



NATIONAL ASSOCIATION OF
ELECTRICAL DISTRIBUTORS

Smart Tools for Smart Distribution®

Going Green Outside:

Selling Energy Management Solutions

Case Studies

Overview

Building owners and building management firms are seeking energy management solutions to reduce their operating costs and increase the value of their assets. Likewise, energy-efficient buildings are an effective way for owners to attract and keep tenants.

This case study will:

- Explore the opportunities in the commercial building energy management market
- Examine the motivations for building owners to invest in these solutions
- Share sales approaches that electrical distributors can employ in this growing market sector

ENERGY MANAGEMENT:

Devising a strategy to reduce energy use and increase energy efficiency, investments in areas like lighting and HVAC retrofits. Plans usually estimate returns on energy efficiency investments.

Selling to the Commercial Building Market

Case Analysis

What opportunities exist for electrical distributors in the commercial building energy management market? How can building owners and managers be motivated to invest in these solutions? By learning about the energy management opportunities, trends, as well as the needs of building owners, electrical distributors can develop effective sales approaches for this growing market.

With volatile energy prices and the increasing emphasis on sustainability, many commercial building owners are considering energy management investments.

Energy management assesses the energy needs of the facility and then seeks to make all aspects of energy usage more efficient.

Electrical distributors can expand their sales by helping commercial building owners and managers meet their energy management needs. Knowing what the primary motivations for building owners and property managers are and how to approach the sale are key components of entering the commercial building energy management market.

Key Motivators for Commercial Building Energy-Efficiency Investments Include:

- ✓ Tax Deductions
- ✓ LEED-Certification or ENERGY STAR®
- ✓ Higher Occupancy Rates
- ✓ Increased Property Value
- ✓ Energy Savings

Sizing Up the Energy Management Market

How does the growing prominence of energy-efficiency and corporate sustainability efforts impact energy management opportunities for electrical distributors?

As of 2006, the U.S. had approximately 74.8 billion sq. ft. of commercial building space.¹ More recent figures from the McGraw Hill Construction Outlook estimate:

- 1.8 billion sq. ft. of commercial space added in 2008
- 698 million sq. ft. will be added in 2009²

Combining these estimates, the U.S. will have approximately 77.3 billion sq. ft. of commercial space by the end of 2009. If an assumption is made that 3% of this commercial space will undergo an energy retrofit every year—and that these retrofits cost anywhere from \$3 to \$10 per sq. ft.—it can be estimated that the energy retrofit market for commercial buildings is worth approximately \$6.9 to \$23.1 billion dollars annually.

Commercial buildings currently make up a majority of energy management sales for electrical distributors.

In a 2009 survey of National Association of Electrical Distributors (NAED) members, respondents were asked to describe the end users of their energy management products and services (see Figure 1). The majority of respondents sold to industrial (78.8%) and commercial office (74.1%) customers. A significant number of responses (43.5%) also identified retailers as an end user.³

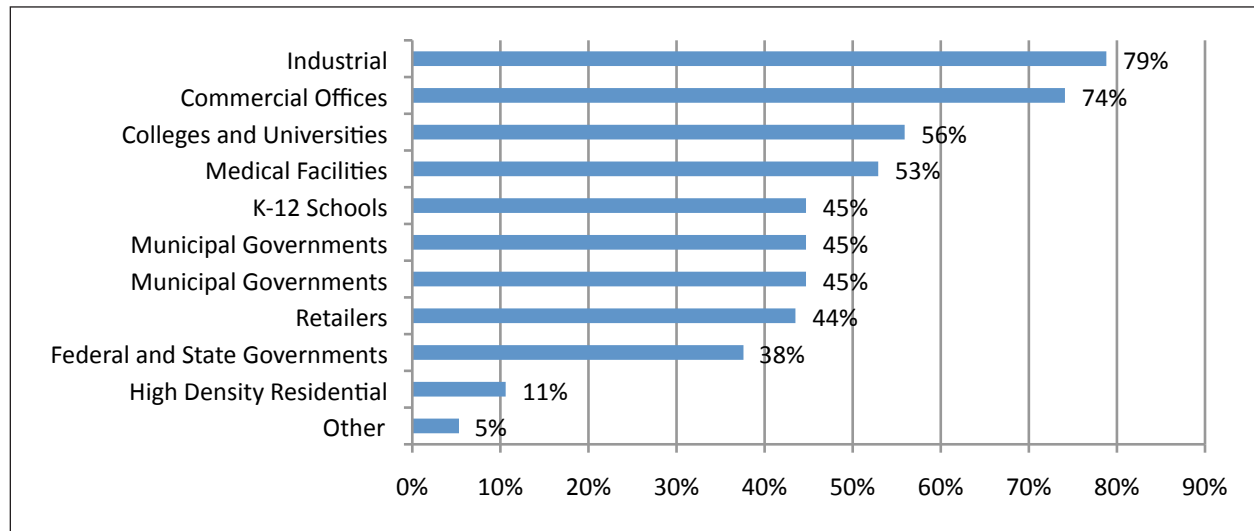
Since distributors already have relationships within this market, this may be an area to focus on for growth.

