CCAR's Forest Protocols: Addressing Permanence and Leakage

EPRI Greenhouse Gas Emissions Offset Policy Dialogue
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Forest Project Types

- **Improved Forest Management** – a change in forest management practice to increase sequestration or decrease emissions (or both) compared to the baseline case over the project life.

- **Reforestation** - planting native trees and their subsequent management or protection for the project life.

- **Avoided Conversion** - removing a significant conversion threat to a non-forest use and dedicating the forest to continued forest cover.

All project types require native species and sustainability indicators.

Permanence

- Forest Protocols consider a reduction or removal permanent when it is maintained out of the atmosphere for 100 years.
  - All reductions for all project types are required to meet this definition.

- Managing for Permanence includes:
  - the ability to detect a reversal (monitoring);
  - compensation for reversals to ensure system integrity

Monitoring

- Annual monitoring includes accounting for estimated fluctuations in carbon pools. Climate Action Reserve has built in reporting forms.

- Periodic monitoring by third-party independent verifiers to oversee inventory methodology, quantification, and measurement.

- A separate Verification Protocol will guide verification bodies.

Project Obligations

- CCAR will require all projects to enter into a Project Implementation Agreement (PIA):
  - Obligates landowner/project developer to comply with protocol for life of the project;
    - Requires monitoring, risk management, and reversal compensation
  - Addresses reversals not covered by buffer pool ('intentional losses').
  - Is 'recorded' and 'runs with the land'.
  - Is legal agreement that is enforced by CCAR.

Insurance Buffer Pool

- Each project must undergo a risk assessment to determine the risk of reversal.
  - Natural disturbances (wildfire, disease, insects, etc.)
  - Social (changing policies, political instability, etc.)
  - Management (overharvesting, illegal logging, conversion, etc.)

- Projects must contribute verified reductions into a CCAR-administered buffer pool.
  - Pool will be used to compensate system for any reversals to ensure overall program integrity.

- CCAR will be re-insured and may seek third-party insurer to administer the pool.
  - Reduces need for bilateral insurance between buyers and sellers of credits.

In the Event of a Reversal

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	Project Proponent Not Responsible	Project Proponent Is Responsible
Within Project's Buffer Pool	Project proponent's buffer pool used to compensate for loss.	Project proponent obligated through PIA contract to remedy loss through financial restitution including possible penalties.
Exceeds Project Buffer Pool	Project proponent's buffer pool plus other pooled reductions used to compensate for loss.	Project proponent obligated through PIA contract to remedy loss through financial restitution including possible penalties.

g1   Need to discuss, since I did not intend the buffer pool to cover intentional losses.
gary, 2/18/2009

Leakage

- All projects required to undergo risk assessment for potential leakage:

  - Reforestation: Assessment based on displacement of grazing and agriculture.

  - Improved Forest Management: Assessment based on activities that reduce historic timber production over long periods of time.

  - Avoided Conversion: Assessment based on risk of shifting conversion to alternative forested site.

Leakage

- Protocol provides prescriptive guidance for assessing potential leakage
  - Each project type has its own worksheet to determine corresponding leakage risk factor based on best available data.
  - Assessment is conducted annually.

- Risk factor or leakage percent is deducted from the calculations of net carbon sequestration or avoided emissions.

Contact

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http://www.climateregistry.org/tools/protocols/project-protocols/forests.html