



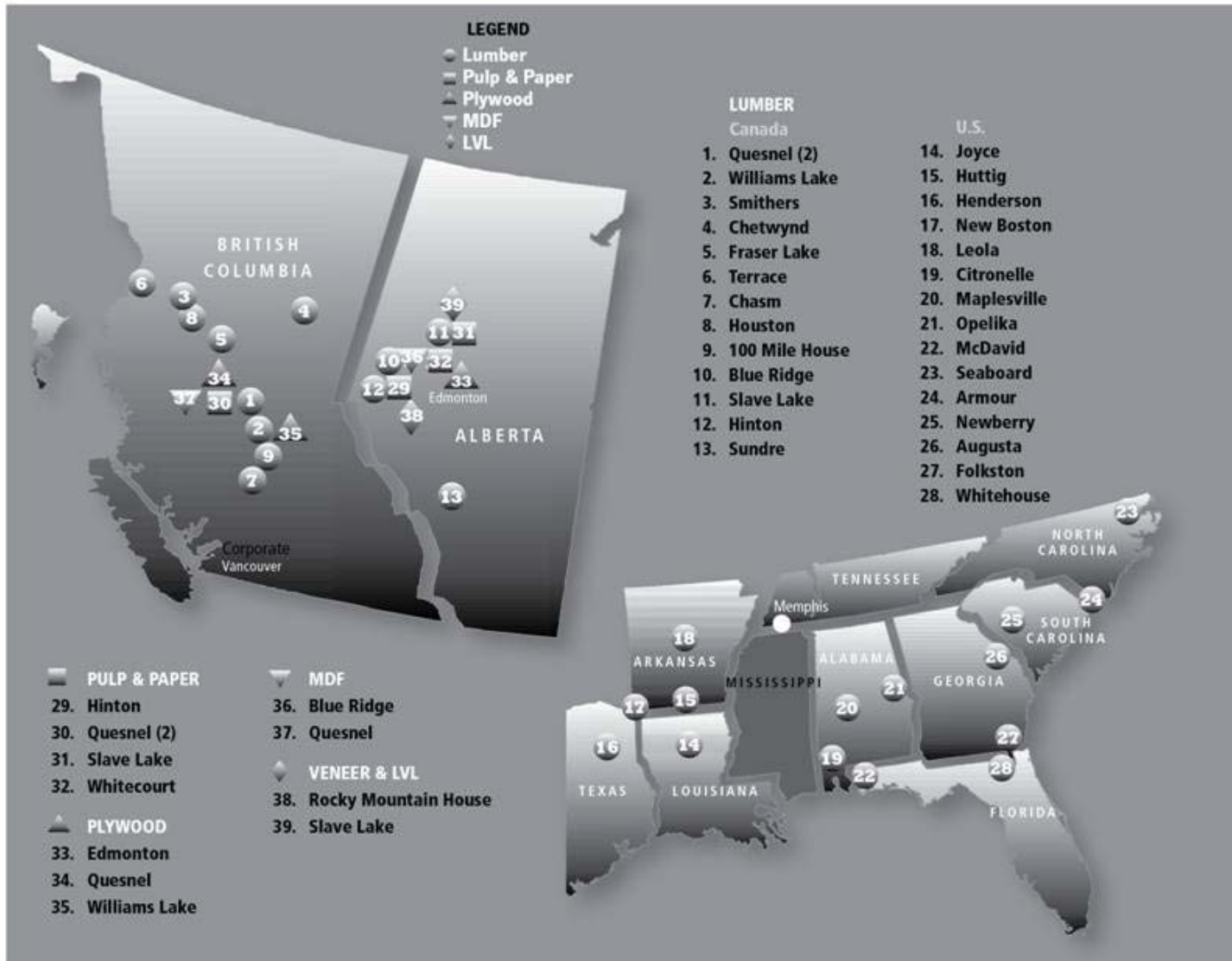
**West Fraser**

**To Be (Involved) or Not To Be (Involved): That is  
the question:  
An Industry Perspective on Forest Carbon Offsets.**



AFGO Conference “Forests and Energy: Growing Towards a Carbon Neutral Alberta”  
October 20-21, 2010

# West Fraser Overview



## Geographic Diversification

# Fully Integrated Platform in Canada



## Lumber

- 28 Mills

## Panels

- 6 Mills

## Pulp & Paper

- 5 Mills

**SPF 3.5 billion feet**  
**SYP 2.0 billion feet**  
**Total 5.5 billion feet**

**Plywood: 830 million square feet (3/8")**  
**MDF: 300 million square feet (3/4")**  
**LVL: 3.2 million cubic feet**

**1.2 million tonnes**

**Largest lumber producer in  
the World**

**Largest plywood  
producer in Canada**

**Third largest pulp  
producer in Canada**



# Regulatory Uncertainty - Alberta



- **Alberta has considerable regulatory certainty as compared to other North American jurisdictions**
- **One-off system so far – unique and confined within the Provincial boundaries**
- **But...still uncertainty around forest carbon**
- **Uncertainty around what will happen if a federal system is ever implemented.**
  - What will this mean to the use and value of offsets?

