Building green

Developers say billions of dollars spent on more environmentally friendly workplaces will pay off in the long run

by Kevin James Shay and Erica Mitrano | Staff writers

One in an occasional series on how green initiatives affect Maryland businesses and jobs

While more Maryland builders and businesses are embracing environmentally friendly practices, executives at The Tower Cos. know most have a ways to go to reach their brand of green.

The Rockville development company, which is about 60 years old, had already focused on smart growth and incorporating ecologically sensitive building practices by the mid-1990s, well before going green reached mainstream status. Along the way, it has achieved a number of firsts — including being the nation's first developer of multi-family housing that meets the stringent certification standards of the U.S. Green Building Council's Leadership in Energy and Environmental Design program at Blair Towns in Silver Spring; and the first in the Washington, D.C., area to achieve the highest LEED certification level of platinum for a multi-tenant commercial office building at the Millennium Building at 1909 K St. NW.

The green building market is increasing substantially, according to a recent study by the U.S. Green Building Council and Booz Allen Hamilton. The total value of green construction nationally rose from $10 billion in 2005 to as much as $49 billion in 2008. By 2013, the market could grow to as much as $140 billion, creating 7.9 million jobs by then.

As other companies jump on the green bandwagon, Tower is moving into new areas. Those include upgrading existing buildings to obtain LEED certification and encouraging tenants to convert to more environmentally friendly practices.
"It's much more difficult to achieve LEED certification for existing buildings than with new construction," said Marnie Abramson, a third-generation principal in the family-owned company and director of marketing and public relations.

Tower is focusing on its high-rise apartment buildings, waiting until tenants move out to make upgrades that will achieve the certification. Abramson estimated the process could take at least five years, and then executives will review whether to tackle the company's mid-rise structures.

A study by the University of Maryland Center for Integrative Environmental Research reported that improving the energy efficiency of Maryland homes heated by natural gas would generate 80,000 jobs in the state over the next decade, while saving homeowners hundreds of dollars annually in heating costs and reducing residential carbon emissions.

Buildings generate about 40 percent of U.S. carbon emissions, more than any other source, including vehicles, according to government and industry reports.

That eye-opening figure is why Tower executives and others are so adamant about improving the efficiency and environmental quality of buildings. The Obama administration has made a big push for various environmental programs, with some green tax credits and other incentives to help make buildings greener. But more government incentives are needed, Abramson said.

"We need a 'cash for clunkers' program for buildings," she said. "There are a lot of old buildings leaking electricity."

ACPT efforts in Charles County

The recession has put crimps in the green plans of many builders and developers. But American Community Properties Trust, developer of the ambitious St. Charles "green city" planned community, is among those in Maryland still pursuing such projects. Executives recently unveiled plans to create a greener headquarters for itself in Waldorf by August.

ACPT plans to retrofit a vacant building, intended for restaurants before the recession began, as its new headquarters with an interior that meets LEED certification, CEO Steve Griessel said. The company is installing items such as low-flow toilets and a 1,000-gallon cistern tank "to harvest rainwater," he said.

"It's a very interesting thing — a lot of other countries do this," Griessel said. "That's going to be used for toilet flushing. It's unique, way beyond what you need to do in terms of getting certified."

Tower also installed a tank to capture rainwater at its Rockville corporate offices at 2000 Tower Oaks Blvd., which earned LEED platinum certification. The tank cost about $200,000, and the water has various uses, including watering plants, Abramson said.

ACPT is aiming for a gold certification for the interior at its headquarters, the second-highest LEED rating. Other planned features are paints that emit fewer toxic compounds than conventional paints, large interior and exterior windows, an open floor plan for more sunlight and recycled materials.

PNC Financial Services Group, the Pittsburgh parent of PNC Bank and one of the largest in Maryland deposits, became the first bank in the U.S. to gain LEED certification for its branches for using recycled materials and systems that save water and electricity in 2002, executives said. The company has at least 66 LEED-certified buildings, which officials say is more than any other company in the world.

PNC's green branches in Maryland include those in Germantown, Bowie, Waldorf and La Plata. Another is planned in St. Mary's County next year.

