



Ministry of **Forests, Lands, Natural Resource Operations**  
and **Rural Development**

# **Adapting and innovating for a better forest bio-economy**

**Meggin Messenger, ED Strategic Initiatives**

**Office of the Chief Forester Division**

***Caring for BC's Forests***

**Community Forest Association AGM**

**Mission BC**

**June 2019**



## Climate change mitigation opportunity

- BC's forest sector can significantly contribute to mitigation by:
  - Increasing carbon sequestration in trees (e.g. reforestation, fertilization, tree improvement)
  - Avoiding emissions (e.g. reduce waste and burning)
  - Increasing sequestration in wood-based products (e.g. use fibre in longer lived products)
  - Displacing higher carbon intensity products
  - Other ideas?



# What is the (forest) “bioeconomy” ?

- Conventional products:

- Timber
- Pulp and paper
- Pellets



- Innovative products:

- Cross-laminated timber
- Biofuels
- Bioplastics
- Food, medicine, etc.





## Change drivers

- Future climate (averages, extremes, costs)
- Reconciliation
- Fibre supply (volumes, locations and characteristics)
- Focus on carbon and emissions
- Global economics
- Technology
- Workforce
- Other....



## BC Responding...

partnerships, tools, practices, incentives, investments,  
policy and legislation for

- Climate informed decision making
- Reduced forest carbon emissions
- Increased carbon sequestration
- Developing products that displace higher intensity carbon products
- Developing value add products for a lower-carbon forest bio-economy
- Indigenous bio-economy program



## **Connecting climate change, forest carbon management and the forest bio-economy**

Adapt, adopt and develop the practices, technologies and innovations which improve the competitiveness and sustainability of the forest sector and support the development of a clean-technology based forest bio-economy.



## Case study: Forest Carbon Initiative

- 290M program of investment including reforestation, fertilization, fibre utilization and tree improvement projects
- GHG benefits in the short, medium term and beyond
- Federal govt, academia, FESBC, BCTS, Forests-for-Tomorrow, First Nations organizations, forestry companies and other stakeholders working together to deliver





## Case study FCI: Applying a future climate lens (adaptation)

### Reforestation Decisions

- Climate Based Seed Transfer
  - as of Feb 4th - 58% of all 2019 sowing requests were made using CBST
- Species choice
- Stocking Density





## Case study FCI: Carbon emissions and products



To Bioenergy:  
Avoided CH<sub>4</sub>, N<sub>2</sub>O, CO and smoke  
emissions



To Wood Products:  
Increased long-term sequestration of  
carbon



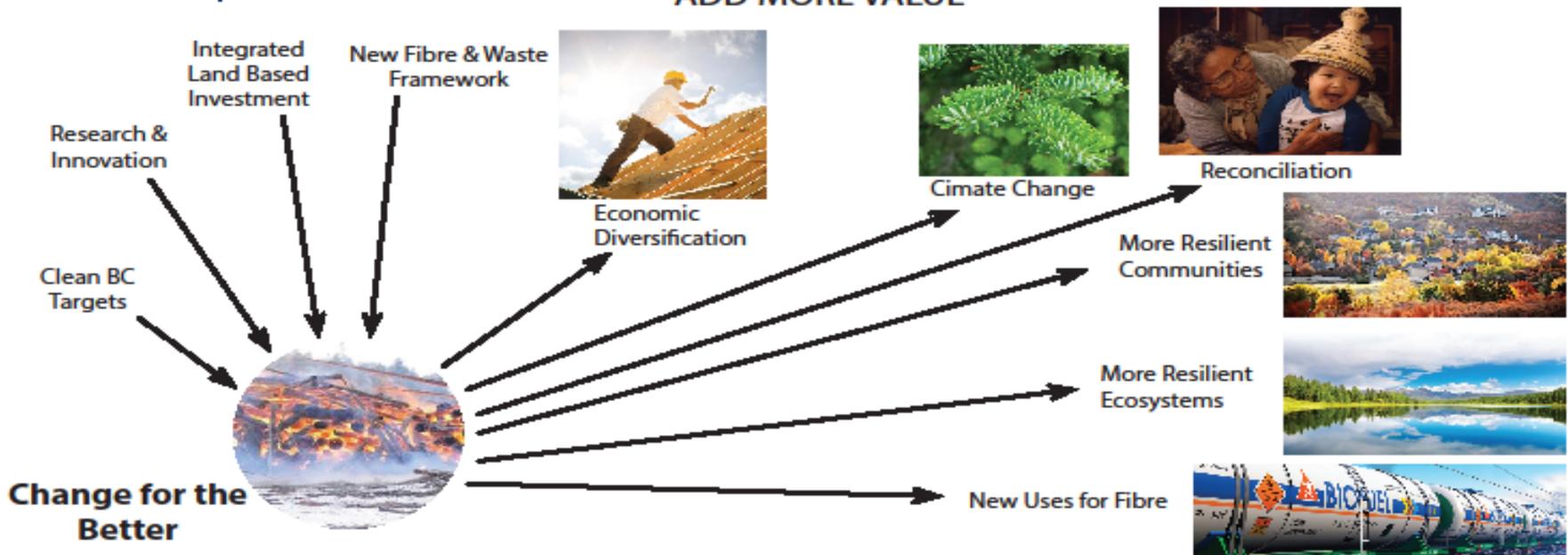
**Waste Less. Use More. Add  
value**



# Ministry of Forests, Lands, Natural Resource Operations and Rural Development



## Revitalization & Clean BC ADD MORE VALUE



Forest management addresses the role of forest fibre as part of ecosystems, as an element of wildfire risk and for its economic value. As we strike this balance we can waste less, use more and realize more value.

Working together to build a sustainable and resilient natural resource sector that supports a strong economy for all British Columbians