An Environment Registry

Capturing the Financial Value of Environmental Services

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Rationale

- New markets for Environmental Services that value ecosystems are emerging

- An Environmental Registry will help build liquid markets by linking buyers and producers of financial-grade environmental services
Purpose

• Explore avenues for quantifying and valuing non-timber ecological benefits of progressive forest ecosystem management

• Develop measurement and validation procedures for tracking, recording and transacting benefits on an Environmental Registry
Objective

- To initiate the creation of an Environmental Registry that builds on GHG Registry\textsuperscript{sm} model, an existing system for registering greenhouse gas (GHG) emissions performance and transacting reductions
The GHG Registry™

- A repository of qualified emissions reports and transactions
- Foundation of comparability between carbon emitting and reducing activities
- Web Accessible, secure Oracle database
Welcome to the Environmental Resources Greenhouse Gas Registry.

If you are a member of the Registry, you can login to the secure site to either view reports or update information in the system. If you are not a member of the Registry and would like to be, go to the ERT Contact page to find out how to contact ERT for membership. Non-participants to the Registry can click on Public Access to view the most recent information available.

Note: This system requires a browser that is compatible with Java and Javascript. Also, this site is best viewed at a 1024x768 resolution to minimize the need for scrolling.

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Goals of GHG Registry Project

- Build GHG market infrastructure
- Enhance confidence in and understanding of actions by providing objective, reputable and credible third-party registry
- Facilitate learning-by-doing
Lessons Learned from GHG Registry

- Reliable quantification key to unlocking financial value of carbon reductions
  - Buyers must have confidence in CO$_2$ instruments

- Standardization of measurement techniques and contracting practices key to fungibility and liquidity

- High first-cost for protocol development widely dispersed benefits
The Environment Registry: Valuing Forest Stewardship

• Environmental benefits of progressive stewardship (and benefit value) vary by:
  – Management regime
  – Forest system type (Tropical, Temperate, etc.)
  – Proximity to urban populations
  – Local resource constraints (e.g. urban watersheds)
  – Flora and Fauna considerations (endangered species, nesting areas, spawning grounds, etc.)
The Quantification Challenge

- Despite the heterogeneity of forest types, management regimes etc,
  - Common measurement metrics and data standards need to be developed to establish environmental service commodities
  - Measurement methods must be robust enough to satisfy requirements of capital markets (financial accounting standards)
  - Measurement and Verification Accreditation standards/procedures need to be developed to foster market confidence/liquidity (CPA/AICPA/FASB)
Potential Transaction Model

Owner of Mixed forest/Indigenous species → Certification Entity → Environment Registry → Environmental Services Buyers

Revenue ---- Services ---
Measurement and Recording

• Non-timber ecosystem benefits can be valued in financial markets if:
  – Quantification meets accounting standards
  – Property rights are clearly established and transferable
  – Common benefits are commoditized and fungibly tradable
  – Packaged for use in capital/commodity markets (e.g. exchange-traded instruments)
Activities

1. Select properties based on forest, tenure and ownership type
2. Develop metrics for Quantifying Environmental Services
3. Apply Metrics to selected properties
4. Create model entries for Environmental Services
5. Populate Environmental Registry
Scope

- Develop and apply quantification protocols for common environmental benefits of progressive stewardship at selected forest types and ownership structures
- Develop actual registry entries for selected properties
- Examine how different ownership structures could bring services to market (e.g. land trusts, communities, timber companies, investment companies)
Scope Continued

• Identify potential market participants and how they could bring various services to market
  – Bundled services
  – Ownership/management aggregation
  – Ala carte sales (e.g. sell management practice changes at marginal cost or in suites of services)
  – Bringing non-standard (extraordinary) services to market
    • Critical ecosystem
    • Special habitat
Scope Continued

- Identify potential buyers and examine how they may interface with market
  - Conservation groups
  - Governments/Municipalities (including tax policy)
  - Re-insurers
  - Progressive corporations
Katoomba Participation

- Design Ideas
- Sponsorship
- Technical Expertise
- Expert Panel Participation
- Certification Criteria
- Game Experiences
- Market Participation