



**Commercial Refrigeration
Efficiency Program**

Keep food fresh.
Keep energy affordable.



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Longer product life. Lower bills.

A well operating refrigeration system is critical to the success of your business. It keeps food fresh, beverages chilled and customers satisfied. However, it's also one of your highest energy consumers.

Xcel Energy's Commercial Refrigeration Efficiency program can help you stretch your energy dollar, while also ensuring the highest quality in grocery products and produce.

This guide will walk you through efficient equipment upgrades that can benefit your business and will also highlight available rebates for faster return on investment. Common upgrades include efficient motors, reach-in case door upgrades, case lighting and more.



Do you qualify?

This program is available to customers with a valid Xcel Energy commercial account in our Colorado electric service territory. Call 855-671-5997 to verify eligibility.

Eligibility requirements:

- Rebate items must be installed on the Xcel Energy electric account listed on the application.
- All installed equipment must be new. Used or rebuilt equipment is not eligible for a rebate.
- Equipment must meet specification requirements and be purchased, installed and operating prior to submitting an application for rebate.
- These rebates assume a one-for-one replacement of fixtures (in retrofit situations) that will result in energy savings.
- Rebates cannot exceed 60 percent of the project cost (including equipment and labor). The minimum rebate is \$5.
- A signed application and detailed installation invoice(s) must be submitted to Xcel Energy within 12 months of the invoice date. Invoice(s) submitted must include itemized by quantity, price, manufacturer's make and model numbers, and product codes for each material item and/or original equipment manufacturer (DEM) specification sheets. Please talk with your account manager or call the program team at 1-855-671-5997 for additional date restriction details.
- Equipment must meet the technical requirements listed in the program application.

Follow these simple steps

The Commercial Refrigeration Efficiency program makes participation easy. Follow these steps to get started.



1. Complete on-site assessment

- Receive your direct install equipment for immediate savings.
- Learn about additional savings opportunities.



2. Confirm eligibility

- Confirm rebate amount and eligibility with your energy advisor.
- Confirm equipment specifications meet program requirements with your energy advisor, along with the trade partner or independent contractor of your choice.



3. Install new equipment

- Work with your trade partner or contractor to install the equipment.
- Obtain the equipment invoice and complete application to receive your rebate.



4. Submit application

- Send application and invoice to your energy advisor for processing.



5. Receive your rebate

- Expect your rebate within four to six weeks of approval.

See what you should submit

Use this invoice as an example of what you will need to send in with your application. Invoice(s) submitted must include itemized quantity, price, manufacturer's make and model numbers, and product codes for each material item. A self-installed project will require an additional dated invoice displaying labor costs and a description of the work completed.

Itemized invoices are the key to fast processing of rebate applications. Sending inadequate invoice documentation or incomplete forms will delay the rebate payment.

Acme Refrigeration Sales 123 Main St. Anywhere, USA 11111		Invoice																											
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Do more. Save more. It's that simple.

Looking for more ways to save? Look no further. You can improve operational efficiency through our other available business programs:

- Compressed Air Efficiency
- Cooling Efficiency
- Data Center Efficiency
- Heating Efficiency
- Lighting Efficiency
- Motors and Drives
- Process Efficiency
- Recommissioning
- Small Business Lighting

You can find more details on our website, xcelenergy.com/Business.

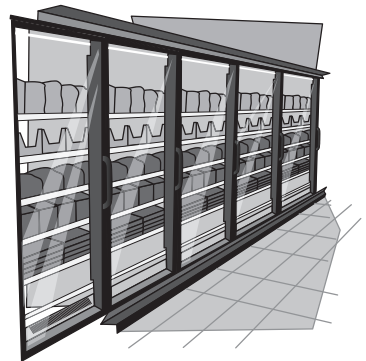
It pays to upgrade



Anti-Sweat Heater Controls

Heaters installed in refrigerated case doors reduce moisture buildup on the glass. These heaters run 24/7, yet they are rarely needed except on hot and humid days. Anti-sweat heater controls regulate these heaters, turning on when the temperature and humidity levels are high (to reduce moisture on the glass) and switching off when they are not needed.

