

One Business

Energy Conservation Program



Gramma Polo's Bottle Shoppe

Spring 2015

"Minnesota Power has been very helpful through this process. Every time I talk with them, I learn something new."

Tom Romundstad, Co-Owner
Gramma Polo's Bottle Shoppe

"Cheers" to Gramma Polo's for Energy Efficiency

There is a surprising tropical oasis on Minnesota Highway 45 in Scanlon, Minn., complete with a hula-skirted dancer, bottles of coconut rum, and a dog named Marley. Inside the new Gramma Polo's Bottle Shoppe, customers are greeted by a breezy island décor and climate as bright and pleasant as a summer day.

Energy-efficient light emitting diode (LED) lighting and high performance mechanical and refrigeration systems have helped co-owners Jodi Polo and Tom Romundstad achieve this warm, welcoming atmosphere. Minnesota Power's Power of One® Business team was a valuable partner in the effort.

The couple purchased Polo's Liquor Store in 2012 from Jodi's then 90-year-old grandmother, Charlotte, who had operated the business since 1947 on a site next door to the current location. They renamed it Gramma Polo's and had contacted Minnesota Power about energy-efficiency upgrades when Kwik Trip offered to buy and demolish the aging building to build a new convenience store. This gave Tom and Jodi an opportunity to rebuild Gramma Polo's on adjacent land—to very high expectations.

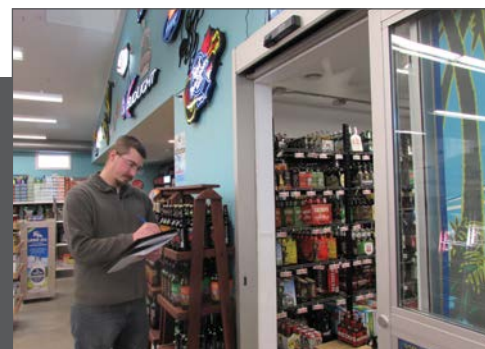
"We wanted to make this the most energy-efficient liquor store in Minnesota or even the Upper Midwest,"

said Romundstad, a former project manager in St. Louis County's Property Management Department, who oversaw many energy-related projects. He and Polo met at the County, where she works in building maintenance, and they share a passion for green, energy-efficient design and construction.

Over the years, Romundstad had worked closely with Minnesota Power's conservation improvement program on energy-efficiency projects. He knew the value of engaging the utility and its program consultants early in the design process for the greatest energy savings and highest rebates.

"They called us in before the first plans were drawn," said Joe Frauenshuh, of Energy Insight, Inc., an energy-efficiency consultant for Minnesota Power's One Business program. "It was important to the owners that they do this right."

Lighting was a major consideration. As a retail liquor store, it was critical to showcase light-sensitive products such as wine and beer without degrading their quality. Energy-efficient LED lighting was installed throughout the store, including inside the "beer cave" walk-in cooler and reach-in



refrigerator cases. Exterior lighting and signs also utilize LED technology.

Another cool feature at Gramma Polo's is an energy recovery ventilator that delivers "free cooling" to the beer cave in winter using outdoor air. This minimizes winter use of rooftop condensers and electronically commutated motor (ECM) evaporator fans in the beer cave. A highspeed automatic door on the beer cave keeps cool air in and warm air out, further reducing the building's heating and cooling load.

Additional energy-efficiency measures include high performance air conditioning units, a furnace with an ECM fan, an on-demand water heater, cycling anti-sweat controls to keep moisture from fogging glass cooler doors, and an ENERGY STAR® qualified ceiling fan.

These choices qualified for more than \$2,500 in rebates from Minnesota Power. They will help Gramma Polo's conserve an estimated 53,000 kWh per year, avoid nearly 12 kW in monthly demand, and save more than \$4,000 in annual energy and maintenance costs.



"There are a lot of great technologies at work in Gramma Polo's," said Craig Kedrowski, lead energy efficiency analyst, Minnesota Power. "The owners tried to take advantage of everything out there to reduce energy."

The building is well insulated and tightly constructed with six inches of underground foam insulation, high-density spray foam in the ceiling and walls, and triple-glazed, low U-factor windows. Cupola windows can be opened for summertime heat ventilation and close automatically when it rains using low voltage motors. Many salvaged products were used in design and construction, including doors, frames, baseboards, shelving, carpeting and ceiling panels. The checkout counter was refurbished from a shop in a Minneapolis strip mall, and the washroom mirror and office desk and chairs were "freebies," diverted from the landfill. Even the store sign was purchased secondhand and retrofitted with LEDs that draw only 120 Watts.

"I don't know how much of this has been done in our neck of the woods, but not many liquor stores are this energy and resource efficient," Polo said.

"There are a lot of great technologies at work in Gramma Polo's. The owners tried to take advantage of everything out there to reduce energy."

Craig Kedrowski, Lead Energy Efficiency Analyst
Minnesota Power

"I don't know how much of this has been done in our neck of the woods, but not many liquor stores are this energy and resource efficient," Polo said.

"For me energy efficiency is more about saving the earth than saving money, but it really strengthens our bottom line," Romundstad said. "It cuts costs, reduces maintenance and makes us a more viable, profitable business."

The Kwik Trip next door has brought new customers to the neighborhood, introducing them to what Tom and Jodi say is the oldest liquor store business in Minnesota that has been continuously owned by the same family.

"A lot of customers come in and really like what we have done," said Polo, petting her dog, Marley, on the head. "That is nice to hear."

"Minnesota Power has been very helpful through this process," Romundstad said. "Every time I talk with them, I learn something new."



For more information:

Take the first steps toward managing energy use and costs at your business. Get started by filling out our free online pre-application at www.mnpower.com/BusinessPreApp

Learn more about Power of One® Business, Minnesota Power's commercial, agricultural and industrial energy conservation program by calling **218-355-2909** or visiting www.mnpower.com/OneBusiness