

Canadian Pellet Industry Update

Pellet Fuel Institute Annual Conference
July 20, 2015 | Williamsburg, VA

John Arsenault, Director | Market access and promotion , WPAC



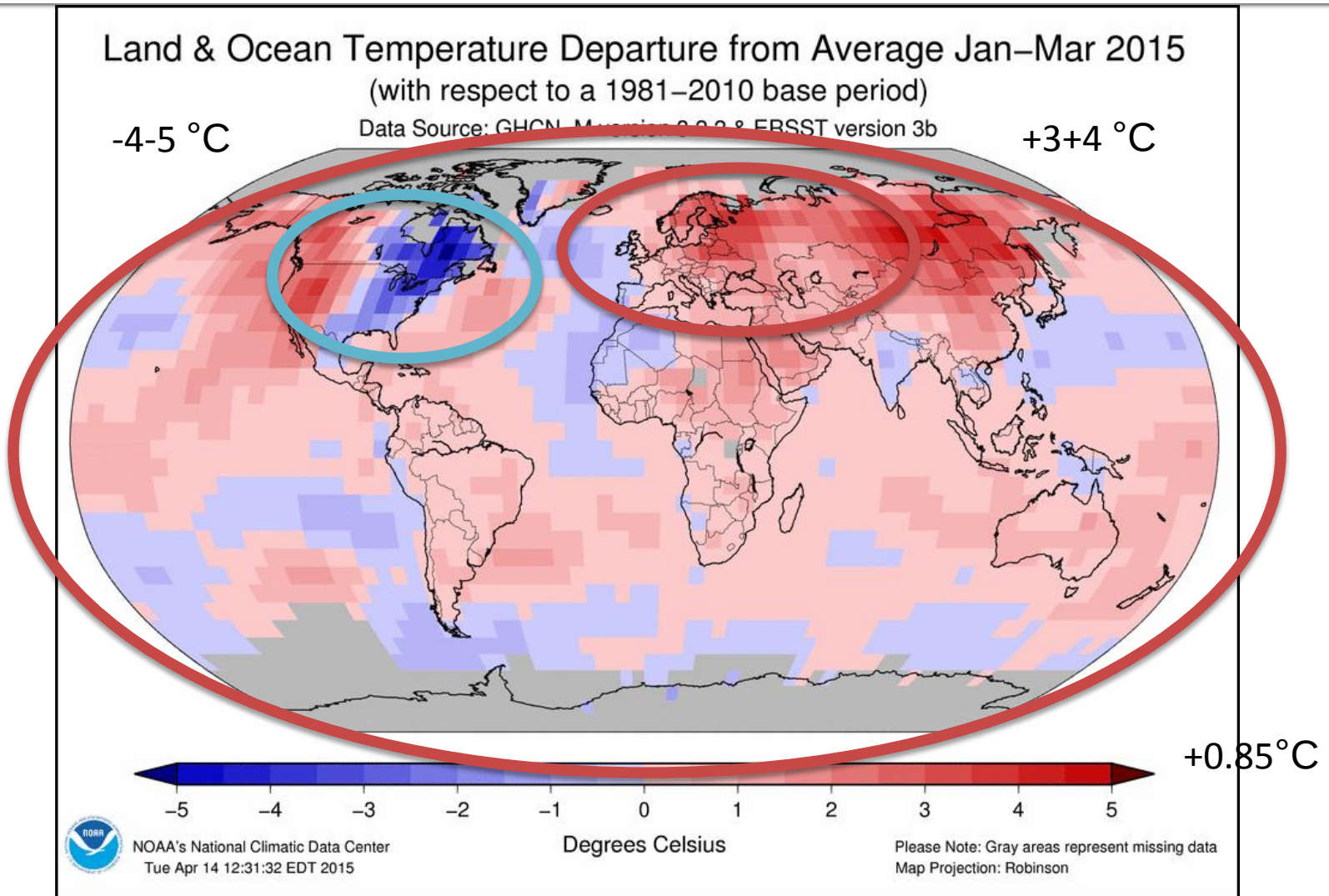
Topics

- World markets
- Canadian exports
- Canadian production
- Canadian pellet consumption
- Pellet market opportunities & challenges



