

# Who will buy York's waste pellets?

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## PELLET ECONOMICS

### **\$95.13/tonne**

Cost to York Region of pelletizing waste, including transportation and fuel costs.

### **\$71.37/tonne**

Cost of sending waste to Michigan landfill, including transportation and fuel.

### **\$110-120/tonne**

Cost to Peel Region of conventional incineration at Brampton energy-from-waste plant. (No figures available for proposed York-Durham incinerator.)

### **100,000 tonnes**

Amount of municipal waste pellet plant is due to process in first year.

### **0**

Number of signed contracts.

*Sources: Peel Region, York Region and Dongara*



Pellet-maker says when coal in a cement kiln is replaced by pellets created from municipal waste, the emissions are far less harmful.

## No customers yet for plant that opens in July

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### **PHINJO GOMBU**

URBAN AFFAIRS REPORTER

Two cities took steps last year to offer a new solution to southern Ontario's perennial garbage disposal crisis: Compressing tonnes of that pesky waste into pellets. Then burning them later, someplace else.

Despite its potential for controversy in a region where incineration is a four-letter word, the municipal trash-to-pellet plant – a first in North America – has moved forward with little fanfare or public scrutiny.

"You can make (the pellets) look like little rabbit turd or you can make it a foot big. It doesn't matter," explains Betty Disero, a former Toronto city councillor hired to lobby for the project. "You can make it any size you like." Finely shredded, mixed with hot-burning materials and compressed, the pellets will be destined to produce energy somewhere off-site.

Last April, the City of Vaughan concluded months of secret negotiations by approving the \$2.3 million purchase of land from the Ontario Realty Corp. that it would lease to a fledgling company named Dongara for \$5,000 a year.

Around the same time, 350 kilometres away in Leamington, the local council voted to support a test burn of Dongara's pellets in a greenhouse, to see if they could be a cleaner, cheaper alternative to oil and biofuel from wood chips.

Backed initially by the financial muscle of the Strada group (the DeGasperis construction family) and Borealis, the investment arm of the municipal employees' pension fund, Dongara is close to finishing a \$50 million pellet plant at the northeast corner of highways 27 and 407. Starting July 1, it expects to sort, shred, fiberize and compress at least 100,000 tonnes of nonrecyclable garbage a year at \$95 a tonne (including transport), the fruit of a 20-year contract signed with York Region three years ago.

What's still unclear is where and how the pellets would be burned.

Whether ultimately they'll be allowed in novel uses, such as fuelling Ontario's billion-dollar hothouse industry, isn't certain.

Nor is it a done deal that they'll be used, as hoped, in a project by Lafarge Canada. The cement company wants to burn tires, Dongara pellets and bone pellet to fuel a kiln near Kingston – a plan the province supports, but which faces an Environmental Review Tribunal hearing in September.

Both options – coupled with recent moves by Queen's Park – raise the spectre of a diffuse pattern of small incineration plants across the province that require only a certificate of approval, bypassing the hassle of full-blown environmental assessment hearings.

A month before the Vaughan and Leamington decisions, the province decided to allow small energy-from-waste pilot projects to skip the lengthy environmental assessment process. The move was meant to lower the barriers to alternative energy sources, but was criticized by some environmentalists.

"The Dongara municipal waste pellets have managed to avoid the public scrutiny that a large incineration project would receive, despite serious environmental and human health concerns that are always associated with burning our waste," said Elaine Macdonald, a senior scientist with Ecojustice, formerly known as Sierra Legal.

That's a worry shared by Mark Mattson, a lawyer with Lake Ontario Waterkeeper, an environmental group fighting the Lafarge plan. "Our concern is that so far all we've heard is sales pitches and we are told, 'See, it's green, it's clean,' but we've yet to have a hearing where the science is scrutinized."

The pellet-maker's website says emissions are well in line with those required to obtain local environmental approvals needed to burn synthetic gas.

They claim that when the pellets replace coal in a cement kiln, the resulting emissions will be far less harmful. And they say the pellet plant can enhance recycling efforts because its sorting process extracts any remaining useful materials before turning the residue into pellets.

