



PUT REFRIGERATION ENERGY COSTS ON ICE

NEW EQUIPMENT OR UPGRADES CAN HELP YOU SAVE

ENERGY TRUST CAN HELP WITH SOLUTIONS THAT:

- Reduce annual refrigeration energy costs up to 30 percent
- Provide cash incentives
- Extend product shelf life
- Extend equipment life
- Improve temperature control
- Decrease demand on environmental resources

Refrigeration energy costs can greatly reduce the profits of grocery stores, convenience markets and restaurants, accounting for up to 60 percent of total electricity consumption. Recent advances in refrigeration equipment and controls can make it easy to cost-effectively cut energy use by as much as 30 percent or more.

Whether you're interested in retrofitting your existing refrigeration cases or purchasing new equipment, such as product display cases, Energy Trust of Oregon can help. We offer solutions to improve system performance and energy dollar savings.

Watch the energy savings add up

An Energy Trust representative can help you identify the most cost-effective improvements that can save energy and qualify for cash incentives, such as:

Evaporator fan controls and electronically commutated motor (ECM). Fan motors in refrigerated cases, walk-in freezers and coolers operate continuously. Installing evaporator fan controls on a standard efficiency fan motor or replacing the motor with a high-efficiency ECM—that uses approximately half the wattage—can save energy.

LED display case lighting. Replacing fluorescent lighting in refrigerated cases with LED light bars can increase sales by putting your products in brighter, yet cooler, surroundings. LEDs use less energy, put less heat into the case and are built to last up to 50,000 hours, resulting in huge maintenance savings.

Add doors to open refrigerated cases.

Enclosing refrigerated cases can increase energy efficiency and lengthen product shelf life—helping you save money. Since the cool air is contained, you'll also improve customer comfort.

Anti-sweat controls. Some refrigerated case doors have electric anti-sweat heaters that help to dissipate condensation that collects on the inside of the glass. Typically, these are on all the time. Anti-sweat heater controls sense humidity conditions and turn the heaters off when they are not needed.



Floating head pressure controls. Typically, refrigeration compressor systems run at the same fixed rate year-round. During the winter when it is cooler, the outdoor cold air takes the heat away from the condenser at a quicker rate and the system can still perform at a lower pressure. Lowering the pressure saves energy and compressor wear and tear. Installing floating head pressure controls allows the system to take advantage of these varying conditions and can save three to ten percent in energy savings during the cooler months.

Get cash incentives for energy-efficient equipment and improvements

In addition, Energy Trust offers cash incentives for the installation of other qualifying, energy-efficient refrigeration technologies—from motion sensors to strip curtains on your coolers. If our standard incentives don't work for your project, you may still be eligible for custom incentives. We're here to help you reduce your energy costs and make your business more sustainable.



SAVE ENERGY. BRING US IN.

Take control of your refrigeration costs.

Visit www.energytrust.org/BringUsIn,

email existingbuildings@energytrust.org or call **1.866.605.1676**.

Serving customers of Portland General Electric, Pacific Power, NW Natural, Cascade Natural Gas and Avista.

PROJECTS AT A GLANCE

Grocery store operating 7 days a week

Project

- Installed energy management system for building performance tracking and control

Financial analysis

- \$8,500 in project costs
- \$5,100 in cash incentives from Energy Trust
- \$1,800 estimated annual energy cost savings

Estimated annual savings

- 23,200 kilowatt hours

Remodeled large grocery store

Projects

- Added doors to open refrigerated cases
- Upgraded the case lighting to LEDs
- Upgraded reach-in and walk-in cases with EC motors
- Installed floating head and floating suction controls
- Planning to install a heat reclaim system for the compressor racks

Financial analysis

- \$185,000 in project costs
- \$73,900 in cash incentives from Energy Trust
- \$44,800 estimated annual energy cost savings

Estimated annual savings

- 476,400 kilowatt hours
- 9,100 therms

Mid-sized grocery store

Projects

- Floating head/floating suction controls
- Variable frequency drives (VFDs) on condensers
- Oversized condensers with VFDs
- VFDs on commercial kitchen vent hoods
- Anti-sweat heater controls

Financial analysis

- \$138,400 in project costs
- \$32,600 in cash incentives from Energy Trust
- \$12,700 estimated annual energy cost savings

Estimated annual savings

- 146,800 kilowatt hours
- 1,400 therms