First Lutheran, Decorah, Installs New Boilers

First Lutheran in Decorah has quietly been going about caring for creation in a big way, cutting their energy bill in half! It's not splashy, it's not showy, in fact you can hardly even see the changes, but First Lutheran has been gradually reducing the amount of energy it takes to heat, cool and light their congregational building, as a way of caring for creation.

Over a period of several years they replaced all of their windows with energy efficient windows, followed by the doors, and then the incandescent lighting with more efficient fluorescent fixtures.

Then an energy audit found that the Church was losing 48% of its heat through the walls and 18% through attic areas due to lack of insulation. In addition, the audit found a significantly oversized all-or-none fired boiler, inefficient steam to hot water converter, and poor zoning.

New Boilers

Using the energy audit data, an energy efficiency and conservation block grant proposal was submitted through the City of Decorah to the Iowa Office of Energy Independence with funding from the American Recovery and Reinvestment Act of 2009. The project was awarded $114,000 to be matched by the congregation. A new 96% efficient hot water condensing boiler system, computerized energy management system, new domestic hot water system, and insulation were installed and have dramatically reduced heating costs and related greenhouse gas emissions.

Energy costs declined 49% in the first year. Since then First Lutheran has invested in subsequent, smaller measures such as continuing to insulate new areas, adding the air conditioning to the energy management system, and adding motion sensors to lighting. To date, total energy use has declined by 39% and carbon emissions by 20% while utilization of the church's space has increased for various ministries.

The congregation gave a very positive response to the capital campaign, being pleased with the improved comfort of

Insulating the outside wall

their church building and the fact that the savings will benefit their free medical clinic and food pantry.

Recently the EPA certified First Lutheran as an Energy Star congregation with a rating of 97, and the ELCA invited them to be a part of the Energy Stewards Initiative.

The Green Team at First Lutheran feels that there are still many steps they can take to reduce energy costs and carbon, and hope to continue their efforts. It is possible the church will install an 8 kW solar array on the roof of the education building in 2014.

Pastor Chad Huebner says, “We are committed to the care of God's creation and are aware that the energy efficiency of our building is a testimony to our commitment to be good stewards of God's gifts. We hope that the work we do on our church property will encourage others in our community to make the same leap of faith.”

Pastor Chad (see photo at left) in front of historic doors that are regularly maintained to keep out the air leaks. There are also storm windows installed over the stained glass windows to increase energy efficiency.

Read more on their website: http://www.firstlutherandecorah.org/?page_id=281
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