



# Canadian Wood Pellet Industry

19<sup>th</sup> European Biomass Conference – Berlin  
Canada Biomass Business Breakfast

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June 7, 2011

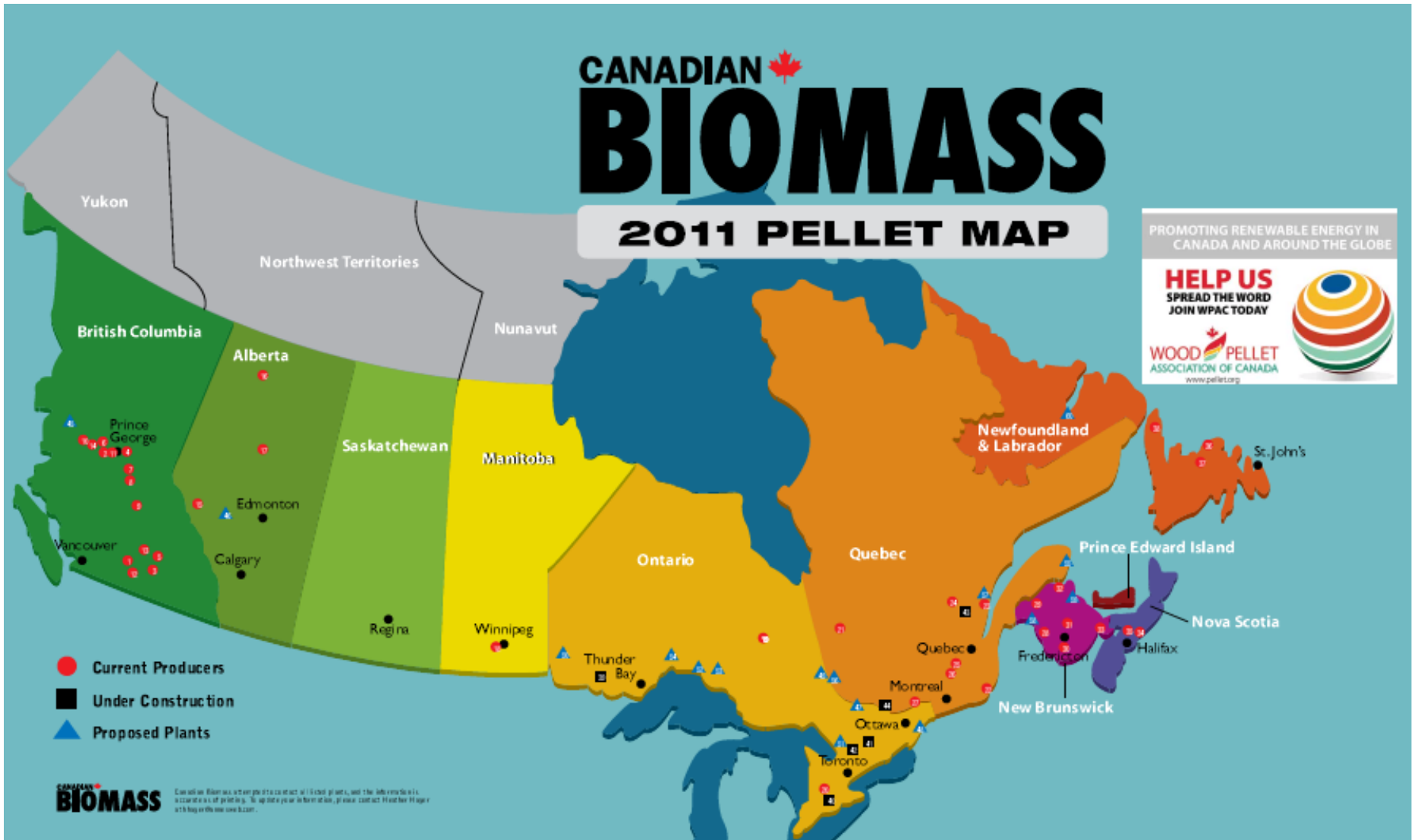




# Outline

- Review of Canadian wood pellet industry
- Canadian investment opportunities







## Canadian annual pellet production capacity as of June 1, 2011 – tonnes

	<b>Plants</b>	<b>Average</b>	<b>Largest</b>	<b>Total</b>	<b>%</b>
Western Canada	16	118,000	400,000	1,889,000	64%
Eastern Canada	21	58,000	130,000	1,042,000	36%
All of Canada	37	79,000	400,000	2,931,000	100%



## Canadian pellet shipments – tonnes\*

	2010	2011F
Europe	1,350,000	1,700,000
North America	90,000	190,000
Japan	60,000	60,000
Korea	0	50,000
	1,500,000	2,000,000

\*estimates only – Statistics Canada does not track wood pellets as a separate product and producers are reluctant to share data



## Overseas pellet distribution chain

- Pellets loaded on rail cars or truck at plant site
- West: rail to Vancouver or Prince Rupert
- East: truck to Belledune or Halifax
- Unloading and temporary storage at terminal
- Pellets loaded on bulk carrier





