

## Solar house ready to take shape in Cambridge

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CAMBRIDGE -- In an old empty factory on the banks of the Speed River in Hespeler, students will soon begin building a house they believe can help save the world.

They want to bring solar-powered North House to the attention of the world, but first need to raise \$260,000 to take the 800-square-foot home and a 30-member team of engineering and architecture students to a solar showcase in Washington, D.C.

"Certainly the area that we would appreciate most of the assistance is on the cash side," Geoffrey Thun of the University of Waterloo school of architecture, said.

Thun is a faculty representative on the team for North House-- solar powered home designed and built by architecture and engineering students. The group includes students from the University of Waterloo, Simon Fraser University and Ryerson.

[Altogether the group must raise about \\$1.5 million in cash and in-kind donations.](#) About \$780,000 of that is for the construction of North House, which will produce more energy than it consumes. It is being built with the help of a \$100,000 grant from the U.S. Department of Energy.

It will be assembled here, then shipped in sections to Washington, D.C. for the Solar Decathlon in September, where it will be reassembled on the Washington Mall.

The Solar Decathlon is a public event designed to increase awareness of solar energy for residential use. It is organized by the U.S. National Renewable Energy Laboratory and the U.S. Department of Energy to foster development of solar-powered homes.

Every two years teams from selected universities compete to design, build and operate solar-powered homes on the Washington Mall.

The hope is that companies will eventually be able to commercialize the technology -- creating energy-efficient homes for people to live in.

About \$260,000 is needed to send the team to Washington for a month.

Companies that have already supported the North House team with donations of materials and services, include Day 4 Energy, Buthaup Canada, Xantrex, JG Group of Companies and B.C. Hydro. "We've had a pretty huge interest I think in materials and supplies," Barhydt said.

"So the actual bones of the house are moving along very quickly in terms of generating the materials that we need, that's going very well, the cash fundraising is going a bit slower."

Based on the model, North House looks like a modernist, minimalist box, shrouded on three sides with vertical and horizontal blinds, which cover the floor-to-ceiling windows. The roof is covered with an array of photovoltaic cells.



This is the North House that will be entered in the 2009 Solar Decathlon in Washington, D.C.

"The glass is actually a really key part of the performance of the house, and it also generates a beautiful living space," said Lauren Barhydt, a master's student at the University of Waterloo architecture school.

Sponsors and donors supporting the project get exposure to the public, developers and national and international media on the Washington Mall.

North House will also be showcased at the Olympics in Vancouver before being brought back to Waterloo Region, where it will be set up in a public space.

Barhydt said the Canada Mortgage and Housing Corporation, a federal crown corporation, has put the North House team in contact with private sector donors.

Any individual or organization wishing to support the North House team should contact Maun Demchenko at [mademche@team-north.com](mailto:mademche@team-north.com).



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