



University at Buffalo Installs ENERGY STAR® Vending Machines Buffalo, New York – Erie County

Background

The New York State Energy and Research Development Authority (NYSERDA)'s **New York Energy Smart**™ Offices Project helped the University at Buffalo, State University of New York (UB), assess energy-efficiency options for vending machines. Vending machines provide significant revenues to the UB Campus, but consume an estimated \$50,000 of electricity each year. Reducing the electric use of the vending machines without impacting product purchases would effectively reduce UB's energy bills and make more funding available for academic programs.

In February 2004, a meeting was set up between the NYSERDA project team and UB staff responsible for managing vending operations at UB. They indicated that the beverage and vending contract would be rebid during the Summer of 2004 and they wanted more information on energy-efficient equipment. The NYSERDA project team, led by PA Government Services, Inc., agreed to assess the various options for the UB campus including the availability of energy-efficient machines, current experience at similar facilities, incremental costs, and potential energy and financial benefits.

NYSERDA project team members summarized the benefits of various retrofit and replacement technologies, and reported on the U.S. Environmental Protection Agency (EPA) ENERGY STAR® Vending Machine specification that went into effect April 2004. They also discussed availability and recent installations with the two leading manufacturers of energy efficient vending technologies. The summary of findings by the project team members included recommendations and an estimate of potential energy savings.

Recommendations

The project team estimated that UB could save between 92,000 and 290,000 kWh per year by replacing 126 vending machines with ENERGY STAR models. The higher end of the range was based on using the most efficient ENERGY STAR model. They recommended that UB:

- specify ENERGY STAR qualified beverage vending machines in upcoming contracts
- test the impact of turning off vending machine lights in some buildings for periods when they are typically unoccupied

Results

As of October 2004, UB had replaced 77 beverage machines with energy-efficient ENERGY STAR machines. These machines will save an estimated 133,000 kWh per year, reducing electricity costs by about \$9,000 annually. UB is also exploring the possibility of retrofitting a number of non-ENERGY STAR machines to produce additional savings.

New York Energy Smart™

All **New York Energy Smart**™ programs are funded by a System Benefits Charge (SBC) paid by electric distribution customers of Central Hudson, Con Edison, NYSEG, Niagara Mohawk, Orange and Rockland, and Rochester Gas and Electric. NYSERDA, a public benefit corporation established by law in 1975, administers SBC funds and programs under an agreement with the Public Service Commission.

New York Energy Smart™ programs are designed to lower electricity costs by encouraging energy efficiency as the State's electric utilities move to competition. The programs are available to electric distribution customers (residential, commercial, institutional, and industrial) who pay into the SBC.

*"Thanks to the NYSERDA-supported **New York Energy Smart**™ Offices team, we were made aware that ENERGY STAR® vending machines were available. The team worked with university staff, encouraging them to specify these more efficient machines in our new vending contract. We resolved some initial problems associated with our on-line vending inventory system but the electric savings made the extra effort worthwhile."*

– Walter Simpson,
UB Energy Officer

