CAMPUS SUSTAINABILITY PLAN 2024

WHITMAN COLLEGE

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EXECUTIVE SUMMARY

Planning process

To create this plan, Whitman partnered with two consulting firms: GreenerU and Cascadia Consulting Group. GreenerU believes that campus sustainability planning processes are most successful when they involve a wide range of campus stakeholders in every part of the planning process.

At the beginning of this process, stakeholders were gathered from across campus to participate in working groups which each met five times. The three working groups each addressed one of three focus areas:

1. Outreach and education
2. Operations
3. Decarbonization and resilience.

The highlight of the planning process was the fourth working group meeting. This was a 2.5 hour in-person meeting of all planning process members and an hour-long gallery tour of the goals and strategies for each focus area. This provided the working groups with the opportunity to offer feedback and identify synergies amongst priorities. Following the gallery tour, working groups reviewed this feedback, adjusted and voted on goal language, and refined strategy language against a set of tools designed to evaluate goals.

Engagement

From February 12 to February 19, the consultant team conducted a campus-wide survey to determine campus sustainability priorities.

While on campus for the fourth working group meeting, the consultant team led seven hour-long listening sessions with various populations on the Whitman campus. These sessions solicited feedback on draft goals and invited ideas across all sustainability topics.

The team met with CTUIR representatives to deepen their understanding of the CTUIR Climate Adaptation Plan and explore collaborative opportunities with Whitman College. Discussions focused on aligning Whitman's Campus Sustainability Plan with CTUIR's goals and identifying mutual benefits such as joint research and educational initiatives. Both parties considered resource sharing and community engagement to enhance their efforts. The meeting laid the groundwork for ongoing collaboration to advance regional environmental sustainability and resilience.

Implementation process and constraints

This Campus Sustainability Plan provides a road map for the college's sustainability-related aspirations over the next 25 years. The initiatives outlined in this plan are subject to two caveats:

1. This plan is part of a wider set of strategic planning efforts at the college, and initiatives from this plan will be managed through the college's normal resource allocation processes, potentially in competition with initiatives associated with other strategic planning priorities.

2. From time to time over the duration of this plan, the college may find itself facing uncertainties and challenges driven by competition in the higher education marketplace, as well as the regulatory, compliance, taxation, and legal environment. These challenges may limit the speed with which the college can realize its aspirations under this plan.

Implementation commitments

There were a couple of priorities for goal implementation that became clear during the planning process:

1. Transparency: Provide regular, accessible updates to the campus community about plan implementation to promote transparency.

2. Equity: Prioritize the well-being of communities and ecosystems impacted by material extraction processes.

Sustainability vision

Through the planning process, the working groups created the following vision for the future of sustainability at Whitman:

"Whitman College demonstrates its commitments to environmental justice, climate action, and sustainability by increasingly implementing best practices chosen through transparent decision-making processes while educating the next generation of global citizens and climate action leaders."

Carbon neutrality commitment

Whitman College has an interim target of reducing greenhouse gas emissions by 50% by 2035 compared to an FY 2022 baseline and will be carbon neutral by 2050.

To reach carbon neutrality, an institution must first decrease their greenhouse gas emissions as much as possible and then, if necessary, use carbon offsets or other measures to mitigate the remaining emissions.

Previous sustainability work at Whitman

As an institution of higher education, Whitman recognizes its environmental, economic and societal impact. The college strives to model behaviors that contribute to a healthy environment, robust economy, and equitable society and commits to evolve as new avenues towards a more sustainable future arise.

On September 24, 2019, President Kathleen Murray (Ret.) affirmed Whitman College's dedication to taking action on climate change by signing **Second Nature's Carbon Commitment.** To Whitman, sustainability includes improving quality of life and equity within the human situation, while supporting our environmental systems.

In June of 2023, the Whitman College Board of Trustees voted to approve S**trategic Theme VI: Environmental Justice, Sustainability and Climate Action**, reaffirming this commitment.

GOAL SUMMARY

DECARBONIZATION

GOAL 1: ENERGY EFFICIENCY

Immediately, energy efficiency is optimized for all new buildings and by 2030 a schedule and funding plan for prioritizing energy efficiency is created for all existing buildings while accounting for climate adaption measures and cost effectiveness.

GOAL 2: ELECTRIFICATION

Convert all major fossil-fuel based energy systems on campus to electricity.

GOAL 3: RENEWABLE ENERGY

Power campus using primarily renewable energy from local or regional sources.

RESILIENCE

GOAL 1: RISK EDUCATION

By 2030, Whitman provides comprehensive, accessible, and well-thought-out information and resources about the importance of climate resilience and responding to severe climate-related events through a variety of channels with the intention of reaching the entire campus community and the greater Walla Walla community.

GOAL 2: INFRASTRUCTURE

By 2030, Whitman has the necessary resources to support its faculty, staff, and students in an equitable manner through severe climate-related events such as heat waves, wildfire smoke events, and high wind events.

GOAL 3: EMERGENCY PLANNING

Whitman annually updates an inclusive and sufficiently funded emergency management plan for severe climate events that integrates with the city and regional emergency response plans and collaborates with the greater Walla Walla community.

OPERATIONS

GOAL 1: WASTE DIVERSION

By 2030, Whitman has increased the percentage of waste not going to the landfill from 40% to 60% utilizing the zero-waste hierarchy as guidance.

GOAL 2: WASTE REDUCTION

By 2030, Whitman has reduced discarded material generation by a minimum of 15% from a baseline year of FY 2024.

GOAL 3: GROUNDS

By 2030, Whitman has created and implemented a landscape master plan that preserves and enhances the sustainability, resiliency, and accessibility of Whitman's landscape.

GOAL 4: TRANSPORTATION

By 2030, Whitman supports accessible transportation options that reduce emissions from commuters, the campus fleet, and college-related travel.

GOAL 5: WATER USE

By 2030, Whitman has a comprehensive understanding of its water use and has established and implemented a campus water use reduction plan.

OUTREACH AND EDUCATION

GOAL 1: CURRICULUM

By 2030, all students understand and have experience creatively addressing sustainability-related problems.

GOAL 3: INTERNAL ORGANIZATION

By 2030, the Department of Sustainability facilitates synergies and knowledge-sharing between sustainability groups and stakeholders, using consistent, accessible, and intentional communication strategies.

GOAL 5: COMMUNITY INVOLVEMENT

Whitman continues to support and aims to become a nationally-recognized leader in regional sustainability and environmental justice work. The college will center mutually beneficial partnerships with various organizations that positively impact the environment and community, emphasizing collaborative efforts that promote sustainability, social equity, and climate adaptation.

GOAL 2: EXPERIENTIAL LEARNING

By 2030, Whitman's sustainability education will extend beyond the conventional boundaries of a physical classroom, enabling students to experience the practical implementation of their studies through real-world opportunities that are accessible to all students.

GOAL 4: ENVIRONMENTAL JUSTICE

By 2030, the Department of Sustainability has established a plan in partnership with various divisions across campus that will develop opportunities for co-curricular, real-world environmental justice work that are responsive to the priorities of our partners.

SUSTAINABILITY VISION

Whitman College demonstrates its commitments to environmental justice, climate action, and sustainability by increasingly implementing best practices chosen through transparent decision-making processes while educating the next generation of global citizens and climate action leaders.

We commit to continuously improving Whitman College's sustainability policies and practices and will demonstrate these improvements in measurable ways. We will generate our sustainability goals through transparent and community-driven decision-making processes, providing regular updates about initiatives and implementation timelines.

We will seek broad campus buy-in and will deeply engage with the Whitman community, ensuring the inclusion of underrepresented groups. We will embed sustainability into campus culture, work with local and regional partners, and embrace necessary changes to lifestyles and operating practices.

GUIDING PRINCIPLE

Strategic theme VI: *Environmental Justice, Sustainability and Climate Action*

SUSTAINABILITY DEFINITION

Whitman College understands the concept of sustainability as a holistic commitment to environmental stewardship, social and environmental justice, and ethical decision-making.

Sustainability involves making thoughtful and careful choices that resonate with the values of our community, ensure fairness and inclusivity, and promote responsibility for the well-being of the planet that all humans share.

Our community's understanding of sustainability extends beyond the present, aiming to empower future generations to navigate and contribute to a harmonious and equitable world in which the basic needs of humans are met while their communities and the ecosystems around them also thrive.

ABOUT THE PLAN

THE PLANNING PROCESS

Figure 1. – The timeline of the planning process at Whitman College.

Consultant partnerships

To create this plan, Whitman partnered with GreenerU and Cascadia Consulting Group.

GreenerU helps institutions navigate the organizational, operational, and infrastructure changes required to reach climate neutrality through planning, engineering, and implementation.

Cascadia Consulting Group was GreenerU's sub-consultant on this project, and was hired to support community engagement efforts. They are a certified small, women-owned consulting firm working to foster sustainability in communities, businesses, and organizations.

Working group meetings

GreenerU believes that campus sustainability planning processes are most successful when they involve a wide range of campus stakeholders in every part of the planning process.

At the beginning of this process, stakeholders were gathered from across campus to participate in working groups which each met five times. The three working groups each addressed one of three focus areas: outreach and education, operations, and decarbonization and resilience. The topics each of these meetings covered are laid out in figure 1.

The highlight of the planning process was the fourth working group meeting. This was a 2.5 hour in-person meeting of all planning process members and an hour-long gallery tour of the goals and strategies for each focus area. This provided the working groups with the opportunity to offer feedback and identify synergies amongst priorities. Following the gallery tour, working groups reviewed this feedback, adjusted and voted on goal language, and refined strategy language against a set of tools designed to evaluate goals.

Campus engagement

Campus survey
From February 12 to February 19, the consultant team conducted a campus-wide survey to determine campus sustainability priorities. The survey laid out the draft goals the working groups had created and asked for feedback. 32 responses were gathered in total, and they directly informed changes to the goals and the creation of strategies.

