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Green is on the move.

## Beyond green light

*Energy efficiency is making inroads into product categories other than lighting.* by Dan Carazo

**Over the next five years**, the U.S. market for more energy-efficient electrical products is expected to grow at a 10% to 15% compound annual growth rate, which most likely comes as no surprise. What many may not realize, however, is what originally began as a way to reduce energy consumption—and the resulting operational costs—has become a key strategic driver to an ever-increasing percentage of the commercial, institutional, and industrial electrical markets.

“We anticipate that the U.S. market for energy-efficient electrical products will outgrow the general marketplace,” said John White, director of energy management and environmental solutions for Eaton. “The growth for green building products and services is expected to grow from about \$12 billion in 2007 to as much as \$20 billion in 2010, and I would expect green electrical power distribution products to at least match that growth rate—if not exceed it.

“The main trend here is connecting energy efficiency with greenhouse gas [GHG] emissions where projects are evaluated on both their financial merits and their contributions to reducing GHG emissions,” explained White. “For many, it isn’t only about managing energy costs. Projects that a few years ago would not have worked financially are much more viable [due to] rising electrical energy costs.”

According to David Bovankovich, vice president of engineering for E-Mon, increasing energy prices and a growing awareness of the impact of electrical consumption on the environment are having a major effect on the uses of electrical energy monitoring hardware and software.

“With the cost of energy rising rapidly and growing awareness of global warming, the market for more energy-efficient electrical products will grow in 2008 and continue growing for the next five years,” said Bovankovich. “From our view, there seems to be a trend toward monitoring for both LEED certification and data gathering to determine areas that will most benefit from energy-efficient upgrades.”

### C&I MARKETS

“For 2008, the education, office, and healthcare market segments could be up 9% or more,” said Norm Sowards, general manager of commercial and industrial marketing for GE.

According to Mark Kenyon, product marketing manager for ABB, the most significant trend impacting the commercial market is the use of adjustable speed drives, due to their impact on

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energy consumption when used on pumps and fans.

"The use of adjustable speed drives has long been recognized as the leading method to save energy in HVAC," said Kenyon. "The savings are so large that they actually can pay for the purchase and installation of the drives in a matter of several years—or less.

"Frequently, more than 65% of the electrical energy produced is consumed by electric motors, with another 25% consumed by lighting," he said. "With the use of adjustable speed drives and new fluorescent lighting with electronic ballasts, huge savings can be realized."

White sees growing activity in the institutional market, with efforts toward *LEED for Schools* and the *Green Guide for Healthcare*. "According to the USGBC,

there are clear ties between the performance of students or recovery of hospital patients and buildings that are designed for improved energy and environmental impact," he said.

Michael Jouaneh, marketing manager for Lutron Electronics, agrees. "The institutional market is showing the strongest growth, especially with the use of daylight harvesting in both the healthcare and education markets," he noted. "According to the DOE, lighting accounts for 44% of the electrical energy in office buildings and 56% in education buildings, more than any other building system. Lighting controls can cut that usage in half or more."

By one estimate, the installed base of commercial buildings in the United States is 13 times the size of all indus-

trial facilities. So it makes sense to focus on the huge retrofit market for energy-efficient lighting and power upgrades.

"Energy reduction via lighting control is a vital strategy and universal to all commercial structures, both newly designed and existing," said Tom Braz, general manager for Hubbell Building Automation. "Regarding new construction, the engineering community has a good understanding of best practices and code requirements."

Braz also pointed to a golden opportunity for distributors. "Owners of existing buildings, on the other hand, don't have a clear-cut path for assistance in understanding these best practices," he explained. "Energy service companies [ESCOs], electrical contractors, electrical distributors, and lighting agents all have

## COMMUNITY INVOLVEMENT AS A GREEN MARKETING VEHICLE

"If you aren't going green, then you're on your way out of business," said Paul von Paumgarten, director of energy and environmental affairs for Johnson Controls. "The whole building industry is going green. We want to be a catalyst." One of Johnson Controls' local partners is the St. Louis Regional Chapter of the USGBC (USGBC-STL), which offers programs on lighting and daylighting.

"Johnson Controls has been a chapter sponsor since our inception," said Emily Andrews, coordinator of USGBC-STL, which serves 24 counties.

"The GBC network is unbelievably strong," said Chris Studney, business development manager for Electrical Distributors Inc. (EDI) in Charlotte, N.C. In fact, just two years after joining USGBC, EDI is recognized as Charlotte's electrical green building expert.

"We get the first call on every LEED project in town," noted Studney. "And we are heavily involved in Charlotte's biggest LEED projects—Bank of America and Ritz Carlton."

In 2007, EDI facilitated a green building presentation at NAED's Mid-Atlantic States Conference and sponsored courses by Green Advantage (GA), a program that certifies contractors. "Electrical contractors were half of the GA audience," Studney said.

