

## Enderby tapping into biomass technology

By **Graeme Corbett - Vernon Morning Star**

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A 200-year-old fuel technology is being rekindled in the North Okanagan.

Thanks to industry advancements in the process known as gasification, the City of Enderby – including the municipality and a handful of commercial enterprises – are tapping into heat from a highly efficient wood biomass boiler.

Providing the spark for it all is Enderby's Fink Machine Ltd., owned by Burkhard Fink. Since 2000, the Austrian-born bio-fuel expert has been installing ultra-efficient wood boilers for government and industrial applications across Canada.

Fink has now brought online the first privately funded district energy system in Western Canada, right in Enderby. And while that is a huge leap forward for biomass technology in North America, it is fairly commonplace in Europe due to their lack of natural resources.

Biomass energy systems utilize plant material and animal waste (in Enderby's case, wood chips), and are considered a source of renewable energy. Fink believes there has been hesitancy among prospective Canadian clients in the past because there is a stigma attached to the inefficient systems of old.

"As soon as they hear a wood burner, they imagine a beehive burner," said Fink. "Technology has changed. (Modern biomass boilers) are just about equivalent to natural gas emissions."

The other hindrance is money.

"We have extremely cheap energy," added Fink. "Unless you're driven to by finance, people don't want to change."

"(But) the attitudes are changing. The preconceived notions that burning biomass is bad are slowly going away. Municipalities are really seeing the benefits and are changing their ways."

Enderby's district system currently serves eight customers, while maintaining capacity for future retrofitted to utilize hot water heating.

Enderby Mayor Howie Cyr, along with council, have been extremely receptive of Fink's initiative, praising the district energy system for its environmental and economic benefits. The city has commissioned Fink Machine to build a biomass boiler that will heat buildings in the public works yard. It will also be used to dry the city's sewage sludge, helping reduce both transportation costs and tipping fees.

"The way things are in Enderby at this point in time, it's very fertile ground for innovation," said Cyr. "These are things we're prepared to embrace and work on."

"It just shows the size of the community doesn't equate to the things you can accomplish and the leadership you can show."

Fuel for the district system comes in the form of wood chips from local sawmills, wood product manufacturers and wood waste diverted from landfills. Once fully operational, it is expected to consume 800 tons of renewable wood fuel annually while helping to mitigate approximately 425 tons of greenhouse gases.

"All the fuel we're getting now is from a mill about 10 minutes away," said Fink.

Added Cyr: "You think of all the pine beetle kill out there and I can't think of a better way to put that to use."

Cyr adds one of the most impressive aspects of the district energy system is the simplicity of its design.

"People might envision this massive, high-tech incredibly complicated system, but really it's predicated on some really simple principles," he said.



Burkhard Fink, a bio-fuel expert and owner of Enderby's Fink Machine, is helping reduce the city's greenhouse gas emissions through a district heating system, powered by a high-efficiency biomass boiler.

Graeme Corbett/Morning Star