

A SUCCESSFUL WOOD PELLET PROJECT

November 3, 2016



Canada's largest wood pellet producer:

- In business since 1989, BAT
- Operating 7 plants totalling 1,500,000 tpa capacity
- Well funded owners (ONCAP)

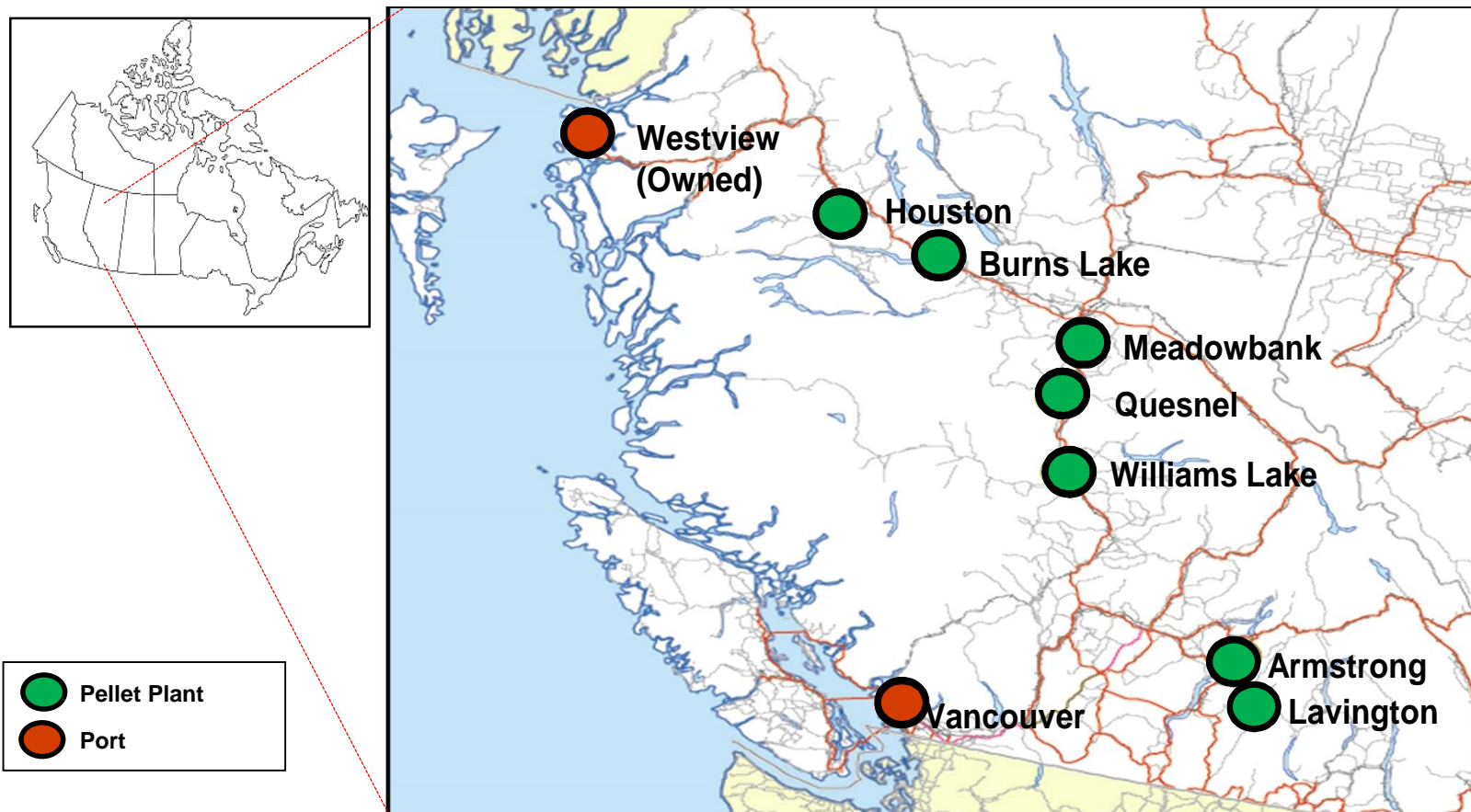
The gold standard for sustainability:

- Located in BC's rich fibre basket
- 60 million hectares of forest
- 95% of which is certified
- PEFC Chain of Custody certified
- On track for SBP certification

