



Building 'green' is getting cheaper, convention in Sacramento shows

By Jim Downing



Sam Roberts, a biofuels company consultant, checks out a display for diesel-engine maker Bosch at the Sacramento Convention Center.

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For Jim Ogden, finding "green" materials for state building projects used to mean custom orders for sustainably harvested wood and costly chemical-emissions tests on ceiling tiles.

But as green-building standards have matured and government mandates have taken hold, building green now means little extra hassle and, often, no extra cost. "It's gotten a lot easier," said Ogden, a former California Department of General Services project manager turned green-building consultant. "The manufacturing sector has really stepped up to the plate."

This week, suppliers of green building supplies – everything from recycled carpet to waterless urinals – have filled the Sacramento Convention Center for the second Green California Summit and Exposition. The event, which ends today, is meant to help the public sector – local and state government, as well as

schools – connect with commercial providers of green building materials and services.

Organizers said the convention is more than twice as large as last year, with more than 5,000 attendees.

While some vendors in the green-carpeted exhibition hall reported being hurt by the drop in residential housing construction, nearly all reported that business overall is good and getting better.

"The government has been a huge draw," said Guy Collignon, who owns Enviro-Crete in Rio Linda.

Collignon installs so-called "pervious" concrete, which allows water to seep through into the soil below, reducing the amount of runoff the local sewer system needs to handle. In his display Tuesday, water poured from a faucet onto a slab of concrete and then dribbled out the bottom.

Pervious concrete costs the same as the ordinary concrete he sells, Collignon said, and using it for sidewalks and parking lots can save money on certain permit fees and earn credits recognized by green-building certifiers.

A building's "greenness" is judged by the Leadership in Energy and Environmental Design, or LEED, standards, released in 2000 by the nonprofit U.S. Green Building Council. The LEED standards encompass a wide range of factors, from energy and water efficiency to sourcing of recycled and locally produced materials to the use of carpet, paint and ceiling tiles that don't emit potentially harmful gases.

More than 1,300 buildings worldwide have been constructed or retrofitted to LEED-certified standards since 2000. Green building is expected to explode in the next few years. McGraw-Hill Construction Analytics estimates the value of green building construction starts will grow from \$12 billion in 2008 to \$60 billions in 2010.

Many at this week's conference said government mandates have been key to jump-starting the green building industry, because they forced builders and materials manufacturers to overcome the types of problems that Ogden recalled from his experience with the state Department of General Services.

Ogden worked on one of the greenest state buildings of all, the Department of Education building at 15th and N streets, which meets the very highest LEED "platinum" standard.

By 2015, all state buildings, new and old, must meet the somewhat lower, but still stringent, LEED "silver" standards. That's a part of California's plans to meet an executive order issued by Gov. Arnold Schwarzenegger in 2004 that state buildings, excluding universities, reduce their energy consumption 20 percent by 2015.

Given today's ready availability of green building materials and expertise, constructing new buildings that are 20 percent or more energy efficient than their conventional counterparts will be straightforward, said Roy McBrayer, program manager of the state's Green Building Initiative.

"The real challenge – for everybody – is the existing built infrastructure," McBrayer said.

That's good news for Ogden, an expert in what's known as "recommissioning" existing buildings. This process takes a careful look at all the ways that a building uses energy, water and chemicals and determines how operational changes can make the building greener. Simple adjustments like reprogramming thermostats or changing the lighting can yield big savings, he said.

So far, McBrayer said, the state has found that recommissioning cuts energy use by more than 8 percent.