FY2025 GREENHOUSE GAS EMISSIONS REPORT

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EXECUTIVE SUMMARY

The University of Texas at Arlington has continued to experience significant growth, from student enrollment to campus square footage. At the same time, efforts from across the campus to implement actions for increasing sustainability outcomes have continued to be expanded. Overall, the University is seeing benefits from growth in the share of renewables coming from the Texas electric grid. As resiliency increases there, combined with efforts on the campus to implement change, there is the potential for emissions to improve.

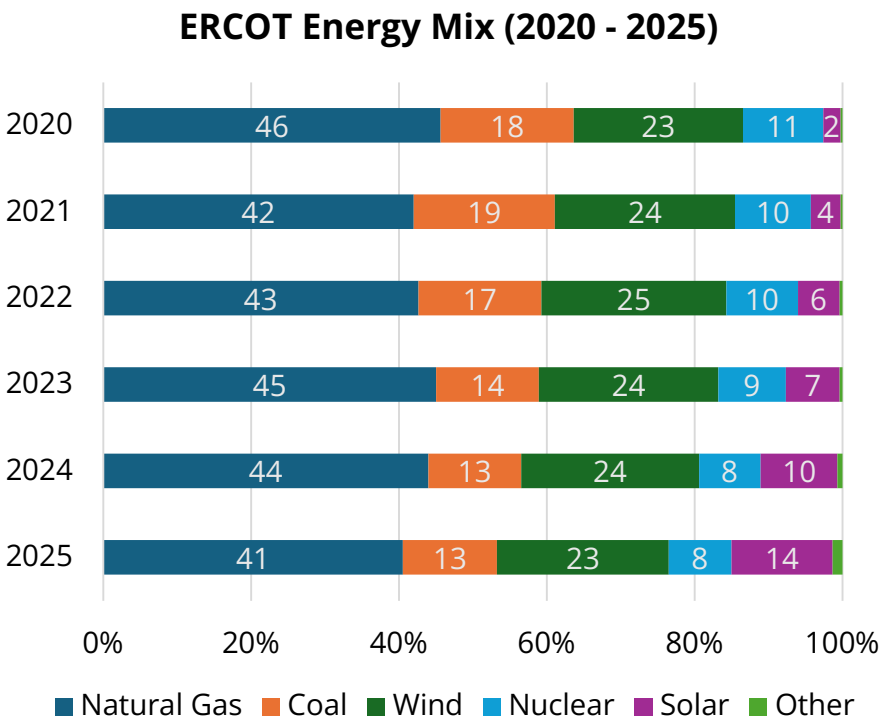
UTA's total Scope 1 & 2 greenhouse gas emissions (GHG) for 2025 amounted to **77,924 metric tons of CO_2e**. Despite **decreases in Scope 2 emissions** (from purchased utilities) over the past three years, **Scope 1 emissions** (direct emissions from sources owned by the university) **continue to increase**. This year also introduced Scope 3 emissions from business travel (both airline and ground mileage) as well as from landfilled garbage. Total net GHG emissions including Scope 3, totaled at **95,769 $MTCO_2e$.**

Overall, the GHG Emissions Report provides valuable insights to impact areas across the campus and its operations. With this clarity, the Office of Sustainability can work to address areas of increased emissions and broaden impact through cross-campus collaboration.

INTRODUCTION

As part of the Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability, Tracking, Assessment and Rating System (STARS), the University of Texas at Arlington submits a greenhouse gas emissions inventory. The purpose of a greenhouse gas emissions report is to allow organizations to track and compare facilities greenhouse gas emissions, identify opportunities to cut pollution, minimize wasted energy, and save money.[1]

In 2025, the University published the Energy Efficiency Plan, which outlined several short-term and long-term plans to promote sustainability and efficiency efforts across the campus. Part of this plan included increasing the share of renewables within the energy matrix used by the University. While the campus does not yet currently have a renewable energy policy or purchase credit offsets, the ERCOT overall energy matrix has shown that wind and solar have continued to produce a higher share of Texas' energy over the past five years, as shown in the accompanying graph.[2] Texas is a state that is leading the way in renewable generation, which the University is able to partake in.



