

HIGH TECH

Staples: Yeah, we've got hybrid lighting technology

The lights inside a Staples retail outlet somewhere on Long Island will soon be powered by a hybrid lighting system developed by the Department of Energy.

But surprisingly, it was a Brookhaven National Laboratory counterpart – Oak Ridge National Laboratory in Tennessee – that gets kudos for creating the system (both BNL and Oak Ridge are DOE facilities).

The exact location of the Staples store has not yet been announced, but it will be among 20 other locations nationwide that will be part of ORNL's Solar Technologies Program. Five sites are already in place and have contributed to beta testing research.

The system works by collecting sunlight into small bundles of optical fibers and is the "ultimate green technology," according to Duncan Earl, co-developer of the method and chief technology officer of Sunlight Direct, which licensed the technology from ORNL.

Earl said his company has already received many inquiries from organizations looking to build Leadership in Energy and Environmental Design-certified buildings. The Staples installation is expected to use a 48-inch-diameter collector and secondary mirror to track sunlight throughout

the day. The sunlight is then focused into 127 optical fibers connected to hybrid light fixtures equipped with diffusion rods similar to fluorescent bulbs.

One collector can power eight to 12 hybrid light fixtures, which can illuminate up to 1,000 square feet, according to ORNL. The system is expected to save about 6,000 kilowatt hours of energy per year in lighting, and another 2,000 in reduced cooling costs due to the lower temperatures generated by the natural sunlight.

Sunlight Direct estimates that hybrid lighting can save 100,000 to 200,000 square foot locations over \$1 million in electric costs over 10 years.

ORNL says that if the project proves successful, 5,000 solar lighting systems could be installed nationally within five years. But first, ORNL said it will work over the next 18 months to reduce the cost of the systems from \$12 per square foot to \$4 per square foot. Then, says ORNL, businesses will realize that the systems will pay for themselves in three to five years.

And in case you were wondering, artificial illumination – a.k.a. standard light bulbs – standby as a backup system for cloudy days and at night.



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SBA podcasts

You know a technology is hip when the U.S. government jumps on the bandwagon, or in this case, on the Information Superhighway.

The U.S. Small Business Administration has gone high-tech and is now offering podcasts for entrepreneurs on a variety of business topics.

- The current list of podcasts includes:
- Is entrepreneurship for you?
- Selecting a business that fits
- Disaster preparedness for business owners
- Financing a small business
- The SBA training network

Each broadcast is under 10 minutes and includes interviews with SBA experts and Service Corps of Retired Executive partners. The SBA has an additional series of podcasts in the works, and said it expects to update its library often.

To download one of the free podcasts, visit www.sba.gov/podcast.

Veni, Vici, Vicon

Digital video manufacturer Vicon Industries Inc. signed a deal with Omaha-based Adesta LLC to deliver high-end video management solutions. The agreement includes the use of Vicon's ViconNet Enterprise-Wide Digital Video

Management Platform, a scalable, open architecture method to monitor remote sites.

So far, Adesta has deployed over 2 million miles of fiber in 70 metro areas, as well as 350 security projects that use video monitoring, and the company said Vicon's offering is a good fit.

In the announcement, Vicon said the global partnership agreement will, "expand each company's ability to deliver custom designed and standardized deployment of high-end digital video solutions to meet the diverse requirements of the government, military, commercial and institutional sectors."

Open competition

Open source fans, including the Long Island PHP Users Group, have a chance to nominate their favorite open source content management system through a contest managed by Packt Publishing. The winning CMS will receive \$5,000 towards future development expenses.

In case you want to try your hand modifying a CMS, Packt is the leading publisher of how-to books on open source software.

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