Listening sessions
While on campus for the fourth working group meeting, the consultant team led seven hour-long listening sessions with various populations on the Whitman campus. These sessions solicited feedback on draft goals and invited ideas across all sustainability topics. The distribution of the listening sessions was as follows:

- Three listening sessions for faculty and staff
- Two listening sessions for BIPOC students
- Two listening sessions for the student body
- One listening session for ASWC leadership

CTUIR engagement

The team met with CTUIR representatives to deepen their understanding of the CTUIR Climate Adaptation Plan and explore collaborative opportunities with Whitman College. Discussions centered on aligning Whitman's Campus Sustainability Plan with the CTUIR's adaptation goals to foster a synergistic partnership. Key topics included identifying mutual benefits and shared goals, such as joint research projects and educational initiatives that leverage each institution's strengths in sustainability and climate resilience. Both parties discussed the potential for resource sharing and community engagement strategies to enhance the impact of their combined efforts. Overall, the meeting laid the groundwork for ongoing collaboration aimed at advancing environmental sustainability and resilience within the region.

In addition, Whitman College has a Special Assistant to the President for Native American Outreach, who will play a crucial role in strengthening the partnership with CTUIR. In 2023, a CTUIR representative was added to the President's Sustainability Advisory Committee (PSAC), ensuring that indigenous perspectives are integrated into the college's sustainability initiatives. This inclusion marks a significant step towards more inclusive and comprehensive sustainability efforts, reflecting a commitment to mutual growth and shared success in environmental stewardship. The renewed partnership between Whitman College and CTUIR signifies a dedicated effort to work collaboratively towards a sustainable and resilient future for the region.

Implementation process and constraints

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1. This plan is part of a wider set of strategic planning efforts at the college, and initiatives from this plan will be managed through the college's normal resource allocation processes, potentially in competition with initiatives associated with other strategic planning priorities.

2. From time to time over the duration of this plan, the college finds itself facing uncertainties and challenges driven by competition in the higher education marketplace, as well as the regulatory, compliance, taxation, and legal environment. These challenges may limit the speed with which the college can realize its aspirations under this plan.

TERMS AND DEFINITIONS

Carbon neutral	Having no net greenhouse gas (GHG) emissions, to be achieved by either eliminating net GHG emissions, or by minimizing GHG emissions as much as possible, and using carbon offsets or other measures to mitigate the remaining emissions.
Carbon offsets	An action or activity (such as the planting of trees or carbon sequestration) that compensates for the emission of carbon dioxide or other greenhouse gases to the atmosphere.
Climate change	A change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.
Climate justice	"Climate justice" is a term, and more than that a movement, that acknowledges climate change can have differing social, economic, public health, and other adverse impacts on underprivileged populations. Advocates for climate justice are striving to have these inequities addressed head-on through long-term mitigation and adaptation strategies.
Decarbonization	The reduction or elimination of greenhouse gas emissions from a process.
Greenhouse gas	Any gas that has the property of absorbing infrared radiation (net heat energy) emitted from Earth's surface and re-radiating it back to Earth's surface, thus contributing to the greenhouse effect.
Renewable energy	Renewable energy is energy produced from sources that do not deplete or can be replenished within a human's life time. The most common examples include wind, solar, geothermal, biomass, and hydropower. This is in contrast to non-renewable sources such as fossil fuels.
Renewable energy certificates (RECs)	Tradeable certificates that represent a unit of energy produced by renewable energy sources.
Resilience	The ability of a system or community to survive disruption and to anticipate, adapt, and flourish in the face of change. Core components of a resilient campus include community, flexibility, inclusiveness, learning, and prevention & management.
Second Nature	A renowned organization committed to accelerating climate action in, and through, higher education.
Sustainability	A path of continuous improvement where our actions protect and enhance the human and natural resources needed for future generations to enjoy a quality of life equal to or greater than our own.
Sustainable procurement	Purchasing materials, products, and services in a manner that integrates fiscal responsibility, social equity, and community and environmental stewardship.
Total cost of ownership	An estimation of the expenses associated with purchasing, deploying, using, and retiring a product or piece of equipment.
Waste diversion	The amount of discarded materials not sent to the landfill or incinerator due to recycling, composting, etc. Usually measured as a percentage.
Zero waste	The conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health.

ACRONYMS

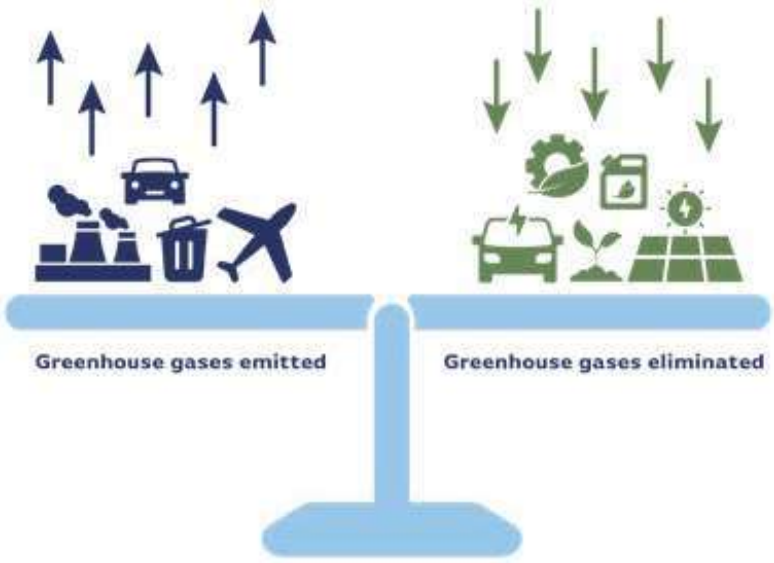
AASHE STARS	Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability, Tracking, Assessment and Rating System (STARS)
ASWC	Associated Students of Whitman College
BAU	Business as usual
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
DEI	Diversity, equity, and inclusion
EPA	Environmental Protection Agency
EUI	Energy use intensity
EV	Electric vehicle
GHG	Greenhouse gas
GSHP	Ground source heat pump
GWP	Global warming potential
IPM	Integrated pest management
IRA	Inflation Reduction Act
LED	Light-emitting diode
LEED	Leadership in Energy and Environmental Design is a commonly used building certification system developed and maintained by the USGBC
LCCA	Life-cycle cost analysis is a method for assessing the total cost of facility ownership
MMBtu	One million British thermal units
$MTCO_2e$	Metric tons of carbon dioxide equivalent
PPA	Power purchase agreement
REC	Renewable energy certificate
STEM	Science, technology, engineering, and mathematics
USGBC	United States Green Building Council

DECARBONIZATION

*Whitman College has an **interim target** of reducing greenhouse gas emissions by 50% by 2035 compared to an FY 2022 baseline and will be carbon neutral by 2050.*

To reach carbon neutrality, an institution must **first decrease their greenhouse gas emissions as much as possible and then, if necessary, use carbon offsets** or other measures to mitigate the remaining emissions.

According to Second Nature, carbon neutrality encompasses Scope 1, Scope 2, and commuting / air travel from Scope 3.



As an institution of higher education, Whitman recognizes its environmental, economic and societal impact. The college strives to model behaviors that contribute to a healthy environment, robust economy, and equitable society and commits to evolve as new avenues towards a more sustainable future arise.

On September 24, 2019, President Kathleen Murray (Ret.) affirmed Whitman College's dedication to taking action on climate change by signing Second Nature's Carbon Commitment. To the College, sustainability includes improving quality of life and equity within the human situation, while supporting our environmental systems.

In June of 2023, the Whitman College Board of Trustees voted to approve **Strategic Theme VI: Environmental Justice, Sustainability and Climate Action**, reaffirming this commitment.

Scope 1

Emissions generated directly on site, typically through the combustion of fossil fuels. Includes emissions from central heating plants, vehicles, etc.

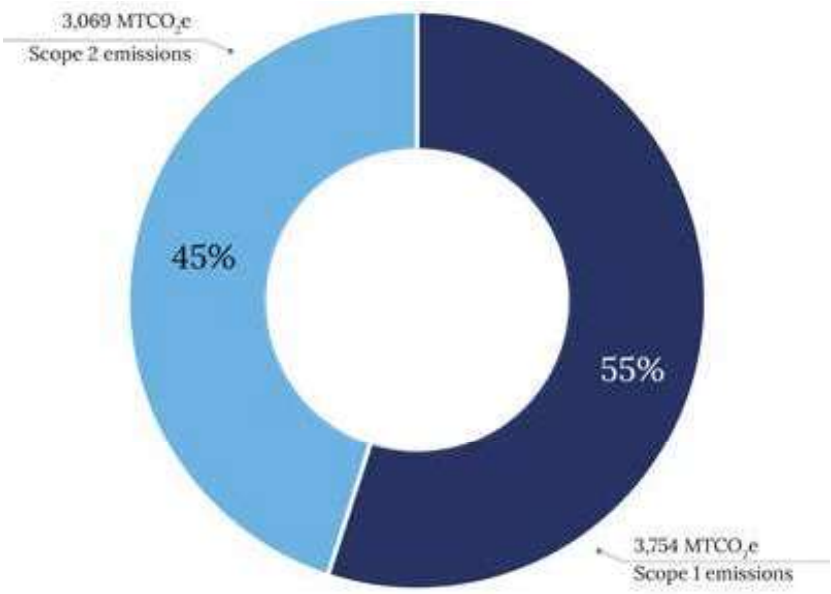
Scope 2

Emissions generated off-site, but that are attributable to the institution's activities, such as emissions from purchased electricity.

Scope 3

Indirect emissions through operations such as staff and visitor commuting, institution-sponsored travel, and the production and disposal of purchased products and services.

Figure 2. – Whitman College's Scope 1 and 2 emissions in FY 2022.




RENEWABLE ENERGY
An electrified campus isn't decarbonized until it is powered by a renewable source of energy like solar or wind. There are many options for acquiring renewable electricity, including building on-site infrastructure and entering into a power purchase agreement.
ENERGY EFFICIENCY
Changes to improve efficiency are the start of the road to decarbonization because they ensure resources are used effectively in the next steps.
Reducing energy use on campus is a natural prerequisite to finding a renewable power source, since the amount of energy a campus needs will affect their decisions.
ELECTRIFICATION
Converting fossil-fuel based systems on campus to electricity allows renewable electricity to power the whole campus.
Electric systems are also significantly more efficient than steam systems.
DECARBONIZATION ROADMAP

GOAL 1: ENERGY EFFICIENCY

Immediately, energy efficiency is optimized for all new buildings and by 2030 a schedule and funding plan for prioritizing energy efficiency is created for all existing buildings while accounting for climate adaption measures and cost effectiveness.