# Regulatory Uncertainty - Federal



- **Stalled – will do what US does.**
  - SLA
  - Border measures
- What is the US doing? What will the US do?
- US System – What US system??
  - Several bills containing provisions for a cap and trade system in the US were tabled in Congress and Senate
    - American Clean Energy & Security Act (Waxman-Markey)
    - American Power Act (Kerry-Lieberman)
  - None made it through
  - EPA forced to proceed to regulate GHG emissions under the Clean Air Act – a very different system than a cap and trade.

# Regulatory Uncertainty - Federal US Review



- What is the US doing?
  - EPA
    - Endangerment Finding
      - GHG's a threat to public health, welfare & the environment
      - Paved way for regulation under the Clean Air Act.
        - Limited tools available to regulate with
        - BACT/MACT
        - Extended timeline for implementation, phased-in approach
        - Litigation, litigation and more litigation

# Regulatory Uncertainty - BC and the WCI



- **WCI = Western Climate Initiative**
  - Development of a regional cap and trade system
  - Model for national system in the US?? North American?
  - US System – What US system??
    - Would require new legislation
  - Other Regional Cap and Trade Systems in US
    - RGGI – Regional Greenhouse Gas Initiative
      - 10 states, electric sector
    - MGGRA – Midwestern Greenhouse Gas Reduction Accord
      - 6 states, one province, similar to WCI



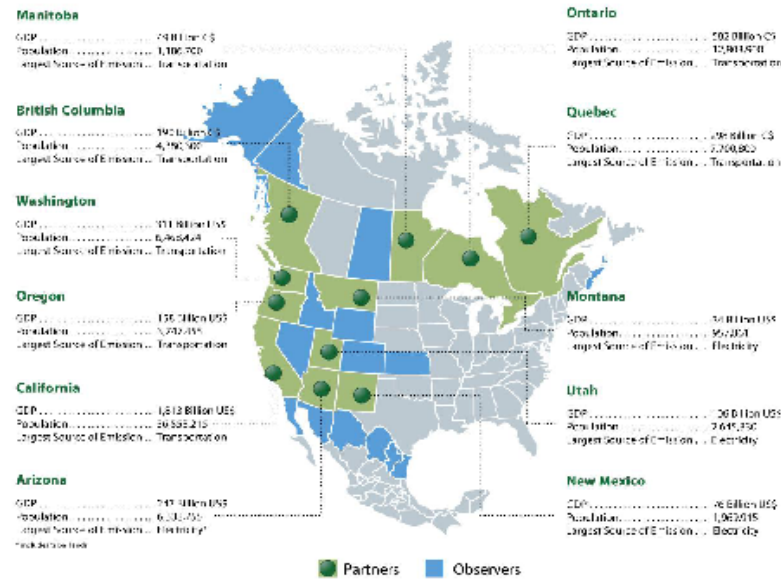
Western Climate Initiative



Figure 1: Western Climate Initiative Partners and Observers

### WCI Partners and Observers

U.S. Partner jurisdictions comprise 15% of the total U.S. population and 20% of the U.S. GDP  
 Canadian Partner jurisdictions comprise 79% of the total Canadian population and 76% of the Canadian GDP.



**Observers**  
 CANADA: Nova Scotia, Saskatchewan, Yukon. UNITED STATES: Alaska, Colorado, Idaho, Kansas, Nevada, Wyoming.  
 MEXICO: Baja California, Chihuahua, Coahuila, Jalisco, Leon, Sonora, Tamaulipas.

Source for Observer U.S.: Census Bureau and U.S. Bureau of Economic Analysis; Source for Observer Canada: Statistics Canada; U.S. and Canada population figures 2009; U.S. and Canada GDP figures 2008.



# Regulatory Uncertainty - BC and the WCI cont.



- **July 2010 released Design for the WCI Program**
- **2012 Implementation**
- **Jurisdictions to implement**
  - 3 Provinces (BC, ON, QC)
  - 2 States (CA, NM)
    - CA
      - Proposition 23, Nov. 2, 2010
        - Suspend GHG law until employment rate drops below 5.5% for at least a year.
        - Employment rate 12%.
      - What if California drops out?
- **Limitation on use of offsets as a compliance instrument**

# Regulatory Uncertainty - BC and the WCI cont.



- **BC implemented mandatory GHG reporting following WCI requirements**
  - Reporting 2011 for 2010 emissions
- **Consultation papers to be released shortly re: allocation and offsets**
- **Still on a 2012 implementation schedule**
- **Lots of questions around allocation and trading**
  - Hopefully consultation paper will provide some direction
- **BC instituted a carbon tax in 2008 on purchased hydrocarbons**
  - 2008 - \$10 tonne/CO<sub>2</sub>e,
  - Increase \$5/yr until \$30 in 2012.

