



LIGHTING THE WAY TO GREENER RETAIL:

A perfect storm has hit the food retail industry but instead of wreaking havoc and causing destruction, this storm has left behind unprecedented cost savings for retailers and new opportunities for them to create brighter, more vibrant displays. Recent activity in this sector, such as the dramatic increase in available utility rebates for LED lighting, a steady rise in electricity costs, and the Obama administration's economic stimulus package with funds earmarked for energy-efficiency projects, means LED is now affordable. A once in a lifetime opportunity has been created that smart food retailers are using to their advantage by upgrading to LED. Since the food retail industry's profit margins are considered relatively low, LED lighting offers a tangible means of reducing operational costs while increasing a retailer's profitability. A shift towards LED lighting within global food retail environments has been occurring due to operational efficiencies, requirements to support green initiatives through sustainability, and the increased merchandising advantages gained by the brighter and more attractive displays.

Stores who have implemented LED lighting in displays have confirmed improvements to their bottom line. The most immediate savings is through a reduction in energy use. Energy use ranks as one of most costly operating expenses for food retail stores.

LED REFRIGERATED DISPLAY CASE LIGHTING:

More than 35 percent of energy use is on refrigeration, with the greatest use occurring in refrigerated display cases, freezers, coolers, and beverage dispensers. Inefficient fluorescent lighting only accelerates this problem with the production of heat equaling a 25 – 50 percent increase in total power consumed. Studies have shown that LED lighting in refrigerated glass door displays can cut energy consumption up to 60 percent.

Frozen food and refrigerated display cases in supermarkets are typically illuminated by fluorescent sources. Although they are reasonably efficient and reliable, fluorescent sources operate best at indoor temperatures of 60 to 80 degrees Fahrenheit. Light output for fluorescent lamps can drop by as much as 60 percent in cold temperatures. LED lighting, on the other hand, performs better as the temperature drops.

LED DISPLAY CASE LIGHTING BENEFITS:

Reduced Energy Costs - Higher energy efficiency and better performance at low temperatures allows LED case lighting to use up to 60 percent less energy than fluorescent systems. Additionally, LED systems emit less heat, which means the refrigeration compressor does not have to work as hard to remove heat as with fluorescent systems.

Improved Product Visibility - LED fixtures efficiently direct the light where it is truly needed, eliminating wasteful light that spills out onto the floor. LEDs are also able to illuminate shelves in a more uniform manner.

Reduced Maintenance Costs - A five-year warranty and an estimated 50,000-hour useful life (significantly longer than fluorescents) can dramatically reduce costs associated with maintenance over the product lifetime.

Better for the Environment - Apart from energy savings and long life, LED lighting contains no mercury. Also, its reduced energy consumption will aid in preventing unnecessary greenhouse gas emissions associated with energy production.

INCENTIVES:

Food retailers, utility companies, and government share a common agenda on many of the issues facing the food retail and energy markets. They are teaming together to mutually benefit each other. These agenda items focus on reducing continuously rising energy costs and wasted energy and driving support for green and sustainability efforts. Today, there are numerous choices available for stores to take advantage of rebates and incentives. Partnering with a local utility-sponsored rebate program can reduce the cost of LED lighting installations and retrofits for retailers by 30 to 50 percent. These are generally available in the form of prescriptive or customized rebates. Prescriptive rebates are energy-efficient product rebates which reward retailers financially upon the product's installation. Customized rebates are tailored individually to each customer and payment is determined by the amount of kilowatts saved. Another area of incentives to consider is corporate exemptions and corporate tax credits. Those who maintain energy-efficient commercial buildings and meet certification requirements can be eligible for corporate exemptions of \$0.30 to \$1.80 per square foot. LED lighting is included as part of the qualifying requirements for participation. Now is an exceptional time for food retailers to invest in LED lighting. LED lighting can lead to both unprecedented cost savings and increased sales opportunities. Store LED lighting installation costs can be reduced through the Obama administration's economic stimulus package programs and the growing availability of generous utility rebates and incentives for LED lighting upgrades. Adoption of this technology in this current ideal, affordable environment will allow retailers to stay ahead of the competition while enjoying the full suite of advantages LED lighting has to offer.