

Draft Updated Forest Protocol Forest Futures II

February 11, 2008



Points to Cover

- **Project principles**
- **Update process**
 - Workgroup
 - Issues addressed
- **Accounting for harvested carbon**
- **De minimus**
- **Other miscellaneous**
- **Timeline**

Forest Protocol Adoption and Update

- Adopted by CCAR in 2005; adopted by ARB in 2007
- Recognize importance of forestry to achieve climate mitigation goals
- Three project types (reforestation, conservation management, avoided deforestation)
- Two projects verified, more on the way

Update Process

ARB sought broader application:

- private commercial forests not associated with a land trust
- private non-timber forests (oak woodlands)
- public lands

CCAR sought improvements and expanded use

- Update science
- Better address leakage, permanence, baseline
- Improve guidance for calculations
- Cost-effective methods
- Use throughout the United States

Forest Protocol Workgroup

- Group size chosen to foster dialogue and be effective
- Have met at least every 3 weeks since November 2007, in all-day sessions
- CCAR managed process
- Comprised of:
 - Private landowners, large and small
 - Public landowners
 - Environmental organizations
 - Scientists/Academics
 - Regulators
 - Verifiers

Sub-committee Leads

The workgroup operated through sub-committees:

- Improved Forest Management Baseline – Eric Holst, EDF
- Public Lands Forest Management Baseline – Bruce Goines, USFS
- Reforestation Baseline – Doug Wickizer, CAL FIRE
- Avoided Conversion Baseline – Michelle Passero, TNC
- Permanence – Ed Murphy, SPI
- Leakage – Katie Goslee, Winrock
- Co-Benefits – Robert Hrubes, SCS
- Quantification – Tim Robards, CAL FIRE

Issues Addressed in Update

Dec 5
Workshop



- Maintain core principles:
 - Real, Permanent, Additional, Verifiable, and Enforceable
- Baseline and additionality
- Risk-management: permanence and leakage
- Quantification
- Co-benefits

