

PFI Annual Conference

“WHY do some Wood Pellet Projects FAIL?”

Or

Suffer low to non-existent profit margins

John Swaan – presenter
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FutureMetrics

***Globally Respected and Award Winning Consultants
in the Wood Pellet Sector***

“Intelligent Analysis and Thought Leadership for the Pellet Sector”

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WHY do some Wood Pellet Projects FAIL?

Or

Suffer low to non-existent profit margins

Lack of appreciation for experience, knowledge, and skills, defeat many projects!

- Whether it be during the feasibility study of the business of model of the project; the technical design of the plant(s), operations planning or the product (inbound & outbound) transportation logistics, **“the devil is in the details”**.
- Recognition of bringing a **“legitimate”** wood pellet industry expert to the management team or as a consultant to the project at times comes either late or too late.
- Wood pellet projects (specifically industrial wood pellet projects) are complex!
- Any aspect of the project from “the fibre in the forest to the utility furnace” Finance, Manufacturing, Operations, Marketing and Transportation can **trip up** the project.

Project show stoppers or margin minimizers;

- A solid **Fibre Strategy** – manage costs, quality and production uptime
 - ✧ Consistent volume - manage supplier, seasonal harvesting, weather or road conditions interruptions.
 - ✧ Within a 50 mile radius - try not to compete with pulpmills, board plants or other pellet plants.
 - ✧ Consistent species mix - avoid cheap fibre options “garbage in is garbage out”
- **Fibre preparation and homogenation**
 - ✧ Blend species at consist ratios
 - ✧ Protect from extreme weather conditions
 - ✧ Completely homogenized feedstock flow – through the entire process

The manufacturing process of wood pellets is “70% technical and 30% art”

- **Process flow and Technical design** – project developers MUST own the project
 - ✧ A flawed process flow design and material handling system will be stressful and costly
 - ✧ Designing a solid wood pellet manufacturing project, one must understand the dynamics of wood fibre throughout the process.
 - ✧ **Safety** – dust explodes, dust burns, wood fibre & pellets generate gases that will explode, burn and kill people – know this and ensure these risks are managed properly
 - ✧ Employ or retain a **legitimate** wood pellet expert with actual hands on experience to review and advise on project design and process equipment selection.
 - ✧ DO NOT rely on an EPC firm to de-risk the project – *own the project*
 - ✧ DO NOT rely on the equipment manufacturer to be responsible for selecting the correct equipment for the desired capacity and performance - *own the project*
 - ✧ Failed performance guarantees and/or court battles do not produce pellets (CASH)

- A solid **Operations Management and Operations Personnel team**

- ✧ Maintain a people first culture

A “state of the art” plant built correctly, only operates and performs as good as the people that operate it.

- **Diversified Marketing Plan** – understand the complexity of the market

- ✧ Industrial Market - Long term contracts – Spot market – Multi-clients

- Logistics – Port infrastructure – Product Specifications – Sustainability Criteria

- ✧ Residential Heating Markets – North America or Europe

- N.A – market risks – weather – low oil pricing

- EU – markets risks – weather – East Block competitors

Thank – You!

Full whitepaper report of this presentation can be found on the FutureMetrics website