Strategies

LED conversion: Convert the remaining 60% of campus to LED lighting.

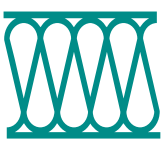
Energy efficiency program: Create an energy efficiency program that will identify and fund efficiency measures in energy intensive buildings.

LEED standard: Design and build all new buildings and major renovations to meet LEED Gold standards.

Energy metering: Install electrical and heating building submeters for all major campus buildings.

Design standards: Create clear design standard resources for designers and contractors.

Example energy conservation measures:



Improve building envelope and insulation

Improve ventilation systems to recover energy from exhaust air

Modernize the energy management system

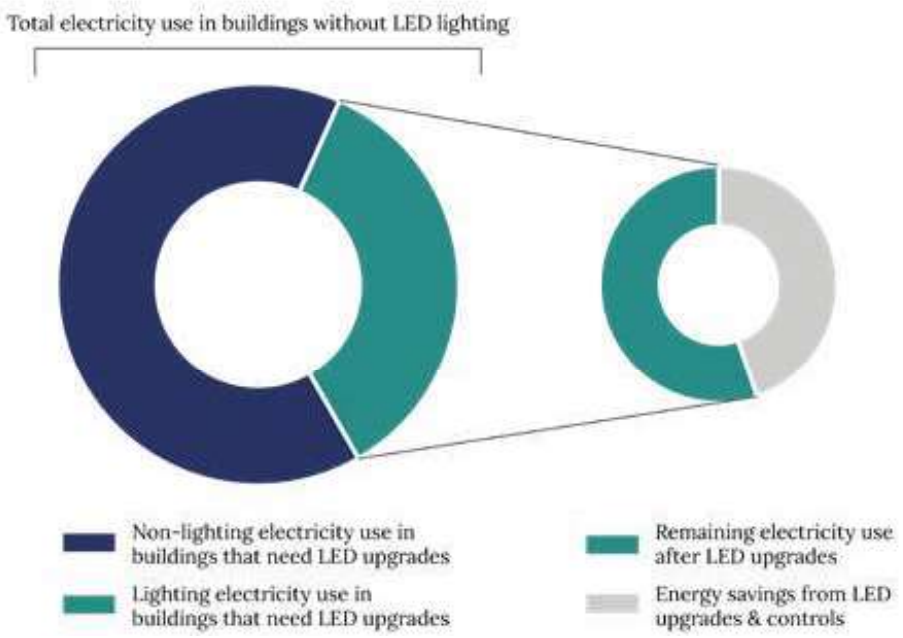
Current state highlights

- 60% of Whitman's building space is lit with non-LED lighting. In this building space, 35% of electricity use is from lighting. LED conversions would decrease electricity use in these buildings by 45%, resulting in significant energy savings (figure 3). LED retrofits usually have a 5-10 year payback, while providing other benefits and improvements to campus spaces.

- Washington State passed the Clean Buildings Act in 2019 and expanded in 2022 to advance the transition to clean energy. This act created energy performance standards for "Tier 1" and "Tier 2" buildings with mandatory compliance beginning in 2026 for the largest buildings.

- Many of Whitman's buildings fall under the "Tier 1" or "Tier 2" categories (see appendix). Creating an energy efficiency program that will identify efficiency measures in the more energy intensive buildings will decrease campus emissions and ensure compliance with the state standards.

Figure 3. – Total electricity use of buildings without LED lighting compared to potential decrease from LED upgrades.



GOAL 2: ELECTRIFICATION

Convert all major fossil-fuel based energy systems on campus to electricity.

Strategies

Central heating plant: Replace the steam-based natural gas central heating plant with a ground source heat pump system for building heating and cooling.

Distributed heating systems: For buildings not heated by the central plant, upgrade HVAC systems to non-fossil options as part of planned capital upgrades.

Funding: Use federal funding from the IRA to offset the cost of new systems.

Current state

Whitman's central heating plant provides heat and hot water to about 60% of campus through a network of steam piping. This accounts for about 50% of the college's natural gas usage (see figure 4). The other 40% of campus is heated through a distributed energy system (smaller natural gas boilers in the buildings). This system accounts for the other 50% of the college's natural gas usage (see figure 4).

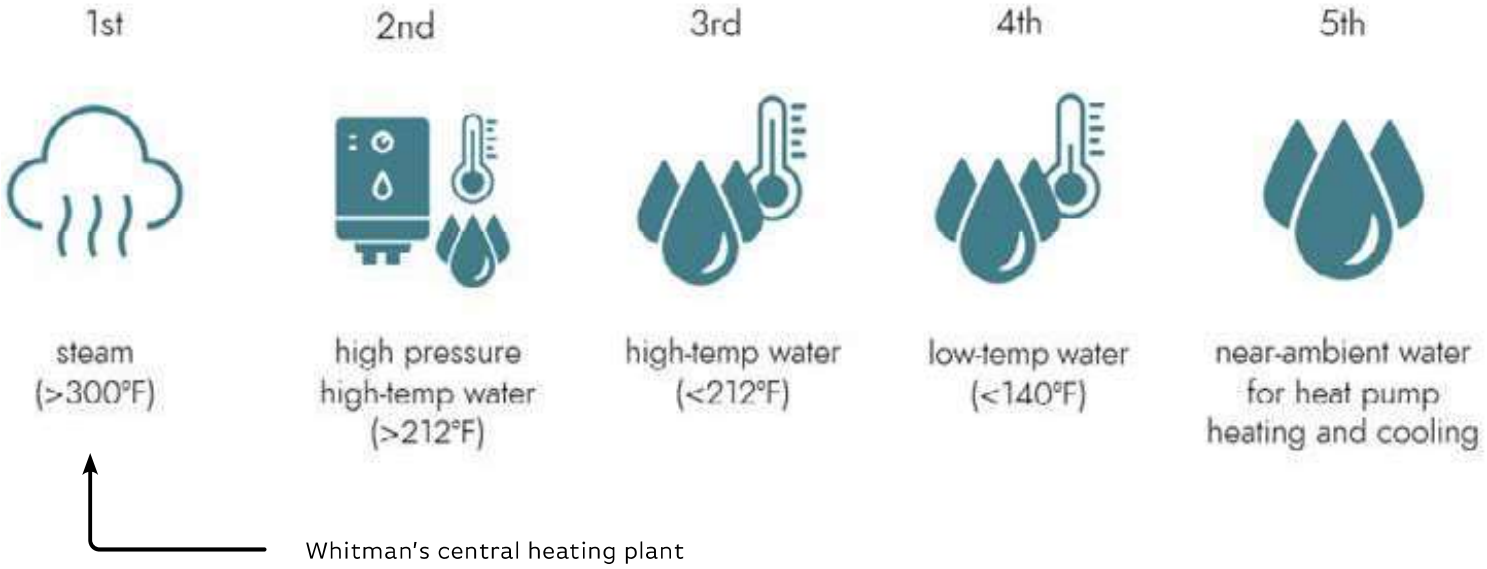
Figure 4. – Natural gas usage by account (in therms).

This means switching the fuel source of the central plant only addresses half the problem. This is why two solutions are recommended for electrification, one focused on the central heating plant and the other focused on the distributed system.

Why electrify?

1. Steam distribution systems have inherent inefficiency issues from losing energy during fuel combustion, and heat loss increases in aging distribution systems.
2. Steam systems are generally less compatible with modern, low-carbon heating systems at the district level.
3. Steam is the "first generation" of district energy systems (see figure 5). Since steam-generating boilers were developed in the late nineteenth century, district heating systems have significantly improved.

Figure 5. – Generations of district energy systems.



Strategy 1: Replace the steam-based natural gas central heating plant with a ground source heat pump system for building heating and cooling.

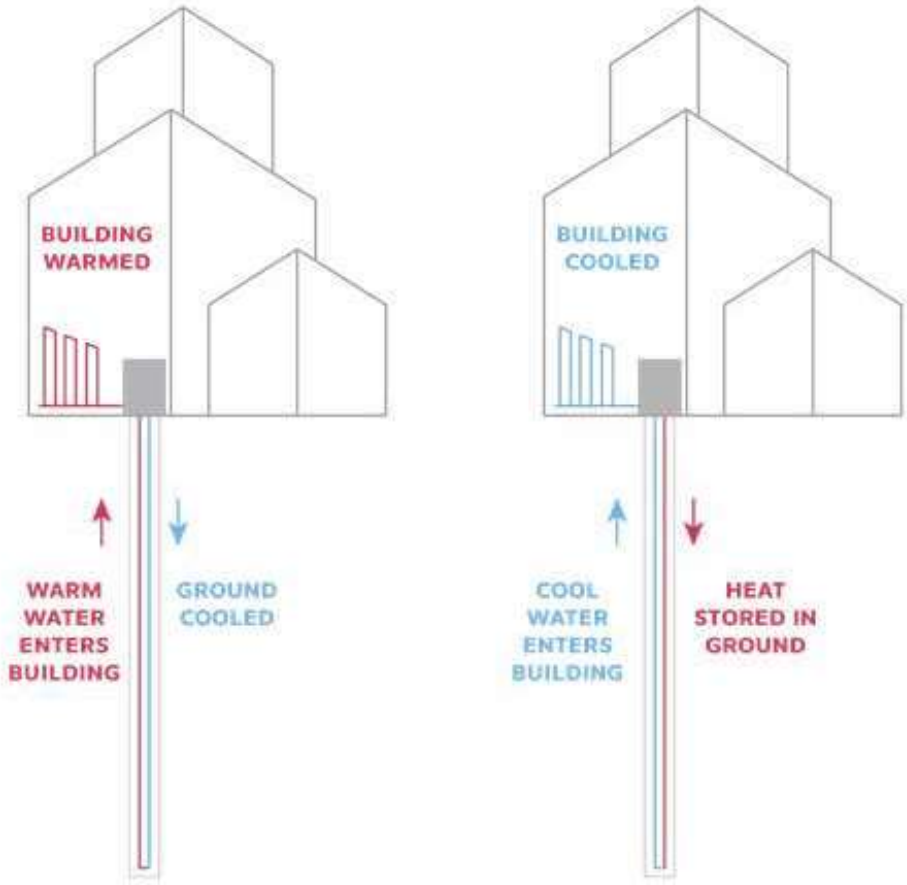
Ground source heat pumps provide a comfortable level of reliable heat, operate at high efficiency and low cost, and do not release greenhouse gas emissions during use.