Winners of:

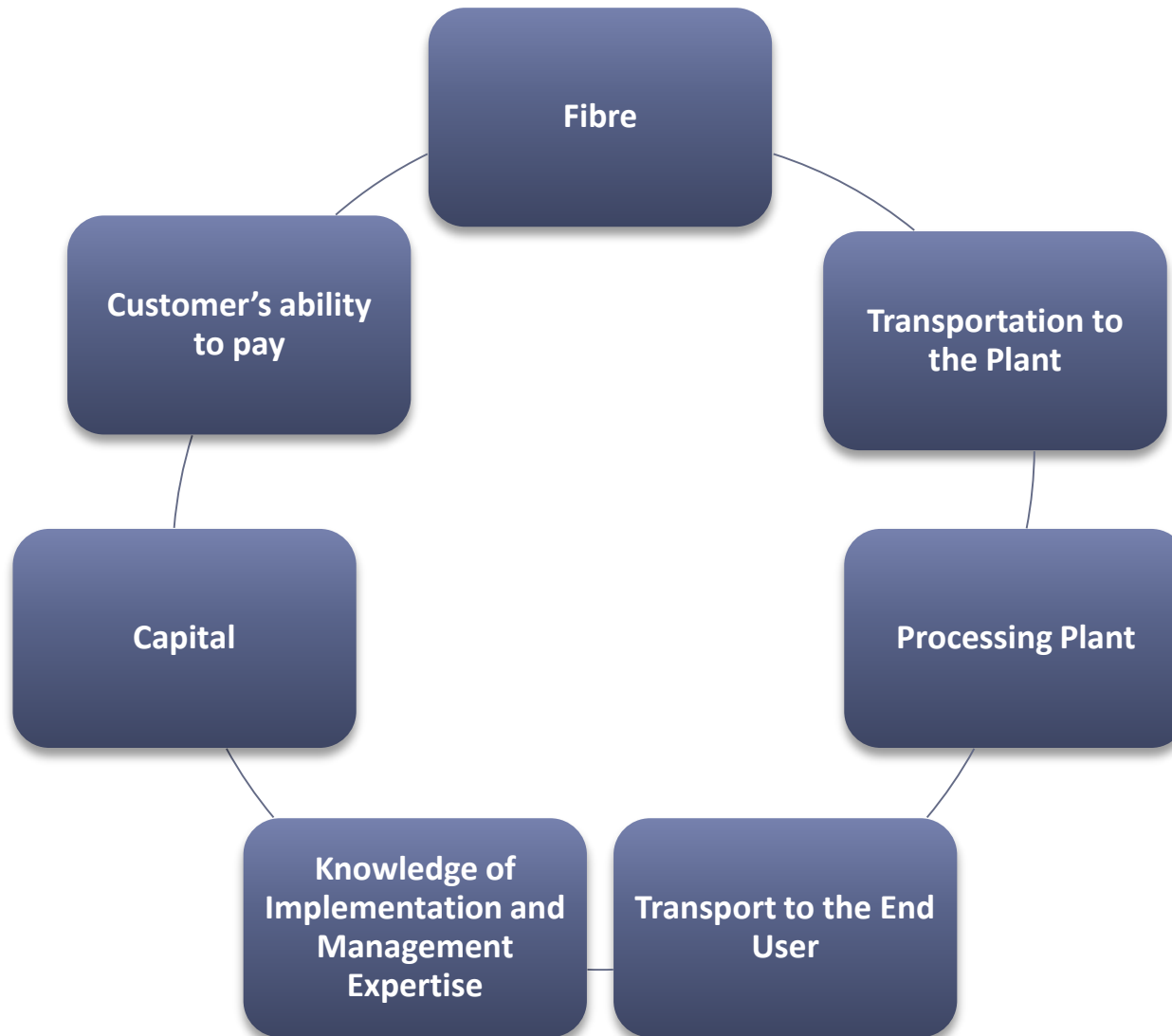
- BC Export Awards 2013
- Premier's Award for Job Creation in 2013

