

# University of Minnesota – Residence Hall Lighting Retrofits

## Lights Out

The University of Minnesota housing department knew they had outdated technology in many of their residence halls and wanted to upgrade to more efficient equipment to save energy and money. There was another problem: the old, inefficient T12 fluorescent light fixtures would no longer be available. It was time for a solution.

Energy Management engineer Blaine O’Brien surveyed all eight buildings and took on the task of finding a contractor to handle the job. “The lighting was dim and yellow in a lot of locations and we knew an upgrade would really improve the experience for the residents.”

## The Upgrade

Replacing 7,400 lamped, magnetic ballasted light fixtures with high efficiency T8 lamps in eight residence halls is no small task. O’Brien had worked with Xcel Energy for a couple of years on implementing various efficiency measures and knew he could get a rebate for the work. They determined the cost, rebate and payback period and moved forward.

## Much Better

The lighting retrofit has improved the quality of light provided in the students’ living spaces, study areas, common areas and dining facilities, while saving money and reducing the University’s carbon footprint. The project cost was \$404,000, with a payback of 2.6 years. The University received a \$142,772 rebate from Xcel Energy for the improvements and will save about \$100,000 annually.



## University of Minnesota Residence Hall Lighting Project Snapshot

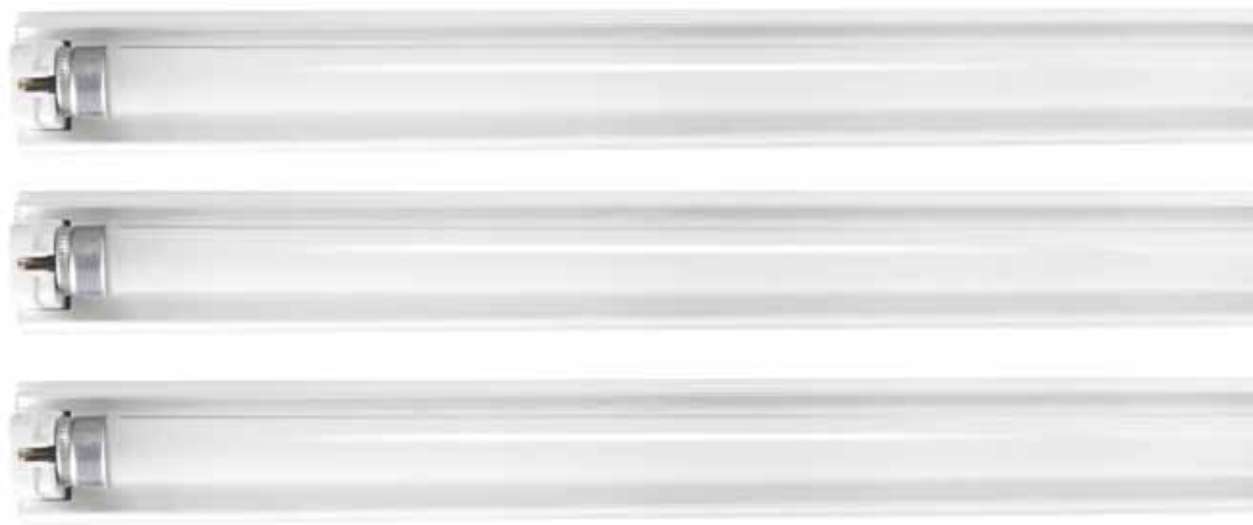
<b>Project</b>	Converted 7,400 fixtures in eight residence halls from T12 and high pressure sodium to 2 and 3-lamp T8 fluorescent fixtures
<b>Cost</b>	\$404,000
<b>Xcel Energy Rebate</b>	\$142,772
<b>Estimated energy savings</b>	\$100,00
<b>Payback</b>	2.6 years

## Bigger Plan

In 2008, the University set a goal to reduce campus energy consumption by five percent, saving \$2.25 million annually and reducing greenhouse gas emissions by 25,000 tons per year. The five percent goal was met in March 2010, approximately three months ahead of schedule, due mostly to an aggressive building recommissioning program.

“Saving 5 percent every year is an aggressive goal,” says O’Brien. “Anything that consumes energy — from lighting to heating and cooling systems to chilled water — is now getting reviewed.”

As of November 1, 2010, efficiency improvements implemented since April 2008 will save the University more than \$3 million annually in energy costs. The Residence Hall Lighting Retrofit is just one example of the hundreds of projects implemented as part of this overall energy efficiency initiative.



For more information, contact your **Xcel Energy Account Manager** or an **Energy Efficiency Specialist** at our **Business Solutions Center** by calling **1-800-481-4700** or emailing [energyefficiency@xcelenergy.com](mailto:energyefficiency@xcelenergy.com).

You can also visit [www.xcelenergy.com/rebates](http://www.xcelenergy.com/rebates)