



# Energy Conservation Days Q&A

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**TEXAS STATE UNIVERSITY**

SPRING 2024

# Welcome & Introductions

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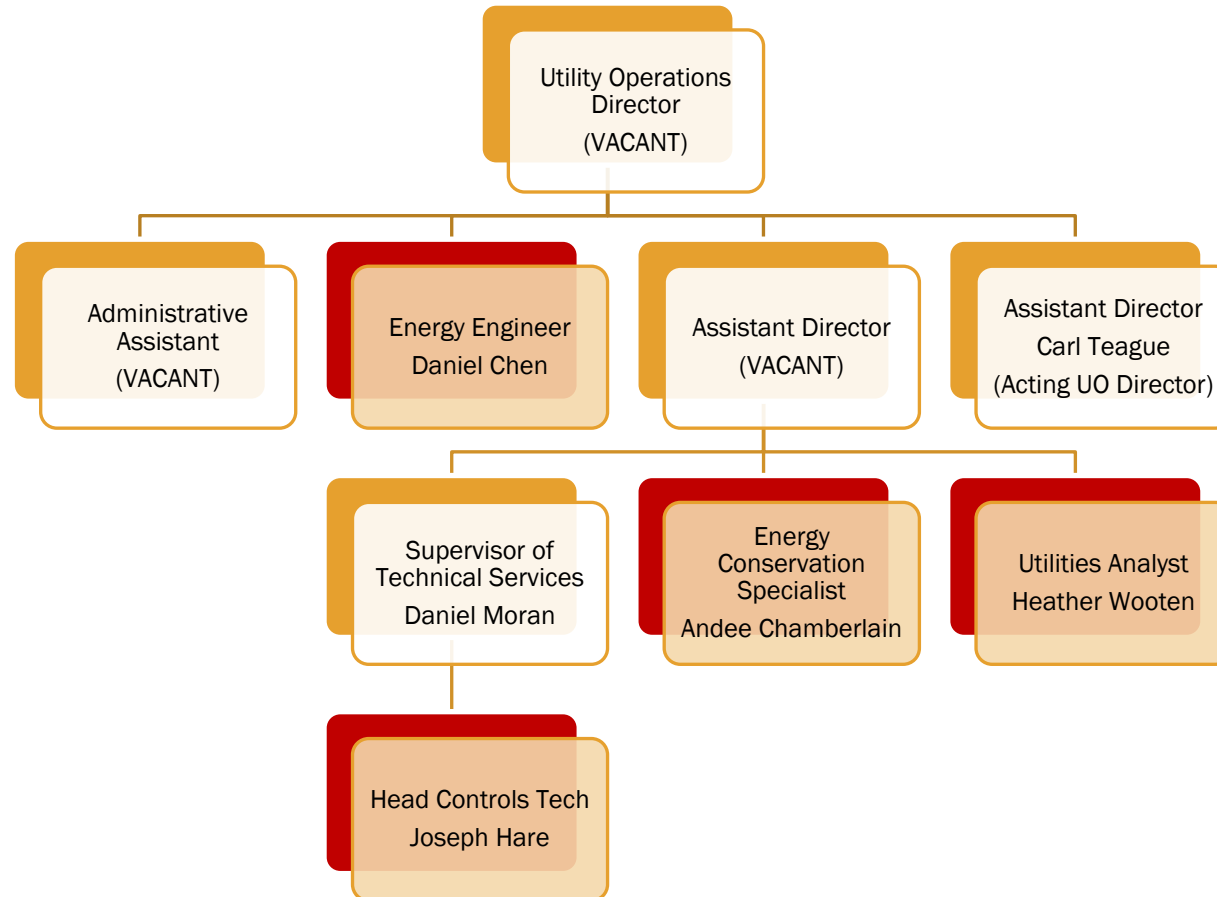
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Energy Conservation Committee Chairperson

# Utility Operations & Energy Team



# Campus Utility Distribution

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The Central Plant, East Plant, and West Plant supply the steam, chilled water, and electricity for Texas State.

