

Green With Possibilities

New building techniques easy on environment – and wallet

By Rebeca Chapa, San Antonio Express-News
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This week, a group of like-minded people will gather for the area's first Suburban Cities Summit.

The goal of the event, sponsored by the Metropolitan Partnership for Energy, is twofold. Organizers hope to provide a forum for community leaders interested in expanding green building while simultaneously educating the public on why such techniques make sense.

San Antonio, already the nation's seventh largest city, continues to grow at a rapid pace. More growth means more homes and businesses competing for dwindling resources. As the community veers dangerously close to federal air quality nonattainment standards, it's time for something to change.

And that change could include green building. Green buildings are energy- and water-efficient, use recycled materials, incorporate local materials to cut down on transportation costs and take advantage of sun, wind and tree cover to heat and cool.

Not only are they better for the environment and the health of their occupants, they make economic sense. City leaders are hoping to lead by example by incorporating such techniques into new city construction projects.

"I don't think these things will be a hard sell because what you're trying to do is be a good steward of city dollars," Councilman Art Hall said. "You may pay a little more money now for a house or building, but on the back end you're going to save dollars."

Several council members have spearheaded city efforts to promote conservation, such as a proposal by District 3 City Councilman Roland Gutierrez to provide free meter parking for hybrid vehicles.

Hall said other examples could include requiring all new construction that results from the upcoming bond election to incorporate some element of green building. Hall said he and others would like to see a fast-track option for developers who use green building techniques.

Green building is doable. And it doesn't have to break the bank.

Sustainable development

Consider Portland, Oregon, which has taken green building to new heights – literally.

Known around the country as one of the leaders in sustainable development and green building practices, Portland has made global warming and emissions reductions its cause.

"It's a federal issue, but it's also a local issue," said Mike Armstrong, assistant director for Portland's Office of Sustainable Development. "Who does transportation? Who does land use planning? Who does building codes? Local governments do."

In 2000, Portland City Commissioner Dan Saltzman merged two city departments – energy and solid waste – and created a more holistic agency, the Office of Sustainable Development. The office of about

40 promote energy efficiency, use of renewable resources, waste reduction, and recycling, green building, and sustainable food systems.

There is also a global warming component. In 1993, Portland adopted an emissions reduction plan, becoming the first city in the country to do so.

Fittingly, the OSD is located in a restored 1895 downtown warehouse known as the Jean Vollum Natural Capital Center.

The red brick building not only houses the agency, it is itself a prime example of how to build green. In 2002, it became the first restored building in the country to receive a gold-level Leadership in Energy and Environmental Design (LEED) rating from the US Green Building Council.

The building has achieved a 30 percent reduction in water use and a 20 percent reduction in energy use. Fifty percent of the material used in the building is harvested locally, which reduces transportation costs, and 75 percent of the indoor space makes use of daylight, minimizing the need for artificial lighting.

The building's parking lot has few spaces, thereby discouraging the use of private vehicles to get to work. Instead, the building offers lockers and showers for those choosing to bicycle, and employees who use public transportation get free passes.

The warehouse also houses several retail outlets, including green granddaddy Patagonia, World Cup Coffee & Tea, and Hot Lips Pizza. For deliveries, the latter uses an electric car, which plugs into an outdoor charging unit when not in use.

"The behavior inside a building is as important as its structure," said Alisa Kane of Portland's green building program.

The building even sports an "eco-roof," a grassed rooftop that absorbs heat rather than reflecting it. Such roofs also soak up stormwater that might otherwise run into Portland's already overloaded drains.

Greg Haines, a Portland eco-roofer who has worked on about 29 roofs, said green roofs last longer than typical roofs because they decrease the amount of damaging sunlight and rainfall that reach the structure.

It also publicly signals a commitment to sustainability. "It's kind of like a big green calling card on your roof," Haines said.

Fewer greenbacks

Sometimes good ideas seem fraught with obstacles. In the case of green building, the obstacle is money. Many people believe that green techniques cost more.

And they do – if green building is considered an afterthought rather than a pro-active, integrated vision for development. A company may come in and retro-fit part of a building to enhance its efficiency, but that's usually more expensive than incorporating the efficiency into the original design.

But developers are beginning to realize that if you start green, you not only save money through integrated building, you eventually reap more in energy savings.

One highly successful Portland developer, Gerding Edlen, has renovated several old buildings using green techniques. In doing so, it has combined two sides of the green building coin.

“It’s a little bit of culture, and it’s a little bit of people smelling money,” Armstrong said.

A green way of life

Mike O’Brien is making a living out of green. The green building specialist with the city of Portland and his wife just moved into a new home that he claims will produce zero emissions.

Fluorescent bulbs fill the home, bamboo (which grows quickly) is the wood choice for floors, and the entire house runs on solar energy provided by roof panels. When the sun isn’t shining – as often happens in the Northwest – wind power kicks in.

O’Brien’s downstairs rooms are made of sand and clay, sealed with linseed oil. Clay paint is used in the home, and many of the walls are made of cob, a mixture of dirt and straw that is applied by hand. The effect is funky, handmade, and unique.

O’Brien said those who squawk about the costs of going green are shortsighted.

“Between peak oil and climate change energy is going to get very, very expensive,” he said. “The dilemma of the dollar is that dollars don’t measure social values. Global warming is the biggest, most colossal catastrophe that the human race has ever seen. You’ve got to start somewhere.”

Still, selling the idea of green will be tough, especially in a lower-income city like San Antonio, said Shanel Ramirez, one of the organizers of the Alamo City summit and a staffer with Build San Antonio Green, a program of the Metropolitan Partnership for Energy.

“When people have...in mind that building green means more money, they get turned off, and that’s a myth,” Ramirez said.