This report continues the University's efforts to calculate the greenhouse gas emissions associated with the campus and its operations. While previous years' reports only covered Scope 1 and Scope 2 emissions, this year deliberate efforts began to understand Scope 3 emissions, specifically focusing on the emissions related with solid waste disposal and university travel (covering both air and vehicle miles). With this expanded greenhouse gas emissions report, UTA can continue to examine its emissions sources, while exploring how to mitigate and implement the initiatives outlined in the Energy Efficiency Plan. Tracking Scope 3 emissions was a designated next step within the UTA FY2023 Greenhouse Gas Emissions Report.

[1] U.S. Environmental Protection Agency, *Learn About the Greenhouse Gas Reporting Program (GHGRP)*
[2] ERCOT, Fuel Mix Reports (2020 – 2025)

DEFINITIONS

AASHE STARS

The Association for the Advancement of Sustainability in Higher Education (AASHE) runs the Sustainability, Tracking, Assessment and Rating System (STARS), which is a transparent, self-reporting framework for colleges and universities to measure their sustainability performance

Fuel and Energy Related Activities (FERA)

The FERA category generally includes all emissions that occur upstream from scope 1 direct combustion of a fuel or generation of energy. The FERA category includes emissions from 4 types of fuel- and energy-related activities:

- Upstream emissions of purchased fuels.
- Upstream emissions of purchased electricity.
- Transmission & distribution (T&D) losses.
- Generation of purchased electricity that is sold to end users.

Fugitive Emissions

Resulting from the direct release of greenhouse gas compounds into the atmosphere of from various types of equipment and processes, such as refrigeration and air conditioning systems, fire suppression systems, and the purchase and release of industrial gases

Greenhouse Gases

Any gas that has the property of absorbing infrared radiation (net heat energy) emitted from the earth's surface and reradiating it back to the earth's surface, thus contributing to the greenhouse effect.

Scope 1 Emissions

Direct greenhouse gas emissions occurring from sources that are owned or controlled by the institution, including combustion of fuels to produce electricity, steam, heat, or power using equipment in a fixed location such as boilers, burners, heaters, furnaces, incinerators and combustion fuels by institution-owned cars, tractors, buses, and other transportation devices

Scope 2 Emissions

Indirect greenhouse gas emissions that are a consequence of activities that take place within the organizational boundaries of the institution, but that occur at sources owned or controlled by another entity; includes purchased electricity, purchased heating, purchased cooling, and purchased steam.

Scope 3 Emissions

All indirect emissions not covered in Scope 2; examples include purchased goods and services, capital goods, waste generated in operations, business travel, commuting (employee and student), end-of-life treatment of sold products, downstream leased assets, franchises, and investments.

METHODOLOGY

The primary tool used for this work was the University of New Hampshire's Sustainability Indicator Management & Analysis Platform (SIMAP), a greenhouse gas tracking tool that is widely used within the higher education community. This platform performs calculations on raw data that result in emission information for carbon dioxide, methane, and nitrous oxide. This data is then aggregated into the common unit of metric tons of carbon dioxide equivalent, or $MTCO_2e$.

The fiscal year 2025 data presented in this report was collected and analyzed by UTA's Sustainability Program Manager, Grant Rodriguez Amlani. Data was received from relevant departments from across the campus, including the Office of Facilities Management, Parking & Transportation, and Office of Disbursements.

As per the "Next Steps" in previous Greenhouse Gas Emissions Reports, this year introduced data collection for Scope 3 emissions, as well as sinks. The emissions for these categories were determined using the following sources:

- Directly Financed Outsourced Travel (Business Air Mileage): calculated using travel data through the University's expense and travel platform, Concur, for business travel. The University switched to this platform in November 2024, meaning the full picture of the Fiscal Year could not be captured. However, a complete 12-month period was still captured, using data from January – December 2025.
- Directly Financed Outsourced Travel (Business Ground Mileage): using the same source at process as outlined above for Air Mileage, based on the mileage reimbursement calculations for business travel over the same 12-month time period.
- Solid Waste (Landfilled): calculated using the monthly yardage reports and Office of Facilities Management invoices from Republic Services, reflecting the garbage from the university which is sent to the City of Arlington's Landfill. As per the City's and Republic Services' guidance, this was categorized in SIMAP as landfill material with Methane Recovery and Flaring.
- Sinks (Compost): which incorporated the University's pre-consumer food waste and landscaping waste that is composted directly on the campus. This also included the post-consumer food waste captured from the campus' two dining halls and is processed by a third-party compost hauler.