The Central Plant's electrical switchgear can distribute more than 17 million watts of electrical power.

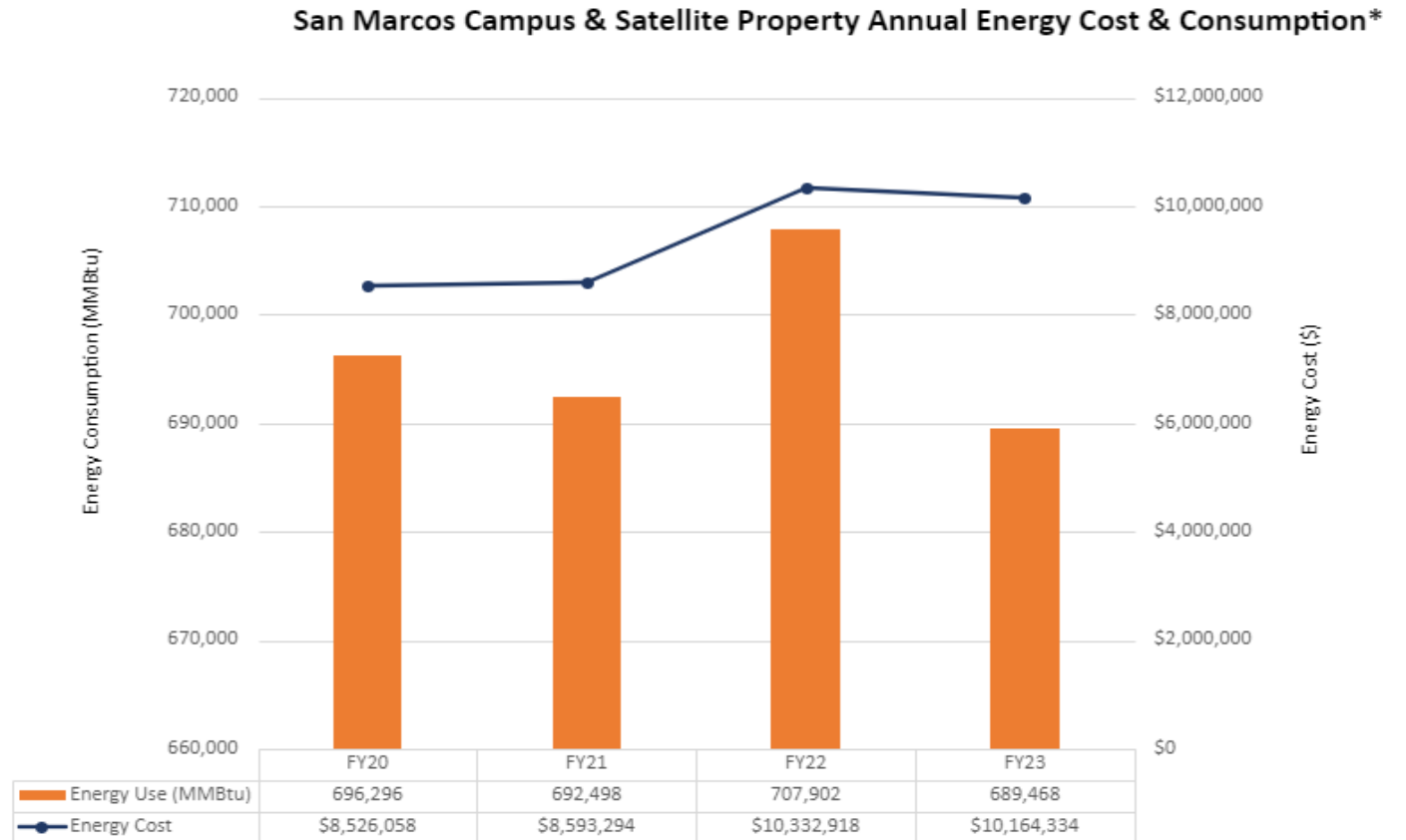
The three plants combined can produce more than 13,450 tons of chilled water while the boilers at the Central and West Plants can produce 160,000 kph.