Facility Network

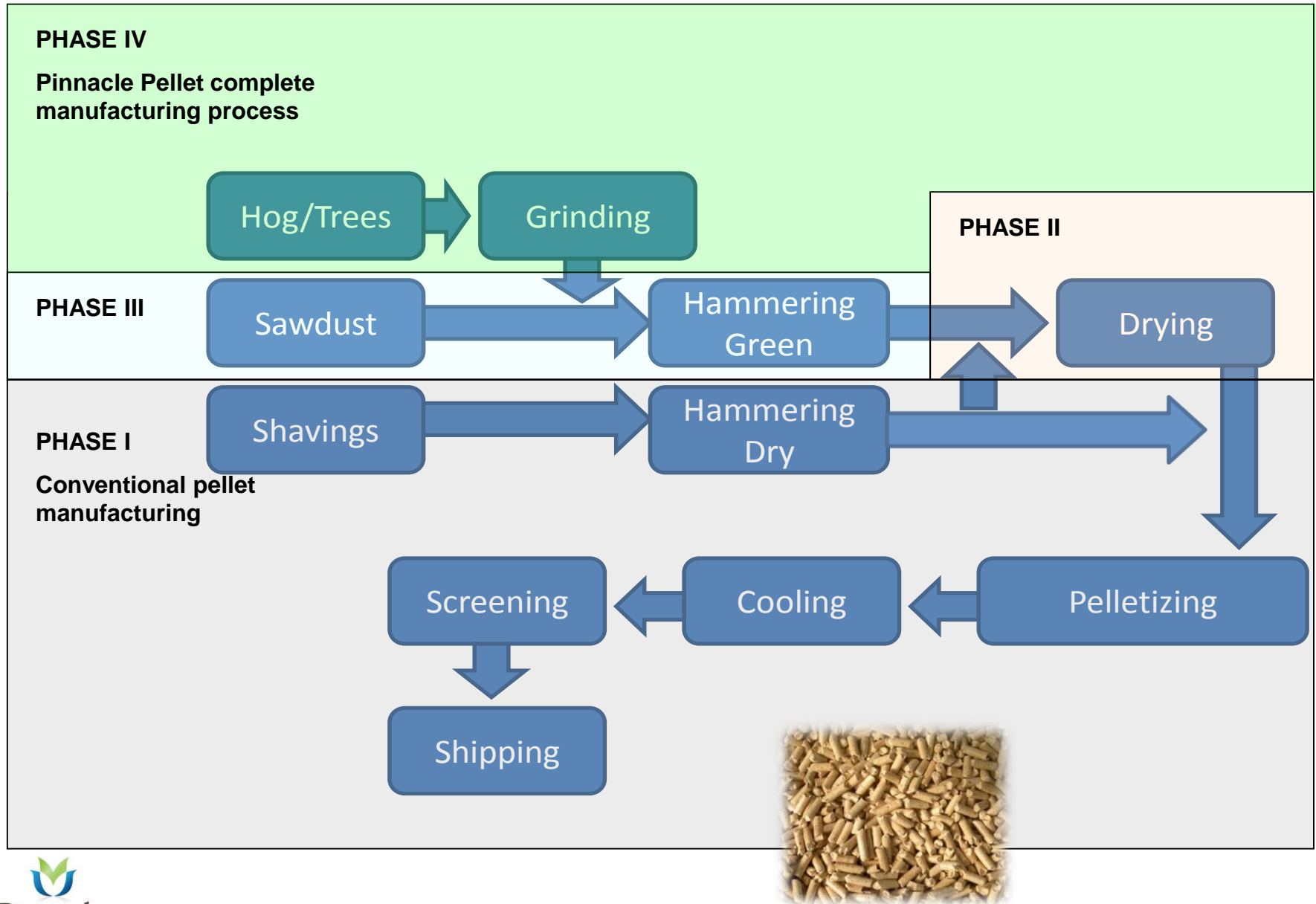


Key Building Blocks for Success

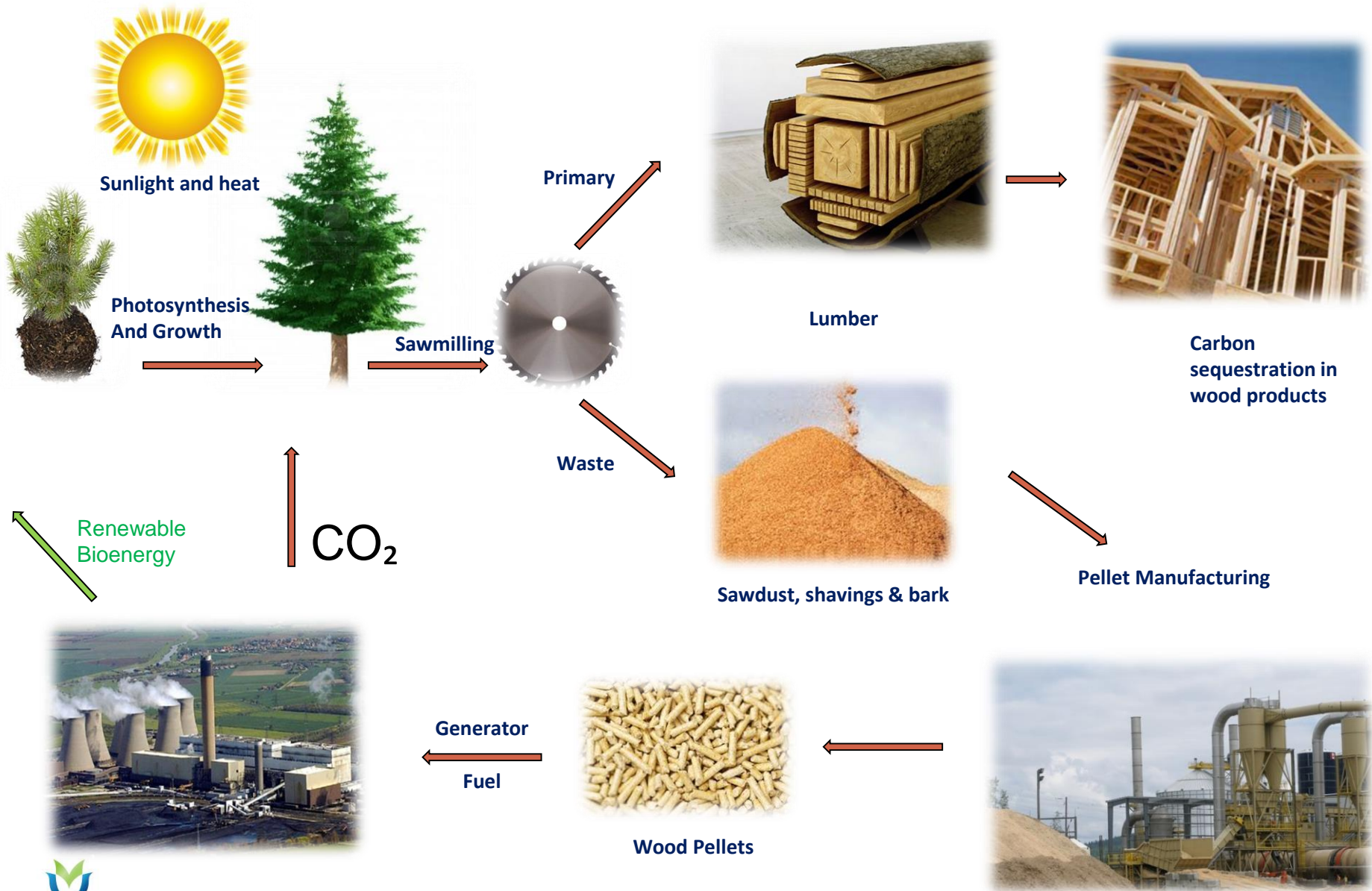
“To have a successful wood pellet project, it requires many pieces of a puzzle to work together or integrate together.”



PELLET PRODUCTION AT A GLANCE



OUR PURPOSE - RENEWABLE, LOW CARBON ENERGY



Not all Fibre is created equally, and nor does fibre all cost the same

There are many different forms of fibre:

- Residues
- Sawdust and shavings
- Chips
- Bark
- Tree Tops
- Fire Kill
- Small Diameter Logs



Macro Level:

- Millions of tones available, the challenge is economics
- Agricultural biomass is another untapped potential
- Blend agricultural biomass with wood biomass

- Forest practices, logging, road building, replanting, and transportation
- Integration is key
- Traditional clear cut practice was to remove the high value logs, for sawmilling and burn the rest in the forest
- This resulted in a terrible utilization of fibre of less than 50% or lower
- Change policy and practices to have one pass logging, that sorts the fibre during the logging process into high value saw logs, pulp logs and bio logs or fibre

