



This Green Home

Projects Offer Eco-friendly Accommodations

Companies and developers are helping Hoosiers sleep well at night – in sustainable housing. A wide range of projects focusing on housing (and even a hotel) offer eco-conscious Hoosiers and others across the country new options for green living. Five ventures with Indiana ties accomplish everything from giving low-income homeowners \$25 monthly electric bills to breathing new life into a dilapidated silver mine.



The Solar Village houses – manufactured by All American Homes – feature solar panels, energy-efficient lighting and appliances, and sustainable materials such as bamboo flooring.

Affordable abode

Bloomington's Housing and Neighborhood Development Department two years ago embarked on a project that demonstrates green living can be affordable. The city built a 12-home subdivision as a Leadership in Energy and Environmental Design (LEED) pilot project.

"The idea was because these are homes built for low to moderate income purchasers and first-time home buyers, the idea of building them a home that isn't economical to operate and live in certainly doesn't make sense," notes John Hewett, program manager for the city's development department.

All 12 homes are completed. Five are occupied with two more pending sale. Buyers must be at or below 80% of the area median income (maximum income for a family of four is \$48,900).

Solar panels – donated by Duke Energy – don the roofs of each home. With 18 panels per house, solar energy collected is routed back to the power grid; homeowners receive credit as the collected energy allows their power meter to rotate backwards.

Among the features are recycled-fiber carpeting, thicker walls for better insulation, blown newspaper insulation, Energy Star appliances and low-flow fixtures to conserve water.

"Green building falls right within what we've always tried to do – put someone in a nice home that's easy to afford to live in so they can build their wealth and their income and basically move forward in their life and get a leg up," Hewett shares.

By Candace Gwaltney

In one of the two-bedroom homes, the complete electricity bill – that includes water, air conditioning and all appliances – cost the homeowner about \$25 in June and \$35 in July last year. All of the homes are completely electric.

Even features outside the homes are environmentally friendly. No curbs line the streets in this small subdivision. Instead, a ribbon of stone edges the roads. Once all construction is complete, native grasses will be added along the streets, Hewett notes. The design slows rain flow and directs it to a nearby stream. About 10 rain gardens (groupings of plants that take advantage of rainfall) help with drainage.

The homes have not received LEED certification yet; the city needs to conduct final tests to ensure everything passes. So far the numbers are in line for certification, Hewett asserts.

Honored homes

A neighborhood in the northwest part of the state also is receiving attention for its environmentally responsible standards. The Village in Burns Harbor (located in the Porter County town of Burns Harbor) is the first subdivision in the nation to receive the National Green Building Standard by the National Association of Home Builders.

The 60-acre development was built to Low Impact Development standards, meaning stormwater is treated as a resource and is managed as close to the source as possible, according to the U.S Environmental Protection Agency.

Other features that make the development green: walkable neighborhood with wider connectivity; small street and pavement widths to reduce paved areas; efforts to protect existing trees; the longest part of homes facing south to capture sunlight; and preservation of natural resources at the site.

Made in Indiana

On Earth Day 2008, All American Homes unveiled a new line of residential systems-built (modular) homes that feature low energy bills and eco-friendly materials. The Solar Village

houses are manufactured in Decatur, Indiana, as well as at facilities in Colorado, Virginia and Iowa.

All American Homes is a subsidiary of Elkhart-based Coachmen Industries. While green features are available on all of the company's modular houses, spokesman Bill Martin describes the Solar Village line as "the Cadillac of green homes."

Features include a solar energy system, solar hot water system, bamboo flooring, cement board siding for increased insulation and smart design that takes advantage of natural light.

The five Solar Village homes range from 900 to 2,500 square feet and start around \$150 per square foot, he says.

Model homes in Decatur and other sites are helping market the relatively new Solar Village line. Many green features already have become commonplace for the company's 90 traditional floor plans.

Green building is a huge factor in the company's long-term planning, Martin asserts.

"The costs to go green are rapidly becoming more affordable, and the payback period is becoming much quicker," he asserts. "Green still has a general perception of being expensive, but that is starting to change."

Martin notes that even the process for building a modular home is more efficient than traditional houses.

"Our building process generates 40% less waste than a site-built home," he says. "Plus, we are a better neighbor during construction. Since our homes arrive about 70% complete, much of the construction noise, traffic and inconvenience to neighbors around the build site is eliminated."

