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In-depth Industry Analysis

CANADIAN WOOD PRODUCTS

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SAWMILLING / PANELS / REMAN / ENGINEERED WOOD

SAWN & QUARTERED

Following Oil Money

When the oil patch starts investing in wood residues, it's time to take our own biomass potential seriously.

Biomass energy has been the next-best thing in our industry for over 20 years. It's easy to understand the recurring enthusiasm, as the wood products sector has an excess of cheap residual fibre on the one hand, and energy-intensive operations on the other. This has meant that some in our industry have dabbled in wood residue-based energy for decades, from wood-fired kilns to the rarer co-gen operations among our mills. Yet the oft-predicted explosion in larger-scale biomass energy production always seems to remain around the next corner. It seems that we now have that last corner in sight.

Watch the money

Case in point is Tolko's much-publicized venture into wood-based gasification as an alternative to natural gas at its plywood plant in Heffley Creek, BC. We will likely look back at this project as a turning point in the solid wood products sector's relationship with renewable energy, and Tolko will likely be viewed as a prescient pioneer. Yet to me the real story are the folks behind the technology used at Heffley Creek, as well as the market fundamentals driving this massive investment.

The technology Tolko is using to convert bark into gas comes from Nexterra, a Canadian company whose roots are overwhelmingly in the oil & gas sector. Nexterra is in fact owned by ARC Financial Corp., a private equity company based in Calgary, AB, with literally billions invested in energy projects. That a company so heavily steeped in conventional oil & gas would sink tens of millions into a technology that essentially competes against its core investments (as a natural gas substitute) speaks volumes to where the energy experts at ARC see the oil and natural gas markets going over the next 10 to 15 years.

Not surprisingly, there is some disagreement over where oil & gas prices are heading between now and 2030. Government agencies like the US-based Energy Information Administration (www.eia.doe.gov) see a slight softening of prices from the high of 2006 as we head to 2015, and then a climbing afterwards to 2030. Other analysts, like the ARC's own energy guru Peter Tertzakian, have us on the brink of an energy breakpoint that will only mean more volatility and higher prices over at least the next 10 to 15 years. (See www.athousandbarrelsasecond.com). All would likely agree on one thing, though – The cheap energy of the '90s is long gone, and those who act accordingly in energy-intensive industries like ours will be the ones who prosper in the long run.

Jonathan Rhone is Nexterra's enthusiastic president and CEO, and like other principals in the company comes from the oil & gas sector. In an interview with *CWP* just before Christmas, he agreed that recent and future volatility in energy prices has changed the landscape for Canada's forestry sector.

"In what has been a very short time, cheap natural gas has become increasingly in short supply, and energy has in fact gone from being a small line item in most forest operations budgets to a tremendous business risk for energy-intensive sectors like forestry."

Volatility is one thing, as 2006 alone saw fluctuations in natural gas pricing of over 100% within weeks. Consistently high natural gas prices are another issue, as even the 2006 "low" of just over $US 4 per MMBtu (million btu) at the hub is significantly higher than the $US 1 to 2 range industry was used to in the '90s when many of their mid- to long-term energy investment decisions were last made. Again, let's listen to an energy sector player who is putting his money where his forecasts are.

"Our business is based on the assumption that these higher and increasingly volatile prices for oil and natural gas are not short-term events, but reflect a long-term trend, and that the days of cheap natural gas are gone. We feel, as many analysts in the oil & gas sector do, that over the mid term gas is going to be in the $US 7 to 9 per million range at the hub, and another $1.00 to $1.50 at the burner tip."

Forecasts are forecasts, of course, but consider that ARC

Financial has access to some of the best analysis in the business. At press time, and after record high early winter temperatures in the northeast, natural gas futures were still at about $US 6.50 per MMBtu, with experts predicting 2007 would see "soft prices" in the $US 7 to 8 range. Prices like this should make gas-dependent mills nervous, but Jonathan adds that unlike our colleagues in mining or manufacturing, we have an ace up our sleeve in the form of largely undervalued wood residues.

"The forest industry will have to react to the new energy reality like other industries, but it has abundant and cheap wood residues on hand that give it options few other sectors enjoy. The industry has done a good job controlling costs over the last 10 years in all areas, except one – energy – and now it's out of control. Not only does gasification bring stability to this growing budget item, but it also means much lower energy costs, so that energy becomes a competitive advantage. We're seeing the more progressive companies looking at this as a long-term survival or competitiveness approach to their overall production costs. Right now, for operations still using fossil fuels, and there are a lot, this can be the most meaningful way to reduce production costs."

He adds that the gasification technology is scaleable for mid- to large-sized sawmills and panel plants, as well as pulp & paper mills, of course. They are also seeing interest among institutional clients, such as their most recent project involving a southern US university that will obtain its wood residues via long-term contracts with area sawmills.

Progressive mills will be looking at their energy demands right through the supply chain, from the types of harvesting equipment used in the woods to logistics, information management, driver training, and energy-efficient equipment to alternatives to natural gas and effective market reach.

While forecasting energy prices has made many fools over the past 30 years, there are two safe bets to make as we welcome 2007 – The days of cheap oil (below $US 45 per barrel) and gas (hub averages below $US 4 per MMBtu) are gone for good; and this new high-cost reality will help create winners and losers in every energy-hungry industry. Which side your company lands on over the next decade will largely depend on how far down the tunnel your management is willing to look.

In that light, projects like Tolko Heffley Creek are starting to look positively visionary. As for Nexterra, even as oil prices struggled to crest $55/barrel at press time, parent company ARC Financial reinforced its long-term commitment to bio-energy to the tune of an additional $6.8 million, for a total investment of almost $17 million. Follow the money.

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