When construction was approved on Allianz Field, new home of the Minnesota United FC Soccer Team, the Twin Cities soccer community was thrilled. Allianz Field management decided to build energy efficiency, as well as other sustainable measures, into the entire property, to help curb costs for years to come.

“We worked with Mortenson Construction and Populous Architects, who had incorporated sustainability and energy efficiency into their properties for years, including partnering with utilities,” says Justin Borrell, General Manager of Allianz Field. “It just made sense to start off by designing these things into the stadium.”

Saving from the Start
Borrell worked with Xcel Energy’s Energy Design Assistance (EDA) program, which helps with the new construction process by maximizing energy saving opportunities that complement the style and design of the building. Through computerized energy modeling, the program identifies various efficiency measures and their potential costs, payback terms and rebates.

Lighting is always a great place to start. Borrell’s team opted for LED lighting for the stadium’s interior and exterior wherever possible. As a result, the new stadium uses 99 percent LED lighting, including industry-leading LED field lighting. Field bowl lighting created the largest savings, with a whopping 53 percent of the project’s energy savings.

In the winter, they’re able to shut down unused portions of the building, such as the concession stands and restrooms, which significantly reduces their energy costs. A Building Automation System helps them isolate energy use to specific portions of the building in the off-season and control occupancy set-points throughout the year, which also helps control energy use.

(continued...)
“A couple of hours before a game, we’ll switch the setting to ‘occupied’ to make it comfortable for guests,” explains Sam Nolden, Director of Operations at Allianz Field. “Even on non-game days, we can control the temperatures in the suites, restrooms, concessions areas and other unoccupied areas to save energy.

The biggest energy savers implemented include:

• LED lighting on the field, concourse, concessions, team store, commissary and other areas
• Improved glazing
• Machine roomless elevators
• 94% efficiency condensing gas boiler
• 97% water heating efficiency
• ENERGY STAR® commercial kitchen equipment, including ice makers, refrigerators, freezers, ovens, fryers and dishwashers

The energy efficiency measures will save the stadium an estimated $86,000 per year compared to building to code. Those measures also fit perfectly with their overall sustainability goals. Other measures implemented in the stadium include low-flow showerheads and faucets, rainwater collection to water the entire complex, and a panel on the roof that reflects the sun’s heat away from the building in the summer.

New space, new season
The 2019 Loons season opened at Allianz Field and the fans couldn’t have been happier.

“We’ve gotten great reviews from local fans as well as visiting teams,” Borrell says. “We’re excited about the new stadium and all of the energy saving measures we were able to build into it. It’s a first rate facility and we’re doing the right thing for our business and environment. It’s been a great experience.”

If you’re planning a new construction, addition or major renovation project, visit xcelenergy.com/BusinessNewConstruction or call the Business Solutions Center at 855.839.8862.