SUSTAINABILITY ACTION PLAN

Adopted 2017 – Updated 2025

2025-2030 STRATEGIES

WESTERN WASHINGTON UNIVERSITY

MAKE WAVES.

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Land Acknowledgment

The contributors to this document acknowledge that Western Washington University (Western) sits on the ancestral homelands of the Coastal Salish peoples, who have lived in the Salish Sea basin, throughout the San Juan Islands and the North Cascades watershed, from time immemorial. We express our deepest respect and gratitude to our Indigenous neighbors for their enduring care and protection of our shared lands and waterways. We also thank Native tribes for preserving and conserving our region's natural resources for present and future generations.

Furthermore, we acknowledge that we are amid a Climate Crisis, the drastic and far-reaching impacts of which we are only beginning to witness. We acknowledge the significant leadership being provided by Indigenous tribes in our community, across the country, and on the planet, and we express our gratitude to them and solidarity with them.

Executive Summary

The Western Washington University (WWU) 2025-2030 Sustainability Action Plan (SAP) is a roadmap to reducing greenhouse gas (GHG) emissions and advancing related goals over the next five years. In 2017, the WWU Board of Trustees approved and is still committed to the full implementation of the original SAP to guide planning, development, and operations. It focuses on 10 impact areas: Curriculum and Research, Campus and Community Engagement, Student Life, Built Environment, Grounds, Procurement, Dining Services, Waste, Transportation, and Investments. Western has made significant progress toward many goals and objectives, including reducing annual Scope 1 and 2 GHG emissions by more than 30% from a 2005 baseline, as reported by the state agency.

This streamlined document focuses on our strategies and action items for the 2025-2030 timeframe and aims to be as accessible, inclusive, and engaging as possible, and calls for regular updates to the plan as sustainability challenges evolve. Given the urgency of addressing climate change, this document focuses on GHG mitigation, beginning with an updated inventory of direct (Scopes 1 and 2) and indirect (Scope 3) emissions to establish a baseline for measuring and forecasting future reductions. It then details progress and lists actionable steps through 2030 for each significant source of emissions: natural gas used for district heating and in buildings, purchased electricity, and Scope 3 categories, including building materials, procurement, dining services, waste, transportation, and investments.

Where possible, this document outlines Western's approach to enhancing its climate resilience - the capacity of systems, communities, and individuals to anticipate, prepare for, withstand, and recover from the effects of climate change. This document uses the term “climate action” to refer to efforts aimed at mitigating climate change and enhancing resilience. This document also builds on the critical work of advancing initiatives that align with the four pillars of sustainability: ecological vitality, health and wellbeing, social equity, and economic stability. In using the term “sustainability”, this document is referring to the four pillars of sustainability outlined above.

The successful implementation of the 2025-2030 SAP will reinforce Western’s identity as a sustainability leader at the forefront of addressing the climate crisis and inspire other institutions to take bold action. However, we will need strong, sustained support from

Western’s leadership, as well as consistent, reliable, and sufficient funding to realize our ambitious goal of achieving carbon neutrality by 2035.

Living Document Acknowledgment

The PSC recognizes that challenges and opportunities related to sustainability will evolve rapidly in the coming years, and that this Plan will need to be updated regularly to maintain relevance, timeliness, and effectiveness. Additionally, community engagement will be critical to the implementation of the SAP, and the engagement process will inevitably highlight portions of the SAP that require refining or updating. Therefore, the PSC presents the SAP for approval as a “living document,” to be updated as needed, determined by the PSC with the approval of the President’s Cabinet. This will allow the Plan to evolve to meet Western’s needs as an institution and to maintain our role as a sustainability leader in our sector.

The implementation process of the SAP will be reported on through a web dashboard along with annual reports. A Sustainability Action Plan Priorities document will be produced every five years. The PSC, in partnership with other university groups, will continue to collect feedback from students, faculty, staff, and other stakeholders on an ongoing basis to support the continued development of this living document. Updates will be provided on the website and through Western Today.

WWU President Sabah Randhawa on Western's Sustainability Goals

Historically, Western has been an exemplary model of sustainability in higher education. In 2017, Western's Sustainability Action Plan (SAP) was released, identifying goals, objectives, and strategies to prioritize and implement sustainability efforts at Western. While there have been many achievements since the 2017 SAP, our sustainability challenges have evolved, particularly regarding the severity of our current global Climate Crisis (see text box below). As an institution committed to serving as a sustainability leader in higher education, we share this five-year strategic focus with a clear commitment to climate action, improving sustainability metrics, and enhancing our engagement with the Western community in advancing this effort. This will be achieved through five ambitious and actionable goals:

Positioning Western as a bold leader in climate action and sustainability.

Our strong commitment to responding to the climate crisis will aim for a 45% reduction in Scope 1+2 emissions by 2030 and carbon neutrality in Scope 1 and 2 emissions by 2035. Western will see a significant reduction in emissions through the Heating Conversion Project (see the featured section of this report). Still, we will simultaneously advance additional sustainability initiatives to reduce emissions, while emphasizing social justice as a critical element of sustainability.

Improving tracking and reporting of Scope 3 emission sources.

While Western has tracked emissions across several Scope 3 emission sources, obtaining and reporting emissions data has been difficult, and many Scope 3 emission sources have not been tracked. Consistent with national standards and practices from other universities, Western will improve its tracking of Scope 3 emissions and launch a real-time dashboard to track emissions and other sustainability metrics.

Advancing sustainability in curriculum and research.

Western will strategically advance sustainability in education programming at Western, through building capacity, extending access, and expanding experiential learning opportunities and professional development support to train the next generation of environmental leaders.

Better engaging the Western community.

This SAP update will not succeed unless equity, inclusion, increased transparency, and meaningful community engagement are incorporated into our climate action and sustainability strategies. We must collaborate to support these efforts, ensuring that the necessary resources are allocated and that our entire community is involved. We will achieve this through listening sessions and the opportunity for meaningful input to inform the direction of our sustainability efforts.

Achieving a STARS Gold score.

Western participates in the Association for the Advancement of Sustainability in Higher Education (AASHE) Sustainability Tracking, Assessment and Rating System (STARS) program to benchmark our sustainability against peer institutions. Historically, we have achieved a STARS Silver rating. By implementing the actions laid out in this plan, we aim to achieve a STARS Gold rating.

We understand that some actions in this plan exceed our current capabilities; however, by outlining and working toward these goals over the next five years, Western will continue to make substantive progress towards our vision and ensure that Western continues to lead in climate action and sustainability in higher education.

This Sustainability Action Plan is the product of voices from all sectors of the University, and I am grateful for the passion, commitment, and dedication that they have invested in this comprehensive and aspirational document. It reflects our values and vision, not only for what we hope Western will become, but for the kind of world we want to live in and help create.

Sabah Randhawa
President
Western Washington University

Western's Sustainability Action Plan Process and Engagement

After the President and Board of Trustees approved the 2017 Sustainability Action Plan (SAP), the President's Sustainability Council (PSC) was formed to advise the President and/or their designees on sustainability and resilience at Western. The PSC recommends specific actions to engage the University in developing and updating Western's Sustainability Action Plan. This includes collaborating across university divisions and with surrounding communities to generate support for and to act on sustainability and resilience issues.

Early in 2022, President Randhawa tasked the PSC with reviewing and updating the SAP. Over multiple meetings between February 2022 and December 2024, the PSC examined the status of the goals and objectives outlined in the 2017 SAP, identifying accomplishments, areas requiring consolidation or revision, and opportunities to introduce new objectives to address emerging sustainability challenges. The PSC reconvened to review each section, solicit additional feedback on each goal and objective (including three public engagement forums and direct feedback from Western stakeholders), and propose revisions.

This process focused on setting priorities for the next five years and updating and streamlining the Plan around emission categories. In addition to refining the existing content of the SAP1, the PSC identified new objectives across several sections of the Plan to guide the university's response to the emerging Climate Crisis. The PSC also discussed Community Engagement further in shaping and implementing the Plan. The PSC will assist in developing a Community Engagement Plan that incorporates communication, feedback, and reporting to increase transparency between the university and the broader community. The engagement goal for the SAP is to establish regular communication and accessible points of connection with all parts of the university community interested in this process.

Climate Science Update

The most recent report from the United Nations' IPCC was released in March 2023 and represents the most current and complete information available on climate change from the scientific community. This report recommends immediate action across every sector to reduce greenhouse gas (GHG) emissions to limit the catastrophic effects of climate change, which are already observed in every region of the planet and disproportionately impact vulnerable communities. Below are findings cited directly from the Policymaker Summary:

- Human activities, principally through emissions of greenhouse gases, have unequivocally caused global warming, with global surface temperature reaching 1.1°C above 1850-1900 levels in 2011-2020.
- Global greenhouse gas emissions have continued to increase with contributions arising from unsustainable energy use, land use change, lifestyles, and patterns of consumption.
- Widespread and rapid changes on land, oceans, the atmosphere, and the biosphere have occurred. Human-caused climate change is already causing extreme weather in every region across the globe.
- This has led to widespread adverse impacts and related losses and damages to nature and people. Vulnerable communities that have historically contributed the least to current climate change are the most affected.
- Continued greenhouse gas emissions will lead to increasing global warming, with the best estimate of reaching 1.5°C in the near term in modelled pathways. Every increment of global warming will intensify multiple hazards.
- Climate change is a threat to human well-being and planetary health. There is a rapidly closing window of opportunity to secure a livable and sustainable future.

Equity and Environmental Justice

Western is committed to fostering an accessible, diverse, equitable, and inclusive environment where all members of our community can thrive and succeed. Western's mission upholds a "Commitment to equity and justice, and respect for the rights and dignity of others," and the Strategic Plan stresses goals such as "Pursue justice and equity in its policies, practices, and impacts." In the area of inclusive student success, Western has seen an increase in representation among students of color, as well as support services for an increasingly diverse student body and a sense of belonging across the campus community. In the coming years, Western will intensify its efforts to expand access for students from historically underserved communities, including low-income communities, communities of color, and Indigenous peoples.

It has been extensively documented that pollution and the Climate Crisis disproportionately affect marginalized and historically excluded communities around the world. Additionally, the Environmental Justice movement has highlighted how the siting and installation of polluting, extractive, and/or hazardous waste facilities tend to occur near marginalized communities in Washington state and across the country for the past several decades, leading to unfair health impacts on these communities.

As an institution committed to equity and justice, it is our moral duty to acknowledge and reduce our role in this ongoing crisis, while taking decisive action and demonstrating authentic leadership in our response—advancing social justice and equity at Western and beyond. Integrating equity and inclusion into the university's strategic plan for climate mitigation and resilience is essential to ensure that all members of the university and local community have fair access to a healthy, safe, and resilient environment and are protected from the unequal and harmful effects of climate change, environmental hazards, and systemic racism.

Many of the recommended actions in this SAP include equity considerations. Western will draft a Community Engagement Plan, outlining its approach to transparency and engagement for capital projects, climate action initiatives, and new sustainability programs. Additionally, the Community Engagement Plan will provide recommendations for outreach and engagement to marginalized and historically excluded community members. As a result, broad and meaningful community engagement efforts will be underway to inform, consult, involve, collaborate with, and empower marginalized and historically excluded members of the campus community during the implementation of the 2025-2030 Sustainability Action Plan.

Intersection with the Okanagan Charter

Western has taken a significant step forward in prioritizing health and wellness by adopting the Okanagan Charter and joining the U.S. Health Promoting Campuses Network. This Charter extends beyond individual wellness to encompass environmental and community health, guiding universities to weave health promotion into their institutional fabric while fostering both local and global partnerships for better health outcomes. As one of eight initial U.S. universities to join the Health Promoting Campuses Network, Western will collaborate with other universities to establish a holistic framework for integrating health throughout campus life.

In Western's response to the Okanagan Charter, we have defined three focuses:

- Place
- Person
- Planet

With significant potential for synergy with the Sustainability Action Plan, we have woven health and well-being commitments throughout this document.

Alignment with State and Federal Policy

Since the 2017 SAP was adopted, Washington state has passed new laws to cut greenhouse gas emissions, improve building efficiency, and decarbonize district energy systems, which will affect energy use and emissions on Western's campus. Relevant legislation includes:

State Agency Climate Leadership Act

Summary

The State Agency Climate Leadership Act was updated in 2020 to direct state agencies, including universities, to lead by example by reducing Scopes 1 and 2 GHG emissions:

- 15% below 2005 baseline by 2020;
- 45% below 2005 by 2030;
- 70% below 2005 by 2040; and,
- 95% below 2005 by 2050; achieve net zero.

Western Impact

Western met the 15% emission reduction by 2020 goal (see Figure 5) through purchasing renewable electricity. Through the Heating Conversion Project (discussed further in the Scope 1 section), Western will be on track to meet the 45% GHG reduction goal by 2030. Western's target date of carbon neutrality by 2035 in Scope 1 + 2 emissions would put Western ahead of state requirements.

Clean Buildings Performance Standard (CBPS)

Summary

The Clean Building Performance Standard (CBPS) was enacted in 2019 and applies to all buildings over 20,000 sq ft or all buildings served by a Campus District Heating system. Under the standard, buildings must meet an Energy Use Intensity (EUI) target based on the building's use and climate zone. In addition to meeting EUI targets, building owners must complete and submit compliance forms and energy management plans. Buildings that do not comply can be assessed penalties of up to $5,000 annually, plus a daily fine of up to $1 per year, per square foot.

Western Impact

Western has 74 buildings connected to the district heating system that will need to comply with the CPBS. Further energy audits, energy efficiency measures, and operation and maintenance changes will be necessary to meet the standard.

