

# Offsets and Forestry: Opportunities and Challenges

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# Blue Source Services

- Canada's leading marketer of offsets
- Policy/protocol advocacy
- Protocol development
- Data monitoring, management
- Project documentation
- Verification/registration
- Post-sale support
- Project investment

# What are Offsets?

- A form of carbon credit
- Represent the avoidance, reduction, or removal of GHG emissions from a specific project
- One offset credit = One tonne of CO<sub>2</sub>e
- Reductions by one party can be used by a second party to offset their own emissions
- Why offsets?
  - Offer flexibility and economic efficiency in compliance
  - Encourage GHG reductions outside of regulatory regimes
  - Encourage new technologies, practices
  - Reward voluntary reductions

# Offsets must be...

- Real/Verifiable
- Quantifiable
- Permanent
- Unique
- Surplus to business as usual (incremental)
- Surplus to regulation (voluntary)

# Forestry Offsets – Blue Source Experience

- October 2009 Alligator River Avoided Conversion Project
  - First project under the Climate Action Reserve's Forest Project Protocol version 3.0
  - Will permanently preserve 2,500-acre forest in North Carolina
- December 2009 – Working Woodlands Project
  - With The Nature Conservancy (USA)
  - A model forest conservation program
  - In conjunction with small landowners (250 acres +)
- Currently in discussions with numerous project developers in Canada, including Alberta, Ontario and British Columbia

# Forestry Projects – Offset Challenges

- Proving additionality - must be surplus to regulation
- No approved protocols in Canada(in development)
- Quantification
- Establishing baseline
- Permanence/reversal
- Leakage
- Ownership



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# Forestry projects – Project Challenges

1. Opportunity cost (loss of current/future harvesting)
2. Market risk
3. Carbon economics
4. Lower growth rates/carbon sequestration in Canada
5. Payback period
6. Small dispersed projects – aggregation requirement

# Forestry Offsets – Market Players

- Project developers
- Landowners/Leaseholders
- Government – Regulatory
- Government – Auditor
- Registries
- Aggregators
- Brokers
- Marketers
- NGOs
- Buyers

# Forestry Offset Markets

- Compliance - Alberta
  - Tech Fund price influences value
- Quasi-compliance (BC)
  - PCT
- Pre-compliance (federal, Western Climate Initiative)
  - Driven by expectation of compliance needs
  - Forest projects expected to be part of any forthcoming system
- Voluntary
  - Corporate and retail buyers
- Conclusion: Informed buyers offering value for compliance-grade offsets

# Current Market for Forestry Offsets

- Buyers
  - Regulated emitters
  - Precompliance
  - Voluntary programs
  - Speculative buyers
- Attractive for social, environmental reasons
- Challenge of permanence, complexity

# Taking Offsets to Market

- Identify carbon marketing objectives/strategy
  - Spot (annual)
  - forward sales
  - Options
  - Banking
- When to go to market?
- Going to market
  - Project documentation
  - Verification
  - Registration
  - Identify potential buyers
- Contracting
- Delivery
- Post-sales support

# Project Types - Afforestation

Reforesting land that has been historically not forested or has not been forested within a specific time period.

- Cut lines
- Forestry roads
- O&G reclamation

## Current protocols

- Alberta (status?)
- Climate Action Reserve (CAR)
- Voluntary Carbon Standard (VCS)
- Chicago Climate Exchange (CCX)

# Afforestation – Key issues

- Sequestration rate of trees
  - Species
  - Region (northern regions, lower sequestration rates)
- Cost structure
  - Planting (site prep/seedlings)
  - Need for aggregation (?)
- Project size
  - 50,000 tonne threshold (aggregation)
  - Land required to be determined

# Afforestation – Challenges

- Eligibility of marginal lands
- Aggregation requirements
- Capital costs
- Maintenance risks
- Competition/opportunity cost
- Weak return on carbon investment
- Future competition for wood fibre
  - biomass conversion/biofuels
- Investment risk
  - Upfront capital costs, and the requirement to keep the land for long periods of time without conversion

# Project Types – Avoided Conversion

Projects that involve the avoidance of conversion, development or modification on traditionally forested land, such as a conservation easement or another form of protection put on the land to prevent the forests from being developed.

## Current Protocols

- CAR
- VCS
- Canadian (if adopting CAR)

# Avoided Conversion – Key variables

- Age of forest
- Type of trees / soils/percentage native forest
- Inclusion of indirect emissions associated with avoided activity in protocol
  - Fossil fuel usage
  - Fertilizer (in some cases)

# Avoided Conversion – Key risks

- How is “development” going to be defined for protocol?
- How is baseline going to be established/proven?
- Competition for land
- Long lead time for land easement projects
- Access to land
- Sufficient project size
- Determination of discounts to account for leakage and reversal risk

# Avoided Conversion - Discussion

- Upfront costs are low
- Huge standing stock of carbon
- Land removed from other uses
- Role of land trusts
- Aggregation requirement
- Relevant to/viable for forestry companies?

# Project Types - Improved Forest Management

Forest management activities that maintain or increase carbon stocks on forested land relative to baseline management practices, such as regulatory requirements.

- Any context where forestry activity takes place

Four project types (under VCS protocol)

- Extended rotation age (ERA)
- Low-productive to productive forests (LtHP)
- Logged forests to protected forests (LPtPF)
- Reduced impact logging (RIL)

# IFM – Key Variables

- How do applicable protocols define relevant management practices?
- Regulatory forestry management practices (baseline)
  - SRD requirements
- Knowledge of practices/improved performance
- Costs/benefits of improved practices
- Ownership of offsets (FMAs = crown land)
- Economics
  - does carbon revenue justify increased cost/resources?

# IFM – Key Risks

- Regulatory change
  - Required practices could increase in stringency
- Different provincial regulations/establishing baseline
- Economic variability of forestry-related industries
- Impact of economic variability on IFM projects
- Proving/maintaining additionality

# IFM – Discussion Points

- Project size – sufficient sized projects likely to belong to LFEs
  - Major players will retain ERBs for internal use
- Moving baseline/regulatory change
- IFM could be resource-intensive project type

# Thank You~

Please come find me if you have any questions!

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