# WCI Forest Carbon Offsets



- Large American lobby for forest carbon offsets
- WCI must approve the offset protocols through their process
  - Can only issue certificates if used an approved protocol
- Differing views on what would constitute a forest carbon offset
  - ENGO's – avoided deforestation, conservation
  - First Nations – Canada vs. US
  - Large land owners – forest management, avoided deforestation, conservation
  - Forest products companies without large private land holdings – forest management

# WCI Forest Carbon Offsets cont.



- Reviewed 2 existing forest management protocols
  - CCX Forestry Carbon Sequestration Project Protocol
  - Climate Action Reserve (CAR) Forest Project Protocol
- 100 yr sequestration
- Modifications required to manage uncertainty, for example, by requiring discounting emission reductions to adjust for high uncertainty
- No approved protocols at this time

# BC Forest Carbon Offsets



- WCI
- PCT
  - Offsets to meet Gov't carbon neutral commitment
  - Major player in development of protocols
- **2 BC Initiatives**
  - “Development and Assessment of a Forest Management Regime Offset Approach for BC” PCT, CAS, MoFR, FSCASC
    - Kelly McCloskey – project manager
  - FCOP “Forest Carbon Offset Protocol” project, CAS, PCT, MoFR, MARR
    - Coastal First Nations agreements
    - <http://www.env.gov.bc.ca/cas/mitigation/fcop.html>
    - Ken Baker – project manager
    - Tight timeline

# Alberta Forest Carbon Offsets



- Protocols being developed
- Previous AFGO workshops

# Public Land and Ownership of Carbon



- Public lands – crown ownership
- Other users, less control than on private lands
- Higher risk of alteration, change in land use policy etc.
- How guarantee government or other users will not alter the forest generating the offsets, e.g.. new roads, new right-of-ways
- Aboriginal land claims – risk on private lands as well as public
- Almost all of these can be dealt with at extra cost (insurance, contract etc) or discounting of value of offset – cost/benefit

# Permanence



- **WCI and CAR 100 years**
- **Risk of loss of offset**
  - Fire, pests, disease.
  - As climate change impacts evolve will the risks increase?
  - What if present tree species are no longer the best species for the climate?
  - Discounting to address inherent risks to offsets?
  - Insurance



# Just in case it wasn't complicated enough...



## ■ Canadian Boreal Forest Agreement

- Agreement between 21 forest companies (FPAC) and 9 ENGO's
  - ALPac, Canfor, DMI, Tolko, West Fraser
  - Forest Ethics, Greenpeace, CBI, Pew, Ivey Foundation
- “c) Implement world-leading, on-the-ground sustainable forest management practices that best reflect the principles of ecosystem-based management in the Boreal Forest.
  - d) Take action on climate change as it relates to forest conservation and forest product life cycles.”
- Working Group #4 Climate Friendly Practices

# Additional Costs



- **Cost of intensive management or other treatment or ??**
- **Cost of offset project development**
- **Cost of certification of offset**
- **Cost of verifying the offset**
- **Cost of listing and selling the offset as contemplated in the WCI-type cap and trade**
- **Large administrative burden – what is the cost?**

# Acting Now vs. Later



- **What is the future of forest carbon offsets in AB, BC, Nationally, North American, International?**
- **What if you develop the carbon offsets today and the regulatory climate changes?**
- **What will this do to your future obligations?**
  - E.g.. PCT vs. cap and trade

# Questions a Company Asks Itself.



## ■ Cost/Benefit Analysis

- Is it worth it?
  - Hopefully BC initiative will help answer this.
- High risk, low return?
- Missed opportunity to make money today?
- Here today, gone tomorrow? Now you see it, now you don't
  - Left holding the (liability) bag.
- A bird in the hand is worth two in the bush.
  - Take advantage of the opportunity today.
- With such large regulatory uncertainty – is it better to play it safe and do nothing for now?
- Have to look at the larger picture.
- Will we ever see a regulatory system where we have to account for GHG emissions from harvesting etc.?

# Final Words



- "Oft expectation fails, and most oft there  
Where most it promises; and oft it hits  
Where hope is coldest, and despair most fits."
- *All's Well That Ends Well (II, i, 145-147)*
- "It makes us or it mars us."
- *Othello (Act I, sc. I)*
- "Show me the money."
- *Jerry Maguire, 1996*

# QUESTIONS?



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