- Harvested carbon accounting
- De minimus
- Other miscellaneous

Feb 3
Workshop

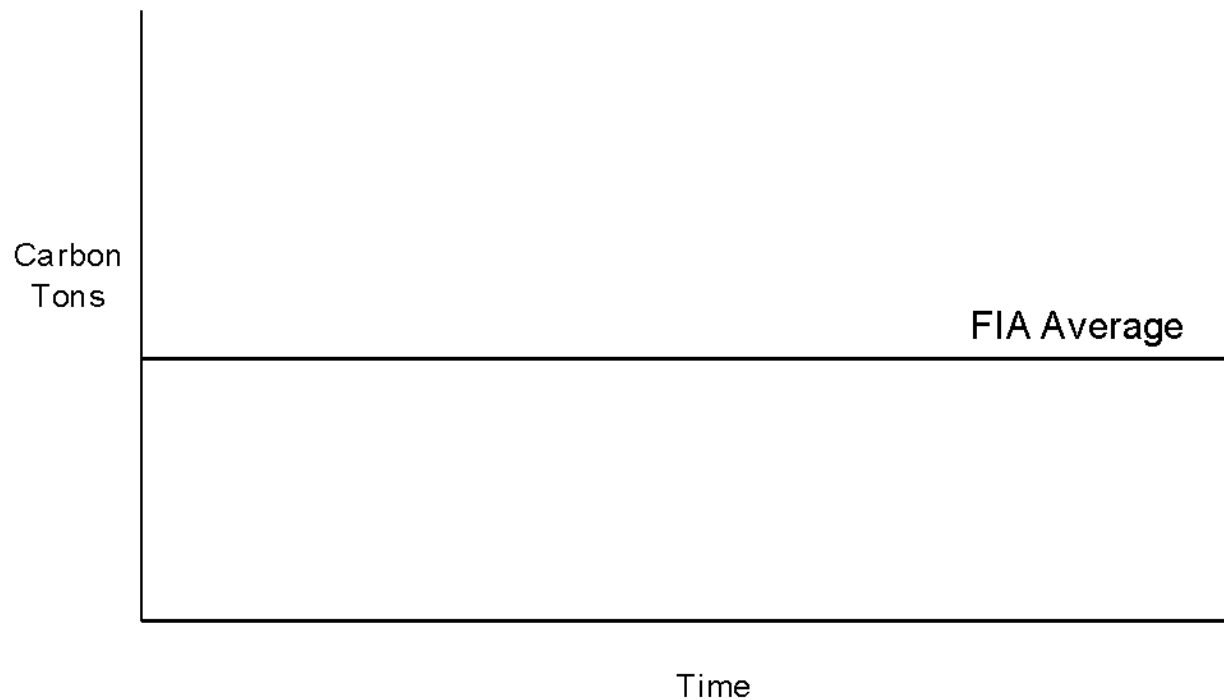


Private Lands Improved Forest Management Baseline

Baseline and Additionality

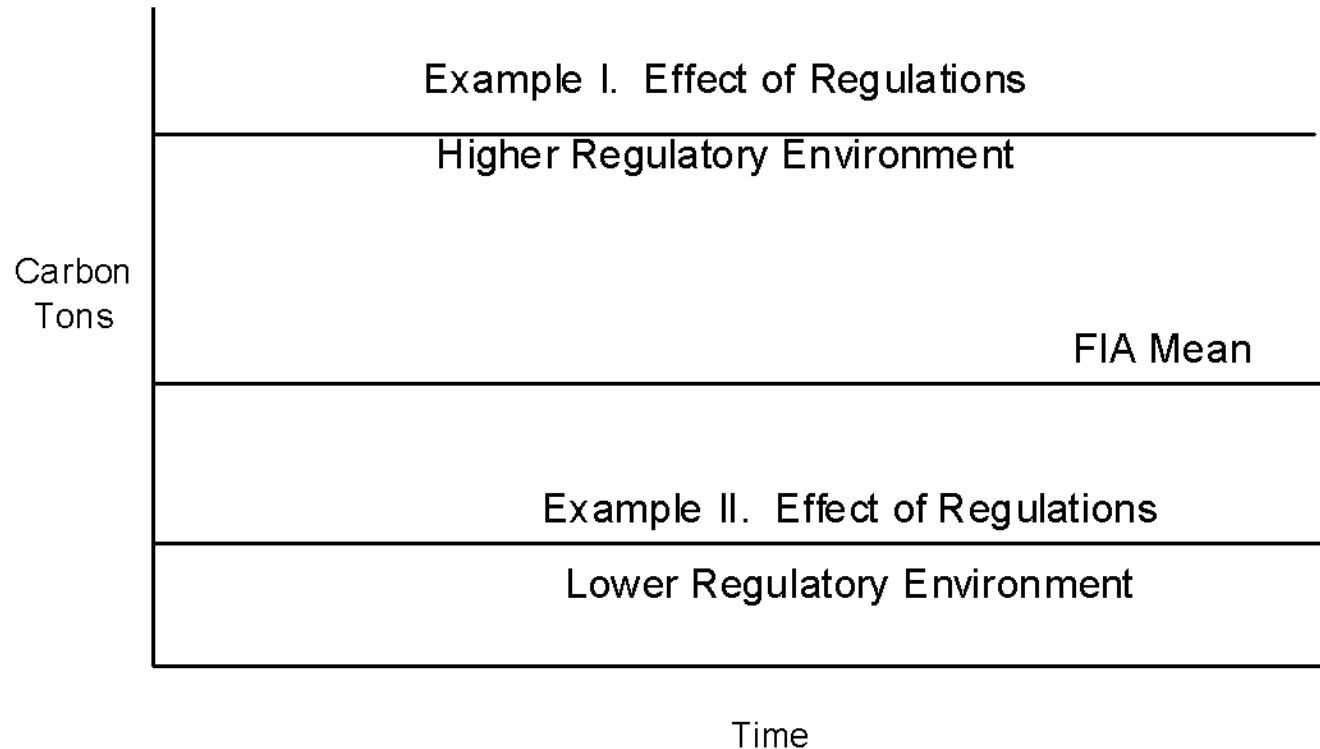
- Current: Forest Practice Rules, Option C
- Proposed: A modeled baseline approach based on legal and financial constraints projected over 100 years, then averaged. FIA data is used as an objective indicator of ‘common practice’ and identifies the extent to which additionality is determined for existing stocks. An historic review of stocks disallows a baseline scenario that follows a period of rapid depletion.