# Canadian pellet shipping routes





## European markets for Canadian pellets

- Belgium – power generation
- The Netherlands – power generation
- United Kingdom – power generation
- Denmark – power/district heating
- Italy – residential heating
- Canadian market share in Europe ~ 15%





## North American Market Situation

- Power markets presently non-existent
- Heat markets generally: natural gas is cheapest, then pellets, then oil, then electricity
- Pellets are cost competitive in areas not served by natural gas – remote areas, Atlantic Canada, Northeast US





## South Korean Market Situation

- Committed to 30% GHG by 2020
- Major companies must meet government GHG reduction targets
- RPS for power generation: 2012 – 2%
- Increase ½% annually until 2020 – 10%
- Project 6 million tonnes pellet market by 2020





# Canada's Forests

- 397 million hectares
- 10% of the world's forest
- Sustainably managed
- 149 million hectares certified by CSA, SFI, or FSC
- 93% is publicly owned—access via licences
- 208 million m<sup>3</sup> annual harvest





## Pellet Fibre Sources

- Wood residues: sawdust, shavings, harvest waste
- Approximately 2 tonnes green fibre equals 1 tonne wood pellets
- 2011: 4 million tonnes green fibre to make 2 million tonnes pellets





## Fibre Availability

- Annual Canadian timber harvest ~ 200 million tonnes
- Ratios: lumber ~ 50%; pulp chips ~ 30%; other residues ~ 20%
- Annual residues: 40 million tonnes





## Fibre Available for Pellets

- Annual residues: 40 million tonnes
- Say ~ 50% used for pulp and paper co-generation
- Leaves 20 million tonnes for wood pellets
- Currently using 4 million tonnes (2011)





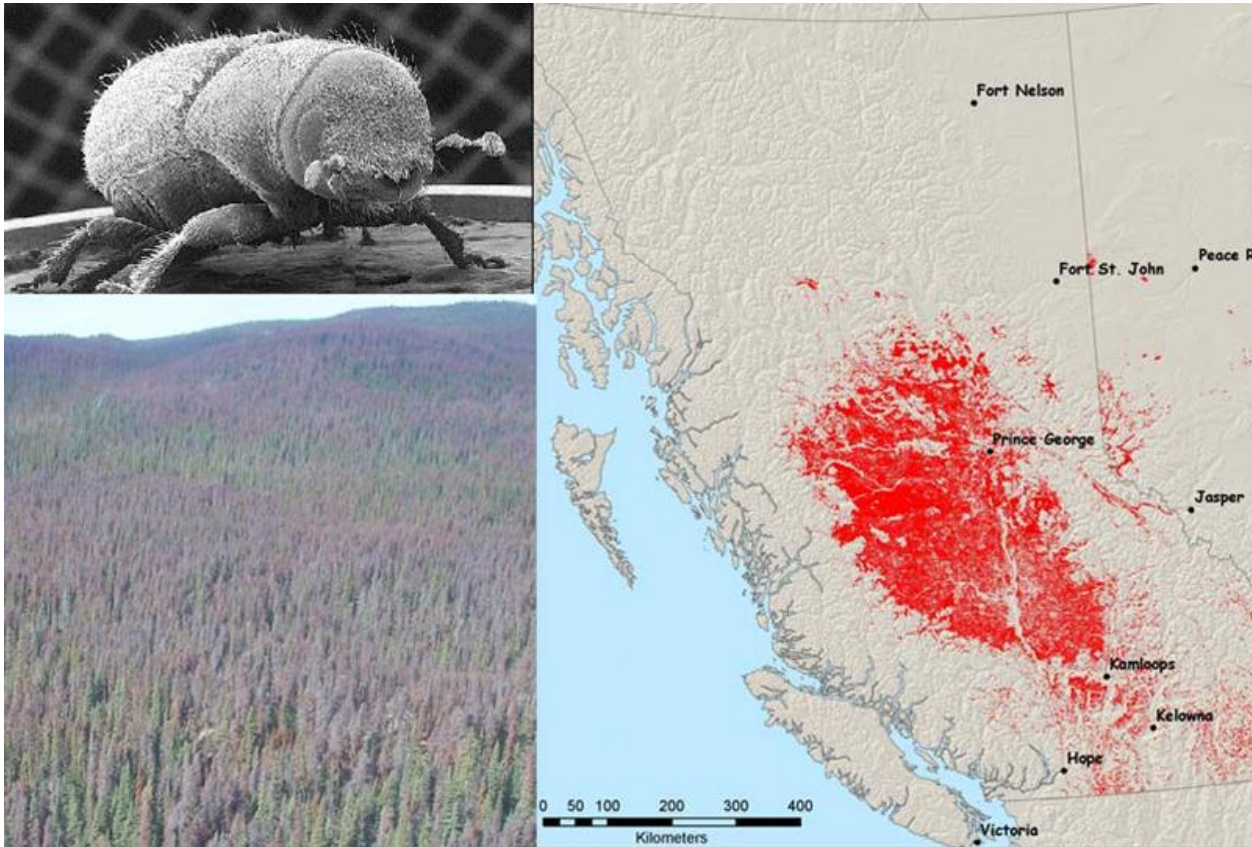
## BC Mountain Pine Beetle Infestation

- Cumulative affected area in BC – 16.3 million hectares (source BC Min. of Forests)
- Infestation is half the size of Germany
- 675 million cubic metres of dead timber
- Access mainly by agreement with sawmills, BC Timber Sales, and First Nations