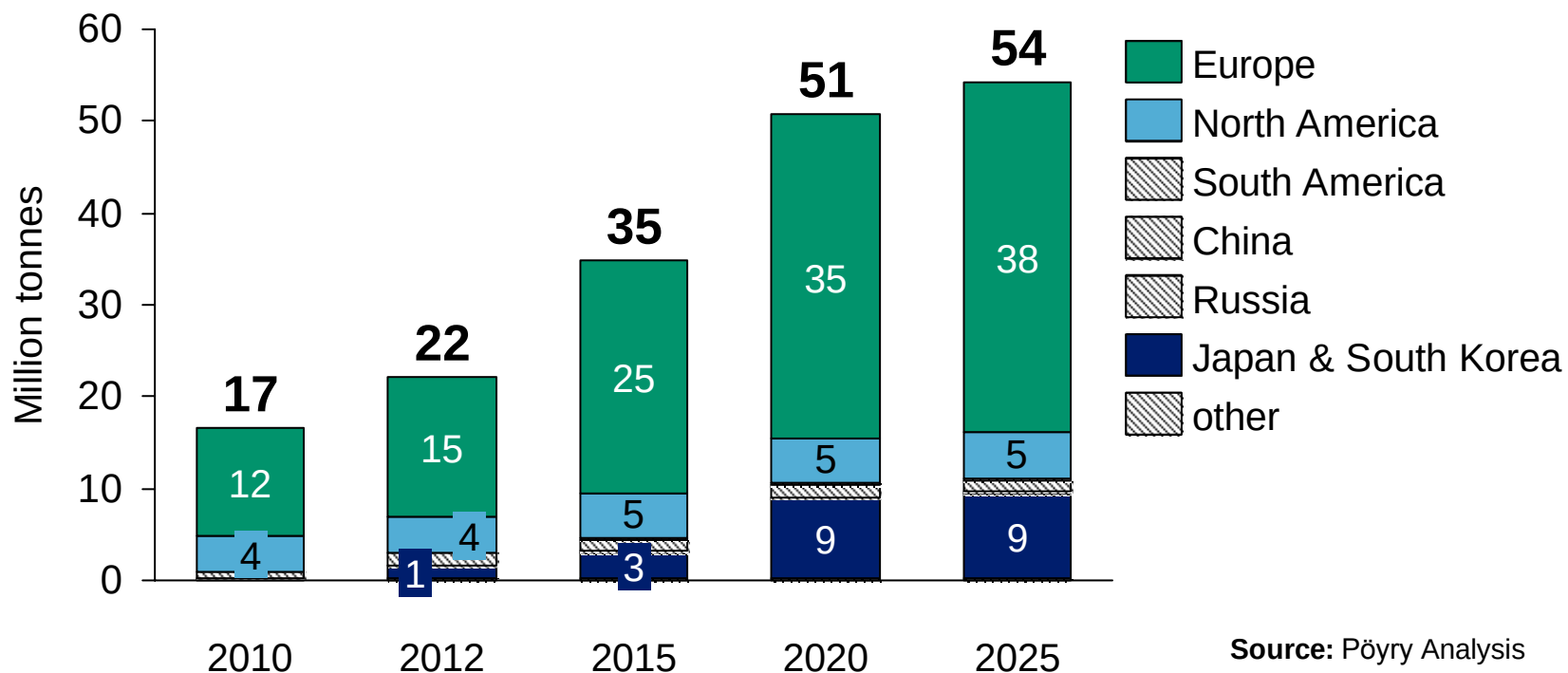
Good Pellet Weather?

<http://www.ncdc.noaa.gov/sotc/global/201503>



Global Demand Outlook to 2025

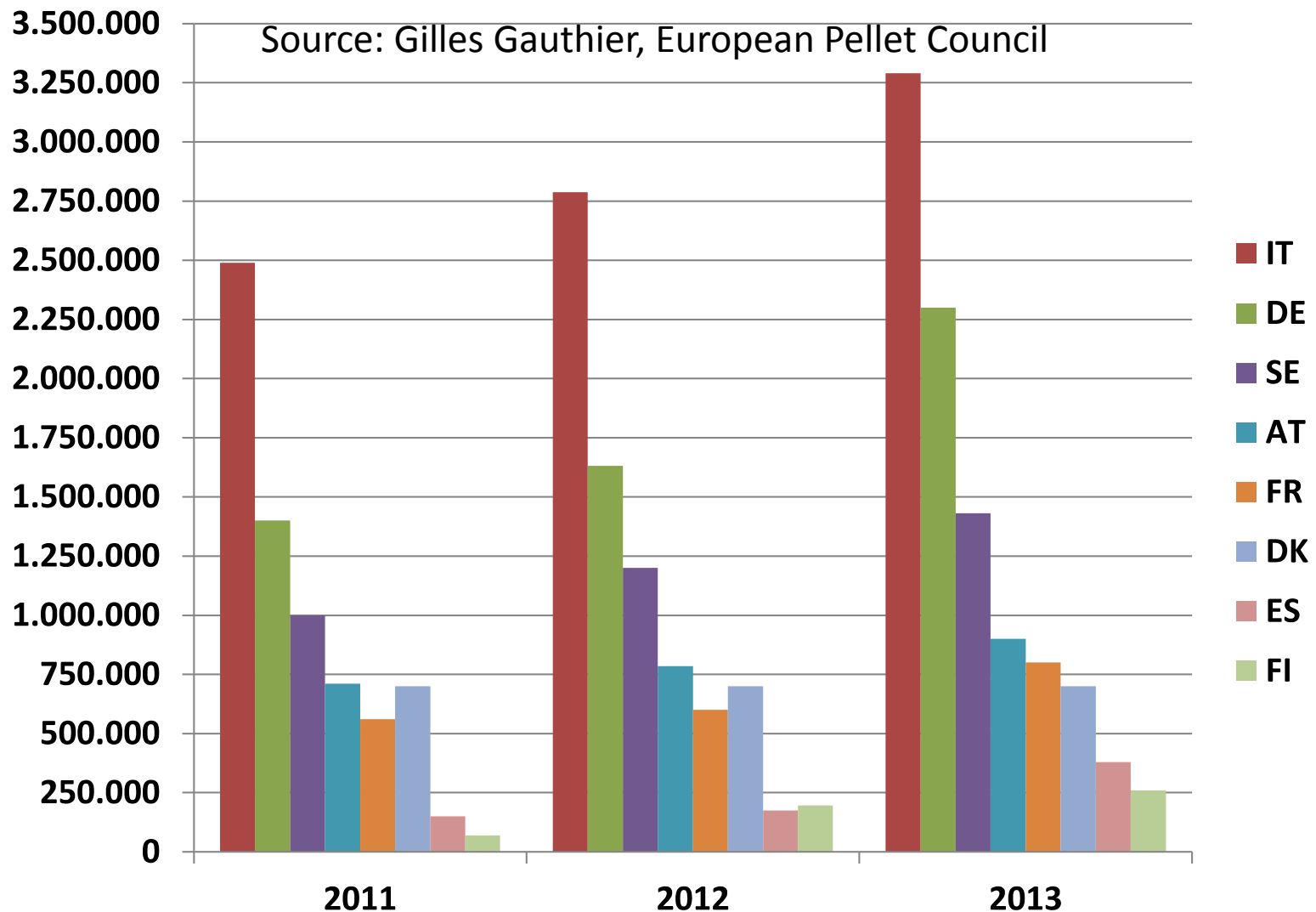
Global Pellet Demand (Pöyry central scenario)



