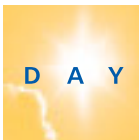


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THE BIMONTHLY NEWSLETTER OF THE DAYLIGHTING COLLABORATIVE

www.daylighting.org

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collaborative®

Thank you to the members who support the Daylighting Collaborative's mission of **lighting every building using the sky:**

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CONTROL SYSTEMS MAKE DAYLIGHTING EFFECTIVE

By Kevin Braley, *Corporate Communications Writer for Orion Energy Systems Inc.*

Lighting buildings using natural daylight provides a wealth of far-reaching, proven benefits. These include higher employee morale, more productive workers with fewer illness, and better visual acuity. An additional group of benefits is the potential to reduce energy use and the resulting reductions in costs and greenhouse gas emissions. But these benefits are only realized if the electric lights in the facility are turned off while the daylight illuminates the facility.

Too often, companies that have installed daylight devices to improve light quality and reduce their energy bills fail to turn off or control their electric lights. The result?: wasted energy and no reduction in energy bills, leaving facility managers scratching their heads wondering why daylighting hasn't lived up to its potential.

Controlling electric lighting in a sprawling facility can be a daunting task. Some facilities have multiple lighting control panels that may be tucked away in a dark and dingy closet. Frequently these control panels are outdated and complicated. And the facility manager may not have any information on how to operate the controls.

Deciding when there is enough daylight available so that the electric lights are not needed is another challenge for facility managers. It is tempting to turn off electric lights as early as possible and keep them off late into the day to reduce costs. But at what point is it too dark to rely solely on daylighting, let alone risk putting employees in harms way?

A SOLUTION

Fortunately for facility managers, there are ambient light sensors that can take this guessing game out of their hands.

The automated, wireless controls available on the market today are designed to automatically turn off lights—all or in part—when there is a preset amount of daylight.

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UPCOMING EVENTS

The Daylighting Collaborative will be at LIGHTFAIR International May 10–11, 2010 at the Las Vegas Convention Center in Las Vegas, Nevada. This two-day conference is followed by the regular LIGHTFAIR Tradeshow and Conference May 12–14, 2010. LIGHTFAIR is the world's largest annual architectural and commercial lighting trade show and conference. If you are planning on attending the trade show, **please visit us at booth #1832**. Visit www.lightfair.com for more information.

DAYLIGHTING COLLABORATIVE MEMBERSHIP

Join the Daylighting Collaborative and connect with the design and construction professionals who need your products and services to deliver sustainable, energy efficient, carbon neutral buildings. Membership will connect you to more than 10,000 highly motivated and qualified customers who are looking for products and technical solutions. Align your organization with an objective, nationally-known resource for design professionals who want to incorporate daylighting into their designs. Contact Peggy Heisch at 608.238.8276 x139 or pheisch@ecw.org for more information.

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Large corporations have embraced daylighting control technology. Companies like Coca-Cola Enterprises, Sysco Foods, MillerCoors and Polo Ralph Lauren have all installed daylighting devices and control technologies that let them rely more on natural daylighting in their facilities—significantly reducing their energy costs.

A Coca-Cola Enterprises facility in Milwaukee, Wisconsin reports that since its tubular daylighting devices were integrated with a wireless control system its electric lights are off for up to 10 hours a day. As a result, Coca-Cola Enterprises has reduced its light-related energy costs by more than \$23,400 every year.

A Polo Ralph Lauren distribution facility in Greensboro, North Carolina is saving more than \$272,000 a year as a result of implementing daylighting with control technology. This facility is reducing its energy consumption by 5.3 million kilowatt-hours every year and will prevent nearly 70,000 tons of carbon dioxide from being emitted into the atmosphere during the life of the technology.

Sysco Food Services installed a daylighting and control system in its Halfmoon, New York facility. Mike Baldwin, director of fleet and facility at this location said the daylighting system has made a difference. "In both the warehouse and the garage, we've noticed a substantial change," Baldwin said. "With the daylight provided by the (tubular daylighting devices), electric lights are seldom needed, further reducing our energy costs."

The Sysco facility is saving \$16,150 a year, displacing 179,363 kilowatt-hours a year, keeping more than 2,350 tons of carbon dioxide from the atmosphere.

DAYLIGHTING AS RENEWABLE ENERGY

The debate over a national Renewable Electricity Standard initially included only technologies that generate electricity—like solar panels and wind turbines. But two U.S. Senators have proposed an amendment to the original RES bill that recognizes direct renewable energy technologies, like tubular daylighting as well. Though they do not generate electricity, they use a renewable resource (sun light) and reduce the use of fossil-fuel-generated electricity. This amendment, if passed, would qualify daylighting technologies for yet-to-be decided financial incentives or tax credits.

Daylighting must be successfully integrated with controls to realize its energy and cost reductions. Recognizing it as a renewable resource will begin to establish it as a credible technology for reducing the environmental impact of our energy use as well. ■

