

Commercial Bakery Retrofit Creates Fresh Thinking About Energy Efficiency



“Xcel Energy’s EDA program took us beyond electricity and gas to a **broader scope of sustainability options.**”

PAUL CHAN

Bakery Manager, Mile Hi Bakery

Background: Meeting rising expectations

Mile Hi Bakery has been on a 30-year growth spurt with no signs of slowing down. The high-speed bakery produces millions of hamburger buns monthly for customers that included McDonalds, Red Robin and Wendy’s. When they reached operating capacity, management decided a new bakery facility was required to sustain future growth.

Challenge: Considering all the possibilities

Mile Hi started a relationship early on with Xcel Energy by leveraging their Energy Design Assistance (EDA) program to provide an analysis of the entire structure. In collaboration with an energy consulting firm and the design team, a process was mapped out to determine goals and maximize energy savings—savings that were both cost effective for the short-term and the long-term. No energy efficiency idea was considered too small or unusual.

Results: A wide range of cutting-edge solutions were developed

Key energy efficiency tactics included:

- Daylight harvesting with 21 skylights to reduce electric lighting load
- Heat recovery to capture exhaust from the ovens
- An ammonia refrigeration system that offers high-efficiency heat transfer and a lower price point than traditional chlorofluorocarbon (CFC) coolant; plus, this system provides zero ozone depletion potential
- Roofing with solar reflecting materials to reduce the “heat island effect,” which also helped reduce building temperatures during the summer
- Energy-efficient equipment and best-in-class practices that earned LEED Gold-level from the U.S. Building Council

BY THE NUMBERS

Program	Energy Design Assistance
Xcel Energy rebate total	\$426,814
Energy savings	2.8 GWh and 252,330 therms
Annual energy cost savings	\$348,000



“The **wow factors** for us were efficiency, functionality and aesthetics.

Our new level of **production efficiency** made it **much easier** to incorporate a product line expansion.”

PAUL CHAN
Bakery Manager, Mile Hi Bakery

This retrofit also had employee comfort, safety and productivity in mind

To retain top staff, the building was designed to use emerging technologies to increase efficiency along with enhancing occupant comfort. For example, new HVAC technology provides 30% more fresh air than required by ASHRAE 62.1-2007, the American Society of Heating, Refrigerating and Air-Conditioning Engineers professionally accepted standards for indoor environments.

Trash and water savings too!

During the construction process, over 95% of waste material was diverted from landfills, and Mile Hi Bakery uses high-efficiency water faucet fixtures which saves 45,000 gallons of fresh water each year.

The new Gold Standard of green?

With the help of Xcel Energy, Mile Hi Bakery was able to save almost 3 GWh of energy and obtain LEED Gold-certification, making it a prime example of green commercial success. It was worth it because the facility reduced its annual energy and water costs considerably, while having increased the capacity to produce in excess of 35 million dozen hamburger buns on an annual basis. That’s close to half a billion buns!

Learn more about how your business can take a fresh look at energy efficiency for your current or new facility. Call **1-855-839-8862**, email BusinessNewConstruction@xcelenergy.com or visit xcelenergy.com/BusinessNewConstruction.