Modular homes have gained notoriety in green building circles, evident in All American Homes' involvement in an exhibit now at the Museum of Science and Industry in Chicago.

The installment called "Smart Home" features a modular home designed by renowned architect Michelle Kauffman and built by All American Homes. The modern design features the latest green home technologies.

"It was the perfect opportunity for us to generate



The city of Bloomington is offering housing that will save money on energy bills for low-income families. Recycled newspaper was used to insulate the walls of the 12-home subdivision.

Urban Acres

Green Living is the Life for This Family

By Candace Gwaltney

An 1880s farmhouse stands out on a bustling Broad Ripple road in central Indianapolis. Even more startling is the occasional cock-a-doodle-doo sound from the backyard.

Tony and Debbie Nicholas, along with their four children, raise chickens at their urban home as part of their eco-friendly lifestyle that includes gardening, biking and other resource-saving measures.

Three chickens and a rooster roam freely around the unfenced backyard under the watchful eye of the Nicholas kids. Most of the time, the feathered family members reside in a coop – comprised of scrap wood of course – designed and built by Tony.

Each week the chickens produce about 21 eggs for the family of six. When it's time to bake cookies on the weekends, sometimes it's a matter of waiting for that extra egg, Tony shares.

"It's good to know where your eggs are coming from and what they're (family members) being fed," he notes. The grocery list, which consists of a lot of organic produce, reflects that philosophy.

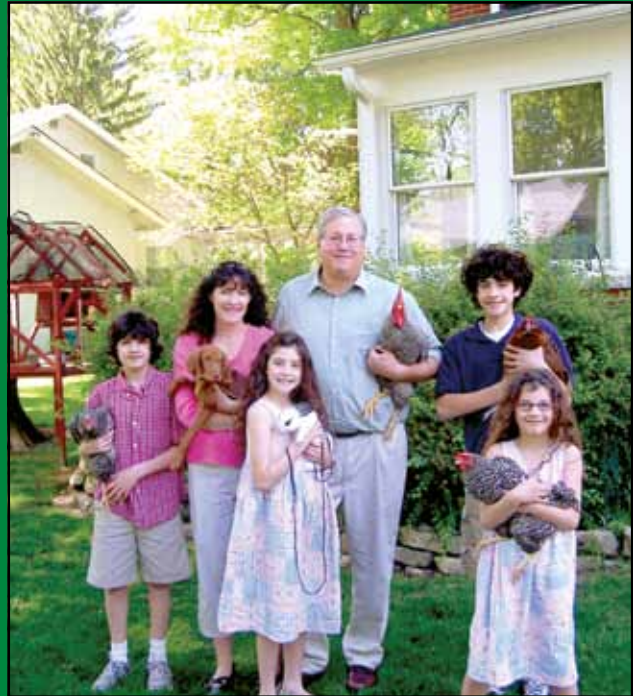
There's no need to fertilize the lawn either – the chickens take care of that, offers Paul Nicholas. The 11-year-old should know. He studied the benefits of chicken droppings for a science fair project. The small coop is easily moved around the yard to help produce greener grass.

While most neighbors enjoy the chickens (or at least are cordial about them), the rooster's crowing did result in a call to the authorities from one unhappy resident. Now the rooster sleeps inside the barn.

The rooster herding the others and the continuous power struggle provide a backyard version of "Animal Planet." "The chickens are a hoot," Debbie adds.

Shrinking eco-footprints

Raising the chickens is nearly cost free. They eat table



Debbie and Tony Nicholas raise chickens in their backyard with help from their children (from left) Paul, age 11; Victoria, 9; Philip, 14; and Catherine, 7.

scraps supplemented with chicken feed, and the family rarely needs to buy eggs.

For Tony, the savings is just one side of the lifestyle. Green living is about being able to live independently. And it's fun. He sees it as a hobby and a challenge: what else can they change to become sustainable? He would like to install a solar panel to harvest energy, but hasn't committed to it because it could take decades before he would see a return on his investment.

Free and inexpensive deeds also make an impact. Debbie uses vinegar and baking soda for cleaning – something she started for peace of mind when the children were small. Laundry is hung outside to dry and eating local produce also means harvesting from the backyard garden.

"I do feel I'm doing my small part for the environment," she asserts.

