

Viridis Energy brought its latest wood pellet plant online at the end of August, but producing pellets is just one side of the business as Keeley Downey found out



# From coast to coast

**V**iridis Energy is the only pellet producing company in North America to own a plant on both the east and west coasts of the continent.

In western Canada, in Kelowna, British Columbia, is its 60,000 tonne pellet facility – Okanagan Pellet Co. – which is well positioned to serve the emerging demand for wood pellets in Southeast Asia. And in the province of Nova Scotia, on the east coast, the company has just opened its second facility: a 120,000 tonne per year production plant in Middle Musquodoboit.

This latter facility, built in what Viridis Energy's CFO Michele Rebiere calls a 'tremendous location', will enable the company to also take advantage of rapidly growing demand for pellets in Europe. 'That's why we acquired the factory,' Rebiere adds.

The plant formerly operated as a wood pellet mill and at that time was the largest wood pellet manufacturing plant in Atlantic Canada. Enligna Canada owned and operated the facility before

its assets were purchased from a bankruptcy by Scotia Atlantic Biomass Company, a wholly owned subsidiary of Viridis, for an undisclosed sum in February 2012.

Since buying the facility, Viridis assessed the capital needs of the project and then raised the necessary funding to get the plant operational. It was determined small repairs and upgrades had to be done along with the acquisition of virtually all mobile equipment required to run an efficient pellet operation. Viridis then kept the plant dormant until it felt the market was right to begin manufacturing and selling more biomass fuel.

'There have been some market issues, especially in the UK, that have disrupted the natural progression of price increases that we expected to see,' Rebiere tells *Bioenergy Insight*. 'One of them being the Department of Energy and Climate Change's (DECC) review of long-term support for renewable energy, specifically biomass. The other is the closure of RWE's plant in Tilbury. These two events have certainly caused some disruption to

the growth of the market.'

Nevertheless, Rebiere believes there is still significant demand for biomass fuel coming from Europe, partly because of the 'unexpected growth' of the residential heating market, particularly in Italy and Austria. As a result the competition for pellets in Europe continues to support 'healthy' prices for North American exporters and Viridis sees this as a good a time as any to get its latest project up and running. Subsequently DECC announced long-term support for sustainable biomass and other low carbon generation.

'The plant is now open as of the end of August,' Rebiere divulges. 'We're shipping several truckloads a day to the storage facilities at the Port of Halifax and will continue to do so every day until we load our first ship in December.'

## More sides to the story

Like the Nova Scotia plant, Viridis also acquired the British Columbia facility before it.

'We look at the cost per tonne ratio for all our investments. We were successful in the two

acquisitions that we did in Canada and bought those at a lower cost per tonne compared to a new build. That is the economic model we review,' Rebiere explains.

With that in mind, Viridis is unlikely to build any new facilities in the near future, but Rebiere confirms the company is keen to 'do additional acquisitions' in 2014. An expansion could already be on the cards at the Nova Scotia plant, too. 'That will depend on the availability of feedstock, an interest by the province and industry, and a willingness to support the wood pellet sector, but we want to expand as much as we can in Middle Musquodoboit,' she adds.

But manufacturing wood pellets is just one side of the business; Viridis also aggregates and brokers additional third party pellets and wishes to expand this part of its company significantly over the next year. Today it works with four different manufacturers and is looking to grow this to around 12.

Rebiere says: 'Our intention is to handle 1 million tonnes a year of pellets in total. Of that we would like



**Viridis opened its 120,000 tonne pellet plant in Nova Scotia at the end of August**

to manufacture half and aggregate or broker the other half. We are continuing to look for sources of additional manufacturing plants.'

### Securing supply

Viridis is also studying the feasibility of trading biomass fuel between the US and Europe. Canada currently exports approximately 90% of its domestically produced wood pellets overseas as the local market is taking time to develop. However, regulations that were implemented this time last year could see things change in the coming years.

Regulations for reducing GHG emissions from coal-derived power were released in September 2012, stipulating that fossil fuel-based power plants cannot emit more than 420 tonnes of GHGs per GWh of electricity generated. This, coupled with a revised rule that coal-fired power plants must be shut down after 50 years of operation, will create opportunities to grow Canada's pellet industry because the fossil burning plants must adopt one of two approaches in order to reduce emissions: implement carbon capture and storage (CCS) technology or co-fire with biomass, natural gas or a combination of both.

Referring to these recent changes in regulation, Rebiere says: 'We believe that over the next five years there will be demand for approximately 5 to 6 million tonnes a year of wood pellets in Canada,

primarily for commercial use. That is considerably more than the country produces so we do expect there will be a point in time when Canada will not be interested in exporting the majority of its pellets as it does today, but we're not there yet.

'Many European utilities are looking to sign long-term offtake agreements with Canadian producers and I'm sure this is one of the factors motivating this behaviour. Once our domestic industry develops, the feasibility of getting pellets out of Canada will be very low.'

One company that has secured a pellet supply agreement with Viridis, albeit just a two-year one, is Ekman and Co. — a trading house and wholesaler of forest products. The two companies entered into an agreement this July. Under the contract, Ekman serves as Viridis' worldwide agent to market its entire wood pellet production.

'Ekman will be handling our total 240,000 tonnes of pellets for the next two years,' explains Rebiere. 'We will assess how that goes and we may either renew and expand that agreement or we may look at one of the eight to 10-year agreements that have been presented to us by the utilities.'

The pellets made at Viridis' new plant will use around 200,000 tonnes of both softwood and hardwood. With regards to finalising other agreements, such as feedstock supply contracts, Rebiere adds: 'We really just started that work within the last two

to three months. We are still contracting some small lumber yards and sawmills but, for the most part, many of the suppliers are those that have been supplying this plant for many years in the former Enligna days. We've just re-energised these agreements.'

Viridis will be exporting its pellets from the Port of Halifax, an advantageous export facility located around 90km from the Nova Scotia factory. It is a well-serviced, deepwater port which remains accessible all year round.

### Helping others

While Viridis' pellet plant is well placed on Canada's east coast to serve Europe, many of the nation's wood pellet manufacturers are — counter-intuitively — exporting from the western side of Canada. This involves transporting the pellets around 16,000km from British Columbia at the Port of Vancouver, through the Panama and over to Rotterdam or Italy.

Rebiere, who is also on the executive board of the Wood Pellet Association of Canada, says this is because there is about 500,000 tonnes of unused/unproduced capacity as manufacturers in eastern Canada are not producing to their maximum nameplate capacity 'as Europe is not perceived as a strong enough market'. To help change

this, the association has started an initiative to try and help eastern Canadian pellet producers export their products to Europe.

Viridis is also working to aid trade from eastern Canada to Europe. Rebiere explains: 'Viridis is going to try and help these Canadian producers by taking advantage of our contract with Ekman, and our logistics knowledge, to aggregate and broker pellets from some of that unused capacity in eastern Canada into Europe. For example, in addition to our Ekman contract, we can expand that to 300,000 or even 500,000 tonnes and provide additional pellets from other providers.

'This is a great solution for some of those smaller plants that don't feel they have the staff, time or resources to get that product to port or get it across the border into the hands of other customers,' she adds.

It would certainly seem Viridis has a successful business model in place: expanding its production capacity through acquisitions is saving capital and freeing up time, allowing the company to grow its aggregate and brokering activities. This side of the business, in the future, could help Canada remain a key pellet exporter, at least until the nation's own hunger for wood fuel outweighs that of Europe. ●



**The first load of pellets will be exported from the Port of Halifax in December**