Biomass boiler a key part of Gundersen energy independence goal

Gundersen Health System took a major step toward their 100 percent energy independence goal in 2013. That's when their biomass boiler began operation.

Gundersen's boilers were a high user of fossil fuels, consuming much of the natural gas used to create heat for their buildings. When it came time to refurbish or replace their aging boilers, Gundersen looked at all of their options and selected a biomass boiler.

How the project works

Healthcare organizations use boilers year-round. The boilers create steam that is used to heat buildings in the winter. The steam is also used all year in the laundry and kitchen, as well as to dehumidify the air and sanitize medical equipment.

The biomass boiler uses clean organic wood fuel sources, such as milling or forest residues. These woody biomass products are sourced locally and have no paints, glues or treatments on the wood. The wood product is fed into the system, where it is burned and heats water to create steam used throughout the La Crosse Campus. Gundersen uses state-of-the-art equipment to control emissions.

In addition, the biomass boiler project incorporates a steam turbine. Steam runs through the turbine to produce electricity. That electricity—enough to power about 225 homes a year—is used on-site by Gundersen, further reducing fossil fuel emissions.

The biomass boiler saves Gundersen approximately \$500,000 a year. The project spends about \$650,000 annually for biomass fuel from local mills. These are dollars that are spent in our local communities rather than in other states or nations. The project was supported in part by a Wisconsin Bioenergy Grant.



The biomass boiler project is part of Gundersen Health System's Envision® plan to lead the healthcare industry in environmental stewardship and lower energy costs. Gundersen **Health System is** headquartered in La Crosse, Wis., with hospitals and clinics in Wisconsin, Minnesota and lowa. For more information, call (855) 669-1653 (toll free) or go to gundersenenvision.org.



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