While a steam system may be **80%** efficient, ground source heat pumps can be between **300%** to **400%** efficient. This means significantly less fuel is used to generate the same amount of heat. One of the reasons ground source heat pump systems are so efficient is because they move heat from place to place, instead of generating it from a fuel source like oil or natural gas.

A ground source heat pump removes heat stored in the ground and transfers it to the building's energy distribution system. The ground loses heat during this process.

Reversing this process in the summer restores the thermal storage in the ground, making the system more sustainable in the long-term. To provide cooling, heat is collected from the building and sent through the loop to the ground.

Figure 6. – Illustration of how ground source heat pumps work.



Strategy 2: For buildings not heated by the central plant, upgrade HVAC systems to non-fossil options as part of planned capital upgrades.

"Zero-over-time-approach"

The most cost-effective way to decarbonize the buildings on campus not connected to the central heating plant is to wait until their HVAC systems are due for renewal. As these systems age and eventually begin to fail, upgrade them to high-efficiency, all-electric heat pump systems. For example, when the HVAC system in the Whitman College Technology Services building reaches the end of its life, Whitman can take that opportunity for a needed upgrade to install electric heat pumps. Over time, all buildings will be powered by electricity.

An option for buildings upgraded after the central heating system is converted is to be added to the campus heating loop, which would further increase the efficiency of that system.

Figure 7. – The Whitman College Technology Services building sits at the corner of Main St. and Touchet St.

Advantages of ground source heat pumps:

They are high-efficiency and do not emit greenhouse gas emissions

They are a proven technology

Whitman is eligible for a 40% reduction in cost through the Inflation Reduction Act

They could be integrated into Whitman's current heat generation systems

They can provide cooling in addition to heating

GOAL 3: RENEWABLE ENERGY

Power campus using primarily renewable energy from local or regional sources.

Strategies

Partnerships: Develop local partnerships, including with other large energy users and utilities, to determine the course of action that optimizes community benefit and cost effectiveness.

Power purchase agreement: Using strong local connections, investigate partners for a power purchase agreement that would cover all projected electricity use on campus.

Connect with Pacificorp: Have conversations with the utility to learn about renewable energy plans in the region.

An electrified campus isn't decarbonized until it is powered by renewable electricity.

Figure 8. – Photo of solar array at Whitman.

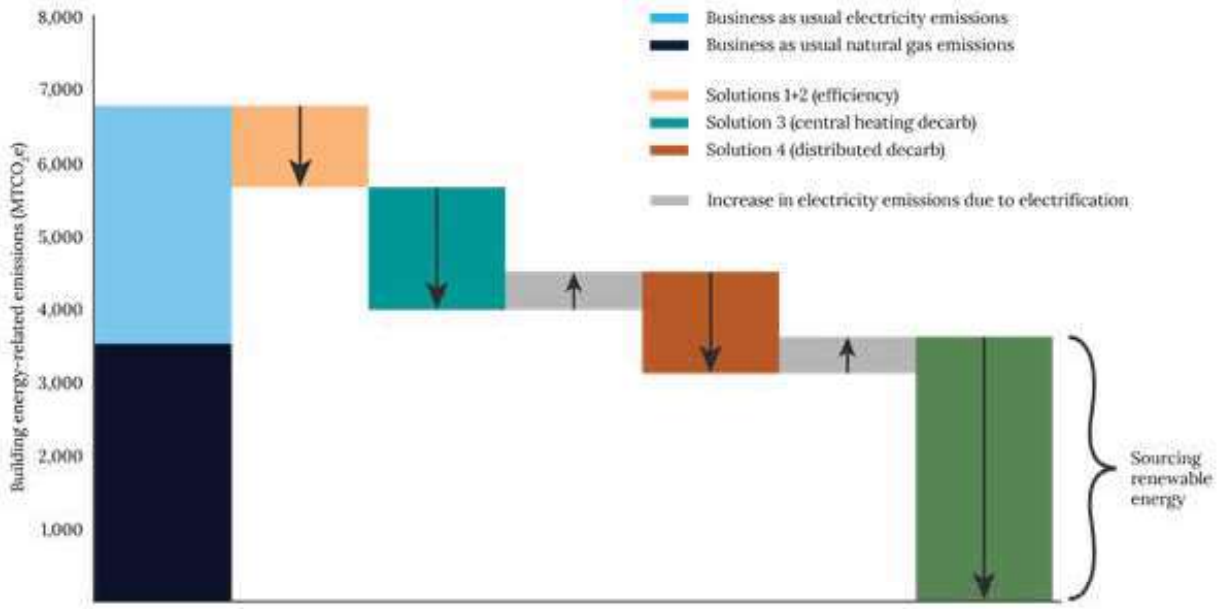
Current state

Utilities in Washington are required to produce only clean electricity by 2045. Though Whitman could rely on the efforts Pacificorp (Whitman's electricity utility) makes to decarbonize, the college has the capability to contribute to renewable energy infrastructure in the Walla Walla region.

A few years ago, Whitman demonstrated their commitment to developing regional renewable energy infrastructure by discontinuing their purchases of unbundled RECs for Scope 2.

Additionally, electrifying campus will lead to an **increase in electricity use**, which has the potential to put undue pressure on the power grid and decrease the resiliency of the area. Adding to the electricity capacity of the region could reduce this pressure.

Figure 9. – Impact of all decarbonization goals and strategies on baseline emissions.



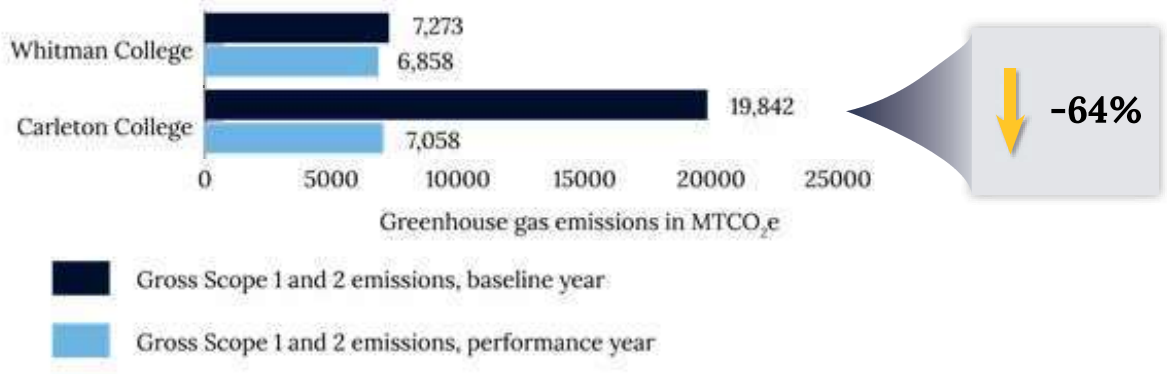
CASE STUDY: CARLETON COLLEGE

Summary

- Carleton brought a geothermal system online in summer 2021, completing its transition from district steam to low temperature hot water heating tied to geothermal heating and cooling. FY21 data represents half of that system coming online, so further reductions are anticipated as a year of data is logged post project completion.
- Carleton's Scope 2 emissions have decreased in purchased electricity, despite adding two residence halls and a large academic building since 2008. This is primarily due to the addition of a 1.68 MW wind turbine in fall 2011.
- There were additional significant reductions in Scope 2 emissions in FY21 because the school began purchasing RECs back for the wind turbine they added in 2004 that supplies the public grid.

	FY 2008	FY 2021
Gross Scope 1 GHG emissions from stationary combustion	8,482	3,783
Gross Scope 1 GHG emissions from other sources	155	275
Gross Scope 2 GHG emissions from imported electricity	11,205	3,000
Total	19,842	7,058

Figure 10. – Change in gross GHG emissions at Whitman College compared to Carleton College. Please note that the metric of "gross" emissions does not take into account carbon offsets.



RESILIENCE

GOAL 1: RISK EDUCATION

By 2030, Whitman provides comprehensive, accessible, and well-thought-out information and resources about the importance of climate resilience and responding to severe climate-related events through a variety of channels with the intention of reaching the entire campus community and the greater Walla Walla community.

Strategies

Orientations: Include education on what to do in the case of a severe climate event in student and employee orientations.

Information sharing: Coordinate with professors to share speakers and panels they have planned with the community.

Education materials: Increase efforts to educate the campus and greater Walla Walla community about heat and air quality risk factors as well as the impacts these events can have on individuals.

Consistency: Ensure materials are circulated annually to account for new students, staff, and faculty.

Current and future climate risks

The two most likely types of climate events Whitman will face in the next thirty years are extreme heat and wildfires. This goal, and the others in this section, address the preparations Whitman must make to meet these challenges head on.

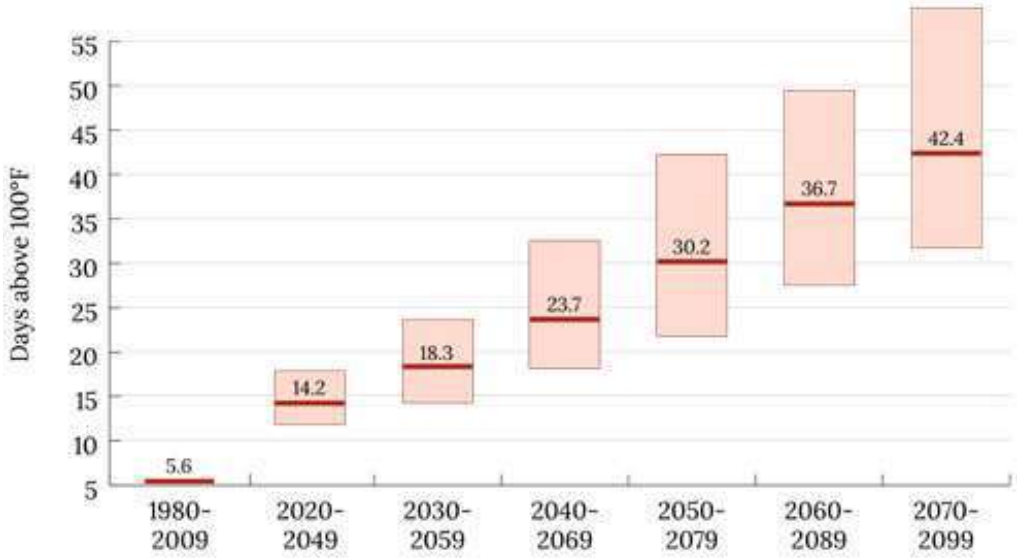
The next two pages provide more information on the changes Walla Walla County will experience in extreme heat and wildfire.

