



## Energy-efficient community attracts residents

By [KATHIE BASSETT](#)

2011-07-16 15:46:06



JERSEYVILLE - Developers have transformed a cornfield into another kind of "green" space as the first net-zero affordable community in the nation nears completion.

The 32-single-family home Lexington Farms Estates, located at East Fairgrounds and Cemetery avenues in Jerseyville, provides energy-efficient, LEED-certified homes to rural families that earn less than \$41,000 per year.

"It's a great deal," said Michael C. Morrissey, vice president and director of construction operations for Morrissey Construction Company in Godfrey. "People can have a brand-new house with three bedrooms and

an attached two-car garage and no utility bills for \$590 per month."

A separate clubhouse will provide a conference room, computer lab, and community room with kitchenette and bathroom, along with a playground for residents' use.

All but one of the homes currently are occupied. The only finishing touches that remain are landscaping with native plants to reduce water usage, seeding and installing a sprinkler system.

By definition, a net-zero home's energy bills will net to zero, or cost nothing, on average over the course of a one-year period, he said.

To accomplish this goal, all of the homes' appliances and equipment run on electric energy powered by roof-mounted solar panels and wind turbines located above the garage.

"Hot water heaters, furnaces and air-conditioning units are all electric," Morrissey said. "We also have installed energy-efficient fluorescent light fixtures throughout the homes to cut usage."

Residents will consume the electric energy produced by these features, with any unused energy being sold to electric companies. Depending on individual usage and weather conditions, there may be times that residents also will buy energy from electric companies.

The net-zero projection is based on the amount of energy that an average family would consume given the size of the 1,230-square-foot homes over the course of a year.

"If the people do it right and not consume electricity heavily, they shouldn't have to pay a utility bill," Morrissey said.

Other green features include energy-efficient showerheads, faucets and low-gallon toilets to conserve water. All bathroom and kitchen vents are vented to the outside.

During construction, drywall is caulked to the framing, and all holes made for electrical and plumbing are sealed to reduce drafts and create an airtight system.

The homes' walls and attic spaces have been insulated with higher-rating materials than required by law, along with the installation of low-E argon windows to minimize energy loss to the outdoors.

"We've used some recycled materials in the insulation and framing process, which is another benefit to the environment," Morrissey explained. "And we've used low-VOC paint to keep vapor emissions down."

All these features contribute to a home being certified as LEED Platinum, which is the highest green rating given to building projects.

"All this costs more initially, but in the long run, there will be savings in energy costs that make up for it," Morrissey said.

"Even the streetlights are powered by solar panels and the wind-turbines," he said. "They work a little differently, because they have batteries that will store up to seven days of energy, so they won't ever go out."

At the end of a 15-year rental period, residents will be given the option to buy their home at a reduced rate, using a formula provided by the Illinois Housing Development Authority. The amount takes into account the length of time the family has lived at the property.

The Illinois Housing Development Authority invested more than \$2.5 million to build Lexington Farms, providing federal American Recovery and Reinvestment funds and federal low-income housing tax credits to finance the development.

The federal tax credits, which were the result of a special allocation for counties hit by severe flooding, generated an additional \$6.7 million in private equity for the development through Sterling Bank.

Demonstrating the state's commitment to building green, the project also received a \$260,000 grant from the Illinois Department of Commerce and Economic Opportunity.

"We've done several green projects before," Morrissey said. "But this one is the most extensive we've done."

[kbassett@thetelegraph.com](mailto:kbassett@thetelegraph.com)

© Copyright 2012 Freedom Communications. All Rights Reserved.

[Privacy Policy](#) | [User Agreement](#) | [Site Map](#)