

UA Sustainability Council || Agenda



November 19, 2024
Tuesday
3:00-4:30PM
MS Teams

1. Co-chair updates
 - a. Associate Vice Chancellor, Facilities Management, Scott Turley
 - i. UASYS solar project is moving forward with good traction, an overview of potential site locations for the solar fields
 - ii. The UA was grandfathered into the old net metering rules, as the new ones passed by the Arkansas State legislature
 - iii. Once the interconnect study is completed, it will be reviewed by an independent grid management company, then it should be ready for construction, so by this time next year the project will be creating power
 - b. Director of Sustainability Academic Programs, Ken McCown
 - i. No report
 - c. ASG Director of Environmental Affairs, Ben Hollis
 - i. Pedal It Forward collaboration to give 25 bicycles away to students, there is an application process that will be reviewed by a committee before distribution
 - ii. The [application](#) is open to all UA students and the bikes will be given away in Spring 2025
2. Updates from Emma Armendariz, the UA's Active Transportation Coordinator
 - a. Commuter Survey results
 - i. 1000+ responses
 - ii. 40% of responders live within 2 miles of campus
 - iii. Significant interest in incentives for alternative transportation users
 - iv. Our travel trends continue to trend towards alternative transportation and away from single occupancy vehicles
 - b. Campus bicycle parking
 - i. Exploring new covered bike parking options at the Union that would be targeting regular commuters, this installation would give them a more secure and weatherproof option on campus for their bikes.
3. UA Carbon Footprint Update (Eric Boles)
 - a. Scope 1 is direct greenhouse gasses emitted from campus, scope 2 emissions are purchased electricity, and scope 3 emissions are indirect greenhouse gasses through affiliates commuting, study abroad and conferences

- b. Purchased electricity is continuing to go down even though we are adding more people and square feet to campus, and this is thanks to the UAs energy performance savings contracts
 - c. Scope 3 emissions are up because of athletics air travel
- 4. Discussion about challenges and opportunities across campus
- 5. Discussion and Q&A with Scenic Hill Solar
 - a. Largest commercial solar project in Arkansas by factor of 3
 - b. Fourth largest solar deployment for a university in the country (exceeded only by Stanford University, University of California System, and University of Pennsylvania)
 - c. The UA 's projects are so large there is no room on campus or enough rooftop space on existing buildings to accommodate such large arrays, which is why they are being built off-site
 - d. More information about these projects can be found at solar.uark.edu
- 6. Good-of-the-Order
- 7. Next meeting is February 11th



UA
Sustainability
Council



Distribution of Emissions by Level of Control

Scope 1 – Direct GHGs

- Natural Gas
- Vehicle Fleet
- Refrigerants
- Agriculture (Fertilizer)

Scope 2 – Upstream GHGs

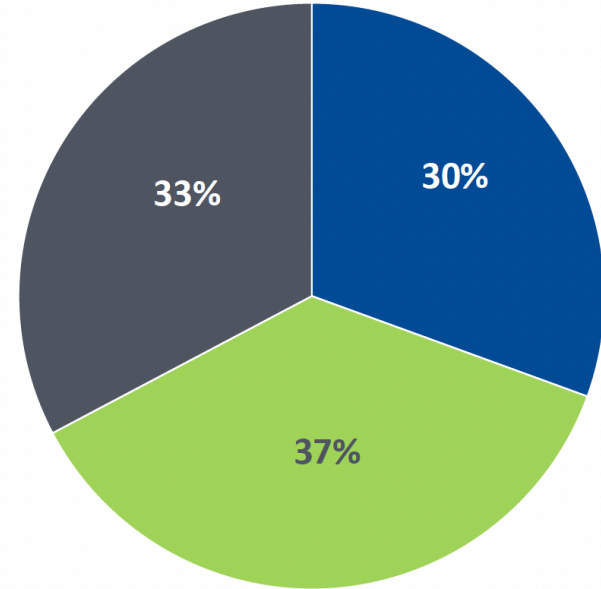
- Purchased Electricity

Scope 3 – Indirect GHGs

- Faculty/Staff/Student Commuting
- Directly Financed Travel
- Study Abroad Travel
- Solid Waste
- Wastewater
- Paper Purchasing
- Transmission & Distribution Losses



