

LEED-EB helps firms go green without new building

Program focuses more on operations, maintenance than construction

BY BARBARA MAYNARD

Green building is a big part of Murphy Co.'s business. Mark Bengard, senior vice president for design build, said about one in three projects the St. Louis-based mechanical construction and engineering firm is working on are seeking LEED certification through the U.S. Green Building Council.

So Murphy decided it should get its own building certified.

"We got the inkling that we should practice what we preach," Bengard said.

LEED certification is most commonly sought for new construction or major renovations, but the company is not building a new facility. Instead, it registered its



Mark Bengard, senior vice president for design build, said he expects the project at Murphy Co. to come in under its \$75,000 budget.



BRIAN CASSIDY

Murphy Co. employee Steve Harting rides his bike to work, from Ballwin to Olivette.

building on North Price Road with LEED for Existing Buildings, or LEED-EB.

LEED-EB was created in 2004 to encourage building owners and managers to maintain and operate their facilities in the most efficient and environmentally friendly manner possible. While the other LEED programs apply to the one-time event of construction, LEED-EB looks at ongoing practices.

"It's really a different rating system than the others," said Emily Andrews, executive director for the St. Louis Regional Chapter of the USGBC. "It's about operations and maintenance. There are a lot of credits that are related to creating policies that then direct behavior in the company."

Only 96 buildings have earned the LEED-EB certification, compared to more than 2,400 commercial and residential buildings worldwide that are certified under the various programs for new construction and major renovation. Several buildings in the St. Louis area are regis-

tered with the LEED-EB program, which means they're working toward certification, but none have been certified yet.

To increase participation in LEED-EB, the USGBC unveiled this year a new version called LEED-EB Operations & Maintenance, or LEED-EB O&M. Revisions were designed to streamline the documentation process and restructure the credits to make them more applicable to more facilities.

MetLife has the only building in the St. Louis area currently registered under the new O&M system. Its office on Tesson Ferry Road is one of 18 sites around the country that the company has registered with the program.

Making an existing building green

As Murphy works toward certification, it has started an office-wide recycling program, switched to non-toxic cleaning products, installed a rain sensor on the irrigation system, and replaced disposable

cups, dishes and cutlery with ceramic and metal options. The company also changed toilets to low-flow versions and installed motion sensors on faucets.

The company is installing a locker room with showers to encourage more employees to ride bicycles to work. That enhancement will earn the company a point toward LEED-EB certification for encouraging alternative transportation, and it was something the company planned to do for their employees anyway, in conjunction with a new workout room.

The most obvious economic benefit of certifying a building's ongoing operations can be reduced utility bills. Madison, Wisc.-based nonprofit Leonardo Academy released a report last year that compared LEED-EB building upkeep costs vs. a typical commercial building. It found the LEED buildings saved between \$4.94 to \$15.59 per square foot of floor space, with an average savings of \$6.68. In addition, the cost of LEED-EB implementation ranged from nothing to \$6.46 per square foot, with an average of \$2.43 per square foot.

Even the most efficient systems can waste energy if they are not operated and maintained properly. As a mechanical contractor, Murphy is on top of that factor. The building has already earned the Energy Star award, which testifies to its energy efficiency. Energy Star is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy.

Murphy engineer Joe Krewson, who headed the project, said tracking the cost has been difficult because changes like the locker room were already earmarked under a different budget. However, he said he expects to come in under the original budget of \$75,000. Bengard said he ex-



The St. Charles Convention Center saved twice as much on utility bills this past year as it spent on reprogramming its heating and cooling systems.

pects the application process to be completed in December.

Putting its own building through the certification process gives Murphy an opportunity to train employees on the LEED programs.

"We wanted to get our design team up to speed on the reality of going after a LEED project," Bengard said.

Thinking beyond energy

Rising utility bills are attracting a lot of attention, but Richard Janis, president of engineering firm William Tao & Associates Inc., said LEED helps people think about a comprehensive vision of sustainable building practices.

"The real advantage of LEED-EB is a lot of people really focus too narrowly on energy as sustainability, but there are an

awful lot of other aspects that contribute to good building operations and the welfare of the occupants," he said. "You can save all the energy in the world, and it can still be a sick building."

Practices such as using non-toxic cleaning products and ensuring adequate air changes can affect employee health and productivity, which result in real but hard-to-track economic benefits.

"I can go to my CFO and talk to him about energy savings. That's real dollar savings that he can put his fingers on and count on next year," Janis said. "But you can't prove the productivity case. A lot of people call them soft savings, and CFOs frequently only believe in hard dollar savings."



Matt Forman

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www.murphynet.com

ST. LOUIS
1340 North Price Road
St. Louis, MO 63132
Ph. 314.997.6600
Fx. 314.997.4536

DENVER
3970 Wheeling Street
Denver, CO 80239
Ph. 303.371.6600
Fx. 303.371.6616