



## PRESS RELEASE

### Wal-Mart Uses GE LED Refrigerated Display Lighting to Save Green

***\$2.6 million energy-cost savings will reduce CO<sub>2</sub> emissions by 35-million pounds annually***

CLEVELAND — Wal-Mart Stores, Inc., will outfit low- and medium-temperature refrigerated display cases in over 500 U.S. stores with a GE ecomagination-certified, light-emitting diode (LED) solution from GELcore, LLC, a GE Consumer & Industrial business (GE).

“The installation of GE’s efficient, long-life LED Refrigerated Display Lighting Solution instead of the incumbent fluorescent technology allows Wal-Mart to aggressively pursue its environmental sustainability goals,” says David Elien, president of GELcore. “This massive application of GE-quality LED technology is another shining example of how green is green.”

In stores where the new GE LED solution will be put to work, Wal-Mart expects to net up to 66 percent energy savings, compared with fluorescent technology. Wal-Mart will employ occupancy sensors and LED dimming capabilities to reduce the time the LED refrigerated display cases are at 100 percent light levels—moving from 24 to approximately 15 hours a day.

“GE is a key ally in our effort to develop and deploy technologies that enhance the performance of our stores,” states Charles Zimmerman, vice president of prototype and new format development at Wal-Mart. “GE’s inventive LED Refrigerated Display Lighting Solution is a strategic tool in Wal-Mart’s pursuit of a 30 percent reduction in energy and 20 percent reduction of greenhouse gas emissions at our stores. These are the kinds of commitments that we’re making to be both an efficient and profitable business, as well as a good steward of the environment.”

The combined environmental impact of a 500-store installation represents an annual 35-million pound reduction of carbon dioxide emissions. It also equals the good that comes from planting over 4,464 acres of trees or removing over 3,143 cars from the road for every year the LED lighting operates in place of fluorescent lighting. Wal-Mart estimates energy cost savings of a 500-store retrofit—one of the top energy-saving initiatives it will pursue in 2007—will exceed \$2.6 million annually.

Wal-Mart reports that subsequent phases of the initiative will be aimed at retrofitting existing refrigerated display cases at many of its worldwide network of 6,689 stores. “We have committed to invest up to \$500 million annually on energy-efficient technologies,” adds Zimmerman. “It’s our hope that one day all our reach-in refrigerated display case lighting will use energy-efficient LEDs.”

**Solution gives retailers more reason to chill with LEDs**

GE engineers and technologists developed the company's LED Refrigerated Display Lighting Solution over a period of years. The company worked closely with retailers and major refrigerated display case and refrigerated display case door manufacturers to design a solution that's widely compatible for retrofit and new installations. Comprehensive and ongoing real world testing conducted by GE optimizes the levels of energy and maintenance savings that retailers will achieve.

"Our sustainability team and senior management recognize the game-changing impact of GE's cutting-edge refrigerated case LED solution," notes Zimmerman. "GE introduced us to its prototype LED refrigerated solution early on. And through discussions among both companies' technology teams and lots of testing, I think we helped GE drive development to where we are now. Our commitment to the application of this GE technology runs deep. We look forward to the day, not too many years down the road, when every retailer will follow our lead in pursuit of greater energy savings and environmental benefits."

To date, GE has over 20 customer installations worldwide. Eight of the top 10 U.S. grocers/supermarkets are testing or using the company's LED Refrigerated Display Lighting Solution. Wal-Mart is the first GELcore customer to roll it out in a widespread application.

"Our collaboration with OEMs and end-users helps us manage the development of every GE LED solution," notes Elien. "We're connected with customers and OEMs not only when it's time to sell, but also when it's time to brainstorm, think big, innovate or drive continuous improvement based on customer needs. We're in this together and our success depends wholly on how we can contribute to the success of customers and OEMs."

Primary benefits of GE's RoHS-compliant, UL-approved LED Refrigerated Display Lighting solution include:

- Improved product visibility with reduced light-source glare on products and floors
- Hidden light source provides better access to products for stockers and consumers
- More robust and better for the environment than fluorescent lamps because it doesn't contain glass or mercury and it doesn't produce UV or infrared light
- Up to 78 percent energy savings compared with VHO fluorescent lamps in a 5-door fixture
- Over two times the life of fluorescent lamps in a cold environment reduces maintenance costs and hassles (50,000 vs. 18,000 hours)

GE's LED Refrigerated Display Lighting solution also saves watts by lessening the load on the compressor. For every light watt reduced in a frozen food case, the compressor works less hard, saving ~ 0.45 watts. On a 5-door case, the additional energy savings from a reduced load on the compressor, can reach 70 watts vs. T8 fluorescent; 134 watts vs. HO fluorescent; and 330 watts vs. VHO fluorescent.

With the GE LED solution, re-lamping cycles can extend beyond five years instead of the 2-year cycle time that is typically associated with fluorescent lamps. It offers a color of ~4800 CCT and color-rendering index of 72.

### **Chain retailers do the math**

GE's LED Refrigerated Display Lighting Solution—and its Tetra® LED signage solutions—appeal to any retailer operating hundreds or thousands of locations. Wal-Mart uses the

Tetra® Power White LED Lighting System from GE for channel letter signage (700 signs installed or retrofit to date).

“Wal-Mart is a leader among retailers, and we think its use of energy-saving GE LED solutions will speed adoption across the entire retail channel,” notes Elien.

In addition to Wal-Mart, well known early adopters of GE LED signage solutions include The Home Depot and Hilton Hotels Corporation.

**About GELcore, LLC**

GELcore, LLC, drives innovation, energy efficiency and cost savings for industries that use LED products, systems and solutions. Fitted with robust, low-voltage, long-life LED light engines, GELcore solutions deliver world-class, GE-grade performance. For more information about GELcore, please visit [www.gelcore.com](http://www.gelcore.com)

###

[Click here to learn more about the GE LED Refrigerated Display Lighting system](#)