FY23 Emissions by Scope



■ Scope 1

■ Scope 2

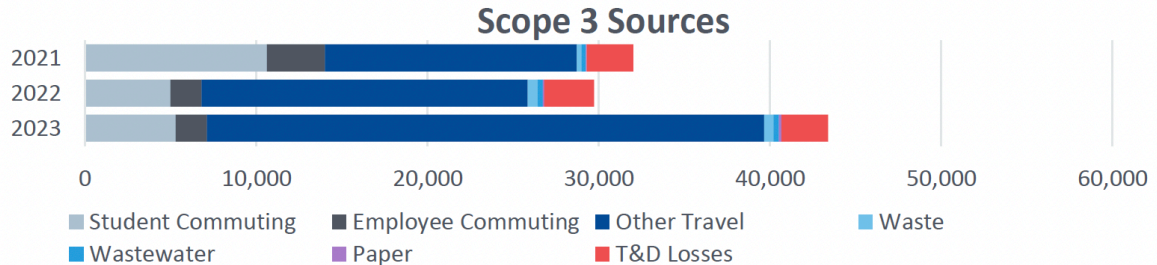
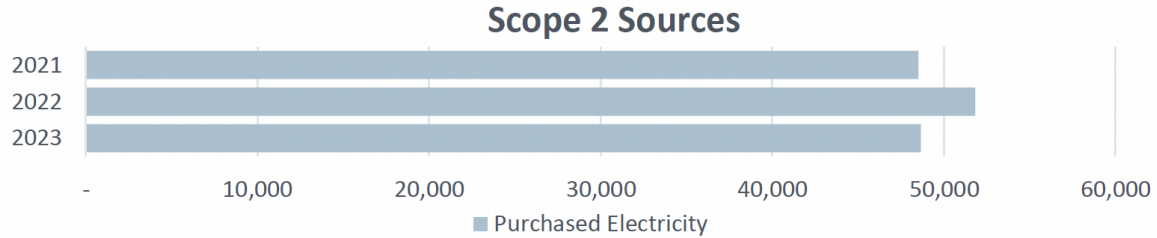
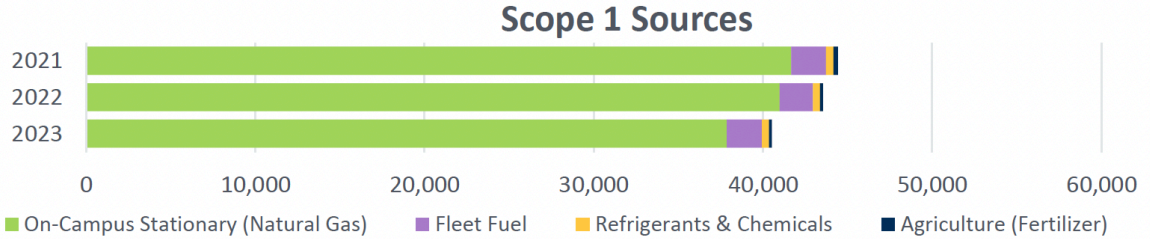
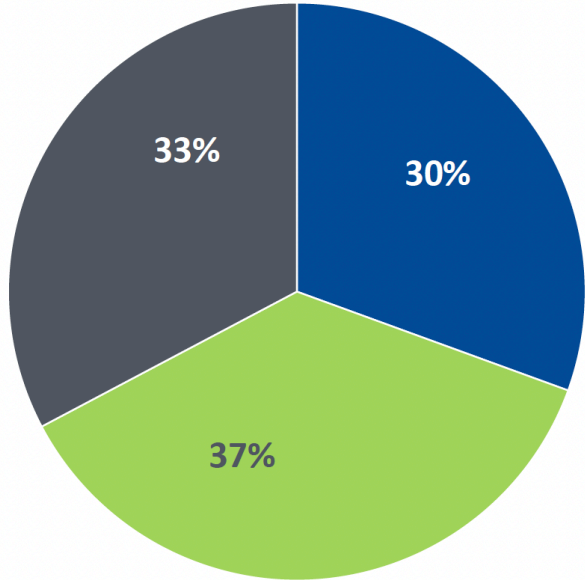
■ Scope 3