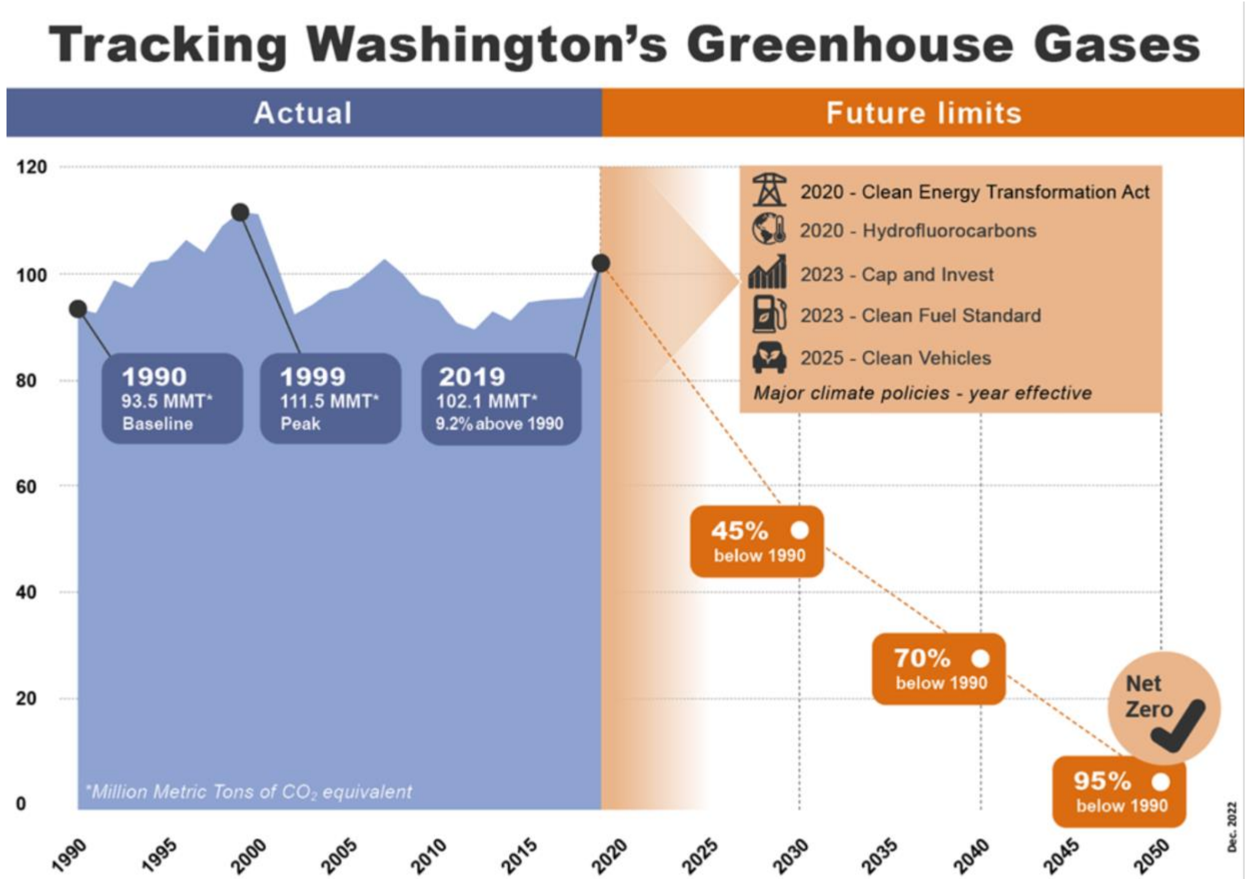


Figure 1. Washington state's statewide historic GHG emissions in million metric tons with future GHG targets. Courtesy of the Washington Department of Ecology.

Clean Buildings Decarbonization Plans

Summary

Recognizing the need to reduce emissions from campus district heating plants, the State legislature passed HB 1390 in 2023. Under HB 1390, owners of state campus district energy systems must begin developing a decarbonization plan by June 2024, submit their final plan to the Department of Commerce by June 30, 2025, and update the plans every five years thereafter. The plans are required to include several elements, such as replacing fossil fuels in the central plant by 2040, evaluating nearby waste heat sources, adding new buildings to the district system, and assessing efficiency upgrades to the plant and connected buildings.

Western Impact

Western submitted its Decarbonization Plan before the June 30th deadline. The design-build team selected for the Heating Conversion Project will review and update the Decarbonization Plan. The Heating Conversion project will need to be completed by 2040 under HB1390, but Western's goal is to complete it before 2035 to meet its Climate Neutrality Goal.

Climate Commitment Act (CCA)

Summary

In 2021, the Washington state legislature passed the Climate Commitment Act (CCA), which establishes a comprehensive, market-based program to reduce carbon pollution and meet the greenhouse gas limits set by state law. The program began on January 1, 2023, and the first emissions allowance auction occurred on February 28, 2023. Generally, facilities are covered by the program if they produce more than 25,000 metric tons of CO2 equivalent per year. These facilities must buy allowances equal to their emissions and submit them to the Department of Ecology. Facilities that emit over 10,000 metric tons of CO2-equivalent annually must report their emissions, but are not required to buy allowances. In 2023, statewide cap-and-invest auctions raised $1.8 billion, which is being used to fund various emission reduction projects and programs across the state.

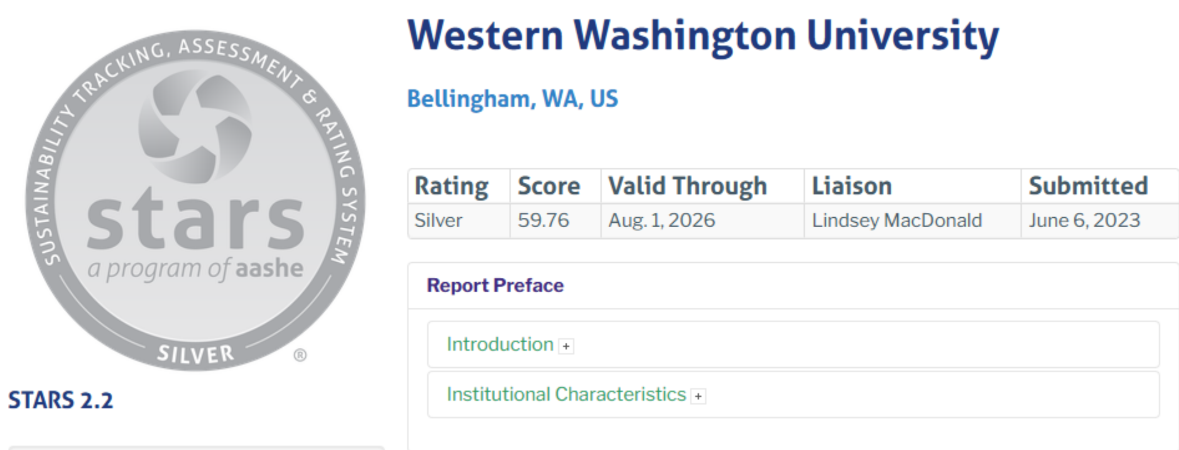


Figure 2. Western's last STARS report earned a Silver rating.

Western Impact

The Western Steam Plant's annual GHG emissions were ~12,000 MT in 2022, exceeding the reporting requirement but under the threshold for obtaining allowances directly. Instead, our natural gas provider, Cascade Natural Gas (CNG), must purchase allowances on our behalf. Starting in May 2024, CNG passed along CCA allowance costs to natural gas customers, substantially increasing Western's natural gas costs. However, Western has received legislative appropriations from the CCA to fund clean energy projects, including the Heating Conversion Project Phase 1, a solar installation on the SMATE building, and fleet EV charging stations. Western was awarded an additional $41 million in the 2025-2027 biennium to fund the design and construction of the Heating Conversion Project.

AASHE STARS Reporting

AASHE STARS (the Sustainability Tracking, Assessment and Rating System) is a comprehensive framework for colleges and universities to measure their sustainability performance based on industry's best practices. It was developed by the Association for the Advancement of Sustainability in Higher Education (AASHE) and is widely recognized as a leading sustainability rating system for higher education institutions.

AASHE STARS assesses sustainability in six categories: academics, engagement, operations, planning and administration, and innovation and leadership. Institutions are responsible for collecting and reporting their sustainability data, and they are then assigned scores ranging from Bronze to Platinum. Participating in STARS enables institutions to compare their performance with that of their peers, identify strengths and areas for improvement, share best practices within the higher education community, and showcase their sustainability leadership. Western has been participating in STARS Reporting since 2013, consistently ranking a silver rating. Western hopes to improve its STARS score in the 2025-2030 timeline and achieve a STARS Gold rating. Western's STARS reports are publicly available on AASHE's website.

Greenhouse Gas Inventory

This inventory provides a clearer understanding of Western's greenhouse gas (GHG) emissions and helps align SAP actions to achieve reduction targets. Western monitors its annual GHG emissions through several databases and completes yearly reports in accordance with sustainability programs and state requirements. For carbon accounting, emissions are categorized into three Scopes based on definitions from the World Resources Institute (WRI) GHG Protocol, which are distinguished by their level of control or ownership. The Sustainability Indicator Management and Analysis Platform (SIMAP) database is the most comprehensive source of Western's emissions across Scopes 1, 2, and 3. Additionally, Western reports its Scope 1+2 annual emissions to the State Efficiency and Environmental

Performance (SEEP) office at the Department of Commerce. The data for this inventory is derived from both reports.

Emission Categories by Scope

It is essential to start with an understanding of emissions scopes:

Scope	Description
Scope 1	Carbon emissions resulting directly from fuel combustion on campus, primarily natural gas for heating or Western-owned vehicles.
Scope 2	Carbon emissions that are associated with energy purchased by Western and generated elsewhere, primarily grid electricity used on campus.
Scope 3	Carbon emissions that result indirectly from Western operations, either from upstream activities such as purchasing goods and services, or from downstream activities, including student and faculty commuting to and from campus. Western does not have direct control over these emissions, but it can influence its operations, procurement, and other activities to reduce them.

The GHG Protocol defines the emission scope and the categories that fall within it. Emissions from Scopes 1 and 2 can be calculated using energy consumption data, while Scope 3 emissions generally require activity data to estimate a GHG impact, which is often more challenging to track. The specific sources that Western has historically tracked under each of the three scopes are described in more detail below:

Scope 1

Natural Gas Consumption

These emissions originate from the operation of Western's district heating system on the main campus, as well as from building emissions caused by independent heating systems, cooking appliances, and laboratory equipment (e.g., Bunsen burners). Data is based on the total usage from monthly natural gas invoices multiplied by EPA emission factors.

Fleet Vehicles

Western includes vehicles used for building maintenance, Transportation Services, University Police, and shared support for academic purposes. Additionally, Western owns motorized watercraft and small outdoor maintenance equipment, which are further sources of emissions. Emission totals are calculated based on fuel purchased through the campus fuel system and off-site fuel bought with university credit cards.

Diesel Generators

Western maintains a network of diesel generators to supply emergency power to critical loads during outages. The generators are required to run for a minimum amount of time each year for maintenance. Emissions data is obtained from receipts for diesel fuel tank fills.

Fuel Oil Consumption

Western's Steam Plant uses fuel oil as a backup source in case of natural gas curtailment. Emissions data is reported through the air quality reports submitted by the Steam Plant.

Refrigerants & Chemicals

These are emissions related to refrigeration and mechanical systems. More robust tracking of refrigerants is required by state legislation.

Fertilizer

These emissions are related to synthetic and organic fertilizers used in grounds maintenance on Western's campuses.

Scope 2

Purchased Electricity

This includes electricity bought from utility providers. All of Western's electricity is purchased through Puget Sound Energy (PSE), our electric utility. Main Campus and Shannon Point receive renewable electricity via PSE's Green Direct Program, which is emission-free. Emission data for other bills are based on monthly bills multiplied by the emissions coefficient for the Northwest electric grid.

Scope 3

Faculty, Staff, and Student Commuting

Western has historically tracked emissions from vehicles that students, faculty, and staff use to commute from their homes to Western's campus. Emissions data comes from surveys.

Transmission and Distribution Losses

This category covers line losses from electricity delivered from the Utility Grid to the Viking Substation, where the utility meter for all power flowing to Main Campus is installed.

Fuel and Energy Related Activities (FERA)

The FERA category generally includes all emissions that occur upstream from the Scope 1 direct combustion of a fuel or generation of energy. Typically, this covers GHG emissions related to the extraction, production, and distribution of natural gas. It includes leakage from natural gas, which is primarily methane, a potent GHG with a global warming potential 30 times that of carbon dioxide. It is calculated by multiplying total natural gas usage by an assigned emission factor.

Paper Purchasing

This category covers the total amount of paper used by Western. GHG emissions are allocated by type and recycled content.

Directly Financed Air Travel

The business travel category covers emissions from transporting employees and financed athletic travel for activities related to the organization. This only includes travel that does not occur with vehicles owned by the organization. Western tracks air travel and vehicle travel (personal and fleet) in this category. Emissions from sponsored travel in vehicles are included in fleet vehicles.

Study Abroad Air Travel

Western tracks air miles travelled for study abroad trips organized through the university. Non-university-associated travel within the destination country is not tracked.

Solid Waste

The waste generated in operations includes emissions from the disposal and treatment of Western’s waste. This is reported based on historic invoices and estimated waste volumes.

Food Purchased

Western receives data related to food purchased by the University’s dining provider and tracks emissions related to the production, transportation, preparation, and consumption of the purchased food.

GHG Sinks

Western also tracks some of its carbon sinks, which are sources that uptake a chemical element or compound, like carbon or nitrogen, rather than releasing them. Western tracks compost and recycling in its carbon sink calculations. However, there are a number of other carbon sinks that Western does not track, like emission uptake from soil and trees on Western-managed property.

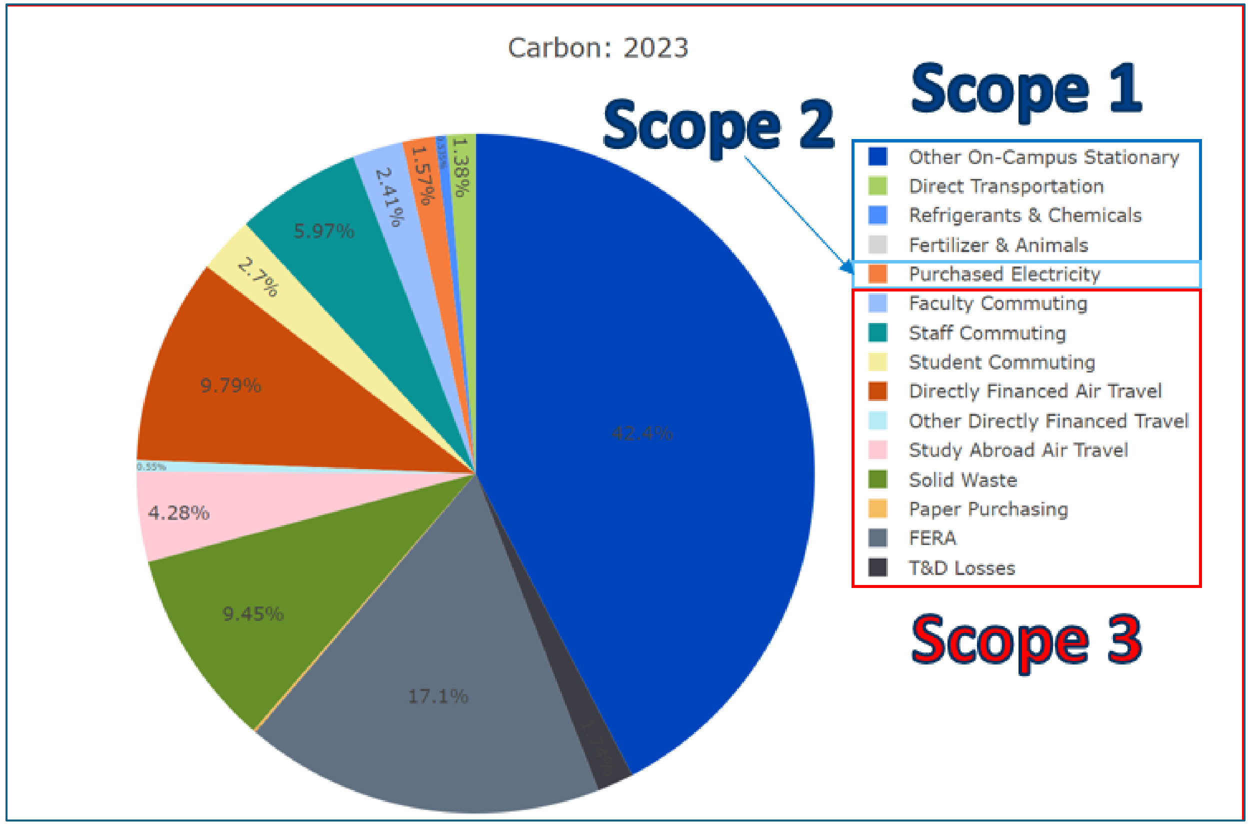


Figure 3. Emission Categories by Scope that Western has historically tracked. Natural Gas combustion is the largest source of emissions in blue. The next largest source is "FERA" - Scope 3 emissions related to the upstream emissions from natural gas extraction, refining, and leakage in distribution.