Baseline and Additionality



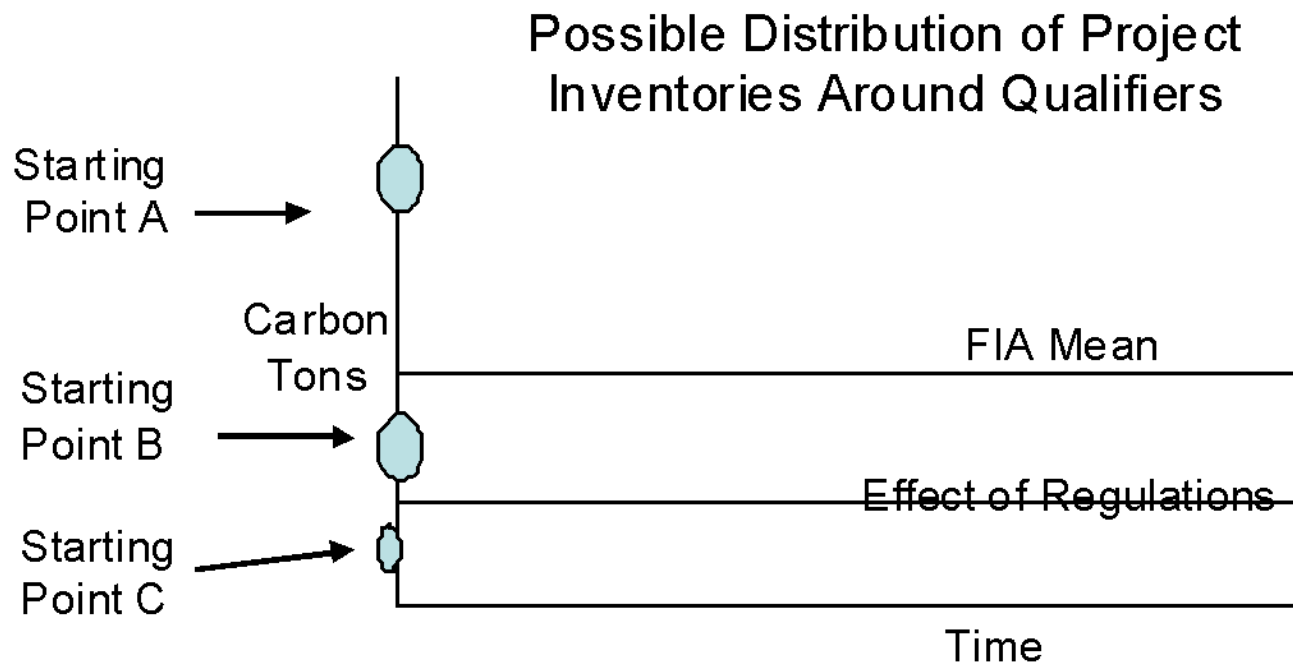
FIA average (mean) within assessment area is used as an objective indicator of common practice and identifies the extent to which additionality can be considered for standing stocks.

