



# ENERGY EFFICIENCY PLAN

OFFICE OF SUSTAINABILITY | 2025

Executive Summary

INNOVATION & RESEARCH





# Why Build Resilience?

While Arlington is no stranger to extreme weather, as global average temperatures continue to climb and weather patterns become increasingly erratic, UTA's energy infrastructure becomes more exposed to damaging storms and peak conditions with greater frequency and for longer periods of time, leaving the system at risk to blackouts.

Planning for future weather extremes is essential to ensure safety and operational resilience for the UTA community and its neighbors. Recent events across the state of Texas and in the DFW area have highlighted the need for this plan. The Energy Efficiency Plan (EEP) presents a "resilience-based" approach to proactive planning of social, environmental, ecological, and infrastructure systems on campus that will help UTA withstand the test of time and mitigate the increasing impacts of weather extremes while also reducing financial burdens in the future.







**extreme heat**

**winter storms**

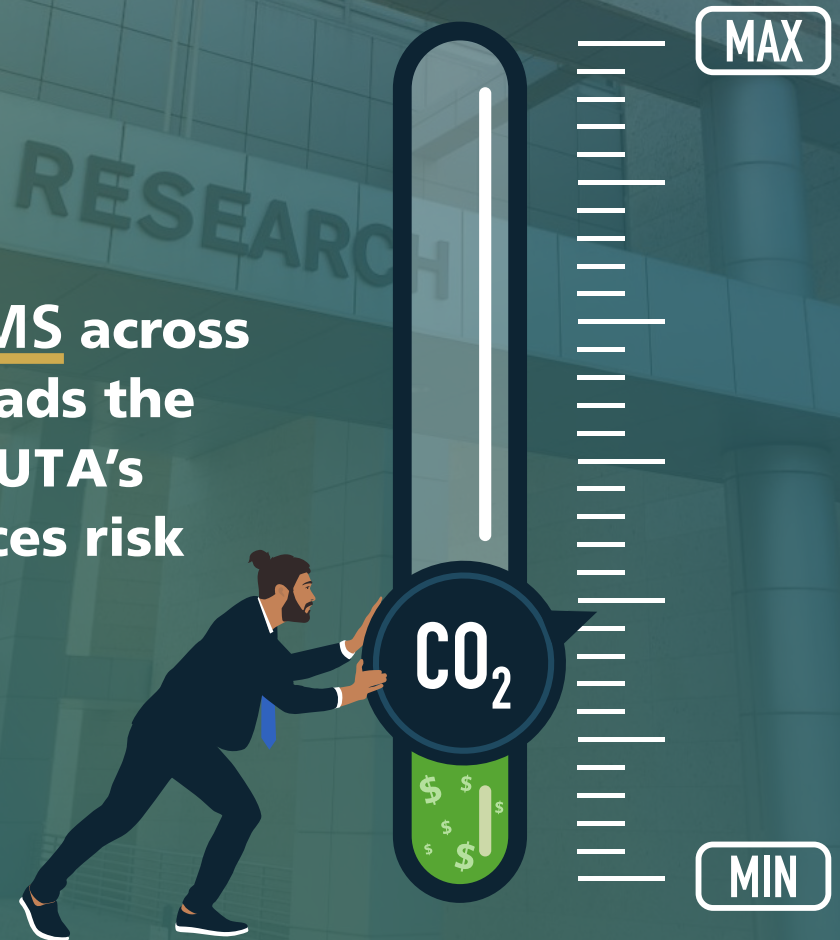
**strong winds**

With extreme storms and increased strain on existing infrastructure, resilience will need to be baked in to any and all future-focused efforts. Resilience, in this context, is not merely having “backup” but rather understanding critical vulnerabilities at the system level, and planning for their future condition. This includes increasing on-site energy generation capacity, to combat potential grid failures like that seen in 2022, or developing financial models accounting for changing energy prices, as market volatility continues to rise. This strategy of operational resilience is a part of not only how UTA builds its facilities, but how it weathers all forms of uncertainty in a changing world.

# Financing the EEP

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Strategically DIVERSIFYING AND DISTRIBUTING INVESTMENT STREAMS across various energy sources not only spreads the burden of responsibility throughout UTA's portfolio, but also significantly reduces risk exposure in energy investments







**Campus-Level  
Operation**



**Designated  
Energy Funding**



**Public-Private  
Partnerships**



**System Level  
Innovation**

As transformative energy projects have historically been in competition with routine operational needs, successful energy infrastructure modernization must come as an evolution of UTA's decision-making framework for financing. By reconceptualizing this as an infrastructure investment rather than an operational expense, UTA can take advantage of the opportunities that come with a more holistic approach.

This includes prioritizing existing infrastructure - ensuring that it operates at its most efficient - in order to capitalize upon savings. These savings provide the most effective way to develop additional infrastructure projects – continuing to reap financial benefits of efficient operation, while expanding that operation further and further. These investments, made at key moments throughout UTA's infrastructure modernization, can stitch together all efforts around environmental stewardship into a feedback loop, magnifying the potential outcomes beyond any single effort on its own.

This holistic approach harmonizes internal operations and external partnerships, creating opportunities for combined efforts to continue to push UTA toward both its environmental and institutional goals, and positioning itself as a leader within the Arlington community.



