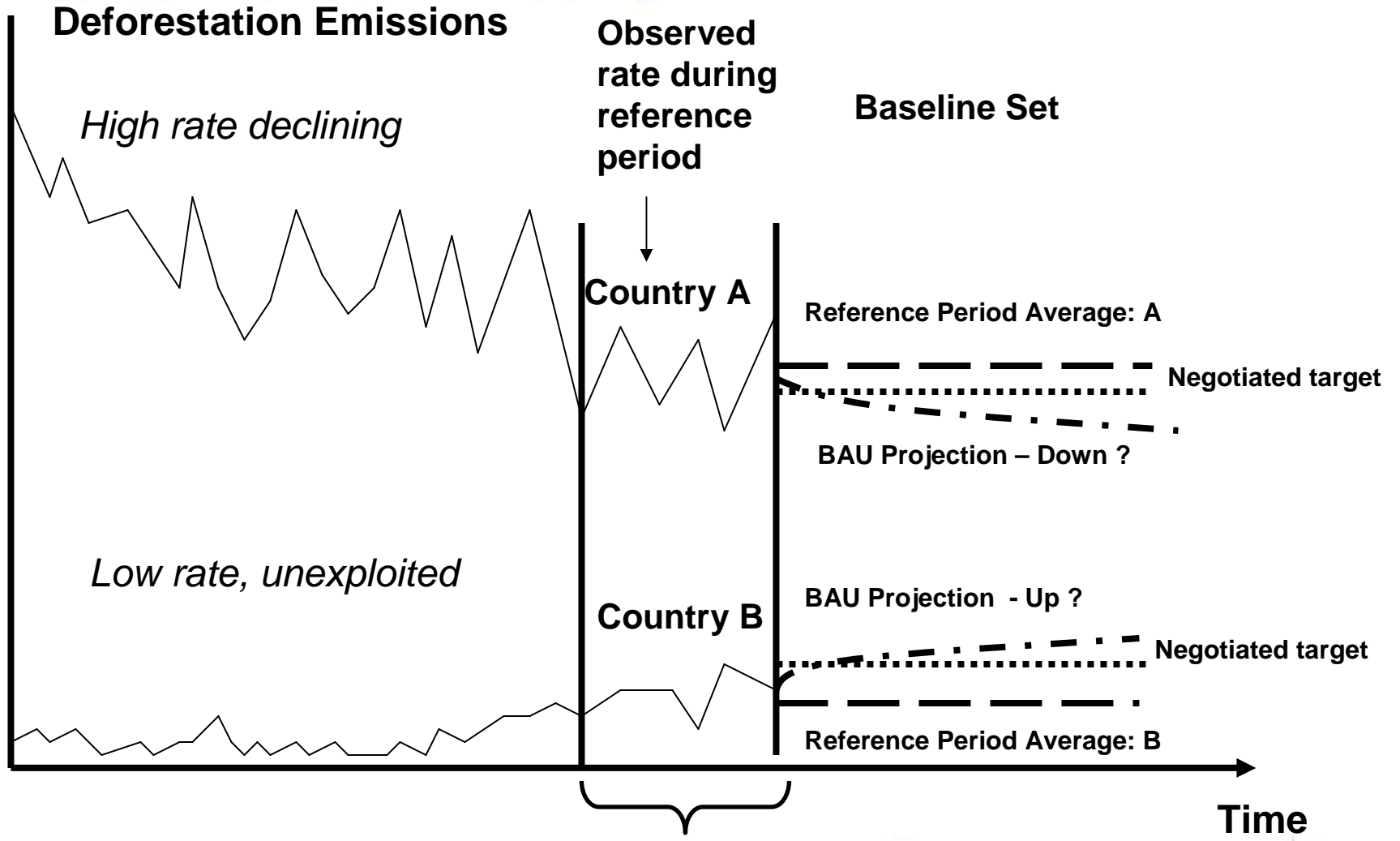


Lesson 1: The Name of the Game is Baselines

National Baseline Options

- Set equal to historic reference period emissions
- Departure from historic rates
 - “Business as Usual” (BAU) projection
 - Negotiated





Reference Period





International Leakage: How Big a Problem?

- Quantitative evidence
 - Model simulations
 - International leakage effects could be large without proper policy design (in excess of 50%)
 - Smaller when more countries opt into the policy
- On evidence and principle: too important to ignore
- Good policy design can address





International Leakage: How to Minimize ?

