

The Forest Industry's Efforts to Reduce GHGs

Mark Johnston PhD
Saskatchewan Research Council
Saskatoon SK

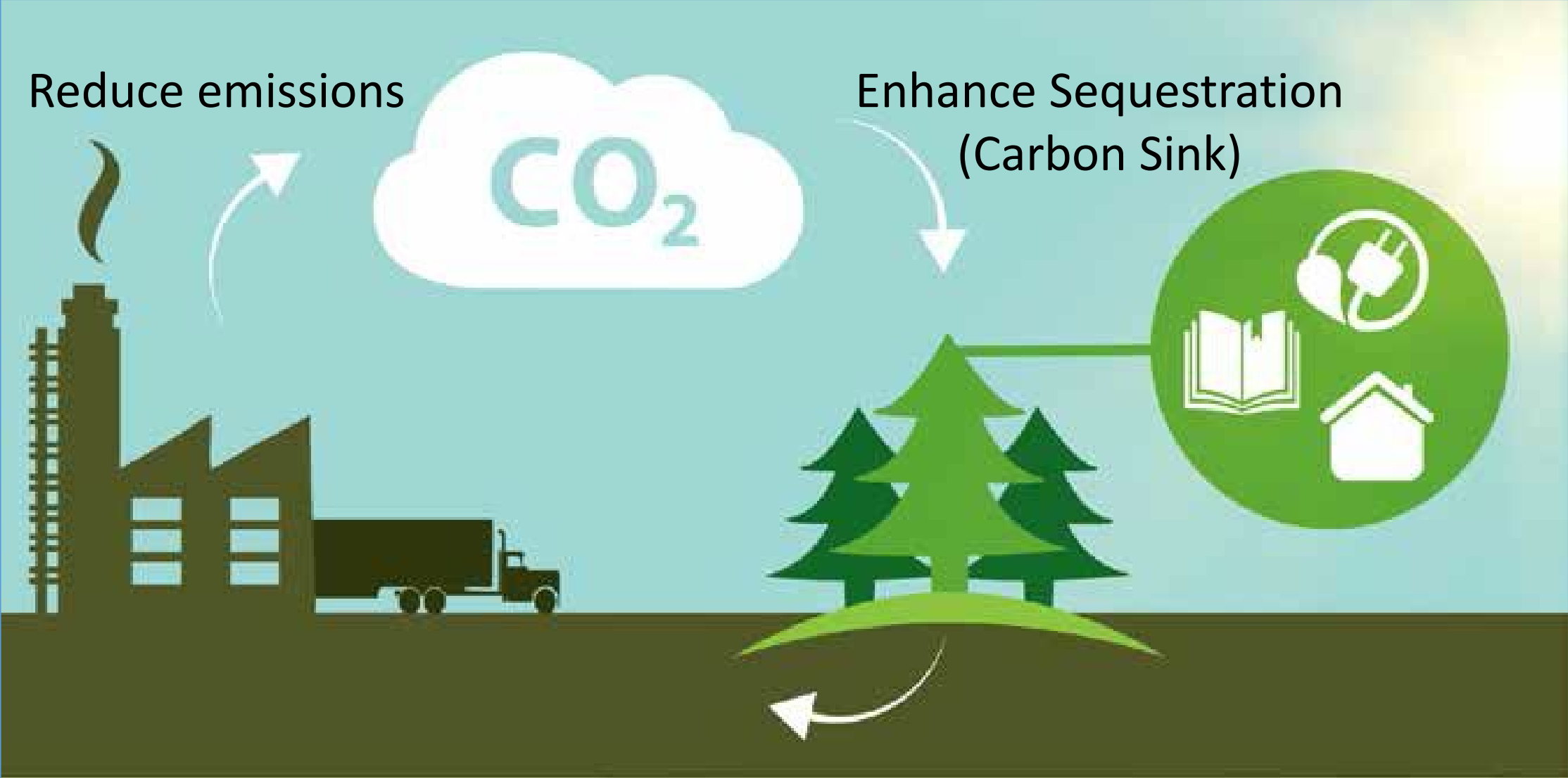
PNWER Annual Summit, 23 July 2019

Canada's Forest Sector

- Economic Activity: \$65 Billion; 2% of Canada's GDP
- Employment: 230,000; country's largest employer of Indigenous people
- Largest industry for more than 200 forest-based communities
- Forest products exported to more than 180 countries; number 1 exporter to China
- 94% of forest land owned by provinces, who regulate forestry management activities



Climate Change Mitigation



Reduce Emissions



- Use of forest residues in pulp and saw mills (“hog fuel”)
- Currently, pulp and paper energy generation is 80% biomass, 18% natural gas and 2% other (oil, hydro).
- Forest biomass in producing heat and power (cogeneration)
- Biomass in producing transportation fuel and other chemicals (bio-refinery)
- Since 1990, the pulp and paper industry in Canada has reduced emissions by about 66%

Enhance sequestration 1

- Modified forest management practices (e.g. green tree retention)
- Breed improved planting stock (e.g. drought resistance, faster growth)
- Extend rotation length
- Reduce deforestation
- Afforestation on areas originally in forest cover (e.g. prairie-forest fringe)



Enhance sequestration 2

- Control disturbance (fire, insects)
- Undertake salvage harvesting after fire and insect outbreaks and convert to forest products



Enhance sequestration 3

- Greater use of wood in buildings – building codes now allow wood buildings of up to 12 stories
- A 100,000 ft² wood building would be the equivalent of taking 1,410 cars off the road each year



World's tallest wood building
UBC student residence (18 stories)

Policies and Programs



Carbon offset programs

- CARB recognizes C sequestered in improved forest management projects
- Provinces and federal government are developing offset programs as part of GHG legislation across Canada

Investments in Forest Industry Transformation

- Federal program supporting the forest sector in developing new technology including bioenergy, biomaterials and biochemicals

Acknowledgements

Thanks to the Forest Products Association of Canada
for providing much of this material



FPAC.ca

APFC.ca