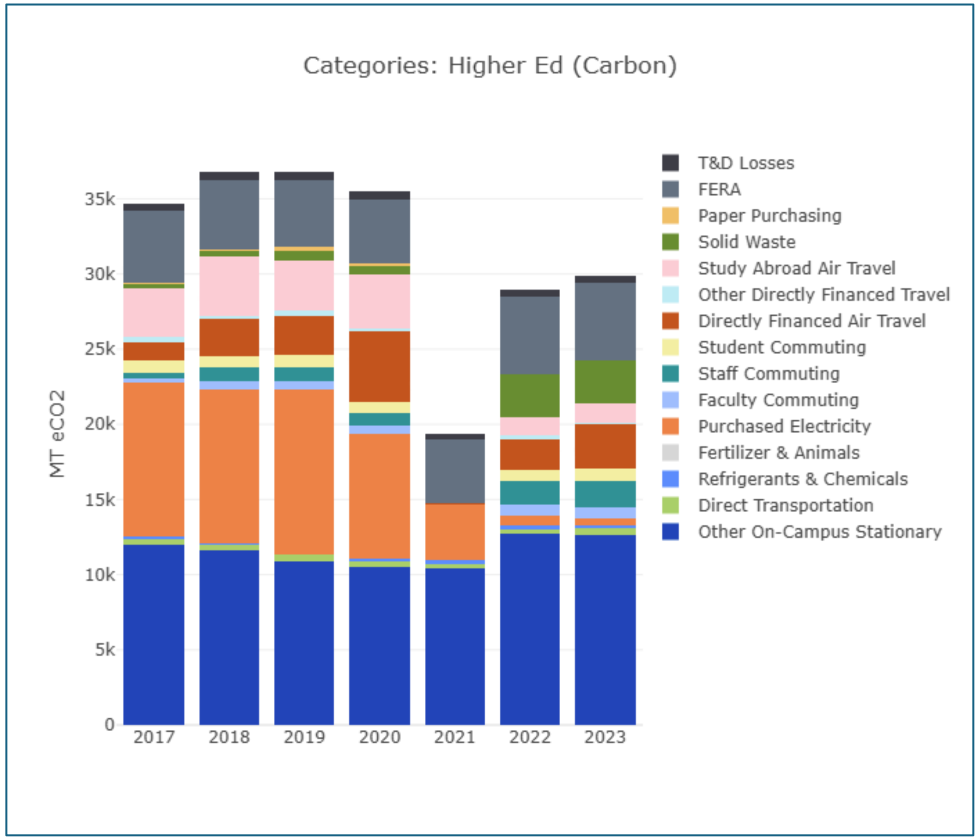


Figure 4. Western's Annual GHG emissions by Source (2017-2023). Some Scope 3 emission data is missing in 2021.

Historic Emissions Trends

Looking at Figure 3, we see that Western's overall Scope 1, 2, and 3 GHG emissions are down from a high of 34,701 metric tons CO2 equivalent in 2017 to 29,910 metric tons in 2023, a reduction of 14%. This was mainly due to purchasing renewable electricity through PSE's Green Direct program, which began in 2020.

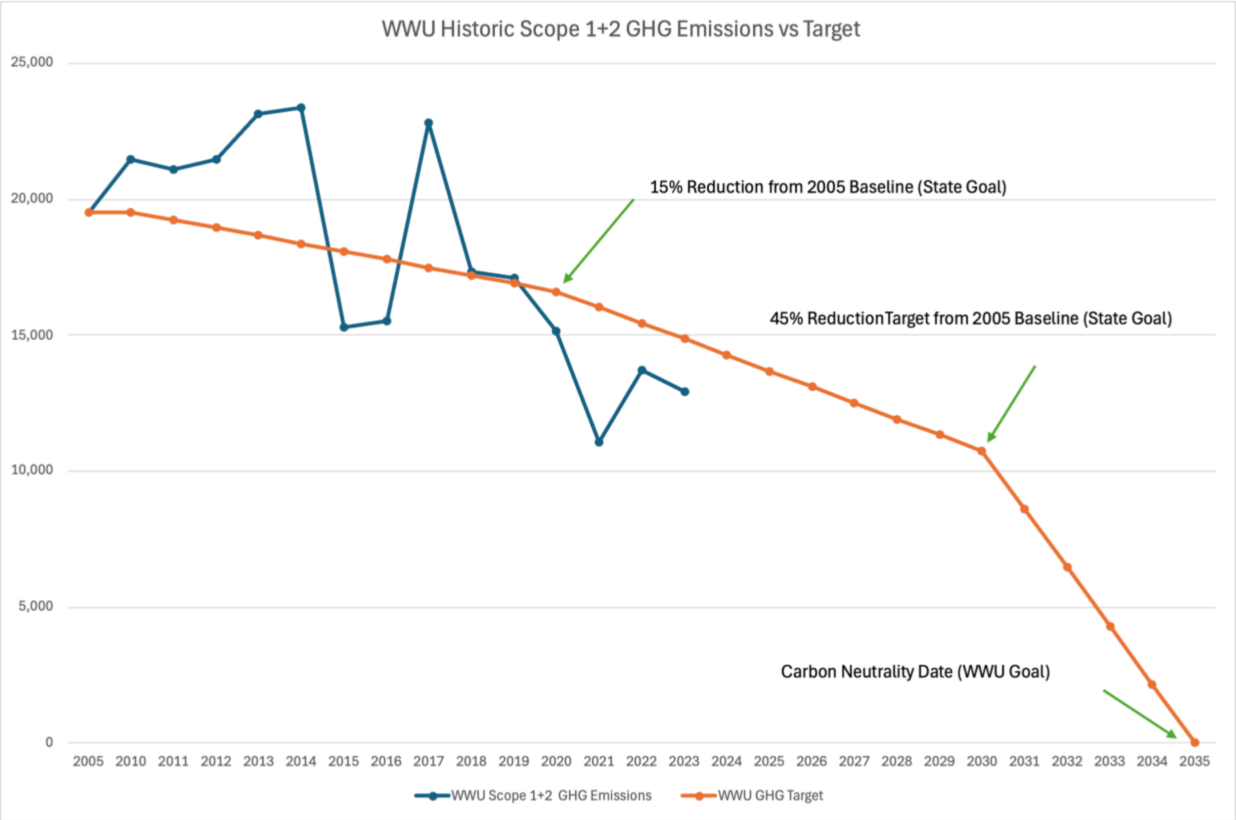


Figure 5. Western's historic Scope 1 + 2 emissions vs State and SAP target dates.

Examining Figure 5, which displays only Scope 1+2 emissions (reported to the state and typically of higher data quality), we observe a general trend of significant reductions in emissions from 2017 to 2023. We are currently meeting the state's 15% emission-reduction target, set in 2020, from a 2005 baseline. However, achieving the 45% emission reduction goal by 2030 will require more focused efforts.

Emission Data Tracking, Improvements to Scope 3 Emissions

Western currently has a public dashboard for monitoring its annual GHG emissions. Additionally, there is an energy dashboard for tracking WWU's utility usage. Western has adopted EnergyCAP as its new utility tracking database. This will enable more accurate reporting and feature improved graphics for a more interactive experience.

A common goal across many of Western's Scope 3 emissions categories is to improve data tracking and reporting on emissions from additional categories outlined in the WRI GHG Protocol that are not currently being tracked. Specific emission reporting improvements include:

Purchased Goods and Services

Western has not tracked the emissions linked to purchased goods and services, outside of paper purchasing. This emissions category could be the largest source of Scope 3 emissions. For example, when the University of Washington began tracking emissions from Purchased Goods and Services in 2022, it found that this category made up 64% of total emissions. To start tracking this category, Western will develop methods to better track purchased goods and services through an upcoming implementation of Jaggaer eProcurement, which includes the standardization of using North American Industry Classification System (NAICS), which sorts goods and services into different categories, and then convert the purchase amount into emissions using EPA's US Environmentally Extended Input-Output (USEEIO) emission factors.

Solid Waste

Our solid waste bills do not specify the total volume or weight of collected materials. They only indicate the dumpster size and collection frequency. Automated dumpster-monitoring technology will enable Western to better track solid waste. Additionally, Western will improve recycling tracking using the EnergyCAP database.

Construction

Western has not historically tracked the embodied carbon associated with new construction and renovation projects. As discussed further in the Green Building Section below, Western will implement a phased Green Building Standard that will require embodied carbon calculations for significant construction projects.

Dining

Western has recently started tracking the embodied emissions from food purchased on Western's campus. To track these emissions, Western relies on data from its dining provider to monitor quantities and types of food bought, categorized by food groups (meat, dairy, vegetables, grains, etc.). This data does not track food purchased and distributed by other entities on campus.

Embodied Carbon from Construction

As outlined in Western's Green Building Standard, tracking embodied carbon involves evaluating greenhouse gas emissions from material extraction, manufacturing, transportation, construction activities, and end-of-life processes. Organizations begin by defining the scope of lifecycle stages (e.g., cradle-to-gate or cradle-to-grave), inventorying materials, and collecting Environmental Product Declarations (EPDs) or utilizing databases for emissions data. Tools such as OneClick LCA, EC3, or Tally help calculate embodied carbon by integrating material and lifecycle information. The data then informs reduction strategies, such as using low-carbon materials, sourcing locally, or designing for recyclability.

Investments

The WRI GHG Inventory includes Scope 3 emissions linked to a reporting organization's investments because providing capital or financing is considered a service offered by the organization. Emissions from investments should be allocated to the reporting organization based on its proportional share of the investee. Calculating these emissions can be challenging because securities typically do not report emissions, and investment portfolios are often dynamic, changing frequently throughout the year. Suppose GHG emissions data is not readily available for Western's investments. In that case, it is advisable to first use a screening method to identify and focus on investments that are most likely to significantly reduce emissions.

Refrigerants

Western has reported on when new refrigerants are added to existing systems but has not previously reported on refrigerants that come precharged in equipment along with fugitive emissions from refrigerant leaks in air conditioning or refrigeration equipment. Refrigerants can have a global warming potential (GWP) many times greater than that of carbon dioxide. Currently, a new Department of Ecology refrigerant management program requires owners or operators of stationary refrigeration or air conditioning systems containing 50 pounds or more of refrigerant with a GWP of 150 or higher to register their systems with the department and report when refrigerants are used.

2025-2030 Strategies

Leadership

Jack Herring, Associate Vice President for Academic Affairs
Joyce Lopes, Vice President for Business and Financial Affairs
Matthew Bryant, Division Planning and Assessment Consultant, Student Success Initiatives

Figure 6. Kaiser Borsari Hall is Western's newest building targeting LEED certification.

KPIs	FY2024	FY2030 Target
Scope 1 Emissions	12,939 MT CO2e	10,000 MT CO2e
Scope 2 Emissions	275 MT CO2e	0 MT CO2e
STARS Rating	Silver	Gold
ESG Investment Share	55%	TBD

Background

Leveraging our successes in operational sustainability and our longstanding identity as a "university of the environment," Western is well-positioned to lead and advance climate action and sustainability across our community, region, and sector. This section includes a clear commitment to climate action and resilience. It expands our previous focus on community-level work to include engagement and leadership at the regional and national levels.

Current Progress

- By 2023, Western had identified and implemented carbon reduction projects to cut Scope 1 and Scope 2 emissions by 34% from the 2005 baseline year.
- Western achieved LEED Gold standard for multiple campus building constructions and renovations, including Miller Hall, Carver Gym, and Alma Clark Glass. Our newest building, Kaiser Borsari Hall, is targeting certification as net-zero energy and net-zero carbon (ILFI Zero Carbon) by the Institute for Living Buildings Energy. Interdisciplinary Science was also LEED Gold.
- Since 2021, Western has offset 93-95% of its electricity use through the Green Direct Power Plan with Puget Sound Energy (PSE), supporting grid-scale renewable energy generation, which will help electrify the Washington energy grid.
- Since 2018, the Foundation for WWU and Alumni has dedicated a portion of the endowment fund to sustainable investing, works with investment advisors who are signatories to the Principles for Responsible Investing, and offers an option for new endowments to be invested in the Green Century Balanced Fund.
  In 2023, University Advancement added information about responsible and sustainable investment activities to the Foundation website, and in 2024, published its first Sustainability Performance Report, providing more details on investment activities for the endowment fund.
- In 2022, Western signed the international Okanagan Charter and joined the Health Promoting Campuses Network as one of eight initial U.S. universities.

2025-2030 Action Items:

1. Positioning Western as a bold leader in climate action and sustainability.

- Achieve a Gold rating in the Sustainability Tracking, Assessment & Rating System (STARS) and continue the improvement of GHG reporting using the Sustainability Indicator Management and Analysis Platform (SIMAP).
- Take a strong public stance on the climate crisis with a clear focus on equity, health, and well-being by declaring a climate state of emergency and committing to environmental justice.
- Make a strong public commitment to addressing the climate crisis by pledging to achieve carbon neutrality in Scope 1 and 2 emissions by 2035. Further, Western will declare the 2026-2027 academic year the "Year of Climate Action," with featured programming and outreach.

