

State of Sustainability: 2024 Update

UW Office of Sustainability
May 22, 2024

BE BOUNDLESS



UW OFFICE OF SUSTAINABILITY



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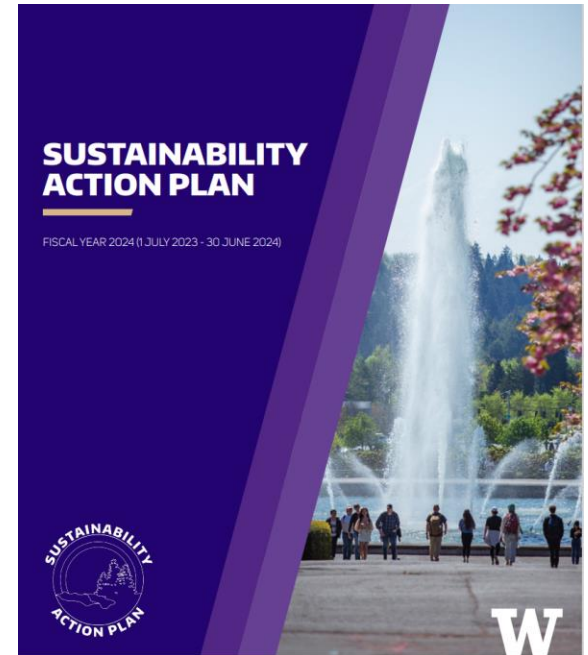
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Sustainability Action Plan Progress

1. Double Student, Faculty, Staff Engagement by 2024
2. One UW-Wide Sustainability Framework by 2022
3. Double Sustainability Oriented Research Projects by 2025
4. Comprehensive Equitable Purchasing Targets by 2022
5. 5% Lower Emissions from Professional Travel by 2025
6. 35% of Food is From Local Sources by 2025
7. 6% Decrease in Single Occupant Commuter Rate by Campus by 2028
8. 15% Lower Energy Use Intensity by 2025
9. 10% Less Solid Waste by 2025
10. 45% Reduction of Greenhouse Gases by 2030

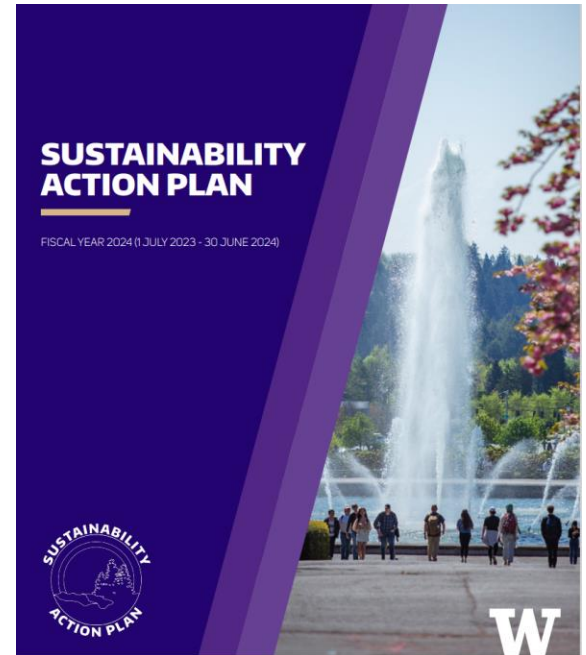
*Read about our progress on each target [here](#) on the Sustainability Action Plan Update page. *2024 Progress Report to be published this summer.*



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Updating the Sustainability Action Plan

Kick-off Fall of 2024!



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SAP TARGET #1: DOUBLE STUDENT, STAFF, FACULTY ENGAGEMENT BY 2024

CREATING A SUSTAINABLE CAMPUS WEBINAR SERIES

- October 25, 2023: Decarbonization Town Hall
- December 6, 2023: UW's Greenhouse Gas Emissions
- January 24, 2024: Sustainable Dining with Housing and Food Services
- February 14, 2024: Keeping items out of the landfill during student move-out
- March 13, 2024: Sustainable Transportation
- April 16, 2024: Reducing Air Travel (part 1)
- April 15th, 2024: Decarbonizing our Energy System
- May 8, 2024: UW's New Green Building Standard
- May 15, 2024: Reducing Air Travel (part 2)
- May 22, 2024: State of Sustainability Update

A purple rectangular graphic for the 'Decarbonization Town Hall' event. At the top, the title 'Decarbonization Town Hall' is written in white, bold, sans-serif font. Below the title, the word 'Panelists:' is written in a smaller white font. Underneath, there are four small square portrait photos of the panelists: Lela Corson, Frank Hodge, Jan Whittington, and Dave Woodson. Below the photos, their names are listed in white text. Underneath the photos, the word 'Facilitator:' is written in a smaller white font. Below that, there is a single square portrait photo of Lisa Dulude, with her name listed below it. To the right of the photos, there is a white rounded rectangle containing the event date and time: 'October 25, 2023' and '4:30 p.m.' in white text.

