

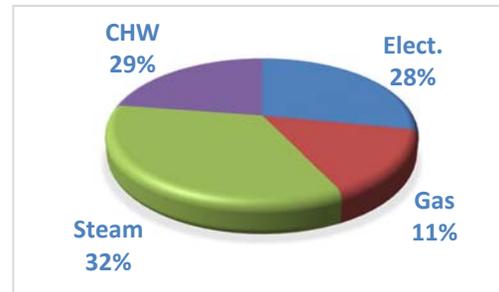
FY 2019 – 3rd Quarter Energy Report

TTUHSC buildings consumed 56 kBtu/sf in the 3rd quarter, which is expected to meet “HSC Energy and Water Management Plan” target of keeping annual energy utilization index (EUI) value of less than 250 kBtu/sf/year. Water consumption intensity for the 3rd quarter was 4.7 Gal/sf, which is within the limits of state water conservation standards, and less than most of the other state agencies in Texas.

Campus Energy Use (kBtu/Sq. Ft.):

March - May

Utility	FY19 Actual	FY18 Actual
Electricity	15.46	16.34
Natural Gas	06.42	05.79
Steam	18.00	15.11
Chilled Water	16.48	17.55
Total	56.36	54.78



- In the 3rd quarter of FY 2019, weighted average Cooling Degree Days (CDD) and Heating Degree Days (HDD) were 208 and 686, as compared to 492 and 492 respectively in the 3rd quarter of FY 2018.
- TTUHSC is continuing with the electricity contract thru Tradition/ Reliant Energy to serve the buildings in Permian Basin and Abilene areas. Lubbock, Power & Light, and XCEL Energy have the sole authority to provide electricity to serve buildings in Lubbock and Amarillo areas respectively. ATMOS provides natural gas at all locations except Lubbock central plant.
- HSC Facilities have completed refurbishment of one air handling unit (AHU). The unit has new modular fans, variable frequency drive, pressure independent chilled water control valve, steam heating, and DDC control system. Currently six additional AHUs are being refurbished.
- Direct digital control (DDC) upgrade to replace pneumatic controls is continuing in the Lubbock and Amarillo campus. Equipment being upgraded include air handling units, variable volume boxes etc.
- Project to replace two aging chillers with R-22 refrigerant in the Amarillo campus, is in design phase. Plan is to use new variable drive air cooled screw chillers with R-134a refrigerant. New chillers shall meet or exceed state energy code performance requirement.
- Project to replace exterior HID fixtures with LED fixtures in the Lubbock campus parking lots, is almost complete. The exterior LED replacement project has improved illumination, light quality, and color rendering, all while reducing power consumption.
- Facilities Operations is continuing to replace fluorescent T8 tubes and associated ballasts with LED T8 tubes, particularly in the hallways and equipment spaces (24/7 operation areas). Reduced electricity consumption and better illumination have been achieved.
- HSC Facilities provide support for successful completion of the new building construction projects, to ensure compliance with ASHARE 90.1 energy code, other applicable code requirements, project drawings and specifications.
- TTUHSC continues to emphasize fuel conservation awareness with strategies such as group travel, and regular preventive maintenance to gain economies.
- Engineering Services continue to work with operation and maintenance departments to improve control parameters and equipment conditions; identify projects and measures for the campus energy conservation.

