

WOOD PELLET SUPPLY, SECURITY & OPPORTUNITY

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Sept 15, 2015 Prince Rupert



Pinnacle.
RENEWABLE ENERGY INC.



Presentation Overview

- **Pellet Demand:**

- *Where are wood pellets going today and who is consuming them?*

- **Pellet Supply:**

- *Where is the global supply coming from and what is the opportunity for growth?*

- **Demand vs Supply:**

- *Can the pellet industry provide reliable long-term fuel security?*

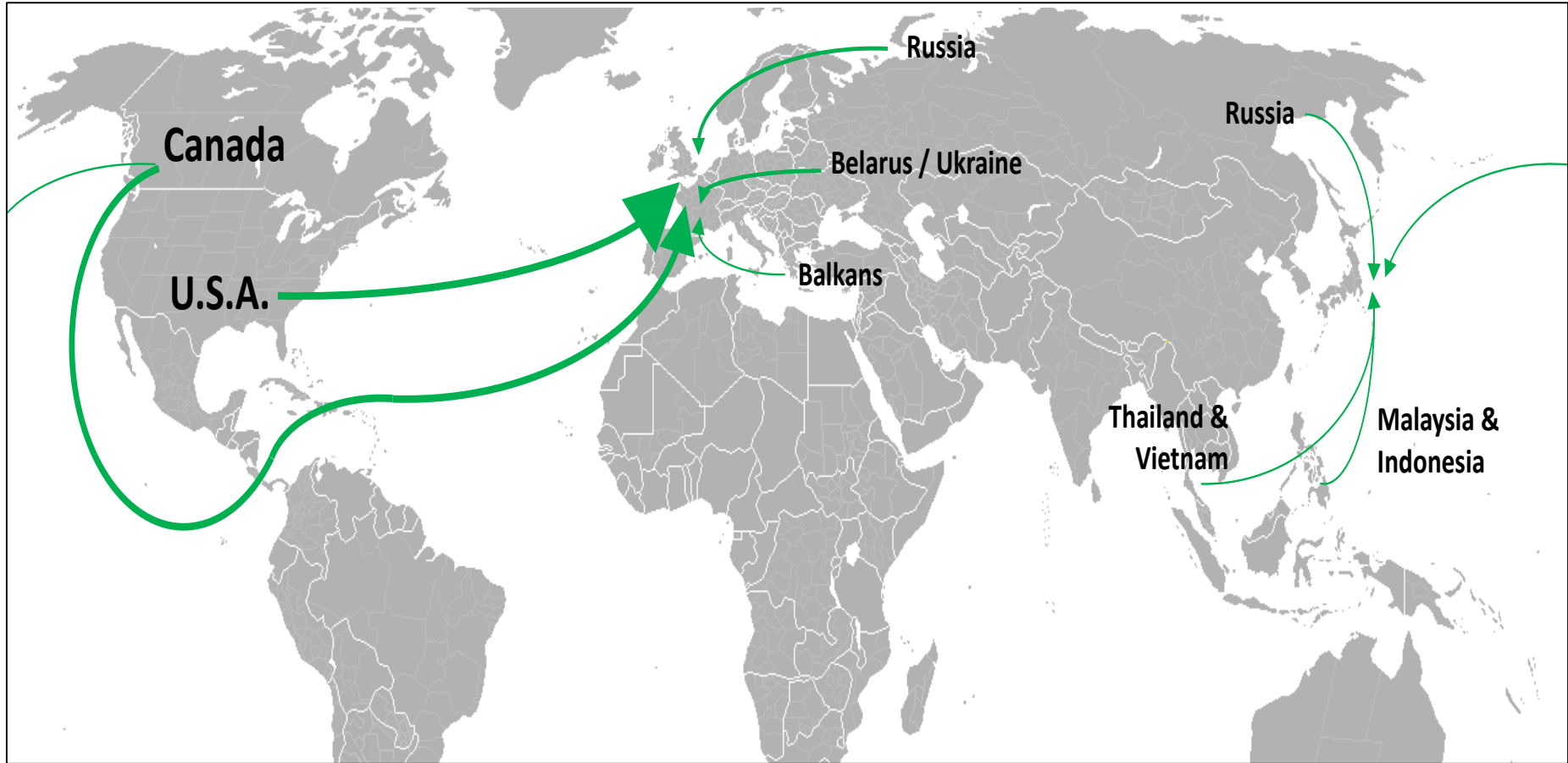
- **Market Update:**

- *What are some of the current factors / trends*

- **Conclusion:**

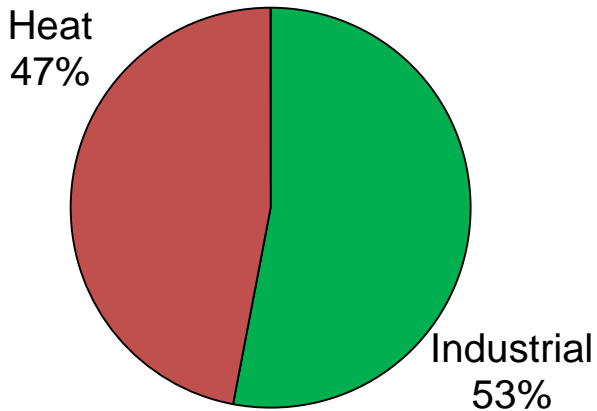
- *What can Pinnacle offer you?*

Overview of Global Trade Flows

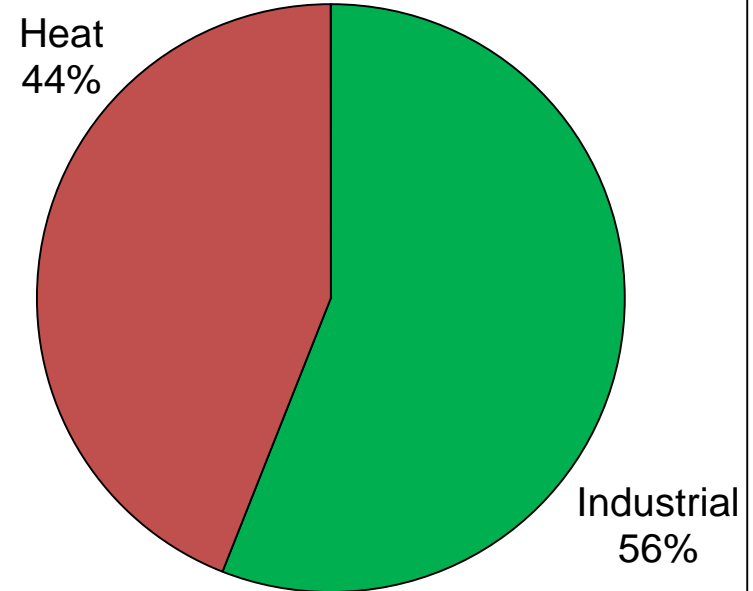


Where is Global production of Wood Pellets going?

Current Demand (29 million MT's)



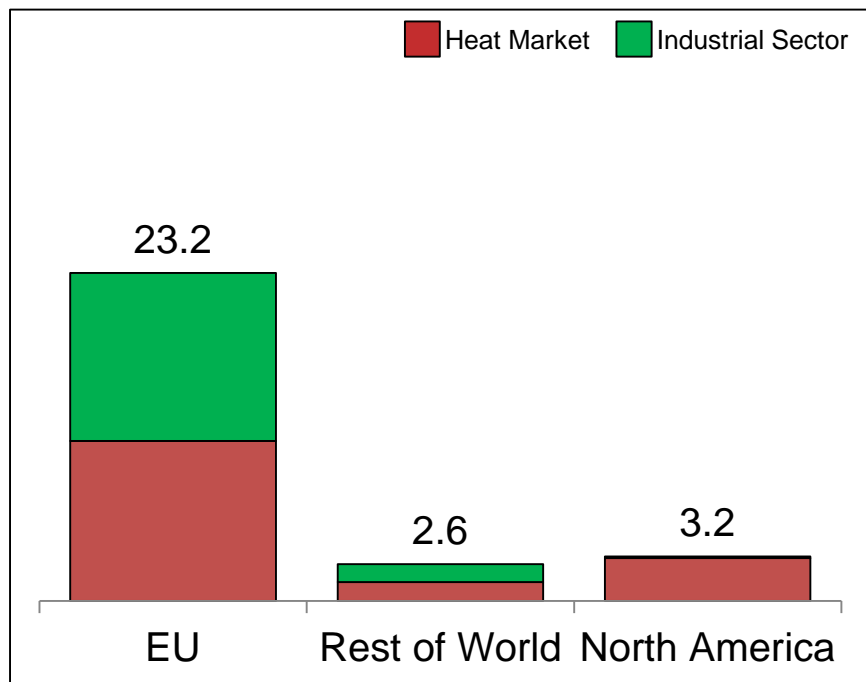
Expected Demand by 2019 (49 million MT's)