**Decarbonization
Town Hall**

Panelists:

Lela Corson Frank Hodge Jan Whittington Dave Woodson

Facilitator:

Lisa Dulude

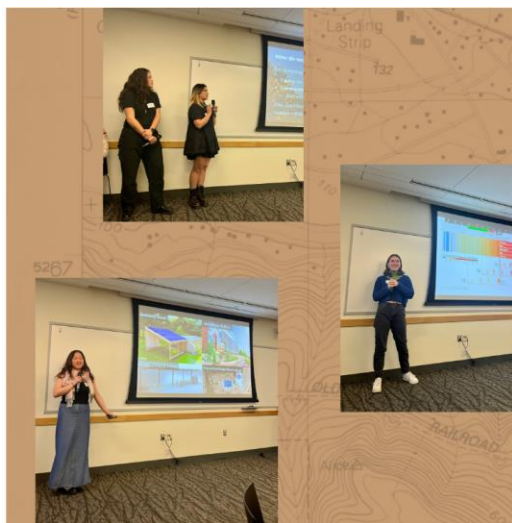
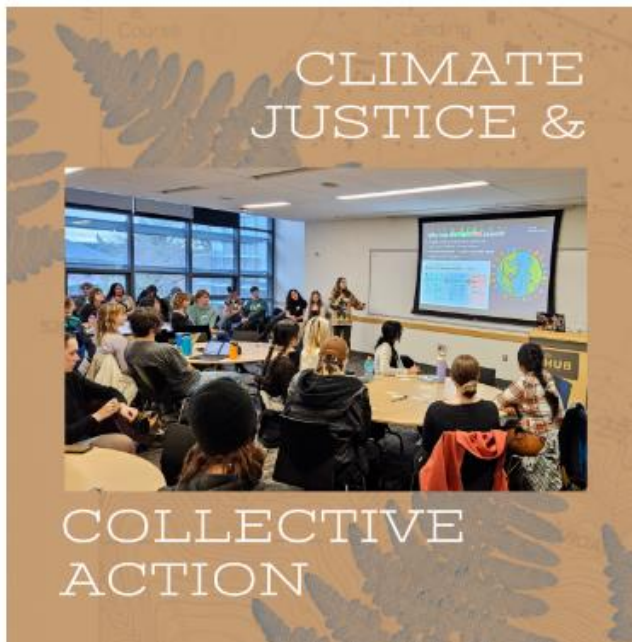
October 25, 2023
4:30 p.m.

Watch Webinar Recordings
sustainability.uw.edu/webinars

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SAP TARGET #1: DOUBLE STUDENT, STAFF, FACULTY ENGAGEMENT BY 2024

INTERSECTIONAL SUSTAINABILITY 'TEACH-IN' hosted by CSF and student RSOs



- [CSF Resource Guide - Google Docs](#)
- [CSF 'Zine' is here](#)

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SAP TARGET #1: DOUBLE STUDENT, STAFF, FACULTY ENGAGEMENT BY 2024



UW Sustainability

Examples to Engage and Stay Informed!

Decarbonization and Energy

- Student Energy Task Force
- Faculty Energy Roadmap Working Group
- Staff Energy Roadmap Working Group

Air Travel

- Air Travel Working Group

Campus Sustainability Fund

- Contact CSF

Sustainability Action Plan Update

- Email UW Sustainability Office

New Student Sustainability Forum/Collaborative

- Email UW Sustainability Office

SEED – Students Engaged in Environmental Dedication

Stay informed

In Our Nature Blog

Newsletters

Podcast

Photos, videos & more

Husky Sustainability Awards

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SAP TARGET #2: ONE UW SUSTAINABILITY FRAMEWORK

We have invested time in re-evaluating our sustainability mission, vision, and path forward for UW.....

Sustainability Vision and Mission

- Are we working toward the same goals? At the same pace?
Aligned as one organization?

Envisioning our Future

- Where do we want to be in 5 years? 20 years? By 2050?

University Commitment

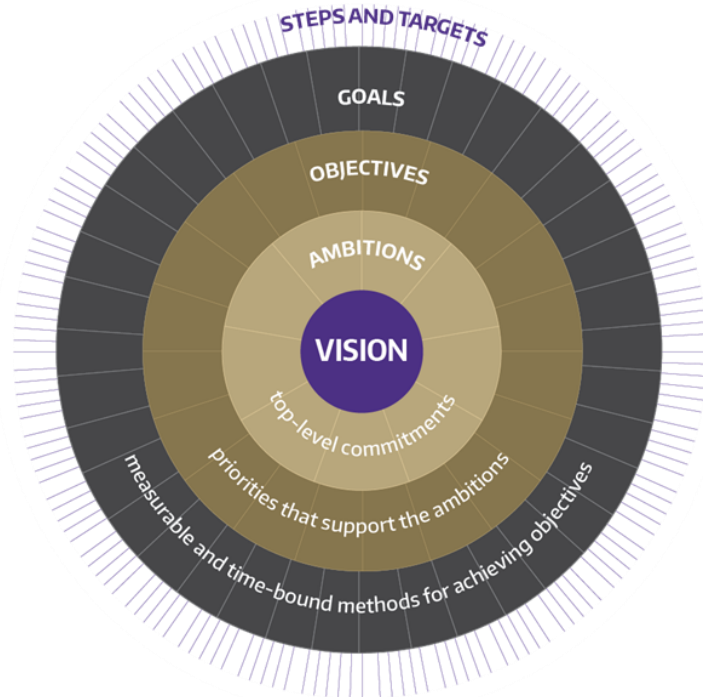
- What are we willing to commit to? All hands-on-deck for 'big' initiatives?

