

Where energy efficiency is wall to wall

Kenny family living in specially designed home featuring high-tech energy efficient systems

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Bryan Kenny says life hasn't changed much since his family moved into a high-tech energy efficient home in Bathurst.

He said it's a bit of a learning curve getting accustomed to their EcoPlusHome but the family is settling in well.

"It has trials and tribulations because it's something new and interesting," said Mr. Kenny from the living room of his home in Bathurst's Squire Green subdivision. "There's always problems when you have new home construction but the problems are very minute.

"We're really comfortable here and my wife just mentioned the night before that the home is starting to feel like home... The kids are really excited. My daughter thinks she's going to be a superstar... and my second son Grayson is doing a school science project based on this house."

Mr. Kenny, his wife Renee and their four children, Tyler, Grayson, Shane and Olivia moved into their new home just before Christmas. Named the EcoPlusHome by developers, the house derives energy through new technology products such as geo thermal, solar thermal, photovoltaic, and it also features energy efficient home appliances.

The Kenny family is living in the home to determine how much energy a large family uses in their day-to-day life through the aid of the latest energy saving technology. Axel Lerche, project coordinator, said the next six weeks will be used to iron out the details of the home and that an official launch of the project is expected in early April.

He said early indications show the home is working out well.

"All technical components are working now but we're doing a lot of fine tuning right now," said Mr. Lerche, the president of Tight Lines Productions Ltd.

"Everything in the home is working very satisfying."

In order to show how much energy is being used, a website



Bathurst resident Bryan Kenny in front of the EcoPlusHome he and his family are living in.

has been created by the CCNB Bathurst campus to show real-time data on energy consumption used in the home. The family will also publish a weekly video blog to tell about their daily life in their home. At the end of the year, the overall consumption and production of energy will be calculated.

The real-time data on the EcoPlusHome isn't available just yet but Mr. Kenny said that hasn't hindered the interest of the public.

"When I go out and do groceries, I have to add about a half hour because guaranteed I'll be talked to two or three times by somebody in the store... We know that's part of the job, we know that's part of the project so we welcome that and I'll talk all day anyway," said Mr. Kenny, who works as an Internet marketing consultant.

Maple Leaf Homes based out of Fredericton constructed the house and Bosch Thermotechnology is providing the green technology aspect of the home.

The Kenny Group (no relation to the Kenny family) gave the land for the house.

Mr. Lerche said the heat for the home comes from the geo-thermal heat pump and roughly six kilowatts of power is produced with the photovoltaic system. The domestic hot water is heated through the solar thermal system.

The photovoltaic system is made up of 52 solar panels on the roof of the EcoPlus Home. A net metering system on the side of the house measures the energy and connects it to the NB Power grid.

A geo-thermal heat pump runs the heating and cooling system

for the home. Three closed underground wells transfer heat from a depth of 150 feet. This heat pump also helps heat the domestic hot water. Solar thermal panels have been installed in the home to generate more heat for the domestic water.

Mr. Kenny said the home is always at a comfortable temperature. He said this is due to the heating system and the way the house was insulated during construction.

Mr. Kenny explained that outside cold tends to seep through the walls into the basement of a home. He said his home has a styrofoam type of material surrounding both the outside and inside of the four-

room walls.

Mr. Lerche said Efficiency New Brunswick recently conducted an air-tight test on the home and determined everything was in tip-top shape.

"As a regular visitor to the home, I can feel the comfortness of the heat, especially in the basement," explained Mr. Lerche. "The fact that we have that ICF basement is a great thing because we don't have any cold in the basement."

Mr. Lerche said a great deal of interest has been shown for the Eco-Home. He noted that during a recent industry trade show in Orlando, he and Mr. Kenny made over 600 contacts of interested parties.

"Over 45,000 key contacts, 17,000 exhibitors and Bosch was the largest exhibitor. We integrated New Brunswick and Bathurst and had a representative from Business New Brunswick. We made physically more than 600 contacts, during that show."

Mr. Lerche believes this project will prove that an Eco-Home can work in northern climates such as Bathurst. He said as long as the sun shines, it doesn't matter what the temperature is outside.

"Yesterday was minus 22 degrees and we produced electricity like crazy," he said.

Mr. Lerche said the goal is to make this home affordable for the average citizen.

"There is nothing fancy about the house. It is not a million-dollar house. It is a nice house... and our focus is for people like you and me."

Mr. Lerche said it is undecided if the Kenny family will remain in the home after the 12 month test project. He concluded that the decision "depends to the development of the project."