



# BAYLOR

U N I V E R S I T Y

## Energy Program Newsletter

2007-2008

### Opening

Welcome back to the seasonal newsletter designed to increase the overall campus energy awareness. Similar to the changes we all have made in our personal lives to offset soaring energy costs, Baylor University has had to adapt and change in order to stay ahead of this rising trend. This newsletter will highlight all of the great initiatives to save energy at Baylor:

Baylor University has established a long-standing commitment to energy management and conservation, which will continue to save financial and environmental resources, and you are an integral part of this commitment.

### Three Percent Overall Energy Reduction

The past fiscal year has again been a great year for the Energy Management Program at Baylor. Even as the campus continues to grow, energy usage has

been reduced. Overall energy consumption has been reduced by nearly 3 percent as compared to the base year (June 2004 through May 2005), producing a cost avoidance for the University of over \$350,000 this past fiscal year. Several key factors attributed to this success.

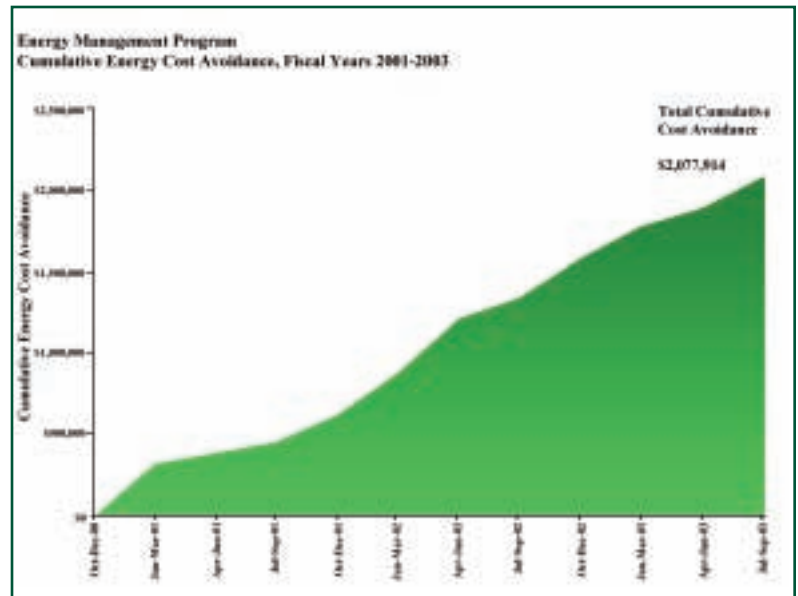
- One extra week of break during the Christmas holiday, which enhanced the Holiday Curtailment Program
- Optimized Baylor Energy Complex's operating efficiency
- Favorable weather



Crenshaw Student Foundation

## Past Achievements

Baylor's initial Energy Management Program began in 1998 and included many successful initiatives, such as lighting upgrades, piping retrofits, and boiler installations. Another successful Energy Program occurred from October 2000 through September 2003 and included upgrading facilities, initiating holiday curtailment programs, implementing an environmental control policy across the campus, and procuring electricity at a favorable rate as Texas became a deregulated market. A total of \$2.1 million cumulative energy cost avoidance was captured during this period.



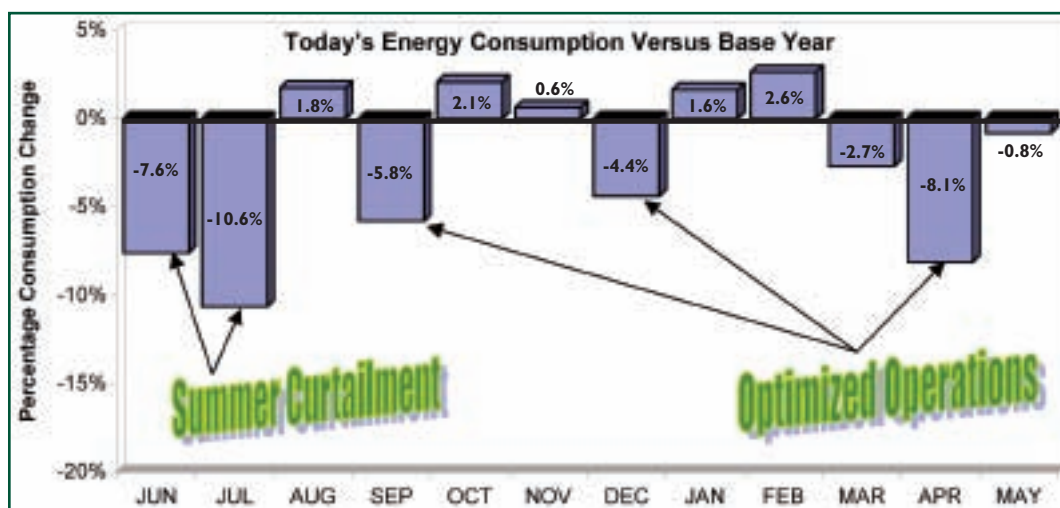
## Snapshots of Current Success

**Energy Program Base Year**—The Baylor fiscal year 2005 (June 2004 through May 2005) has been established as the base year for our comparison. Due to the tremendous campus growth from 2002 through 2004 of over one million square feet, energy data from this period cannot be used for our comparison. Program performance results will focus mainly on current campus energy consumption as compared to the base year.

