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PROGRESSIVEGROCCER

Give Green, Get Green

Eneref Institute examines how light fixtures with specular reflectors reduced energy in Scranton, PA, Gerrity's Supermarkets'

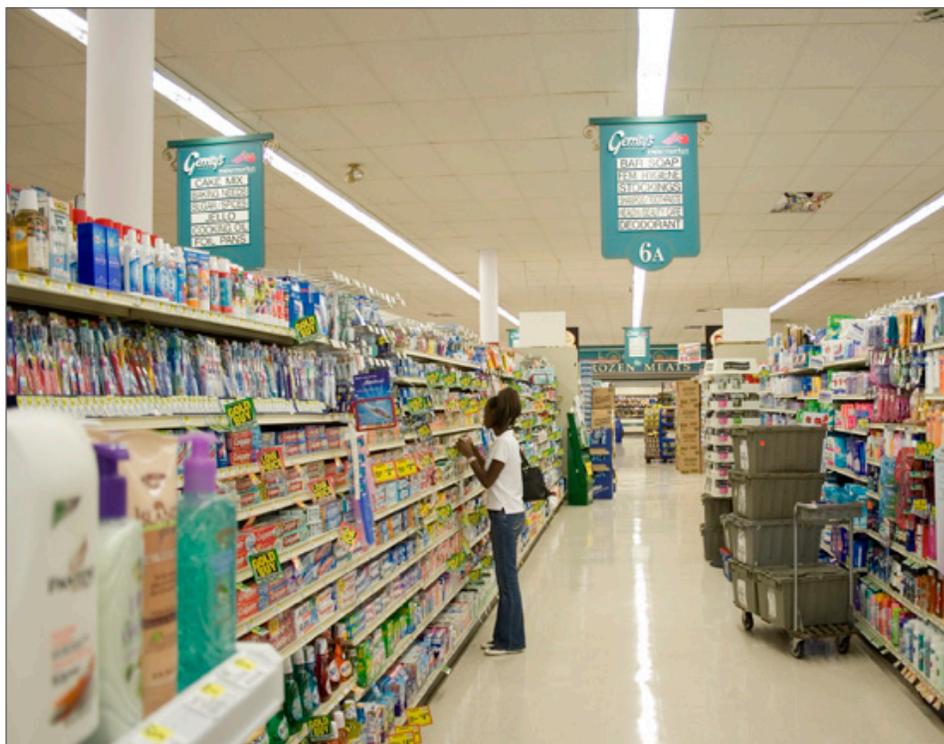
Gerrity's Supermarkets (www.gerritys.com), a family owned chain in northeastern Pennsylvania, was frustrated that increasing energy bills were cutting into margins. When VP Joe Fasula discovered his energy prices were expected to rise even further, he made energy reduction his personal priority.

He determined that the answer to reducing their energy use was to upgrade their old T12 fluorescent lighting system. Not only were the T12s an energy drain, but the problem was also exacerbated by the fact that as the fixtures aged, the light Output depreciated.

The lighting solution came a year ago, when a longtime Gerrity's customer, who happened to be the representative of a Dalton, Pa.-based green building products company called Environmental Build, suggested an energy-saving alternative that used a new reflective material called MIRO. The new lights would both reflect and direct more light to where light was most needed.

Gerrity's was the first supermarket in the United States to install lighting made with MIRO-Micro Matt, an extremely reflective aluminum that makes light fixtures substantially more efficient. In fact, the new system required so much less energy that it

saved over \$35,000 per year, per store in energy, which means a total of over \$2 million in savings over the next 10 years for the company. Add to this the simplified and lower-cost maintenance of the system, and it paid for itself within just 13 months.



The MIRO reflector system offers more light and better color rendering giving Gerrity's shoppers an improved view of product labels.

"We saw a 70 percent to 75 percent reduction in energy use for lighting with the MIRO," Joe Fasula explains.

"So the payback was quick. And the accelerated tax depreciation helped, too. Refrigeration is a big part of the energy. Overall, the energy reduction was probably like 30 percent because of the refrigeration."

The new system was efficient enough to allow for an EPAct tax credit, making it a "triple dip," according to Chris Griffing, president of Environmental Build.

Joe Fasula and his mother, Joyce Fasula, own and operate nine supermarkets in and around Scranton, Pa. Joyce Fasula is the company president and oversees over 400,000 total square feet of retail space. Joe Fasula

is a strong advocate for energy efficiency, especially when it makes economic sense. New lighting was the perfect op-

portunity.

Energy usage dropped even in areas of the stores where light levels increased the demand for energy. Overall, the system produced over 100 foot-candles using far less lumens per watt. In the aisles, the foot-candles generally improved by 20 percent, and in the open areas, such as produce and frozen foods, the foot-candles were up 10 percent. The store appeared much brighter even though the new fixtures used fewer fluorescent bulbs.

Part of the earlier inefficiency was because the original lighting plan no longer matched the products on the selling floor. Over time, gondolas and merchandising displays were moved. Environmental Build redesigned the lighting system to meet the current needs of the store. "MIRO will reflect as

much as 98 percent of the light," notes Griffing. "But the bonus is specularity -its ability to direct the light where it's needed, such as store shelves." He adds that the store's brighter appearance was, in part, a result of MIRO's specularity.

The retrofit project took about one week for each store. All work was done overnight, with no interruption to customer service. Joe Fasula reports a \$38,000 price tag for the installation and fixtures in one of the 45,000square-foot facilities. Maintenance, a profit drain, was reduced as well because, as part of Environmental Build's solution, Gerrity's now needs just one-size fluorescent lamp and one size ballast to stay well stocked.

"We get to save energy for the benefit of the environment, and we get

to save money for the benefit of our customers," says Joe Fasula. ●



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