Average number of hot days

The number of annual "hot days," or days per year with a maximum temperature greater than 100 °F, is used as a metric because days with a temperature over 100°F are an indicator of potential damage to transportation infrastructure such as roads and bridges. Statewide, large increases in the number of hot days in the future are confined to low elevation areas in eastern Washington, with little change in western Washington.

The number of annual hot days per year is expected to **increase from ~6 to ~14 days** on average between 2020–2049 (see figure 11).

Figure 11. — Average number of hot days in Walla Walla County by thirty-year time period.

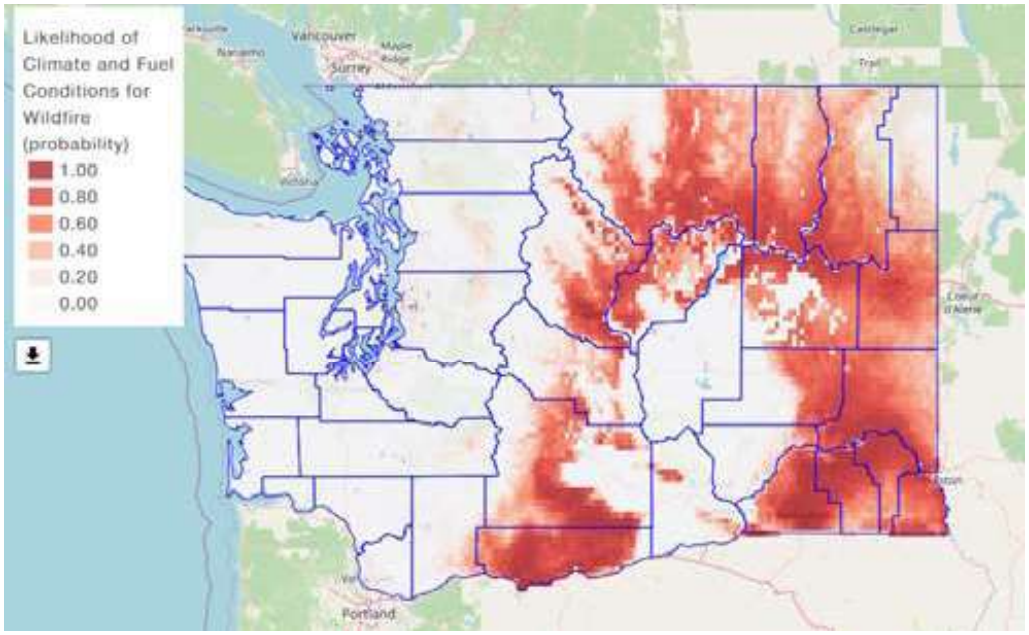


Wildfire risk

The likelihood of wildfire is simulated using a fire process model. An increased likelihood of climate and fuel conditions conducive to wildfire indicates greater potential for wildfire danger to damage infrastructure, interrupt businesses, and affect public health and well-being.

Within the 2020–2049 time period, Walla Walla County has a **74% probability that any year will have climate and fuel conditions that are favorable for wildfire** compared to a baseline of 0% (see figure 12).

Figure 12. — Average likelihood of climate and fuel conditions being conducive to wildfire in a 30-year period compared to the 1980-2009 average.



GOAL 2: INFRASTRUCTURE

By 2030, Whitman has the necessary resources to support its faculty, staff, and students in an equitable manner through severe climate-related events such as heat waves, wildfire smoke events, and high wind events.

Strategies

Cooling: Create a plan to install cooling in all residential buildings.

Funding program: Consider creating a funding source similar to the Life Cycle program to provide resources.

Inventory: Inventory safe spaces for the Whitman community to utilize as a retreat from heat waves and smoke events.

Healthy building materials: Create healthy building materials and indoor air quality standards that prioritize occupant health and safety.

Figure 13. — Reid Campus Center is often utilized as a reprieve from the summer heat.

GOAL 3: EMERGENCY PLANNING

Whitman annually updates an inclusive and sufficiently funded emergency management plan for severe climate events that integrates with the city and regional emergency response plans and collaborates with the greater Walla Walla community.

Strategies

Review: Establish a task force responsible for reviewing and updating the emergency management plan annually. Include representatives from various campus departments and student organizations.

Integration: Regularly coordinate with city and regional emergency management agencies to align Whitman's plan with broader community efforts.

Collaboration: Foster strong relationships with local organizations, businesses, and residents in the greater Walla Walla community.

Inclusivity: Involve diverse campus and community stakeholders in the emergency management planning process.

Sustainability: Incorporate sustainable practices into emergency preparedness efforts.

Current state highlights

- Whitman Implements a comprehensive Emergency Operations Plan (EOP) to enhance emergency response capabilities for large-scale emergencies, aligned with FEMA's National Incident Management System (NIMS) and Incident Command Structure (ICS).
- The Emergency Planning and Leadership Team (EPLT), comprising key leaders from departments like the President's Office, Facilities Services, Environmental Health and Safety, Finance, Communications, Student Affairs, IT, and Security, meets monthly to discuss operations, review the EOP annually, and serve as the Emergency Operations Center staff.
- Whitman Conducts annual FEMA Emergency Management Institute (EMI) training courses tailored for higher education institutions, facilitated by Emergency Planning Solutions (EPS), to ensure readiness through drills, exercises, and emergency response training and presentations for all staff, faculty, and students at the start of each academic year.

OPERATIONS

GOAL 1: WASTE DIVERSION

By 2030, Whitman has increased the percentage of waste not going to the landfill from 40% to 60% utilizing the zero-waste hierarchy as guidance.

Strategies

Tracking database: Update current tracking methods and increase frequency of waste audits to ensure accurate reporting information.

Recycling: Increase campus wide understanding of recycling.

Composting: Evaluate and establish a sustainable strategy for campus compostables.

CTUIR anaerobic digester: Partner with CTUIR's anaerobic digester Nixyaawii, Awkn Cowpum Akaatta Project.

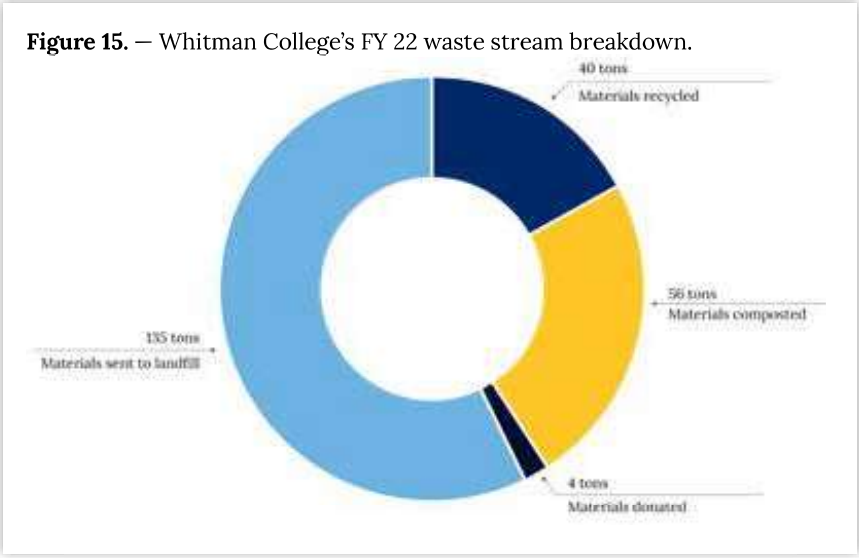
Food recovery: Partner with a food recovery organization to decrease post-consumer food waste.

Figure 14. — The Zero Waste Hierarchy 8.0 from the Zero Waste International Alliance.

Current state highlights

- Recycling efforts helped Whitman divert nearly 40% of materials in FY 22 (see figure 15).
- Whitman recycles plastics #1, 2, and 5, fiber (cardboard/paper), aluminum, and tin.
- The annual "Ditch The Dumpster" program encourages donating goods to the community rather than trashing them. In FY 23, students helped divert over 3,000 pounds of items from the landfill by donating to the community through this program!
- Whitman mulches wood trimmings and uses the resulting compost on campus.
- Whitman has multiple partnerships with local entities for community donations, such as SonBridge, the STAR project, and YWCA.
- Bon Appetit collects food scraps for local farmers to use. Food waste at Whitman has decreased 90% since 2019. In FY 23, only 3.2 tons of food waste came from our kitchens, and half of that gets fed to local pigs!
- The annual surplus yard sale redistributes goods across campus.

Figure 15. — Whitman College's FY 22 waste stream breakdown.



GOAL 2: WASTE REDUCTION

By 2030, Whitman has reduced discarded material generation by a minimum of 15% from a baseline year of FY 2024.

Strategies

Waste streams: Identify and eliminate unnecessary waste streams on campus.

Sustainable procurement guidelines: Develop and implement sustainable procurement guidelines that align with our other campus sustainability plan goals.

Purchasing coordination: Create a communication network between departments that facilitates the coordination of purchasing supplies and the sharing of surplus materials.

Disincentivize discarding materials: Financially disincentivize unnecessarily high-waste behavior while accounting for accessibility concerns.

Reuse programs: Create new and innovative programs that encourage faculty, staff, and students to reuse materials.

Figure 16. — The Whitman College Recycling Center includes a cardboard bailer to reduce reliance on third parties to divert waste.

GOAL 3: GROUNDS

By 2030, Whitman has created and implemented a landscape master plan that preserves and enhances the sustainability, resiliency, and accessibility of Whitman's landscape.

Strategies

Occupational safety: Grounds and maintenance staff have occupational safety guidelines that prevent harm from climate hazards such as wildfire smoke and heatwaves.

Native plants: Identify and utilize the native plants most appropriate for Whitman's campus micro-climate and surrounding environment.

Organic management: Develop a recommendation for reducing the use of fertilizers and pesticides.

Electric equipment: Investigate the feasibility of electric landscaping equipment.

