Forest Carbon Project Workshop: Augusta, MA
June 7, 2010

Adam Raphaely – Environmental Markets
Introduction to TFS Green Carbon
Policy Update
The Role for Forestry in a Federal Mandated Program
Current Market Activity and Stakeholders
Structures that Trade
Concluding Comments
TFS Energy, LLC
New York Environmental Markets Desk

- Teams with Clean Development Mechanism (CDM) desk in London, with satellites around the globe.
- Works on all environmental products, including: GHG offsets and allowances, Renewable Energy Credits (RECs), and NO$_x$/SO$_2$ in the acid rain program.
- Recently Awarded the coveted ‘Broker of the year Award’ by Point Carbon.
Waxman Markey: Passed the House narrowly

*Offset component*: 50% Domestic / 50% International
If Domestic < 900mt/year, will allow increase of International to 1.5bt/year

Kerry Lieberman’s American Power Act: Released on May 12th 2010

*Offset component*: Favor’s Domestic Projects with good inclusion of Land use and forestry based offsets
Administration hoping to use strong anti fossil fuel sentiment driven by the oil gushing in the gulf to rouse the Senate into action.
Forest Management Methodologies include:

Afforestation, reforestation, improving forest, cropland, grassland, rangeland management practices, conservation of grassland and forest, avoided conversion, reduced deforestation, urban forestry, agroforestry, and forest technologies to sequester more carbon, restoration or preservation of vegetated marine coastal habitats
Market Activity / Stakeholders

Market is composed of 2 buyers:

**Pre Compliance Buyers**
- Natural Shorts like Utilities
- Client Facing Principles like Banks
- Commodity Trading Houses and Investment Funds

**Voluntary / Retail Buyers**
- Retail Marketers
- Fortune 500 Companies

- Appetite for project types differ based on motivation
OTC and Exchange Cleared

1. OTC

- **Spot Transactions**
  - Mitigate delivery risk
    - Short Form Contract
    - Credit and Counterparty risk minimized

- **Forward Transactions**
  - Payment on Delivery or Prepay
    - Credit and Counterparty Risk become tangible concerns
    - Contracting is structured with many covenants
    - UC vs Firm Delivery
OTC and Exchange Cleared

1. Exchange Cleared
   - **Futures**
     - Multiple Delivery Months
       - Provides natural hedge versus cash / physical market
       - Posting margin may prove unreasonable for certain sellers
   - **Options**
     - Provide Long and Short Participants with multiple hedging structures
       - Liquidity is the largest concern now
       - Physical underlying contract is key to the success
Market is healthy and robust despite dip in liquidity

Clarity on Policy outcome will provide much needed confidence for developers and buyers

Market provides unique opportunity for forestry project developers to be rewarded for activities undertaken to responsibly manage forestry based activities

Lessons learned in the current market environment will allow for smooth transition into full fledged compliance market
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