	Rebate Amount*	Estimated Annual Savings**
Anti-Sweat Heater Controls (per door)	\$60	\$60-\$200



Efficient Reach-In Case Doors

No-energy (no-heat) doors reduce the total number of heaters needed and instead use additional insulation and coatings to reduce the moisture buildup. Using no-energy doors also reduce the heat load that is added to the refrigerated cases.

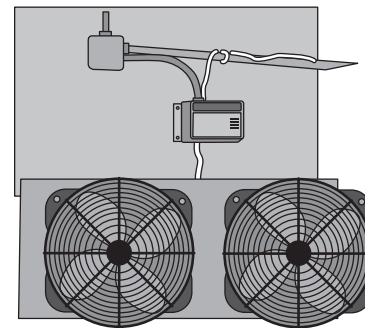
	Rebate Amount*	Estimated Annual Savings**
Efficient Reach-In No-Heat Freezer Case Doors (per door)	\$113	\$50-\$150
Efficient Reach-In No-Heat Cooler Case Doors (per door)	\$113	\$20-120



Reach-in Electronically Commutated Motors (ECM)

ECMs operate at approximately 75-percent efficiency. Because ECM motors create less heat, this results in both motor and refrigeration energy savings. In addition to lowering energy usage, ECMs run quieter, reducing the noise within the case. Improve refrigeration efficiency by replacing standard shaded pole (SP) motors or permanent split capacitor (PSC) on your existing reach-in freezer and reach-in cooler evaporator fans with ECMs. The typical payback for replacing SP motors with ECMs is approximately 1.5 years.

	Rebate Amount*	Estimated Annual Savings**
Low Temp Reach-In Cases (per motor)	\$40	\$50
Medium Temp Reach-In Cases (per motor)	\$40	\$45



Evaporator Fan Motors and Motor Speed Controls

Replace the PSC or SP motors on your existing walk-in freezer and walk-in cooler evaporator fans with ECMs to improve refrigeration efficiency. You can also save on energy consumption by installing speed controls in conjunction with SP, PSC and/or ECM evaporator fan motors in walk-in coolers and freezers.

	Rebate Amount*	Estimated Annual Savings**
Evaporator Fan Motors (per motor)	\$70	\$35-\$250
Motor Speed Controls (per motor)	\$35	\$20-\$45



Night Curtains for Open Coolers

Open, upright refrigerated cases run fans continuously to keep cold air inside the cooler. These fans run throughout the night when the store is closed, causing additional load and heat gain on the cases. Installing night curtains on the cases helps keep the cold air in the case by creating a barrier between the case and the store, maintaining a more consistent product temperature throughout the night. Night curtains can reduce up to 33 percent of a case's energy use.

	Rebate Amount*	Estimated Annual Savings**
Night Curtains for Open Coolers (per linear foot)	\$20	\$15



Replacing Open Multideck Cases with Efficient Reach-In Cases with Doors

Open multideck cases have significant heat gain due to conditioned air infiltration. Often, the air curtains designed to keep cold air within the open multideck case are obstructed due to overstocking. This results in increased operating costs and an overworked compressor. Cases with doors have far lower operating costs, extended compressor lifetimes and increased stocking capacity.

	Rebate Amount*	Estimated Annual Savings**
Replacing Open Multideck Cases with Efficient Reach-In Cases with Doors (per linear foot)	\$70	\$130



Retrofitting Open Multideck Cases with Solid Glass Doors

Install high efficient no-heat doors on your existing open multideck case to improve the case efficiency. Installing doors on your open multideck reduces not only operating costs, but also improved customer comfortability by containing the conditioned air within the case.