Baseline and Additionality



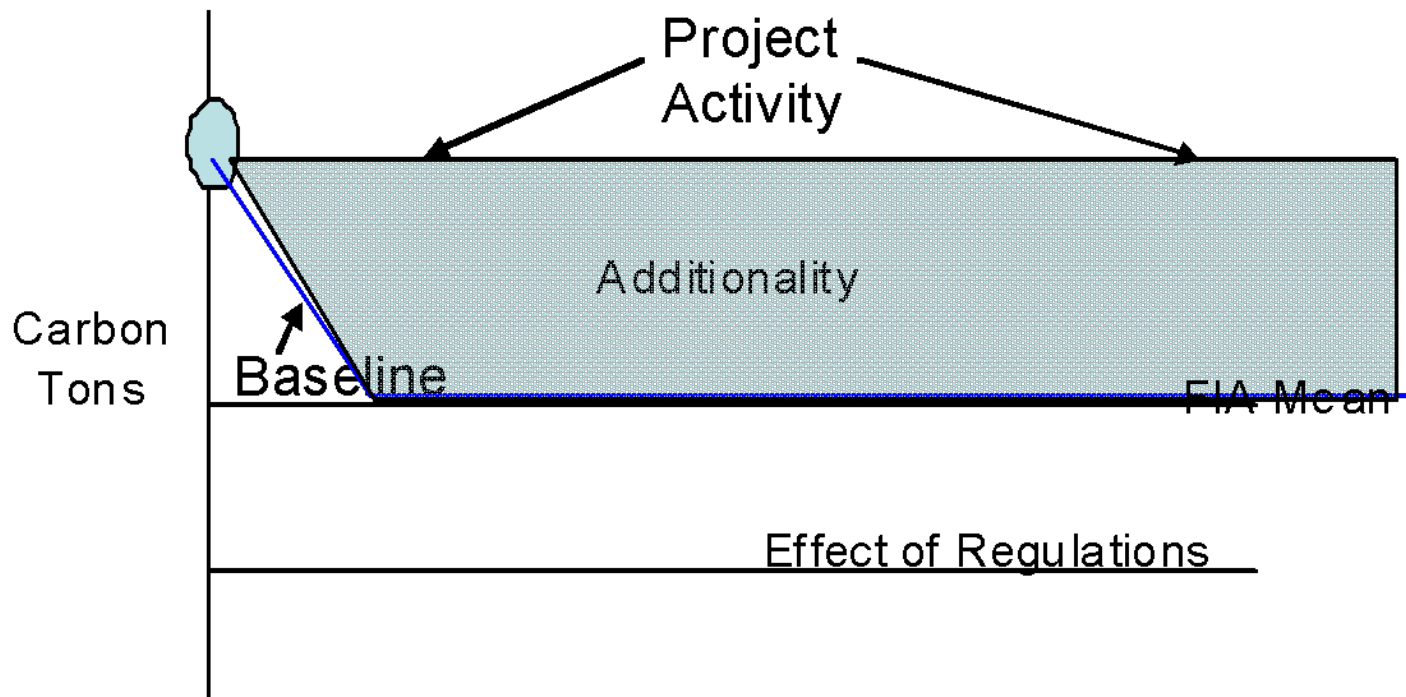
The baseline determination includes an analysis of the regulatory context

