

UNIVERSITY of WASHINGTON

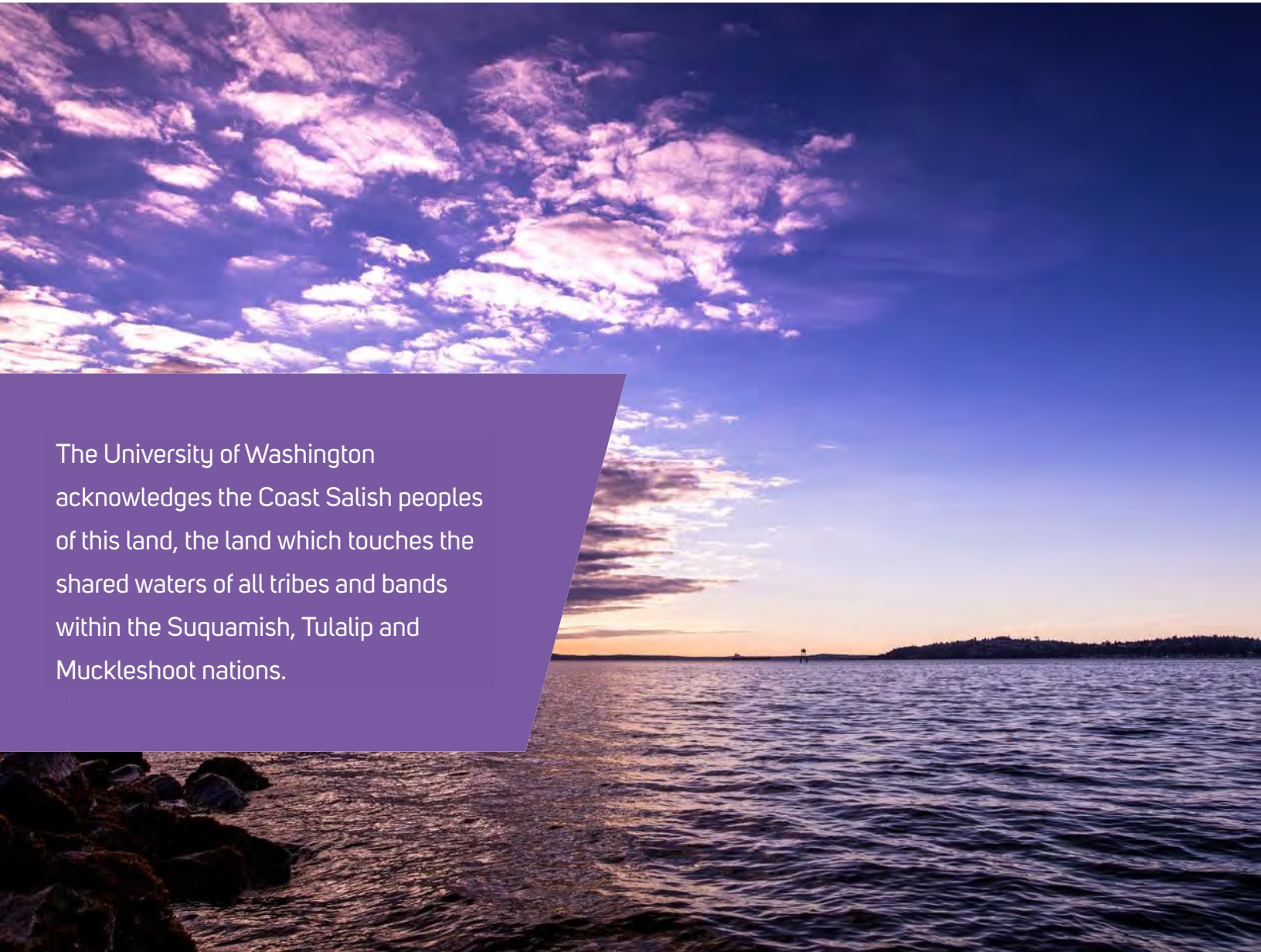
SUSTAINABILITY ACTION PLAN

UPDATE

FISCAL YEAR 2022 (1 JULY 2021 - 30 JUNE 2022)



ACKNOWLEDGEMENTS



The University of Washington acknowledges the Coast Salish peoples of this land, the land which touches the shared waters of all tribes and bands within the Suquamish, Tulalip and Muckleshoot nations.



We are grateful to the many individuals and organizations who have contributed to this effort. View the list online at:
green.uw.edu/plan/acknowledgments

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FISCAL YEAR 2021 ACTION PLAN IN REVIEW



The Sustainability Action Plan launched in July 2020, a few months after our campus changed overnight in ways that impacted how we learn, teach and conduct our daily work. Despite the uncertainty imposed by the COVID-19 pandemic not only on our campuses but the world, we began the implementation of a five-year action plan. Target teams worked on and off campus to ensure actions were carried out through virtual meetings. Our actions were also grounded through the establishment of foundational work that will be necessary to ensure equity and inclusion continue to be at the forefront of the Sustainability Action Plan for more years to come. UW staff, faculty and students achieved several accomplishments this first year which are highlighted on these pages.