- Publicly reporting on climate action and sustainability initiatives by setting key performance indicators and managing a public-facing sustainability dashboard.
- Conduct a thorough assessment of climate variability risks in our bioregion and develop strategies to enhance institutional and community resilience.
- Continuously advance sustainability initiatives to address opportunities and challenges by establishing the PSC as a standing committee for ongoing action and accountability, with regular consultations from subject matter experts.
- Emphasize social justice as a key part of sustainability by identifying and appointing ADEI representative(s) to the PSC and expanding synergies between sustainability efforts and ADEI initiatives.
- Emphasize individual and community health and wellbeing as a key part of climate resilience and sustainability by increasing collaboration between the PSC and the Wellbeing Collaborative and further supporting health-promoting campus initiatives.
- Western has made sustainability a core value. Therefore, we will continue to emphasize sustainability in our strategic budgeting process and identify the necessary resources to support the advancement of the SAP priorities.

2. Co-leadership and collaboration in climate action and sustainability within our community.

- Enhance the PSC by regularly inviting key community representatives, including advisory members from the region, city, county, and local tribes, for deep conversations.
- Build on existing relationships by appointing more students, faculty, and staff representatives from Western to participate in key community climate action and sustainability working groups, reporting back to the PSC.
- Serve as a vital partner in community initiatives focused on climate action and sustainability by identifying essential efforts within the city, county, and tribes where collaboration can increase impact, including the Whatcom County Climate Action Plan.
- Highlight climate action and sustainability in the Western community by adding a goal in the university's updated strategic plan that prioritizes sustainability efforts and incorporates sustainability topics into orientations for new students, staff, and faculty.

3. Leadership collaboration in climate action and sustainability within our region.

- Align our climate action and sustainability efforts with regional organizations by continued participation in and support of regional, national, and international conferences and working groups, for example, the Washington Oregon Higher Education Sustainability Conference (WOHESC), hosted by Western in 2024.
- Lead climate action and sustainability efforts among regional institutions by drafting and guiding a memorandum of understanding with local government agencies or colleges to declare a climate emergency and achieve carbon neutrality for Scope 1 and Scope 2 emissions by 2035.
- Provide research, workforce development for students, and technical support that align with the climate change and sustainability goals and needs of communities in the region.

4. Collaborate on climate action and sustainability within our sector.

- Leverage climate action and sustainability in our sector by advocating with local, tribal, national, and international organizations to promote policies that support the well-being of students, staff, faculty, local communities, and the planet.

5. Demonstrating our commitment to sustainability through responsible investment practices.

- The Foundation for WWU & Alumni will make a defined commitment to responsible investing by updating its Investment Policy Statement to include a statement and definitions regarding responsible investing.
- The Foundation for WWU & Alumni will share information with the university and the broader community about its responsible investing activities by consistently showcasing its approach to responsible investing on the Foundation website.
- The Foundation for WWU & Alumni will develop responsible investing metrics according to its current Investment Policy Statement and will regularly report on these metrics to the university community.
- The Foundation for WWU & Alumni will exclusively hire investment advisors who are signatories to the Principles for Responsible Investing.
- The university will explore opportunities to invest in the university-owned investments currently managed by the Foundation for WWU & Alumni, according to the Board of Trustees' Policy on Socially Responsible Investing and consistent with university values.

Community Outreach & Engagement to Advance Priorities

Lindsey MacDonald, Associate Director of Sustainability Engagement Institute
Kate Beck, Sustainability Action Plan Implementation Manager

Figure 7. Western students and community members provide input to improve engagement.

KPIs	FY2024	FY2030 Target
Percentage of university stakeholders reached through sustainability outreach and communications	80-100% (as tracked in FY25 using SEI outreach through Western Today)	80-100%
Percentage of students who participate in sustainability co-curricular activities	<5% (as tracked in FY25 using Go for the Green participation - tracking needs to be improved)	60-79% and improved tracking methods
Percentage of employees who participate in sustainability activities	<10% (as tracked in FY25 using Sustainable Office and Lab Certification program participation - tracking needs to be improved)	60-79% and improved tracking methods
Percentage of university members aware of Western's sustainability commitments (from strategic plan, SAP, Okanagan Charter, and others)	Unknown	60-79% and improved tracking methods
University and community partnerships are reciprocal and mutually beneficial (via assessment tool)	Unknown	An assessment tool has been developed and implemented

Background

While completing a university-wide public engagement alignment process continues to be of significance to meeting Western's goals toward better community engagement (Goal 1 in 2017 SAP), it is clear that this is not likely to be completed in the next five years. So, the following action items were developed as valuable shorter-term efforts, particularly focused on engagement and outreach to advance the 2025-2030 SAP priorities in mutually enhancing ways for groups working on sustainability efforts on campus and in the community.

Current Progress

For several years, many university entities have been working to organize and support outreach and engagement efforts with a focus on sustainability. This has included:

- Hosting the Wellness Collaborative, a group of faculty, staff, and students who work towards Western's commitment to becoming a health-promoting campus.
- Co-hosting intergenerational Learning Together Forums with community partners on all the United Nations Sustainable Development Goals.
- Facilitating First-Year Interest Group clusters on sustainability issues, such as Clean Energy Transitions, Climate Change Cognition, Environmental Communication, Global

Citizenship, Leading for a Sustainable Future, Environmental Justice, and The Salish Sea.
- Delivering sustainability orientations for new faculty and staff.
- Engaging students in local organizations through Sustainability Pathways, Students in Community, and Climate Leadership Certificate programs.
- Hosting quarterly sustainability and “How It Works” tours on various sustainability-focused systems on campus and in the community.
- Managing City Sprouts Farm in the Birchwood neighborhood.
- Western’s newly constructed House of Healing will serve as an educational center to promote healing, cultural exchange, and supportive understanding for the communities served by the university.

2025-2030 Action Items

1. Develop a climate change and sustainability engagement and outreach model along with an implementation plan.

Before delving deeply into specific action items, the Sustainability Engagement Institute (SEI) and the PSC, in partnership with other campus stakeholders, will create a model and plan to promote awareness, education, culture, and behavior change throughout the university and the wider community. This will also incorporate specific methods for evaluating the effectiveness of engagement activities beyond simple participation metrics.

2. To share progress on SAP priorities, develop new and expanded sustainability and climate change engagement programs, tools, and resources.

On a university campus, there is significant value in modeling good sustainability practices and sharing successes and challenges with students as learning opportunities. This initiative aims to boost engagement by thoughtfully soliciting and sharing sustainability and climate initiatives across the university. This could include, but is not limited to, hosting an annual town hall to report progress, facilitating monthly thematic workshops or webinars, participating in events hosted by other campus and community groups, engaging with programs like the Sustainable Office and Lab Certification programs, leading tours, giving class presentations, and/or publishing digestible reports or dashboards. Collaborating on initiatives of this type with other campus and community groups will help to save time and resources and allow for deeper engagement with a wider variety of audiences and participants. The SEI will facilitate but will rely on content experts from the PSC and other campus stakeholders to participate and share.

3. Develop new ways to engage with climate change and the four pillars of sustainability across various fields, and support collaboration among university groups.

Western will depend on the entire university community to work together to advance the climate change and sustainability action commitments outlined in this priorities document, as well as in Western’s Strategic Plan and its commitment to the Okanagan Charter. In a tight budget environment, coordinating and co-creating efforts to achieve shared goals across departments will have a greater impact. Therefore, the PSC and the SEI will work to strengthen partnerships among university groups to foster sustainability initiatives focused on climate change and the four pillars of sustainability, ensuring Western’s commitments are integrated into all units and departments.

4. Focus on reciprocal partnerships and collaborations to enhance sustainability across the broader community.

This can include, but is not limited to, ongoing participation in the Whatcom County Climate Collaborative Committee (WC4), working with regional universities, co-hosting social learning events, showcasing the efforts of community organizations involved in sustainability, facilitating “How It Works” and campus sustainability tours, developing or using partnership assessment tools for reciprocity, maintaining ongoing relationships and trust-building activities, and continuing to support programs that benefit students and community partners, like Sustainability Pathways, Students in Community, and Climate Leadership Certificate programs. Special emphasis will be placed on collaborations and partnerships that focus on the inclusion of underrepresented and/or vulnerable populations within the region.

5. Refine orientation programs for students, staff, faculty, and visitors to emphasize Western’s commitment to education for sustainability.

Helping newcomers on campus understand our sustainability values and learn how to align their behaviors with those values can make a meaningful difference. Since the COVID-19 pandemic began in 2020, orientation formats for these groups have changed. In collaboration with leaders of these orientations, the SEI will work to incorporate sustainability content where appropriate and relevant.

6. Expand courses and co-curricular programs for first-year students that focus on local and regional sustainability issues through community engagement.

Discussions have taken place about the value of the Sustainability Representatives' residence hall sustainability program, which was eliminated during the COVID-19 pandemic. Although this program may not be returned, this action item prioritizes finding other ways to engage first-year students. This could include developing a sustainability living-learning community, collaborating with first-year student success programs, creating additional sustainability ambassador programs, and more.

Curriculum & Research

Matthew Miller, Professor of Elementary Education
Teena Gabrielson, Dean, College of the Environment
Grace Wang, Professor, Department of Urban Environment & Policy / Director of the Sustainability Engagement Institute

Figure 8. Students in the Miller Hall collaborative space.

Background

WWU has consistently been a leader in environmental education, with the College of the Environment (formerly known as Huxley) established in 1969. It was the first college in the country devoted to interdisciplinary approaches to teaching the environment. Community approaches to recycling and conservation have long been important at Western. A “White Paper” written in 2011 highlighted the need to integrate the concept of sustainability into all disciplines, rather than limiting it to the traditional fields of environmental or natural resources. This framework is called Sustainability Across the Curriculum (SATC). An academic program in sustainability was established in 2012, in collaboration with the Office of Sustainability, to develop opportunities for students, staff, and faculty to integrate the four pillars of sustainability into the curriculum. Working with regional academic partners through Curriculum for the Bioregion and the Washington-Oregon Higher Education Sustainability Committee, faculty and staff can develop skills and pedagogical approaches to teaching sustainability in their subject areas.

Current Progress

Since the 2017 SAP was adopted, Western has implemented several academic programs available to students. In addition to the Sustainability Studies Minor, created in 2015, newer offerings include Minors in Environmental Justice (2019), Salish Sea Studies (2019), Climate Change (2022), and a Climate Leadership Certificate (2021). The Director of the SEI continues to coach the teaching faculty and staff at Western through the Sustainability Fellows program, and in the region through the Curriculum for the bioregion program, two training programs designed to support instructors in integrating sustainability concepts into course content. The 2024-2025 Sustainability Fellows cohort includes the disciplines of Accounting, Communication, Ethnic Studies, Mathematics, Polymer Sciences, and Nursing. As of 2024, all colleges and 73% of departments offer sustainability-focused or sustainability-inclusive courses.

2025-2030 Action Items

1. Western will engage all students in the fundamentals of sustainability and increase opportunities to apply sustainability principles to foster and create the conditions for a thriving society, economy, and environment.

This will be achieved by increasing participation in both sustainability-related credit-bearing and co-curricular programs (as defined by STARS), by integrating sustainability learning opportunities into residence life and other first-year programming, and by expanding students’ eligibility for sustainability-related Independent Study Projects.

2. Western will support scholarship and teaching that advance understanding and promote sustainability.

This includes but is not limited to ensuring strong representation from Western faculty at sustainability events, establishing dedicated funding and support programs for faculty research on sustainability, continuing to other faculty training programs, like Curriculum for the Bioregion and Sustainability Fellows, and providing access to timely publications and resources to support sustainability-focused scholarship and teaching.

3. Western will recruit and retain faculty and staff who focus on the four pillars of sustainability.

This goal will be achieved by providing all faculty with opportunities to teach sustainability-related content and exploring ways to expand the number of faculty dedicated to one, some, or all four pillars of sustainability. This could involve recruiting across all disciplines. Additionally, the SEI will be included in the annual faculty and monthly staff orientations. Language about sustainability will be incorporated into job descriptions for staff positions when we post vacancies, whenever possible.

4. The impact of the Sustainability Engagement Institute will continue to grow.

The SEI’s mission is to create educational opportunities and drive systems change for a more sustainable, just future. This effort will involve expanding SEI staff to monitor, engage the campus community with, and help achieve the ambitious goals of the Sustainability Action Plan, developing fundraising strategies to boost support for SEI initiatives, and regularly seeking feedback from relevant campus stakeholders and experts on how to further SEI's commitment to ecological vitality, health and wellbeing, social equity, and economic stability.

Student Life

Leonard Jones, Executive Director of University Residences

Figure 9. WWU students engaged in discussion on the Old Main lawn.

KPIs	FY2024	FY2030 Target
# of student employee positions related to one, some, or all of the four pillars of sustainability	Unknown (tracking method not available)	55 (5% overall) with an improved tracking method
% of student employees receiving sustainability training	0%	100%
% of sustainability program participants reporting increased sustainability knowledge	Unknown	TBD
# of health-promoting programs and services offered to students	Unknown	TBD
% of students graduating with Green Graduate distinction	0%	10%

Background

Building on the sustainability programs developed since 2017, the updated goals and objectives of this Student Life section will make sustainability a core focus of student life at Western, fostering environments that develop sustainability literacy, offering opportunities for students to engage in sustainability practices, offering health and wellness support to students, and inspiring graduates to build a more sustainable future by integrating social equity, economic stability, ecological justice, and health and wellbeing into their daily lives.

Current Progress

An example of progress in integrating sustainability into student life is the Housing Sustainability program, established to address the lack of sustainability literacy and related behaviors in the residence halls following the elimination of the Sustainability Representatives Program. Launched in 2020, the Housing Sustainability program aims to provide on-campus residents with educational programming and initiatives that emphasize and prioritize sustainability in residential experience. Its programming is designed to prepare students for life after on-campus living, educate them about sustainability, reduce on-campus waste, and help students save money through programs like the Resident Checkout Program.

The Sustainability, Equity, and Justice Program also continues to offer numerous opportunities for students to learn about and promote sustainability across the university, supporting more than 15 student grant teams each year. Additionally, Western's Outback Farm continues to engage and inspire students on various sustainability topics every year. Western provides several health-promoting programs and services that support students' success and wellbeing at Western through the Basic Needs Hub, the Counseling and Wellness Center, the Student Health Center, and the Centers for Student Access, Community, and Intercultural Exchange.

2025-2030 Action Items

1. Promote student success and wellbeing by expanding support for health-promoting programs, policies, and services.

As outlined in the Okanagan Charter, Higher education institutions have a unique opportunity and responsibility to support transformative knowledge generation and learning opportunities for future generations, and to lead by example in establishing policies and programs that enhance the well-being of individuals, communities, and environments. To ensure Western is a vibrant, supportive place for an array of students to learn, live, and work, Western must expand support for health-promoting student-focused initiatives, including but not limited to those provided by the Basic Needs Hub, the Counseling and Wellness Center, the Student Health Center, The Centers for Student Access, Community, and Intercultural Exchange.

