

Wartime home may get energy retrofit

Now House™
One small house.
One million opportunities.

Theresa Boyle. Toronto Star - Toronto, Ont.

(Toronto, Dec. 23, 2006.) A small, nondescript, wartime house in East York has come under intense scrutiny by engineers, environmentalists, urban planners designers and architects. The 1,200-square-foot house, on Topham Rd., near O'Connor and St. Clair, has been selected for inclusion in a national competition to build or retrofit homes so that they meet the highest standards in energy efficiency.

The Net Zero Energy Healthy Housing competition, sponsored by the Canada Mortgage and Housing Corporation, is aimed at creating market housing that meets the Net Zero standard. That means the homes must produce as much energy as they consume.

The "Now House Team" - one of 20 groups of volunteers who are taking up the challenge across the country - gathered at the Ontario College of Art and Design last Friday for a design charrette.

About 60 participants from diverse professional backgrounds attended the brainstorming session and threw out ideas on how to make the Topham Rd. house more energy-efficient. They debated whether to use solar water heating, wind electrical generation, ground source heating and low-consumption appliances.

"I can't believe this all started with one idea and a couple of people," exclaimed Now House team leader Lorraine Gauthier, principal of Work Worth Doing, a for-profit company that collaborates on projects to bring about positive social and environmental change.

The idea came from team member Gonzalo Cardenas, an architect from Peru who went on to study industrial design at OCAD. Having seen a picture of wartime houses in Douglas Coupland's book, *Souvenir of Canada*, he floated the idea of retrofitting Canada's current stock of wartime houses.

According to the Now House team, there are about one million such houses across the country. They were constructed by the CMHC to house vets returning from World War II or to house workers near factories that were producing goods for the war effort. Each of the prefab homes was erected in less than 36 hours in an assembly-line fashion.

"This is the problem. We have all these well-built homes that are not that energy-efficient. Do we knock them down and build new ones, which is very resource intensive, or do we find ways to retrofit the older homes?" asks Lenard Hart, a consultant with the team.

Hart is vice-president of building and housing initiatives with the Summerhill Group, a Toronto company that specializes in sustainable development initiatives. The National Roundtable on the Environment and the Economy estimates that 66 per cent of the buildings that will be standing in 2050 are already built.

“We knew that the biggest environmental challenge would be improving homes that are already built,” said Gauthier.

“There’s a pressing need for these retrofits if we ever hope to have a sustainable future,” she added.

Earlier this year, 72 teams from across the country entered the CMHC competition. Of those, 20 were chosen to proceed to the next stage of the competition, which involves coming up with detailed plans to create Net Zero housing.

Later next month, a panel of CMHC judges will narrow the field of contestants even further by choosing six to 12 teams and asking them to take their plans beyond the design stage and make them a reality.

Each of those teams will be given between \$60,000 to \$100,000 by the CMHC and will be required to finance the rest of the project themselves.

Gauthier is crossing her fingers that the Now House will be among the finalists. It’s unique on a number of fronts, she notes. While most of the other teams are focusing on the building of new homes, the Now House would be a retrofit. It’s the only project located close to downtown Toronto. And it has a strong tie to the CMHC, given that it was the federal housing agency that built the wartime homes.

There are about 63 such homes in the Topham Park area of East York. The one selected to be the Now House model is owned by John Van Dusen. He’s enthusiastic about the project even though it has seen his home turned inside out over the last few months.

If the Now House is selected as a finalist, Van Dusen could be the beneficiary of a sophisticated - and free - retrofit.

“I’m getting to meet and interact with some very interesting people. It’s truly amazing,” he says. Since he agreed to be part of the project last summer, his house has been poked and prodded by engineers and energy experts.

They’ve cut away drywall, crawled through his attic, and hunted for any trace of mould.

“It’s been like a home invasion,” remarks Gauthier.

If the Now House is a winner in the competition, Gauthier hopes it will serve as a catalyst to retrofit other wartime homes so that they are more energy efficient.

Hence the Now House slogan “One small house, one million opportunities.”

Credit: Toronto Star