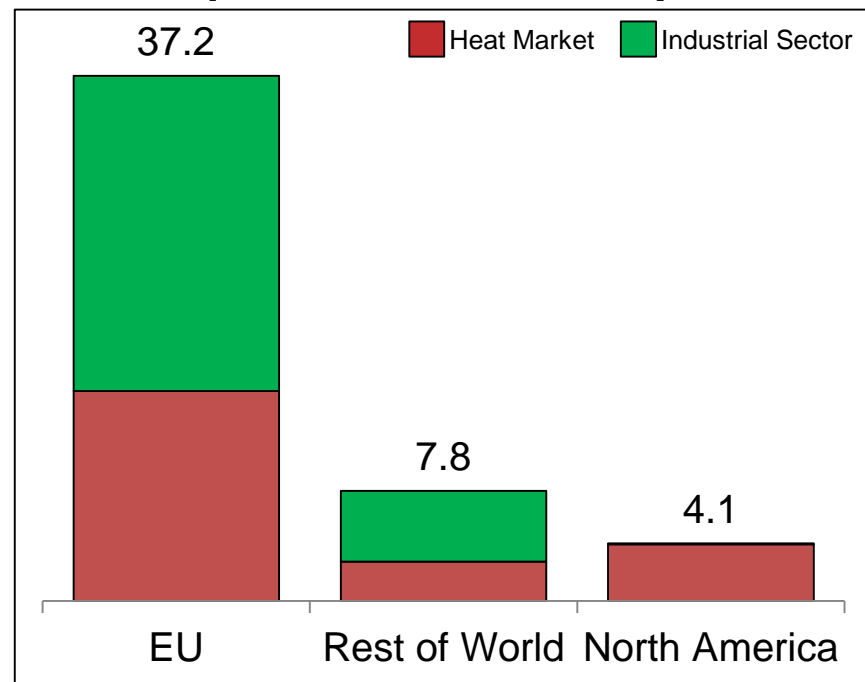
- Overall demand for wood pellets is forecast to grow 70% thru end of 2019
- **Industrial Sector** → Electricity Generation / Power / CHP
- **Heat Market** → Residential & Commercial Space Heating

Who is Consuming Wood Pellets?

Current Demand (29 million MT's)