Like EDI, Genlyte Supply Division in Union, N.J., penetrates local communities through education. "We're conducting EPAAct seminars around the country and have website tools that calculate costs and savings," reported Chuck Havers, president.

Schneider Electric takes a more hands-on approach to community involvement: company employees build Habitat for Humanity homes, while the company donates product—\$6 million worth between 2001 and 2006.

"When Schneider executives worked on Habitat homes last fall,

we saw how Habitat is incorporating green building techniques, integrating our panel boards and circuit breakers in solar systems," said Dominique Rattner, corporate communications manager.

One of them, Phoenix-headquartered Electric Supply, worked on a Habitat home in Phoenix in January. "We stress community involvement," said Jim Morlan, CEO and a Habitat laborer. A family-owned, "hometown" business for more than 50 years, Electric Supply nourishes its close connection to the local community. According to Morlan, the company's community involvement leads its customers to look upon it more favorably.

Scott McDowell and Joyce Tschudy, northeast regional vice presidents for Hagemeyer North America in Hagerstown, Md., helped Schneider build a home in Bermuda. "We've donated to Habitat projects in our community for 20 years, but this is the first time we contributed labor," said McDowell. "The community work definitely helps brand our name."

Green building presents another branding opportunity: "The green initiative is another differentiator," McDowell said. "Our Energy Lighting Services Group and our new catalog both focus on energy solutions."

Some benefits of community involvement are indirect and long term—e.g., business thrives in a vibrant community. Others go immediately to the bottom line: "I am confident that we are getting an increase in business because of what we're doing with the green building," Studney said. ■

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an opportunity to deliver this message.”

Bovankovich added that the demand for monitoring products has increased in the commercial market. “In the past, the product application was primarily for billing and budgeting; however, present trends are moving toward energy savings and data acquisition,” he said.

## THE INDUSTRIAL MARKET

Mike Nager, industry management of the Americas for Phoenix Contact, noted that the ROI for variable frequency motor drives is now favorable, boosting sales. “Industrial processes use a lot of electrical power. As electrical rates rise, there is a driving force to reduce energy consumption. The increased costs of

energy change the ROI calculations made by end-users.”

“The goal of decreasing energy consumption is definitely impacting the industrial market,” said Jill Mungovan, marketing manager of energy solutions for Cooper Lighting. “Building owners and facility managers are looking for more efficient systems.”

For now, however, the industrial and commercial markets are growing much faster than institutional, according to Pablo Medina, product manager of the motor control center for Siemens Energy & Automation. “In the next few years, the commercial market may grow faster because the industrial sector has been concerned with higher energy efficiency

for a longer time; water/wastewater, for example, is growing very fast.

“I think the sales of high-efficiency and smart products will double the demand compared to similar products without those features,” he added.

“Distributors are well positioned to benefit from the growing emphasis on energy-efficient products,” said Mungovan. And while opportunities exist beyond lighting, “With more than 40% of energy consumption coming from lighting, a lighting system upgrade is a first step to reducing energy load.” ■

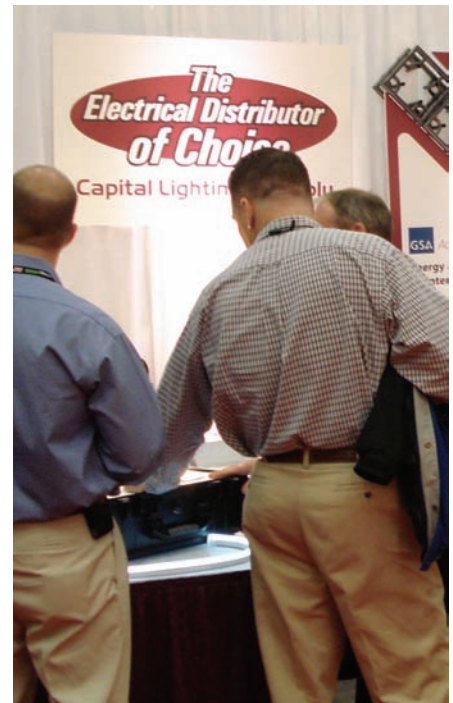
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## Show Report

### NFM&T's Baltimore show grows—and attracts distributors

With the difficult handle of National Facilities Maintenance & Technology (NFM&T), this late-winter trade show and conference held annually in Baltimore has grown up to earn notice—from attendees, exhibitors, and several area electrical distributors.

This year's show, held March 4-6, also included much higher numbers of energy- and electric power-oriented exhibitors. One reason: In the past few years, rates charged by Baltimore Gas & Electric have increased by more than 70%. —TED



Among the electrical distributors exhibiting at the 2007 NFM&T were (from left) C.N. Robinson Lighting Supply, Baltimore; Hagemeyer; and Capital Lighting & Supply, Alexandria, Va.