Path Forward for Success

- What does UW want and need in our new Sustainability Action Plan? And what do we need to achieve our goals?



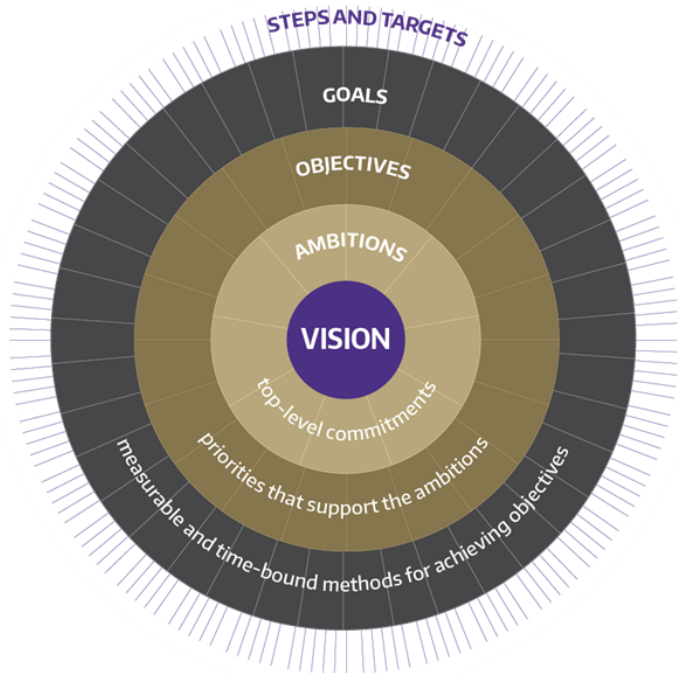
SAP TARGET #2: ONE UW SUSTAINABILITY FRAMEWORK



SUSTAINABILITY VISION

We envision a UW where sustainability is **interwoven** in everything we do - including scholarship, service, operations, public health, and community. With sustainability deeply embedded in our culture, we take **bold action** and lead with **urgency** for a just, resilient, and healthy planet.

SAP TARGET #2: ONE UW SUSTAINABILITY FRAMEWORK



SUSTAINABILITY MISSION

We consistently acknowledge **environmental harm and inequity**, both past and present, in order to make meaningful progress. We develop leaders and **innovative solutions** to address our planet's **urgent** sustainability challenges. We do this by using teaching, research, service and operations as a foundation to **translate learning into action**, by creating livings labs, and by **dedicating resources** to follow through on our commitments.

SAP TARGET #3: DOUBLE SUSTAINABILITY RESEARCH PROJECTS

Academics

Find courses looking at aspects of sustainability, research centers and departments working on innovative solutions to big challenges, and faculty members with deep expertise.



Sustainability course list

Find UW classes touching on various aspects of sustainability.

LEARN MORE



Departments and centers

Academic units across the UW who are researching and working on topics related to sustainability.

LEARN MORE



Featured courses

See a selection of sustainability courses at UW open to all students.

LEARN MORE



Sustainability directory

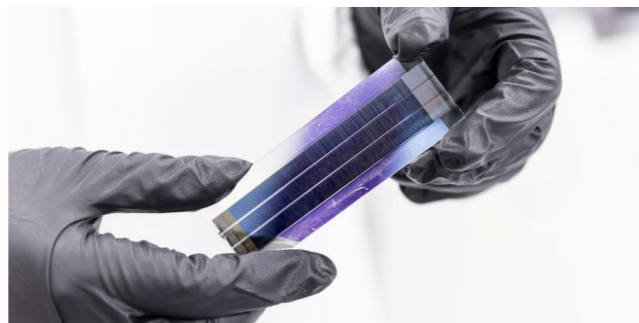
A directory of faculty working on sustainability issues.