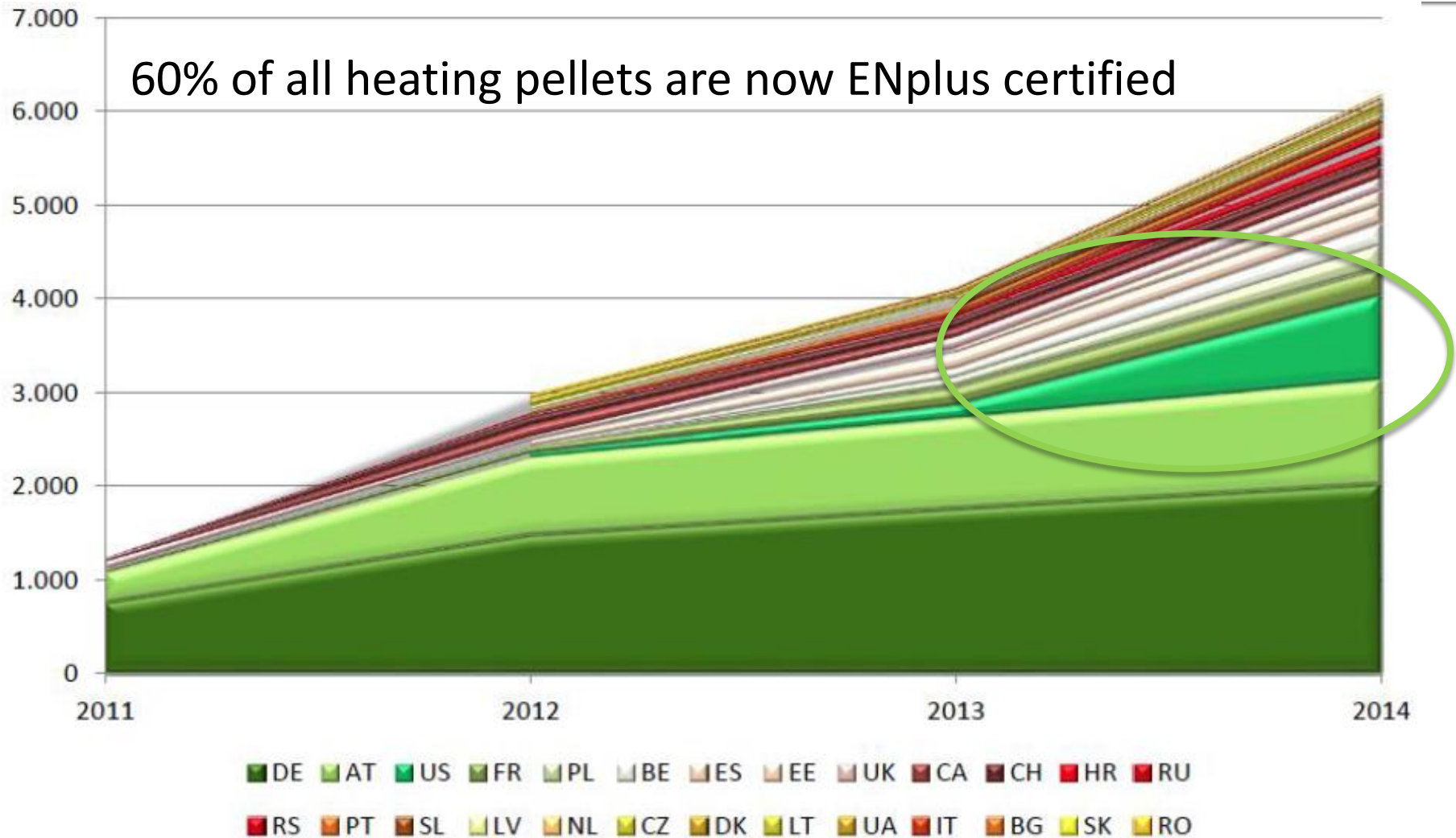
Source: Silvio Mergner, Pöyry

Source: Pöyry Analysis

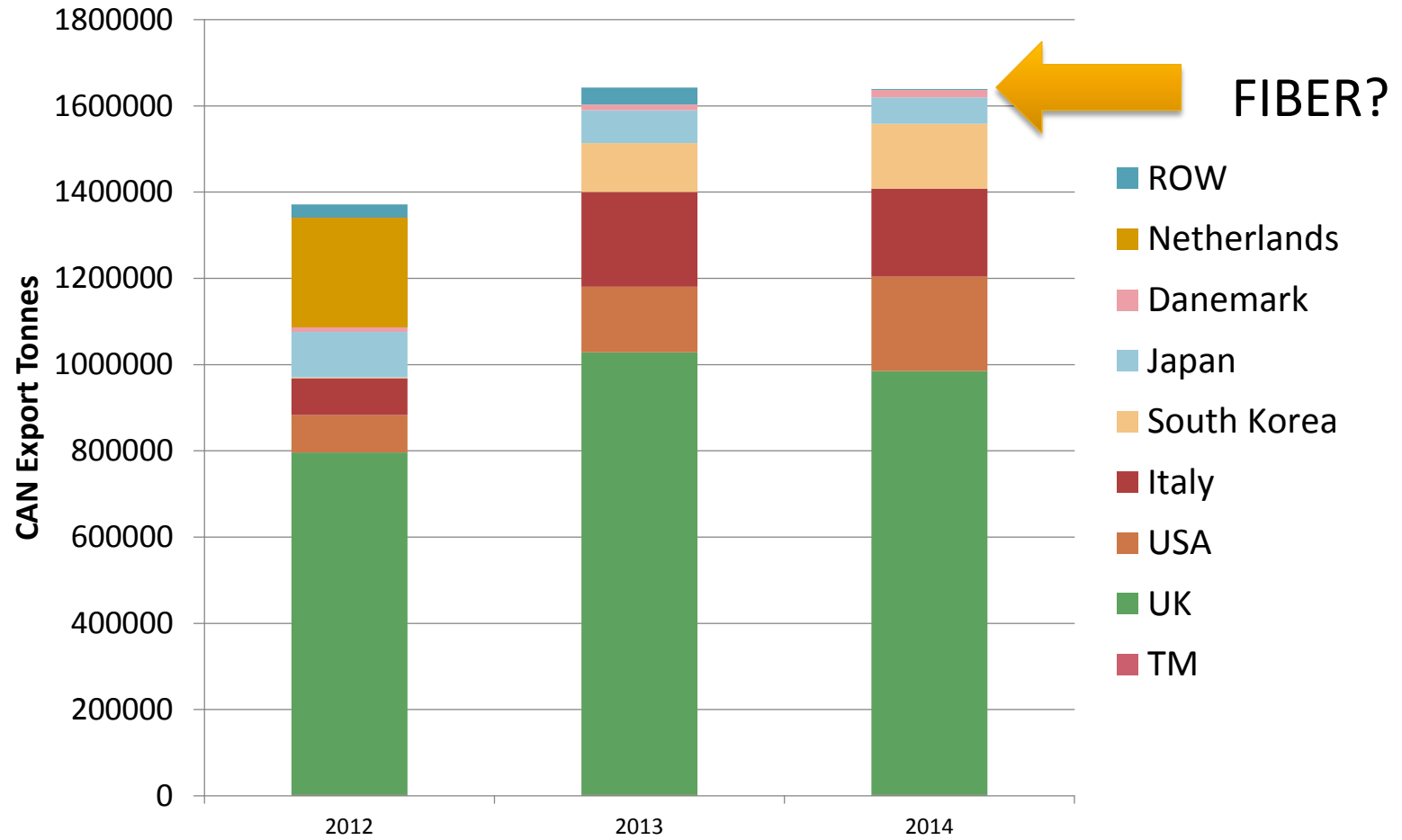
European Heat Market Growth (tonnes)



European Growth of Enplus Certification (thousand of tonnes)