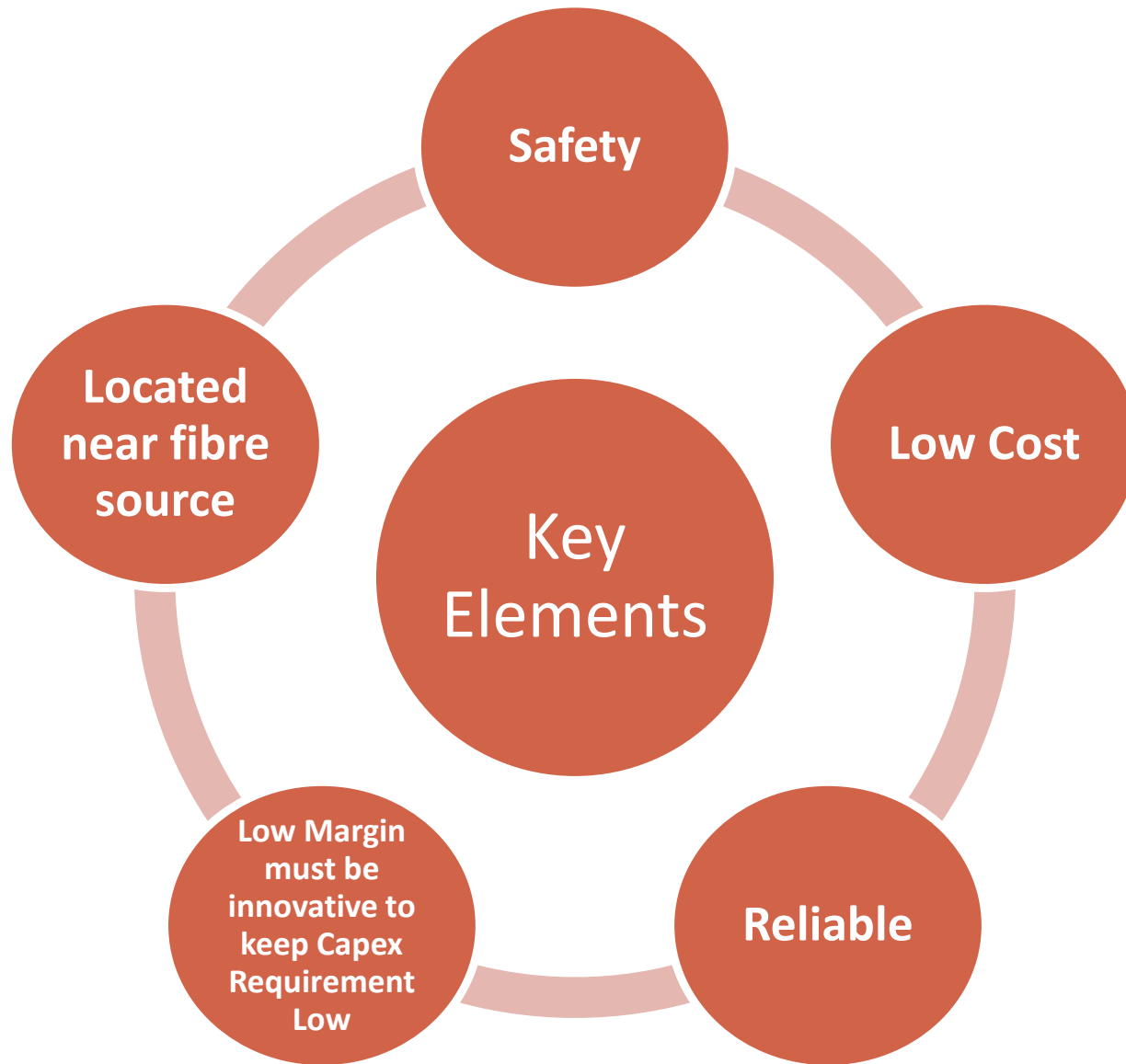


TRANSPORTATION TO THE PLANT

It is the most expensive transportation leg, so it can not commute long distances:

- Low truck utilization, high moisture





TRANSPORT TO THE END USER

- Trucking look for backhaul or integration with Pulp Network
- Large Trains
- Shipping (depends on, scale of operations)
- Port Facilities