Aesthetic green spaces: Utilize human focused landscape design to create welcoming outdoor green spaces that encourage the community to get outside and enjoy the space.

Current state highlights

- Whitman reduces their herbicide use by heavily mulching with compost.
- The campus employs a closed loop composting system for yard waste, sending it to a municipal composting facility and using the compost on the campus grounds.
- Whitman does not currently practice organic management or implement an integrated pest management program.
- As a consequence of decades of landscape management, Whitman has created a micro-climate on campus. This means that desert plants, which are native to the surrounding area, would not necessarily thrive on campus. This presents a challenge of choosing native plants that would thrive in this micro-climate.

GOAL 4: TRANSPORTATION

By 2030, Whitman supports accessible transportation options that reduce emissions from commuters, the campus fleet, and college-related travel.

Strategies

Baseline transportation data: Assess campus-wide and departmental vehicle needs and uses and assess student, staff, and faculty commuting habits.

Transportation plan: Create a campus transportation plan that identifies and guides campus related travel (i.e. outdoor programs and education may require hybrid vehicles for travel).

Charging infrastructure: Ensure charging infrastructure exists to support increase in electric vehicle usage by commuters and facilities.

CTUIR's Kayak Transit: Use and support the CTUIR's free Kayak Transit service that goes to Walla Walla.

Transportation incentives: Create incentives for staff, faculty, and students to use sustainable transportation.

Current state highlights

- Whitman does not currently track staff, faculty, or student commuting data. Tracking this data is an essential first step in measuring the efficacy of sustainable transportation programs on campus.
- 5% of Whitman's campus fleet vehicles are sustainably-powered, with 56 gasoline-powered vehicles and three low-emissions vehicles.
- Whitman's rural location means that electric vehicles aren't a great option for vehicles meant to travel longer distances. The feasibility of these options merits more investigation.

GOAL 5: WATER USE

By 2030, Whitman has a comprehensive understanding of its water use and has established and implemented a campus water use reduction plan.

Strategies

Data tracking: Set up tracking systems for water sources and consumption to monitor progress in water use reduction.

Water use study: Conduct a study of water use to establish comprehensive understanding of water use.

Water reduction plan: Create a measurable and impactful water reduction plan for the campus with stated goals.

Water recovery: Consider installing water recovery systems for irrigation.

Water efficiency: Enhance the water efficiency of campus buildings through retrofits and the intentional design of new construction projects.

Current state highlights

- As of spring 2024, there is a new meter to track well water usage.
- The sprinkler system is going through efficiency upgrades including adding an app and new sprinkler heads to reduce watering the sidewalk, overwatering, and catch leaks.
- The watering schedule is at night to reduce evaporation. Occasionally students see the sprinklers going in the day, but that is almost always for maintenance.
- Whitman is upgrading fixtures in building bathrooms to conserve water (dual flush toilets and efficient faucets).

OUTREACH AND EDUCATION

GOAL 1: CURRICULUM

By 2030, all students understand and have experience creatively addressing sustainability-related problems.

Strategies

Orientation: Create an embedded new student orientation (NSO) program focused on sustainability.

Living lab: Use Whitman's infrastructure and unique location for sustainability-related learning opportunities.

Interdisciplinary opportunities: Provide opportunities to incorporate sustainability into classes.

New course opportunities: Create new sustainability-oriented curriculum opportunities for students.

Current state highlights

- According to Whitman's 2023 STARS report, 20% of courses offered include sustainability concepts.
- Whitman does not have an institutional learning outcome related to sustainability, meaning that students who attend the college are not expected to learn about sustainability. Based on major requirements, about 22% of students graduate with at least some understanding of sustainability.

GOAL 2: EXPERIENTIAL LEARNING

By 2030, Whitman's sustainability education will extend beyond the conventional boundaries of a physical classroom, enabling students to experience the practical implementation of their studies through real-world opportunities that are accessible to all students.

Strategies

Environmental justice: Work with external partners to create mutually beneficial, environmental-justice-focused, hands-on learning opportunities for students.

Student internships: Work with community and alumni partners to develop Whitman-specific sustainability-related internships for students.

Local policy: Provide support to local policy leaders to ensure sustainability priorities are included in decision-making and reflected in comprehensive planning.

Outreach: Engage students in outreach activities with community and alumni partners.

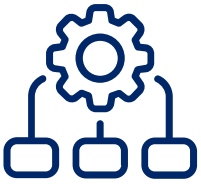
Funding: Provide the necessary funding for these opportunities to ensure finances are not a barrier for interested students.

Current state highlights

- A very popular program at Whitman, the Semester in the West, is an interdisciplinary field program focusing on public lands conservation and rural life in the interior American West.

  The objective is to know the West in its many dimensions, including its diverse ecosystems, its social and political communities, and the many ways these ecosystems and communities find expression in regional environmental writing and public policy.

GOAL 3: INTERNAL ORGANIZATION



By 2030, the Department of Sustainability facilitates synergies and knowledge-sharing between sustainability groups and stakeholders, using consistent, accessible, and intentional communication strategies.

Strategies

Environmental Initiatives: Invest in environmental initiatives to enhance existing offerings and prepare for growing student interest.

Communications: Create improved and consistent communication mechanisms the Department of Sustainability can use to communicate information to the campus community.

Student collaboration: Create a network student groups can use to communicate about sustainability work to encourage collaboration.

Department of Sustainability investment: Invest in the Department of Sustainability by reviewing staffing resources to ensure they are appropriate to support this CSP.

Current state highlights

- There are many student groups with an environmental focus, including, *but not limited to*: the Salmon Conservation Club, Climate Justice Coalition, and Native Plant Restoration Coalition.
- Whitman's Department of Sustainability has recently created an Instagram profile to engage its community online.
- There are a few environmentally-focused listserves to disseminate environmental projects, events, and tips.

GOAL 4: ENVIRONMENTAL JUSTICE

By 2030, the Department of Sustainability has established a plan in partnership with various divisions across campus that will develop opportunities for co-curricular, real-world environmental justice work that are responsive to the priorities of our partners.

Strategies

Definition: Define what environmental justice means to Whitman College.

Collaboration with CTUIR: Collaborate with the CTUIR on its Climate Adaptation Plan, when possible.

Identify partners: Identify environmental justice partners.

Funding: Seek funding opportunities that incentivize community-oriented and applied work.

Events: Designate funding for speaking engagements or events with environmental justice experts.

Current state highlights

- Whitman's Environmental Studies major integrates diverse disciplines for comprehensive understanding and promotes critical thinking about environmental issues.
- Whitman offers hands-on learning through fieldwork and study abroad opportunities.
- Whitman facilitates networking with experts and professionals, mostly through the alumni network and strong community partnerships.
- Various student organizations drive environmental action, and Whitman offers a housing option that emphasizes sustainability and community living.

GOAL 5: COMMUNITY INVOLVEMENT

Whitman continues to support, and aims to become, a nationally-recognized leader in regional sustainability and environmental justice work. The college will center mutually beneficial partnerships with various organizations that positively impact the environment and community, emphasizing collaborative efforts that promote sustainability, social equity, and climate adaptation.

Strategies

Student Outreach Activities: Engage students in outreach activities with local community partners to foster sustainability and environmental justice initiatives.

Whitman Specific Internships: Work with community and alumni partners, and with other potential collaborators, to develop Whitman-specific sustainability-related internships for students.

Local Sustainability Planning: Involve students in local sustainability planning by engaging with county and city leaders to shape sustainability policies and practices, potentially through student internships.

Neutral Convening Space: Establish a neutral venue for convening community partners to discuss and collaborate on sustainability and environmental justice initiatives. Appoint designated facilitators from our campus to serve as primary contacts and coordinators for these community-based efforts.

Support for Local Policy Leaders: Provide support to local policy leaders to ensure sustainability priorities are included in decision-making and comprehensive plans.

Current state highlights

- Whitman College maintains multiple long-term partnerships with local organizations to advance sustainability and address community needs, engaging diverse and underrepresented groups as equal partners.
- A significant number of Whitman students actively participate in community service, dedicating substantial hours annually to support local initiatives and foster strong community ties.

APPENDIX

WORKING GROUP MEMBERS

Decarbonization and resilience	Operations	Outreach and education
Bill Duncan	Alex Kelly	Abby Juhasz
Camryn Zoeller	Andrew Johnson	Adam Miller
Dan Terrio	Bradley Nelson	Alzada Tipton
Eunice Blavascunas	Brenna Frisbie	Anna Shimkus
Greg Powell	Clara Bates	Anthony Maniko
Justin Rodegerdts	Delbert Hutchison	Gina Ohnstad
Kat McWhorter	Ellen Haney	Juli Dunn
Kazi Joshua	Jeff Jensen	Kate Shea
Kim Chandler	Laura Norris	Marquita Drabek
Kirsten Nicolaysen	Mehrimo Bakhtalieva	Noah Leavitt
Randy Coleman	Owen Jakel	Paige Royal
Sara Frey	Richard Kaplan	Patrick Frierson
Stan Thayne	Sam Allen	Rachel Freeman-Cohen
Steve Setchell	Skeeter Anderson	Rachel Kennedy
Valentina Garcia-Charles	Telara McCollough	Tim Parker

BUILDING LIST

On central heating plant	Not on central heating plant	
Cordiner Hall	Baker Center	Global Aware Hs 104 Merriam
HJT & Addition	Boyer House	Japanese House 528 University
Hunter Conservatory	Fouts Visual Arts	Marcus
Penrose Library	Glover Alston	MECCA 106 Otis
Maxey Hall	Health Center	North Hall
Memorial Bldg	Hall of Music	Penrose House
Hall of Science	Sherwood House	Stanton Hall
Olin Hall	Whitman College Tech Services	Spanish House 412 Boyer
Reid Campus Center	Baker Ferguson Fitness Center	Welty Counseling
Sherwood Center	Bratton Tennis Center	
Anderson Hall	Dance Studio	
Douglas Hall	Cleveland Commons	
Jewett Hall	Facilities Services	
Lyman Hall	College House	
Prentiss Hall	Environmental House 424 Boyer	
	Fine Arts House 404 Boyer	
	French House 418 Boyer	
	German House 401 Cypress	