LEARN MORE



2025 Focus

Expand living-lab learning opportunities on campus



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SAP TARGET #4: EQUITABLE PURCHASING TARGETS BY 2022

Business Diversity & Equity

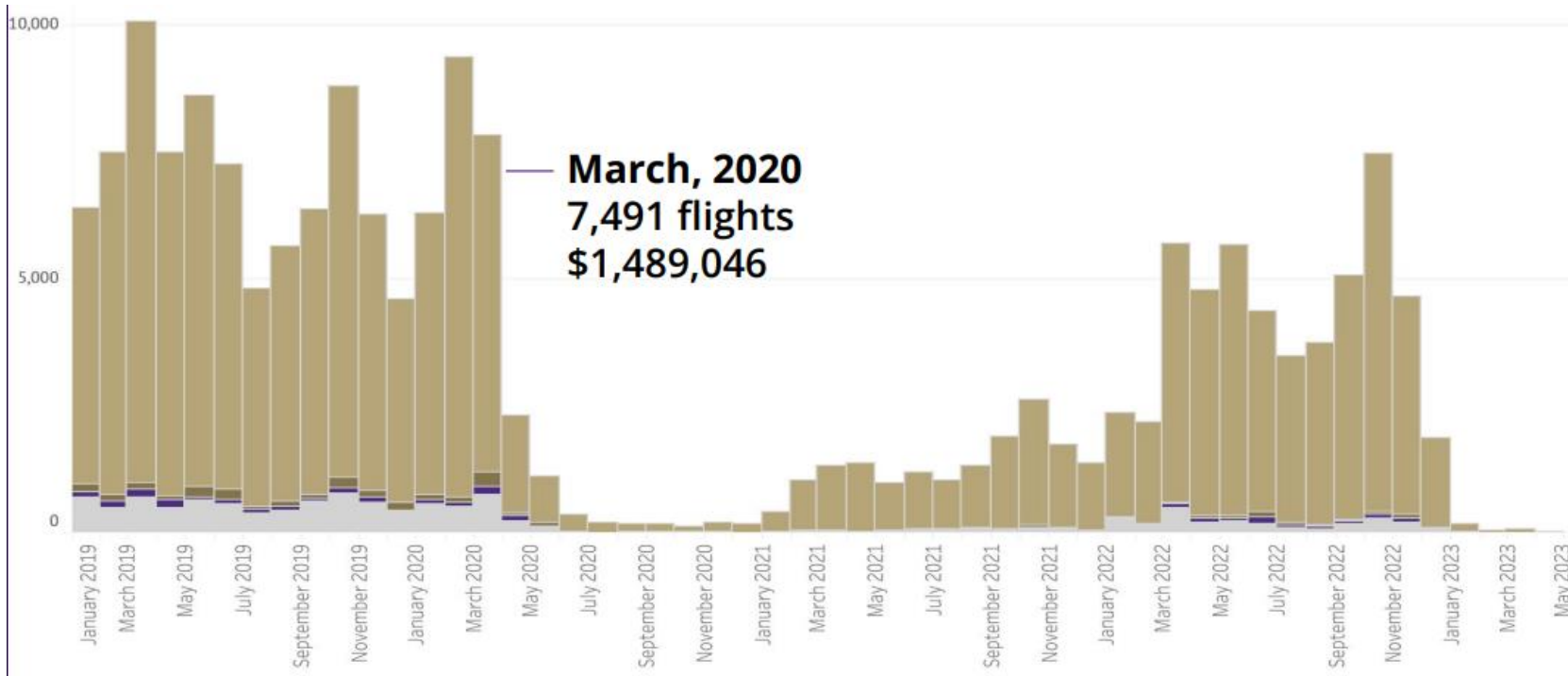
What we do

BD&E connects buyers with diverse suppliers, and provides guidance and networking opportunities for companies who want to do business with the UW.

- Seek to assure visibility of opportunities for small, minority, and women-owned businesses
- Conduct business opportunity fairs and provide information on how to do business with the University
- Provide training opportunities ([Supplier Orientation](#)) and educational workshops for businesses ([Consulting & Business Development Center](#))
- Support UW departments and schools/colleges in sourcing qualified businesses
- Encourage the University's larger suppliers and contractors to develop and expand their commitments to business diversity with their suppliers and subcontractors
- Recommend qualified businesses become certified as minority or women-owned business enterprises with the [State Office of Minority and Women's Business Enterprises](#)



SAP TARGET #5: 5% LOWER EMISSIONS FROM AIR TRAVEL

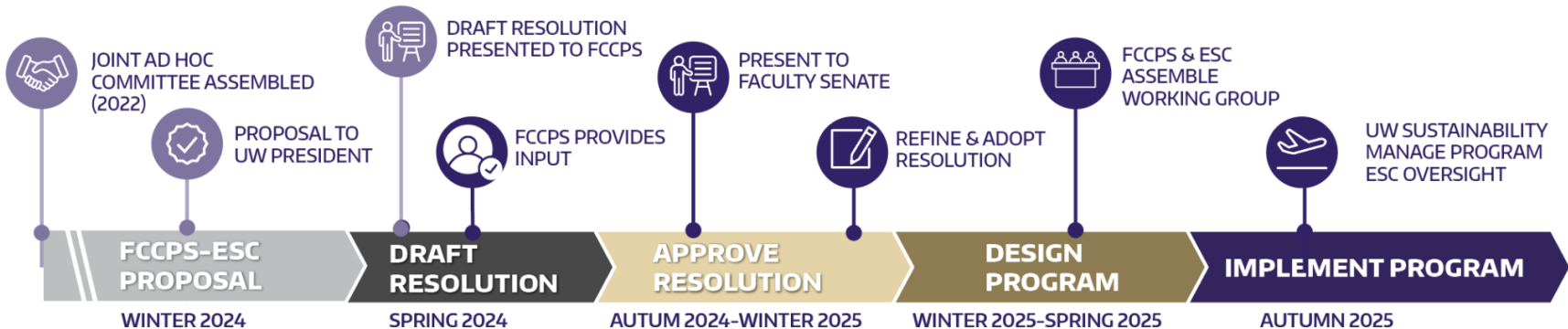


SAP TARGET #5: 5% LOWER EMISSIONS FROM AIR TRAVEL

AIR TRAVEL PROPOSAL: SUMMARY

UW should establish “**Sustainable Connections,**” an Air Travel Reduction Program with two primary goals:

1. **Reduce emission from air travel #FLYLESS** (*begin July 2025*)
2. **Mitigate for UW emissions from air travel #TAKERESPONSIBILITY** (*begin July 2026*)



SAP TARGET #6: 35% FOOD FROM LOCAL SOURCES BY 2025

UW Dining works in partnership with UW Sustainability and campus partners to achieve the goals of the Sustainability Action Plan

- > **Target I- Double student, staff and faculty engagement by 2024**
 - Involved in educational opportunities in the classroom and Dining Units
 - Launched the expanded OZZI Reusable Container Program
- > **Target IV- Purchasing**
 - UW Dining continues to lead in sustainable purchasing practices
- > **Target VI- 35% OF FOOD IS FROM LOCAL SOURCES BY 2025**
 - Locally sourced food is currently at 32% with an eye on the goal
- > **Target IX- 10% LESS SOLID WASTE**
 - Launched the expanded OZZI Reusable Container Program
 - Re-instated the use of reusable plates and utensils at Residential Dining

SAP TARGET #6: 35% FOOD FROM LOCAL SOURCES BY 2025



UW Dining Purchasing

- Focus on plant-based offerings
- Plant-based foods currently account for 38% of all menu items

SAP TARGET #7: 6% DECREASE IN SINGLE OCCUPANT COMMUTE BY 2028

2023 Primary Commute Modes

*2023 Annual Commute Survey not yet complete/published

- Drive alone: 16%
- Approximately 75% of students walk or take transit
- Telecommuting now reduces staff trips to campus by 38%
- Overall, most popular commute modes are Transit and Walking, with a combined total of 58% from all respondents



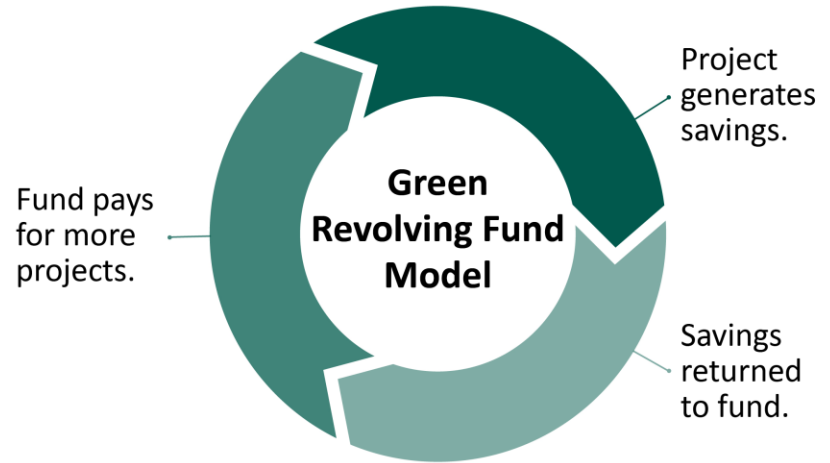
Visit: transportation.uw.edu

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SAP TARGET #8: 15% LOWER ENERGY USE INTENSITY BY 2025

Energy Conservation Efforts:

- State mandate for campus and large commercial bldgs
- Improve and enhance energy data collection from buildings
- \$10M from CCA proceeds
- Anticipate 65% reduction in energy through decarbonization strategy
- Increased from \$0.5M to \$1.5M per year; goal to get it to \$3M/year



SAP TARGET #9: 10% LESS SOLID WASTE BY 2025

EMISSIONS FROM WASTE DISPOSAL

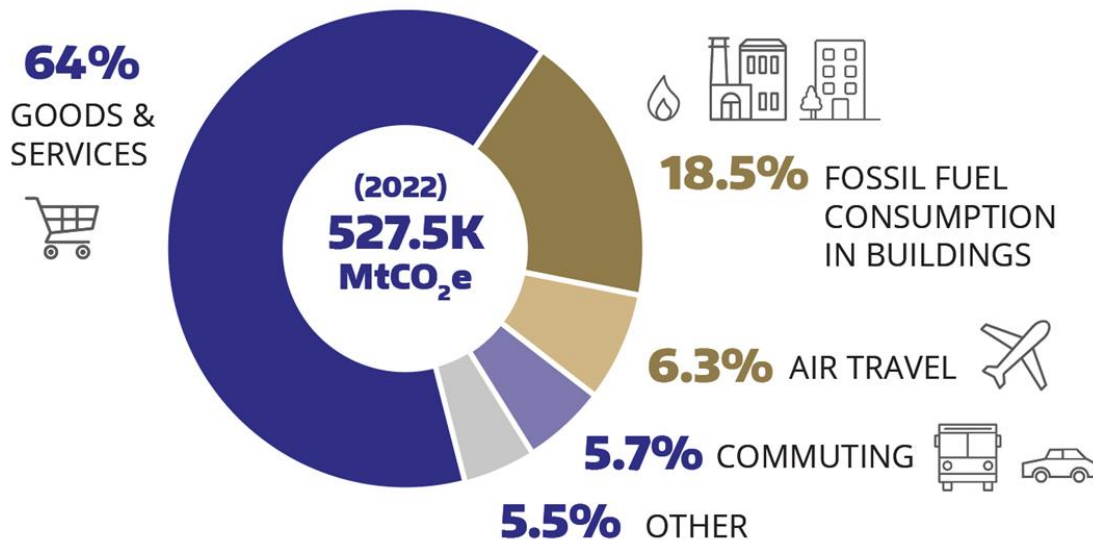


Figure 17: Waste emissions. UW Medicine was not separated in 2005. numbers rounded for graphic simplicity)

UW is on track for this target with some caveats:

- Reduced waste from telecommuting
- Contamination of recycling and compost streams is a huge issue = probation action

SAP TARGET #9: 10% LESS SOLID WASTE BY 2025



- In 2022, 0.57% of the University's emissions came from recycling, composting or landfilling waste.
- Compare that to 64% of emissions from goods and services.

