

SYLVANIA Lighting Services – Manufacturing/Warehouse Retrofit Case Study



Case Study Overview:

- OSRAM SYLVANIA Distribution Centers
- Eastern Distribution Center – Bethlehem, PA
- Midwest Distribution Center – Versailles, KY
- Combined 1 million square feet
- Conversion of HID lamps to T5 fluorescent lamps with motion sensors.
- Combined initial investment: \$639,000

Benefits:

- Savings of over 3 million kWh annually.
- Cost savings of almost \$200,000 annually.
- Average 40% savings for each retrofit.
- Combined EPC Act tax benefit: \$ 191,730
- Combined maintenance savings: \$29,986
- Average payback is less than 2 years.

OSRAM SYLVANIA MAKES CHANGE BEGIN INTERNALLY *Lighting Manufacturer Employs Sustainability in own Facilities*

Danvers, Mass. (March 2008) – North American lighting leader, OSRAM SYLVANIA, has a longstanding reputation for proactive environmental stewardship. Its SYLVANIA Lighting Services recently made lighting upgrades at the company's two distribution centers. The energy-saving re-lamp project proves that when it comes to sustainability, OSRAM SYLVANIA walks the walk.

As much as 50 percent of all electricity consumed in commercial buildings is used for lighting. Installing more efficient lighting technologies and products is a cost-effective strategy for industry, and represents an eco-friendly cause that OSRAM SYLVANIA has championed for more than 25 years. In keeping with the corporate mission to reduce energy consumption at OSRAM SYLVANIA facilities, SYLVANIA Lighting Services recently completed retrofit projects at both the Eastern Distribution Center in Bethlehem, Pennsylvania, and the Midwest Distribution Center in Versailles, Kentucky.

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Both re-lamping efforts involved a complete conversion from HID to fluorescent systems that use motion sensors. For the Eastern Distribution Center, this constitutes the second lighting retrofit since it came on line in March, 1997. “Sustainability and energy conservation has been always a key component for the distribution centers,” confirms Peter van Breda, OSRAM SYLVANIA director of warehousing and logistics.

The Pennsylvania facility’s first retrofit in 2000 involved the removal of 1000-watt HID lamps, replaced by new fixtures fitted with 400-watt HID lighting controlled by motion sensors. The most recent re-lamping installed new T5 fixtures with state-of-the-art motion-senor technology.

In Pennsylvania, six-lamp and 10-lamp T5 fixtures were deployed to replace existing HID fixtures. The project required four weeks to complete.

The Midwest Distribution Center opened in March, 2004. Original lighting featured a smattering of T5 fixtures with the remaining majority comprised of 400watt HID. This year’s retrofit replaced all HID fixtures with T5 fixtures operating with motion sensors. Motion sensors represent a complementary driver in both projects to further improve energy savings. After all, every aisle of both 500,000-square-foot facilities is not typically occupied by employees around-the-clock.

“The key in all of this was to reduce our energy consumption while, at the same time, improving lighting quality—which we defined as both better and more even lighting distribution,” explains van Breda. “The next step in our energy savings efforts will be to install large ceiling fans up to 20 feet in diameter to rotate interior air, which should significantly reduce the use of natural gas for our distribution centers.”

By installing energy-efficient lighting upgrades to both facilities, OSRAM SYLVANIA saved almost 3 million kWh of power. This calculates to eliminating nearly 5 million pounds of CO2 per year and taking 254 cars off the road. “We try to integrate as many green practices into our company as possible,” explains Jennifer Dolin, OSRAM SYLVANIA environmental marketing manager. “Our commitment to sustainability goes well beyond our products; these lighting retrofits are not only great for the company’s electric bill, but are responsible and responsive actions we’re taking to combat the demand for energy.”

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Along with great energy savings, the retrofit renders approximately \$150,000 in savings from operation costs. In comparison to most consumption-reduction strategies, relighting offers a quick and dramatic return on expenditure. According to Frank Ciampa, the account representative for the Pennsylvania facility, the Eastern Distribution Center retrofit will pay for itself in two and a half years. “This project shows that fluorescent T5 technology is a great way for customers to get immediate savings,” says Ciampa. “And because the fluorescent fixtures allow for motion sensors, the savings are likely to be greater than projected, especially considering the volatility of energy prices.”

Lighting upgrades have also been completed at the St. Marys and York, PA, plants; projects that will pay for themselves—in energy savings and federal energy-conservation tax credits—in about 18 months. Similar retrofit proposals at four other plants are either on the drawing board or awaiting approval.

SYLVANIA Lighting Services (SLS) is the industry leader in turnkey energy management programs for interior and exterior lighting systems as well as preventive maintenance programs with over 35 years of experience, the company provides dedicated lighting design capabilities, the best delivery of service, access to new energy-efficient lighting products and a computer-routed national service fleet. SLS offers customer a single point of contact for all of their lighting needs, including recycling. A subsidiary of OSRAM SYLVANIA, SLS is a national company and is headquartered in Danvers, Massachusetts. For more information, please refer to our website at: www.sylvania.com/sls.