- The more countries that opt-in, the less scope for leakage
- How do you get countries to opt in?
 - They must see more to gain from entering than from staying out
 - Back to the ***baselines*** issue





Baseline Can Create Strong and Weak Incentives to Join

Assume Baseline = Historical deforestation rates

Remaining Forest Cover

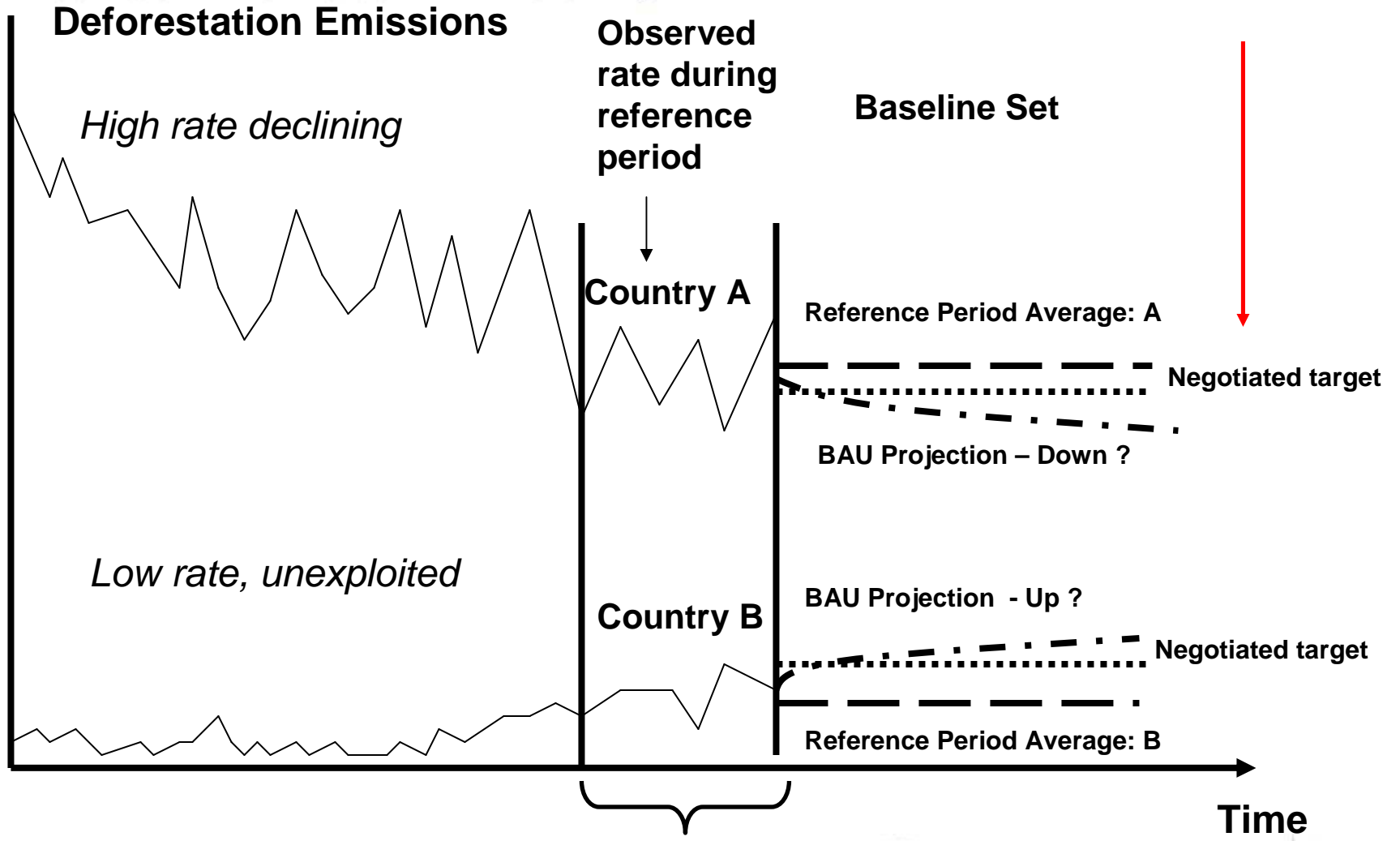
Historic Deforestation Rate

	High	Low
High	Strong <ul style="list-style-type: none">•High credit potential•High opportunity costs	Very strong <ul style="list-style-type: none">•High credit potential•Low opportunity costs
Low	Very weak <ul style="list-style-type: none">•Low credit potential•High opportunity costs	Weak <ul style="list-style-type: none">•Low credit potential•Low opportunity costs

If going purely with historic baselines, many countries have little incentive to join



One option – Adjust Baselines



Reference Period





Another Option: Complementary Policies

Country Situation	Effective Policy
High rates of Deforestation High Forest cover	REDD carbon credits
Low rates of Deforestation High forest cover	Policies that promote maintaining forest
Low rate of Deforestation Low forest cover	Policies that promote afforestation and reforestation