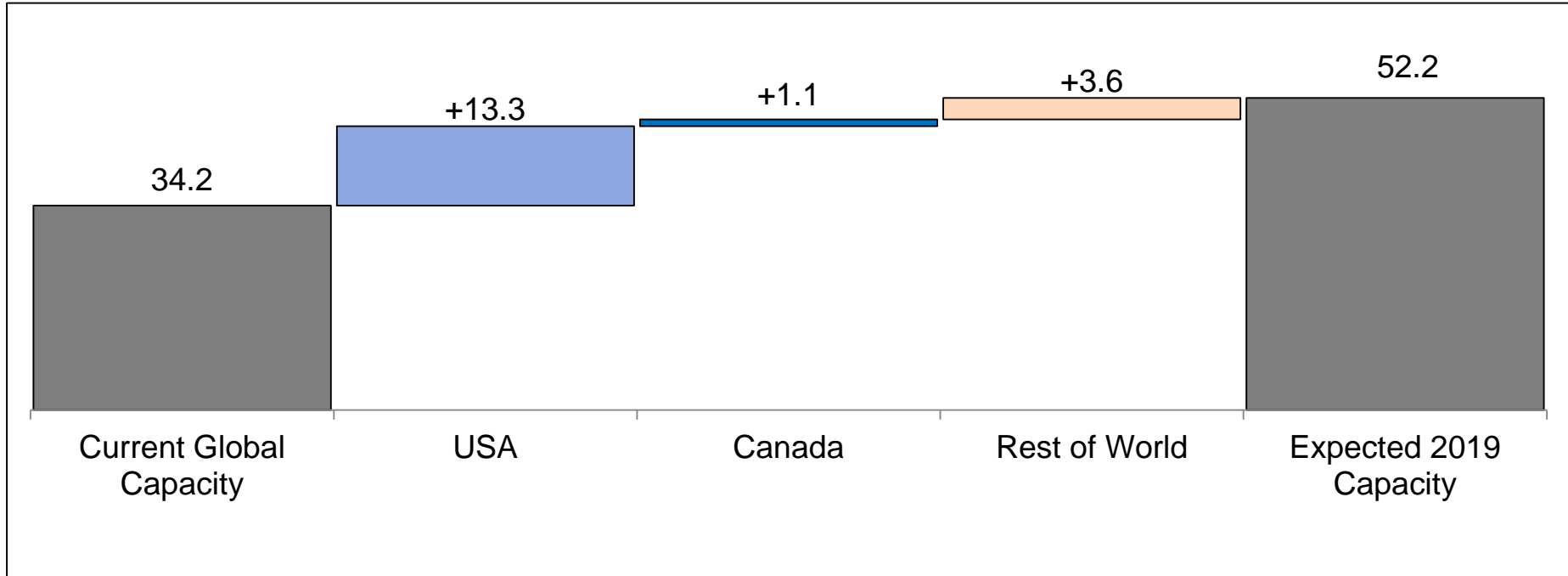
Expected Demand by 2019 (49 million MT's)



- European Union is the largest market for both industrial and heat pellets, consuming almost 80% of current global demand. This is expected to drop slightly to 75% by 2019, predominately as a result of growing demand from the Pacific Rim.
- Specifically, UK is the largest consumer of industrial pellets (53% of total) while Italy is the largest consumer of heating pellets (27% of total)

Global Pellet Supply – Total Operating Capacity

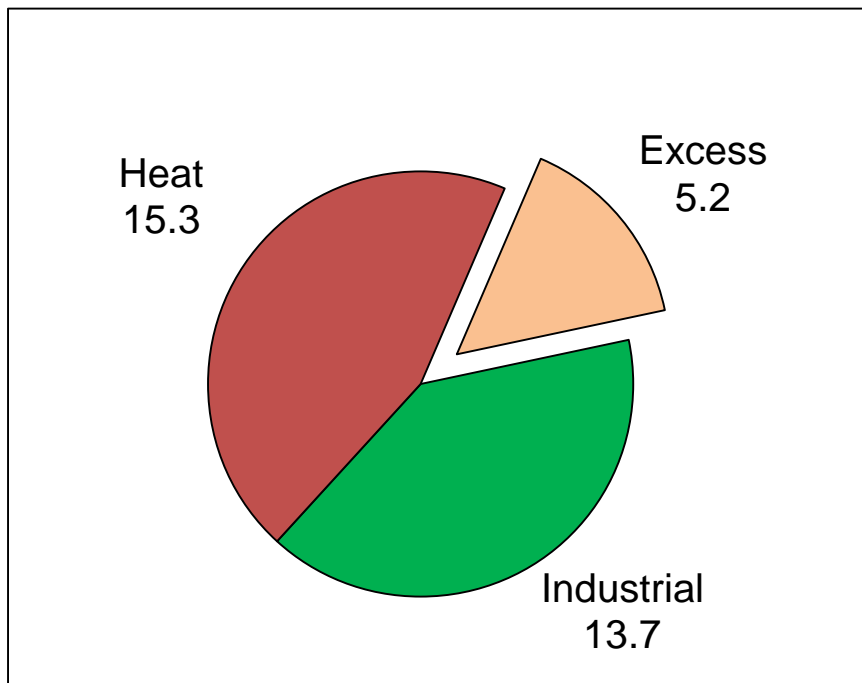
Expected Growth in Global Supply – 2015 to 2019 (million Mt's)



