



South St. Paul Secondary School: a remodel with built-in energy efficiency



A major remodel at South St. Paul Secondary School was the perfect time to revisit the energy systems within the building. No stranger to energy efficiency, Building and Grounds Director Glen Birnstengel had been through more than a dozen efficiency projects with Xcel Energy over the years that qualified for rebates. But this project was by far the biggest.

More projects, more rebates

The project went through a program called Energy Efficient Buildings (EEB), a kind of one-stop shopping program from Xcel Energy that begins during the design phase. Energy consultants recommend measures like more efficient heating and cooling equipment, lighting and other items to ensure energy efficiency throughout the life of the building.

"This program precludes customers from having to apply for every single rebate one at a time," Xcel Energy account manager Al Joe says. "EEB bundles it all up, keeps it simple for them and takes into consideration the entire building."

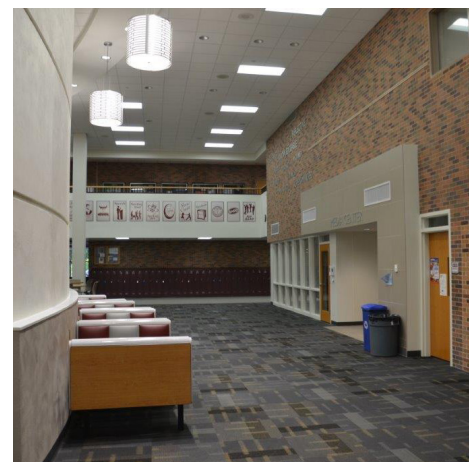
"Working with Al and Xcel Energy is great," Birnstengel says. "We've got it down to a science. The more we do, the easier it gets."

Birnstengel chose to implement a variety of the energy consultant's recommendations that he hadn't considered until he learned about additional savings and payback terms.

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Building and Grounds Director



Project Snapshot	
Project	Implemented a number of energy efficient measures during high school renovation
Estimated project cost	\$184,179.82
Rebate amounts	Electric rebates = \$68,445 Gas rebates = \$7,490
Total annual energy savings	278,358 kWh and 1,100 DTh or \$34,450

Maximizing savings

In all, the following energy efficient items were installed:

- Energy efficient interior lighting
- VFDs on fans and pumps
- Energy recovery ventilators
- ENERGY STAR® freezers
- High-efficiency cooling system
- High-efficiency furnaces and water heater
- Occupancy sensors
- LED exterior lighting

The measures are estimated to save South St. Paul Secondary School 278,358 kilowatt-hours annually, or \$28,450. They also earned them more than \$75,000 in Xcel Energy rebates, or 40 percent of the overall cost. Those measures will continue to save the school energy and money for years to come.

Next steps

Birnstengel says energy efficiency is very important to the district and he's proud of the school's accomplishments.

"Only about two percent of the buildings in the state are more energy efficient than ours," he says.

He currently meets with Joe about once a month and will continue to look for additional ways to save at this building and the others within the district.



For more about the Energy Efficient Business program or any other Xcel Energy rebate or efficiency program, visit [xcelenergy.com/businessnewconstruction](https://www.xcelenergy.com/businessnewconstruction).