An Environment Registry

Capturing the Financial Value of Environmental Services

> Ben Feldman Environmental Resources Trust bfeldman@ert.net

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

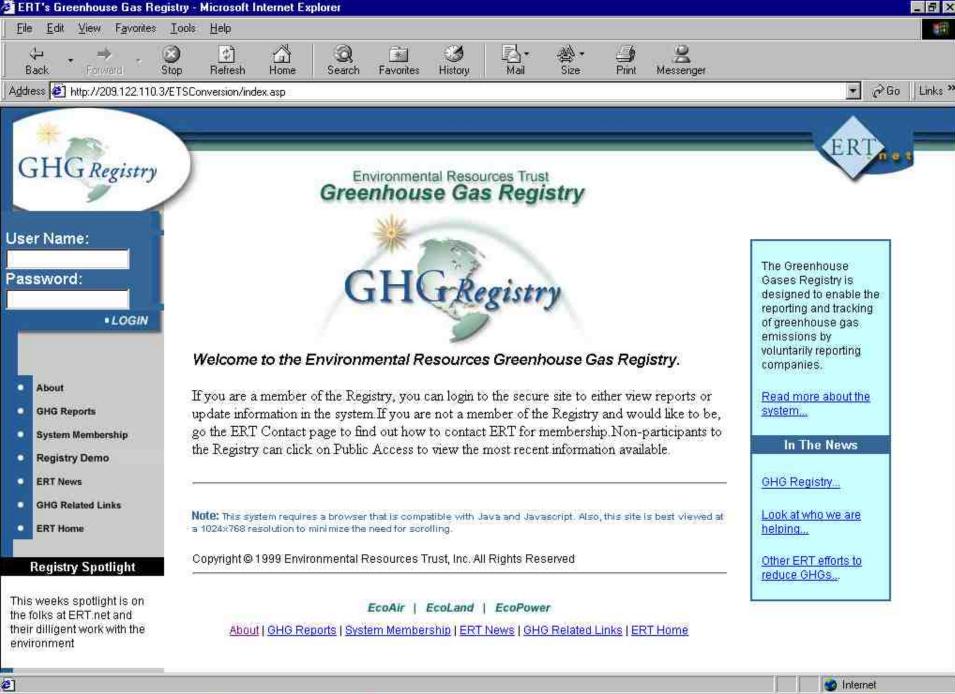
- Explore avenues for quantifying and valuing non-timber ecological benefits of progressive forest ecosystem management
- Develop measurement and validation procedures for tracking, recording and transacting benefits on an Environmental Registry

Objective

 To initiate the creation of an Environmental Registry that builds on GHG Registrysm model, an existing system for registering greenhouse gas (GHG) emissions performance and transacting reductions

The GHG Registrysm

- A repository of qualified emissions reports and transactions
- Foundation of comparability between carbon emitting and reducing activities
- Web Accessible, secure Oracle database



Start FIERT's Greenhouse G Sector Contract Sector Sector

America Online



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 CO₂ instruments
- Standardization of measurement techniques and contracting practices key to fungibility and liquidity
- High first-cost for protocol development widely dispersed benefits

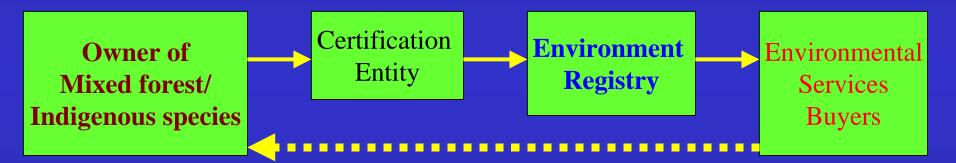
The Environment Registry: Valuing Forest Stewardship

- 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

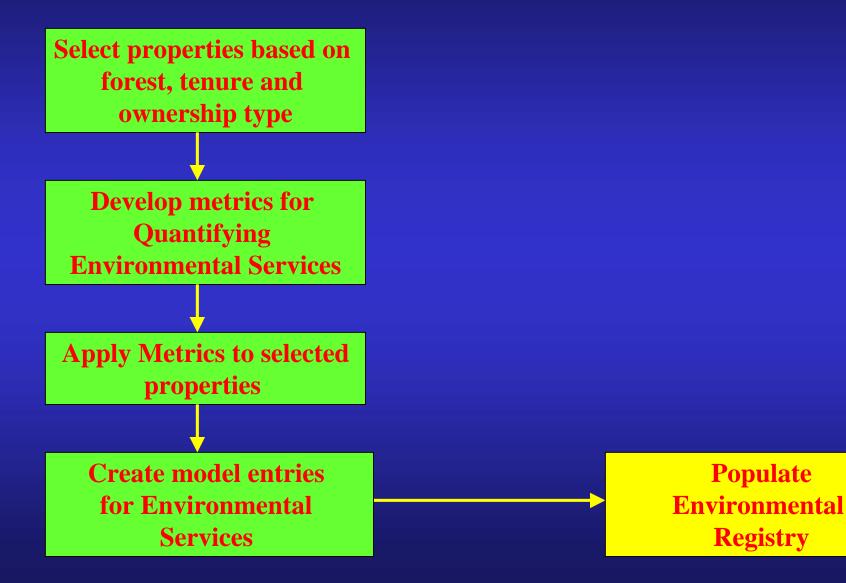




Measurement and Recording

- 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 commiditized and fungibly tradable
 - Packaged for use in capital/commodity markets (e.g. exchange-traded instruments)

Activities



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