“It can be estimated that energy retrofit market for commercial buildings is worth approximately \$6.9 to 23.1 billion dollars annually.”

For More Information

>> Refer to NAED’s *Selling Energy Management Solutions* case study series on TEDGreenRoom.com to learn about institutional and government end users.

Figure 1: In a 2009 NAED Survey, distributor respondents checked all customer segments that are buying energy management solutions:*

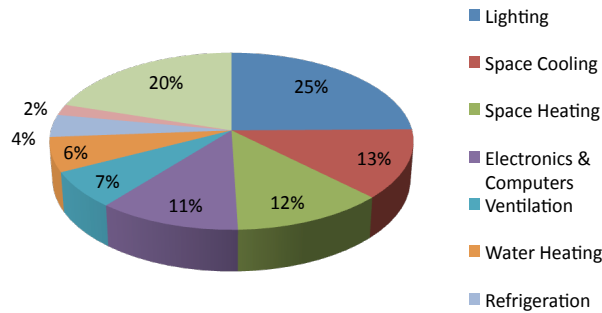


* Respondents were asked to check every end user category they sold to, so response frequencies exceed 100.

Commercial Building Energy Use

Commercial buildings use about 18% of the energy produced in the U.S., while industry uses another 32%.⁴ Lighting is the largest end use of energy in commercial buildings, as illustrated in Figure 2.

Figure 2: Commercial Energy End Uses.⁵



*Includes service stations, telecommunications, and medical equipment, ATMs, pumps, emergency electric generators, plus combined heat and power and manufacturing performed in commercial buildings.

Did you know?

T12 lamps still account for the majority of lamps in use today (about 900 million lamps). As a result, major retrofit opportunities exist for distributors in supplying T8 and T5 lamps to these facilities.⁶

Because lighting is the largest energy end use in commercial buildings, it is also the prime target for energy reductions. This coincides nicely with the fact that fluorescent lamps are the mainstay of energy-efficient lighting sales for electrical distributors and manufacturers.

According to the National Association of Electrical and Medical Imaging Equipment Manufacturers (NEMA), fluorescent sales made up 26% of the \$2.9 Billion U.S. lamp market in 2007.⁷

For More Information

➤ Check out NAED's *Services & Solutions to Help Customers Go Green* white paper at TEDGreenRoom.com to access more detailed figures on fluorescent lamp sales.

Motivating Factors

Many factors are driving the energy management investments in commercial buildings, including government incentives, sustainability initiatives, increased rental value, and energy savings.

Tax Deductions

Tax deductions continue to be an important force for energy-efficiency investments. The Energy Policy Act (EPAAct) of 2005 will continue to be a major influence on energy management decisions by commercial building owners and managers because the American Recovery and Reinvestment Act (ARRA) largely focuses energy efficient spending on institutional and residential buildings.

EPAAct allows businesses to apply for federal tax deductions for new or renovated buildings that save 50% or more on projected annual energy costs compared to the American Society of Heating, Refrigerating and Air-Conditioning Engineers ([ASHRAE 90.1-2001](#)) standard. Partial deductions are also available.

Energy cost reductions are typically achieved through lighting and HVAC retrofits. The maximum deduction is capped at \$1.80 per sq. ft. EPAAct also allows businesses and individuals to apply for a 30% tax credit on the cost of solar, small wind, and geothermal heat pump renewable energy systems.⁸

Energy Audits and Commissioning

To make larger energy management solutions sales, distributors have to go beyond the low hanging fruit of lighting. Energy audits and commissioning are the main methods for examining whole building energy reduction opportunities.

