

Conservation Converts: Saint John's Cathedral Gets Rebates for Heating Upgrades



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Tara Williams
Director of Finance and Administration

Deferred maintenance

Maintenance needs fall down the priority list due to various circumstances — it happens to the best of buildings everywhere. At Saint John's Cathedral in Denver, a 104 year-old facility built when Denver was no more than a string of mining camps along the Platte river, the maintenance staff faced several issues. They needed to remove asbestos from under the cathedral and address boiler and steam trap problems. The boilers hadn't been touched in years. Mud inside steam traps and water bills that were higher than normal were clear indicators that things weren't operating efficiently. With a packed schedule full of church services, classes in the adjacent school and various activities hosted each week, slowing down wasn't an option.

The first order of business was obvious: begin collecting bids from contractors to get started on the repair process.

A positive learning curve

The Department of Energy reports that heating and cooling can account for half of a building's utility bills. Cathedral staff knew they could be saving money. Through the process of selecting a contractor, Tara Williams, the Cathedral's Director of Finance and Administration and her staff learned that the energy efficiency work they were looking to complete was eligible for Xcel Energy rebates.

"Everyone who gave us bids told us there were dollars available, which helped us move the project up the priority list," says Williams.

Ultimately, they replaced 56 decades old steam traps and added pipe insulation. Both maintenance improvements were eligible for rebates and reduced the amount of energy they were wasting, which in turn reduced their overall usage and lowered their bill. The bonus is that they could now potentially invest the money saved into other efficiency work.



Savings snapshot	
Project	Replace 56 steam traps and add pipe insulation
Estimated project cost	\$22,000
Estimated annual energy savings	25,000 therms
Estimated annual cost savings	\$12,488
Xcel Energy rebate amount	\$8,450 (38% of total cost)
Payback term	Less than 2 years

"Those two steps made a big enough difference that we started thinking holistically about energy efficiency," says Williams.

Williams and her team decided to get an on-site energy assessment performed by Xcel Energy for a more comprehensive approach. An energy advisor conducted an audit of the facility and its energy use, and produced a detailed report including energy conservation opportunities with associated costs, paybacks, savings, and potential rebates.

"The assessment helped us create a priority list," says Williams, "and since the first round of repairs was mitigated by the rebates, it enabled us to do more work than we would have initially."

Williams was impressed with the entire process.

"Our Xcel Energy representative and contractor were so diligent about explaining the process and getting the necessary information to file the rebate paperwork," says Williams. "I was really impressed with the level of customer service."

Maintenance efforts paid off — the cathedral will save 25,000 therms of energy. According to the Environmental Protection Agency's Greenhouse Gas Equivalencies Calculator, that's the equivalent of taking 28 cars off the road.

Rebalancing priorities

Now that they know the benefits of energy efficiency, Williams says they'll be more aggressive with their work.

"We're analyzing our entire system to extend the life of the boiler and make sure we're operating as efficiently as we can," Williams said.

She says the effort to use less energy aligns well with existing green initiatives like composting and recycling to reduce waste, and creating a community garden.

On the efficiency front, they're now looking at upgrading the lighting in office areas and in exit signs, as well as replacing an aging hot water boiler.

"We know the benefits of energy efficiency go beyond financial savings," says Williams. "It's also about being a responsible member of the community by lowering our environmental impact, which is important to us."

Other rebates available through Xcel Energy's Heating Efficiency program include:

- Boiler and furnace installations
- Boiler tune-ups
- Water heaters
- Equipment improvement add ons modular burner controls, outdoor air reset controls and stack dampers

Learn how you can save energy and money with rebates from Xcel Energy.Visit **xcelenergy.com/HeatingEfficiency** or call our Business Solutions Center at **855.839.8862** to receive free energy efficiency advice.



Pipe insulation makes the boiler operate more energy efficiently by allowing the pipes to better retain the hot-water heat.



