Why Canada is a Great Sourcing Option for Wood Pellets
WHAT IS CANADIAN SUPPLY CHAIN RISK?

FIBRE

MANUFACTURING

QUALITY

LOGISTICS
Why buying from Canada makes good sense

You need a supply of wood pellets, what should you consider?

• **Proximity & Logistics** – distance to Japan, port infrastructure
• **Fibre feedstock** – Availability, consistency; security, sustainability, quality
• **Transport Infrastructure** – reliable, safe
• **Manufacturing experience and technology** – safety, quality, best available technologies
• **Financial muscle** – well funded owners / producers; stable fibre suppliers
• **Economic & Political Stability** – well managed, politically stable & AAA rated

**LOW RISK SUPPLIABILITY**
What is Canadian Supply Chain Risk?

Internal: Controllable

External: Uncontrollable

Any negative threat that could disrupt the flow of material.
COFACE COUNTRY RISK ASSESSMENT MAP

Updated quarterly, the Coface Country Risk Assessment map offers a unique overview across 190 countries around the world. The Coface country risk assessment aims at evaluating the average credit risk of companies in a given country. The evaluation is based on economic, financial and political data. But it also takes into account Coface experience on the country, under two dimensions: Coface’s payment experience on the companies of the country and also its assessment of the business climate.

Source: Coface Website
**GEOGRAPHIC RISK — PROXIMITY AND ACCESS**

<table>
<thead>
<tr>
<th>Soma, Japan to:</th>
<th>Sailing Time</th>
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<tbody>
<tr>
<td><strong>Prince Rupert, BC</strong></td>
<td><strong>11.5 days</strong></td>
</tr>
<tr>
<td>Long Beach, CA</td>
<td>15.0 days</td>
</tr>
<tr>
<td>Chesapeake, VA</td>
<td>30.0 days</td>
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<tr>
<td>Perth, Australia</td>
<td>15.0 days</td>
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<tr>
<td>Jakarta, Indonesia</td>
<td>11.0 days</td>
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<tr>
<td>Saigon, Vietnam</td>
<td>8.0 days</td>
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<tr>
<td>Shanghai, China</td>
<td>4.0 days</td>
</tr>
<tr>
<td>Global Leaders; Long Term Contractable</td>
<td>Quantity &amp; Abundance of Fibre</td>
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<tr>
<td>---------------------------------------</td>
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<tr>
<td>CANFOR</td>
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<td>TOLKO Industries Ltd.</td>
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<td>CONIFEX</td>
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<td>CARRIER LUMBER</td>
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<td>BRITISH COLUMBIA</td>
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<td>BC Timber Sales</td>
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<td>West Fraser</td>
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<td>GORMAN The Finest Boards</td>
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<td>Weyerhaeuser</td>
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<tr>
<td>DUNKLEY LUMBER LTD.</td>
<td></td>
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<tr>
<td>WOOD PELLET</td>
<td></td>
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</tbody>
</table>
• Source of raw material?
• Meets all local and national legislation?
  ➢ Forestry & Environmental laws
  ➢ Conservation and habitat laws
  ➢ Labour Laws
  ➢ Welfare, Health & Safety laws
• Forest Management Certification
• Chain of Custody Certification
• Greenhouse Gas Certification
• Paid up stumpage, taxes and duties
• Land use change
• Deforestation
• Contamination
**FEEDSTOCK RISK – SUBSTITUTION, MIXING AND ALTERNATIVE USE**

- **Substitution Risks:**
  - Tropical Hardwood
  - Agricultural residue (husks)
  - MSW, RDF, SRF etc

- **Mixing Risks:**
  - Different types of Fuels
  - Certified with non-certified pellets
  - Legal with illegal raw material
  - Legal with illegal pellets

- **Alternative use Risks:**
  - Demand & Supply of pellets
    - Animal comfort
    - Sorbent
    - Domestic markets
  - Demand & Supply of wood fibre
    - Lumber
    - Chips for fuel or pulp
    - MDF, OSB,
Manufacturing Risks

• Manufacturing experience?
  ➢ How long in the business
  ➢ Safety record
  ➢ Manufacturing record
  ➢ Maintenance record

• Best Available Manufacturing Technology?

• Regular Capital Expenditure?
  ➢ Updated & upgraded equipment

• Quality?
  ➢ Handleability
  ➢ NCV / heat
  ➢ Chemistry; Trace elements
  ➢ Ash content & melting behavior
  ➢ Consistency
**INFRASTRUCTURE RISKS**

- **Inland Transportation:**
  - Roads
  - Rail
  - Intermodal points
  - Critical points

- **Ports:**
  - Safety
  - Labor
  - Draft (air and water)
  - Services

- **Export Terminals:**
  - Storage
  - Surveys
  - Sampling
  - Loading

*Images of road infrastructure and ports.*
SERVICES RISKS

- **Load Port Services**
  - Supervision
  - Surveys
  - Sampling and Testing

- **Biomass Services**
  - Sustainability and GHG audits
  - Wood traceability
  - Stumpage / Tax payment verification

- **General Services**
  - Export administration
  - Fuel and Power
  - Telecommunications
COUNTERPARTY RISK

- Financial capacity
- Credit wrap availability
- Customer default risk
- Long term contract competency
- Business risks
  - Key personnel
  - Business processes
  - Planning and control
  - Cultural risk
  - Mitigation and contingency

- Proven supply capability to Japan
FINANCIAL RISK

- Basic Risk
- Capital Risk
- Country Risk
- Default Risk
- Economic Risk
- Exchange Rate Risk
- Interest Rate Risk
- Liquidity Risk
- Operations Risk
- Payment System Risk
- Political Risk
- Refinancing Risk
- Reinvestment Risk
- Settlement Risk
- Sovereign Risk
- Underwriting Risk
BC has 58% of Canadian Wood Pellet Capacity

42% of Canadian capacity would logistically flow through the East coast.

Total Canadian Capacity About 4 million Tonnes
WHY BUYING FROM CANADA MAKES GOOD SENSE

• Geography – 1.5 weeks sailing to Japan
• Available feedstock – 55 million hectares of forest lands, 1.5 times area of Japan.
• Fibre security – long term contracts with established Canadian sawmillers
• Sustainability – 95% forests are certified to international standards
• Quality – made primarily from clean sawmilling residuals, consistent high heat I2 standard.
• Port Infrastructure – 2 deep water modern ports, west coast
• Terminal Infrastructure – most modern pellet terminal in the world, panamax capable
• Transport Infrastructure – dependable rail and road network with world class operators
• Manufacturing experience & technology – 25 yrs of experience & many sites utilize BAT
• Financial muscle – well funded owners; stable fibre suppliers
• Economic and Political Stability – well managed, politically stable and AAA rated

LOW RISK SUPPLIABILITY
Scott Bax, Senior Vice President, Operations
Pinnacle Renewable Energy Inc.

Scott.bax@pinnaclepellet.com  +1.604.787.3176