

Pellet plants are in the development stages on PEI

by Patricia Roy

Renewable Energy

PEI is moving full speed ahead to support innovative Island-based projects with a strong potential for commercialization. In June, the provincial government announced it would fund eleven projects under the **Discovery and Development Fund**. This program encourages new product development through partnerships between primary resource industries, the private sector, and research institutions.

Two of the funded projects are with PEI companies that are researching heating systems and fuel pellets. The pellets are made from renewable resources such as **wood and agricultural products**.



Paul Smallman, owner of Smallman's Forestry and Feedlot in O'Leary, and 11-year-old son Drake. The businesses employ two people on the farm and five in forestry. Paul has expanded into selling heating systems for commercial buildings that use wood chips or larger pellets and is now building a pellet manufacturing plant.

Paul Smallman operates **Smallman's Forestry and Feedlot** in O'Leary. He believes renewable energy could help create a viable and sustainable local business that could be a real boost to the economy of western PEI.

"Due to the instability of oil prices and the many jobs lost in agriculture and forestry, I strongly believe Islanders should have a sense of urgency and awareness in finding solutions that could create employment and provide Islanders with a stable source of heating fuel," says Paul.

"There is no shortage of wood in Island forests that cannot be used for building material but could be turned into pellets," says Paul. His research indicates that manufacturing pellets from what is commonly called junk wood would be good for the local economy.

The plan

Paul has created two companies that support his future plans. **Clean Green Heat Ltd.** provides heating systems for commercial buildings that use wood chips or larger pellets. The chip and pellet-burning furnaces for both commercial and residential use are currently being manufactured in Charlottetown. Meanwhile, **Wildwood Pellets Ltd.** will manufacture pellets from waste wood.

Paul says the provincial grant he received is enabling him to research what kind of wood and what level of moisture content would make the best pellets. "Drying the wood is the biggest cost of making pellets," says Paul. "One-year-old cut wood has about 40 percent moisture content. In order to make pellets, the moisture has to be brought down to eight percent."

New and sustainable job prospect

Paul plans to complete a pellet manufacturing plant in Mont Pleasant by the spring. He estimates that the new plant could generate 20 new jobs within two years. "The plant could support at least another 25 to 30 jobs in forestry, and it would take two or three wood contractors to keep the plant going."

He adds that the plant's location, behind the old airport, is easily accessible to forestry operations in Prince County.

"In addition to the direct jobs at the plant and for the wood cutters, there would also be jobs for truck drivers and forklift operators. Spin-off jobs to install, service and maintain pellet burning equipment in commercial buildings and homes would also be created," he says.



James Parker is one of three partners of Pellagri Energy, which has built a pellet mill in Hartsville, near Hunter River. Their research indicates that over \$175 million worth of oil was burned on PEI last year. "By burning pellets, Islanders could keep more money in the province and create jobs in the process," says James.

Pellagri Energy creates green energy and supports local farmers by creating a market for hay, straw, and diseased grains that would otherwise be thrown away. This company, located in Hartsville, makes heating fuel pellets and burners.

The business was started in 2004 by **Andrew MacCabe** and **Brian MacKay**. Partner **James Parker** joined the company a year ago. They have installed pellet burners and supply the pellets for a number of commercial and government-owned buildings on PEI.

They also manufacture burners that can be fitted to boilers that can burn wood or agricultural pellets. The business is now waiting for approval from CSA for a burner for residential use.

Pellagri Energy has been granted funding to develop and commercialize a residential biofuel heating solution and to refine its pellet mill.

The plant site includes the manufacturing facility and a building where hay is chopped by a machine into six-inch pieces. Then it is transferred to a building where the product is dried. A hammer mill grinds the material down before it is made into pellets.

Employment and income possibilities

The mill now produces pellets using products from one owners' farm. They hope to eventually purchase raw material from more local farmers. The plant can now make a tonne of pellets an hour, and is capable of ramping up to produce double that amount.

Currently, the three partners run the plant, and are considering their hiring needs. "As things progress, we will require two people to run the pellet line," says James. "We would need someone to drive the delivery truck and at least two to make the burners. As things get busier we will need to hire an office assistant and sales person. We hope to start employing people as early as this winter."

"Pellet line workers could be trained on site," says James. "A mechanical background would be an asset in the burner manufacturing side of the business. A class 3A driver's license would be needed to drive the delivery vehicle."

Future plans

"We plan to keep expanding the business," says James. "The rule of thumb is that one mill can supply customers in a 100-mile radius. I think the Island could easily handle four mills. If each mill can employ 10 to 15 people, that's close to 60 jobs created. There would also be spinoff jobs for plumbers, electricians and maintenance personnel across the province."

For more information, call 859-3017

For more information, call **James Parker** at 629-0134 or visit www.pellagri.com