

Canada's Wood Pellet Sector

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John Arsenault, Director Market Access and
Promotion



Outline

- Canadian wood pellet production statistics
- Canadian wood pellet markets
- Regional developments Canada-Québec



Canada's wood pellet plants

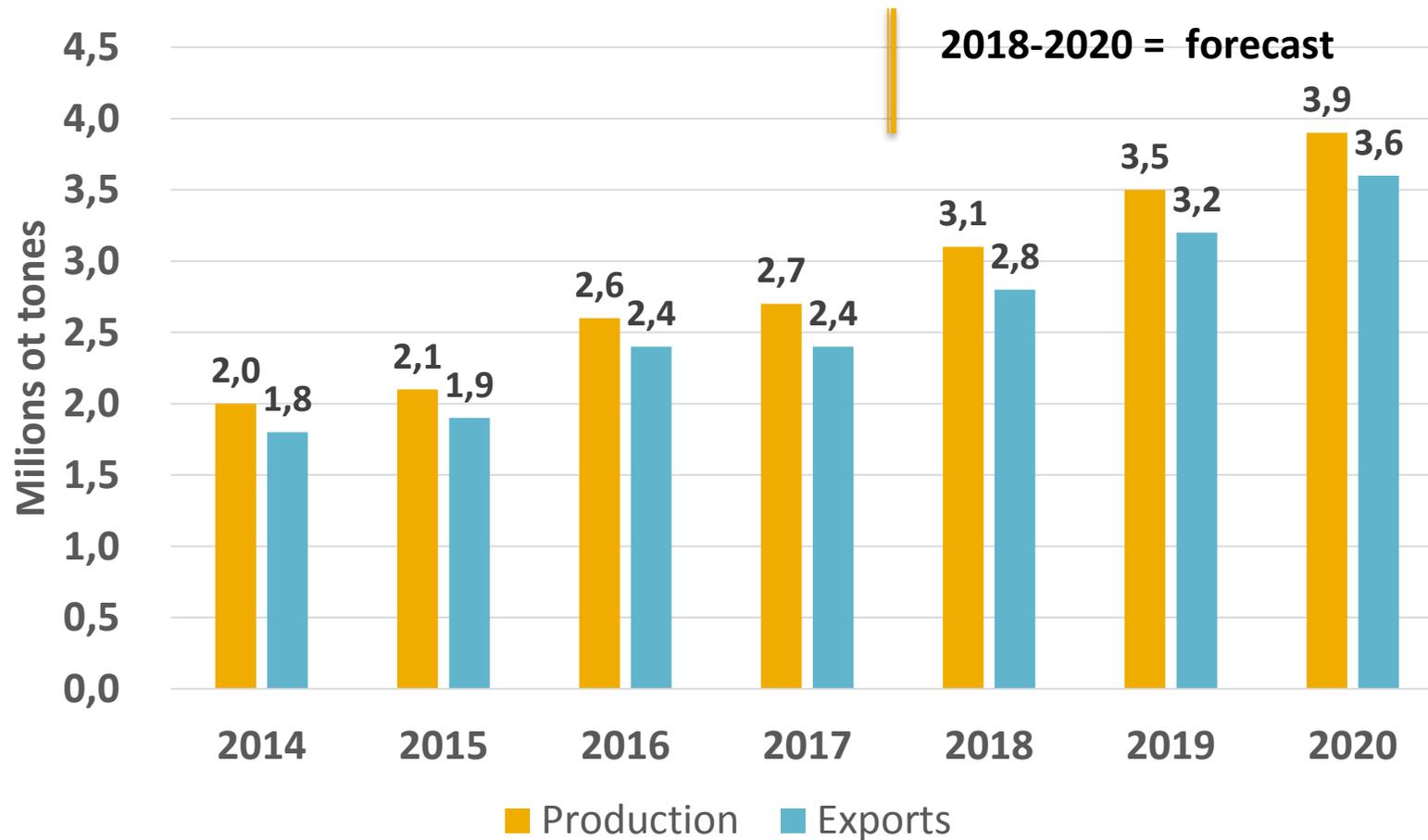
- 44 pellet plants in Canada
- Export focus, therefore concentrated near coasts
- > 4 million tonnes annual capacity