Canadian Export Destinations – Volumes



Source: Stats Canada

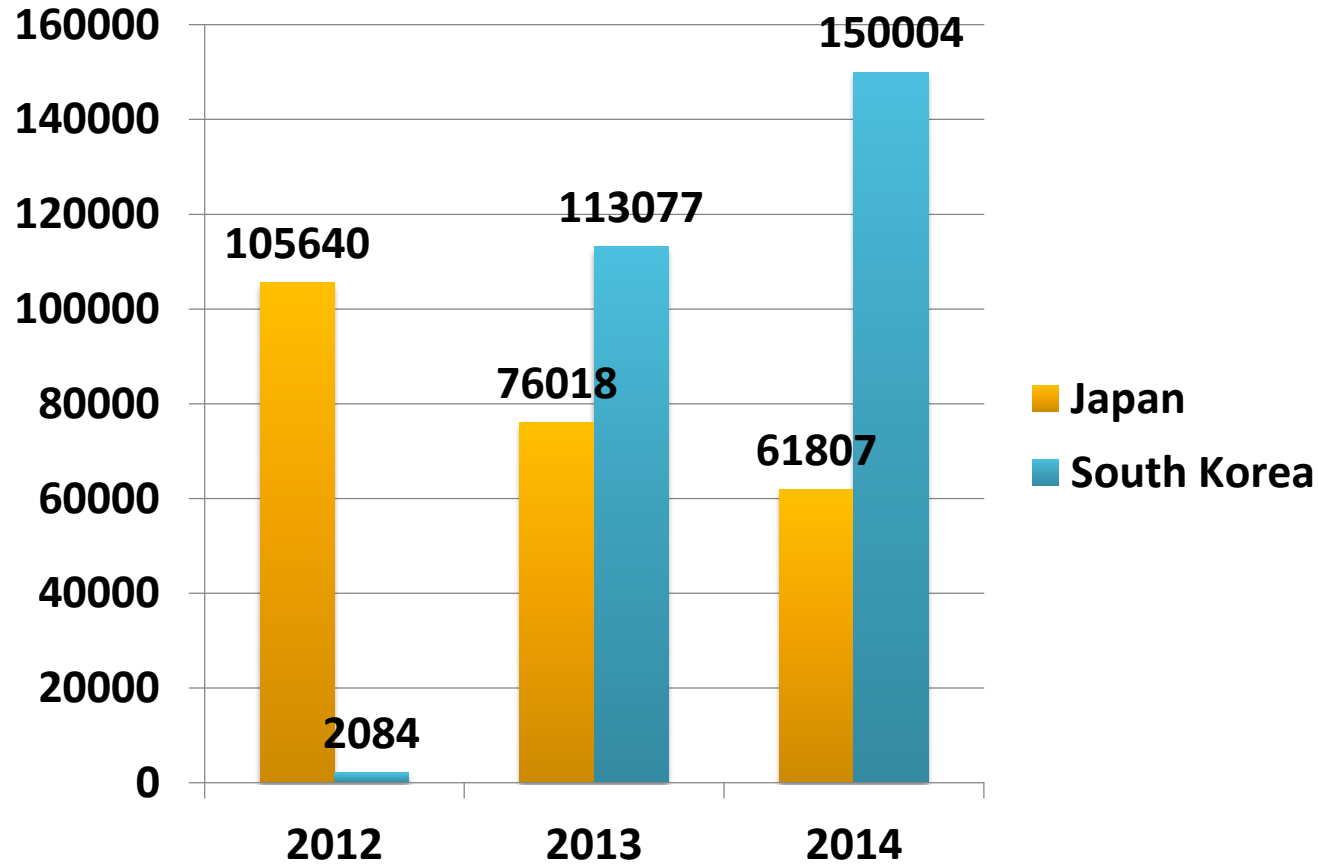
Canadian Export Destinations – Volume and prices (2015 YTD May)

Top 10 countries for year-to-date 2015 to which we exported trade commodity "440131 Wood pellets" from "Canada ", custom basis, 6 digit commodity level

Rank	Country (Select a country below to view top 10 trade commodities)	2015		2014		2013		2012	
		Quantity (KGM)	Value (CAN\$)	Quantity (KGM)	Value (CAN\$)	Quantity (KGM)	Value (CAN\$)	Quantity (KGM)	Value (CAN\$)
		Trade amount							
Total	World	652,680,626	112,105,858	1,637,392,857	275,987,791	1,640,231,208	260,078,002	1,369,176,738	208,246,672
1	United Kingdom	489,879,154	77,089,850	982,800,144	149,760,584	1,026,526,570	149,707,952	794,379,153	116,859,288
2	United States (+Show States)	74,265,846	19,589,568	218,889,222	50,897,513	152,271,441	32,177,262	86,665,148	18,180,342
3	Italy	32,299,827	5,463,725	204,528,467	38,559,233	219,551,041	40,105,839	85,237,666	14,308,893
4	Korea, South	29,187,438	4,990,644	150,003,940	22,443,229	113,077,437	18,053,724	2,083,648	458,753
5	Japan	26,466,424	4,804,725	61,807,302	11,197,791	76,018,205	12,481,791	105,640,409	15,707,588
6	Singapore	270,126	72,454	705,037	202,445	747,258	205,197	589,080	164,592
7	Taiwan	98,135	35,923	273,511	83,096	229,766	76,981	200,676	62,061
8	Bahrain	101,600	23,572	152,400	36,118	102,036	17,996	0	0
9	Malaysia	40,347	15,399	25,206	6,858	87,712	25,731	0	0
10	Hong Kong	31,974	9,529	12,236	3,693	49,428	15,235	25,489	7,852