# Community Insight

Two public engagement workshops with the campus community, and an online survey with over 250 responses, identified several key themes and revealed alignment between institutional capabilities and the aspirations of students, staff, and faculty. Together with technical analysis from energy modeling software and baseline infrastructure data, this input is what became the Energy Efficiency Plan.

**2** engaging  
workshops

**215+**  
attendees

**ONE** Maverick  
spirit





The UTA community left us with a clear understanding that this plan must take action in the following:

### **CELEBRATE SUSTAINABILITY!**

Recognizing the hard work and achievements of UTA to date

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### **REACTIVE TO PROACTIVE: A HEALTHY CAMPUS IS A SUSTAINABLE CAMPUS**

Preventative measures are the most important for protecting the campus overall

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### **DEEPEN THE COMMUNICATIONS FABRIC OF UTA'S SUSTAINABILITY STORIES**

Enhance visibility through signage, art, and student activities

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### **EXPAND ON WASTE LEADERSHIP TO TACKLE THE FOOD-WATER-ENERGY NEXUS**

Create programming that integrates UTA dining services, waste management practices, and state of the art energy solutions

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### **CREATE A PHYSICAL GROUNDING POINT FOR INTERDISCIPLINARY WORK**

Collaboration needs an intentional home to bring together researchers and students across different department

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### **GET AGGRESSIVE ON THE INFRASTRUCTURE MODERNIZATION**

Prioritize the strategies (and financing!) needed to deliver action on energy security

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### **INNOVATE THROUGH RESILIENCE!**

The changing climate needs new technologies and ideas in order to protect the plan immediately. Utilize the brainpower at UTA to turn vulnerabilities into opportunities

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### **STRENGTHEN THE REGIONAL IDENTITY OF SUSTAINABILITY**

Did you know DFW is the first net-zero airport in the US? Or that UTA will be collaborating on the World Cup's sustainability actions in Dallas? UTA and its partner need to create a clear brand identity that puts sustainability front and center





## **SOCIAL IMPACT**

Highlight UTA as an exemplar university  
for research in sustainability



## **OPERATIONS & FINANCE**

Utilize environmental impact in  
operational and financial decision-making



## **HIGH-PERFORMANCE BUILDINGS**

Retrofit and design high-performance  
buildings across campus



## **ENERGY INFRASTRUCTURE**

Shift to low-carbon energy infrastructure



# Key Themes





## **FOOD & WASTE**

Reduce food and waste by moving towards circular economy



## **ECONOMIC DEVELOPMENT & INNOVATION**

Position the DFW region as a leader in sustainability and innovation



## **CULTURE & COMMUNICATION**

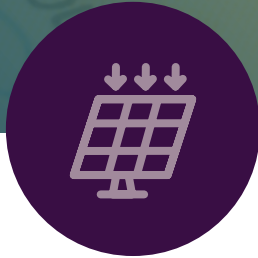
Enhance the role of sustainability in culture & communications through story-telling and collaboration



## **MOBILITY**

Shift to sustainable mobility patterns

# Regional Leadership



## Sustainability Innovation and Research Support

UTA's status as an R1 institution lends itself to leading North Texas in sustainability-focused research by leveraging the region's momentum in renewable energy and supporting major efforts such as DFW International Airport's commitment to becoming North America's first carbon neutral airport; the University can do this by creating a pipeline of skilled professionals in related fields like clean energy technology, sustainable urban development, and waste diversion. Key partnership opportunities include regional utility providers and technology companies where UTA can support joint research, demonstration projects, and provide shared testing and validation facilities. Strong partnerships can make it easier to pursue collaborative proposals, allowing for a greater chance of securing funding for further research and equipment.



## UTA's Campus as a Living Laboratory

As a coordinated effort with the Strategic Plan and the Campus Master Plan, the EEP not only helps to inform the development of future UTA facilities and services, but it helps to set goals for how UTA handles its future operations and how the university can tackle some of North Texas' biggest challenges head-on. Establishing hands-on learning experiences that are focused on solving problems experienced across campus and within the Arlington community helps students learn how to apply the information they're learning in their classes while also offering real world experience for when they are ready to enter the workforce.



1

NEAR-TERM PRIORITIES | 0 - 5 YEARS

## **Supporting sustainable systems expansion**

Prepare infrastructure for modernization, and develop new buildings to high performance targets

2

MID-TERM PRIORITIES | 5-10 YEARS

## **Bridging Electrification**

Develop new buildings to high performance targets, focus on existing building efficiency improvements, and continue to prepare infrastructure for modernization

3

LONG-TERM PRIORITIES | 10-15 YEARS

## **Resiliently Electrify UTA**

Swap remaining fossil fuel sources for electrified sources, increase on-site utility resilience

# **UTA's Pathway to Modern Infrastructure**



# Implementing the EEP



**Financing  
Needed**

## **The Journey Continues**

The Energy Efficiency Plan is just the first step on UTA's path toward sustainable operations, and another step in a long line of environmentally conscious efforts. This plan will serve as a guide, but needs input and participation from everyone to be successful!

**Check out  
the Office of  
Sustainability  
website for  
information  
about upcoming  
events and ways  
to get involved!**

Or email us at [sustainability@uta.edu](mailto:sustainability@uta.edu)