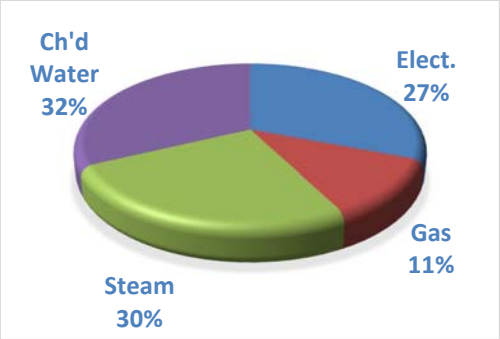
TEXAS TECH UNIVERSITY
HEALTH SCIENCES CENTER™

FY 2020 – 1st Quarter Energy Report

TTUHSC buildings consumed 64.10 kBtu/sf in the 1st quarter, which is expected to meet "HSC Energy and Water Management Plan" target of keeping energy utilization index (EUI) value of less than 250 kBtu/sf/year. Water consumption for the 1st quarter was 8.3 Gal/sf, which continues to be one of the lowest among the higher education institutions in the State of Texas.

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

Utility	FY20 Cons.	FY19 Cons.
Electricity	17.44	17.19
Natural Gas	07.18	05.87
Steam	19.35	18.82
Chilled Water	20.13	18.94
1st Qtr. Total	**64.10**	**60.82**



1. In the 1st quarter FY 2020, weighted average Cooling Degree Days (CDD) and Heating Degree Days (HDD) were 479 and 782 respectively, as compared to 320 and 773 respectively in the 1st quarter FY 2019.
2. 'Annual Energy Report', 'EPA Portfolio Manager - Utility Report', and 'Energy & Water Management Plan' were prepared and submitted to the state agencies (SECO and Governor's Office) before due date.
3. TTUHSC is continuing with the electricity contract thru Tradition/ Reliant Energy to serve the buildings in the Permian Basin, Dallas and Abilene areas. Lubbock, Power & Light, and XCEL Energy have the sole authority to provide electricity to serve buildings in the Lubbock and Amarillo areas respectively. ATMOS provides natural gas at all locations except Lubbock central plant.
4. Project to replace two aging chillers with R-22 refrigerant in the Amarillo campus, is in the construction phase. Plan is to use new variable drive air cooled screw chillers with R-134a refrigerant. New chillers exceed state energy code performance requirement.
5. HSC Facilities is expected to meet the annual plan to complete refurbishment of six air handling units (AHU) in the Lubbock campus. The units will have new modular fans, variable frequency drives, pressure independent chilled water control valves, steam heating, AQUIS antimicrobial flooring, and DDC control system.
6. Facilities Energy Conservation Project funds were being utilized to replace a significant number of fluorescent tubes and associated ballasts with LED troffers, particularly in the classrooms. This is to reduce electricity consumption and provide better illumination.
7. Project to replace exterior HID fixtures with LED fixtures in the Amarillo campus parking lots and building exteriors, is in construction phase. The exterior LED replacement project is expected to improve illumination, light quality, and color rendering, all while reducing power consumption.
8. Facilities Engineering continues to review the construction project documents and product submittals to ensure compliance with ASHARE 90.1 energy code, and other applicable standard & code requirements.
9. Engineering department continues to assist the operation and maintenance departments to improve control parameters and equipment conditions, identify projects and measures for the campus energy conservation.
10. TTUHSC continues to emphasize fuel conservation awareness with strategies such as group travel, and regular preventive maintenance to reduce gasoline consumption.