There are ramifications for how the GTA's waste will be handled. A political source explained that one reason York Region has signed on for a 12 per cent stake in Durham Region's controversial plan to build an energy-from-waste incinerator in Clarington is to ensure York has a backup plan. If Dongara doesn't work out, York has an option to increase its stake in the Durham incinerator. It's even possible that York's waste, in pellet form, could end up used in the Durham facility.

Darren Soanes, vice-president of Borealis Infrastructure and chair of Dongara, said he was excited about the opening. The Vaughan facility is designed, optimistically, to handle double

the 100,000 tonnes of waste it is slated to get annually from York Region, and got a major equity investment boost from U.S.-based Lakeside Energy LLC this year.

But Soanes said that, given the politics of waste issues in the province, "we are cautiously optimistic."

He was also vague about where customers will come from for the pellets, despite the plant's looming start date of July 1. There were no signed deals yet, he admitted, but "a lot of things in discussion."

"It could be (used) in numerous markets as long as it conforms with regulatory requirements in those areas," he said, refusing to name any specifically, in Ontario or elsewhere.

Pelletizing itself isn't a new concept; it's used extensively in disposing of food and sawmill waste. Dongara's trademarked process, patented by a Canadian company called Sentinel, is a variation on techniques in use in Europe.

But Soanes said the Dongara plant would mark a first for handling municipal waste in North America.

Whether the pellets find widespread use in Ontario could be crucial for Dongara because, as industry analyst John Nicholson has predicted, shipping them to the U.S., despite laxer rules there, could be "economically nonviable."

Yet when Vaughan first considered the pellet plant in 2005, a staff report said there would be "no burning of the pellets ... on-site or in Ontario."

The report said tested pellets contained far less nitrogen, sulphur, vanadium, mercury, lead, chromium, cadmium and barium than the coal they might replace.

Soanes hinted this week that, if nothing else, the pellets could be used in existing traditional incineration and gasification plants. The company tried to push that use as recently as last year, in Ajax, but had trouble selling the idea.

Dongara's problem remains that while Ontario's environment ministry has granted permission to produce pellets, that doesn't imply approval to burn them.

But last year's legislative changes did make things easier for Dongara.

The government's poster child for the change was Plasco Energy Group, a company that wanted to turn gasified municipal waste into energy in Ottawa. Plasco's pilot project began a few months ago.

Just before the legislation was passed, in March 2007, Dongara had tried to persuade the Town of Ajax to approve a steam plant that would gasify its pellets, through a Borealis company, Arbour Power.

Ajax was dubious about allowing such a plant without hearings under the Environmental Assessment Act. A staff report cited too many uncertainties about the project and recommended telling the province the town didn't support the proposed regulatory exemptions.

Opposition also came from Lake Ontario Waterkeeper, environmental lawyer Joseph F. Castrilli and Gordon Downie of the band Tragically Hip, which has a studio in Bath, outside Kingston.

Both called the Ajax proposal premature, given there were still regulatory hurdles to another plan for the pellets – burning them in Lafarge Canada's cement kilns near Bath. Ultimately, the Ajax proposal was withdrawn.

And although the environment ministry approved the Lafarge plan, opponents succeeded in convincing the Environmental Review Tribunal to hold a hearing on it in September. Lafarge, along with the ministry, went to court this month to try to halt those hearings.

Disero and Jim Gallant, a partner in Renewable Energy Services, the company that's conducting the test burn in Leamington, say that eventually provincial approval for use of the pellets will have to come on a site-by-site basis. Gallant's pollution abatement tests will provide a useful benchmark.

But for now, the rules exempt pellet users from lengthy environmental assessment (EA) hearings.

"Before this legislation (in 2007), people had to go through a full EA, period," said Disero.

If the Leamington test proves successful, the greenhouse will be allowed to apply for a permanent "air certificate of approval," said ministry spokesperson John Steele.

Gallant knows much rides on his test of the pellets, which he says is "progressing well." But he was cautious about a *Toronto Star* call to check how it was going.

"You terrify me because I know the whole issue is so perfect for the media to get hold of, because they whip everybody up into a frenzy," he said at the start of the interview.

Despite his hesitation, he explained the pellets and the greenhouse industry are a perfect match between a seller seeking a market and an industry whacked by the rising dollar, soaring energy prices and hikes in the minimum wage.

Gallant said the pellets could provide a cheaper heating alternative for hothouses, which depend on oil, wood chips and coal.

"We are committed to meet all environmental standards."

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