CANADIAN BIOMASS

2018 PELLET MAP



Canadian production and exports

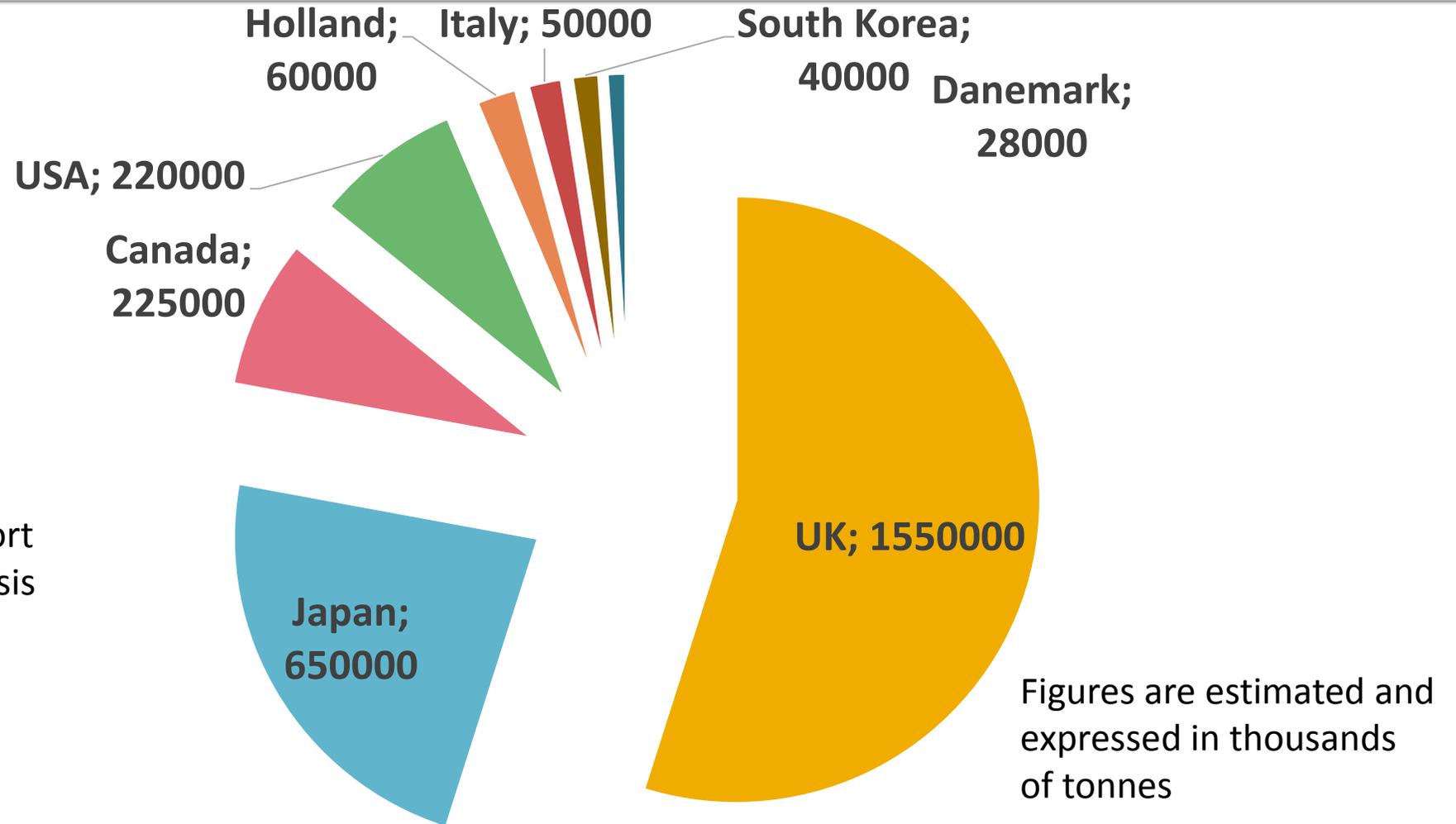


Source: Global Trade Atlas export and import data & WPAC analysis

Canada: pioneer in overseas pellets

- First overseas bulk shipment
Sweden 1990, 5kt
- First commercial offtake agreement:
Sweden 1998
- First trans-Pacific shipment
Japan 2008
- First Panamax shipment
UK 2015, 60 kt

