

# COOL DOWN YOUR REFRIGERATION COSTS

SIGN UP FOR A FREE ASSESSMENT

INFORMATION SHEET  
MINNESOTA



Refrigeration can be one of the biggest drivers of energy use in grocery, convenience and liquor stores. Depending on your industry, it can account for more than half of your monthly electricity costs.<sup>1</sup> Our free on-site refrigeration assessment provides our small business customers with a convenient way to identify opportunities for improvements that can generate long-term energy and cost savings.

## Sign up and start saving

It's free. Sign up and we'll schedule our no-obligation assessment at a time that works best for you.

Get advice from experts. An energy advisor will conduct a brief walk-through of the refrigerated areas in your business. They'll provide you with a report that shows you what types of equipment upgrades can have the biggest impact on reducing your refrigeration energy costs, identify rebates you can earn and estimate the annual energy savings you could gain.

Get complimentary, energy-saving products. During the assessment, we'll install energy-saving products of your choice.

Earn rebates on energy-saving improvements. If you decide to move forward with any of the recommended, energy-saving improvements, your energy advisor will fill out and submit your rebate forms.

## Types of businesses that can benefit from an assessment

- Convenience stores
- Liquor stores
- Retail stores with food service
- Grocery stores
- Restaurants
- Schools

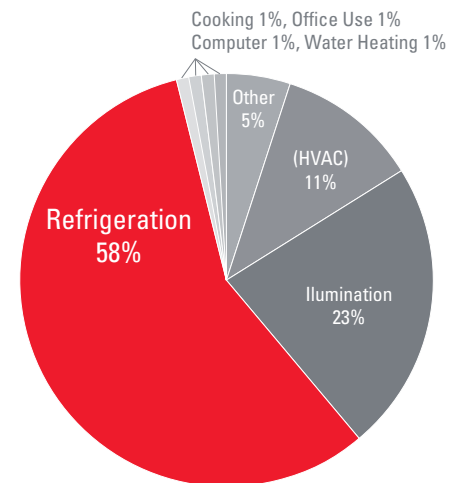
## Free products and services

Gain immediate savings by having energy-efficient products and services provided to you during your assessment at no cost. Depending on your facility, this can include:

**Coil cleaning tune up.** When refrigeration coils are clogged with dust and dirt, they can't release heat efficiently. This causes your compressor to work harder and longer, which can drive up energy use and shorten the life of your equipment. We can conduct a free coil cleaning on your self-contained coolers and freezers, which can help your systems operate more efficiently. The cleaning will only involve brushing and vacuuming of the coils (it is not a solvent-based cleaning, and the units will not need to be emptied or turned off during the cleaning process.)

**Faucet aerators:** Faucet aerators limit water flow and reduce water use. Additionally, because less water is used, they help reduce the amount of energy needed to supply your hot water needs. We can replace standard (2.2 gpm) aerators with low-flow models in your kitchen and restrooms.

## Average grocery store electric energy consumption by end use in the U.S.<sup>1</sup>



Notes: Total electric intensity (kilowatt-hour [kWh] per square foot [ft<sup>2</sup>], annual basis): 50.4; average consumption per building (kWh): 419,038; average enclosed floorspace per building (ft<sup>2</sup>): 8,314.

© E Source: Data from U.S. Energy Information Administration.



<sup>1</sup>E Source: Supermarkets and Grocery Stores, Sector Snapshot, May 21, 2013.

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**LED screw in lamps in refrigerated cases:** LEDs can save money because they use less energy and last longer than more traditional incandescent bulbs. We can replace your existing incandescents in walk-in coolers and freezers with LEDs.

**Pre-rinse sprayers:** Low flow pre-rinse spray valves use less water than older, less efficient models. By reducing your water consumption, the valves also lower the amount of energy needed for your hot water. We can replace your standard (1.6 gpm) sprayers with low-flow models.

### We'll help lower the cost of your energy-saving improvements

Our Commercial Refrigeration program offers rebates for the most common types of refrigeration upgrades, which will help speed up the payback of your energy-saving projects. These are some examples of improvements which could be identified in your assessment report.

Energy-Saving Upgrade and Description	Rebate
<b>Anti-sweat heater controls</b> – Most refrigerated case doors contain heaters to reduce moisture buildup on the glass. These heaters operate 24/7, yet they are only needed in humid conditions to reduce moisture. Anti-sweat heater controls help reduce energy use by regulating these heaters, turning them on when the temperature and humidity levels are high, and switching them off when they are not needed.	\$60/door
<b>Demand control ventilation</b> – Commercial kitchen ventilation hoods with demand controlled capability. Most kitchen exhaust and make-up air fans run at a constant speed to eliminate fumes and smoke from cooking activity. When your cooking activity is low, this can result in wasted energy due to excessive fan speeds and unnecessary levels of make-up air that needs to be conditioned. DCV varies exhaust and make-up air fan speeds based on the level of your cooking activity, resulting in lower energy use while still capturing and expelling unwanted fumes and smoke.	Gas customers: \$250 per exhaust fan hp Electric customers: \$400 lump-sum for all fans under 5hp \$125 per exhaust fan hp for fans equal to or greater than 5hp but less than 7.5hp \$100 per exhaust fan hp for fans 7.5hp and greater
<b>Electronically commutated motors</b> – Reduce your energy load by replacing standard shaded pole motors or permanent split capacitor motors of your existing freezer and cooler evaporator fans with ECMs. They're energy-efficient and create less heat, which can result in both motor and refrigeration energy savings. In addition to lowering energy use, ECMs run quieter, reducing the noise within the case.	\$40/motor display case \$70/motor walk-in
<b>Evaporator fan motor controllers</b> – Save on energy consumption by installing speed controls in conjunction with shaded pole evaporator fan motors in walk-in coolers and freezers. Controllers decrease refrigerator load and save energy by reducing evaporator fan speed when the compressor is either off or not needed.	\$35/motor controlled
<b>LED reach-in case lighting</b> – Refrigerated display lights produce heat, causing the refrigeration system to consume more energy in order to maintain cold temperatures. Replacing your fluorescent lighting with LEDs can reduce the amount of heat generated and also provide a higher quality light. Additionally, LED lamps last longer than fluorescents and the payback can be especially fast in retail applications with long operating hours.	\$45/door (DLC standard and premium models) \$33.75/door (non DLC listed)
<b>New reach-in case with doors</b> – Installing new cooler cases with doors can lower your energy use and costs, and help extend the life of your compressor.	\$70/linear foot of case
<b>Night curtains for coolers</b> – Installing night curtains on the cases helps keep the cold air in the case by creating a barrier between the case and the store.	\$20/linear foot
<b>No heat case doors</b> – Install new freezer or cooler cases with no heat case doors. Made of two to three panes of glass that include a low conductivity filler, these doors keep the outer glass warm and prevent external condensation.	\$100/door cooler case \$150/door freezer case
<b>Retrofit of open multi-deck cases with doors</b> – Retrofitting your existing open multi-deck cases with solid glass doors can improve the case efficiency, reduce operating costs and increase customer comfort by containing chilled air within the case.	\$50/linear foot of case – coolers \$75/linear foot of case – freezers

### Sign up today!

To schedule your free refrigeration assessment, call **612.455.7803** or email [XcelMNRrefrigeration@mncee.org](mailto:XcelMNRrefrigeration@mncee.org). Visit [xcelenergy.com/MNRrefrigeration](http://xcelenergy.com/MNRrefrigeration) to learn more.

CEE implements the MN Commercial Refrigeration program on behalf of Xcel Energy.

