

Biomass Gasification Facility

New Construction & Renovation

Middlebury's biomass gasification facility was conceived as a means to provide a sustainable, local, renewable fuel source for heating, cooling, and electricity for the campus. "Biomass" is the replacement of heating oil with a renewable fuel source; in this case, wood chips. The facility is expected to reduce Middlebury's use of fuel oil by 50%, and is expected to reduce heating costs by as much as 25%. This alternative is also estimated to cut our carbon dioxide output by approximately 40%, helping to achieve the College's carbon reduction goal set for the year 2016.

Construction of the biomass plant began in the spring of 2007 adjacent to the College's existing combined heating and power facility at the Service Building. A portion of the Service Building connecting the two facilities was renovated to provide new office space for our Custodial Services division, and to create a new main entrance to the trades and custodial areas of the Facilities Services department.

It is anticipated that the biomass plant will also provide demonstration and learning opportunities regarding the design, construction, and operation of biomass heat and power technologies for other colleges, municipalities, state government, hospitals, dairy and food processors, and other small to medium enterprises.



Completed:	January 2009
Total Square Footage:	Addition 8,100 sf
	Renovation 4,800 sf
Project Cost:	\$11,900,000
Project Manager:	Tom McGinn
Architect:	CBT Architects, Boston, MA
Construction Manager:	Engelberth Construction, Inc. Colchester, Vermont

[For more on Middlebury's biomass plant.](#)