

sustainability

a report to the board of trustees of the
connecticut state university system

James W. Schmotter, President
May 15, 2008



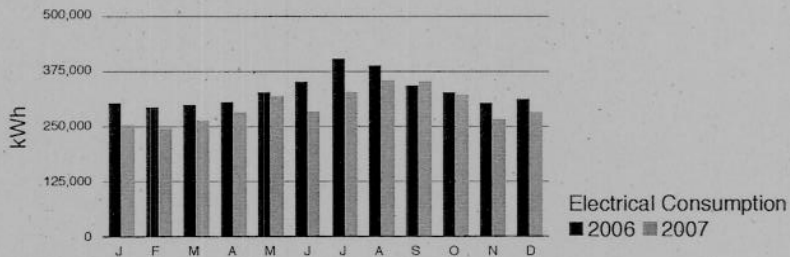
what is
sustainability?

One of the earliest and most quoted definitions is "meeting the needs of the present without compromising the ability of future generations to meet their own needs."

As one of the top five employers in Danbury, with operating expenditures in FY08 totaling \$97.6 million, the choices WCSU makes in balancing planet and prosperity significantly impacts local and regional environments. New initiatives to promote environmental stewardship and sustainable practices are decreasing the impact of the university's footprint on our community.

electrical
consumption

Our Goal: A reduction of 1.5 percent in electrical consumption per square foot/per year. This goal has been exceeded. Implementing conservation and automation improvements and monitoring use in 14 buildings decreased electrical consumption in these buildings by 10.1 percent from 2006 to 2007; a savings of \$64,300. The campus in its entirety was able to reduce consumption by 6.2 percent.



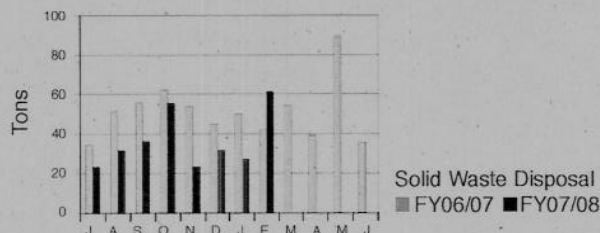
natural gas and
fuel oil consumption

Our Goal: To maintain natural gas and heating oil usage at current levels.

The university is in an enviable position because Midtown campus buildings can be heated by either gas or oil. Each month during the winter gas and oil pricing is reviewed to select the most cost effective option. This combined with automated temperature controls have resulted in significant savings. Heating costs in 2007 were \$45,600 below heating costs in 2006.

solid waste
disposal

In FY06/07 prior to initiating a recycling program, the university disposed of 625.36 tons of trash. The Environmental Protection Agency estimates that up to 60 percent of solid waste is recyclable. With a recycling program now in place, for FY07/08 295.99 tons of trash has been disposed to date. At the current usage rate the university will have reduced trash disposed by 38 percent by the end of the fiscal year.



recycling

The recycling initiative in FY07/08 has recycled 112,000 pounds of paper and cardboard and more than 2,000 pounds of recyclable materials. Recycling has also been used to dispose of:

- 500 pounds of batteries
- 400 pounds of toner cartridges
- 33,149 pounds of used surplus furnishings sent to disaster centers in Latin America

In FY 07/08 these efforts resulted in avoiding \$8,285 in costs associated with renting trash compactors and transferring and disposing trash at transfer stations. Recycling paper and cardboard has also created a new revenue stream for the university.

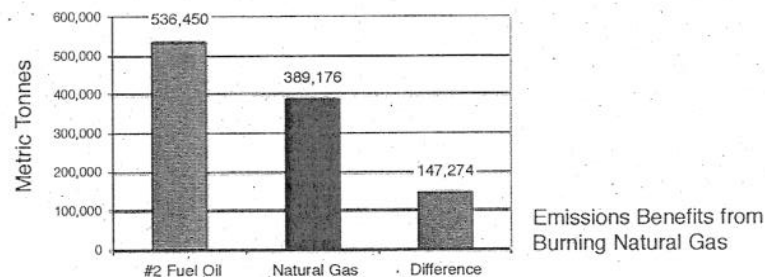
going solar

WCSU has signed agreements with the Connecticut Office of Policy and Management to participate in a passive solar collection system "Beta Test." A unit will be installed on the roof of University Hall and it is projected to provide enough hot water to service all occupants. Results of the test will determine expansion of this technology to other buildings.

climate control
commitment

The American College & University Presidents Climate Commitment was signed by President Schmotter in 2007 pledging to take significant steps to address global warming by reducing the university's greenhouse gas emissions and ultimately reach climate neutrality (zero net greenhouse gas emissions). Our current goals include:

- Development of a campaign to encourage ride sharing.
- Investigation of renewable energy sources such as fuel cells which will allow the university to control energy costs while producing power that is environmentally friendly.
- Mapping our emission footprint. When the sources of emissions are located we will be in position to better plan for control and regulation. Already we factor in the decrease in emissions generated when heating with natural gas over fuel oil. In 2007 the university decreased CO₂ emissions by 147,274 metric tonnes by choosing to heat with gas when prudent.



Emissions Benefits from Burning Natural Gas

green buildings

The three buildings most recently constructed at WCSU were built to the U.S. Green Building Council Leadership in Energy and Environmental Design (LEED) standards: Centennial Hall, the Science Building and the Westside Campus Center. Adopting LEED standards reduces future energy consumption and builds in a way that is more respectful to the environment.

commitment to
nature

WCSU's Westside Nature Preserve is 33 acres of deciduous woodland and wetlands. The primary purpose of the preserve is to set aside a portion of the locally diverse fauna and flora for future generations. The nature preserve boasts seasonal outdoor learning opportunities through active outdoor classrooms and non-traditional self-study throughout the seasons.

energy conservator
awards

WCSU received the prestigious Energy Project Award from the New England chapter of the Association of Energy Engineers in 2008 for our innovative program to monitor energy use and identify opportunities for improved energy efficiency in 14 university buildings.

WCSU received ISO New England's 2005 Demand Response Award for cutting electricity usage by 2.2 megawatts, enough to power roughly 2,200 homes, for one day during a heat wave to allow the consortium that runs the New England energy grid to meet the demand for electricity. Not only does WCSU assist in meeting regional energy demands it also receives payment each month for being on call.