Broken Boiler a Blessing in Disguise

A Big Problem
When your 38-year-old boiler dies you really have no choice but to get a new one. The building management company of The Logan Building in downtown Denver had that problem last spring. The boiler was bound to fail sooner or later. But in replacing it, property manager Ryan Dunn of Dunn and Associates realized the boiler wasn't the only problem.

"People complained daily about it being too hot or too cold," said Dunn about the staff working in the 6-story office facility. "The building was constructed in 1969 and for the most part was built very well. But it had most of the original heating and cooling equipment in place and needed some efficiency upgrades. We knew it was time for a more holistic solution."

A Comprehensive Solution
Tolin Mechanical Systems Company helped identify problems such as simultaneous heating and cooling, indoor air quality issues and energy efficiency upgrade opportunities.

"Our comprehensive energy audits identify operational inefficiencies within our customers' facilities," says Dan Gacnik, Energy Services Representative at Tolin Mechanical Systems Company.

Gacnik and his team identified and recommended various energy projects including a new energy management system as detailed in the table below. With the installation of new equipment, Tolin was able to provide additional savings by decreasing the annual maintenance contract and avoiding costly repairs.

Project Summary Totals
• Net Project Cost: $228,656 (After Xcel Rebates)
• Simple Payback: 3.2 yrs
• Return on Investment: 31%

An Obvious Choice
Dunn knew he had to replace his boiler, but now he knew the value in investing in other conservation improvements. He knew the upfront costs and how long it would take to get his money back in energy savings.

The new Energy Management System (EMS) was just one component, but accomplishes several things:
• It automatically controls and increases the efficiency of all major mechanical equipment including boilers, chiller, cooling tower and outside air capabilities.
• It negates the need to run the chiller in the winter. By adding an economizer control, it can utilize outside for cooling and decrease the need for the chiller.
• It allows the chiller to operate at partial load, rather than "100%" or "off."
• Reduces demand for energy use. Because the system isn't on 100% all of the time, it drastically decreases the amount of power used during the day.

Rebate Dollars Help
Tolin considers Xcel Energy as a strategic partner in all of its energy projects implemented within their service territory. "Xcel was a crucial part of this project as their rebates were able to 'buy-down' the cost of the projects which decreased the payback period and increased the return on investment for the customer," says Gacnik.

"The rebates enabled us to make the changes," says Dunn. "The payback term is only a little over three years and our return on our overall investment is 31 percent. The numbers speak for themselves." And one more thing: no one complains about it being too hot or too cold anymore.

The Bottom Line
Xcel Energy works with companies to increase your bottom line and improve energy performance and savings. Contact your Xcel Energy account manager or call the Business Solutions Center at 1-800-481-4700.