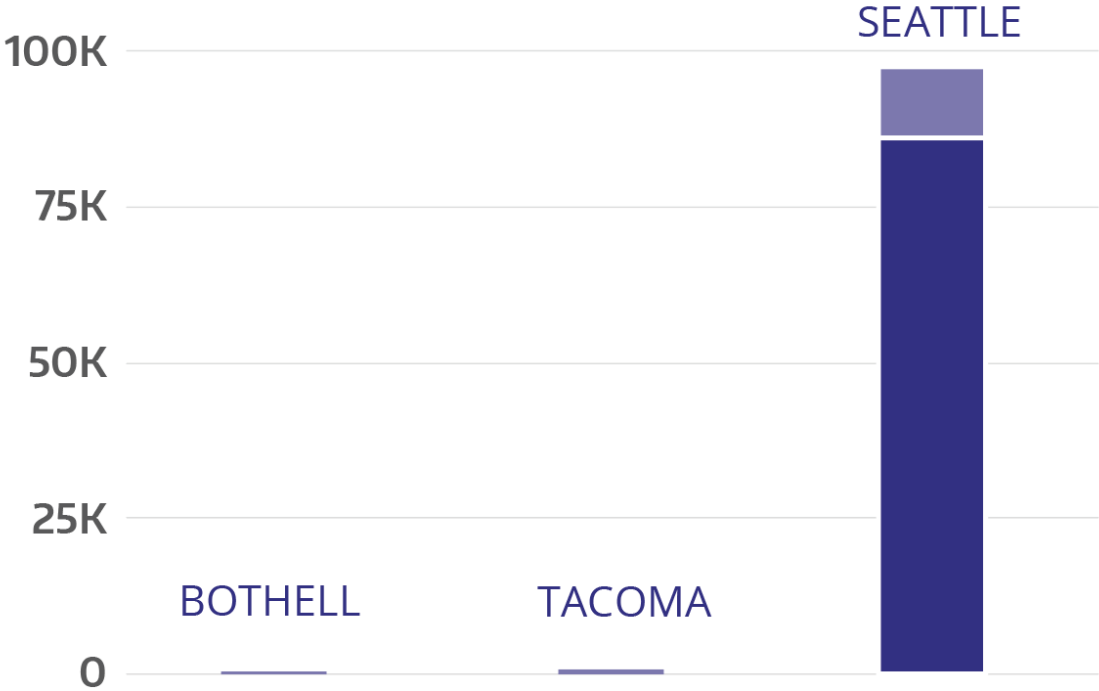
SAP TARGET #9: 10% LESS SOLID WASTE BY 2025

A few examples and resources:

- [SCRAM – Student Clean-up, Recycle, and Move-Out program](#)
- [UW Surplus](#)
- [UW Food Pantry](#)
- Sustainable Procurement Webpage:
[Sustainable Purchasing | Procurement Services \(uw.edu\)](#)



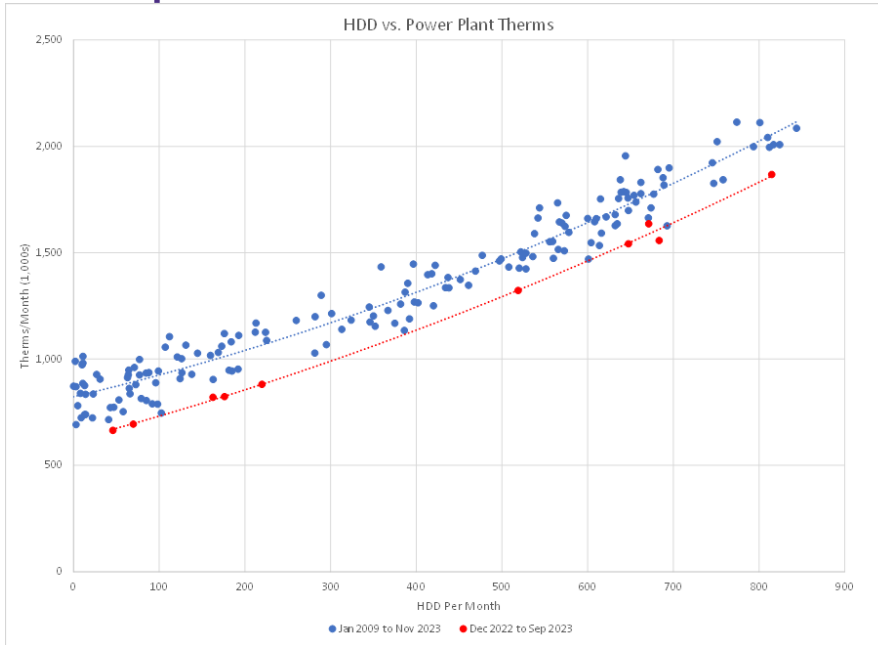
SAP TARGET #10: 45% REDUCTION IN GREENHOUSE GAS EMISSIONS BY 2030



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SAP TARGET #10: 45% REDUCTION IN GREENHOUSE GAS EMISSIONS BY 2030

DRUPS Replacement: ~10% reduction in gas consumption








Power Plant Resiliency Project:
Standardized pressure across the 5 boilers at the steam plant

➤ 12% reduction in natural gas = 10,000 tons of CO₂e reduction!