Energy audits and commissioning also happen to be major prerequisites in the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) rating systems for New Construction (LEED-NC) and Existing Buildings: Operations & Maintenance (LEED-EBOM).

Did you know?

The LEED rating systems and ENERGY STAR® Portfolio Manager have become popular in the commercial building sector as third party verification of energy efficiency and sustainability. According to the U.S. Green Building Council, 25,460 projects (cumulative total) have registered for LEED certification as of August 2009.

The Environmental Protection Agency's ENERGY STAR® Portfolio Manager is another means to establish a baseline for a building's energy performance and measuring the effectiveness of energy improvements.⁹

Adam Rose, a Property Manager with international real estate firm, Hines, expanded on the importance LEED certification has as a way to differentiate a commercial building and increase its value:¹⁰

"We believe a Class A building in the future is going to be defined by LEED. You're not going to have a Class A building that is not a LEED building at some point down the road. We wanted to be the first to take that step and show our commitment. We did this as a voluntary step forward in doing the right thing and showing that we are walking the walk," said Rose. "Additionally, we firmly believe that LEED certification will increase the tenant satisfaction. It will allow us to garner higher rents, stay at a higher occupancy, and hopefully raise the value of the building."

Energy Savings

Energy savings still tend to be the main driver for energy management investments by commercial building owners and managers. Gary Thomas, Sustainability Director of CB Richard Ellis, feels that most projects derive their savings and paybacks from the retro-commissioning and ASHRAE Level 2 energy audit requirements in LEED-EBOM (see box at right).

RETRO-COMMISSIONING:

A process that identifies low-cost operational and maintenance improvements in existing buildings. It typically focuses on mechanical equipment, lighting, and related controls.

Q & A

WHY ARE BUILDING OWNERS INTERESTED IN LEED-EBOM CERTIFICATION?

"Owners in general are motivated by perceived value and market differentiation. There is the perception that a LEED-EBOM-certified building will maintain a higher occupancy and have higher rental rates than other buildings. There's also an understanding that, once buildings start trading again, the sales price of a LEED-EBOM certified building will be higher."¹¹

"An additional motivator for energy-efficient buildings is related to tenant requests. Potential tenants' RFPs are starting to include questions to determine if a building has instituted green practices or if it's LEED-certified. In most major markets, only 5 to 10% of the tenants might looking for energy-efficient space right now, but as this market evolves and as tenants' education about green building practices and benefits grows, our clients believe that those requests will grow."

—Gary Thomas, Sustainability Director of CB Richard Ellis, a large commercial property management company

Rick Pospisil is director of facilities for USAA Realty's FBI facility in Chicago, which is part of a national portfolio of approximately 65 million square feet. Continuous improvement efforts, under the LEED-EBOM system, increased the building's ENERGY STAR® score from 78 to 95.

Pospisil provided some insight on the costs and benefits of third party energy performance certification.¹² He said, "Changes made within the building, to increase efficiency and reduce costs, realized a net savings of \$0.25 per sq. ft. In short, we saved more than we spent. This includes costs for (LEED) certification and consulting, and making water conservation changes, like adding aerators, changing irrigation and landscaping."

Pospisil continued, “Taking this a step further, a \$0.25 per sq. ft. net savings with an 8% cap rate, creates a potential positive impact on the asset value of \$1,568,225 with an 833% internal rate of return and a net present value of \$485,855.”

These leading property and facility managers know that energy management improvements—and third party verification of those improvements—save money and increase a building’s value. Buildings that are on the cutting edge of efficiency stand out in the commercial market and are better at attracting and retaining tenants.

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—Rick Pospisil,
USAA Realty

Sales Approach

While property management professionals are convinced of the value in energy management investments, many commercial building owners need to understand the business case for energy retrofits.

Speak the Language of the CFO

For distributors who want to secure energy management sales, it’s important to speak the language of Chief Financial Officers (CFOs) and get project proposals in front of these key decision makers.