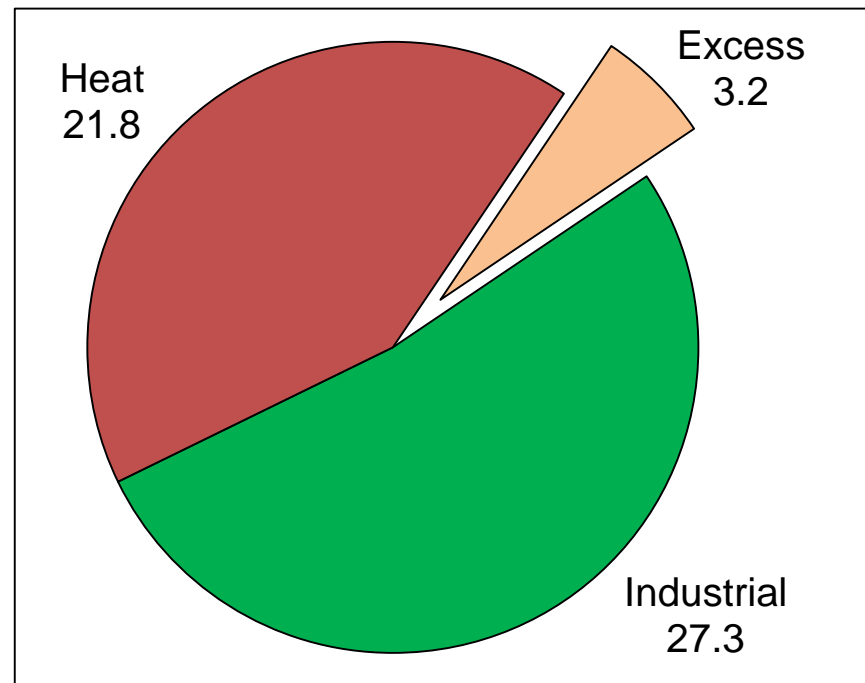
- 85% of the planned production growth expected to come from North America
- North America accounts for 40% of global supply today, with the potential to increase to 54% overall by 2019.
- NA is globally recognized as having a secured fibre basket available for sustainable pellet growth.

Demand vs Supply

Current Supply (million MT's)