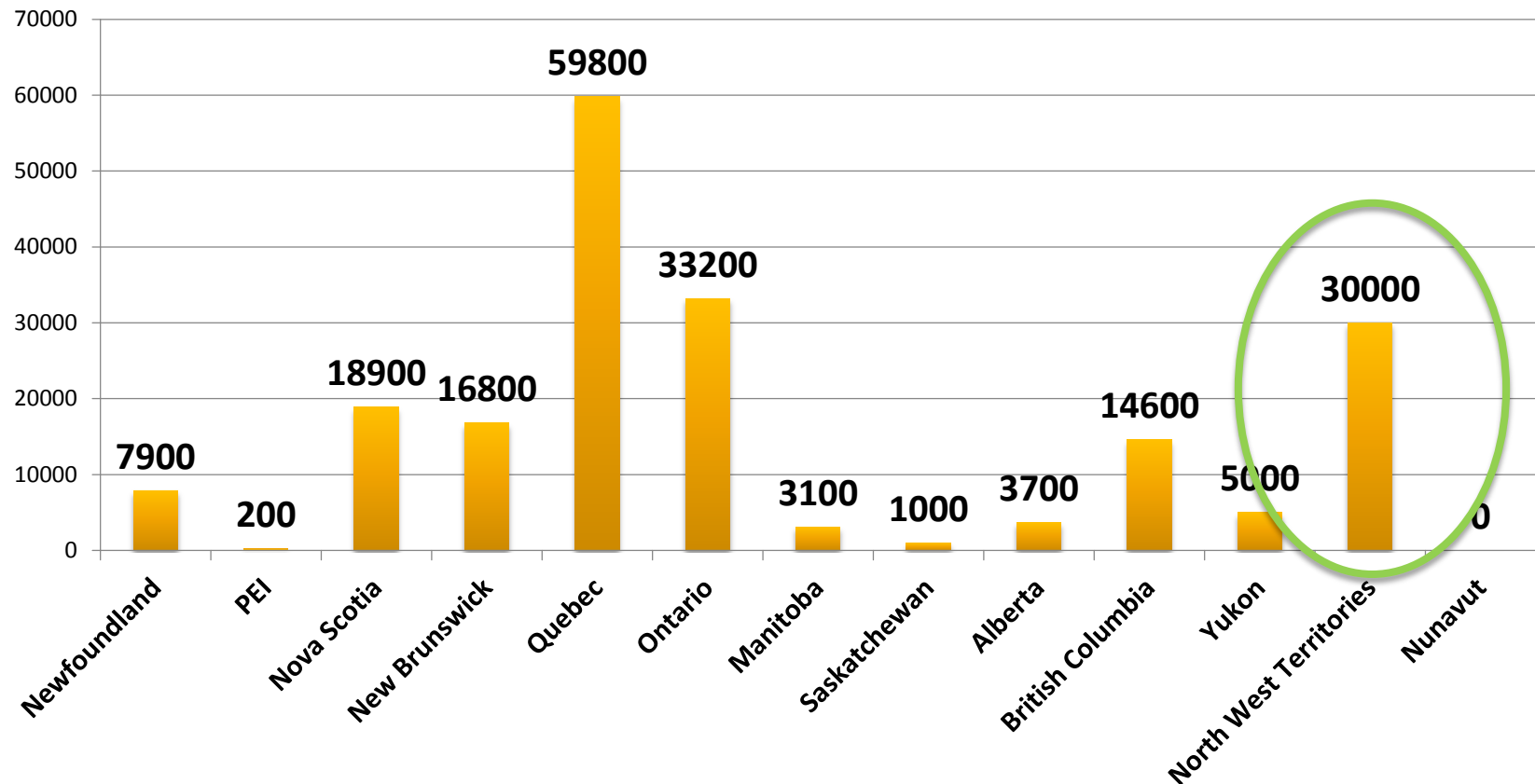
<http://www5.statcan.gc.ca/cimt-cicm/topNCountries-pays?countryId=0&tradeType=1&scaleQuantity=0&usaState=0&dataTransformation=0&save=null&topNDefault=10&freq=12&lang=eng&refYr=2015&country=null§ionId=9&scaleValue=0&chapterId=44&monthStr=null&arrayId=0§ionLabel=&retrieve=Extraire&provId=1&refMonth=12&commodityId=440131>

