



CASE STUDY MINNESOTA

U of M Housing Cooperative Improves Comforts and Cuts Costs with Efficiency Investments

EQUIPMENT UPGRADES AND MAINTENANCE PAID OFF FOR COLLEGE HOUSING DEVELOPMENT



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- Jeff Ciesynski

In a corner of the University of Minnesota campus is a 22-acre housing cooperative for students and their families. Quality care, image and utility management of the family-friendly residential facility is the responsibility of facility manager, Jeff Ciesynski.

For the past seven years, Ciesynski has been finding ways to meet utility needs within a set budget for 58 buildings—all while ensuring comfort and safety for residents.

The age of the buildings and heating equipment all varied, and with them, came its own set of challenges to conserve energy.

"With the lack of temperature controls, I noticed that our renters were opening apartment windows in the dead of winter," Ciesynski says. "The idea of saving money for the cooperative didn't seem possible knowing we had to do something to manage extreme heat loss." Heating equipment efficiency improvements addressed these issues effectively.

FINANCIAL SNAPSHOT	
Total buildings:	58
Total rebates:	\$94,690
Gas Savings	52,107 therms

Connecting the Dots

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When Ciesynski contacted his mechanical contractor to address equipment upgrades and energy controls within his budget, he learned about Xcel Energy's heating rebate programs. Xcel Energy's efficiency specialist in collaboration with CTC's management team, the University of Minnesota, and the mechanical contractor worked on the most cost-effective path for Commonwealth Terrace Cooperative—including services, rebates and expertise.

"Once our funding came through, we really appreciated Xcel Energy's suggestions and help in getting through such a large project," added Ciesynski. "The recommended plan that was implemented reduced therms and budget along with rebates which all helped us see amazing efficiency results."

A combination of measures was implemented over a span of seven years to address heat loss, boiler modulating issues, temperature controls and reliability. The cooperative received numerous rebates from Xcel Energy's Prescriptive and Custom Rebate programs to help offset up-front costs that were then reinvested in the facility.

PROJECT SUMMARY

- 36 boilers replaced with high-efficiency equipment
- Annual boiler tune-ups on all boiler equipment
- Upgraded modulating circulator pumps
- Window replacement and new insulation in nine buildings
- Outdoor air reset controls







Benefits to Residents and the U of M

As a result of efficiency measures taken by Commonwealth Terrace Cooperative, the energy savings realized was recognized by the cooperative residents. "The residents praised us for the improvements and saw the benefit beyond the intrusion during construction," said Ciesynski. "Now we don't see open windows, and residents enjoy greater heating and cooling comfort of their own units."

Ciesynski continues to work with Xcel Energy's energy efficiency specialist dedicated to Commonwealth Terrace Cooperative, Rex Schultrich, who makes recommendations to keep boilers operating as efficiently as possible.

Xcel Energy uses proven engineering methods and assumptions to calculate savings potential of projects for businesses like Commonwealth Terrace Cooperative. Our programs assist our business customers in realizing value and return on investment when taking steps to improve their energy usage. "With seasonal variables such as they are, it becomes very difficult to compare one year's energy use against another, but we can confidently estimate that Commonwealth Terrace would be using far more energy if they had not undertaken the improvements they did".

To engage the services of an Xcel Energy efficiency specialist or learn more about our programs, visit **ResponsibleByNature/Business** or call **1-800-481-4700**.