Equipment	Cost \$
30 Trucks	.30/km
3 Rail Cars	.03/km
Large Ship	.20/km



Wooden pellets is relatively a new industry - It does not have a lot of operating or engineering is available

The building and developing stages are crucial:

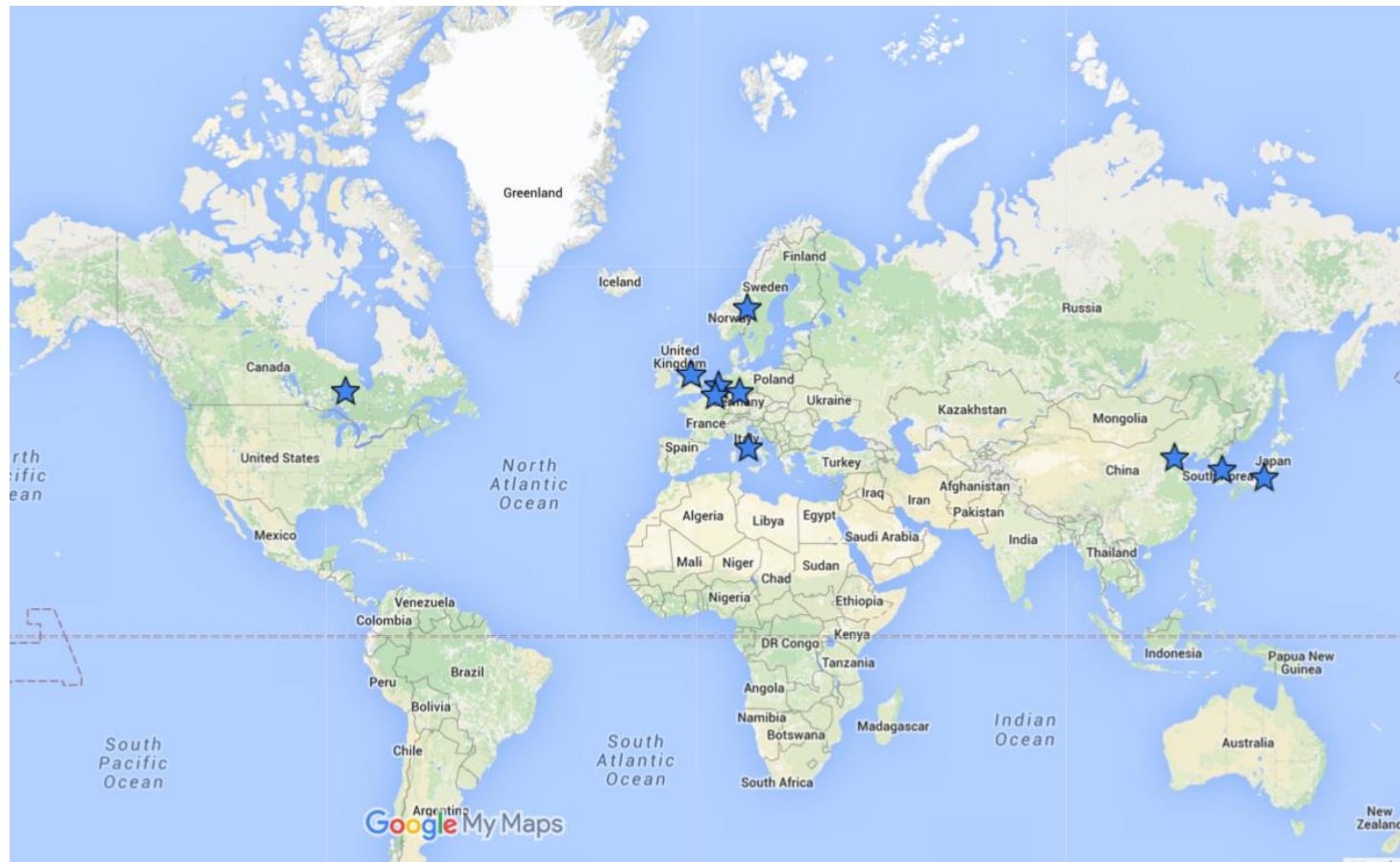
1. Share best practices from plant to plant
2. Building on experience from older plants
3. Continuous Improvements
4. Focus on Safety (Owning Safety Since 2014)

