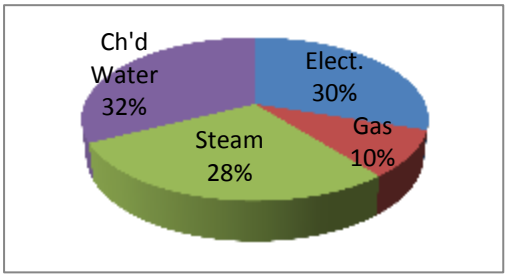
TEXAS TECH UNIVERSITY
HEALTH SCIENCES CENTER™

FY 2015 – 1st Quarter Energy Report

TTUHSC buildings consumed 57 kBtu/sf in the 1st Quarter, which is expected to meet our institutional goal of keeping energy utilization index (EUI) value in the range of 226 and 250 kBtu/sf/yr. Water consumption intensity for the 1st quarter is 6.2 Gal/sf, which is within the limits of SECO (State Energy Conservation Office) water conservation guidelines.

Campus Energy Use (kBtu/Sq ft): September – November

Utility	FY15 Actual	FY14 Actual	Change
Electricity	16.89	15.17	11.36%
Natural Gas	5.54	6.40	-13.43%
Steam	15.73	18.21	-13.64%
Chilled Water	18.46	21.56	-14.40%
Total	56.62	61.34	-7.70%



1. In 1st Quarter FY2015, Cooling Degree Days (CDD) has decreased by 19%, and Heating Degree Days (HDD) has decreased by 4%, as compared to 1st Quarter FY2014.
2. Annual Energy Report, Resource Efficiency Plan and 5-yr Energy & Water Management Plan were prepared and submitted to SECO.
3. We are in the process of installing (4) 350W LED fixtures with occupancy sensor to replace existing parking lot pole lights (400W HPS). The lights will dim to 50% during unoccupied period at night.
4. Preliminary design work is being completed to replace three air handling units in Lubbock HSC.
5. We are working with our control system vendors to optimize HVAC system operations. Energy savings features such as temperature resets, static pressure resets, economizer operation, cooling load based on actual Btu demand etc., are being implemented.
6. Lighting design to replace (36) 175W exterior soffit building lights by 34W LED light fixtures has been prepared. The material is on order.
7. We have prepared a preliminary design guide draft report with the intent of improving reliability and increased energy savings for new construction and renovation projects.
8. Templates were developed for the Midland Memorial Hospital to invoice energy consumption and cost for Jenna Welch Center on a monthly basis.
9. Experiments to optimize chilled water stop have been conducted in one of the air handling unit zones, and potential for energy savings has been observed.
10. Lighting retrofit to use F28 & F25 T8 lamps, and occupancy sensors for automatic lighting control, are being implemented through maintenance, new construction and renovation projects.
11. New energy efficient LED lights are being tested for performance and reliability since FY2010. As of date, there has been 3.5% failure rate, and no significant depreciation in illumination.
12. Upgrade pneumatic control systems to direct digital control systems. This is being done as and when funding is available.
13. We continue to review and update the 'Resource Efficiency Plan' (REP), which identifies a comprehensive list of projects and measures for the campus energy conservation. Projects are being prioritized and implemented based on acceptable payback period, and availability of funding.