Segmenting Emissions by Scope

Energy use is the most impactful contributor to emissions profile

FY23 Emissions by Scope



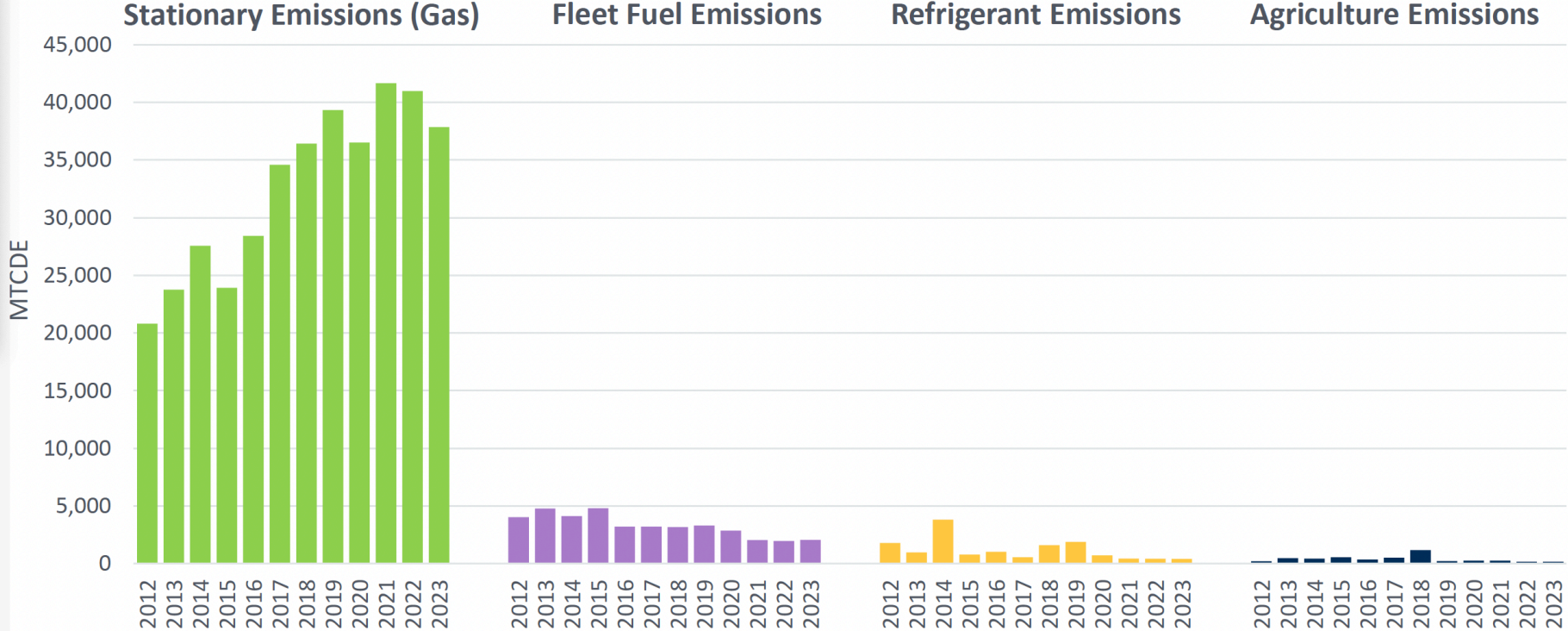
*Sources measured in MTCDE

■ Scope 1 ■ Scope 2 ■ Scope 3



Scope 1 Emissions By Source

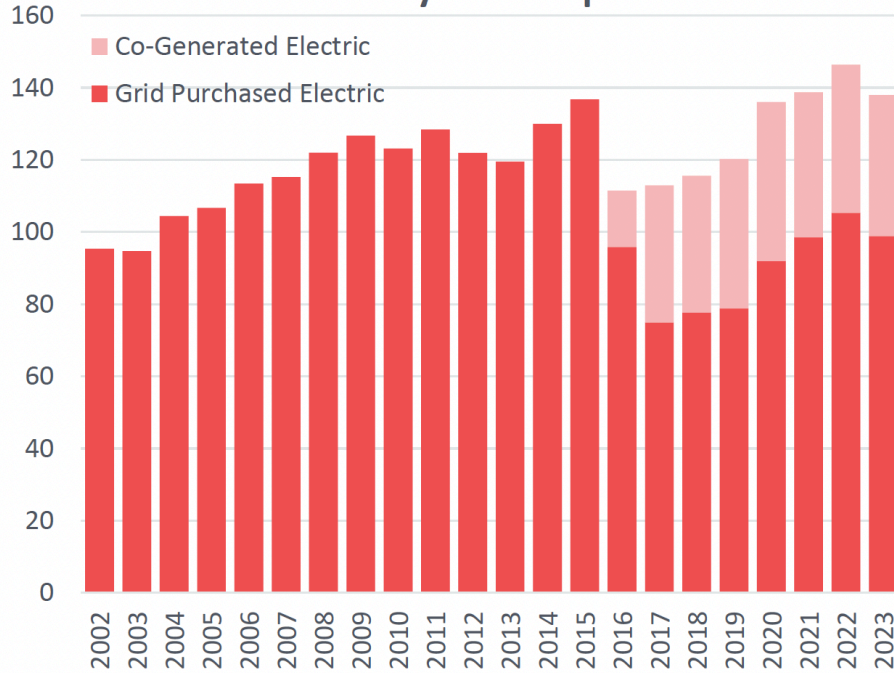
Majority of Scope 1 emissions from Natural Gas consumption



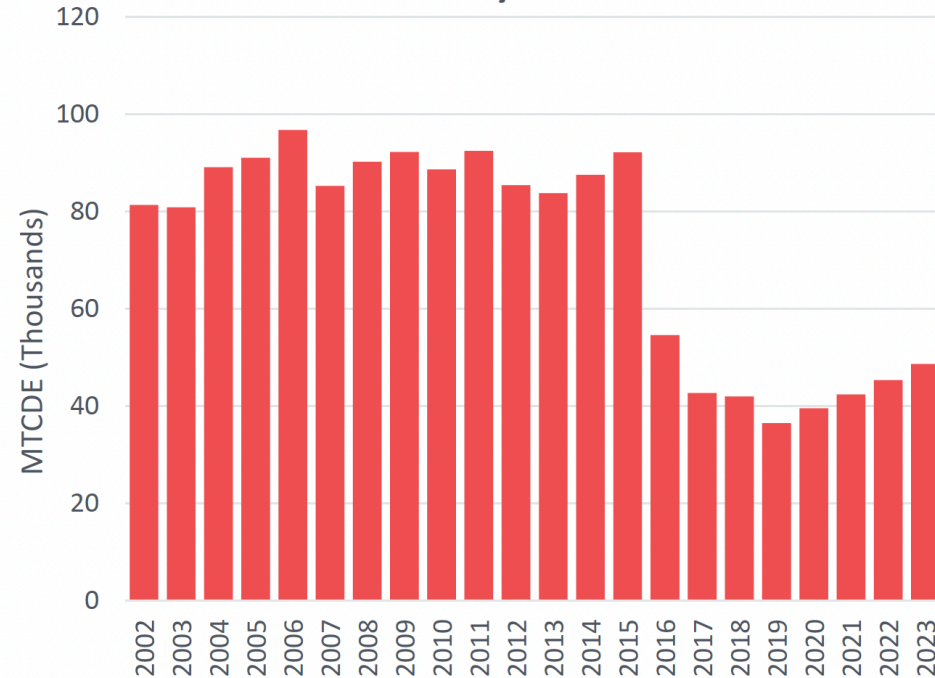
Scope 2: Electricity Consumption vs Emissions