SAP TARGET #10: 45% REDUCTION IN GREENHOUSE GAS EMISSIONS BY 2030

Seattle Campus Five-Part Decarbonization Strategy

	1 ENERGY EFFICIENCY <i>Expand metering, upgrade controls, data analytics and green revolving fund.</i>	2 CONVERT TO HOT WATER <i>Convert from steam to hot water heating.</i>	3 CENTRAL COOLING <i>Replace inefficient chillers, use lake water for cooling, and add thermal storage.</i>	4 ELECTRIFY HEATING <i>Use heat pumps to extract heat from cooling towers, sewer and lake water.</i>	5 EMERGING TECHNOLOGIES <i>Continuously evaluate emerging technologies for full decarbonization.</i>	
ENERGY SYSTEM ISSUES						GOAL 100% CLEAN ENERGY
Greenhouse Gas Emissions	15% reduction in GHGs	20% reduction in GHGs	no additional reduction	45% reduction in GHGs	20% reduction in GHGs	100% reduction in GHGs
Energy Consumption	30% energy reduction	20% energy reduction	10% energy reduction	15% energy reduction	?	75% Reduction in Energy Use
Electrical Capacity Constraint	2% more capacity	2% less capacity	25% more capacity	30% less capacity	?	Accommodate Capacity Constraint
Aging Utilities Infrastructure	✓	✓	✓	✓	?	Resilient Infrastructure

SAP TARGET #10: 45% REDUCTION IN GREENHOUSE GAS EMISSIONS BY 2030

RECENT EXAMPLES FROM UW BOTHELL AND UW TACOMA

UW Bothell Central Plant Optimization & Gas Boiler Replacements (\$6.5 million):

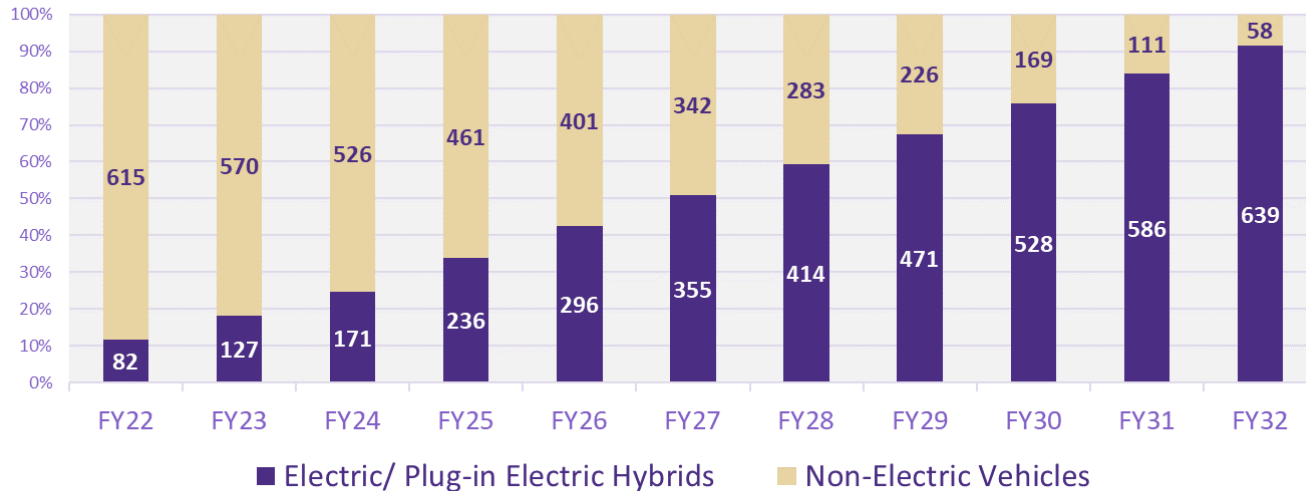
- Upgrade the existing 1,000-ton chiller at the Central Plant
- Replace 21 domestic gas heaters with electric heaters in campus facilities.