Rapid growth needs strong capital support:






1. Strong long term off table agreements
2. Potential JV'S
3. Secure and valuable fibre sources
4. Strong Ownership
5. Supportive and Understand Banks (managed risks)

CUSTOMER'S ABILITY TO PAY

- Resources have affordable pricing Eg. Coal, Natural Gas
- Levels the Playing field
- Biomass is a proven commodity in the production of electricity around the world



CUSTOMER'S ABILITY TO PAY

Customer	Location	Market Cap (US\$B)	Credit Rating (S&P / Moody's)
	U.K.	\$1.7	BB / NR
	U.K. / European Union	\$9.5	BBB+ / Baa1
	Japan	\$8.6	NR / A3
	Japan	\$37.6	A+ / A1
	U.K. / European Union	Private	NR / NR ⁽¹⁾

SUCCESS OF LAVINGTON: DELIVERING ON TIME AND WITHIN BUDGET

- Pinnacle's newest facility has exceeded expectations for Pinnacle and its partner Tolko
- Project was completed on time and on budget
- Production has exceeded budget in every quarter since operations commenced in Q4 2015
- First cash distribution was received from the partnership in Q3 2016
- Lavington will be used as a template for future greenfield expansion projects



Job Creation:

- Construction created 120,000 hours of employment
- Full-time direct employment at the plant (excludes inbound and outbound logistics) of 25 individuals

Fibre Infrastructure

- Pellet plant is located on the saw mill side that supplies 30% of the input of fibre
- Pellet plant was located in the middle of a cluster of nearby sawmills

Transportation

- Utilization of the existing network of trucks including strategic backhauls

Technology

- Borrowing technology from other industries Ex. Waste ledge bed dryer

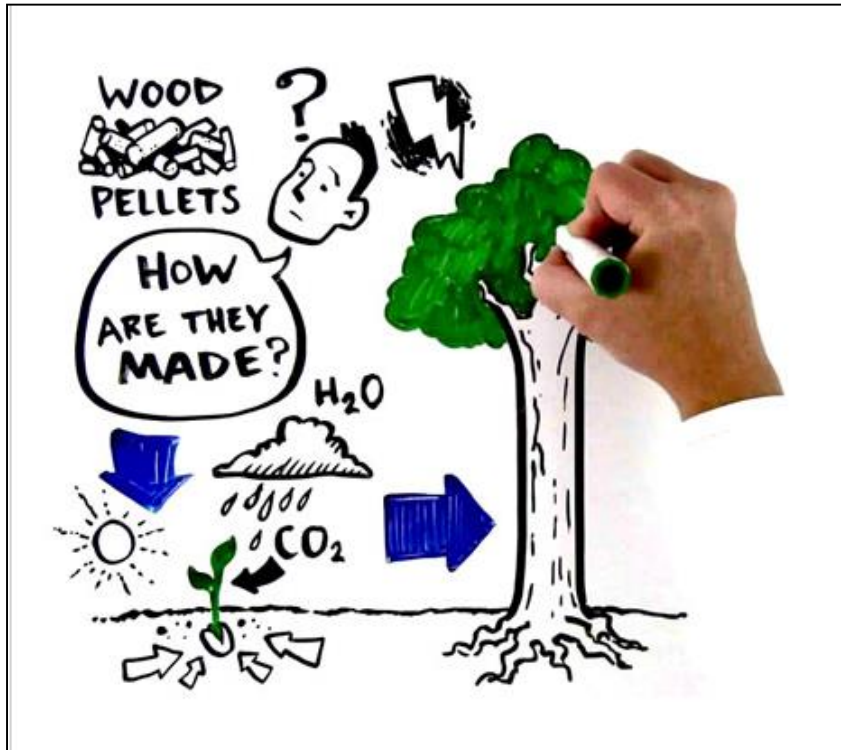
Capital

- Capital JV with Sawmill partner (joint venture)

PELLET OVERVIEW VIDEOS

Please visit our website at www.pinnaclepellet.com for an interesting story of our pellets

Pinnacle Pellet Learning Series:
LEARN HOW PELLETS ARE MADE



Pinnacle Pellet Learning Series:
LEARN HOW PELLETS ARE USED



THANK YOU