

Solar roof planned for Markham Wal-Mart

Contract revives struggling tool and die maker

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Wal-Mart Canada announced plans this morning to build the country's largest rooftop solar-energy system atop a new Supercentre planned for Markham later this year, a project with potential to spread across the retailer's national chain.



Ontario's Ministry of Research and Innovation is contributing a \$3-million forgivable loan to support the demonstration system, which will supply emission-free electricity and heat to the Wal-Mart store. Minister John Wilkinson attended an event this morning to launch the project.

"On just one Wal-Mart store, this Ontario product can reduce greenhouse gas emissions by 390 tonnes per year," said Wilkinson.

But the announcement was just as much about creating green-collar jobs as it was about green technology adoption. Ottawa-based Menova Energy Inc., which is supplying the system for Wal-Mart, has turned to struggling automotive parts maker Woodbine Tool & Die for its manufacturing.

"They're just stoked, and they've really been super accommodating," said Dave Gerwing, president and founder of Menova. "They offer the kind of scale we needed."

Menova has created a "concentrated" solar-energy system that magnifies the sunlight by 1,000 times onto tiny solar cells, resulting in a dramatic reduction in costs and highly efficient electricity production. The heat from this intense focusing of sunlight is also captured, creating another source of emission-free energy that can replace fossil fuels typically used for space and hot-water heating.

In what could be called a solar hat trick, Menova is also capable of capturing the sunlight in fibre-optic cables and redirecting it inside a building. By bringing outside sunlight indoors, buildings can reduce their reliance during the day on conventional lighting and the electricity it requires.

Gerwing has leased 25,000 square feet of space at Woodbine Tool & Die's stamping facility in Markham, close to where Wal-Mart plans to build its new Supercentre. Menova has the option of doubling its space requirements.

"It's the kind of scale we need," said Gerwing, adding that Woodbine Tool & Die is an example of how highly skilled yet struggling industries in Ontario can adapt to new opportunities, such as solar. "We have a great shot at a global business from Ontario."

Tibor Urbanek, founder of Woodbine Tool & Die, said the company has no choice but to be flexible, given the current economic climate in the automotive sector. "Physically, we are ready to expand in this new direction," he said. "This project is exciting."

Wilkinson said Menova and its collaboration with Woodbine Tool & Die is a "shining example" of how the province's manufacturing economy can be retooled for green jobs of the future.