UW Tacoma Gas Boiler Replacements (\$8.4 million):

- Replace five large gas-fired boilers, 11 unitary gas packs, and associated infrastructure with electric condenser boilers or heat pumps

SAP TARGET #10: 45% REDUCTION IN GREENHOUSE GAS EMISSIONS BY 2030

Fleet Vehicle Composition

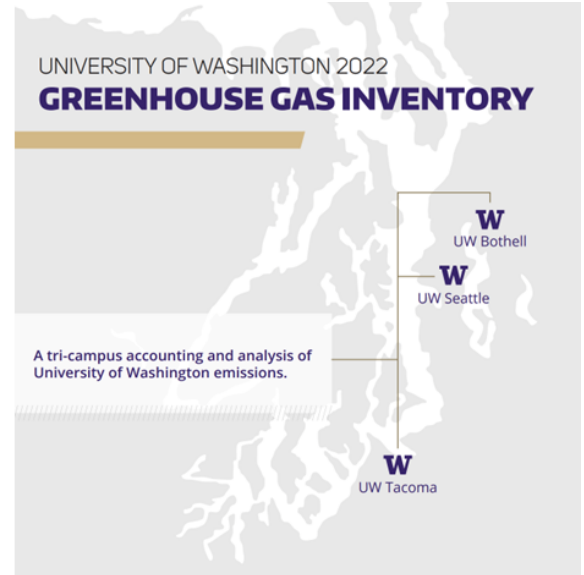


As gas vehicles in the fleet become eligible for replacements, goal is to purchase an electric vehicle whenever possible

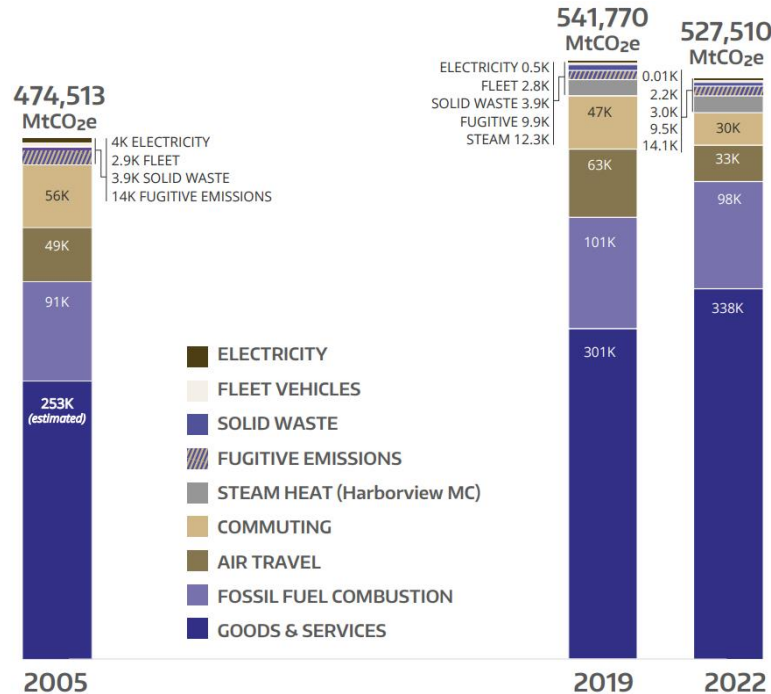
SAP TARGET #10: 45% REDUCTION IN GREENHOUSE GAS EMISSIONS BY 2030

- > UW's first public-facing GHG Inventory since 2005
- > **First time that UW has inventoried 'Goods and Services' purchased**
- > Includes all three campuses as well as UW Medicine and major medical facilities
- > Critical for updating UW's Sustainability Action Plan (kick-off in fall 2024)

You can't manage what you don't measure!



SAP TARGET #10: 45% REDUCTION IN GREENHOUSE GAS EMISSIONS BY 2030



11% increase in GHGs over 2005 baseline

- Square footage and campus population has significantly increased since 2005

Figure 1. Comparison of total UW emissions from 2005 (baseline year) to 2019 and 2022. Numbers are rounded for graphic simplicity.

New UW Green Building Standard

To be published this spring 2024.....

NEW UW Green Building Standard

PROJECT TYPES

TIER 1

new construction
major renovation



TIER 2

partial renovations
interiors projects



TIER 3

system
upgrades



TIER 4

non-energy
projects



TARGETS



WATER

25-40% below code
depending upon project



ENERGY

EUI below state requirement



LEED GOLD (or equivalent)

some required credits



EMBODIED CARBON

<500kg CO₂e/m² in primary
materials

ECOLOGY

HEALTH & WELLNESS

EQUITY

New UW LEED
Scorecard with
required credits

New UW Friendly Bird
Guidelines – created
by a PHD student!

Pilot a fitwell credit
Include showers &
changing facilities

Lactation facilities,
Gender-neutral
restrooms

- No new fossil fuels
- Required Life Cycle Cost Assessment
- Must connect to District Energy System



What's ahead for 2024-2025?

- New Green Building Standard – Roll out and implementation
- Water Conservation Audit
- New Student Sustainability Forum
- Sustainability Action Plan Update

An aerial photograph of the University of Washington campus. In the foreground, a large, historic building with a dark, multi-gabled roof and several chimneys is visible. The building is surrounded by lush green lawns and trees with vibrant autumn foliage in shades of yellow, orange, and red. In the background, a large body of water (Lake Washington) is visible, along with more campus buildings and a forested hillside under a clear blue sky. The text "Thank you!" is overlaid in the top left corner, and "QUESTIONS?" is centered in the middle of the image. Contact information is provided in the bottom left and right corners.

Thank you!

QUESTIONS?

Website: sustainability.uw.edu

Email: sustainability@uw.edu

Visit our [staff page](#) for individual contact information

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