

Smarter Refrigeration Technologies Help Kokopelli Liquors Dial Down Energy Expenses



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> BRAD RUSH. Owner, Kokopelli Liquors

The Situation

In the high desert, western slope town of Grand Junction, Colorado, Kokopelli Liquors was staying busy. With a friendly staff, strong local marketing efforts, and a solid social and digital media presence, business was good in this town of 58,000. But like any small business, they were looking for efficiency savings to reduce their fixed costs which directly affected their bottom line.

Brad Rush, who owns and manages the store, knows that in a town of this size you have a competitive market. Plus, there are the challenges of retaining good employees with healthcare and other benefits. Any savings on monthly expenses can help directly in other areas of business.

At an altitude of 4,500 feet, this semi-arid climate experiences hot summers. Grand Junction has more than two months each year when high temperatures average 90°F or above. In these conditions, any business that depends on refrigeration needs to be aware of their energy use.

The Solution

For starters, Kokopelli Liquors arranged an energy assessment from Xcel Energy's refrigeration consultant Franklin Energy, to see what improvements could be made.

This free Commercial Refrigeration assessment provided energy-saving recommendations and information about how the Xcel Energy Commercial Refrigeration Efficiency program could assist the store.

Brad Rush also discovered that refrigeration can account for up to 60% of a liquor store's monthly energy costs. This also holds true for convenience stores, grocery stores and many restaurants.

FINANCIAL SNAPSHOT	
Project	Replaced old motors with 12 ECMs with controls. Also controlled 22 case doors with anti-sweat heater controls.
Cost	\$6,114
Xcel Energy rebate	\$2,580
Cost after rebate	\$3,534
Annual energy savings from direct- install measures	\$152 (1,129 kWh, 43 Therms)
Annual energy savings from prescriptive measures	\$3,432 (36,302 kWh)
Demand savings	5.3 kW
Payback term	1 year





As part of the Commercial Refrigeration assessment, Franklin Energy visited Kokopelli Liquors to provide complimentary installation of energy-saving products (such as screw-in LEDs and aerators) while also preforming a condenser coil cleaning and tutorial. Brad and his store team also received a report detailing further system improvements that could lower energy use and qualify for prescriptive energy rebates from Xcel Energy.

Once the business decided which additional energy efficiency upgrades were best, they made arrangements with a local installer and the following projects were completed:

 Replaced old motors with more sophisticated ECMs (electronically commutated motors). The existing motors were large, used a 15" fan and required a high input of wattage. That combination created quite a bit of heat in this cold space.

The new ECMs are small, fractional horsepower motors about the size of a softball. Because these motors run nearly 24/7, a reduction in the input wattage really adds up.

Utilized anti-sweat heater controls. These can be used on almost any standard
walk-in cooler with glass doors. They are installed throughout the door and the frame,
usually in three locations. These controls are designed to prevent and dissipate
condensation from occurring on the glass and blocking the customer's view of the
product during particularly humid days.

The anti-sweat heater controls have sensors outside the case, and only cycle these door units on when needed, based on outside air conditions. The technical specifications estimate over a 90% reduction in runtime based upon historical weather data in Colorado.

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For more on Xcel Energy's Commercial Refrigeration Efficiency programs and energy efficiency rebates, please visit xcelenergy.com/CommFridge or call Business Solutions Center at

The Results

For Kokopelli Liquors, energy efficiency upgrades not only resulted in savings with rebates but also with lower monthly electricity use. And that translated to bottom line savings.

Brad was elated with the outcome of the project. "We're not using nearly the amount of energy as a year ago. It's been a noticeable difference, at least \$200 in savings each month."

Brad went on to say, "Xcel Energy inspected the installed efficiency upgrades to make sure the work was done completely and accurately after the project was completed."

He noted that employees were also talking about the project. The water cooler chatter was "the walk-in cooler fans are quieter and the lights are brighter—it's just a better environment to work in."

For Your Business

If you're looking for ways to find efficiency savings for your business, call our refrigeration consultant, Franklin Energy at **1-855-671-5997** and schedule a free (no obligation) refrigeration assessment for your business.

For a full list of equipment that qualifies for a commercial refrigeration efficiency rebate, rebate amounts or to request an application, contact Franklin Energy by calling **1-855-671-5997** or emailing **XcelRefrigeration@franklinenergy.com**.

