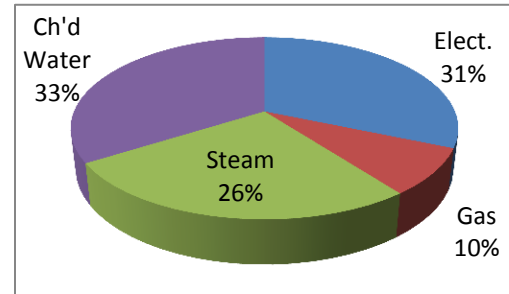


FY 2017 – 1st Quarter Energy Report

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 289 kBtu/sf/yr. Water consumption intensity for the 1st quarter is 7.9 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	FY17 Actual	FY16 Actual	Change
Electricity	17.52	17.13	2.29%
Natural Gas	5.83	4.51	29.17%
Steam	14.68	14.44	1.63%
Chilled Water	19.03	18.54	2.64%
Total	57.06	54.63	4.45%



- In 1st Quarter FY 2017, Cooling Degree Days (CDD) decreased by 21%, and Heating Degree Days (HDD) decreased by 29%, as compared to 1st Quarter FY 2016.
- 'Annual Energy Report', 'EPA Portfolio Manager - Energy Report', and 'Energy & Water Management Plan' were prepared and submitted to the state agencies in the month of October.
- We are continuing with the electricity contract thru Tradition Energy to serve the buildings in Permian Basin and Abilene areas. Lubbock, Power & Light, and XCEL Energy provide electricity to serve buildings in Lubbock and Amarillo areas respectively. ATMOS provides natural gas at all locations.
- We have procured (500) 22W LED T8 tubes for lighting retrofit. Installation is ongoing. These will reduce electric consumption, and provide better illumination.
- We have completed replacement of one air handling unit, and another is being replaced in Lubbock HSC building. The new AHUs have multiple fans, VFDs, pressure independent chilled water control valves, steam heating and DDC control system.
- Parking lot light fixtures are being replaced by new 350W LED fixtures to improve light quality, reduce power consumption. A total of 27 HID fixtures are in the plan to be replaced by LEDs in FY-17.
- Lighting retrofit and occupancy sensors for automatic lighting control are being implemented through maintenance, new construction and renovation projects.
- New energy efficient LED lights are being tested for performance and reliability since FY2010. As of date, the failure rate is 5%, and no significant depreciation in illumination.
- Upgrade pneumatic control systems to direct digital control systems and components. This is being done as and when funding is available.
- Total miles driven by vehicles in 1st Quarter FY2017 have increased by 22% (or 27,925 miles) as compared to 1st Quarter FY2016. Total fuel cost for the quarter has also increased by 21% (or \$2,747.55) due to more trips.
- We work with operations groups to improve equipment conditions, identify projects and measures for the campus energy conservation. Projects are being implemented based on acceptable payback period, and availability of funding.

