



Issues in Offset Accounting

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Session 5: Offsets, fragmented approaches and accounting

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Outline of remarks

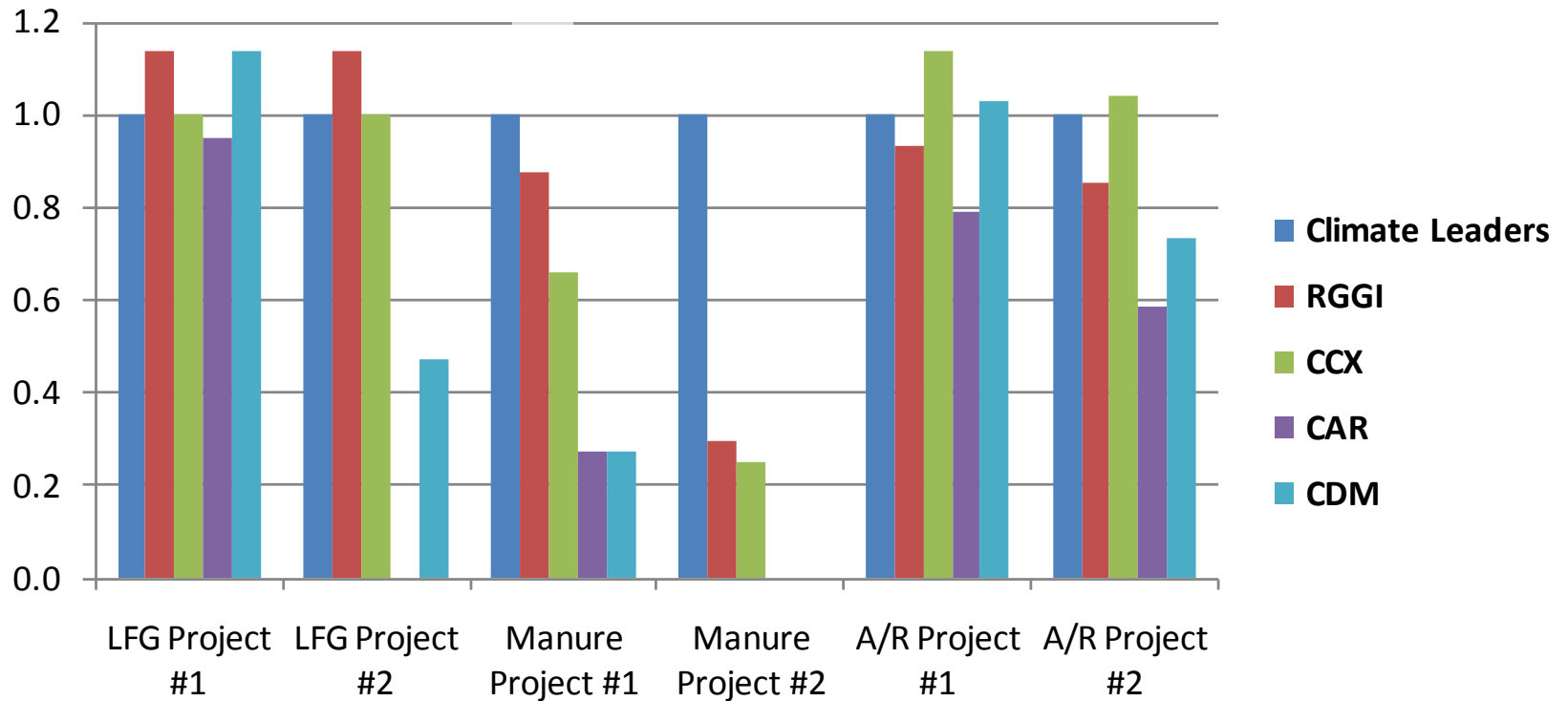
- Findings from 3 recent studies of domestic (U.S.) and international offsets
- Options to improve credibility and integrity of offsets post-2012

1. U.S. EPA/SEI Road Test

- Context
 - Prospect of significant offset volumes in U.S. national and regional emission trading systems; multiple offset units and programs
- Approach
 - Evaluate sample projects against multiple baseline methodologies (protocols)
- Objectives
 - Reveal differences, increase comparability, improve and standardize
- Project types
 - Landfill, manure mgmt, afforestation, CMM, forest mgmt (underway)
- Offset program protocols
 - U.S. EPA Climate Leaders, RGGI, Climate Action Reserve (CAR), Chicago Climate Exchange (CCX), ACR, VCS, and CDM

A ton is not always a ton

Offsets Credited under Different Protocols, Sample Projects
(Relative to Estimates using Climate Leaders Protocols)



Source: Road-testing Offset Protocols for Landfill, Manure, and Afforestation/Reforestation Projects. SEI Working Paper: WP-US-1001.

