

**State Agency Energy Savings Program
Sam Houston State University
Energy Conservation Plan April 2006 Update**

The State Agency Energy Savings Program provision in RP 49, relating to an electric customer education choice campaign, electric conservation by state agencies, and diversity of energy supply, requires agencies to submit an update of their State Agency Energy Savings Program by April 1, 2006 (extended to April 14, 2006)

I. Update to State Agency Energy Savings Program

- A. The extent to which the agency has met the percentage goal it established for reducing its usage of electricity, gasoline, and natural gas;

For the first five months of FY 2006:

Electrical consumption is up 8.4% from FY 2005

Natural gas consumption is up 22.8% from FY 2005

Unit consumption per square foot (kbtu/sf)(electrical and gas) is 11.9% above FY 2005.

Unit consumption per square foot (kbtu/sf)(electrical and gas) is 6.3% below FY 1995.

Goal for unit consumption is 1.0% below FY 2005.

Fleet gasoline consumption is down 11.3% from FY 2005.

Fleet mileage driven is down 4.6% from FY 2005.

Total fleet MPG is presently 7.6% higher than FY 2005

Goal is 1.0% increase in MPG from FY 2005.

Comments:

While facility energy savings are not encouraging, the University has come through a major capital construction program where several buildings have been brought on line and operational commissioning is still on-going. An analysis of weather for both years reveals no significant impact from year to year.

A golf course has been added to the University which adds large amounts of electrical pumping for irrigation with a very small amount of square feet (raises our kbtu/sf calculation)

A sizeable gas leak occurred entering a large classroom building, elevating our gas usage. The leak has now been repair, but the lost gas impacts consumption.

Our East Central Plant has consumed more energy this year due to several new buildings coming on line. The Chemistry and Forensic Science building is one of those buildings. As a science building, it's consumption per square foot is higher than

the campus average and it is contributing to the upward movement on our campus kbtu/sf number.

- B. The steps the agency may take to increase the percentage goal for reducing its usage of electricity, gasoline, and natural gas;

The University is exploring potential for a Performance Contracting application.

- C. Any additional ideas the agency has for reducing energy expenditures relating to facilities;

Information Management staff are exploring applications which will turn off campus PC's during off hours. All campus PC's are now running 24/7 in order to receive program updates from the Computer Services Department.

The Physical Plant is exploring programming functions within our energy management system which would monitor room occupancies thereby enabling lower amounts of fresh air intake and thus reducing the energy to treat such air.

Our maintenance program continues to focus on automatic faucets, high efficiency water heaters, multi-stage boilers, and the testing of all gas lines on campus. Electrical lamps and ballasts are being replaced with T8 lamps and electronic ballasts. Outdoor lighting is being changed from 175 watt mercury vapor to 85 watt fluorescent which has a longer life and results in less energy and maintenance. Occupancy sensors for room lighting are being expanded and variable frequency speed drives are being used everywhere an application exists.

- D. Any additional ideas the agency has to minimize fuel usage in all vehicles and equipment used by the agency.

Physical Plant operations is promoting less single occupancy trips to the main campus in hopes of leaving some vehicles idle more often. Employees are being asked to make better use of their trips to campus by not having to return to the shops as often.

II. Posting of Update to State Agency Energy Savings Program

The campus Resource Efficiency Program and Quarterly Agency Energy Updates are located at http://www.shsu.edu/~ppl_www

Copies of this report have also been forwarded to the offices below:

energysavings@governor.state.tx.us

dgeiger@governor.state.tx.us

Legislative Budget Board
P.O. Box 12666
Austin, Tx 78711