2. Make sustainability an embedded theme in programs across Western and in the community.

With the idea that all Western graduates should be exposed to sustainability learning opportunities, common learning outcomes related to sustainability will be developed across curricular and co-curricular programs in collaboration with local higher educational institutions. Efforts will be made to highlight sustainability practices throughout co-curricular programs and events (such as signage, posted sustainability statements, etc.).

3. Expand opportunities for students to develop place-based sustainability literacy—covering awareness, knowledge, and skills—with a focus on the four pillars of sustainability.

While sustainability literacy is a key part of the formal curriculum, it can also be fostered in co-curricular spaces across campus. Strategies to boost literacy may include better connecting students to sustainability resources (e.g., WHOLE Food Pantry, Residence Hall Reuse Program), increasing participation and engagement in sustainability-focused learning communities within University Residences, and exploring options for peer mentorship or ambassador programs for sustainability. Additionally, establishing a system to assess sustainability literacy and program involvement, as well as the student body at large, will be crucial.

4. Encourage students to actively engage in sustainability practices

Lifelong habits are often developed during college years. This action aims to establish a baseline and then increase student involvement in community learning and engagement programs related to one, some, or all four pillars of sustainability. These programs are available through the Center for Community Learning, University Residences, Leadership and Community Engagement, SEI, and the Community Service Center, among others.

5. Supporting graduates in applying sustainability practices in their lives after leaving Western.

While we aim to help students learn about and practice sustainability during their time at Western, we also want graduates to continue those practices beyond their college years. While we acknowledge it will take time to develop and implement curricular and co-curricular programs, we want to keep an eye on this objective as well to implement it entirely by 2035. This action item focuses on supporting students in maintaining their engagement with sustainability as they transition to life after school. This could include, but is not limited to, reviving a “Green Graduate” distinction initiative, expanding sustainability opportunities at career fairs, or providing support services for alumni.

District Heating (Scope 1)

Traci Rogstad Love, Associate Vice President, Facilities Development & Operations (FDO)
Jeff Aslan, Assistant Director, Campus Utilities & Sustainability, FDO
Greg Hough, Assistant Director, Asset Management, FDO

Figure 12. One of five natural gas boilers in Western's Steam Plant.

KPIs	FY2024	FY2030 Target
District Heating Natural Gas Use (therms):	2,137,620	1,175,691
Campus Wide Energy Use Intensity (kBTU/SF):	96	82
District Heating Natural Gas Emissions (MT CO2e):	11,329	6,227

Background

Western's district heating system accounts for 86% of the overall Scope 1 and Scope 2 emissions, making it the largest single source of carbon pollution across all emission categories. The system comprises the Central Steam Plant, featuring five natural gas-fired steam boilers, five miles of steam and condensate piping extending from the plant, and heat exchangers located within 54 buildings that convert steam into hot water for space heating and domestic hot water.

Western's district heating system is over 80 years old and has exceeded its useful lifespan. Additionally, 15% of the energy supplied to the Steam Plant is lost at the boilers, and a further 30% of all heat produced by the Steam Plant is unavoidably lost during distribution, resulting in a net system efficiency of only 55%.

Current Progress

Since the 2017 SAP, Western has been actively planning for the replacement of its district heating system. The project, known as the Heating Conversion Project, officially started with a Feasibility Study in 2022. The study's recommendations included:

- Transitioning from a centralized district system to multiple distinct "nodes," each with its own plant and distribution network, while potentially being linked for resilience and load balancing. This enables each node to be developed gradually in phases rather than all at once.
- Transitioning from steam distribution to domestic hot water and incorporating chilled water pipes will reduce overall distribution losses and create potential for cooling.
- Shifting from natural gas to electric heat pumps as the primary energy source. Heat pumps usually can't reach the 170-180° water temperatures that many of our buildings are designed for, so multiple energy sources will be necessary.
- Leveraging waste heat from off-campus sources in the future.

2025-2030 Action Items

1. Secure funding for the design and initial phase of the Heating Conversion Project.

Western has received $10 million so far to support early planning efforts for the District Heating Conversion. Western also requested additional funding from the State Capital Budget during the 2025-2027 biennium. The legislature allocated an extra $41 million for the first phase of construction. Since the project is not fully funded and future funding remains uncertain, Western will need to adopt a flexible approach to the Heating Conversion that accommodates various phasing and funding options.

2. Complete the Decarbonization Plan and Stakeholder Engagement Plan by June 2025.

The State requires us to provide a detailed Decarbonization Plan that includes information about the current district heating system and describes the conversion process. The Plan will also serve as an opportunity for increased engagement with both internal and external stakeholders before progressing further into design and construction. Stakeholder engagement will be carried out through the President's Sustainability Council, the Sustainability Engagement Institute, and other platforms.

3. Identify and plan for necessary building upgrades by 2027.

Upgrades to building mechanical systems and distribution piping will be required to support a lower-carbon district system and fully enable cooling. These upgrades are estimated to cost over $350 million. Further analysis, planning, and prioritization are needed to prepare for this.

4. Decommission the Steam Plant by 2035.

The schedule for completing the Heating Conversion project largely depends on funding and construction timelines; however, early analysis indicates that if the project receives the requested funding (starting in the 2025 legislative session), both construction of the Heating Conversion Project and decommissioning of the Steam Plant could be finished by 2035. This will be crucial for reaching the 2035 carbon neutrality goal.

5. Install new steam and hot water meters by 2026.

Knowing each building's thermal energy use is essential for fair billing, energy management, and planning for the District Heating Conversion. Many buildings on Western's campus either lack meters or have non-functioning steam meters. Western will work to improve overall thermal energy metering across campus during 2025-2026.

Buildings (Scope 1)

Traci Rogstad Love, Associate Vice President, Facilities Development & Operations (FDO)
Jeff Aslan, Assistant Director, Campus Utilities & Sustainability, FDO
Greg Hough, Assistant Director, Asset Management, FDO

Figure 14. Western's energy usage peaks on cold days due to increased heating demand from buildings. Exhaust from the Steam Plant's boilers is visible in the center of the photo.

KPI	FY2024	FY2030 Target
Building Heating Natural Gas Use (therms)	207,380	114,059
Building Heating Natural Gas Emissions (MT CO_2e)	1,099	605

Background

Natural gas consumption at the Steam Plant is intrinsically linked with demand coming from campus buildings. Thermal efficiency improvements in buildings served by the district heating system can amplify emissions reductions from the Steam Plant. With the district heating system operating at 55% efficiency due to boiler and steam distribution losses, for every BTU reduction in steam demand at the building level, this will result in a multiplier effect on natural gas saved at the Steam Plant. In addition to the district heating system, Western should target energy efficiency and conservation measures for smaller natural gas appliances and plan for including independent building heating systems, cooking equipment, and laboratory equipment. Combustion of natural gas from these smaller natural gas appliances accounts for 8% of Western's Scope 1 and Scope 2 emissions. To reduce these emissions, Western should target energy efficiency and conservation measures in the interim and plan for the electrification of smaller natural gas equipment.

Current Progress

Since the 2017 SAP, Western has implemented several building improvements that have helped reduce natural gas consumption. The most impactful of these projects have been control improvements, including CO_2 sensors and demand-controlled ventilation programming that manages the amount of outside ventilation air entering buildings in response to occupancy levels. Western completed a series of energy audits on 12 buildings over 50,000 sq ft in 2022. Recommended energy efficiency measures from the report to reduce natural gas consumption include retro-commissioning of building mechanical systems, heat recovery ventilation in lab buildings, and replacing aging, inefficient equipment.

2025-2030 Action Items

1. Plan for phasing out natural gas equipment.

Western will develop a policy, likely integrated into the Green Building Standard, for new constructions or when existing natural gas equipment needs replacement. This policy will prohibit the installation of new fossil fuel systems in buildings, with limited exceptions, such as for backup power or research purposes. Since electrification often requires infrastructure upgrades and higher costs, Western will also create an inventory plan for natural gas equipment, evaluating its remaining lifespan and estimating the costs involved in transitioning to electric systems.

2. Incorporate efficiency improvements at key opportunities throughout the building's life cycle.

When buildings need new roofs, it's also an opportunity to add insulation and make the building solar-ready. During remodels of older buildings, they could undergo a comprehensive energy retrofit, significantly improving the building enclosure, mechanical distribution systems, and HVAC equipment. By combining energy upgrades with other building renewal or remodeling projects, it reduces the total cost and minimizes disruption to occupants. WWU's Green Building Design Standard, once adopted, will outline these requirements further for project teams.

3. Complete additional energy audits and meet Clean Buildings Act requirements.

Washington's Clean Building Performance Standard requires commercial buildings to develop detailed energy management and operations plans. For buildings exceeding energy usage targets, energy audits are necessary. Western owns 74 buildings covered by this standard and must submit these documents during the 2025-2030 period or face penalties for non-compliance. Western has scheduled energy audits for 14 buildings (all over 50,000 sq ft) in 2025.

4. Secure funding to complete energy efficiency projects, aiming for a 15% reduction in natural gas use from 2024 levels by 2030.

To reach this goal, Western will actively pursue funding for projects across campus. Priority will be given to initiatives such as upgrading HVAC systems, enhancing building insulation, and optimizing controls to reduce natural gas consumption. Funding will be sourced from various sources, including state and federal grants, utility rebates, and internal financing, such as the Revolving Energy Fund. These projects should be phased and strategically targeted to maximize impact, starting with high-consuming buildings and facilities.

5. Reduce building operating hours. Many campus buildings operate for up to 16 hours per day.

Cutting back on operating hours for specific buildings, such as consolidating functions to take entire buildings offline during periods of low use (especially during the summer), can significantly reduce energy consumption by minimizing the use of lighting, heating, cooling, and other energy-intensive systems when they are not needed. Shorter hours decrease the run-time of HVAC systems and electrical equipment, leading to lower energy consumption and utility bills. Additionally, fewer operating hours lessen wear and tear on building systems and equipment, helping to prolong their lifespan and reduce maintenance needs. Security requirements are also lowered, as lower occupancy means fewer access points and patrols are necessary to monitor buildings, which simplifies staffing and operational costs.

6. Inventory of refrigerants on campus.

Refrigerant emissions are an additional source of Scope 1 emissions at the building level. As required by state law, Western will develop an inventory of all air conditioning and refrigeration equipment that uses refrigerants, monitor refrigerant charges, and plan for replacing equipment that uses high global warming potential (GWP) refrigerants.

Fleet Vehicles (Scope 1)

Shelby Zimmerman, Director, Transportation Services
Ryan Wyckoff, Fleet & Warehousing Operations Supervisor, FDO
Andrea Reiter, Associate Director of Active Transportation
Jeff Aslan, Assistant Director, Campus Utilities & Sustainability, FDO

Figure 15. New electric vehicle charging stations were installed at the Physical Plant in 2024.

KPIs	FY2024	FY2030 Target
Total number of vehicles in WWU's fleet	205	205-190
Number of hybrid vehicles in WWU's fleet	15	17
Number of 100% electric vehicles in WWU's fleet	9	22
Number of fleet EV charging stations	1	13

Background

Western currently owns over 200 vehicles, including Facilities Development and Operations (FDO) fleet vehicles, FDO long-term lease/motor pool vehicles, transportation services, and department-owned vehicles. In line with state mandates and the 2017 SAP's goals, Western has been working toward fleet electrification. RCW 43.19.648 requires state agencies and local governments to use electricity or biofuel, whenever feasible, to fuel fleet vehicles. Executive Order 21-04 mandates agencies to purchase EVs at the end of each vehicle's useful life, aiming for 70% of the fleet (passenger vehicles and light-duty trucks) to be electric vehicles by 2030. As electric vehicle technology advances, Western continues to steadily work toward electrifying its vehicle fleet.

Current Progress

Campus Services has six EV charging stations for fleet vehicles. The Physical Plant currently has seven charging stations supporting FDO.

2025-2030 Action Items

Western will continue to work on transitioning university vehicles to electric options as vehicles are sent to surplus and replaced, or if state funding becomes available for purchasing electric vehicles.

1. Replace maintenance vans and passenger vehicles with electric vehicles.

As maintenance vans age out of the fleet, they will be replaced with Ford E-Transit vans. The Ford E-Transit is one of the few electric vehicles on the market that offers a direct 1:1 replacement for vehicles Western currently uses without requiring any compromise or adjustments to their use within a department. Current funding could support the purchase of one or two Ford E-Transits per year.

2. Consolidate vehicles into a centralized motor pool.

Where feasible, replace department-owned vehicles with a shared fleet. Survey department users to identify potential efficiencies in the number of vehicles owned and maintained. The motor pool would offer a variety of vehicles to meet different needs, primarily electric and hybrid models, with gas-powered options available as needed. Departments will be able to check out the vehicle that best suits their specific task.

Transportation Services is currently working on bringing ZipCars back to campus, primarily for student use and funded through the Active Transportation Fee. Departments will have access to department accounts to rent vehicles; this will also help with cost reduction, consolidation, and minimizing the number of vehicles in WWU's motor pool.

3. Develop purchasing language that mandates buying electric vehicles unless it is not "practicable."

State law requires purchasing electric vehicles instead of internal combustion engine vehicles unless it is not “practicable.” This may involve considering factors such as cost differences between fuels, availability, refueling infrastructure, functional differences, technical feasibility, implementation costs, and other relevant factors. When a vehicle needs to be replaced, the Fleet Operations Supervisor will collaborate with the requesting department to replace it with an electric vehicle, unless a 1:1 EV replacement is not practicable and the department demonstrates that available EVs will not meet their vehicle needs.

4. Build EV charging stations for fleet vehicles.

Installed six charging stations at both Physical Plant and Campus Services in FY 25.

5. Pilot drop-in low-carbon fuel replacement.

Renewable Diesel R99 is a renewable diesel fuel produced from non-petroleum renewable sources, including vegetable oils and animal fats. R99 can be used interchangeably with conventional diesel as a drop-in replacement. It recently became available for wholesale purchase. It does not face the same challenges as biodiesel, such as cold-weather gelling, microbial growth, and fuel storage tank certification that limits B100 use.

Fleet Electrification - Small Equipment (Scope 1)

Shelby Zimmerman, Director, Transportation Services
Andrea Reiter, Associate Director of Active Transportation
Ryan Wyckoff, Fleet & Warehousing Operations Supervisor, FDO
Jeff Aslan, Assistant Director, Campus Utilities & Sustainability, FDO

Figure 16. WWU grounds staff are using electrical equipment on campus

KPIs	FY2024	FY2030 Target
Number of Electric Small Equipment Purchases	62	92
Number of medium-sized electric lawn mowers	0	1

Background

WWU's grounds maintenance crews use many different types of power tools daily. Historically, these tools had internal combustion engines that burned a mixture of fuel and oil. WWU's Facilities and Development Operations department quickly transitioned to electric tools as they became available.