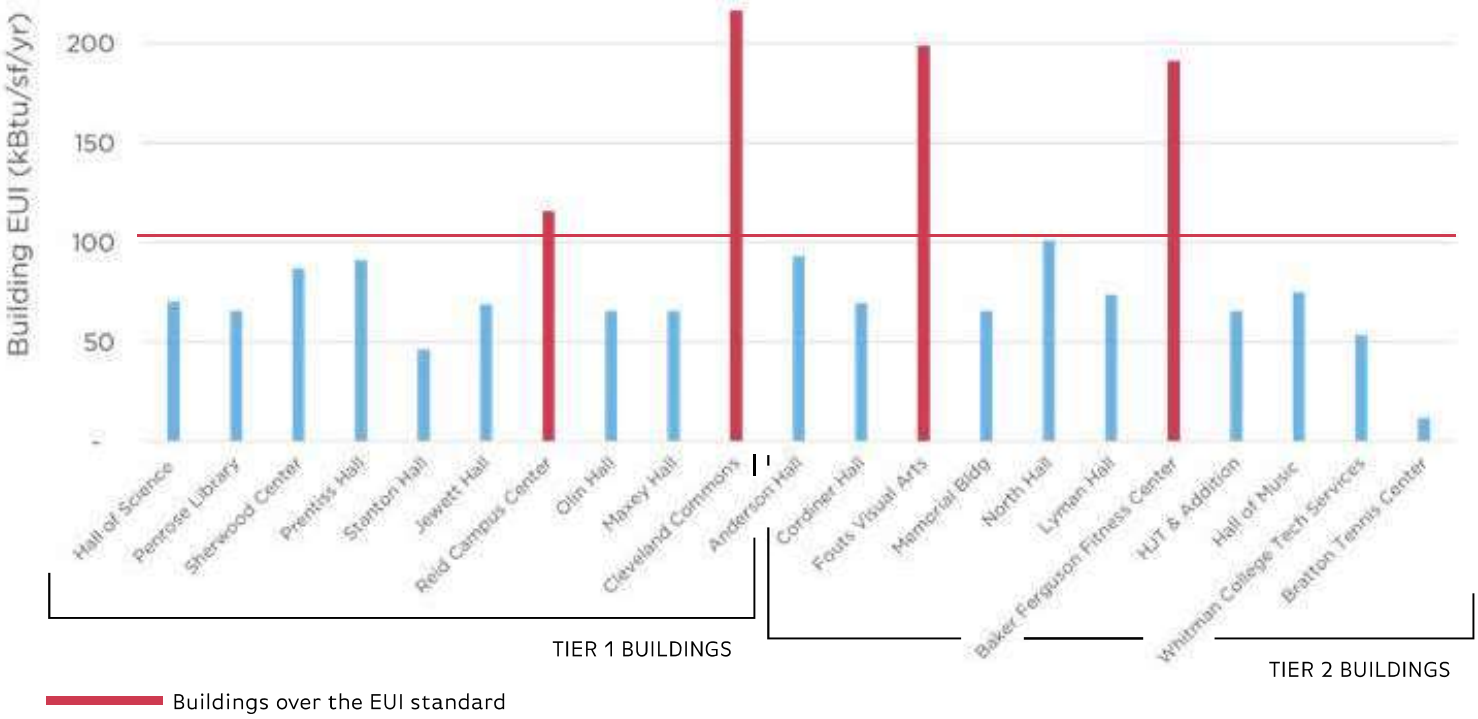
WASHINGTON CLEAN BUILDINGS STANDARD

Buildings account for 27% of Washington State's emissions, second only to transportation. The State views investment in building energy efficiency as essential to meeting climate goals in a cost-efficient manner. To advance this transition, the Clean Buildings Act was passed in 2019 and expanded in 2022. This act created energy performance standards for "Tier 1" and "Tier 2" buildings with mandatory compliance beginning in 2026 for the largest buildings. This will affect Whitman beginning in 2027.

BUILDING TIERS

Tier 1 | >50,000 square feet
Tier 2 | 20,000 - 50,000 square feet

Figure 17. – EUI of Tier 1 and 2 buildings compared to the standard for higher education buildings (102 kBtu / square foot).



STRATEGY GUIDE

Topic	Goal	Initiative Name	Initiative Description *(continued on next page)*
Decarbonization	Energy Efficiency	LED Conversion	Convert the remaining 60% of campus to LED lighting.
Decarbonization	Energy Efficiency	Energy Efficiency Program	Create a program that will identify and fund efficiency measures in energy-intensive buildings.
Decarbonization	Energy Efficiency	LEED Standard	Design and build all new buildings and major renovations to meet LEED Gold standards.
Decarbonization	Energy Efficiency	Energy Metering	Install electrical and heating building submeters for all major campus buildings to monitor and analyze energy usage more precisely.
Decarbonization	Energy Efficiency	Design Standards	Create clear design standard resources for designers and contractors.
Decarbonization	Energy Efficiency	Improve Building Envelope and Insulation	Improve building envelope and insulation in all major campus buildings to enhance energy efficiency by reducing heat loss in winter and heat gain in summer.
Decarbonization	Energy Efficiency	Modernize Energy Management System	Modernize the energy management system for more efficient energy use by upgrading controls and monitoring systems via implementing sensors, automation, and data analytics to optimize energy consumption.
Decarbonization	Energy Efficiency	Improve Ventilation Systems	Improve ventilation systems to recover energy from exhaust air.
Decarbonization	Electrification	Central Heating Plant	Replace the steam-based natural gas central heating plant with a ground source heat pump system for building heating.
Decarbonization	Electrification	Distributed Heating Systems	Upgrade HVAC systems in buildings not heated by the central plant to non-fossil options as part of planned capital upgrades.

Target Year	Recurring?	Expense Type	Complementing Strategic Priorities	Priority	Lower $	Upper $
2026	One-Time	Capital	V, VI	Very High	$5,000,00	$7,000,000
2025	Recurring	Operating	I, VI	High	$100,000 annually	$200,000 annually
Ongoing	One-Time	Capital	III, VI	High	$2,000,000 per project	$5,000,000 per project
2025	One-Time	Capital	I, VI	Very High	$200,000	$750,000
2026	One-Time	Operating	I, VI	Medium	$50,000	$100,000
2030	One-Time	Capital	IV, VI	High	$3,000,000	$10,000,000
2027	One-Time	Capital	I, VI	High	$300,000	$1,000,000
2029	One-Time	Capital	III, VI	Medium	$400,000	$900,000
2028	One-Time	Capital	V, VI	High	$30,000,000	$60,000,000
2030	Recurring	Capital	III, VI	Medium	$500,000	$5,000,000

STRATEGY GUIDE

Topic	Goal	Initiative Name	Initiative Description *(continued on next page)*
Decarbonization	Renewable Energy	Partnerships	Develop local partnerships to optimize community benefit and cost-effectiveness for renewable energy.
Decarbonization	Renewable Energy	Power Purchase Agreement	Investigate partners for a power purchase agreement that covers all projected electricity use on campus to secure a stable, renewable energy source.
Decarbonization	Renewable Energy	Pacificorp	Engage with Pacificorp to learn about regional renewable energy plans.
Resilience	Risk Education	Orientations	Include education on severe climate event response in student and employee orientations.
Resilience	Risk Education	Information Sharing	Coordinate with professors to share speakers and panels on climate resilience with the community.
Resilience	Risk Education	Education Materials	Increase efforts to educate the campus and Walla Walla community about heat and air quality risk factors.
Resilience	Risk Education	Consistency	Ensure materials are circulated annually to account for new students, staff, and faculty.
Resilience	Infrastructure	Cooling	Create a plan to and then install cooling in all residential buildings to enhance comfort for residents, especially duirng warmer months, while considering energy efficiency and sustainability in the selection and implementation of cooling systems.
Resilience	Infrastructure	Funding Program	Consider creating a funding source similar to the Life Cycle program to provide resources.
Resilience	Infrastructure	Inventory	Inventory safe spaces for the Whitman community to use as retreats from heat waves and smoke events.
Resilience	Infrastructure	Healthy Building Materials	Create standards for healthy building materials and indoor air quality.

Target Year	Recurring?	Expense Type	Complementing Strategic Priority	Priority	Lower $	Upper $
2030	Recurring	Operating	V, VI	Medium	$50,000	$100,000
2026	One-Time	Operating	I, VI	Very High	$0	Depends on contract terms
2030	Recurring	Operating	V, VI	Medium	$10,000	$20,000
2030	Recurring	Operating	III, VI	High	$5,000	$10,000
2030	Recurring	Operating	V, VI	Medium	$2,000	$5,000
2030	Recurring	Operating	V, VI	High	$5,000	$10,000
2030	Recurring	Operating	III, VI	Medium	$2,000	$5,000
2030	One-Time	Capital	III, VI	High	$5,200	$36,418,000
2030	Recurring	Operating	V, VI	Medium	$100,000	$200,000
2030	Recurring	Operating	III, VI	High	$10,000	$20,000
2030	Recurring	Operating	III, VI	Medium	$10,000	$20,000

STRATEGY GUIDE

Topic	Goal	Initiative Name	Initiative Description *(continued on next page)*
Resilience	Emergency Planning	Review	Establish a task force responsible for reviewing and updating the emergency management plan annually. Include representatives from various campus departments and student organizations.
Resilience	Emergency Planning	Integration	Regularly coordinate with city and regional emergency management agencies to align Whitman's plan with broader community efforts.
Resilience	Emergency Planning	Collaboration	Foster strong relationships with local organizations, businesses, and residents in the greater Walla Walla community.
Resilience	Emergency Planning	Inclusivity	Involve diverse campus and community stakeholders in the emergency management planning process.
Resilience	Emergency Planning	Sustainability	Incorporate sustainable practices into emergency preparedness efforts.
Operations	Waste Diversion	Database	Update tracking methods and increase the frequency of waste audits.
Operations	Waste Diversion	Recycling	Increase campus-wide understanding of recycling by implementing educational campaigns, workshops, and clear signage, along with involving students in hands-on recycling initiatives to promote active participation and awareness.
Operations	Waste Diversion	Composting	Evaluate and establish a sustainable strategy for campus compostables.
Operations	Waste Diversion	CTUIR Anaerobic Digester	Partner with CTUIR's anaerobic digester project.

