

[BUILDING GREEN]



Reflective metal roofing qualifies for utility incentives. For example, Florida Power & Light's Business Building Envelope Program offers up to 45 cents per square foot of reflective roofing.

GETTING PAID

UTILITIES OFFER INCENTIVES FOR GREEN BUILDING IN THE COMMERCIAL SECTOR

BY JEFF STEPHENS

WITH TODAY'S CHALLENGING business climate, building owners and managers must examine all program areas to reduce operating costs. Poorly insulated roofs, inefficient lighting or overworked HVAC equipment result in higher energy use and money diverted away from core business practices. Implementing select green-building techniques, including building-envelope improvements and energy-saving features, can help businesses reduce energy costs.

Because it is easier for utilities to reduce customers' energy use than build new power

plants, financial incentives to go green abound. Luckily, information about utility and government rebates and incentives are well organized and easily accessible.

FINANCIAL INCENTIVE PROGRAMS

There are a wide range of financial incentives for saving energy, including corporate-, property- and sales-tax incentives, as well as rebates and grants. Rebate programs are offered at the state, local and utility levels to promote the installation of renewable energy and ultra-efficient equipment. For a building owner or property manager with a portfolio of properties across multiple states and utilities, getting started can be daunting.

The Database of State Incentives for

Renewables & Efficiency, or DSIRE, provides a wealth of information to business owners on its Web site, www.dsireusa.org. A joint project of the Raleigh-based North Carolina Solar Center and the Latham, New York-based Interstate Renewable Energy Council, the DSIRE Web site is updated each week with new programs and the verification of or changes to existing pro-

grams. Incentive programs vary considerably among states and between investor-owned and municipal power agencies.

INVESTOR-OWNED UTILITY PROGRAMS

According to Steven Rosenstock, P.E., manager of energy solutions for the Washington, D.C.-based Edison Electric Institute, an association of shareholder-owned electric compa-

nies, California has been the grandfather of energy-incentive programs. All three investor-owned utilities, including San Francisco-based Pacific Gas and Electric, Rosemead-based Southern California Edison, and San Diego Gas & Electric Co., offer valuable programs to reduce business energy use.

Leaders across the country include Commonwealth Edison, Chicago; Florida Power and Light, Miami; PacifiCorp, Portland, Ore.; Puget Sound Energy, Bellevue, Wash.; and Xcel Energy, Minneapolis. Nationwide, approximately 30 to 40 percent of rebate programs within investor-owned utilities target commercial customers with an equal mix of new businesses and existing facilities.

Kathy Schmitt, P.E., program manager for Florida Power & Light, indicates FPL offers several programs designed to save energy at the commercial-building level. The Business Building Envelope Program helps customers save energy and money by providing

Many utilities across the country offer solar incentives to their business customers. Some programs, like the California Solar Initiative, offer cash incentives for solar power systems; the current incentive is \$2.50 per watt.

incentives for adding or installing reflective roof systems; roof and ceiling insulation; and window treatments, like solar film, solar screens or high-efficiency window replacements. The utility offers up to 45 cents per square foot of reflective roofing or 5 to 15 cents per square foot of insulation installed over the air-conditioned space of an existing building. The Business Building Envelope Program has a 2008 budget of approximately \$3.2 million.

MUNICIPAL UTILITIES

According to Nick Braden, director of



California energy managers have created the Savings By Design program to encourage high-performance nonresidential building design and construction. Metal roofing easily can be a component of a high-performance building.

Options.

DRY JOINTS
UP TO 12"



Envelope 2000® RS
'RainScreen' System

CODE
APPROVED



Envelope 2000® RR
'Rout & Return' System

BATTEN &
REVEAL



Envelope 2000® RV
'Reveal' System

Envelope2000®

Code tested, Metal Composite Material (MCM) available in a variety of finishes and attachments.



CITADEL
ARCHITECTURAL PRODUCTS

Call (800) 446-8828 or
visit www.citadelap.com

circle no. 79 or <http://metalmag.hotims.com>

[BUILDING GREEN]



Utility and federal tax incentives can cover up to 60 percent of the total cost of a solar system.

communications for the Washington-based American Public Power Association, municipal utilities also offer a variety of efficiency and incentive programs to encourage business customers to reduce energy. In California, the Sacramento Municipal Utility District, or SMUD, offers up to 30 percent of the project cost with a maximum of \$50,000 for HVAC replacement projects. To retire inefficient T12 lights, SMUD offers 50 percent of the project cost or up to \$150,000 per effected account.