Current Progress

FDO has replaced most small, mixed-fuel internal combustion engine tools with electric tools or mixed-fuel Kombi motor tools that feature attachments for everyday tasks, such as weed trimmers, stick edgers, hedge trimmers, brushes, and blades. As small equipment tool technology advances, mixed-fuel tools will be replaced with more efficient and/or fully electric options.

2025-2030 Action Items

Until small equipment tool technology advances, Western will continue to use electric small tools whenever possible and test alternative fuels in internal combustion engine tools to reduce overall greenhouse gas emissions. These measures will likely result in utility cost savings.

1. Add lightweight electric backpack leaf blowers to the fleet of small tools.

Electric backpack blowers have already been purchased, but are too heavy for most ground maintenance staff to use. Once lighter-weight, practical blowers are available, WWU will buy new backpack blowers to replace both the mixed-fuel and electric models.

2. Add electric lawn mowers to the small tools fleet.

When large-scale electric lawn mowers become available, FDO will transition its internal combustion engine lawn mowers to electric models as funding allows and tools need replacement. Review the cost/benefit of maintaining lawns across the university versus xeriscape landscaping.

3. Explore more efficient fuel options.

Test alternative fuels that generate fewer greenhouse gases to assess their compatibility and maintenance needs.

Electricity (Scope 2)

Traci Rogstad Love, Associate Vice President, Facilities Development & Operations (FDO)
Jeff Aslan, Assistant Director, Campus Utilities & Sustainability, FDO
Greg Hough, Assistant Director, Asset Management, FDO

Figure 17. A 112 kW Solar PV system was installed on the SMATE building in 2025.

KPIs	FY2024	FY2030 Target
Electricity Usage (kWh)	32,385,516	N/A
Renewable Electricity Total (kWh)	30,971,000	100% of usage
Electricity GHG Emissions	275	0

Background

Western's electric usage accounts for only 2% of total annual Scope 1 and Scope 2 emissions. This is because 95% of Western's electricity is sourced from renewable sources, primarily purchased through Puget Sound Energy's (PSE) Green Direct program. Western started purchasing renewable electricity through Green Direct in 2020. This program allows large commercial and government customers to purchase electricity directly from dedicated, newly constructed renewable energy facilities. PSE develops large-scale renewable energy projects, and participating customers sign long-term contracts (20 years for Western's contract) to purchase the electricity generated by these facilities. This differs from traditional renewable energy credits, as customers directly support the construction of new renewable energy infrastructure in Washington, rather than simply purchasing credits from existing sources. Thus far, PSE has developed two significant projects: Skookumchuck Wind Facility, which provides 137 mW of wind energy (enough to power 30,000 homes), and Lund Hill Solar, the largest solar installation in Washington, capable of generating approximately 375,000 MWh of solar energy every year.

In addition to renewable purchasing through PSE, Western has installed solar PV on three buildings: SMATE (112 kw), Kaiser Borsari (82 kW), and Environmental Studies (4 kW). On-site solar systems reduce electrical costs significantly by reducing grid power consumption and demand charges.

Although Western already sources most of its electricity from emission-free renewable sources, reducing overall electricity consumption remains strategically essential for several reasons. In terms of utility expenditure, electricity represents the highest overall utility cost for Western, making conservation crucial for responsible fiscal management. Moreover, as institutions increasingly transition toward electrification of heating, cooling, and transportation systems to meet climate goals, reducing current electricity demand creates essential capacity for these future electrified systems without requiring costly infrastructure upgrades. Beyond the direct campus benefits, reducing electricity consumption, even from renewable sources, yields broader societal advantages by decreasing the total emissions from GHG-intensive power generation infrastructure.

2025-2030 Action Items

1. Complete projects that cut campus electrical use by 5 million kWh annually.

The university will prioritize these projects as a key part of its climate action plan. Efforts will focus on upgrading all remaining traditional exterior and building lighting to energy-efficient LED lighting, installing advanced lighting controls, and improving building systems through control upgrades and retro-commissioning. These efforts will enhance energy performance by ensuring systems function as intended, reducing waste, and lowering overall electricity consumption. Additionally, smart control technologies will be utilized to automate lighting and HVAC systems, ensuring that energy use aligns with actual occupancy and usage patterns.

2. Ensure all campus buildings have smart electrical submeters.

The expression “you can manage what you can’t measure” holds especially true in energy management. Some buildings on Western’s campus are unmetered, while many others use older analog submeters. Smart submeters provide real-time, detailed data on electricity usage, enabling precise monitoring and identification of energy-saving opportunities. With this technology, the university can analyze consumption patterns, compare building performance, and quickly spot anomalies or inefficiencies. Smart metering also enables campus stakeholders to adopt targeted energy reduction strategies, such as optimizing HVAC systems, lowering peak demand, and increasing occupant awareness of energy use. Additionally, the data collected will help track progress on sustainability initiatives, drive cost savings, and support compliance with reporting requirements for carbon reduction goals.

3. Develop on-site solar panels on five buildings across Western’s campus.

Although Western currently sources off-site renewable energy, on-site solar will fulfill a large part of the buildings' electricity needs, reduce costs, and support future electrification. These solar installations will be carefully selected based on factors such as rooftop suitability, solar exposure, and energy demand profiles. In addition to cost and environmental benefits, these projects will act as visible examples of Western’s dedication to sustainability, providing opportunities for student involvement and education through renewable energy research and practical experiences. By 2025, Western will have installed 163 kW of solar AC, and it can increase to 500 kW AC on the main campus without requiring complex utility permits.

4. Increase renewable energy use to reach 100% by 2030.

In FY24, 95% of Western’s electric consumption came from renewable sources. By 2030, Western should either produce or buy 100% renewable energy.

Construction (Scope 3)

Traci Rogstad Love, Associate Vice President, Facilities Development & Operations (FDO)
Alexis Blue, Assistant Director, Capital Planning & Development, FDO
Jeff Aslan, Assistant Director, Campus Utilities & Sustainability, FDO
Greg Hough, Assistant Director, Asset Management, FDO
Forest Payne, Assistant Director, Campus Planning & Design, FDO
Rod Koenig, Construction Project Coordinator 4, FDO

Figure 18. WWU's newest building, Kaiser Borsari Hall, is targeting Zero Carbon certification and embodies Western's commitment to sustainability.

KPIs	FY2024	FY2030 Target
Total number of certified green buildings	9* (KB certification pending)	11

Background

As a State Agency, Western is mandated by RCW 39.35D.030 to certify major construction projects at a minimum of LEED Silver. Western's 2017 SAP set a goal of achieving LEED Gold certification. Numerous other state policies influence sustainability in the built environment, including the Washington State Energy Code, Stormwater standards, and the Clean Buildings Act. While these codes and statutes establish minimum standards, Western aims to go beyond them whenever possible to reduce embodied carbon and energy consumption, thereby promoting greater sustainability. At the same time, Western must balance other operational priorities, stakeholder needs, and available funding to fulfill its commitments.

In 2024, the University of Washington (UW) adopted a Green Building Standard that provides a comprehensive approach to ensure construction projects align with the institution's sustainability goals. As a peer institution, Western can learn from others like UW (among many regional institutions) that have already implemented a standard and established a green building standard tailored to their operations and campus identity.

A green building standard provides a framework and guidelines to encourage sustainable construction practices, decrease environmental impact, and improve the health and well-being of building occupants. Green building standards encompass various building systems and sustainability aspects that guide the design, construction, and operation of buildings to minimize their environmental impact. Higher education institutions increasingly adopt these standards to ensure that construction projects align with their sustainability goals.

Current Progress

Since the 2017 SAP was adopted, Western has built three new buildings:

- Alma Clark Glass Hall, a 117,336 sq ft residential building certified for LEED Gold.
- Interdisciplinary Science Building, a 56,600-square-foot academic facility, features teaching labs and classrooms and is certified as LEED Gold.
- Kaiser Borsari Hall, a 52,609 sq ft academic building with labs, classrooms, and office space, is aiming for ILFI Zero Carbon certification.

In addition to these achievements in 2025, Western released its Capital Development and Strategic Plan, which guides the university's physical growth over the next 10-15 years. The plan suggests several development projects and addresses many aspects of sustainability.

2025-2030 Action Items

1. Adopt LEED Silver certification as the university's official design standard.

Although the 2017 SAP required major construction projects to attain LEED Gold, funding limitations have made this unrealistic for every project. Moving forward, LEED Silver will be the minimum certification for new construction and major remodels on buildings over 5,000 sq ft. Opportunities to earn additional LEED credits will be considered in every aspect of the design, and every effort will be made to maximize sustainability within budget.

2. Provide clear guidance to design and construction teams that Western's design standards are mandatory.

Although Western has established design standards for each construction division, challenges may arise due to limited or reduced funding, requiring a creative or alternative approach. Language will be added to Western's design standards and specifications to emphasize that these standards must be followed and incorporated into all project and maintenance contracts, especially those related to sustainability. Deviations or alternative recommendations should be reviewed and approved through a process involving the Associate Vice President for Facilities Development and Operations and the Vice President for Business and Financial Affairs during the design phase, prior to finalizing project design documents or maintenance contracts.

3. Develop a comprehensive Green Building Standard by December 2026.

Based on the best practices of other higher education institutions, Western will adopt its own Green Building Standard. The Green Building standard should address all of the following topics:

- Choice of certification program for new construction and major renovations: As discussed above, LEED Silver is the state minimum and will now be Western's official standard; however, the university will have additional sustainability requirements beyond the baseline LEED Silver.
- Tiers for different project scopes: New construction will have more modern and stricter requirements than a renovation or mechanical upgrade. Developing a tiered structure can allow for easier compliance for smaller projects, such as interior tenant improvements or mechanical replacements. Consider sustainability in all efforts and project scopes, balancing funding sources with a 'good, better, best' approach to carbon reduction.
- Updated language on utility metering: Design standards should clarify that submetering is required for electricity, steam, and potable water in all buildings over 5,000 sq ft to monitor resource use and fairly assign costs. For existing buildings, a phased implementation should be established.
- Embodied carbon measurement and reduction: The Green Building Standard should specify when embodied carbon calculations are required and when reductions in embodied carbon might be necessary.
- Restrictions on new fossil fuels: To accelerate the shift away from natural gas and other fossil fuels, the Green Building Standard should limit the purchase of new equipment that burns fossil fuels, with few exceptions (e.g., necessary for research, emergency/backup power, no electric substitute available).
- Construction and Demolition waste should be recycled: This type of waste is a significant part of Western's waste stream. There are new recycling opportunities for construction, and contractors should be required to recycle materials whenever possible.
- Enhanced Life Cycle Cost Analysis: Many capital projects face pressure to cut initial costs without fully accounting for long-term operational and maintenance expenses. The state mandates that projects submit an LCCA analysis, but only for projects over $5 million or new buildings exceeding 5,000 sq ft. Minor projects involving mechanical or electrical replacements should also perform an LCCA analysis.
- Connection to District Heating: To support Western's Heating Conversion strategy, whenever the University has district heating infrastructure, all new buildings and existing building mechanical modifications must connect to these systems for primary heating needs, unless a variance is approved through the variance process.

Water Conservation & Stormwater Management (Scope 3)

Traci Rogstad Love, Associate Vice President, Facilities Development & Operations (FDO)
Jeff Aslan, Assistant Director, Campus Utilities & Sustainability, FDO
Wayne Galloway, Director of Facilities Operations, FDO
Cameron Byrnes, Building & Ground Supervisor, FDO
Oskar Kollen, Grounds/Nursery Serv Specialist 6, FDO

Figure 10. Bioswales in Lot 9G were constructed to manage stormwater.

KPI	FY2024	FY2030 Target
Irrigation Water Consumed (CCF)	14,213	9,949
Domestic Water Consumed (CCF)	86,075	73,164

Background

Rain becomes stormwater when it flows over roads, sidewalks, and buildings. This stormwater flows through storm drains and ditches into our lakes, streams, and Bellingham Bay. When it picks up fertilizer, pesticides, oil, soap, and bacteria from pet waste, water becomes polluted, negatively impacting long-term water quality, as well as community and ecological health. Western operates a small municipal separate storm sewer system (MS4) that has stormwater permit requirements imposed by the Washington State Department of Ecology and the EPA. MS4 permits require campuses to develop and implement a comprehensive Stormwater Management Program (SWMP) that includes:

- Managing stormwater from parking lots, buildings, walkways, and recreational facilities
- Ensuring all campus construction (residence halls, academic buildings, etc.) meets stormwater requirements
- Maintaining stormwater pollution prevention at facilities like maintenance shops, dining services, and vehicle fleets
- Using the campus as a "living laboratory" for sustainability education and outreach

Domestic water is supplied to the Main Campus by the City of Bellingham's Water Treatment Plant on Lake Whatcom. Western is the largest water user in Bellingham, consuming 75 million gallons of potable water in 2024. With a growing population and climate change potentially impacting rainfall patterns, conservation is essential to ensure this limited water source continues to serve the community while protecting the ecological health of Lake Whatcom for future generations. Additionally, water and sewer costs at Western currently exceed $1 million annually, and rates are expected to increase significantly.

Current Progress

Since the 2017 SAP, Western has implemented several actions identified in the 2017 SAP, including:

- Rain and soil moisture sensor evaluation was completed to reduce excess water consumption.
- Most plant materials sourced by the grounds team are now native to Western Washington, which reduces water needs once established.
- Pest management continues to be an essential part of ground management operations and continuing education. Gardeners participate in education/recertification with Washington State University's Integrated Pest Management program at Whatcom Community College.
- All landscaping waste is now composted on site for use as fertilizer.
- The Wade King Native Plant Showcase Garden transforms an area impacted by invasive species into a native vegetation garden that will reduce the need for regular watering once well-established.
- Regular street-sweeping reduces potential pollution runoff to surface waters.
- New native plants are being introduced to remaining bioswales in C-Lots to help further biofiltration and outcompete invasives.
- Western continues to protect water quality by complying with all DOE-required stormwater maintenance activities.

2025-2030 Action Items

1. Complete overhaul of South Campus storm system

Stormwater for the south campus flows through a large vault and then through several biofiltration swales, where water is filtered before continuing onto the City storm system. Since the bioswales were installed 15 years ago, invasive species and sediment buildup have been found. Both the bioswales and the vault structure will likely need an overhaul when the Student Development and Success Center (SDSC) is built.

2. Update Western's Stormwater Management Program

Western's permit with the Department of Ecology was updated in 2025, along with the Stormwater Manual for Western Washington, which contains a list of Best Management Practices. Western's existing Stormwater Management Program is outdated and requires modernization to meet current standards.

3. Install additional water meters on buildings that are currently unmetered

Many academic buildings on campus are connected to a single City meter, and water usage between various buildings cannot be measured. Installing water meters will allow for more effective water management by enabling the identification of buildings with higher usage and the diagnosis of leaks.

