Canal Park Brewing Company Taps Power of One®

Downing an ice-cold beer at Canal Park Brewing Company in Duluth, Minn., might seem effortless, but it takes a lot of energy to make that frosty ale. That is one reason why folks behind the new restaurant and brewery designed and built the project for optimal energy performance.

The striking brick facility, accented with a gleaming steel silo for malted barley, is a model of energy and resource efficiency, from its light emitting diode (LED) lighting to its innovative brewing system, nicknamed “Gus.” It is a perfect fit for its Lake Superior waterfront location and for the crowd that owners hope to draw.

“Respect for the environment and energy efficiency seem to be part of the craft brew culture, so it made sense for us to be as energy and resource efficient as possible within a budget we could afford,” said Rockie Kavajecz, co-owner of the private, family business. “We did a major environmental cleanup on the entire site before construction began, so that really set the stage.

“Owners expressed an interest in environmental responsibility very early in this project and understood how short-term investments in energy efficiency would lead to long-term gains,” said Elden Lindamood, architect, Wagner Zaun Architects. “That mindset drove many decisions.”

One of those decisions was to contact Minnesota Power’s Power of One® commercial conservation team on the front end of the project. Minnesota Power representatives engaged owners, architects, and electrical engineers in meaningful ways to identify energy-saving opportunities and resources, then determine which ones were the right fit. This led to informed choices that are helping Canal Park Brewing Company achieve its goals for energy efficiency, short- and long-term cost savings, and minimal carbon footprint.

“The rebates made it a lot easier to say yes to LEDs. We also get a long-term return on investment that ultimately helps keep down the price per pint.”

Rockie Kavajecz, Co-owner, Canal Park Brewing Company

“As an architect, being able to say there were rebates available through Minnesota Power made the decision to go with more expensive LED lighting more attractive to owners.”

Elden Lindamood, Architect, Wagner Zaun Architects

Left Side Bar: (top and middle) The bar and restaurant at Canal Park Brewing Company are illuminated with LED lighting designed into unique fixtures and chandeliers. Pictured is bartender Kylie Wahl; (bottom) Brewmaster Badger Colish checks a batch of beer during the energy-intensive brewing process. Above: The new Canal Park Brewing Company building is designed for energy efficiency with features that help the company save nearly 100,000 kWh per year in electric energy.
“Restaurants tend to be very energy intensive, and this was especially true for Canal Park Brewing Company,” said Tyler Barrell, a commercial energy consultant for Minnesota Power. “Its onsite brewery and the number of hours its equipment runs are more like manufacturing, so there was a lot Minnesota Power could offer in terms of incentives to encourage energy efficiency.”

For example, a special promotion that provided enhanced rebates for LEDs significantly lowered the upfront cost of LED lights and fixtures. Originally, the company was considering a mix of halogen, incandescent and metal halide lights. Minnesota Power energy analysts compared cost- and energy-savings of various lighting configurations and calculated potential rebates. The process demonstrated the value of choosing LEDs. It led Canal Park Brewing Company to install LED lighting inside and out—from spotlights, chandeliers and wall packs to exit signs and decorative outdoor lights.

Other energy-efficient choices that qualified the company for more than $7,000 in Minnesota Power rebates included high performance, energy-efficient rooftop air conditioning units with economizers; multiple variable frequency drive (VFD) motors; ENERGY STAR®-qualified kitchen equipment; and a heat-exchange system in the brewery that simultaneously cools beer after boiling so yeast can be added while preheating groundwater for the next batch.

“It eliminates the need for an extra chiller and takes load off the hot water heater at the same time,” said Joe Frauenshuh, a commercial energy consultant for Minnesota Power.

These combined decisions are helping the company save more than 99,000 kWh per year, reduce monthly demand by 11.2 kW, and avoid more than $6,000 per year in electric energy costs.

“Brewing creates a huge energy demand, and anything we can do to mitigate that helps,” said Badger Colish, brewmaster/head brewer, who often tours customers through the brew house. “When I tell people about how our system reclaims water and recaptures heat, you can see the light bulbs go on. They are impressed and excited by what we are doing and want to know more.”

The new facility is creating a buzz in the brewing world, drawing professional brewers from as far away as Colorado and Southern California.

“People are coming from all over the country to see how we built this facility,” Kavajecz said. “Everyone is looking for energy efficiencies, and what we have done is filtering through the brew pub industry.”

“As business operators, we are doing what we can to save energy and lower our carbon footprint,” said Tom Eugenis, general manager. “We talked about it at orientation, and the staff is on board, so there is a real culture developing, and everyone is very proud of what we are doing here.”

Canal Park Brewing Company’s success story is another example of the Power of One® at work for businesses, communities, and the environment. Raise a glass, and spread the word!