



Pinnacle of success

In the face of a general industry downturn, Pinnacle Pellet Inc. is charting its own path, executing a very successful business strategy that includes a new \$20 million wood pellet plant in B.C.

By Jim Stirling

Pinnacle Pellet Inc's impressive growth curve is continuing on its upward trend with the recent commissioning of its fifth—and largest—wood pellet fuel manufacturing facility.

Pinnacle Pellet Meadowbank cost an estimated \$20 million to build and became fully operational this past November. It has a plant capacity of 240,000 tonnes of pellets per year and runs 24 hours a day, seven days a week.

The plant is about three kilometres north of Dunkley Lumber Ltd.'s sawmill and planer complex at Strathnaver, about 60 kilometres south of Prince George in central British Columbia.

The Meadowbank plant reflects the experience that management and operational staff have acquired with the company's other four B.C. plants: near Quesnel, in Williams Lake, in Armstrong and—in a joint venture with Canfor Corporation—at Houston, B.C.

"This plant incorporates a very streamlined design and layout, and we involved all our managers in the design process," says Leroy Reitsma, Pinnacle Pellet's senior vice president. The peer-focused design reflects Pinnacle Pellet's nimble corporate structure. Its five company owners afford Pinnacle Pellet with the flexibility to make business decisions quickly and respond to changing marketing and operational issues.

A major upgrade to the company's Williams Lake plant was also completed in 2008. The operation went from running two wood pelletizing machines to five, added a drying system and completed other plant modifications. Together, they helped boost plant capacity from 60,000 tonnes of pellets annually to about 180,000 tonnes.

The new Meadowbank plant and the Williams Lake expansion are a good indication of the company's growth pattern. "We've gone from operating one pellet plant producing about 60,000 tonnes in 2004 to five plants producing about 750,000 tonnes in 2008 and we plan continued growth," summarizes Reitsma.

Reasons for the growth, past and projected, reflect in part a change in forest industry structure and attitude precipitated by falldowns in lumber markets and wood quality as a result of the mountain pine beetle epidemic.

A major factor contributing to growth is Pinnacle's ability to forge solid working partnerships with primary lumber producers and strategic service suppliers while developing new and expanding offshore wood pellet fuel markets.

"We've worked very closely with our partners and I can't say enough about them— they've been excellent," says Reitsma. "I think the forest companies can see we're looking to be of assistance to them. We're not after the same products," he adds. "We see a sawmilling industry that needs a strong partner to take the non-merchantable material. The need to deal with it at source is ever more important," he explains. The preponderance of lower quality logs and their impact on production and grade is a major issue for commodity lumber producers, he notes. And one that's forecast to continue.

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The problems also spill over into re-manufacturing the lower grades of material. For example, pockets of rot caused by the mountain pine beetle can make it more difficult to fingerjoint lower grades of wood, Reitsma points out.

The Meadowbank wood pellet fuel manufacturing plant took little more than a year from site determination, signing key fibre supply and other agreements through the construction phase and ramping up into full time operation.

Dunkley Lumber is a major fibre supplier for Meadowbank with sawdust, shavings and bark trucked under contract to the plant by Arrow Transport. The trucking company was also delivering pellet-making feedstock from Canfor's Clear Lake sawmill near Prince George.

Pinnacle Pellet also used portable grinders to convert roadside harvest residues for pellet making and Reitsma predicts these volumes will significantly increase. "We continue to investigate the most efficient way of reclaiming fibre from roadside to plant. We're testing various ways of doing that," he adds.

The plant has separate infeeds for dry material—like shavings—and the wetter sawdust and hog. Each line has a hammer-mill from Bliss Industries: a 44 inch diameter by 36 feet long mill for the dry material and a 44 inch by 60 feet unit for the wetter fuels. Both mills grind the material down to size, in the target three sixteenths of an inch range.

After sizing, there's the flexibility of having one or both lines leading to the driers. These are twin MEC machines with 13 foot diameters and 60 feet long drums.

All material is collected on one conveyor after drying, and delivered to a surge bin ahead of the pelletizing stations. The plant's six identical Sprout pelletizer machines are fed by a Pinnacle Pellet proprietary design modular system.

"One of the big advantages of conveying through this module is that it's all by gravity," points out Reitsma.

Downstream of the pelletizing process, the material handling of the pellets includes an Optimil screening system. The bucket elevators within the process and Westeel storage bins were supplied by Skyway Grain Systems of Airdrie, Alberta. Pioneer Rail Contracting in Prince George constructed the plant's rail spur with room for 27 empty rail cars. Pinnacle leases its own fleet of cars.

Product from Meadowbank is 100 per cent export. The primary market is in the U.K. with some volumes to Belgium and Holland: European countries that are increasingly looking to the green advantages of wood biomass to meet their increasing power demands.

The pellets start their journey to distant markets by rail from Meadowbank to terminals at Ridley Island, near Prince Rupert on the northwest coast or through two ports on the Vancouver area waterfront.

Pinnacle Pellet has become adept at co-ordinating and consolidating maritime freight movements to meet customer expectations. Interestingly, Pinnacle was the first wood pellet fuel manufacturer in B.C. to ship bulk product to Japan.



Completing a major industrial construction project like Meadowbank in a timely and successful fashion requires the expertise and co-operation of several contractors and consultants. Spearheading the project on Pinnacle Pellet's behalf were Brock Martin, general manager of capital and continuous improvement; Darren Swaan, control and process logic supervisor, and the Meadowbank production team including Jack Levesque, plant manager.

Martin Bokesch, plant manager at Quesnel and Harold Berkholtz, plant manager at Williams Lake, also contributed greatly to the success of the project both in terms of training key personnel prior to their commencement of work at Meadowbank and follow-up support.

Reitsma says construction timelines would not have been achieved without key equipment installation contractors which included: the BID group of companies through their Del-Tech divisions in Prince George, Service Electric in Quesnel and Allied Blower in Williams Lake.