4. Coordinate campus-wide water audits and efficiency program

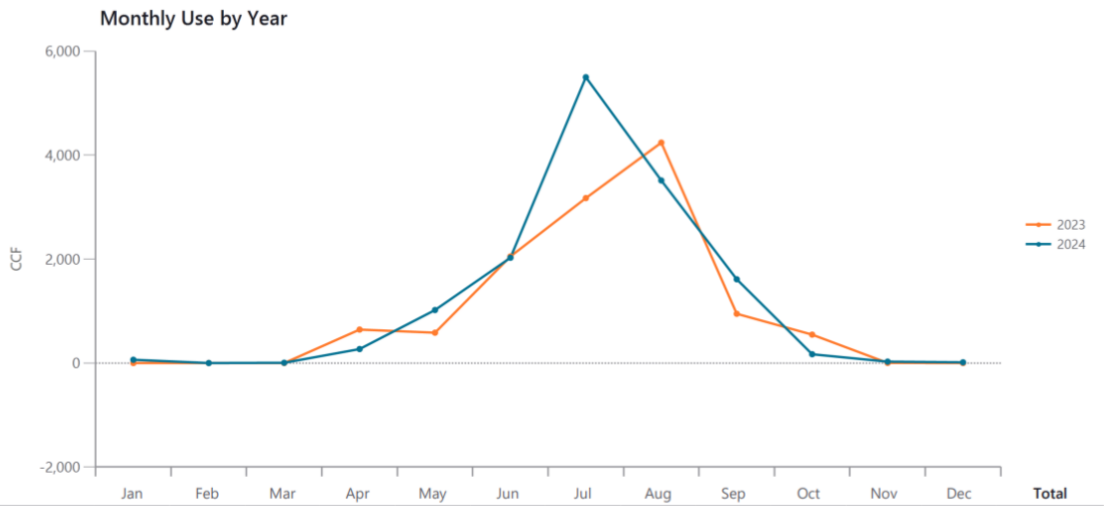
It has been over 10 years since the last campus-wide water audits. Given the recent rate increases in water and sewer costs, building water audits should be conducted. Funding may be available from the City of Bellingham to retrofit plumbing fixtures for low flow. Given the high cost of water, many will have a quick payback.

5. Assess the potential for reclaimed water for irrigation

In 2008, the City of Bellingham identified the potential to create reclaimed water from the wastewater treatment facility. At that time, it was determined that this would require significant and costly upgrades to existing treatment processes to meet the Class-A standard needed for effluent reuse. However, with the city undergoing updates to water and sewer infrastructure, it might be worthwhile to reconsider the possibility of a reclaimed water pilot for irrigation. Besides reducing water use from Lake Whatcom, reclaimed water typically leads to 30-50% reductions in potable water consumption for irrigation, resulting in notable cost savings over time.

6. Engaging the university community to participate actively in water sustainability efforts

Provide training and communication to raise awareness of our water infrastructure, how their daily habits affect water usage, the challenges we face in supplying water for drinking, irrigation, and other needs, and the impact that water use practices have on community and ecological health. Aligning these water-wise communication efforts with Water Wise Week or Fix a Leak Week may help promote this initiative. This type of training can lead to a reduction in water usage and a cost to the end user.



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2023	0	0	0	643	583	2,051	3,173	4,240	947	546	3	0	12,186
2024	63	0	5	269	1,019	2,026	5,498	3,512	1,611	169	27	14	14,213

Figure 11. Irrigation usage peaks in the summer months.

Commuting to Campus (Scope 3)

Shelby Zimmerman, Director, Transportation Services
Andrea Reiter, Associate Director of Active Transportation

Figure 19. Passengers loading onto a WTA bus in front of the Viking Union.

KPIs	FY2024	FY2030 Target
Employee drive alone rate	45%	40%
Employee active transportation rate (bus, bike, walk)	Bus: 8% Bike: 10% Walk: 9%	Bus: 10% Bike: 10% Walk: 10%
Student bus ridership	86%	88%

Background

Since the 1980s, Western has implemented a Transportation Demand Management (TDM) plan to reduce commute vehicle traffic and parking overflow. The TDM plan now aims, alongside reducing parking demand, to lower greenhouse gas emissions caused by single-occupancy vehicles (SOVs) during the commute to campus for both students and employees. Over the next five years, Transportation Services will refine the commuting data collection process to establish current transportation modes across campus, improve safety programs to increase the adoption of alternative transportation for staff and students, and develop incentive and educational programs.

Current Progress

Since the 2017 SAP, Western's Transportation Services has implemented several programs to encourage active transportation, and Western's remote work policy has reduced the number of single-occupancy vehicles coming to campus daily. In 2020, Pay-by-Day parking began, giving commuters the daily choice to use alternative transportation. In spring 2022, the student body approved the Active Transportation Fee again; this fee, which has been self-assessed since spring 2007, provides all students with a bus pass, a safe ride program in the evenings, and other active transportation initiatives. Post-COVID, Western updated its remote work policy, with 20% of employees now working from home and avoiding commuting altogether. In spring 2023, all employees began receiving an unlimited ride bus pass for WTA and Skagit Transit; currently, 8% of employees commute by bus. Western continues to install EV charging stations for employees and students; there are now stations in four parking lots. Western has proven to be a leader in reducing commute trips, with 86% of students regularly riding the bus and a 45% drive-alone rate among employees, compared to the county-wide rate of 58%.

Western's Transportation Services has also worked to increase the number of electric and hybrid vehicles for public transportation. WWU fully supports WTA's transition to EV buses; WTA currently operates over 100 daily routes across campus. The Starlight Shuttle, WWU's safe-ride program, runs two hybrid vehicles, and Transportation Services is converting its enforcement vehicle fleet to all-electric.

2025-2030 Action Items

1. Contract with the company to develop a TDM plan for Western, covering both students and employees.

The updated Transportation Demand Management plan will guide Transportation Services on how to boost participation in active transportation among employees and students.

Post-COVID-19, transportation has changed considerably, including people's willingness to share confined spaces through carpooling or buses. The TDM plan will identify a baseline of current commuting patterns for employees and students, explore ways to engage these groups in active transportation, and detail how Transportation Services can achieve the transportation goals set in the 2017 SAP. Outcomes may include web or app-based carpooling programs, incentives for active transportation, carpool benefits, or updates to parking management at Western.

2. Engage the Western community to implement the TDM plan.

Once finalized, Transportation Services will begin collaborating with WWU stakeholders on ways to promote active transportation for campus access. Active transportation includes biking, walking, and using public transportation.

3. Reduce SOV commuting to campus by implementing a TDM plan.

Once the plan is finalized, Transportation Services will put measures in place to cut single-occupancy trips to and from campus. The aim is to introduce at least three new measures from the updated TDM plan by 2030.

4. Continue conducting regular student and staff surveys to monitor progress.

Transportation Services will conduct an employee survey every other year, as required by the Washington Department of Transportation, to track advancements. Additionally, Transportation Services will carry out a student survey every four years to gather student input at least once during their time at Western.

Solid Waste (Scope 3)

Jeff Aslan, Assistant Director, Campus Utilities & Sustainability, FDO
Wayne Galloway, Director, Facilities Maintenance and Operations, FDO
Terence Symonds, Associate Director, University Residences Facilities, FDO
Lindsey MacDonald, Associate Director, Sustainability Engagement Institute, FDO

Figure 20. Big Belly Waste Sorting stations have been installed across campus.

KPIs	FY2024	FY2030 Target
Total Cubic Yards of Landfill Waste	6,549	5,000

Background

There are several stakeholders involved in solid waste management at Western. Waste Hauling on the Main Campus is handled by the Sanitary Services Company (SSC). As of FY2024, Western has 55 separate accounts with SSC, with a variety of dumpster sizes and collection frequencies. Student Employees assist with waste operations and sustainability. FDO custodial staff provides waste management for academic buildings. University Residence Facilities provides related waste oversight for residential and dining facilities. FDO and UR Facilities are responsible for overseeing waste-hauling service with SSC for their respective facilities. SEI coordinates sustainability initiatives to improve waste diversion.

Current Progress

There have been several advancements in Western's Management of Solid Waste since the 2017 SAP. Notable achievements include:

- 53 new waste sorting stations were installed in existing buildings, along with additional waste sorting stations in new buildings.
- University Residences launched their Solid Waste Audit Program in Winter 2021 with an initial focus aimed at "right-sizing" SSC pick-ups. Recurring weekly checks are done at all waste depots during the academic year (twice per week), assessing landfill and composting container actual capacity/contamination levels, along with waste depot area tidiness.
- University Residences launched a Composting Program funded via SEJF grant in Fall 2018, providing 1.8-gallon bins and waste liners to all resident private living spaces (2,200+ bedrooms and apartments).
- Education and outreach were provided to students housed in University Residences through programs like Residence Hall Reuse Program, Go For the Green, and Food Recovery Drive.
- Big Belly outdoor waste sorting bins were installed at several locations across campus.
- Initiatives to develop a community clothing closet (Western Worn Community Closet), reuse off campus furniture (Furniture Fest), donate graduation gowns for future students, create a tool lending library, rent outdoor gear through the Outdoor Center, and borrow instead of buy books through interlibrary loan programs at the Library have all emerged to creatively and affordably send less materials to landfills.

2025-2030 Action Items

1. Standardize and improve waste signage and education.

Across campus, there are several different signs and standards for how waste is collected, making it difficult for Western community members to know which waste stream to deposit materials in. This leads to contamination across waste streams and compostable/recyclable materials being sent to landfills. In the future, signage should be standardized across campus, while also recognizing that waste streams vary by building. Along with the new signage, staff (SEI, Zero Waste Western, UR, United Disposal Solutions (UDS) vendor) should continue to educate the campus community about waste diversion and proper waste sorting. Leveraging these collaborative efforts, developing and/or revising user-friendly content as needed to support Initial/Recurring Training initiatives would be ideal.

2. Improve waste tracking and reporting.

Waste tracking and GHG reporting for academic and dining waste collection points are primarily based on invoices from SSC that show dumpster size and collection frequency. University Residences' waste-tracking efforts began in Winter 2021, providing roughly four years of audit data. Since the overall campus data collection assumes dumpsters and toters are full when collected, reported waste volumes to date tend to overestimate waste generation. Western has deployed sonar dumpster monitoring technology, which improves waste tracking and reporting, resulting in cost savings by enabling Western to downsize dumpsters or dispatch waste haulers only when dumpsters are full. This capability will optimize the current processes. However, regularly conducting physical inspections at waste depots with staff is still necessary to supplement the volume data and verify capacity, contamination rates, and tidiness.

3. Improve the operational efficiency of solid waste.

FDO coordinates waste operations. Having all solid waste management housed under FDO will enable more holistic programming and improvements to solid waste management, along with enhanced collaboration with UR and SEI. This will result in reduced waste bills, improved waste diversion, and better compliance with statewide solid waste regulations, such as the Washington Organics Management Act.

4. Make strategic changes to solid waste management.

To improve waste diversion and efficiency, Western is making ongoing changes to interior and exterior waste containers and collection methods. For example, comingled containers and mixed paper have been transitioned to Single Stream Recycling, which streamlines the sorting and storage process. At the same time, cardboard has continued to be separated due to size constraints and costs. In addition, deploying more of the 4-bin style sorting stations for indoor sorting stations that don't currently have them is another priority.

Figure 21. New four-bin Sorting stations and signage in academic buildings.

University Travel (Scope 3)

Kate Cabe, Interim Associate Dean of Libraries, Western Libraries
Nicole Brown, Associate Professor, English Department

Figure 22. Student research poster exhibit in the Western Library Reading Room.

KPIs	FY2024	FY2030 Target
Western provides incentives designed to encourage employees to reduce their air travel	Western has a policy encouraging extended stays to reduce travel costs and virtual attendance at conferences	Western has a more comprehensive set of incentives to reduce air travel
Western has adopted restrictive measures designed to reduce GHG emissions associated with its air travel	none	Western has met this KPI
Western has a program designed to mitigate the GHG emissions associated with its air travel	none	Western has met this KPI

Background

Although federal and state regulations govern much of university travel, Western provides procedural guidelines and best practices through various documents and procedures: POL-U5348.10, Collective Bargaining Agreements, Department Evaluation Plans, and more. While avoiding travel is the most sustainable choice, air and long-distance trips are often necessary to maintain vital engagement and professional growth within academic and professional communities. Therefore, Western must evaluate the necessity, costs, and impacts of travel against its social benefits. This requires a strategic approach that acknowledges the importance of essential travel while encouraging sustainable alternatives. Additionally, although reducing carbon emissions from travel is crucial for Western's goal of carbon neutrality, a comprehensive approach to sustainable transportation should also consider broader impacts on biodiversity, ecosystems, and community health, particularly in terms of resource consumption. As a result, efforts to mitigate or offset the effects of travel to meet the university's sustainability goals should not diminish more direct actions aimed at long-term change and benefits. Western currently tracks paid faculty and staff travel, athletics and sports club travel, and study abroad travel.

Western's efforts to reduce the climate impact of travel could include these three approaches, ordered from most feasible and impactful to least:

1. Institutional and Personal Change
2. The development of balanced, sustainable alternatives
3. University Offset Projects and Programs

Western will need to explore how to fund these approaches. For example, funding for these three strategies might come from various sources, including university funds and personal donations. A Sustainability Impact Fund could be created within Western's Foundation using these contributions and additional fundraising efforts. Innovative programs, such as a Forest Conservation Investment Fund, could also be developed in line with the State of Washington's Climate Commitment Act (CCA).

Current Progress

- Vice Presidential approval is required for all travel required by collective bargaining agreements, certifications, grant-related travel, and other non-discretionary travel. Although this policy was implemented as a cost-saving measure due to budget challenges rather than a sustainability effort, it has successfully reduced paid travel and encouraged the identification of professional development and training opportunities that do not involve travel.

- Western's travel and expense management system, Concur:
  - Displays flight carbon emission amounts.
  - Reminds and encourages the use of video conferencing options.
  - Highlights train versus air travel.
  - Supports hybrid cars when available.
  - Tracks travel emissions for policy decisions and carbon offsets.
  - Connects with apps that promote sustainability, such as ride-sharing services.

