

Midwest health system proves low-cost changes can lead to big energy savings

Changes are the first step in being energy independent by 2014

When Gundersen Lutheran Health System set out to reduce energy consumption, they weren't looking for the one to two percent decrease that's common at most healthcare facilities. Instead, the health system aimed to reduce energy consumption by 20 percent or more in less than two years. That's 9,600 metric tons of carbon dioxide annually that's not being released into the environment, the equivalent of removing 1,631 cars from the road. The health system, headquartered in La Crosse, Wis., is on target to achieve their goal through the process of retrocommissioning.

Retrocommissioning examines heating and cooling systems, lighting and employee behavior and uses low-cost or no-cost measures to improve efficiency and reduce energy demand. It's a process that will save Gundersen Lutheran approximately \$800,000 a year and is the first step in the health system's plan to becoming 100 percent energy independent by 2014.

"We knew we had to do something to reverse the trend of rising energy use and energy costs. Our costs were rising by about \$350,000 a year, and unfortunately being passed on to patients in the form of higher healthcare costs," says Jeff Rich the executive director of Efficiency Improvement at Gundersen Lutheran.

Rich and Corey Zarecki, efficiency improvement leader for Gundersen Lutheran, brought a unique perspective on energy to the healthcare system. Before joining Gundersen Lutheran both were engineers at Trane, a manufacturer of heating, ventilating, air conditioning and building management equipment which has production facilities in La Crosse. They knew that in order to reduce energy costs, Gundersen Lutheran first had to identify areas for

improvement. The health system conducted an energy audit in February 2008.

"The audit opened our eyes to the energy saving opportunities that are available at Gundersen Lutheran. The whole idea of retrocommissioning came up as part of that event," explains Zarecki. "We realized there were dozens of no-cost or low-cost measures we could take to improve efficiency and reduce energy demand. Since then, we've been working with Focus On Energy and other outside engineering resources on our retrocommissioning efforts."

The retrocommissioning process began in May 2008, and Gundersen Lutheran began seeing paybacks almost immediately. "Many of the changes were fairly easy fixes. However, some have been more challenging," Rich says. Gundersen Lutheran's campus in La Crosse has some buildings that are more than 100 years old and the operating systems are decades old. That resulted in infrastructure investments for some of the retrocommissioning measures, but the investment payback still averages approximately two years.

"Some of the changes we're making seem obvious, but the way the space is used in buildings over the years has changed," Zarecki comments. "That's why retrocommissioning is important. It takes a look at how the building's needs have changed to make sure your systems are being used in the most energy efficient way."

Through retrocommissioning, Gundersen Lutheran saw a 10 percent decrease in energy consumption by the end of 2008, and expects to see a 20 percent decrease or more by the end of 2009. That's an 8 million kW hour reduction in electricity consumption and 40 million cubic feet reduction in natural gas consumption each year.

"The changes we're making are sustainable and we're seeing paybacks quickly," Rich says. "We're setting an example for other health systems in the country. We're not just talking about reducing energy consumption by 20 percent. We're showing it can be done."

To find out how you can get involved in the green efforts at Gundersen Lutheran Health System, contact Joan Curran, chief Government Relations and External Affairs officer, at (608) 775-1400 or e-mail JLCurran@gundluth.org.

Gundersen Lutheran Health System

- Headquartered in La Crosse, Wis.
- Hospitals and clinics in western Wisconsin, southeastern Minnesota and northeastern Iowa
- Nearly 700 medical, dental and associate staff
- More than 6,000 support staff
- Named among the top 100 in the nation 13 times in the last 11 years