Electricity Consumption



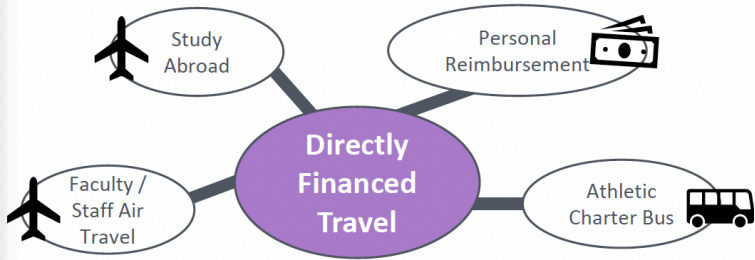
Electricity Emissions



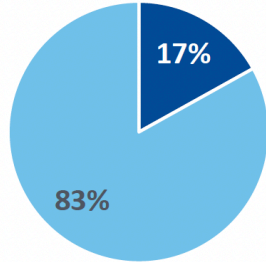


Emissions Increasing Over Time

Travel emissions increase significantly in FY23

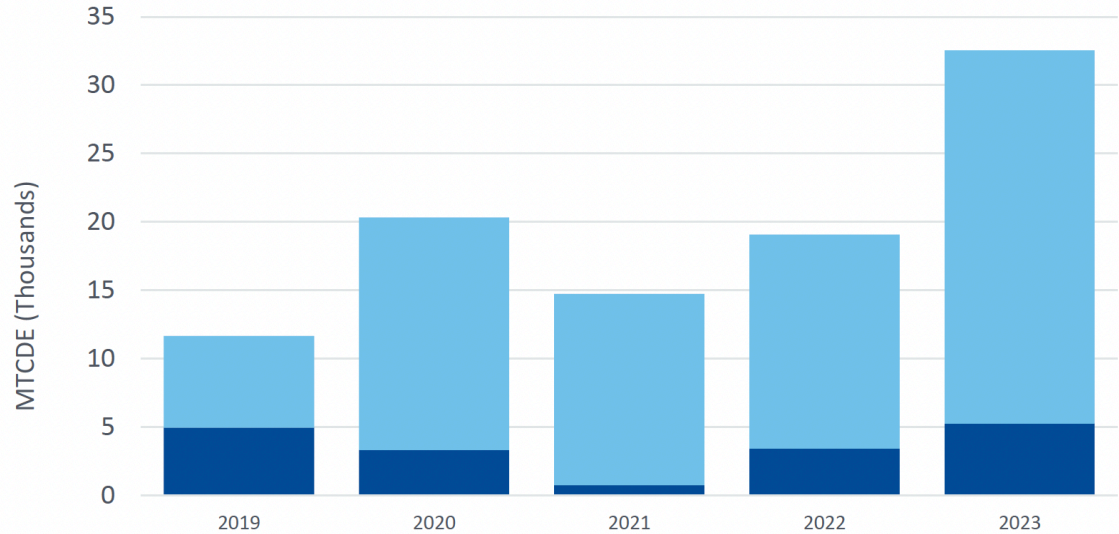


FY23 Travel Emissions



■ Study Abroad ■ Institutional Ground & Air Travel

Travel Trending

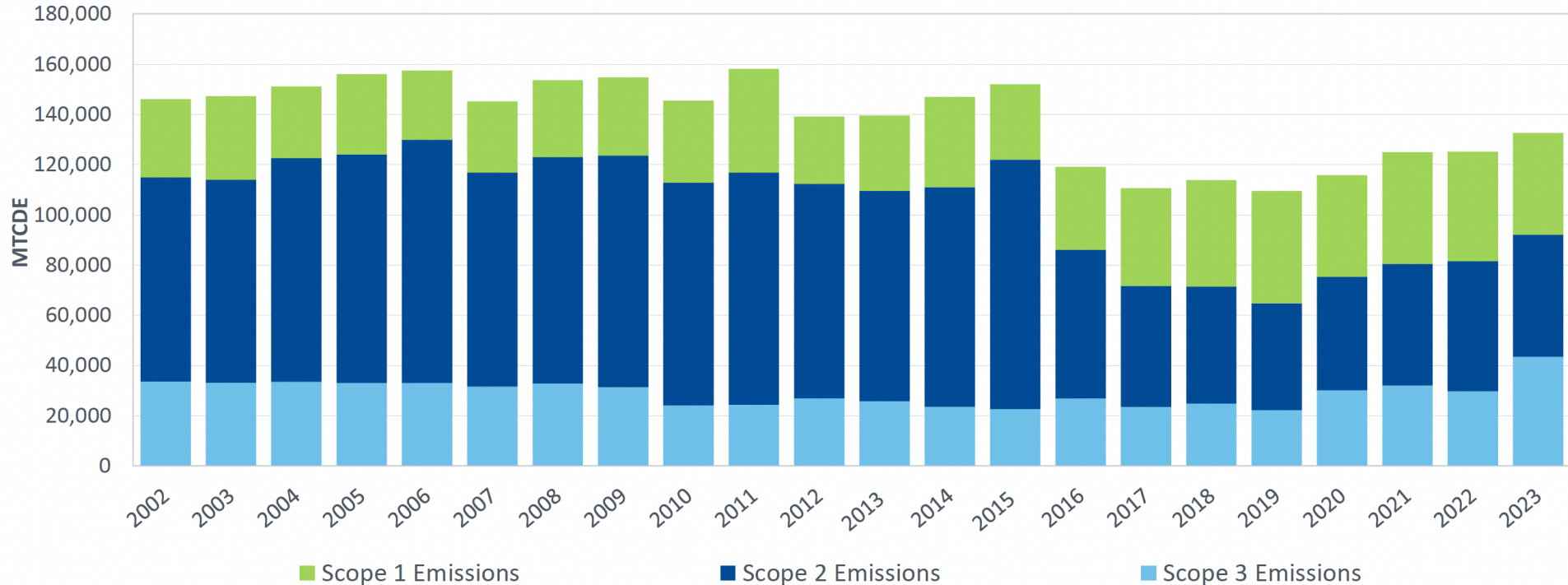


■ Institutional Ground & Air Travel ■ Study Abroad

Air Travel Drives Increase in FY23



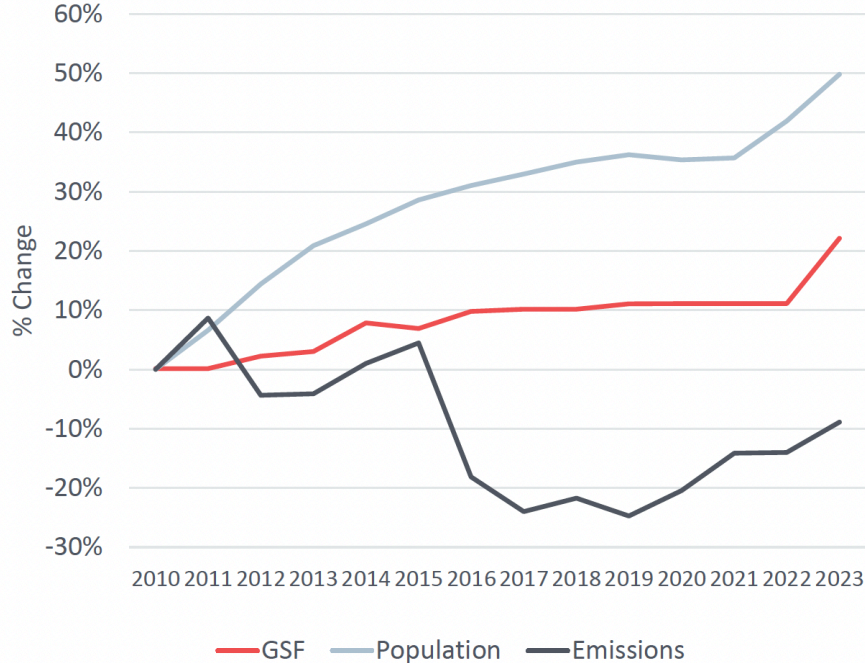
Historical Gross Emissions



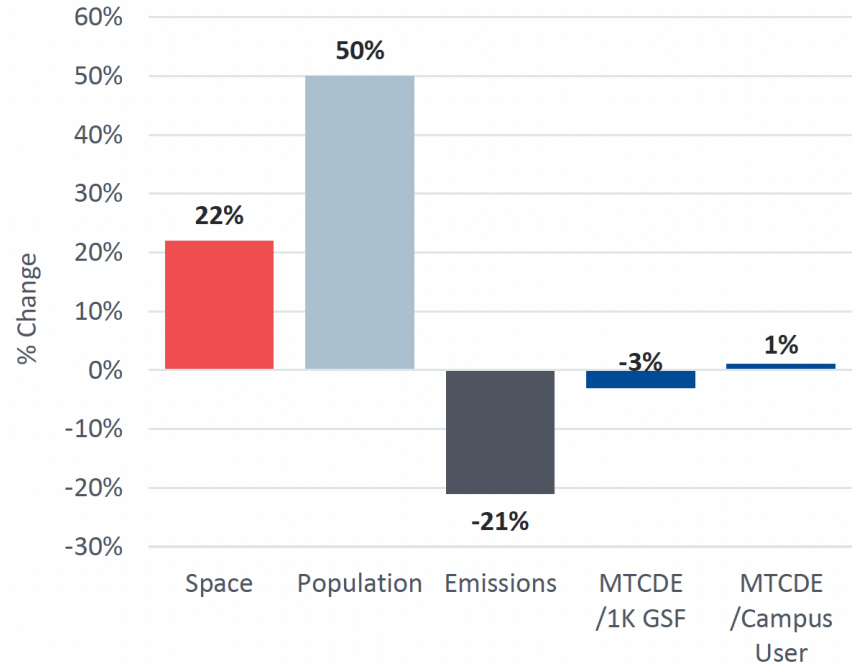