	Rebate Amount*	Estimated Annual Savings**
Medium Temp Cooler Case Doors (per linear foot)	\$50	\$95
Low Temp Cooler Case Doors (per linear foot)	\$75	\$285



LED Reach-In Case Lighting

Refrigerated display lights produce heat, causing the refrigeration system to run longer in order to maintain cold temperatures in the case. Replacing the fluorescent lighting with LED lighting reduces the heat generated and also provides a higher quality light on the product. Energy savings typically exceed 50 percent, and the LED lamps last longer than fluorescent lighting. Payback is especially fast in retail applications with long operating hours.

	Rebate Amount*	Estimated Annual Savings**
LED Reach-In Case Doors Lighting (per door)	\$100	\$40

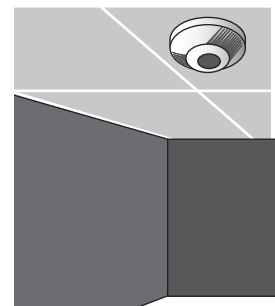
* Rebates are subject to full program eligibility and participation requirements available at xcelenergy.com/Rebates.

** Energy savings figures are based on Xcel Energy rates and technical assumptions for Commercial Refrigeration program efficiency measures.



Your business is unique. Efficiency can be too.

Do you have an energy-saving idea not included in our program? Custom commercial energy-saving refrigeration projects not included in our prescriptive rebate program are still eligible for rebates through our Custom Efficiency program.



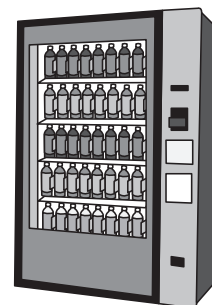
Split system equipment:

- Compressor/Condenser Upgrades
- High Efficient Fan Blades
- Case Light Occupancy Sensors



Split system controls:

- Defrost Controls
- Floating Head Pressure Controls



Self-contained controls

- Beverage Cooler Controls
- Vending Machine Controls

Cost savings snapshot

Based on your assessment, check out the identified opportunities for your business. Not only will you save on your monthly energy bill, but also you'll receive these incentives for your projects.

Equipment Upgrade	Unit Measure	Incentive per unit	Number of units	Total Incentive
Anti-Sweat Heater Controls	Door	\$60		
Efficient Reach-In Case Doors	Door	\$113		
Reach-in Electronically Commutated Motors	Motor	\$40		
Motor Speed Controls	Motor	\$35		
Evaporator Fan Motors	Motor	\$70		
Night Curtains for Open Coolers	Linear Foot	\$20		
Replacing Open Multideck Cases with Efficient Reach-In Cases with Doors	Linear Foot	\$70		
Retrofitting Open Multideck Cases with Solid Glass Doors	Linear Foot	\$50/\$75		
LED Reach-In Case Doors Lighting	Door	\$100		

Look for your full savings report in your email soon to see the savings you already achieved from your assessment.

Notes



Let's talk efficiency

Acronyms and technical terms used throughout our guide are defined below.

Acronyms

- ECM** Electronically Commutated Motor
- LED** Light Emitting Diode
- SP** Shaded Pole
- PSC** Permanent Split Capacitor

Technical terms

Electronically Commutated Motor

A motor that used a permanent magnet design to generate a rotating magnetic field. The rotating magnetic field causes the axle to rotate, spinning the fan.

Light-Emitting Diode (LED)

A semiconductor diode that emits visible light when electricity is applied used in lamps and digital displays. LED is available in a wide variety of colors and lighting fixture types and typically has a much longer-rated life than traditional lighting technologies.

Low Temp

Refrigeration systems storing frozen product with a thermostat set point typically in the ranges of 0°F to -10°F.

Medium Temp

Refrigeration systems storing cooled product with a thermostat set point typically in the ranges of 35°F to 38°F.

No-Heat Doors

A door with anti-condensate heaters with a wattage less than 52 watts per cooler door and less than 54 watts per freezer door.



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