RESULTS

The primary tool used for this work was the University of New Hampshire's Sustainability Indicator Management & Analysis Platform (SIMAP), a greenhouse gas tracking tool that is widely used by colleges and universities.

The subsequent tables below show results by source after FY 25 data was entered into SIMAP. The first table also shows the change in Scope 1 & 2 emissions from fiscal year 2019 to fiscal year 2025. The total combined Scope 1 & 2 emissions for FY2025 were **77,924 metric tons of CO_2e**.

Scope 1 & 2 Greenhouse Gas Emissions ($MTCO_2e$) by Source, Fiscal Years 2019–2025

Scope	Emissions Source	FY 19	FY 20	FY 21	FY 22	FY 23	FY24	FY 25	FY 19–25 change
1	Stationary source: natural gas	21,161	20,623	20,718	21,027	22,286	22,395	22,077	+4.3%
1	Stationary source: gasoline	3,021	2,548	2,311	2,350	2,455	2,563	-	*
1	Stationary source: diesel	35	64	62	26	31	91	479	+1268.6%
1	Transportation source: gasoline fleet	637	560	508	516	539	501	526	-17.4%
1	Transportation source: diesel fleet[3]	3	1	1	0	-	-	133	+4333.3%
1	Refrigerants and chemicals	373	3,864	4,065	4,226	3,662	4,728	10,012	+2584.2%
2	Purchased electricity[4]	49,095	43,924	40,291	43,702	45,246	46,427	41,838	-14.8%

*For 2025, the Office of Facilities Management provided no amounts in this category. Previous UTA Greenhouse Gas Emissions Reports stated that, "the nature and purpose of gasoline combustion on campus was unknown."

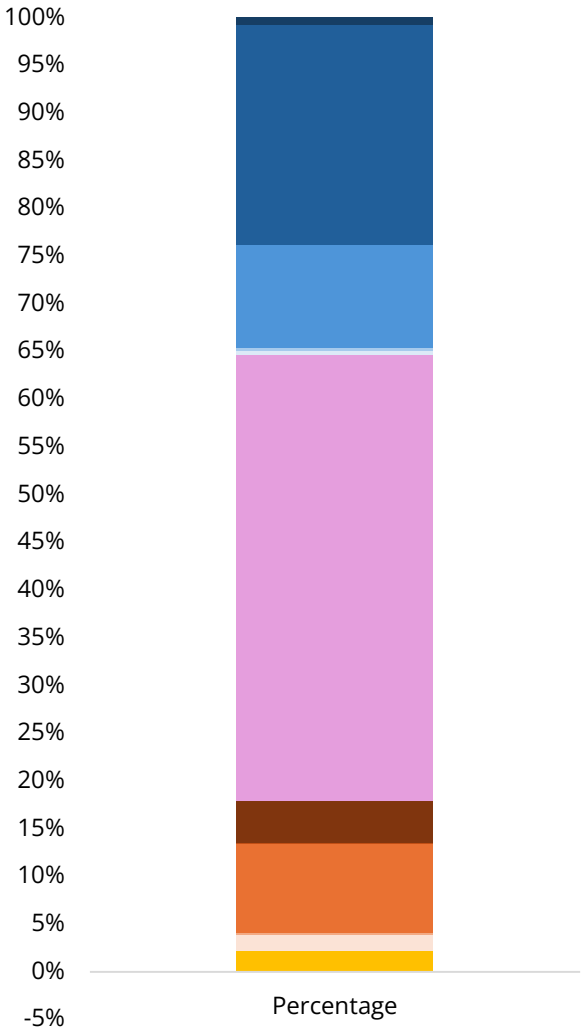
[3] Previous UTA Greenhouse Gas Emissions Reports included diesel fleet amounts into the stationary source category, which at the time was a small amount. However, as demonstrated in the table, diesel amounts for transportation increased considerably in fiscal year 2025.

[4] Existing UTA Greenhouse Gas Emissions Reports from previous years appear to exclude student housing electricity usage from annual figures, so this table is also reflecting the $MTCO_2e$ excluding student housing. If student housing is included in Scope 2 emissions, the figure for 2025 is 44,696 metric tons of CO_2e.