Baseline and Additionality



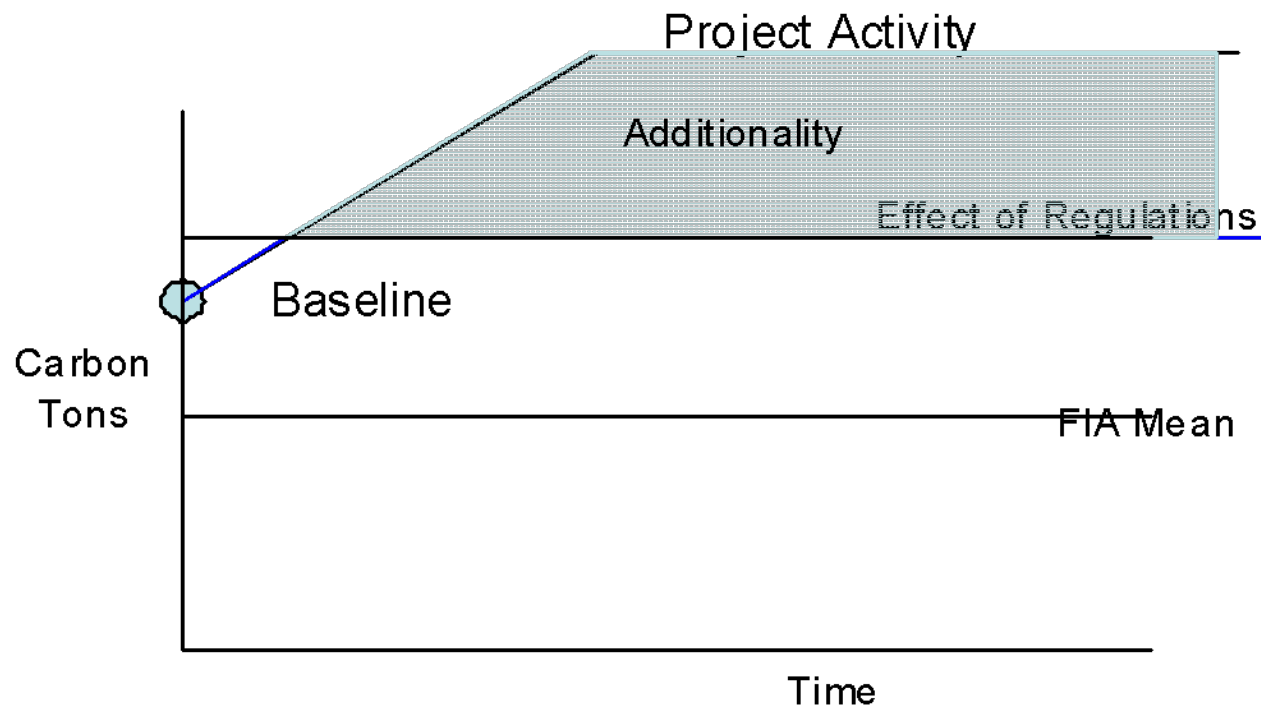
The baseline is mostly determined by the relationship of starting stocks to the FIA mean and the regulatory context

Baseline and Additionality



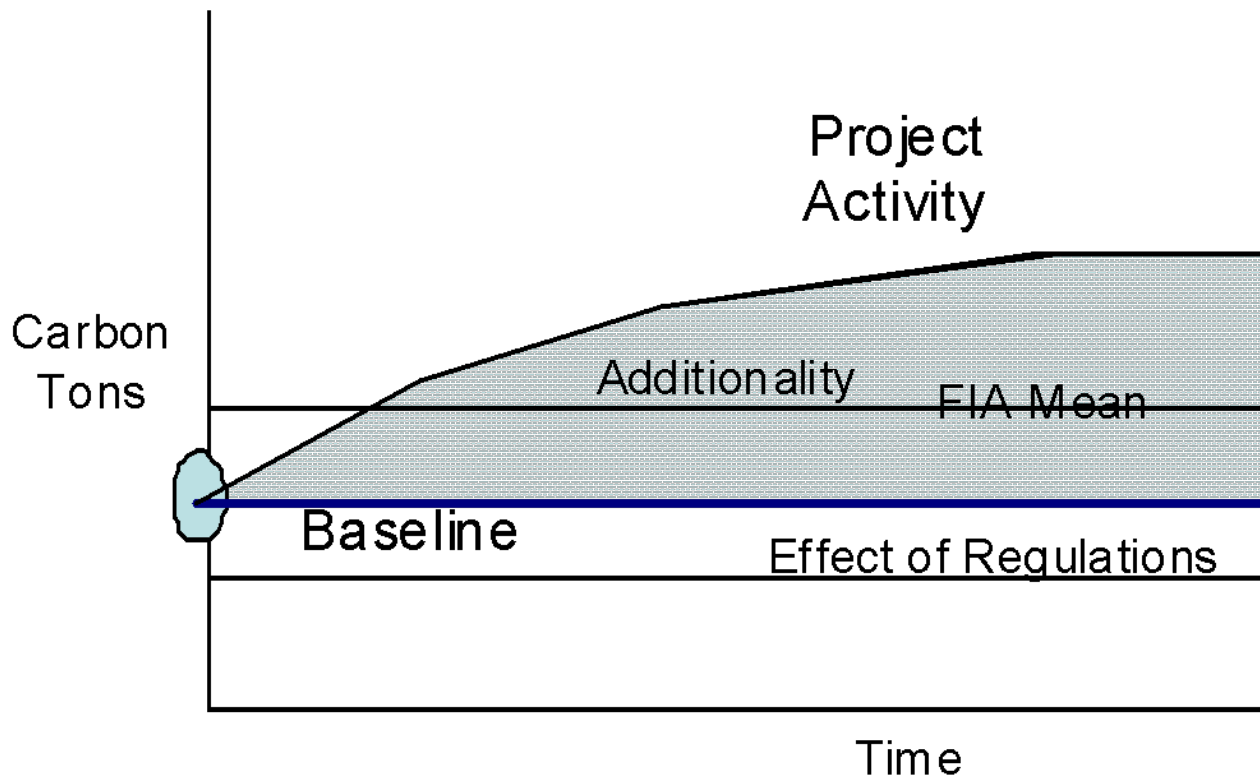
Baseline for a project starting above the FIA mean and regulatory context is demonstrated by a modeled harvest scenario down to the FIA mean and/or regulatory context