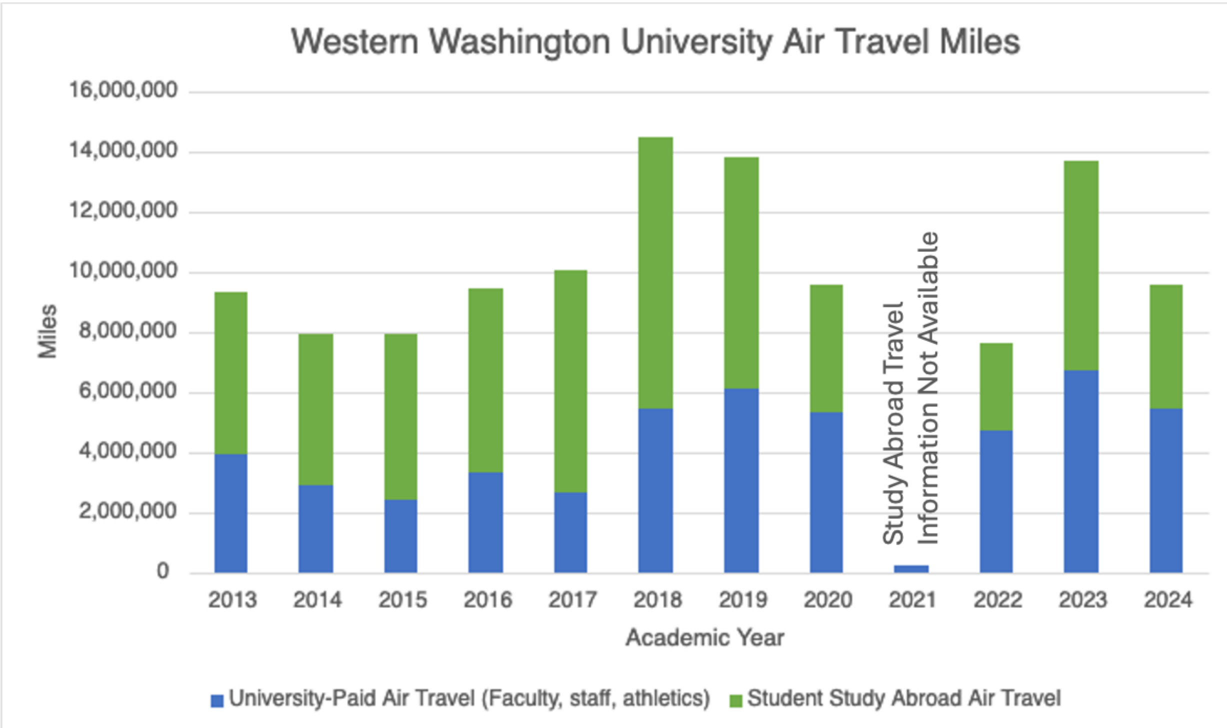


Figure 23. WWU travel miles per year since 2013.

2025-2030 Action Items

1. Institutional and Personal Change

- Develop a university-wide system to monitor and communicate emissions from paid business travel, such as flights, rental cars, and reimbursed mileage, at the individual, department, and university levels, such as a travel emissions dashboard.
- Launch an educational campaign using email, social media, posters, and workshops to share facts, success stories, and tips for more sustainable business travel.
- Showcase progress on sustainable business travel at all levels in the SAP priorities annual reports.
- Adjust department evaluation plans to fairly recognize regional and place-based professional engagement for tenure and promotion, in line with the WWU Strategic Plan.
- Establish communication channels within the university and departments to promote participation in regional events, training, and conferences.

2. The development of balanced, sustainable alternatives

- Provide guidance to groups on ways in which to meet academic, professional, and social goals while also meeting university travel goals aligned with the university's sustainability commitments.
- Create a website to inform about and promote sustainable travel options and incorporate these recommendations into travel policies, training, approval forms, and programs, like Concur.
- Minimize university travel by developing policies that incentivize alternative practices, such as recognizing virtual meetings, remote research and collaborations, regional events, and hybrid/virtual conferences when possible.

3. University Offset Projects and Programs

- Establish a process for managing university-led sustainability projects on Western's campuses and in our local community to offset travel impacts, such as tree planting, natural habitat improvements, restoring degraded landscapes, and more.
- Integrate a "traveler choice" program into the booking process with options for travelers to contribute to the offset of travel impacts through curriculum development, donation, and/or direct engagement with university-directed or community-centered projects. Currently, state funds cannot be used to cover travel offset through third-party carbon offsetting programs. However, university travel not paid for with state funds could be encouraged to purchase verified and credible third-party offsets.

Food & Dining Services (Scope 3)

Sam Schmidt, Sustainability Intern, Chartwells
Paul Wilson-Scott, Resident District Manager, Chartwells
Gabby Brower, Campus Registered Dietitian, Chartwells
Leonard Jones, Executive Director, University Residences
Lindsey MacDonald, Associate Director, Sustainability Engagement Institute
Kate Beck, Sustainability Action Plan Implementation Manager
Gina Ebbeling, Basic Needs Resource Navigator
Leo Curtis, Student Employee of the WHOLE Pantry
Terri Kempton, Manager, Outback Farm
Kristy Matta, Student

Figure 24. Appetizers at a Chartwells catered event.

KPIs	FY2024	FY2030 Target
Local food purchase as % of total dining provider spend	Not Yet Tracked	Target Not Yet Set
Plant-based entrees as % of total entrees offered in dining halls	Not Yet Tracked	Target Not Yet Set
"Climate-friendly" entrees offerings as % of total offerings in dining halls	Not Yet Tracked	Target Not Yet Set
Plant-based entrees as % of total entrees offered in dining provider retail spaces	Not Yet Tracked	Target Not Yet Set
"Climate-friendly" entree offerings as % of total offerings in dining provider retail spaces	Not Yet Tracked	Target Not Yet Set
Plant-based food and beverage as % of total dining provider spend	Not Yet Tracked	Target Not Yet Set
Ethically sourced food and beverage as % of total dining provider spend	Not Yet Tracked	Target Not Yet Set
Total emissions associated with dining food purchases	Not Yet Tracked	Target Not Yet Set
Total water usage associated with dining food purchased	Not Yet Tracked	Target Not Yet Set
Total lbs. "red" waste	Not Yet Tracked	Target Not Yet Set
# of student engagements while tabling on food-related topics	Not Yet Tracked	Target Not Yet Set
# of unique student engagements at food-related events	Not Yet Tracked	Target Not Yet Set

# of affordable entrees offered on campus per dining location per day	Not Yet Tracked	Target Not Yet Set

Background

Engaging students in sustainable eating practices early in their college careers fosters a culture of sustainability and critical thinking within Western's community. Our food system accounts for over a quarter of global GHG emissions. The most significant contributors within our food system are livestock and fish farms (30%), crop production (27%), land use (24%), and the supply chain (18%) (Poore & Nemecek, 2018). Considering these statistics, we should focus on goals that target these primary sources.

Food plays a key role in students' health and well-being, and ensuring access to nutritious, culturally appropriate, and sustainable food is vital for promoting social equity on campus. The 2024 student survey showed that nearly 44% of students at Western experience some level of food insecurity, a 14% increase since 2020. Students should be able to make choices that align with their values and support their overall well-being. They should also be able to afford food without excessive financial strain while maintaining their nutritional security.

As Western transitions from Aramark to Chartwells as our contracted dining service, Western aims to increase responsible purchasing, waste reduction, transparency, and campus and community engagement. Although there was some consistency in reporting by dining services in the years following the 2017 SAP, the switch from Aramark to Chartwells has resulted in inconsistent reporting and engagement. Throughout 2025, Dining Services plans to create baseline reports that will establish feasible, aggressive, and appropriate goals for the coming years.

Current Progress

Western is currently part of a pilot study linking increased food security to higher retention rates. This is clear evidence that reducing food insecurity on campus is a crucial part of enhancing student retention, promoting health and wellbeing, and contributing to the development of a fairer food system.

Dining Services currently sources about 40% of its food locally, uses programs that promote waste reduction, and is in the process of starting a food recovery plan.

2025-2030 Action Items

1. Reduce Scopes 1 and 3 greenhouse gas emissions related to university-provided food and beverages.

Cutting emissions includes, but is not limited to, decreasing energy consumption, supporting local and regional purchasing, minimizing food waste and implementing food recovery programs, and offering more climate-friendly food choices. Additionally, Dining Services aims to increase its Green Restaurant Certification—covering comprehensive GHG emission data from all scopes—from 3 to 4 stars across all dining halls.

Clear annual targets should be established after setting a baseline in 2025. AASHE's STARS KPIs should be reported. Furthermore, Dining Services should work with Western to adopt shared GHG accounting software. Continued support for operations like Outback Farm and City Sprouts Farm, which actively engage in ecosystem services and carbon banking, is essential. Increasing transparency in reporting baseline metrics and annual progress is vital so the university community can monitor progress over time.

2. Expand offerings of plant-based, sustainable, and ethically sourced foods and beverages on campus.

Dining services should establish a baseline percentage of university-provided food and drinks that meet these criteria as defined by AASHE STARS and set ambitious annual targets. Baseline KPIs are to be established by 2025. Additional projects led by students, staff, and faculty should also work to promote this goal; campus CSA programs and campus farms should continue contributing as well. It is essential to set yearly targets and monitor data both broadly and at the unit level.

3. Ensure fair access to food resources on campus through responsible delivery and distribution.

Dining Services and relevant groups should work to provide students with affordable, nutritious, culturally appropriate, sustainably sourced, and ethically produced food. These efforts should include developing and improving food and meal voucher recovery and redistribution programs to support food insecurity initiatives on campus, as well as exploring additional opportunities for food recovery and redistribution. Dining Services should increase collaboration with staff at the Basic Needs Hub and the Outback Farm. Both Dining Services and the Basic Needs Hub should develop a standard operating procedure for food affordability and food recovery by Spring 2026. The new staff position in the Basic Needs Hub will collaborate with Dining Services to implement food recovery starting in Fall 2025, diverting materials from landfills and reducing operating costs associated with food waste. Dining Services and university administration should also explore options to create more equitable access to food, like supporting SNAP/EBT (or similar programs). Campus programs that empower students to participate in and have control over food production should be supported and emphasized. These programs may include, but are not limited to, the Outback Farm, City Sprouts Farm, and courses involving students in food production.

4. Further develop campus engagement initiatives to enhance food system literacy among students and campus community members.

Create meaningful engagement around our food system that helps students develop lifelong habits contributing to social equity and sustainability. Develop and maintain support for engagement programs, events, and community connections to raise awareness of sustainability best practices; include awareness training for Objectives 1 and 2 above. Collaborate with other university departments or groups with vested interests or expertise in food systems and sustainability to advance this goal, including but not limited to the Outback Farm, City Sprouts, and the Basic Needs Hub. Dining services should also increase storytelling methods that highlight local food and other sustainability initiatives. Continue supporting student-led initiatives aligned with this goal, such as Co-Creating a Food Literate Future and the Food Systems Coalition.

Increased engagement and understanding of the basic needs landscape should be prioritized among the staff and faculty of Dining Services and Western.

5. Encourage the achievement of Goals 1-4 through internal tracking and regular reporting.

All KPIs should be monitored according to AASHE STARS if applicable. In addition to tracking KPIs, Chartwells should utilize appropriate internally provided resources and ensure a clear understanding of current progress. Yearly progress reports should be published in alignment with annual SAP progress reports, and sustainability scorecards should be posted monthly. Foster collaboration with the Basic Needs Hub and the SEI via recurring monthly meetings. Additional monthly reports should be shared with the SEI to promote transparency, engage students, and assist internal stakeholders in making decisions aligned with our sustainability goals. Chartwells should write monthly newsletters that highlight progress and share relevant reports. These newsletters should be distributed both internally and externally. If any current program used to track, define, or advance sustainability goals is no longer relevant, dining services and other campus departments should identify a similar program to replace it.

Procurement (Scope 3)

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Figure 25. Image of a warehouse storing goods for purchase.

KPIs	FY2024	FY2030 Target
% Spend on cleaning products, electronics, furniture, and office paper that meet sustainability criteria (STARS)	Not Yet Tracked	Baseline established
% Contract Spend on Social Impact Suppliers (STARS)	Not Yet Tracked	Baseline established

Background

Western's procurement department directly manages the acquisition of goods and services between suppliers and the university, ensuring these transactions comply with state regulations and university policies. These transactions include, but are not limited to, purchasing furniture, hazardous materials, scientific equipment, library materials, textbooks, and electronics (such as computers and related accessories). Supplies and services are procured through purchase orders, often using pre-negotiated contracts with vendors who offer the best overall value to the university.

Current Progress

- Sustainability statements and questions have been integrated into the procurement request for proposal (RFP) processes.
- The Procurement Office is implementing a Supplier/Vendor Onboarding and Management System that will enhance the efficiency of the supplier registration process, including the ability to capture supplier certifications and other helpful information related to supplier/vendor diversity classifications, company sustainability statements, and eco-certifications or ecolabels that apply to goods and services supplied to Western.
- The Procurement Office has continued to improve Western's Local Vendor website to highlight local and regional businesses and emphasize their value to Western and our local economy.
- Western's Procurement and Contract Administration reduced the use of individual printers on campus, replacing them with fewer large printers to be shared among a group of users.

2025-2030 Action Items

1. Promote sustainability by reducing unnecessary purchasing.

- Reusing and repurposing existing supplies, materials, and equipment is often the most sustainable choice.
- Collaborating between procurement and surplus teams within the organization to identify surplus options when initiating purchases.
- Communicating and promoting surplus offerings, both internally and at the state level, to raise awareness of alternatives to buying new products.
- Promoting shared resources where feasible, such as printers, office supplies, furniture, and other general-purpose items across the organization.

2. Support university purchasers and external suppliers in making sustainable choices.

- Develop and implement WWU's Supplier Code of Conduct by posting it on the Purchasing website and exploring ways to incorporate it into the new Jaggaer software suite.
- Implement Jaggaer software to improve the collection, reporting, and visibility of sustainable certifications and related sustainability attributes.
- Update the procurement website to include the Washington State Green Purchasing Guide as a valuable and easily accessible resource for researching sustainable options when making purchases.
- Update procurement and/or purchasing card (Pcard) training to include relevant content. Highlight 'think before you purchase' and 'reduce, reuse, repurpose' messages to promote sustainable purchasing.

3. Performing a Scope 3 emissions baseline assessment for goods and services.

- Estimate the University's Scope 3 emissions using data on goods and services purchased, along with results from the UW study.
- Improve the use of Jaggaer to provide Western with more accurate purchase data, enhancing reporting and business intelligence, including aspects related to sustainability.
- Consider the use of software and/or third-party data to help populate emissions data in Jaggaer.

4. Identify and implement improved methods of accessing library materials that have the smallest carbon footprint and consider ethical and sustainable sourcing.

- Find ways to buy, access, and borrow library materials, both physical and electronic, that minimize carbon emissions.
- Implement and communicate enhanced acquisition processes to lower the carbon footprint.
- The WWU Ethical Contracts Committee was established in May 2025 to enhance discussions and decisions regarding the ethical aspects of our external suppliers, including sustainability. The committee will gather feedback from students, faculty, and staff to inform our contractual partnerships and discuss its implications for Western's needs.