Update on “Forestry” Protocols

Alberta Forest Growth Organization Conference, October 21, 2010.

Introduction

- Two active protocols that touch forestry – forest management:
  - Afforestation protocol
  - Direct reduction in emissions arising from a change in harvest practice protocol – aka. The In-block chipping protocol

Introduction

- Improved forest management protocol
  - Not actively pursued in 2010
- Strategic overview of forest carbon
  - Full life cycle thinking
  - Trade implications

Afforestation Protocol

- Part of the original suite of protocols
  - Derived from a protocol developed for a planned national registry
  - Utilized a number of “black boxes” derived from the Carbon Budget Model for quantification
  - No offsets were ever quantified under this protocol

Afforestation Protocol

- Protocol had a few flaws:
  - Did not discount carbon storage when trees were harvested:
    - Some protocols discount using a storage in Harvested Wood Products
    - International Panel on Climate Change extinguishes all carbon storage at harvest

Afforestation Protocol

- Protocol had a few flaws:
  - Quantification guidance did not work
    - Equations would not give a result due to structural errors

Afforestation Protocol

- Flaws were the reason for withdrawing the protocol for review and revision.
- Times have changed leading to far more detailed revision, including:
  - Explication of expansion factors
  - Detailed examination of carbon storage in harvested wood products
  - Examination of conservation forests

Direct Reduction Protocol

- Supported by Daishowa Marubeni International (DMI)
- Focuses on quantifying changes in emission profile associated with changes in harvesting practice
  - Specifically in-block chipping

Direct Reduction Protocol

- Protocol development system has been evolving toward greater rigor and conservatism
- Has some ability to adapt to other changes in harvesting practice
- Moving toward final approval stages

Improved Forest Management Protocol

- Supported by ANC Timber Ltd., AFGO, CANFOR, MDFP
- Secured an Alberta Innovation Grant to pursue specific aspects, in particular strategic engagement of Alberta's forest industry with the "carbon economy."

Improved Forest Management Protocol

- Strong parallels with the Afforestation Protocol:
  - Storage in harvested wood products
  - Quantification
  - Leakage

Improved Forest Management Protocol

- Some differences from the Afforestation Protocol:
  - Additionality
  - Ownership
    - ASRD interpretation that ownership of carbon resides with Alberta until the tree is severed
  - Baseline setting

Improved Forest Management Protocol

- Growing awareness that Alberta's forest industry needs an overarching carbon strategy
  - Depending on how baselines are set making old forests young can turn into a carbon deficit pretty easily
  - Copenhagen suggests potential for using tariffs to ensure compliance in export markets
  - US and Europe are better positioned than Canada

Forest Carbon Strategy

- Driven by awareness of the ambiguous nature of determining carbon balance of old, boreal forests
  - Carbon stocks are likely to be radically reduced by harvest
  - Reforestation increases capture rate
  - What is the balance especially when we consider dead organic matter

Forest Carbon Strategy

- Pilot project examining three approaches to managing forest carbon:
  - Stock change
  - Baseline
  - Baseline with carbon management
  - Seeking active engagement with Alberta Sustainable Resource Development and Alberta Environment

Forest Carbon Strategy

- Pilot project examining three approaches to managing forest carbon:
  - Single forest management unit
  - Integrated coniferous – deciduous harvest
  - Address landscape scale carbon balance:
    - Standing stock
    - Dead organic pools
    - Peatland

Conclusions

- Direct reduction protocol is nearing completion
- Afforestation protocol has identified some very real challenges missed in initial protocol development
- Afforestation protocol has developed some quantification tools of considerable value to the improved forest management protocol

Conclusions

- Dawning awareness that management for forest carbon presents challenges and risk as well as opportunity
  - Need to better understand total carbon balance
  - Challenges in the trade arena
  - Recognize and build forward from the great accomplishments on the forest products processing side