The plants operate on a 24 hour, 7 days a week, 52 weeks a year continuous cycle.

# San Marcos Campus Annual Energy Cost/Use

## FY2023

- Electricity
  - \$8.2M
  - 100,574,836 kWh
  
- Natural Gas
  - \$1.95M
  - 339,516 MCF



# Energy Conservation Days Policy

Annually, The Texas State University System (TSUS) Board of Regents approves energy conservation days. The president has designated essential offices to remain open with skeleton crews. Other offices may be requested to remain open.

<https://policies.txst.edu/division-policies/information-technology/01-04.html#section.04.01>



# ECD Building Participants

\* Buildings with sub-metering  
information available.

Academic Service Bldg. North	Joann Cole Mitte*
Academic Service Bldg. South*	Jowers
Bruce & Gloria Ingram Hall*	Lampasas Hall
Child Development Center	LBJ Student Center*
College of Education Bldg.*	Math & Computer Science*
Comal	Nueces
Commons Hall	Pedernales
Derrick Hall	Roy F. Mitte
DHRL Admin Bldg	Sabinal
Emmet & Miriam McCoy Hall*	Supple*
Evans	Taylor Murphy Bldg.*
Flowers Hall*	Trauth Huffman Hall (UAC)*

# Energy Conservation Days

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Temperature adjustments utilize our building automation systems to maintain temperatures at a wider range than we typically operate, between 60 degrees and 80 degrees.



We monitor total energy use of Steam & Hot Water for Heating, Chilled Water for Cooling, and total electrical consumption.



Despite a 6-day cold snap in 2022 that pushed overnight temperatures below freezing, we saw significant energy use reduction campus-wide.





On average, buildings that participate in Energy Conservation Days reduce their energy use by 27%



If the entire San Marcos campus participated in ECDs and reduced use by an average of 27%, that would save approximately \$10,000 each day.

# What's Next?

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- Complete Sub-metering on San Marcos Campus
- Complete EnergyCAP Re-commission
- Integrate sub-meter data into EnergyCAP system to calculate and track actual use and cost of buildings
- Further sub-meter buildings by floor/ usage area/ room
- Provide real-time feedback to users about energy use
- Implement competitive efforts to reduce energy use and cost

# Innovative Funding for Energy Efficiency

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- Central Plant
  - Economizer for Boiler #2
  - LoanStar Loan Funding Mechanism (2% interest rate)
  - 5.6 year ROI
- Oncor Energy Concierge Program at Round Rock Campus (\$25,585)
- City of San Marcos Utilities Efficiency Incentives (one time use)
  - Efficiency incentives for LED Lighting Retrofits
  - Renewable Energy incentives for on-site solar installations
- Inflation Reduction Act
  - 30% Federal Tax incentive can now be passed to contractor to reduce up-front project cost



# Outreach & Involvement

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- Energy Conservation Committee (meets annually)
- Engage Students in Behavioral Change
- Engage Staff/ Faculty in Behavioral Change
- Improve Tracking & Reporting of Emissions Data
- Increase coordination between Utilities, Facilities, & Design Branches to meet long-term efficiency & sustainability goals

Learn more about ways to conserve energy:

<https://www.facilities.txst.edu/utilities/energy-conservation.html>

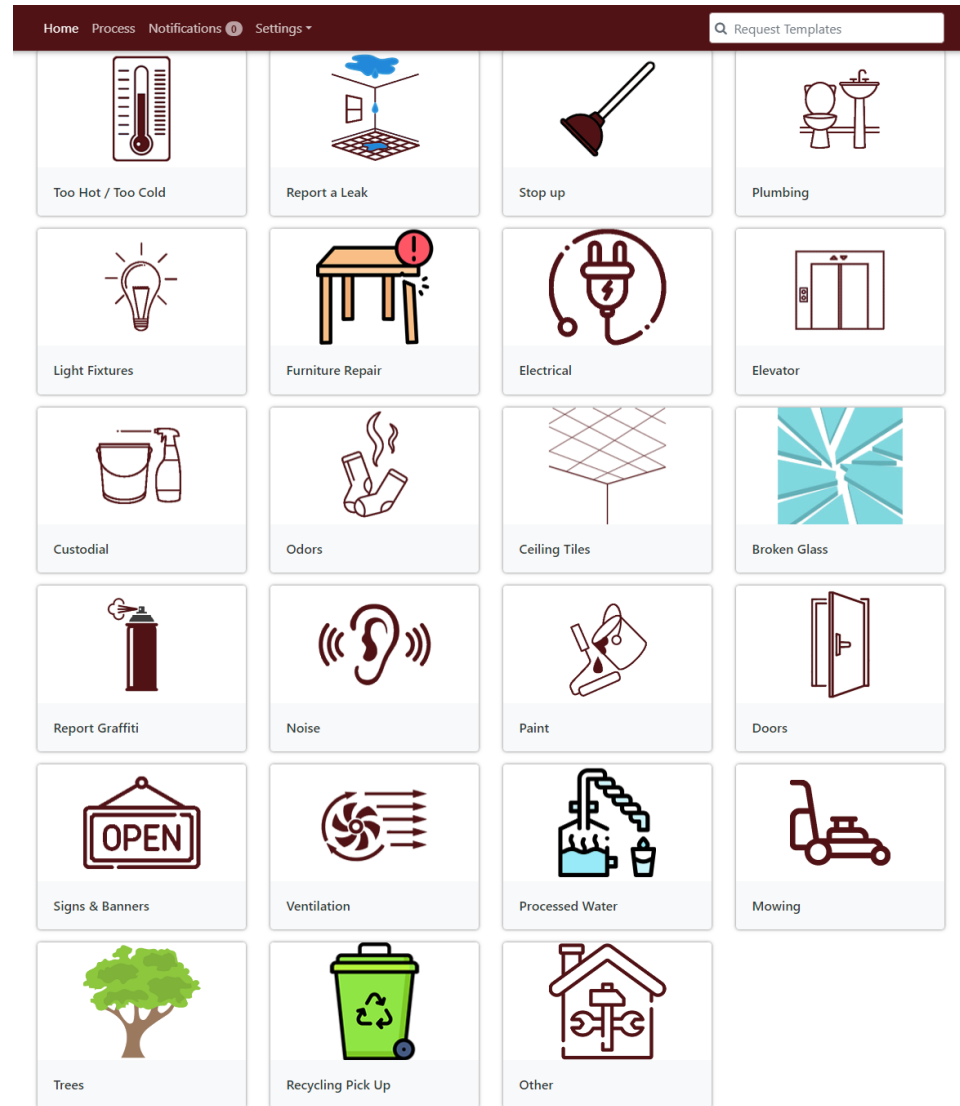


# Ready Request Online System

Help by reporting leaks, inefficient operations, and other items that need repair or attention on campus.

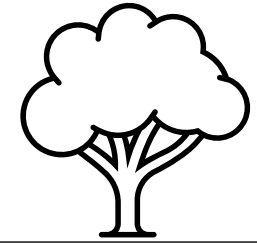
<https://ready.facilities.txstate.edu/ready/>

Call Customer Service at 512-245-2824



# April Sustainability Events

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April 1 – 19

Earth Day Clothing Drive – drop off items at Central Plant on campus



April 20

Earth Day at Meadows Center (10am – 4pm) Music, Activities, & More!



April 22

TXST Earth Day at LBJ Mall with Games, Door Prizes, & Education

# Thank you!

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“Alone we can do so little,  
together we can do so  
much.”

-Hellen Keller

Share your comments & suggestions:

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