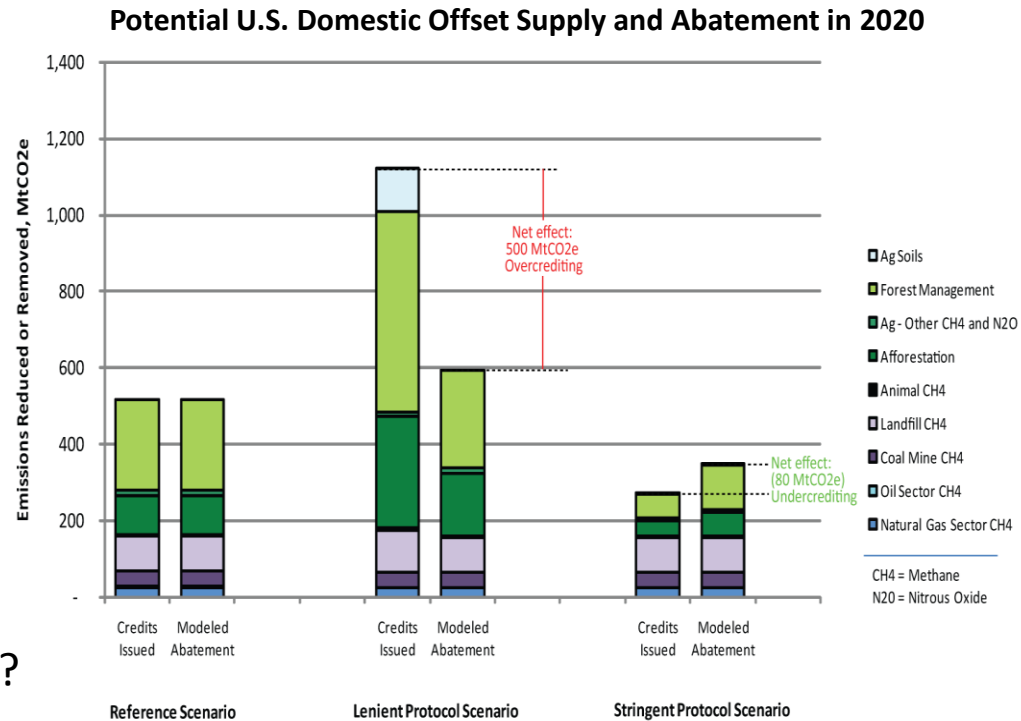
Preview of possible outcomes in a fragmented offset system?

- Unless methodologies consistent, bilateral and multilateral mechanisms may credit very different amounts for similar actions
- Unless mechanisms coordinated, may credit the same reductions more than once

2. Effect of Program Design on U.S. Domestic Offset Supply

- Proposed U.S. cap-and-trade legislation allowed $\approx 1\text{Gt/yr}$ domestic offsets from uncapped sectors
- Adapted EPA abatement cost curves to consider scenarios for baselines, additionality, permanence, leakage
 - assumptions drawn from available meths, road tests, other literature
- Lenient: higher supply, net env. loss
- Strict: lower supply, net env. benefit

Where's the sweet spot and how to find it?