Canada's pellet markets – 2018



Source: Global Trade Atlas export and import data & WPAC analysis

Canada's domestic wood pellet market

- Estimated internal market 250-300 kt/a.
- Pellets used for power generation in Ontario (90kt/a), and for residential and commercial heating, mainly in areas off the natural gas grid.
- Stoves dominate, but boiler installations are increasing slowly, especially in NWT and Atlantic Canada.
- Coal is to be eliminated by 2030.

Ontario Power Generation



**Ontario Power Generation's Atikokan Power Plant:
converted from coal, now firing on 100% wood pellets**

Canada's domestic wood pellet market

- Regional efforts starting to pay off.
- North West Territories government exemplarity has created huge pellet market penetration (> 1 tonne/yr/resident)
- Atlantic provinces have installed over 30 systems > 50 kw, tenders for 20 more.
- Quebec has created Vision Biomasse with aims of using 1 000 000 tonnes of biomass per year, at least half pellets.

Vision Biomasse Québec

- Multiple stakeholders(GO,NGO, EnvNGO, etc.)
- Recognized by government support programs
- Organizing communications
 - Website with documentation and examples
 - Annual Biomass conference



Vision Biomasse Québec

- Working with Quebec Government Energy Transition office (TEQ)
- Over 6,5 Mt/yr of forest biomass available
- Potential market ~ 2 Mt/yr

TABLEAU 1 : SCÉNARIOS 1 À 4 — POTENTIEL NET DE SUBSTITUTION HORS DE L'ÎLE DE MONTRÉAL AU MAZOUT LÉGER, AU MAZOUT LOURD, À L'ÉLECTRICITÉ ET AU PROPANE PAR LA BIOMASSE FORESTIÈRE

	Mazout léger (litres)	Mazout lourd (litres)	Propane (litres)	Électricité (GWh)	Granules (tma)	Copeaux (tma)
Scénario 1	63 639 279	13 051 376	0	0,0	47 559	114 473
ajout incrémental	0	0	4 593 775	1 190,7	46 790	279 988
Scénario 2	63 639 279	13 051 376	4 593 775	1 190,7	94 349	394 461
ajout incrémental	84 693 037	18 673 718	31 487 981	2 744,0	809 791	113 634
Scénario 3	148 332 315	31 725 094	36 081 756	3 934,8	904 139	508 095
ajout incrémental	68 391 130	15 105 109	13 005 901	1 460,0	294 034	271 118
Scénario 4	216 723 445	46 830 203	49 087 657	5 394,8	1 198 173	779 213