The four children happily do their part by walking to school, taking care of the chickens and helping in the garden.

Eating at nearby restaurants oftentimes involves a caravan of bicycles. A bike trailer that once transported children now serves as the perfect vehicle to bring home groceries from the local market.

Tony regularly rides a bike downtown (more than 16 miles roundtrip) to his job as a principal for Mussett Nicholas and Associates. He estimates he rides about 2,000 miles a year between trips to work and errands. He's brought new meaning to pizza delivery by biking over to pick it up himself.



Indianapolis-based DeNovo Properties is remediating an old silver mine site overlooking Sun Valley, Idaho. A portion of the land will become high-end home lots.

excitement about how green our systems-built process can truly be,” Martin says of the partnership with Kauffman.

He continues: “It has also been a great tool to help break down the misconceptions of what system-built (modular) building is. Modular homes can be architecturally impressive and state-of-the-art, while being built in a controlled environment with better quality and in less time than ordinary site-built homes.”

New life for old land

Founded in 2007, Indianapolis-based DeNovo Properties buys environmentally distressed real estate and restores it for use. A current project will allow homes to be built at a former mine.

“We clean it up and then position it for resale or some more productive use than its current contaminated state,” comments company co-founder and CEO Brian Pitkins.

“De novo is Latin for ‘to make new again,’ ” he explains.

In October, the company purchased an 850-acre former silver mine in Sun Valley, Idaho. The mine opened in the 1880s and ceased operations in the 1960s. Cleanup of the land is underway and includes removing any soil and structural hazards such as the remaining open mines. Pitkins expects the remediation to be completed by mid-November.

Of the 850 acres, 85% of the land will be donated to a land trust. A public trail system will also be built. The remaining land will be divided into 15 high-end home lots of five to 10 acres each that will overlook Sun Valley and an existing ski resort.

Once remediation is complete, DeNovo will begin marketing the home lots. Pitkins expects it will take a couple of years to sell the properties.

“We view this business as the means to breathe new life into the old historically blighted and contaminated industrial facilities that dot not only the Midwest, but the whole country,” Pitkins shares. “As manufacturing consolidates and migrates overseas and downsizes through efficiencies, it leaves behind a lot of blighted assets and our goal is to bring new life and new productivity to those.”

Other sites DeNovo is looking at include old oil refineries in New Orleans and Rhode Island, former industrial sites in the Chicago area, a chemical manufacturing facility just south of the Philadelphia airport and a pharmaceutical facility in Puerto Rico.

While DeNovo has not found a viable remediation site in Indiana, the company has been involved in projects in the Hoosier state. The company served as the lender for an effort that transformed an old industrial facility into what is now a

charter school in Indianapolis.

Green getaway

Neighbors to the west hope to create a green destination for Hoosiers. Green Mill Village is a hotel, conference center and spa being built in Arcola, Illinois. Construction began in the fall for the resort that is about two hours from Indianapolis, Chicago and St. Louis.

The development will include a 76-room hotel, restaurants, shops, meeting areas and a not-for-profit education center that will involve training programs in wellness, energy and agriculture.

“We need a renaissance in this country. The answer is in creating sustainable products and experiences like Green Mill Village. Everyone wins,” developer Bob McElwee noted in an e-mail.

Much of the power for Green Mill Village will come from wind and solar energy and visitors will be able to learn about green energy technology, he explains. Food at the restaurants will come from local sources and furnishings in the hotel rooms will be locally made.



Construction has begun on an environmentally friendly resort called Green Mill Village in east central Illinois.

The hotel/spa and retail center will tentatively open in the fall of 2010. While other green hotels exist, Green Mill Village developers believe it will offer something different for visitors and the local economy.

“We are environmentally and economically sustainable,” McElwee writes. “There are many green hotels now, but we actually create a positive impact on the environment and on the local economy by (not only) creating jobs through the tourism component, but also through increased manufacturing.”

INFORMATION LINK

Resources: John Hewett, city of Bloomington, at <http://bloomington.in.gov/evergreen>

Bill Martin, Coachmen Industries and All American Homes, at www.allamericanhomes.com

Bob McElwee, Green Mill Village, at www.greenmillvillage.com

Brian Pitkins, DeNovo Properties, at www.denovoproperties.com

The Village in Burns Harbor at www.villageinburnsharbor.com