Doug Borchers, Vice President of Sales & Engineering with Dickman Supply in Ohio, feels strongly about this approach, “Getting to the money guy that makes the decision is essential. Nothing is more effective in making these sales than speaking directly with the owner or CFO.”¹³

Borchers continued, “You also have to be creative enough to make the sale, which includes knowing about the incentives. Potential utility rebates down the

SALES TIP: OFFICE SPACE DIFFERENTIATION

- >> Commercial building owners are making energy management decisions to differentiate their properties in the office space market.
- >> Energy efficient buildings, especially those with third party certification like ENERGY STAR® or LEED, have higher resale values and attract and retain tenants better.

line will help, but currently there are state incentives and federal tax deductions. Through our Green Team, we’ve put together all sorts of information, including developing a PowerPoint™ presentation for the CFOs. EPAAct information is also included in our literature.”

Promote the Payback

Mike Lindner, Director of Lamps and Energy Management Sales with Eoff Electric Supply in Oregon and Washington, said that the quick payback often surprises CFOs.

“We talk to owners and managers and encourage CFOs to take a look at the proposals. Most of the time they ask ‘Is this for real?’ The payback is so good, it’s almost guaranteed that they’ll do it. They can’t make that kind of return anywhere else. The payback in most cases is 1 ½ to 2 years at the most.”¹⁴

PAYBACK PERIOD:

The amount of time it takes for a company to recoup their energy management investments through energy savings.

“Most people don’t realize the energy they are wasting. We save 40 to 50% through these projects daily,” Lindner said. “We suggest they give our other customers so they can find out how we help them can save energy and money. Despite the current economic conditions, we haven’t seen it slow down; they are still investing in energy management solutions.”

Partner with ESCOs

Sometimes it is difficult to speak the CFOs' language and present the business case in their terms. This is where partnerships with Energy Service Companies (ESCOs) can be helpful.

Bruce Ryman, National Sales Manager (ESCOs) in OSRAM Sylvania's Industrial/Commercial Channel, said, "ESCOs have a financial value proposition as the core of their business. They are a bridge between the financial world and the electrical products world. As a result, they are able to sell from a financial perspective. Most of them excel at speaking in financial terms, the same language as CFOs."¹⁵

Ryman continued, "Each sales situation is different. However, one common thread is that ESCOs excel at reaching the financial decision makers and often pull their distributor partner along with them. Since the decision makers for these projects are not often the same as the decision makers for MRO purchases, meeting that financial buyer can only open more doors for the distributor in the future."

For More Information

>> Refer to NAED's Selling Energy Management Solutions case study on Utility and ESCO partnerships at TEDGreenRoom.com to learn more about partnering with ESCOs.

SUCCESSFUL ENERGY MANAGEMENT PROJECT PROPOSAL ELEMENTS

An energy management project proposal must be relevant to the executive suite, especially the CFO; it has to speak their language. Successful sales tactics should show how the project will improve the business by reducing operating costs and increasing positive cash flow.

Proposals should outline:

- >> Payback time
- >> Return on investment
- >> Applicable energy efficiency incentives
- >> Savings on operating costs

Endnotes

- ¹ http://buildingsdatabook.eren.doe.gov/docs/xls_pdf/3.2.1.pdf accessed June 17, 2009.
- ² McGraw-Hill Construction, "Construction Outlook 2009", available at: http://construction.ecnext.com/coms2/summary_0249-295230_ITM_analytics
- ³ NAED Selling Energy Management Solutions Survey, administered between 12/29/2008 and 2/27/2009 by Yudelson Associates.
- ⁴ <http://buildingsdatabook.eren.doe.gov/TableView.aspx?table=1.1.3> accessed May 11, 2009.
- ⁵ <http://buildingsdatabook.eren.doe.gov/TableView.aspx?table=3.1.10> accessed May 11, 2009.
- ⁶ Hoffman and Wisniewski, "Business Opportunities in the Commercial Lighting Arena: High-performance T8s light the way for savings opportunities on new and existing construction projects," Consortium for Energy Efficiency, April 1, 2008.
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- ⁸ <http://www.lightingtaxdeduction.org/f1.html> accessed June 16, 2009.
- ⁹ ENERGY STAR® data provided by Enesta Jones, EPA press office.
- ¹⁰ Personal interview with Adam Rose, April 2009.
- ¹¹ Personal interview with Gary Thomas, CBRE, April 2009.
- ¹² Personal interview with Rick Pospisil, via email, April 2009.

- ¹³ Personal interview with Doug Borchers, January 29, 2009.
- ¹⁴ Personal interview with Mike Lindner, January 13, 2009.
- ¹⁵ Personal interview with Bruce Ryman, July 17, 2009.

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