Construction of Cogeneration Plant Drives Emissions Trend

Change in Emissions vs Institution Metrics Indexed to FY2010



Change in Space, Population, and Emissions Indexed to FY2010



Strategies for Reducing Emissions



AVOIDANCE:

Prevent activities before they start

Example: Increase space utilization instead of building or acquiring new space

ACTIVITY:

Reduce the existing level of an activity

Example: Consume fewer BTUS' of energy/travel fewer miles

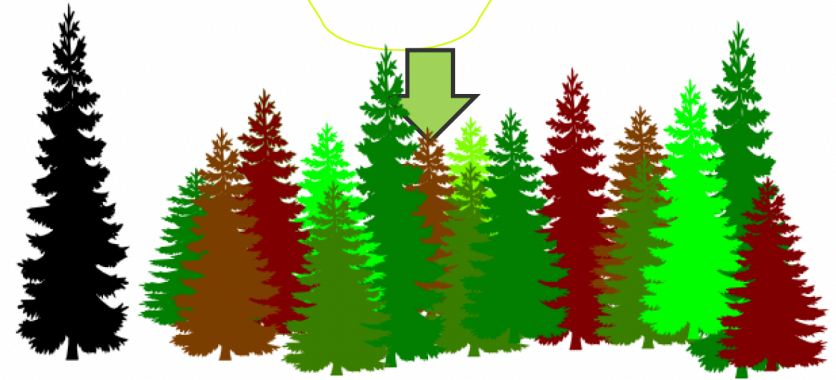
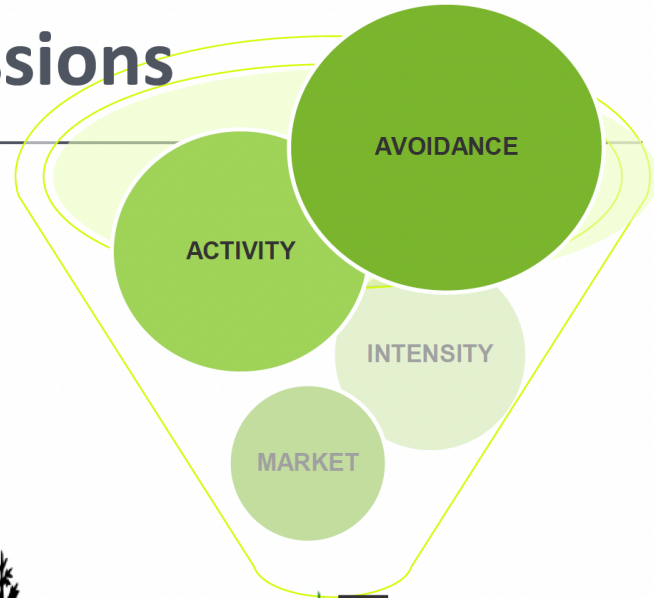
INTENSITY:

Lessening the carbon intensity of activities

Example: Fuel switching (coal to biomass)

MARKET:

Utilizing Market mechanisms to neutralize unavoidable GHGs



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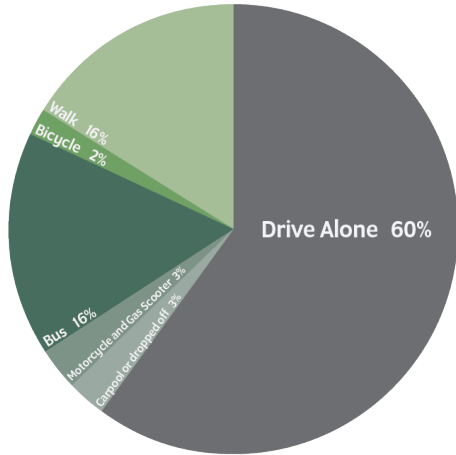


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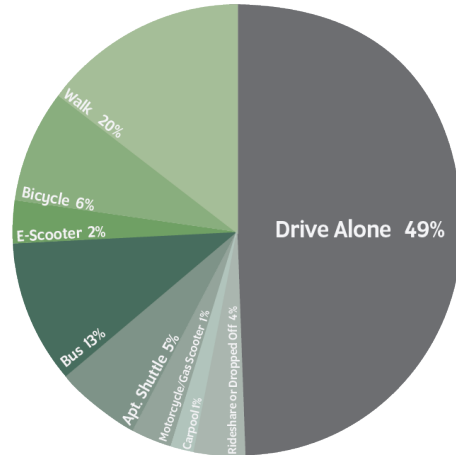
1. Co-chair updates
 - a. Associate Vice Chancellor, Facilities Management, Scott Turley
 - b. Director of Sustainability Academic Programs, Ken McCown
 - c. ASG Director of Environmental Affairs, Ben Hollis
2. EPA Climate Pollution Reduction implementation grant (Eric Boles)
 - i. Oak Ridge Hillside
 - ii. ARTP Prairie
 - iii. Oak Knoll
3. Updates from Emma Armendariz, the UA's Active Transportation Coordinator
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UofA Commuter Survey

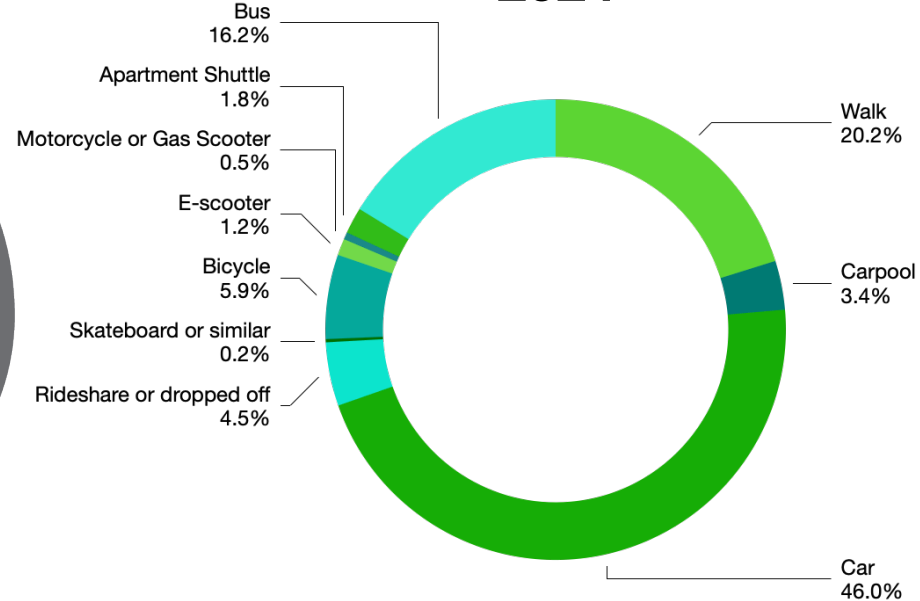
2015



2023



2024

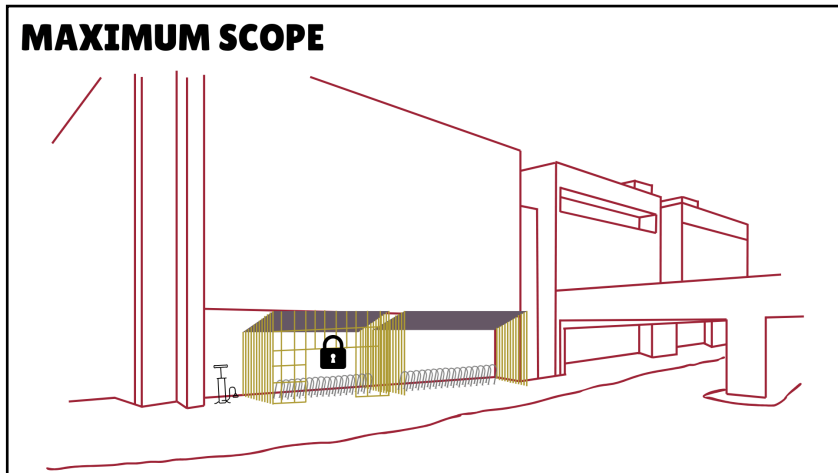


- Collected 1000+ responses
- 40% of responders live less than 2 miles from campus
- Significant interest in incentives for alternative transportation users