Scope 3 Greenhouse Gas Emissions ($MTCO_2e$) by Source, Fiscal Year 2025

Scope	Emissions Source	Input	FY25 MTCDE
3	Directly Financed: Air Travel Faculty/Staff	8,258,780 passenger miles	4,632
3	Directly Financed: Ground Personal Mileage Reimbursement	648,538 vehicle miles	1
3	Solid Waste Landfilled Waste: CH4 Recovery and Flaring	2,407 tons	1552
3	Electricity, Steam, and Chilled Water: T&D Losses	118,622,736 kWh	2,248
3	FERA Stationary Distillate Oil (1-4)	46,752 gallons	166
3	FERA Stationary: Natural Gas	415,880 MMBtu	8,917
Sink	Compost	159,200 pounds	-23

FY2025 Total GHG Emissions

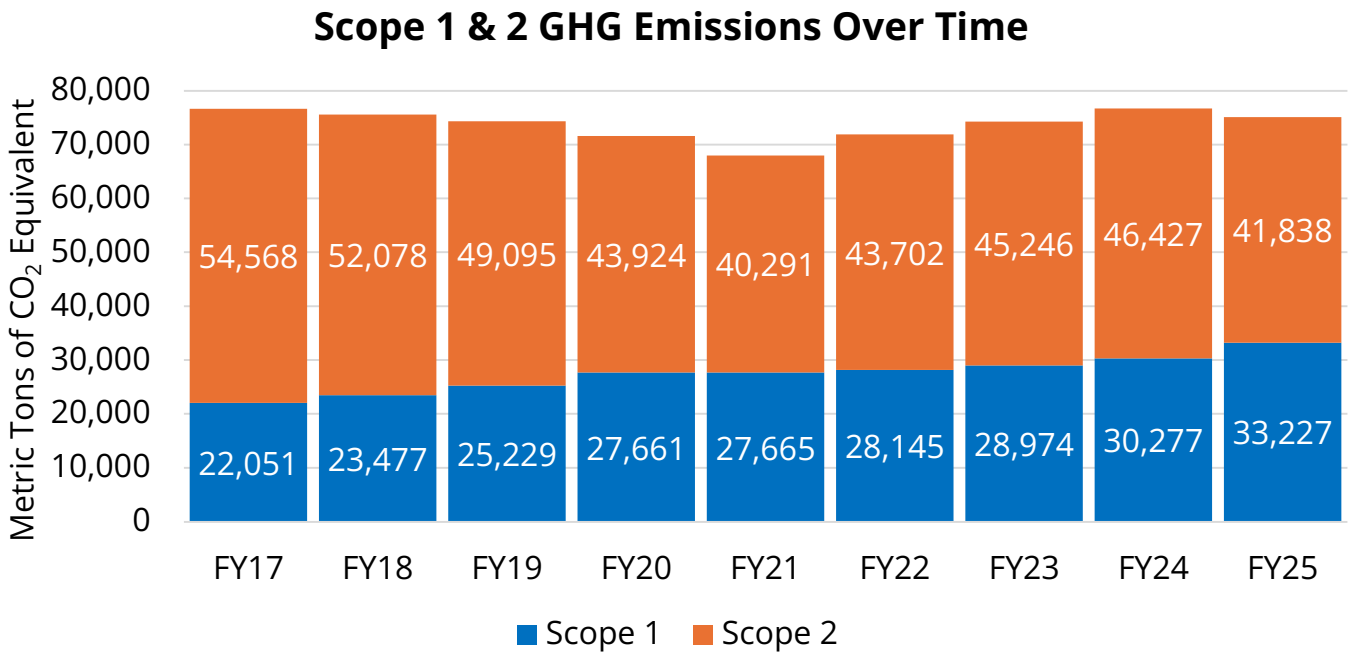


FY2025 Total GHG Emissions
95,769.43 $MTCO_2e$

	Percentage
Scope 1: diesel	0.50
Scope 1: natural gas	23.13
Scope 1: refrigerants and chemicals	10.49
Scope 1: transportation gasoline	0.55
Scope 1: transportation diesel	0.14
Scope 2: purchased electricity	46.83
Scope 3: business air travel	4.85
Scope 3: business ground travel	0.00
Scope 3: FERA stationary natural gas	9.34
Scope 3: FERA stationary distilate oil (#1-4)	0.17
Scope 3: landfill	1.63
Scope 3: utilities transportation & distribution losses	2.36
Sink: compost	-0.02