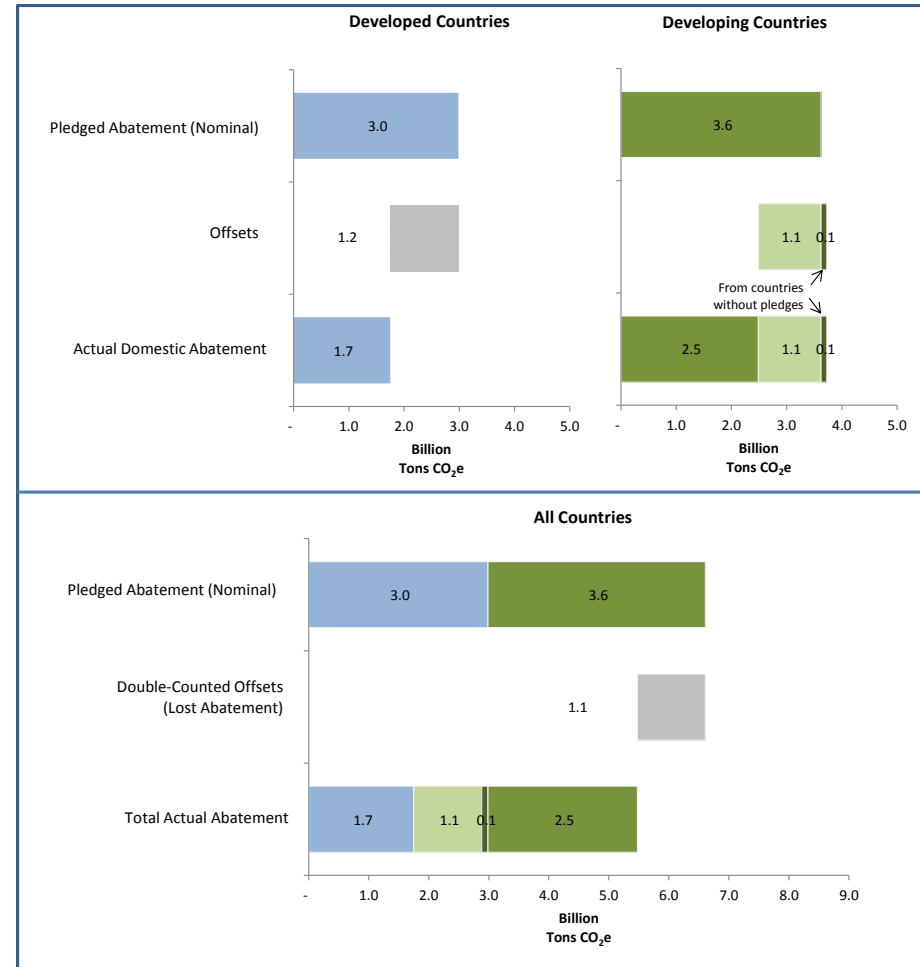


Source: Erickson, Lazarus, Kelly, 2011. *Potential Domestic Greenhouse Gas Offset Supply in A U.S. Cap-And-Trade System: The Importance of Program Design*, *Climate Policy* (forthcoming)

3. Modeling International Offset Flows

- Supply-demand model driven by pledges, offset market experience, complementarity limits
- International offsets supply up to third of developed countries' 2020 pledged reductions
- (Perceived) double-counting of reductions could reduce pledge ambition > 1 Gt CO₂e in 2020
 - ≈10% of abatement to stay within 2°
 - more, if offsets over-credited

Offset Use/Accounting, 2020 (Lower Pledge Ambition, Current Mech)



Source: The Implications of International Greenhouse Gas Offsets on Global Climate Mitigation, SEI-US Working Paper 11-06

Options to improve international offset credibility and integrity, post-2012

- Buyer-only crediting of reductions from offsets?
- Shared crediting? What shares?
- Partitioning of sectors eligible for offset vs. those included in pledges?
- Design of new (sectoral) crediting mechanisms?
- Conservative and consistent baseline methodologies
- Common transaction tracking system

Sources: SEI Working Paper 11-06;

Remedying Discord in the Accord: Accounting Rules for Annex I Pledges in a Post-2012 Climate Agreement. Working Paper. Washington, D.C. World Resources Institute

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CORE Website: <http://www.co2offsetresearch.org/>

The image shows a screenshot of the CORE website header and navigation bar. The header is a dark blue bar with the following elements from left to right: the text 'CORE Carbon Offset Research & Education' in white; the 'ghg management institute' logo, which consists of a stylized green leaf icon and the text 'ghg management institute'; and the 'SEI STOCKHOLM ENVIRONMENT INSTITUTE' logo, which includes a square icon with a grid and the text 'SEI STOCKHOLM ENVIRONMENT INSTITUTE'. Below the header is a navigation bar with four colored sections: a green section with 'Policy Information', a blue section with 'Consumer Information', a dark blue section with 'Aviation Information', and a light green section with a search input field and a 'Submit Query' button.