



FOOD DISTRIBUTOR DEVELOPS A TASTE FOR ENERGY-EFFICIENT LIGHTING

DPI Northwest stores and delivers 11,000 specialty food items to supermarkets and fine restaurants throughout the Pacific Northwest. Most of the company's domestic and imported cheeses, meats, entrees, salads and bakery items need to be refrigerated or frozen, so more than one-half of the company's 250,000 square-foot warehouse in Tualatin contains industrial refrigeration and freezer space that must be well lit for employee productivity and safety. The company also recognizes that lighting is an opportunity for energy savings.

DPI Northwest identified two main goals for its lighting upgrade project: to reduce energy costs and to improve lighting quality for employees. Energy Trust of Oregon trade ally contractor Pacific Energy Concepts considered the specific requirements of cold conditions when recommending lighting options and products, such as LED fixtures in specific areas would perform well in refrigerator and freezer environments. In addition to improving brightness and visibility throughout the facility, the proposed lighting upgrades would save energy, reduce costs and qualify for incentives from Energy Trust.

“ Workers are telling us the lighting is better inside and out. They can see better and we've noticed that accuracy has improved.

Bob Adams,
vice president of warehouse & transportation
DPI Northwest

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PROJECT-AT-A-GLANCE

Project benefits

- Reduced energy use and costs
- Lower heat output from lighting
- Better task illumination for employees

Equipment installed

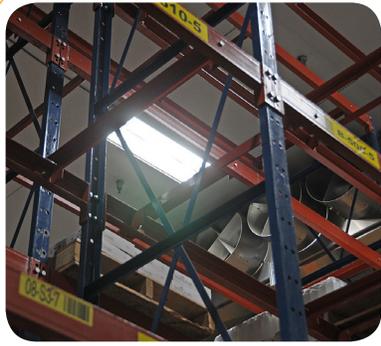
- LED fixtures and lamps
- High-performance T8 fluorescent lamps and fixtures
- Bi-level ballast and fixture controls

Financial analysis

- \$194,000 project cost
- \$113,881 Energy Trust incentive
- \$37,106 estimated annual energy savings

Estimated annual savings

- 536,319 estimated annual kilowatt hour savings



Cool options for cold storage

DPI Northwest planned to focus lighting upgrades in the refrigerator and freezer areas of the facility, with the original plan being to convert from metal halide to energy-efficient fluorescent fixtures. With technical assistance from Pacific Energy Concepts and Energy Trust, the company modified its plans to install LED lighting in the freezers and several exterior areas as well.

“LEDs are more expensive upfront, but they made sense for us,” said Bob Adams, vice president of warehouse and transportation for DPI Northwest. “Because installing new lighting throughout our facility was such a large project, the LED fixtures were a small segment of the total budget, and the payback worked. Plus, the LEDs were the right technology for the freezers because they perform well in a cold environment.”

Unlike fluorescents, LEDs don’t need time to warm up for full output; they provide instantaneous illumination, a convenience and safety bonus. Plus, they are cooler so they don’t add heat to the freezer, which provides additional energy savings. LEDs also penciled out as a replacement for several exterior fixtures on the loading docks, entrances and parking lot poles.

The company installed high-performance T8 fluorescents in the remaining refrigerated and dry storage areas. Many of the LED and fluorescent fixtures included occupancy sensors and wireless controls for additional energy efficiency. The fixtures can be custom programmed to operate according to different

lighting levels, timing options and motion activation, which also saves energy.

DPI Northwest was able to tap into a pilot initiative from Energy Trust to earn additional incentive dollars. The pilot encourages businesses to look at the lighting needs of their facilities more like a new building than a retrofit. “If we start by designing a lighting plan that meets lighting codes and light levels throughout the whole facility, rather than focusing on one-for-one fixture replacements, we can help businesses from leaving a lot of energy savings on the table,” explained Doug Oppedal, Energy Trust lighting specialist. “By looking at it comprehensively, we typically come up with solutions that save more energy more quickly, and have a better rate of return. It’s a better value for the business over time.”

Quality light for quality work

Many of the jobs in the warehouse require reading small print on labels to get the orders packed correctly. The new lighting, both fluorescents and LEDs, were specified for the right brightness, positioned for the best illumination and programmed to work when and where they are needed.

DPI Northwest reports a 12 percent decrease per day in energy consumption. Considering that 90 percent of the building is refrigerated, this decrease as a result of lighting upgrades is significant.



To learn more about energy-efficient lighting opportunities for your business, visit www.energytrust.org or call **1.866.368.7878**.