Campus Bike Parking

Improvements and additions

- Audit occurred summer 2024
- Retrofitting where we can
- Identifying spaces in need



Field Trips to Oak Knoll

School of Art

- Interdisciplinary collaboration
- National Campus Bike Summit
- Two more field trips
- Exhibition planning - Spring 2025





INSPIRATION
INTEGRATION
TRANSFORMATION

MAPLE STREET CYCLE TRACK



Oak Ridge Hillside Trail and Restoration Project

OAK RIDGE
PAVED TRAIL EXTENSION
PHASE 2.2

OAK RIDGE
SELECTIVE
TREE PLANTING

OAK SAVANNA
RESTORATION
(4.5 ACRES)

OAK RIDGE
PAVED TRAIL EXTENSION
PHASE 3

OAK RIDGE HILLSIDE RESTORATION
(4 acres)

EVERGREEN RESTORATION
(2.7 acres)

OAK RIDGE PAVED TRAIL

FAYETTEVILLE TRAVERSE TRAIL

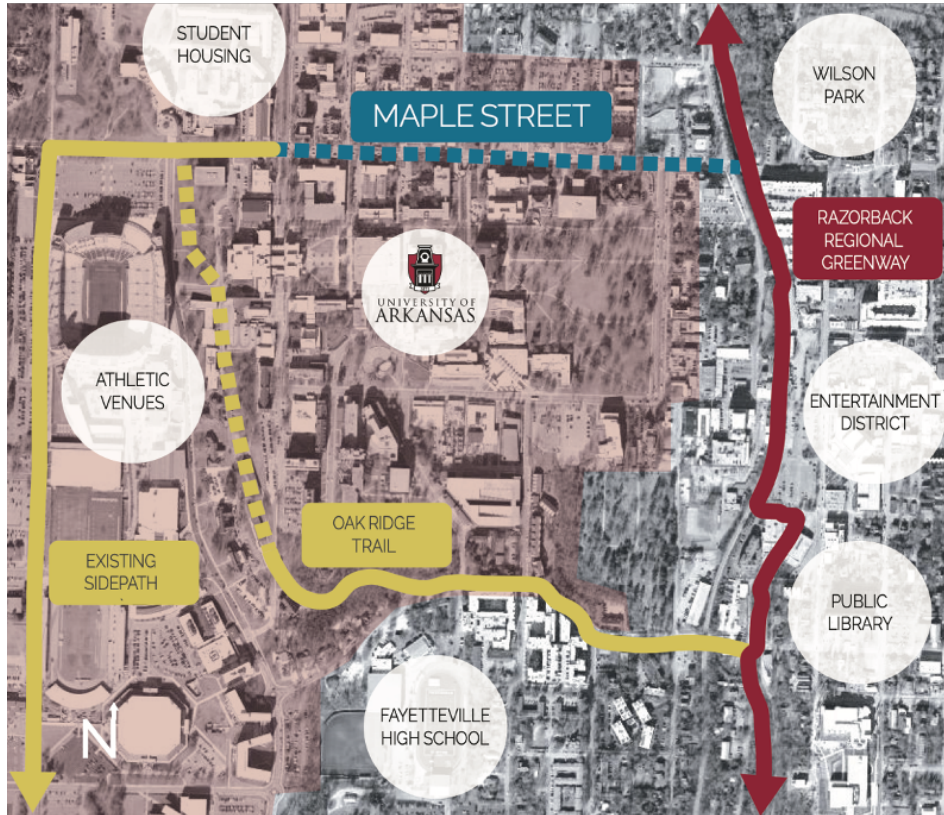
ADOHI RESTORATION
(1.4 acres)

RAZORBACK REGIONAL GREENWAY

- Existing Paved Trail
- New Paved Trail
- Prairie + Savanna Restoration
- Forest Restoration