Baseline and Additionality



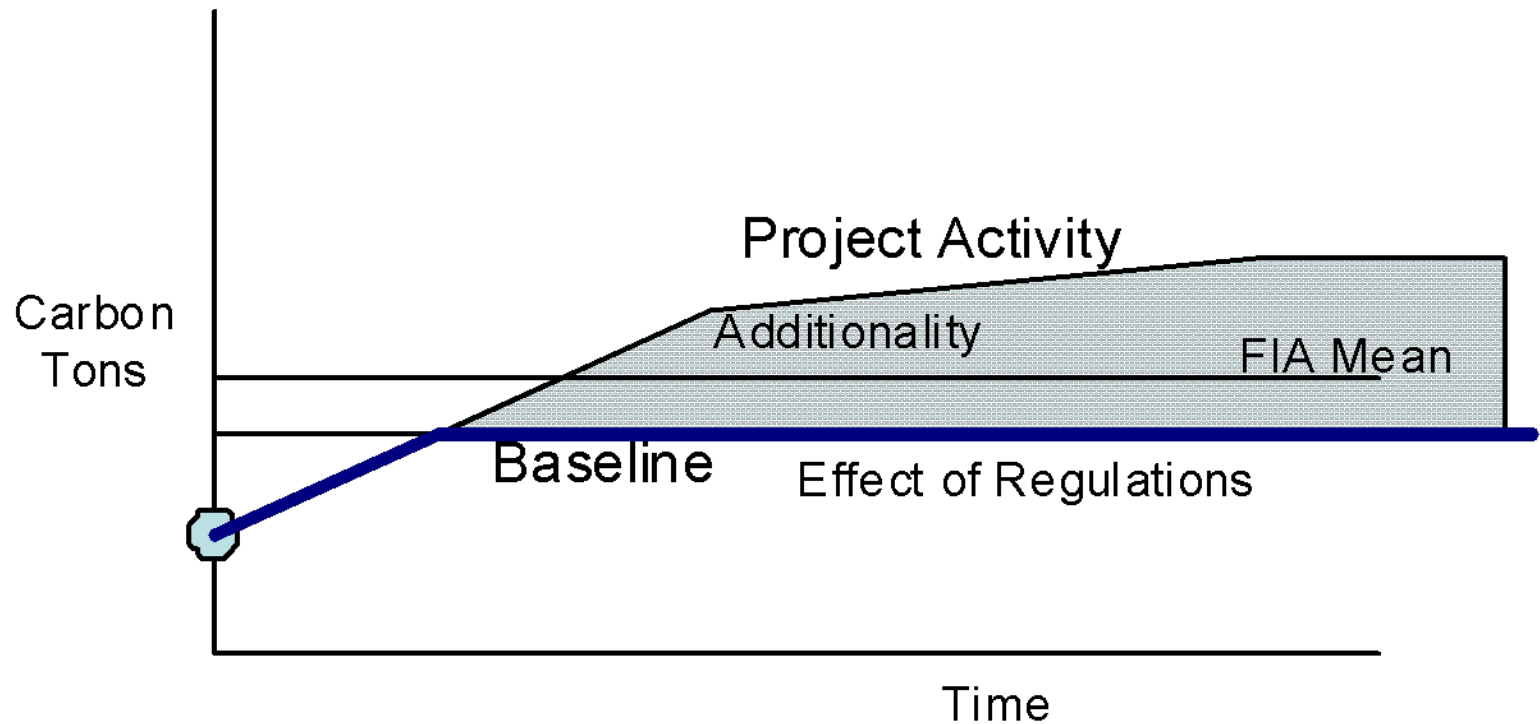
All project baselines must meet the regulatory context

