

# PARKING

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## Green Lighting Saves Energy for Parkway Garage

Eneref Institute examines a new energy efficient lighting technology that provides significant energy savings, combined with higher quality lighting.

Parkway, a Philadelphia-based corporation, has nearly 100 parking facilities in the U.S. and Canada, totaling 30,000 parking spaces. Although it's a major player in the parking industry, Parkway is "a little different from most," as COO Paul Ierubino explains. "It's not that we are not players in the parking business, we certainly are," he says, but the company has wider objectives than the typical parking company. Parkway also owns and develops other types of real estate, including apartments, hotels, condominiums and other commercial real estate. Despite Parkway's geographic spread, it has strong ties to its Philadelphia home. Parkway's owners are committed to giving back to the community and developing properties with their surroundings in mind, as they did during a recent lighting project at one of their Philadelphia locations. As Ierubino explains, "We try to do the right thing; it's not just about the money."

Unlike many parking companies, Parkway owns or leases -- not manages -- most of its parking properties. Therefore, most of the savings from energy reduction goes back to Parkway, allowing them to consider upfront renovation costs in balance with long-term savings.

As Ierubino explains, "We are taking

a ten year look at it." Parkway hoped to reduce lighting overhead costs while improving the safety in their facilities.

Parkway had already converted one of its garages and published a Request for Proposal for more conversion projects. GreenTech was the low bidder and was awarded two more conversions. In addition to reduced energy consumption as well as increased illumination, conversions provide additional benefits such as EPA tax credits, which are designed to reward and

offset the costs of energy-efficient renovations in businesses.

GreenTech, a twenty-year-old company, focuses on energy-saving renovations well beyond parking facilities, including schools, hospitals, and government buildings. In Haviland's view, an important factor in the increase in lighting renovations is the advent of new technologies -- like fixtures from LumenOptix that take advantage of the newest innovations in lighting, such as highly efficient aluminium light reflectors.

In the past, companies looking to update their lighting had few options. They could choose an expensive overhaul of their lighting systems, or choose inferior, one-size-fits all fixtures that rarely matched the space and application. LumenOptix pioneered the high-quality retrofit-luminaire customized system that is tailored to the application. Their customized approach, the lighting industry terms



Miro reflector lighting system offers more light and better color rendering at the 12th & Walnut Streets Parkway Parking Garage

“Tailored Lighting”, offers the look of a completely new system yet with the minimal labor and disturbance of a retrofit system. While most low-cost “retrofit kits” are just that, “kits”, what Parkway installed was a retrofit luminaire system that benefited from some of the most energy saving component parts available, such as the Miro Aluminum reflector system. Better reflectors not only offers both more reflectivity – more light – but they also offer more control of the light, putting the light only where it’s needed; something too often overlooked by facility managers.

Energy savings, combined with higher quality lighting, is a strong argument for using a seasoned lighting professional, such as GreenTech. The cost of employing a lighting professional can often pay for itself quickly in energy savings alone. Yet, a study by the Eneref Institute (eneref.org), found that well over 60% of commercial facilities retrofitted their existing lighting without the help of a lighting professional – thereby forfeiting potential efficiency and lighting quality.

According to the Eneref Institute’s research, adding a well-designed reflector in a luminaire, for example, can easily add 25% more efficiency to a fixture. Still, even with the best component parts, the lighting designer still needs to specify the right fixtures.

“It’s not just the reflective material” explains Jay Goodman, CEO of LumenOptix, “it’s the way you design the fixture and facet the Miro reflector to maximize efficiency.”

In the seven parking levels and ramps, GreenTech replaced Parkway’s 100, 175 and 250 watt metal halide fixtures with LumenOptix T8 fluorescent 55-watt garage lighters, cutting the total lighting energy usage by 62%.

The swarm of activity each morning meant that GreenTech needed to be in and out before rush hour began. As Haviland explains, “You can’t shut down spaces--they have to be able to operate,” leaving GreenTech to work around activity in the garage and use minimal workers. “That was the difficult part,” says Haviland, but GreenTech’s experience with garages gave them the necessary foresight.

The results of the renovation matched Parkway’s highest expectations, Ierubino says. “People comment that it seems bright and very safe.”

Equally important, Parkway will use far less kilowatts of electricity, saving close to \$250,000 over the next ten years. As a result, Parkway plans to renovate all of its facilities, including those less than ten years old. ●



This article is an excerpt of the future Eneref report which assesses the impediments to building zero-energy urban communities in the U.S. A companion film documentary, The Eneref Project, will seek to demonstrate to key decision-makers how zero-energy communities can be commercially viable.