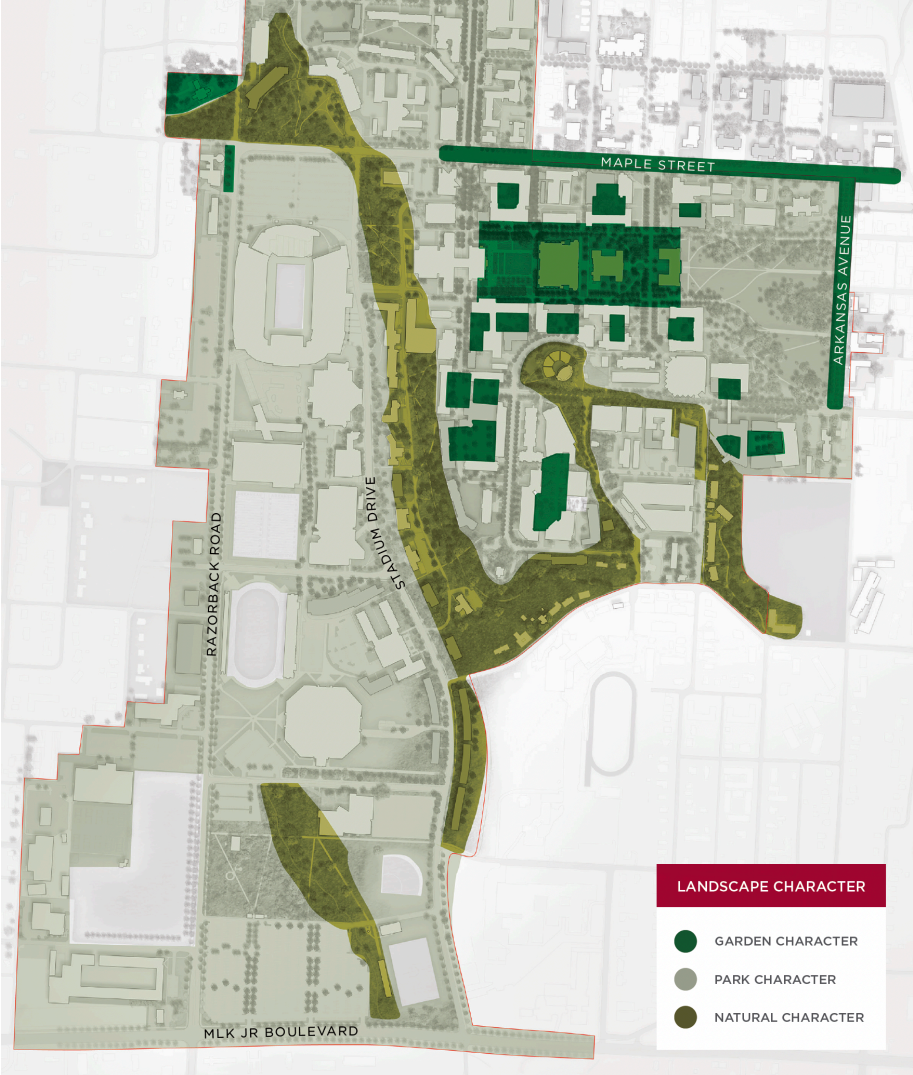
Campus Loop



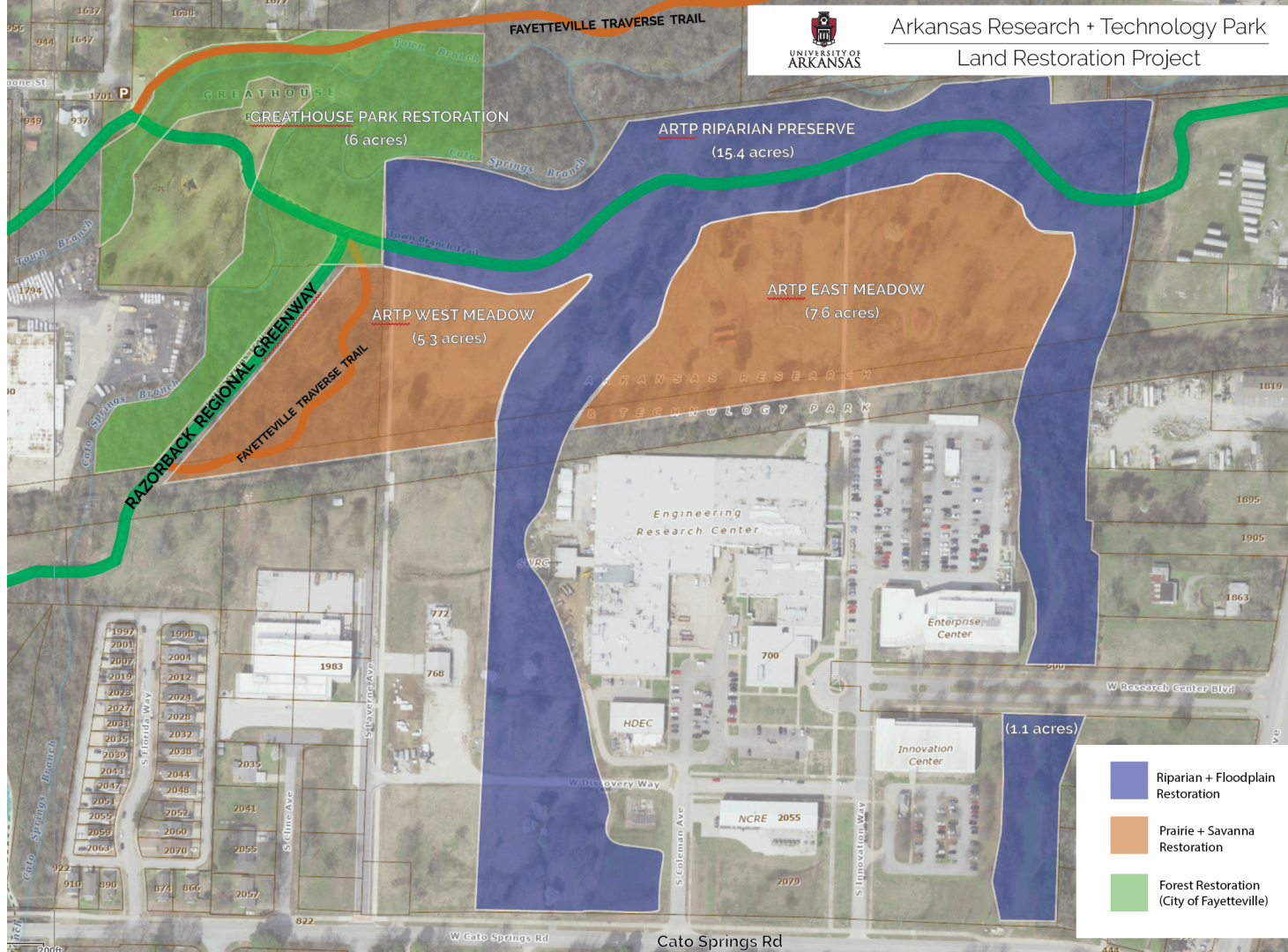
The University of Arkansas campus sits just blocks from the Razorback Regional Greenway—a regional network of over one hundred miles of paved trails.

Unfortunately, the connectivity between the Greenway and campus destinations lacks adequate infrastructure to serve all ages and abilities of users.

The campus needs a contiguous loop of multi-use paved trail to envelope the campus core and allow for efficient transportation and recreation.







- Riparian + Floodplain Restoration
- Prairie + Savanna Restoration
- Forest Restoration (City of Fayetteville)





The 10-acre Post Oak Savanna



The CSRC Remnant Prairie



