

PNM Business Energy Efficiency Program **Convenience/Grocery Store Refrigeration**



Night covers for reach-in refrigerated display cases are shown at Frontier Mart, Corrales, NM.

Why improve energy efficiency?

- 1 Cuts your operating costs and improves profitability.
- 2 Reduces maintenance demands.
- 3 Distinguishes your business as being eco-friendly.
- 4 Allows you to use energy savings to finance business expenses.
- 5 Qualifies you for rebates from PNM.

Refrigeration is Energy Intensive

Grocery and convenience stores have long hours of operation and are open most days of the week. Some equipment is on and running constantly even when the store is closed. Energy costs can add up even more when equipment is old and inefficient.

Refrigeration often comprises 50 percent or more of the electricity costs for grocery and convenience stores. Lighting averages about 20 percent of the energy expense, cooling and ventilation both average about 13 percent. You can reduce these costs by implementing energy-saving strategies.

Time to Upgrade

PNM QuickSaver™ offers rebates to small businesses to lower the cost of upgrading to new energy efficient equipment. The rebate can cover 50 percent or more of refrigeration project costs and shorten your project payback period. Depending on the scope of the project, hours of operation, and the size and type of your business, you could see significant savings.

Refrigeration Equipment Upgrades¹

- Install anti-sweat heater controls on display cases. Instead of running 24/7, these controls sense humidity conditions and turn the heaters off when not needed. Save \$220 per 10 feet of display case each year.
- Replace shade-pole motors with high-efficiency evaporator fan motors in refrigerated cases and walk-in coolers and reduce energy use by 50 percent. Add fan motor controls to slow motor speeds when the compressor is not running and save another 33 percent.

Refrigeration Equipment upgrades (continued)

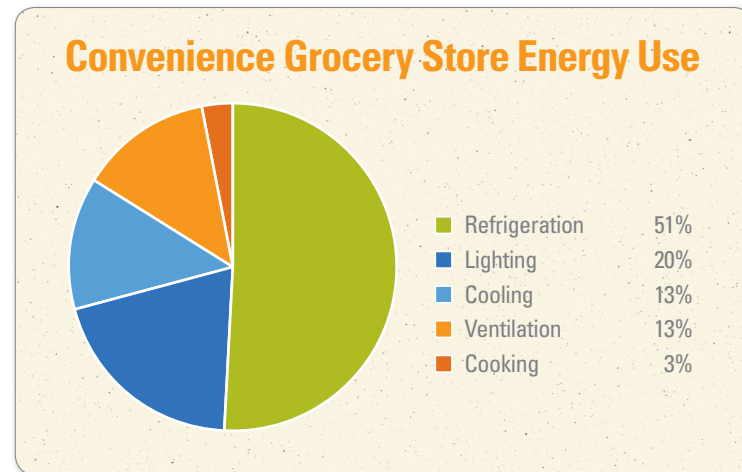
- Add night covers to open display cases to trap refrigerated air and keep food colder. The cover reduces electricity use while they are in place by up to 40 percent.
- Add glass doors to display cases to improve efficiency by 50 percent.
- Easy-to-install strip curtains in the doorways of walk-in boxes reduce air infiltration 75 percent. Incentives of \$3-\$8 per square foot means the payback can be in measured in months.

Refrigerated Display Case Lighting

LEDs thrive in cold environments and perform better than fluorescent lamps which can have reduced light input in cold temperatures.

LEDs in refrigerated display cases are often combined with timers to dim the lights at night when the store is closed.

The PNM Business Energy Efficiency program offers a \$30 rebate for LED refrigeration case lighting per door.



For information on the PNM Business Rebate Program, please visit PNM.com/bizrebates or call Toll Free 877-607-0741

Quick Ways to Save

Occupancy Sensors

Install occupancy sensors in areas that are not consistently occupied such as walk-in refrigerators, storage rooms, back offices, and restrooms to save 30 – 75% of lighting energy. Use dusk to dawn sensors or timers for exterior lighting.

Clean and Maintain Equipment

Clean equipment runs more efficiently. Conduct regular maintenance and replace torn or loose door gaskets to prevent leakage. Check current temperature settings with an accurate thermometer and adjust to manufacturers recommendations. Clean condenser and evaporative coils and recharge low refrigerant.

¹ Cost savings estimate in this section provided by Supermarket Energy Technologies. Calculation based on energy cost of \$0.08 kWh.