Baseline and Additionality



Projects below the FIA Mean are not able to get credit for avoided emissions

Baseline and Additionality



All projects must meet the regulatory context

Improved Reforestation Baseline

- Current: out of forest cover for 10 years and on forest soils.
- Added clause that enables reforestation projects after significant natural disturbance.

Improved Baseline for Avoided Conversion

- Current – Site specific immediate threat
- Added discounted risk-based approach based on risk of conversion in each of the following categories:
 - Suitability of Project Area for Conversion
 - Legal Permissibility of Conversion
 - Disparity in Value
 - Assessment of Risk of Conversion

New Public Lands Forest Management Baseline

- A new baseline approach that allows public lands to quantify a baseline based on an historic (10-year) review of retention standards, rotations, and other practices determined by statute, regulation, policy, and budgets.

Risk-management

- Greenhouse gas reduction projects face a variety of risks that may compromise the reductions produced by a project.
- The **permanence** of reductions and **leakage** (i.e., displacement of GHG emissions) are among the risks that forest projects may encounter.

Risk-management: permanence

- CCAR defines permanence as securing any obligated reductions from the inception of those reductions for a period of 100 years (an international standard used to represent the life-cycle of carbon in the atmosphere).

Risk-management: permanence

- Three permanence mechanisms in updated forest protocol
 - Requirement for annual self monitoring and reporting, and periodic inventory verification.
 - Requirement that the project be governed by a contractual agreement between the project proponent and CCAR that is recorded and commits parties to the terms of the project and verification protocol.
 - Requirement that the project include a risk assessment and establishment of reserves (a buffer pool) based upon this risk assessment.

Risk-management: permanence

- Risk Assessment
 - Natural disturbances: fire, disease
 - Illegal activity
 - Ownership change
 - Financial
- Buffer Pool
 - Contribution based on risk
 - Used to backfill reversals
 - CCAR manage, or private insurance
 - Consistent with VCS

Risk-management: leakage

- The former “Forest Sector” protocol has been replaced by a rigorous leakage risk assessment
- Each project type has its own worksheet that assesses the risk of leakage and provides a corresponding leakage risk factor
- This risk factor or leakage percent must be assessed annually and deducted from the calculations of net carbon sequestration or avoided emissions

