



## One with the Earth

### Sample home shows that convenience, comfort and sustainability go hand in hand

By Caryn Rousseau The Associated Press

CHICAGO — The bathroom tiles are recycled wine bottles. The hardwood floors are sustainable bamboo. And the sprawling garden gets sprinkled with rainwater collected in 300-gallon barrels.

From its recycled plastic deck to its solarpaneled roof, everything in and about the 2,500-square-foot home on exhibit just outside of the Museum of Science and Industry has been designed to show the public how easy it can be to incorporate environmental sustainability into their own abodes.

"We tried to look for ideas in every choice that we make in our homes ... hoping that everyone who goes through it will be inspired to make some change on some level," said Michelle Kaufmann, the Oakland, Calif.-based architect who designed the SmartHome. "Some people will walk away and want to do an entire new home or some people will think when they go for their towels next and go for organic linens."

In fact, green housing is growing even while the overall housing market is suffering, said Nate Kredich, the council's vice president for residential market development.

This year, green building is expected to represent 6 percent of the residential construction industry, according to a survey conducted by McGraw-Hill Construction Research & Analytics for the U.S. Green Building Council. That's up from just 2 percent in 2005.

"It is happening. But the industry needs to do a better job of getting information into people's hands when they're looking for it," Kredich said.

The goal of the Chicago exhibit, which runs through January, is to show visitors that saving energy and conserving resources are within reach of everyone — whether it's an entire house or a single feature, museum officials said.

The modular home, which Kaufmann said uses less than half the energy and a third of the water of traditional homes, includes a kitchen with a countertop composter and a sink made from concrete and fly ash — a by-product of burning coal. Water from the bathroom sink is diverted to the toilet, where it is used for flushing. A bicycle in the children's bedroom must be pedaled for 30 minutes to charge a battery to power video games.

Visitors receive a guide that tells about the function of each feature, how they're assembled and where they can be purchased. The bicycle system, for example, was homemade from parts bought on an electronics Web site.

Jasmine Davis, 23, of Park Forest, who visited the home with her mother, said the exhibit gave her tips for her own apartment. "I like not making a negative impact on the Earth," Davis said.

"It's got so much to be said for it because it uses nature and natural materials," said Robert Richards, 70, of Santa Monica, Calif., who visited with friends. "It's open. You bring the outside in and you can even bring the inside out. It's a house built for humans."

David Johnston, who owns an international green building consulting firm in Boulder, Colo., said the exhibit is a great way to educate the public about green possibilities, but he hopes that the home's ultramodern architecture doesn't leave visitors with "the impression that green building has to be modern, weird, solar, ugly."

"One of the things that's fundamental to green building is that it can look like anything. It can be a regular Craftsman house or a Cape Cod house in New England or an adobe house in Santa Fe. You don't have to change what the home looks like to make it green."

Anne Rashford, the museum's SmartHome project manager, said nobody expects that people will try to re-create the exhibit home.

"But we hope people will make informed decisions when they're building, when they're renovating," Rashford said.

While it can be tough for homeowners to figure out where they're going to get the most green payback for their money, Kaufmann and Johnston agree overall energy usage and building materials will attract homeowners to a green house.

Johnston suggests rolling the costs of energy-saving features into the mortgage by choosing quality insulation and solar panels during the building phase. Kaufmann says homeowners could spend \$1,000 on an energy-metering system that provides a dashboard for power usage.

"Once I can see in real time how my behavior translates to my usage, I can make changes," she said. "These homes will actually cost less."

Johnston, who has written a book on green building, said being energy efficient beyond existing building codes, conserving resources, recycling and improving indoor air quality truly make homes green.

#### GREEN HOMES BY THE NUMBERS

Green building is catching on with homeowners, as they look for ways to conserve energy and recycle waste. Here's a look at the trend by the numbers nationwide:

6 percent: Green building's expected share of the 2008 U.S. residential housing market, up from 2 percent in 2005

**332,900:** Estimated number of green homes constructed since 2005

**\$296,000:** Average price of green homes constructed since 2005

Source: McGraw-Hill Construction Research & Analytics survey prepared for the U.S. Green Building Council **BUILDING GREEN IN N.M.**

For a list of local green builders, suppliers, products and information on Build Green New Mexico's certification process, go to [www.buildgreennm.com](http://www.buildgreennm.com).

**THE PROGRAM HAS CERTIFIED:**

7 homes in 2006

11 homes in 2007

127 homes year-to-date (100 of those are in Pulte Homes' Loma Colorado subdivision in Rio Rancho).

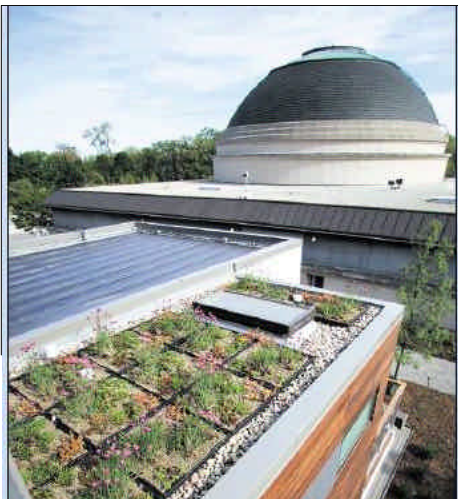
Thirty-five additional homes have registered for certification but have not completed construction.

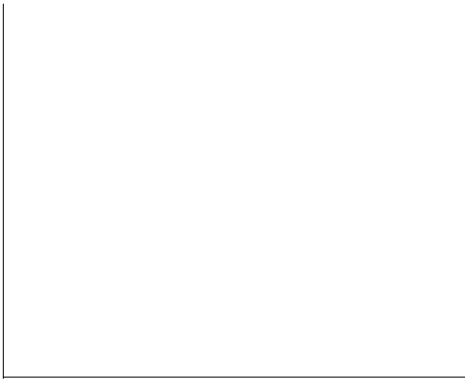
Build Green New Mexico was developed in March 2006 by the Home Builders Association of Central New Mexico to promote and facilitate sustainable construction. One way it does this is through a certification program that requires home builders to meet a certain number of "green" criteria. "Informing and educating the homebuying public on the value of a home that meets Build Green NM standards is one of the primary undertakings of the program," according to the Web site.

Source: Kristy Moyer, director of Build Green New Mexico



**COURTESY PHOTO** The SmartHome is on exhibit outside the Museum of Science and Industry in Chicago. The 2,500-square-foot home incorporates sustainable materials and energy-efficient practices, and the designer hopes it will inspire prospective home-builders to go green.





**COURTESY PHOTO** The SmartHome exhibit sits on the grounds of Chicago's Museum of Science and Industry.