## YEARLY RESULTS

### Consumption and Cost Performance Summary

	Base Year Usage June-May 2005	Current Year June-May 2007	Avoidance vs. Base Year	
1. Fossil Fuels MMBTU	539,433	474,651	Energy Saved	64,782
2. Electricity MMBTU	255,471	209,610	Energy Saved	44,139
3. Total Energy MMBTU	794,904	774,261	Energy Saved	20,643
			Cost Avoidance	\$368,563



## Energy Curtailment Saves \$200,000

The University had another opportunity to save considerable energy and costs, during the recent winter academic recess, by curtailing energy use in campus buildings that were closed or had minimal occupancy. Temperatures in selected buildings were reduced during unoccupied periods (nights, weekends, and holidays). Facilities personnel conducted frequent inspections of the buildings during the entire holiday period to ensure temperatures were being maintained within the parameters set.

The curtailment period began on Sunday, December 16, 2007 (after Commencement), and ended on Sunday, January 13, 2008 (day before classes started). The residence halls were curtailed from Sunday, December 16 until Sunday, January 6. The remaining facilities (that were able to be curtailed) were set back during unoccupied hours for the entire curtailment period, and all hours from December 24 through January 1.

During the entire campus shutdown from December 22 through January 1, electrical consumption was reduced by about 75,000 kWh per day. Electrical consumption was reduced by 39,000 kWh per day for the remaining days of the curtailment. This electrical usage reduction, along with the reduction of other energy consumption saved Baylor about \$200,000 for the length of the curtailment.

**Commitment**—Your cooperation and support in eliminating wasted energy and reducing unnecessary utility costs is greatly appreciated.

## New Energy Deal

Baylor recently negotiated a complex, ground-breaking power deal, which was awarded a 2007 Innovation Award from the National Association of College and University Business Officers (NACUBO) at their annual meeting.



Baylor Energy Complex

The NACUBO Innovation Award, which honors the achievement of higher education institutions in business and financial administration areas, recognized Baylor in the resource enhancement category—recognizing institutions that have successfully reduced costs, increased revenues, or improved productivity in response to a campus need.

The industry-leading 10-year power deal, structured by Baylor administration, facilities management, ARAMARK, Baylor General Counsel, purchasing, and office of investment, will save more than \$2 million annually on electricity for the 735-acre campus, or \$20 million over 10 years. Equally important, the deal also provides Baylor with a predictable cost structure to support its budget planning model. Additionally, through this new contract, Baylor is helping to finance the creation of environmentally friendly wind-generated electricity to be brought to the Texas power grid.

A team consisting of Amerex Energy Services (a leading energy consultant), Integrys Energy (energy provider), and Credit Suisse First Boston (a world leading financial services company), structured an energy plan that would be most beneficial to Baylor's proactive position on the future of energy consumption and their strategic transformation goals.

*Source: [aramark.com](http://aramark.com)*



## Green Movement

### LEED-EB CERTIFICATION

Baylor University is attempting to secure Leadership in Energy and Environmental Design for Existing Buildings (LEED-EB) certification for the Truett Seminary and is currently engaged in the testing period. The Truett Seminary was selected for multiple reasons, such as being a newer facility that still meets the requirement of being at least two years old; being multi-functional with classes, offices, religious services, and large gatherings all taking place within this facility; and being on the cutting edge as far as total maintenance and operations. Baylor is currently preparing documentation to prove it meets all prerequisites and to earn credits within LEED rating system. The United States Green Building Council will review this documentation and decide if the Truett Seminary meets the criteria for LEED-EB certification.

The Green Building Rating System™ is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings. LEED gives building owners and operators the tools they need to have an immediate and measurable impact on their buildings' performance. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality.

LEED for Existing Buildings maximizes operational efficiency while minimizing environmental impacts. It provides a recognized, performance-based benchmark for building owners and operators to measure operations, improvements, and maintenance on a consistent scale. LEED for Existing Buildings is a road map for delivering economically profitable,

environmentally responsible, healthy, productive places to live and work.

The LEED Rating System for Existing Buildings addresses:

- Whole-building cleaning and maintenance issues including chemical use
- Ongoing indoor air quality
- Energy efficiency
- Water efficiency
- Recycling programs and facilities
- Exterior maintenance programs and systems upgrades to meet green building energy, water, IAQ, and lighting performance standards

*Source: usgbc.org*

### RECYCLING DID YOU KNOW?

- Campus paper and cardboard recycling account for approximately 160 tons of waste being diverted from the landfill per year.
- Student Environmental Concerns Organization (ECO) operates a campus student recycling center that collects and recycles aluminum cans, clear plastics, white and colored paper, and newspaper. In addition, ECO hosts Earth Week each year.
- Dining facilities offer organic menu items and purchase paper products made from recycled materials.

Please do your part in assisting in these and other recycling initiatives to help keep the campus beautiful and to preserve the world we live in.



Truett Seminary



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