Vision Biomasse Québec

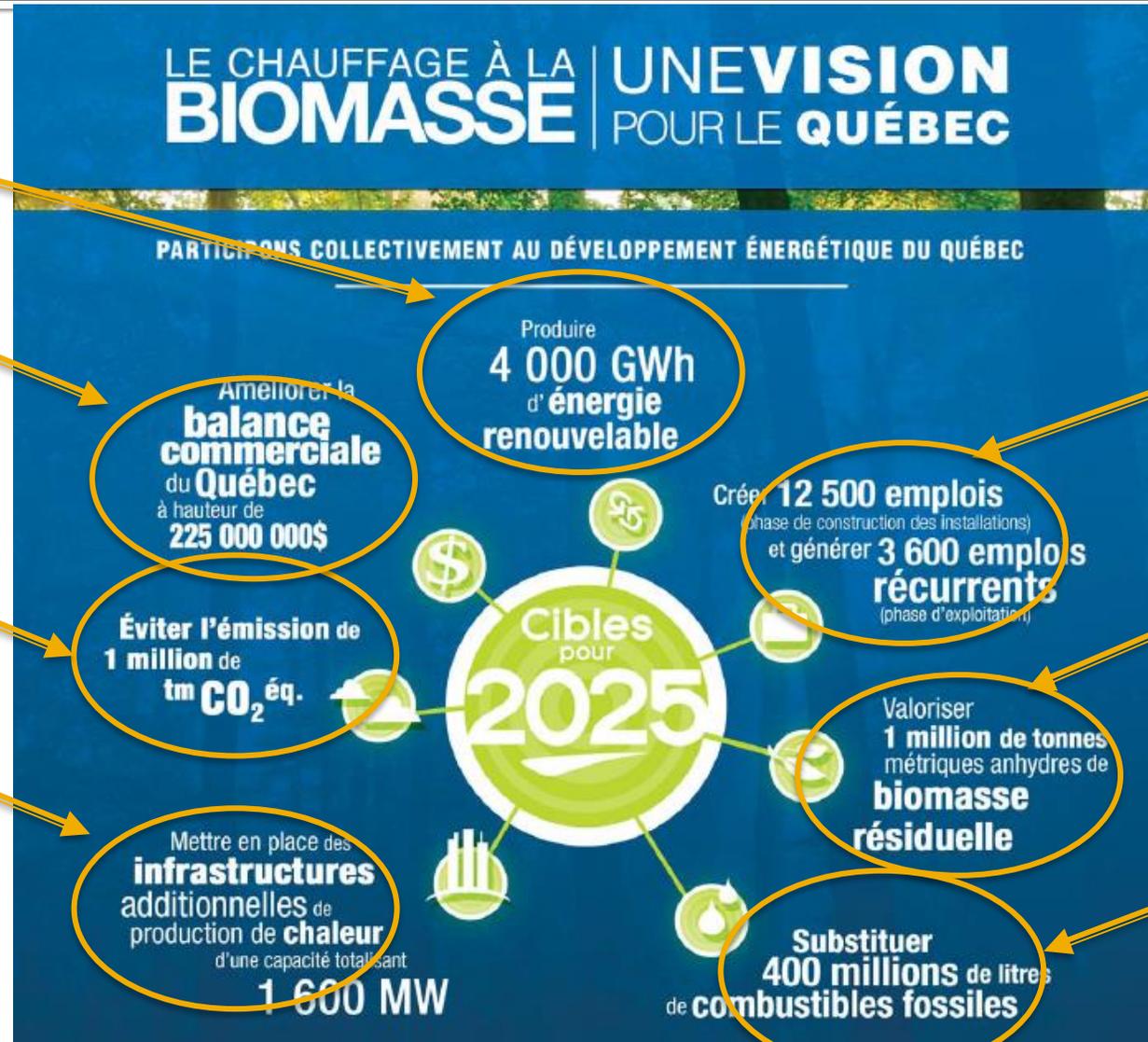
visionbiomassequebec.org

Renewable heat

Improve commercial balance

Reduce GHG

Invest in heat equipment



Create Jobs

Add value to Biomass

Replace fossil fuels

WPAC market development

- Produced two videos on pellet use:
 - Industrial: www.pellet.org
 - Residential: www.pelletheat.ca
- Regionally targeted social media campaign during the fall of 2018
- Currently preparing marketing strategy towards pellet appliance buyers.

Conclusions

- Canada's pellet industry is growing thanks to demand from Europe and Asia
- Repurposing PC power plants for co-firing or dedicated firing with wood pellets is proven and widely used in many countries. Canada should adopt this more widely.
- There is a huge opportunity to increase the use of wood pellets for domestic heating in Canada built on strong regional bases

Thank you!

John Arsenault

- john@pellet.org
- +1 819 583-7477



Quebec Wood
Export Bureau



WPAC AGM & Conference

Sept. 24-25, 2019

National Arts Centre, Ottawa

PELLET.ORG/WPAC-AGM