Canadian Exports to Asia (tonnes)



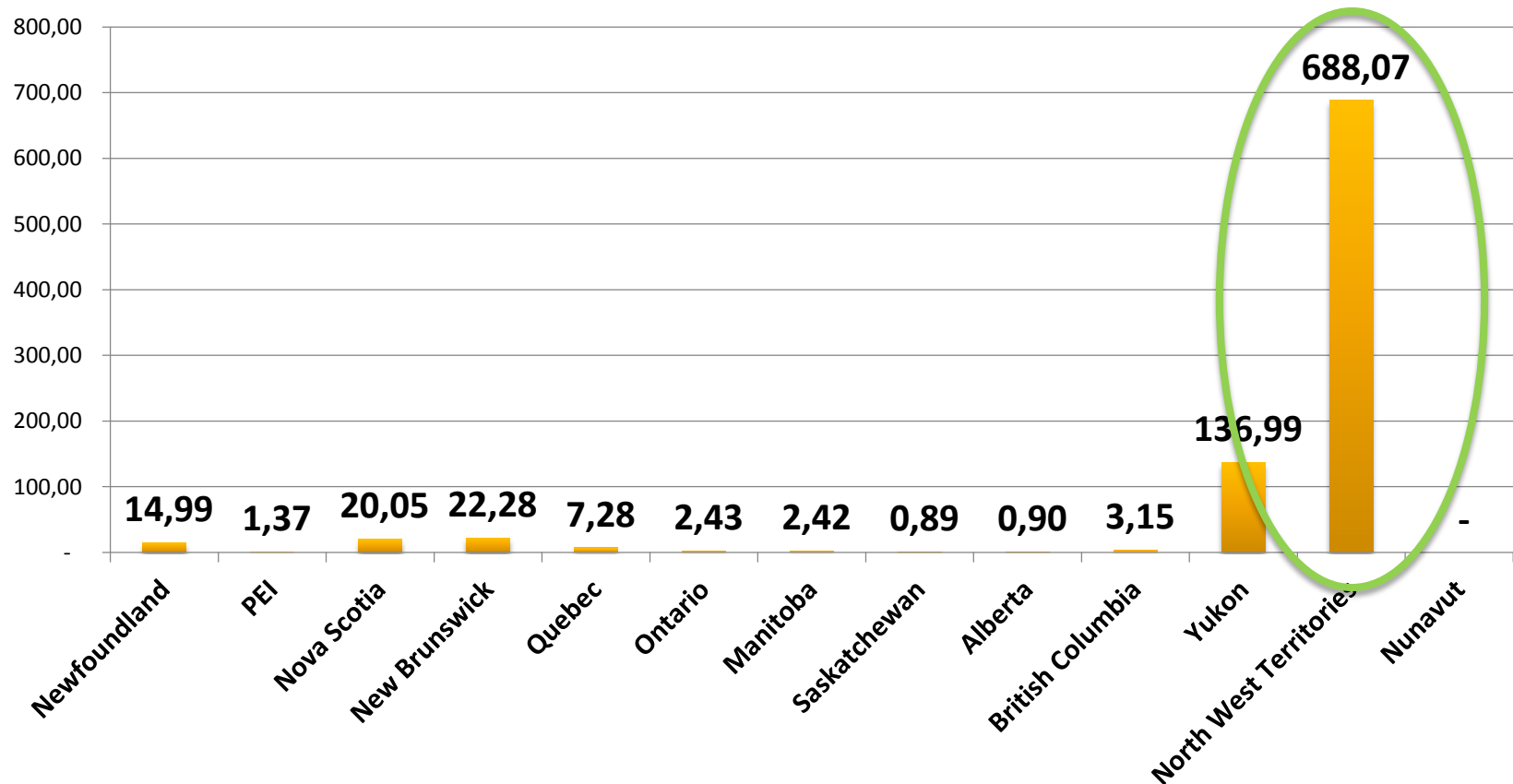
Source: Statistics Canada

Canadian Annual Domestic Wood Pellet Consumption - tonnes



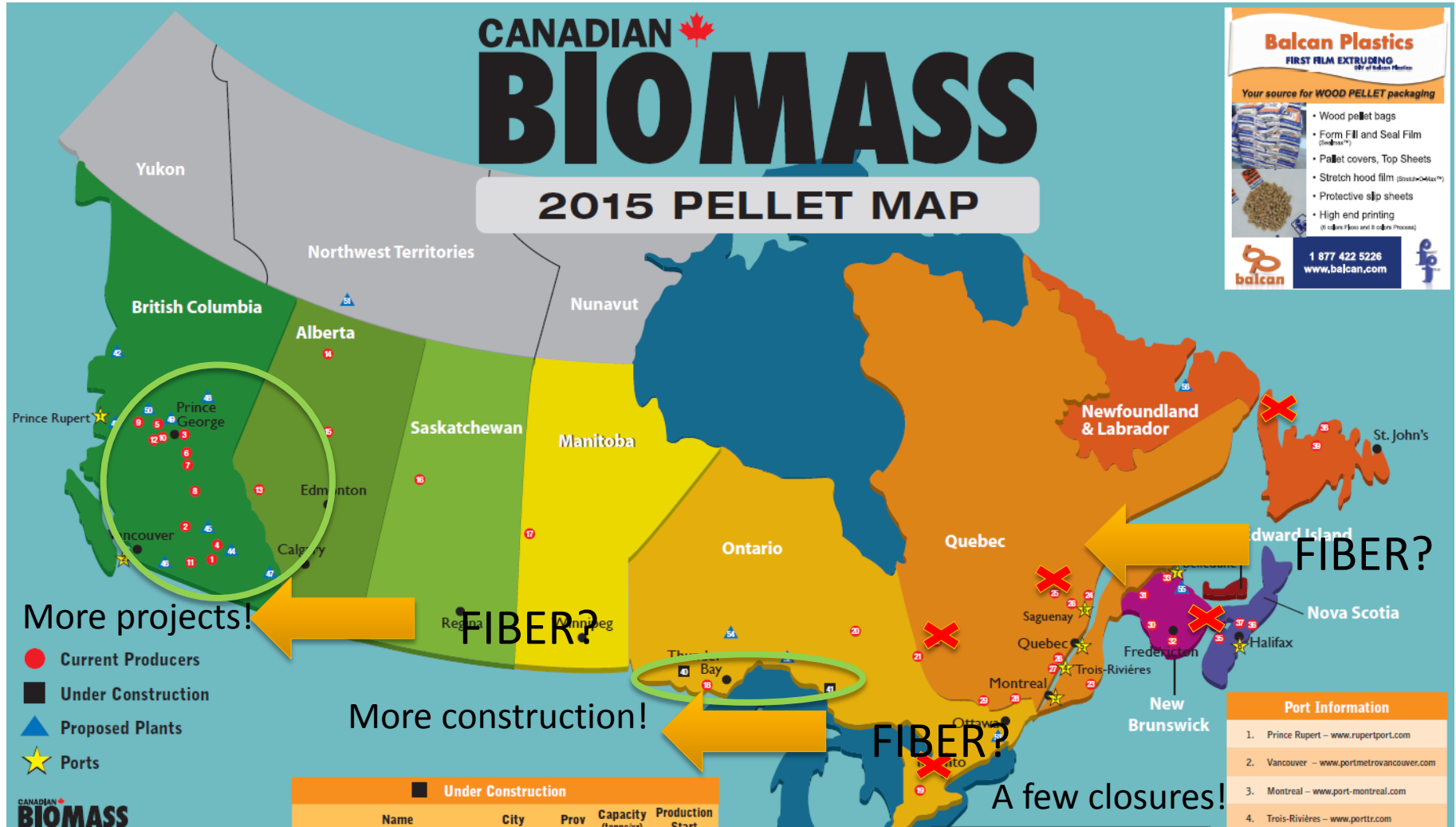
1. Calculated using data from Stats Canada & HPBA Canada & NWT Biomass & Energy Association
2. Approximately 200,000 tonnes for all of Canada annually

Canadian Annual Domestic Wood Pellet Consumption – tonnes/1000



1. Calculated using data from Stats Canada & HPBA Canada

Canadian pellet plants



Export terminals Panamax Ready!

Existing: Vancouver, Halifax, Belledune, Trois-Rivières, Montréal
New:

Quebec Stevedores
75000 tonnes
Quebec City



Westview Pellet Terminal
60000 tonnes (Phase 1)
Prince Rupert BC



Power Generation conversion (OPG)

Attikokan 200MW power plant (90Kmt/yr)



Power Generation conversion (OPG)

Thunder Bay 150MW power plant (6Kmt/yr)



Black or White?

Conversion parameters		Attikokan	Thunder Bay
		White	Black
Capacity	MWe	205	150
Use Factor	80%		
Tonnes used		738345	488301
Conversion	Costs	\$ 170 000 000	\$ 5 000 000
Annual Costs	7%	\$ 11 900 000	\$ 350 000
Conv.Costs	Per MWe	\$ 8,28	\$ 0,33
	per tonne	\$ 16,12	\$ 0,72
Transport	per tonne	\$ 10,00	\$ 10,00
	Per MWe	\$ 5,14	\$ 4,65
Savings	Per tonne		\$ 18,18
	Per MWe		\$ 8,44
Outage	Months	18	7
Downtime costs		?	?

Sustainable Biomass Partnership

Partners



“Participating Observers”

EIPS, USIPA, & WPAC

Conclusions

- The general market outlook is positive
- Europe is still major export market
- USA is now more attractive for Canadian producers, mostly currency related
- Fiber and sustainability are key issues
- North America will grow slowly

Thank you!

For more information:

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Quebec Wood
Export Bureau