The Renewable Energy Rebate Program at Colorado Springs Utilities, Colo., supports and encourages customers to install solar-power generating systems; businesses are eligible for a \$3.75 per watt rebate. Combined with federal tax credits for solar, 40 to 60 percent of the total system cost could be covered by rebates and tax credits.

Santa Clara, Calif.-based Silicon Valley Power offers attractive chiller rebates. Many large commercial and industrial businesses have old, inefficient chillers containing ozone-depleting chemicals, such as chlorofluorocarbons, or CFCs. Replacing a 500-ton (454-metric ton) CFC chiller at 0.85 kilowatt per ton efficiency with a 0.46 kW/ton non-CFC chiller can save thousands of dollars every year just on electricity. Utility incentives of \$45 to \$90 per ton for new, efficient units also improve the payback period. Austin Energy in Texas offers rebates of up to \$100,000 for thermal-energy storage

systems that help reduce electricity demand and avoid the need for new power plants by shifting chilled water production for air conditioning to night hours.

SAVINGS BY DESIGN

California energy managers believe that energy-efficient buildings happen by design and have created the Savings By Design program to encourage high-performance, non-residential building design and construction. Sponsored by four of California's largest utilities under the auspices of the Public Utilities Commission, Savings By Design offers building owners design assistance, financial incentives and even design-team incentives. The program features whole-building and systems-type approaches.

GOING SOLAR

Many utilities across the country offer solar incentives to their business customers. Some programs, like the California Solar Initiative, offer cash incentives for solar systems; the current incentive is \$2.50 per watt. Combined with federal tax incentives, incentives can cover up to 50 percent of the total cost of a solar-power system. It is important to note the federal Investment Tax Credit is set to expire at the end of 2008 and the solar industry is lobbying Congress to extend it during this busy election year.

To pursue solar projects, Tobin Booth, president of Blue Oak Energy, Davis, Calif.,

recommends building owners first identify those buildings with the highest electricity rates and then investigate rebate options in those utilities. His company recently helped Sumner, Wash.-based Recreational Equipment Inc. retrofit more than 10 percent of its stores with solar arrays; locations were selected based on current electricity costs, available incentives and rebates, and roof condition.

Rebates alone don't tell the whole story. For example, Colorado has much better rebates than California, but its electricity rates are approximately 30 percent less, making solar projects less financially attractive. According to Booth, one of the most important elements with any solar project is to assess its impact on roof warranties and structural capabilities to avoid delays or hidden costs.

STRATEGIES FOR SUCCESS

Despite the wealth of available information about rebates and incentives, building owners and managers still may face a maze of paperwork and potential delays when applying to individual programs. Andrea Traber, director of green building services for Oakland, Calif.-based KEMA, an energy-consulting firm, recommends that project managers be diligent with utility rebate programs. Because of understaffing or institutional barriers that create endless rounds of paperwork, some programs are better than others. "Don't let staff administering the rebate programs forget about your application; persistence is key to receiving funding in a timely manner," Traber says.

Jeanne Clinton, advisor to the California Public Utilities Commission, San Francisco, adds that implementing energy-efficiency measures sooner rather than later also makes economic sense because some states, such as California, require energy-use benchmarking at the time of property sale or lease.

By using less energy, businesses not only can save money, but also reduce greenhouse-gas emissions and contribute to the fight against climate change. ■

Jeff Stephens is principal of Oakland, Calif.-based Planet Relations, a public-relations consultancy for Earth-minded businesses. He can be reached at jeff@planetrelations.com or (510) 663-4462.

"I've built thousands of aircraft hangars from coast to coast since 1972. If you haven't built one, or want to build them better, you need to get **Everything You Need To Know Before You Build**. It's **FREE** from Erect-A-Tube, the company that makes the only hangar I prefer to build."

Charles Clermont



Don't make a mistake. Go to www.erect-a-tube.com/mm and download your FREE Reference Guide now.

ERECT-A-TUBE

800-624-9219



Name: Charlie Clermont

Owens: C&M Construction, Marshfield, WI

Specialty: Building Aircraft Hangars

Number Built: 2,000 +

Hangar of Choice: Erect-A-Tube

circle no. 80 or <http://metalmag.hotims.com>

Self-Framing Substations: Only at Parkline.



Our unique self-framing metal building system is attractive, durable and maintenance free. The world's largest electrical companies trust us to protect their most valuable equipment. Let us protect yours too.

Phone: 1.800.786.4855

Web: www.parkline.com



Parkline. Small Metal Buildings.

circle no. 81 or <http://metalmag.hotims.com>