Target Year	Recurring?	Expense Type	Complementing Strategic Priority	Priority	Lower $	Upper $
2030	Recurring	Operating	III, VI	High	$10,000	$20,000
2030	Recurring	Operating	V, VI	High	$5,000	$10,000
2030	Recurring	Operating	III, V, VI	Medium	$10,000	$15,000
2030	Recurring	Operating	II, III, VI	Medium	$5,000	$10,000
2030	Recurring	Operating	VI	Medium	$15,000	$25,000
2025	Recurring	Operating	VI	Low	$13,300	$13,800
2025	Recurring	Operating	III, VI	High	$69,129	$188,169
2030	Recurring	Operating	VI,	Medium	$5,000	$10,000
2030	Recurring	Operating	V, VI	High	$50,000	$100,000

STRATEGY GUIDE

Topic	Goal	Initiative Name	Initiative Description (*continued on next page*)
Operations	Waste Diversion	Food Recovery	Partner with a food recovery organization to decrease post-consumer food waste.
Operations	Waste Reduction	Waste Streams	Identify and eliminate unnecessary waste streams on campus.
Operations	Waste Reduction	Sustainable Procurement Guidelines	Develop and implement sustainable procurement guidelines.
Operations	Waste Reduction	Purchasing Coordination	Create a communication network to coordinate purchasing supplies and sharing surplus materials.
Operations	Waste Reduction	Disincentivize Discarding Materials	Financially disincentivize high-waste behavior while accounting for accessibility.
Operations	Waste Reduction	Reuse Programs	Create new programs encouraging reuse of materials.
Operations	Grounds	Occupational Safety	Develop guidelines to prevent harm from climate hazards for grounds and maintenance staff.
Operations	Grounds	Native Plants	Identify and utilize native plants appropriate for Whitman's campus.
Operations	Grounds	Organic Management	Develop a recommendation for reducing the use of fertilizers and pesticides.
Operations	Grounds	Electric Equipment	Investigate the feasibility of electric landscaping equipment.
Operations	Grounds	Aesthetic Green Spaces	Utilize human-centered design to create welcoming outdoor green spaces.

Target Year	Recurring?	Expense Type	Complementing Strategic Priority	Priority	Lower $	Upper $
2030	Recurring	Operating	V, VI	Medium	$2,000	$5,000
2030	Recurring	Operating	II, VI	High	$5,000	$10,000
2030	Recurring	Operating	I, VI	Medium	$2,000	$5,000
2030	Recurring	Operating	III, V, VI	Medium	$2,000	$5,000
2030	Recurring	Operating	II, VI	High	$5,000	$10,000
2030	Recurring	Operating	III, VI	Medium	$2,000	$5,000
2030	Recurring	Operating	III, VI	High	$5,000	$10,000
2030	Recurring	Operating	V, VI	Medium	$5,000	$10,000
2025	Recurring	Operating	I, VI	Medium	$2,800	$18,429
2030	Recurring	Operating	I, VI	Medium	$2,000	$5,000
2030	Recurring	Operating	III, VI	Medium	$5,000	$10,000

STRATEGY GUIDE

Topic	Goal	Initiative Name	Initiative Description *(continued on next page)*
Operations	Transportation	Fleet Revamp	Assess vehicle needs and commuting habits to identify opportunities for reducing campus vehicle fleet size, transitioning to EVs from gas-powered vehicles, promoting alternative transportation options, and encouraging sustainable commuting practices.
Operations	Transportation	Plan	Create a campus transportation plan.
Operations	Transportation	Charging Infrastructure	Ensure charging infrastructure exists for electric vehicle usage.
Operations	Transportation	CTUIR's Kayak Transit	Support the CTUIR's free Kayak Transit service.
Operations	Transportation	Incentives	Create incentives for sustainable transportation.
Operations	Water Use	Data Tracking	Set up tracking systems for water sources and consumption.
Operations	Water Use	Study	Conduct a study of water use to establish a comprehensive understanding.
Operations	Water Use	Reduction Plan	Create a measurable and impactful water reduction plan by identifying key areas of water usage, setting specific reduction targets, and implementing strategies such as efficient irrigation systems, low-flow fixtures, and water recycling initiatives.
Operations	Water Use	Water Recovery	Consider installing water recovery systems for irrigation.
Operations	Water Use	Efficiency	Enhance water efficiency of campus buildings through retrofits and intentional design of new projects.

Target Year	Recurring?	Expense Type	Complementing Strategic Priority	Priority	Lower $	Upper $
2025	One-Time	Operating	III, VI	High	$4,200,000	$6,600,000
2030	One-Time	Operating	V, VI	Medium	$5,000	$8,000
2030	One-Time	Capital	I, VI	High	$500,000	$1,000,000
2030	Recurring	Operating	V, VI	Medium	$5,000	$10,000
2030	Recurring	Operating	III, VI	Medium	$5,000	$10,000
2030	One-Time	Operating	I, VI	High	$10,000	$20,000
2030	One-Time	Operating	I, VI	High	$50,000	$100,000
2026	One-Time	Operating	II, VI	High	$4,500	$15,000
2030	One-Time	Capital	I, VI	Medium	$50,000	$100,000
2030	Recurring	Capital	I, VI	High	$100,000	$200,000

STRATEGY GUIDE

Topic	Goal	Initiative Name	Initiative Description *(continued on next page)*
Outreach and Education	Curriculum	Orientation	Create a sustainability-focused new student orientation program.
Outreach and Education	Curriculum	Living Lab	Use Whitman's infrastructure for sustainability learning opportunities.
Outreach and Education	Curriculum	Interdisciplinary Opportunities	Provide opportunities to incorporate sustainability into classes.
Outreach and Education	Curriculum	Cohesive Approach	Create a cohesive approach to sustainability in the curriculum by integrating sustainability principles across various subjects, developing interdisciplinary courses on environmental issues, and incorporating real-world sustainability projects. Collaborate with faculty to embed sustainability outcomes into course objectives and assessments.
Outreach and Education	Experiential Learning	Environmental Justice	Work with the partners identified under the environmental justice goal to create mutually beneficial, environmental justice focused, hands-on opportunities for students.
Outreach and Education	Experiential Learning	Student Internships	Work with community and alumni partners to develop Whitman-specific sustainability-related internships for students.
Outreach and Education	Experiential Learning	Local Policy	Provide support to local policy leaders to ensure sustainability priorities are included in decision-making for comprehensive planning.
Outreach and Education	Experiential Learning	Outreach	Engage students in outreach activities with community and alumni partners.
Outreach and Education	Internal Organization	Environmental Initiatives	Invest in environmental initiatives to enhance existing offerings and prepare for growing student interest.
Outreach and Education	Internal Organization	Communications	Create improved and consistent communication mechanisms the Department of Sustainability can use to communicate information to the campus community.

Target Year	Recurring?	Expense Type	Complementing Strategic Priority	Priority	Lower $	Upper $
2030	Recurring	Operating	III, VI	High	$5,000	$10,000
2030	Recurring	Operating	I, VI	Medium	$10,000	$20,000
2030	Recurring	Operating	I, II, VI	Medium	$10,000	$20,000
2028	Recurring	Operating	I, VI	Medium	$2,250	$10,000
2024	Recurring	Operating	II, VI	High	$10,000	$20,000
2025	Recurring	Operating	I, IV, VI	High	$15,000	$25,000
2026	Recurring	Operating	V, VI	Medium	$5,000	$10,000
2030	Recurring	Operating	III, VI	Medium	$5,000	$10,000
2025	Recurring	Operating	I, VI	High	$6,300	$9,300
2026	Recurring	Operating	III, V, VI	High	$500	$1,000

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Topic	Goal	Initiative Name	Initiative Description *(continued on next page)*
Outreach and Education	Internal Organization	Student Collaboration	Create a network student groups can use to communicate about sustainability work to encourage collaboration.
Outreach and Education	Internal Organization	Department of Sustainability Investment	Invest in the Department of Sustainability by reviewing staffing resources to ensure they are appropriate to support this CSP.
Outreach and Education	Environmental Justice	Definition	Define what environmental justice means to Whitman College.
Outreach and Education	Environmental Justice	Collaboration with CTUIR	Collaborate with the CTUIR on their Climate Adaptation Plan when possible.
Outreach and Education	Environmental Justice	Identify Partners	Identify environmental justice partners.
Outreach and Education	Environmental Justice	Events	Designate funding for speaking engagements and events with environmental justice experts.
Outreach and Education	Community Involvement	Student Outreach Activities	Engage students in outreach activities with local community partners to foster sustainability and environmental justice initiatives.
Outreach and Education	Community Involvement	Whitman-Specific Internships	Work with community and alumni partners, and with other potential collaborators, to develop Whitman-specific sustainability-related internships for students.
Outreach and Education	Community Involvement	Local Sustainability Planning	Involve students in local sustainability planning by engaging with county/city leaders to shape sustainability policies and practices, potentially through default student internships.

Target Year	Recurring?	Expense Type	Complementing Strategic Priority	Priority	Lower $	Upper $
2024	Recurring	Operating	II, III, VI	Medium	$5,000	$15,000
2026	Recurring	Operating	I, VI	High	$30,000	$60,000
2024	One-Time	Operating	II, VI	High	$800	$1,000
2025	Recurring	Operating	II, VI	High	$10,000	$20,000
2024	One-Time	Operating	II, VI	High	$5,000	$10,000
2025	Recurring	Operating	II, VI	Medium	$10,000	$15,000
2025	Recurring	Operating	II, VI	Medium	$5,000	$10,000
2026	Recurring	Operating	I, IV, VI	Medium	$10,000	$20,000
2026	Recurring	Operating	IV, V, VI	Medium	$8,000	$15,000

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Topic	Goal	Initiative Name	Initiative Description (*continued on next page*)
Outreach and Education	Community Involvement	Neutral Convening Space	Establish a neutral venue for convening community partners to discuss and collaborate on sustainability and environmental justice initiatives. Appoint designated facilitators from our campus to serve as primary contacts and coordinators for these community-based efforts.
Outreach and Education	Community Involvement	Support for Local Policy Leaders	Provide support to local policy leaders to ensure sustainability priorities are included in decision-making for comprehensive planning.

Target Year	Recurring?	Expense Type	Complementing Strategic Priority	Priority	Lower $	Upper $
2025	Recurring	Operating	II, V, VI	Medium	$3,000	$7,000
2026	Recurring	Operating	IV, V, VI	Medium	$4,000	$8,000