Another Option: Comprehensive Coverage of all Forest Stocks

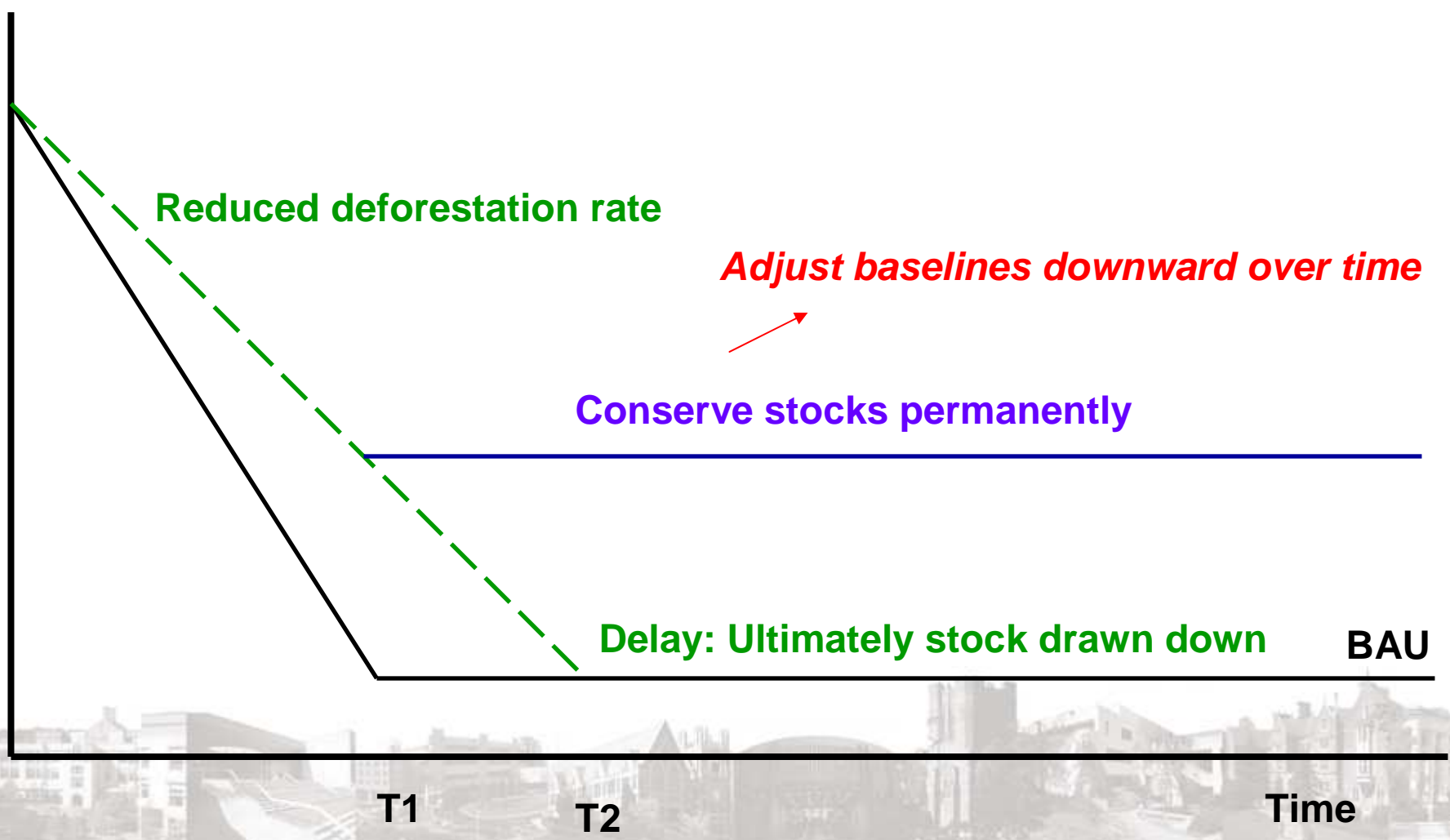
- Not just Deforestation/Degradation, but all changes in forest C stock at the national level
- Reduces leakage among activities
- IPCC Guidelines for National Accounting of Forest C stocks
- Raises concerns about tradeoffs with non-GHG benefits of forests
 - Biodiversity
 - Water quantity and quality





Baseline Adjustments to Promote Permanence

Forest C stock





Lesson 2: With National Implementation, Additionality, Leakage, and Permanence are still relevant

- One approach to national implementation is targeted compensation within country (i.e., projects)
 - Issues arise once more
 - Additionality
 - Leakage
 - Permanence
 - Could require more projects to achieve a given national reductions
 - Implicit discount
- Other approaches
 - Enforcement of existing forest protection laws
 - Deforestation Cap-and-Trade within country





Summary

- Avoided deforestation was left out of CDM because of additionality, leakage and permanence (ALP) concerns
- CDM has not been forthcoming for Forest C thru LULUCF
- Forest loss continues
- Current proposals deal at the national, not project level
 - This fixes a lot of the ALP problems
 - But not all
- Depends critically on establishment of valid and incentive-compatible national baseline
 - Tied to past emissions
 - Adjust over time to reflect dynamics
- Parties should seriously consider extending incentives to all changes in forest carbon stock and not just deforestation (and degradation)





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Avoided Deforestation Prospects for Mitigating Climate Change

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Thank You

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