Perhaps the most memorable appliances are the toilets, which are used differently depending on the type of, well, deposit, said Donna Kaufmann, branch manager of the La Plata office. The flush handle can move up or down, and "you flush up for No. 1 and down for No. 2," she said.

An early adopter of green design principles in Southern Maryland was Dominion Energy, which opened its new administration building in spring 2008. The building, at the Dominion Cove Point liquefied natural gas facility in Lusby, was awarded a silver LEED certification, the third highest. A year and a half into its use, the structure has not disappointed, said Mike Frederick, director of LNG operations at the Cove Point LNG terminal.
"It's probably exceeded expectations," he said. "The thing about the building is, when you walk in, the first reaction is it's a great environment to walk into. From a personal space perspective, the screen windows in each office let you control your own environment at the temperature you'd like."

**Not much more costly, proponents say**

While documenting and verifying the standards can take some time, it really doesn't cost much more to qualify for LEED certification, Abramson said. She estimated there was a premium of 1 percent to 2 percent, though that could rise if a company is trying for platinum status. A lot of the products such as paints can be bought at market rates, Abramson said.

The green premium on construction costs averages 2.3 percent, according to Clark Construction Group of Bethesda. Clark's Phillip Merrill Environmental Center in Annapolis, completed in 2000, was the first building to receive LEED platinum status, officials said.

Green buildings have demonstrated a 40 percent reduction in operating costs over the life of the building, and the average green building uses 30 percent less energy and water than comparable conventional buildings, according to Clark.

While green building may cost a little more upfront, the payback over time has proven to be substantial, said Jim O'Brien, a Maryland homebuilder who is developing a new heating, ventilation and air conditioning system that he says can cut energy consumption by more than half.

"I've never known it to be a negative," O'Brien said.

Some new companies are breaking into the LEED certification process. Bethesda hotelier Marriott International plans to open its 147-suite SpringHill Suites by Marriott in College Park, Ga., today, one of the first Marriott properties to earn LEED designation.

Other companies involved in green building in Maryland include Skanska USA Building of Rockville, part of Swedish construction giant Skanska AB, which built the gold LEED-certified Camille Kendall Academic Center at the Universities at Shady Grove in Rockville; and St. John Properties of Baltimore, which obtained a silver LEED designation for Melford Plaza II, a 145,000-square-foot Class A office building in Bowie.

Besides LEED, Tower has been recognized by the Energy Star program, developed by the U.S. Environmental Protection Agency. Since 1999, about 9,000 buildings have received the designation nationwide.

LEED has standards for homes as well as commercial buildings. But Mike Bell, owner of the Bell Cos. of Washington, D.C., instead touts a set of standards developed in part by the National Association of Home Builders.

Under the association's Green Building program, a home can be certified as bronze, silver, gold or emerald. Bringing a home up to the bronze standard could cost a builder up to about $2,000 extra, said Bell, a member of the Maryland-National Capital Building Industry Association who sits on its environmental committee. The cost for silver certification can be from $3,000 to $5,000; for gold, $15,000 to $18,000; and for emerald, $28,000 to $30,000, he estimated.

"I'd say the people who are building green are custom 'spec' builders, building for clients [when] clients have asked them to go to a certain level," Bell said. "I will say, we think there is a light at the end of the tunnel that's not the train. People look at the product and ask the question, 'What do I need to do [in terms of] efficient windows, the level of insulation, water resources and indoor air quality ... to make my product green.' So when they gear back up and start building, you'll see more of them building green."

Green building resources


Green Building Institute, Jessup, 443-733-1234, www.greenbuildinginstitute.org; nonprofit focused on educating people about natural building methods.

Amicus Green Building Center, Kensington, 301-571-8590, www.amicusgreen.com; includes a store with green building products.

Maryland Environmental Design Program, Annapolis, 410-260-8119, www.dnr.state.md.us/ed; state program under the Maryland Department of Natural Resources that advances economically sound and environmentally sensitive building and site-design techniques.

file:///Users/shreemamehta/Downloads/MDGazette_GreenBuilding_Dec2009-1.webarchive