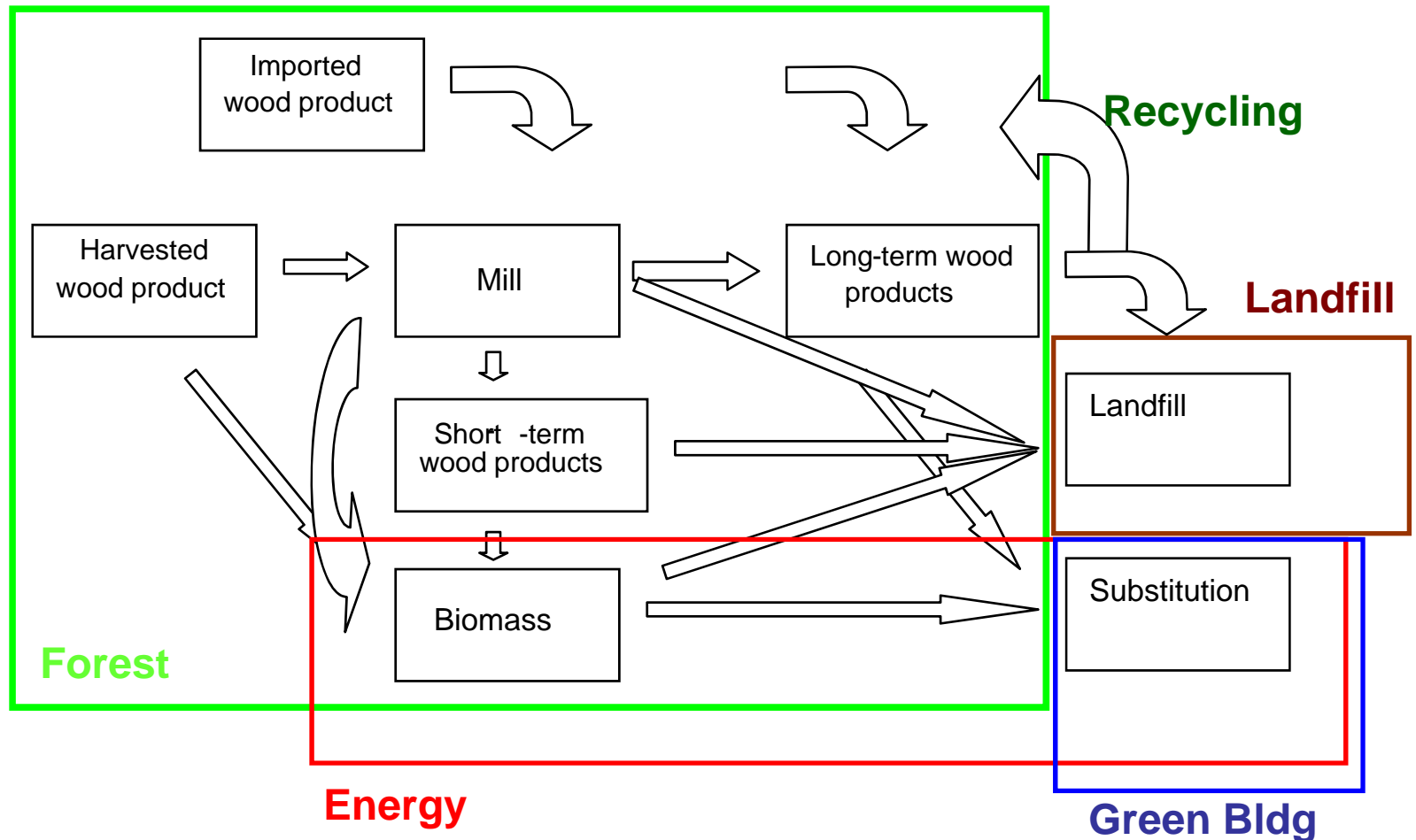
Co-benefits

- Improved definitions of “native” and “natural forest management”.
- Native species requirement
- Requires management of biodiversity at watershed-scale regardless of silvicultural methods used.

Quantification

- Improvements in both accuracy and cost-effectiveness.
- The latest biomass equations are incorporated.
- Guidance for required and optional pools based on project type.

Wood Product Life Cycle – Multiple Sectors



Subcommittee Findings

- Accurate forest project accounting requires the accounting of harvested carbon in both baseline and project activity analyses.
- The forest sector must account for all emissions over a 100-year defined period to address permanency and transparency issues, even though cross-sector accounting guidelines have not yet been established programmatically.
- Accounting and crediting are not the same and should be separated.

Crediting of Harvested Carbon

- For conservative crediting, crediting will be based on the 100-year carbon cumulative average of in-use harvest carbon.
- This includes accounting for mill efficiencies and product generation for each assessment area.

Crediting DOES NOT include landfill carbon storage.

Timeline

- Prepare interim draft with updated terms by 2/13.
- Public comment period (wood product focus) ends 2/20.
- Review and respond to comments, including CCAR concerns and priorities with workgroup by 2/23.
- Workgroup delivers final draft to CCAR by 3/13.
- CCAR makes final edits, puts out to workgroup and public by 3/20.
- Public review and comment ends on 4/20.
- Final draft to CCAR Board on 5/10 (tentative).

Contact



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