## Scope of BC Infestation





## New Capacity 2010-11

	Name	City	Province	New Capacity (tonne/yr)
1	Northwest Wood Preservers	Vanderhoof	BC	30,000
2	Pacific BioEnergy	Prince George	BC	180,000
3	Pinnacle Pellet - Burns Lake	Burns Lake	BC	400,000
4	Firemaster	Kamloops	BC	30,000
5	Highland Pellet Manufacturing	Merritt	BC	29,000
6	Tahtsa Pellet	Burns Lake	BC	30,000
7	Groupe Savoie	St-Quentin	NB	55,000
8	Holson Forest Products	Roddickton	NL	50,000
9	Granulco	Sacre-Coeur	QC	20,000
10	Granules de la Mauricie	Shawinigan-Sud	QC	22,000
11	Trebio	Portage-du-Fort	QC	130,000
				<b>976,000</b>



## Canadian Investment Opportunities

- Recommend joint ventures with existing Canadian producers
- Canadians bring fibre access, management expertise, capital
- Foreign investors bring off-take agreements, capital





## Reasons to Invest in Canada

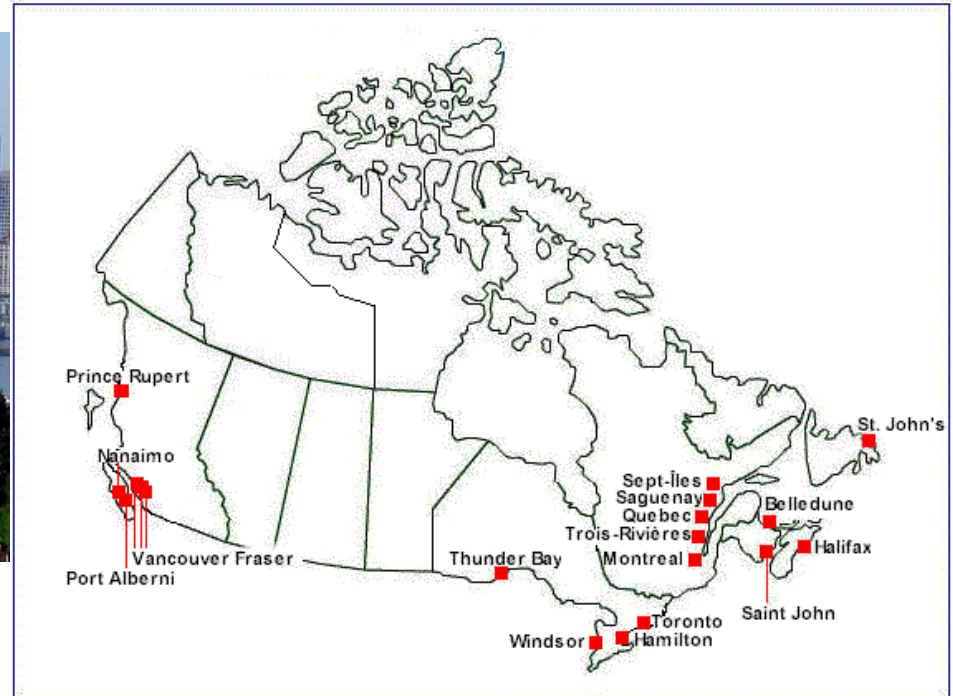
- Canada welcomes foreign direct investment
- Export Development Canada offers financing
- Best place in G-7\* to do business says Economist Intelligence Unit
- Lowest taxes on new business in G-7
- Lowest business cost in G-7 says KPMG
- Highest quality of life in G-7, says Swiss-based Institute for Management Development
- By 2015 will be first G-20 country with tariff-free zone

\*G-7 includes France, Germany, Italy, Japan, UK, US, and Canada



## Reasons to Invest in Canada

- Superb port network on Atlantic and Pacific coasts and along Great Lakes/St. Lawrence Seaway





## Export Development Canada

- Financing direct foreign investment in greenfield and brownfield
- Foreign company must invest at least 10%
- At least 50% of production must be exported
- Rates are competitive, based on credit quality, market conditions, and repayment terms.





## More Information?

Contact the Canadian Embassy, High Commission or Consulate nearest you, or visit

[www.investincanada.com/globalnetwork](http://www.investincanada.com/globalnetwork)

- **1-888-306-9991** (toll free in Canada and the United States)  
**613-944-9991** (in the National Capital Region and outside Canada)
- **Email:** General enquiries: [enqserv@international.gc.ca](mailto:enqserv@international.gc.ca)

Or

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