ANALYSIS & KEY TAKEAWAYS

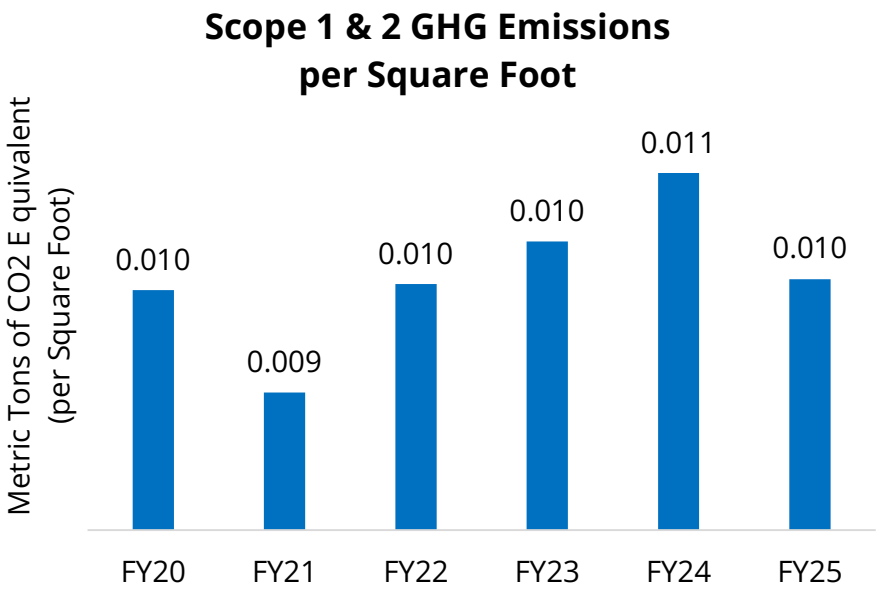
While there has been a gradual overall increase in Scope 1 emissions over time, the Scope 2 emissions (associated with electrical utilities) have seen a marked decrease. The graph below demonstrates the Scope 1 & 2 GHG emissions each year, excluding housing utilities.



In the introduction, an analysis was provided regarding the ERCOT grid mix since 2020. The decrease in Scope 2 emissions from utilities shown can be explained by the growing share of renewables within the Texas grid, which is a benefit to the University's GHG emissions outcomes. This is backed up through the increase in utility consumption from 112,633,662 kWh in FY24 to 118,622,736 kWh in FY25.

As demonstrated in the Results section, this year's emissions report worked to address some of the gaps in previous annual reports, which were acknowledged in prior reports. Additionally, the data appears to be an indication of some changes in operations at UTA, resulting in rather different outcomes than past years. One such result is the demonstrated increase in fleet emissions associated with diesel fleet. Further investigation is needed to determine the reason for this outcome.

When accounting for emissions per square foot, UTA was able successfully cut Scope 1 and 2 emissions per square foot by nearly a third between the fiscal years 2010 and 2020, even with increased floor space. However, looking at this same normalization since 2020, there has been limited progress in improving this outcome. Therefore, continued efforts will be needed to ensure successful results.



While there is limited data to compare to peer institutions over the same time period, this year was the introduction to Scope 3 emissions for the University of Texas at Arlington. This matches efforts by other Texas universities, including the University of Texas at Austin and Texas A&M University. Reaching this point required additional understanding and leveraging of our data sources, while broadening the Office of Sustainability's collaboration with other departments to ensure a more complete picture of our emissions.

NEXT STEPS

1) **Implementation of Energy Efficiency Plan actions**
   UTA launched its first Energy Efficiency Plan in 2025. Within this plan there are actions that will help to address sustainability outcomes and emissions reductions over time. Effective implementation will require support and participation from across the campus population and operations.

2) **Continued investigation into the nature of emissions data sources**
   There is some limited context around certain data points, as stated in GHG Emissions Reports from previous years. This year aimed to address some of these gaps, though continued due diligence will be required to ensure valid data reporting.

3) **Expand Scope 3 data collection**
   As this year was the introduction of Scope 3 emissions capture for UTA, there is be a need to increase efforts to understand the emissions associated with Scope 3. A solid start, increased data collection going forward will reflect a clearer picture.