

University of Montana-Missoula

New Energy Sources

<u>Wind turbine</u>	Educational, and provide electricity. 10 KW expecting it to produce on average 1 KW
<u>Landfill gas</u>	Exploring ways this might be able to provide power to campus, working with Tech, Allied Waste, and NWE to evaluate options.
<u>Cogen</u>	Average of 1.7 MWh per year, 5% of campus electricity usage. Provides electricity at 50% savings
<u>Biodiesel bus</u>	1 bus, 5% Biodiesel
<u>Fuels for Schools</u>	Dillon 400 hp (14,000 lb/hr) boiler, sized for peak load. Out to bid in Jan/Feb – startup Sep 06. (our boilers are almost 6 times larger)

Conservation

<u>SBEP</u>	Almost \$2M in energy conservation bonds funding projects over the past 10 years.
<u>DDC controls</u>	Allows advanced temperature and variable ventilation control to minimize energy consumption while maximizing performance.
<u>GW cooling</u>	Uses well water for air conditioning, 75% energy savings vs conventional cooling
<u>Steam Tunnels</u>	\$6+million LRBP project to replace and install new steam tunnels – will conserve energy by eliminating leaks and provide secure heat source.
<u>Boiler Controls</u>	\$600,000 LRBP project replaced boiler controls – improved efficiency thus reducing amount of gas required to heat campus and reducing costs.
<u>Design standards</u>	Drive the design of new construction and renovation to maximize energy efficiency.
<u>HVAC retrofits</u>	Retrofitting mechanical systems in Chemistry, and Health Sciences. Utilizing energy recovery and variable ventilation control for reduced operating costs.

Gas contract purchasing

Pool together with other state agencies to maximize our purchasing power for natural gas. This allows us to procure competitive gas contracts that individually would not be as attractive.