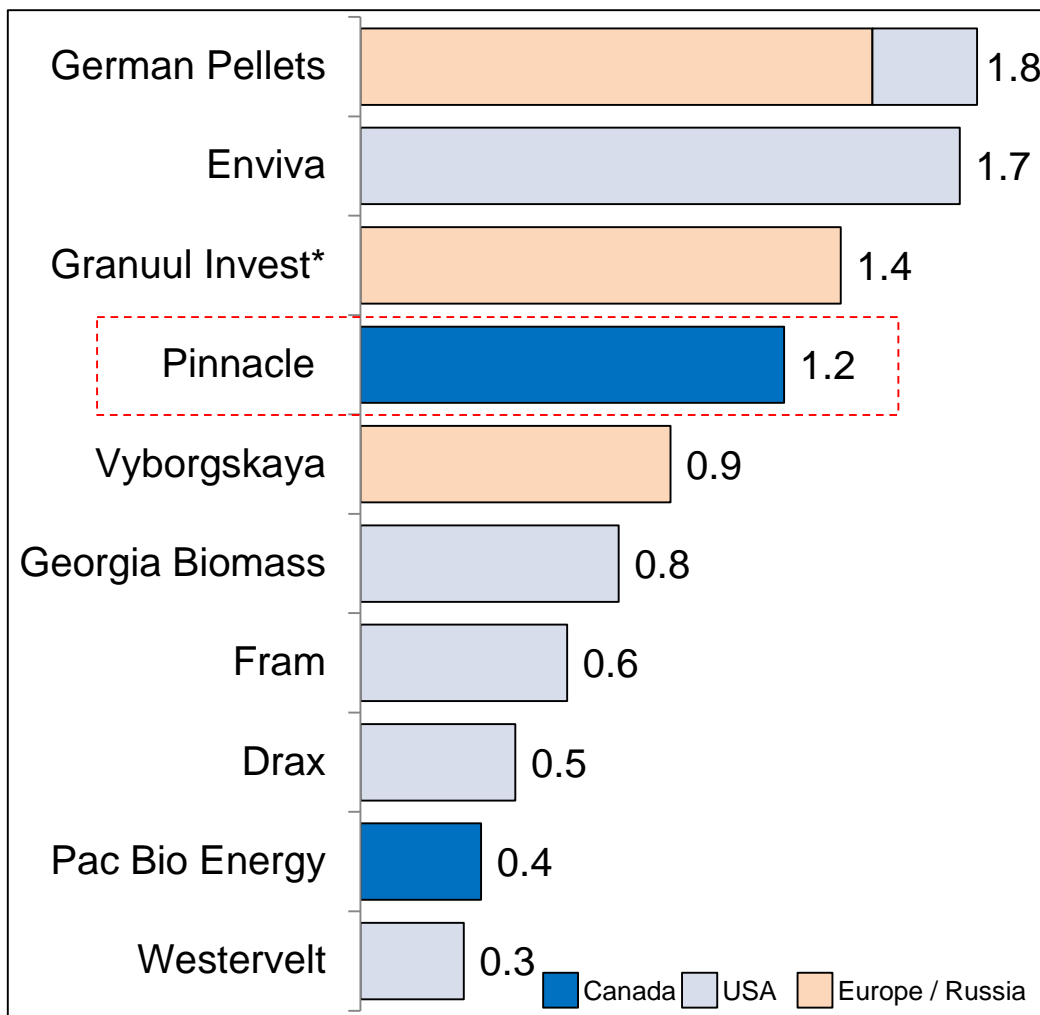
Expected Supply by 2019 (million MT's)



- Current demand of 29 million MT's vs supply of 34 million MT's creates an excess gap 5 million MT's
- By 2019, gap expected to decline to 3 million MT's as global demand grows vs. supply.
- North American has significant & secured invested capacity available today without off-take, presenting opportunities for co-firing generation consideration.

Location of Largest Global Suppliers

Largest Global Pellet Producers (million MT's of Capacity 2014)



- List of largest global pellet producers represent almost 29% of global annual production
- Over 60% of this is produced here in North America
- Producers ship to where demand is and currently that remains Europe.

- **China** - following Korea's lead?
- **Korea / Japan** - Expect continued growth (5.5 M by 2019).
- **USA** – Heat market remains strong (4.0 M MT / while capacity exists for emerging Industrial sector for co-fire.
- **Pricing** – overall production costs stable but many variables with logistics & currencies can influence delivered costs.
- **Logistics** – within NA rail / truck and even waterborne options available.
- **Westview Terminal** - exporting over 1.0 Mil MT / YR.

Pinnacle Renewable Energy Inc offers:

- ✓ Secure Feedstock in a Sustainable Fibre Basket
- ✓ Multi-site, Best in Class Technology & Manufacturing
- ✓ Efficient, Flexible, Multi-port Logistics
- ✓ Strong Owners with Financial Muscle
- ✓ Committed to Growth
- ✓ Blue Chip Customers
- ✓ Lowest Wood Pellet Fuel Supply Risk in the World

**PINNACLE –
WE'RE RIGHT NEXT STORE WAITING FOR
SOMETHING TO HAPPEN. COME TALK TO
US!
THANK YOU!**

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