Tribal Forest Carbon – An Overview of Project Mechanics and Benefits

Institute for Tribal Environmental Professionals

9/5/2017

Who is Bluesource?

- Oldest and largest carbon offset developer in the North America
- >200 Projects, >20 Project Types, >150 million tonnes of emissions reductions represented in portfolio
- Dedicated Forestry Team: Includes in-house finance, marketing, and legal experts, plus 5 professional foresters with unparalleled forest carbon experience
- Strategic partners include: TNC, EDF, Audubon, The Arbor Day Foundation, The Pacific Forest Trust
- Developer with most listed compliance forest offset projects with the California Air Resources Board
- Market Maker, help guide clients to finding the best counterparty and best sale pricing on environmental benefit related transactions

San Francisco

Salt Lake City

Calgary

Toronto

Contents

What Are Forest Carbon Offsets?

- Forests across the US sequester substantial amounts of CO2
- By maintaining or increasing forest stocking, forest landowners can generate units of CO2 emissions reductions (“Carbon Offsets”)
- Companies wishing to combat climate change are willing to pay forest owners for these Carbon Offsets, thereby claiming credit for reducing CO2 emissions and mitigating some of the effects of climate change

Environmental Co-benefits

Forest offset projects offer a host of environmental co-benefits beyond carbon sequestration:

- Support biodiversity
- Improve water quality
- Improve air quality
- Erosion control
- Habitat connectivity
- Recreation

Financial Benefits

- Average Bluesource forest project generates >$6 million in revenue over the first 10 years of project life

- Best projects generate >$30 million in first decade

- >75% of first decade's revenue often realized at first credit issuance (i.e. in year one)

Forest Carbon Markets

Voluntary Market – Companies voluntarily choose to purchase offsets to reduce their emissions

- Greater variation in pricing (<$1 to >$12)
- Premium value attributed to “charismatic” projects
- Less certain demand

Compliance Market – Companies purchase offsets to help meet their legally mandated emissions targets (CA, Quebec, Ontario)

- More consistent pricing (currently ~$11 to $13)
- Built in demand through 2030

Forest Carbon Project Types

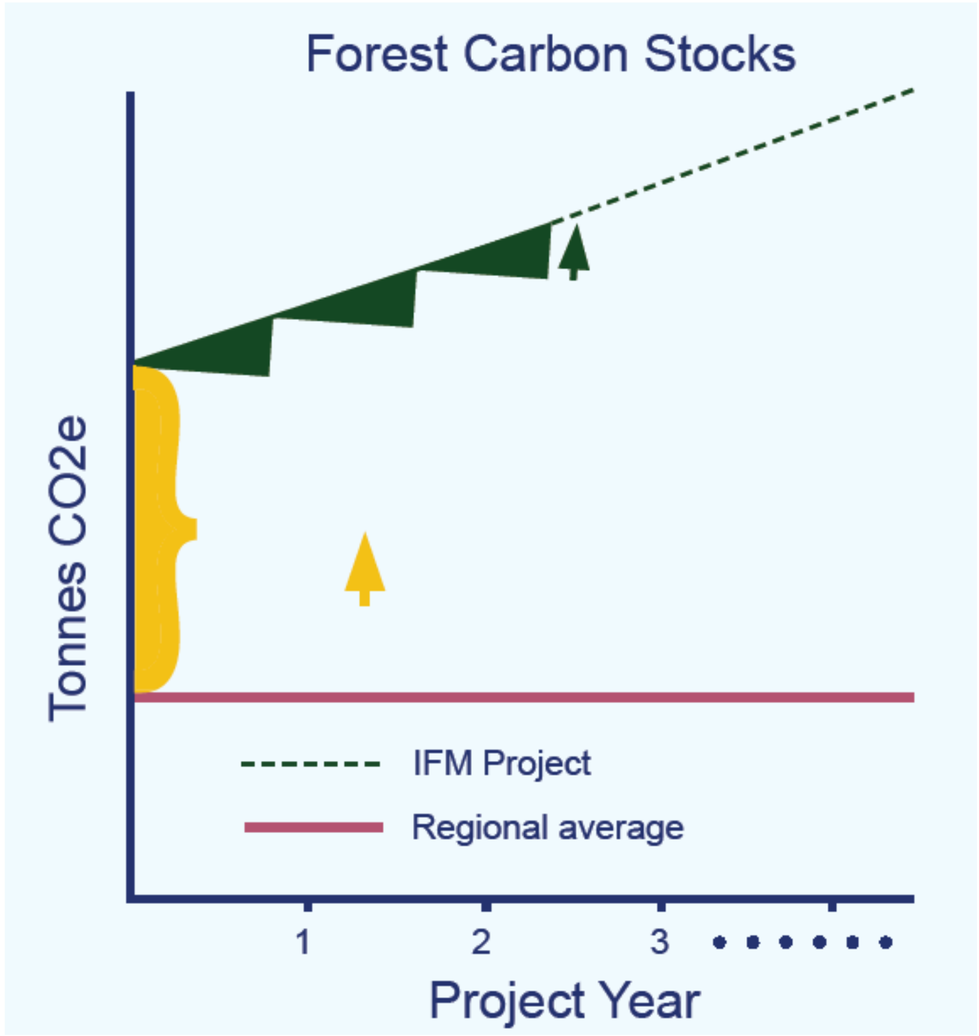
- Afforestation
- Avoided Conversion
- **Improved Forest Management (IFM)**


Afforestation


Avoided Conversion


IFM

IFM Project Mechanics



IFM Development Process

Credit Marketing

1. •Project Feasibility Analysis
2. •Contracting and Listing
3. •Inventory
4. •Modeling and Documentation
5. •Verification
6. •Credit Registration and Issuance
7. •Credit Sale

Impacts On Management

Management Restrictions

- Harvesting should not exceed growth in any year
- No even aged harvests on contiguous areas greater than 40 acres
- No use of broadcast fertilizer
- Must maintain certification (FSC, SFI, ATFS) *or* have Sate/Fed/BIA approved forest management plan *or* no harvesting on an area greater than 12 contiguous acres

Important to find the optimum balance between timber harvesting and carbon revenue generation

Landowner Obligations

A compliance project must be maintained for **100 years** following final credit issuance

Monitoring

- A complete forest inventory must be updated at least every 12 years
- Monitoring documentation must be updated annually to account for harvesting, growth, or significant damage from natural disasters

Auditing

- A full verification with a site visit component must be undertaken every 6 years

Obligations Specific to Tribes

- Must sign a limited waver of sovereign immunity
- Must obtain letter from BIA stating federal approval is not required for the tribe to participate (per 25 U.S.C. §81)

Thank You

Josh Strauss
Vice President
Bluesource
(949) 233-1501
jstrauss@Bluesource.com