Target I: Double student, staff, and faculty sustainability engagement by 2024

- ✓ Hired student intern to develop outreach and engagement strategy
- ✓ Started diversity, equity & inclusion engagement strategy for the Sustainability Action Plan
- ✓ Worked with Sustainability Action Plan team to develop inclusive process for FY22 updates
- ✓ Started tracking events for all

campuses as a proxy engagement metric

Target II: One UW-wide sustainability framework by 2022

- ✓ Engaged the Environmental Stewardship Committee (ESC), Campus Sustainability Fund (CSF) and faculty groups in crafting a sustainability definition for the UW
- ✓ Worked with Program on the Environment students for Sustainability Hub feasibility study
- ✓ Hired Diversity Equity & Inclusion Coordinator as part of UW Sustainability and CSF offices, who will also serve as a liaison to the Sustainability Hub

Target III: Double sustainability-oriented research projects by 2025

- ✓ Formed faculty advisory group for curriculum and research
- ✓ Reviewed prior effort to create a catalog/directory of sustainability related researchers
- ✓ CSF established UW network to further equity-focused Campus as a Living Lab work

Target IV: Comprehensive equitable purchasing targets by 2022

- ✓ Hired a student intern to help address engagement initiatives
- ✓ Established a process for tracking and reporting all contract suppliers who have agreed to the UW Supplier Code of Conduct.
- ✓ Established a process to capture second-tier diversity spending from major goods and services suppliers

Target V: 5% lower emissions from professional travel by 2025

- ✓ Developed travel data baseline from UW systems (Ariba, CTA)
- ✓ Completed a master agreement with ACT/Evergreen to be UW's contracted carbon offsets provider
- ✓ Worked with Program on the Environment student class projects for air travel reduction and carbon offsets

Target VI: 35% of food is from local sources by 2025

- ✓ Focused on partnerships with local community organizations during production and operation challenges
- ✓ Partnered with the UW Farm for their annual fundraiser and focusing on the farm as the

primary means to procure available produce

- ✔ Worked with HFS Communication and Marketing to highlight and share stories

Target VII: 6% decrease in single-occupancy commuting rate per campus by 2028

- ✔ Updated target language to better reflect needs of all three campuses
- ✔ Developed a transportation needs assessment survey of the campus community to determine barriers
- ✔ Partnered with Commute Options and developed three potential routes to study
- ✔ Finalized work plan for bike house program

Target VIII: 15% lower energy usage intensity by 2025

- ✔ Started process to create Green Revolving Fund
- ✔ Obtained approval for the OSI building monitoring equipment
- ✔ Worked on scope for 17 conservation projects
- ✔ Engaged with and contacted shops and vendors to develop conservation proposals

Target IX: 10% less solid waste by 2025

- ✔ Installed an extensive waste infrastructure, completing 60% of the buildings in FY21
- ✔ Organized virtual waste outreach events
- ✔ Implemented testing to standardize recipe use by Dining Services to reduce redundant waste

Target X: 45% reduction of greenhouse gas emissions by 2030

- ✔ Issued RFI for energy transformation consulting
- ✔ Worked with UW Solar to complete Campus Solar Plan

FISCAL YEAR 2021 PLANNING PROCESS

Action Planning Overview

The Sustainability Action Plan (SAP) calls for an annual review to develop Actions for the upcoming Fiscal Year, which begins on July 1.

The goal is to have an open and inclusive review of progress on the Plan and to develop revised actions using an equity lens, following the Plan's Guiding Principle of keeping equity and inclusion at the center of the process.

This FY22 Action Plan includes the revised actions for the upcoming fiscal year, as well as accomplishments under the plan during the 2021 fiscal year, which ended June 30, 2021.

The planning process to determine the 2022 fiscal actions occurred during Spring 2021. Target Action owners along with faculty, students and staff were convened into four planning workgroups to develop revised actions. These proposed actions were presented to the SAP Executive Committee and the UW Environmental Stewardship Committee for review and integration into this Fiscal Year 2022 Action Plan.

An inclusive and equitable planning process

The planning for the FY22 SAP began in Winter quarter with the development of a survey to garner broad input from UW faculty, students and staff on ideas for revising the actions of the plan. The survey also provided an inclusive method for UW community members to express their interest in participating in the FY22 planning process. Interested survey respondents self-selected into one of four planning workgroups led by UW Sustainability staff and faculty

who have been involved with the coordination and implementation of the actions. The survey results were shared with work groups who reviewed FY21 progress reports and then revised the actions for the FY22 plan. The workgroups used an equity impact analysis tool to determine if the proposed actions of the plan would present barriers or burdens to underrepresented community members at UW.

View the survey results and equity impact analysis tool at green.uw.edu/plan.



I. DOUBLE STUDENT, STAFF, AND FACULTY SUSTAINABILITY ENGAGEMENT BY 2024

Target Actions

- Whole U and UW Sustainability collaborate to expand university-wide equitable engagement
- Expand professional development opportunities for faculty and staff
- Inventory and expand community engagement

Sustainability Plan guiding principles



Ensure students achieve sustainability literacy



Choose our research conscientiously



Keep equity and inclusion at the center



This Target is about increasing the visibility of, and access to, sustainability in campus life. Implementing actions include a wide range of education programs, collaborations, and volunteerism that touch the lives of nearly every student, staff and faculty member, as well as community members in the neighborhoods surrounding UW campuses.

The 2022 Action Plan will include actions that promote innovative collaborations between UW's existing healthy living and environmental sustainability efforts; expanded professional development; and community engagement programs.

ACTION:

Whole U and UW Sustainability collaborate to expand university-wide equitable engagement



Outreach to underrepresented groups is key, specifically targeting and obtaining feedback from these groups on the plan actions and connections with sustainability is imperative.

Steps we will take in FY 2022

1. UW Sustainability continue to work to define “sustainability engagement” in measurable terms, and use information gathered in FY21 for event attendance. The defined measurement unit shall correlate to an individual receiving an encouragement toward considering environmental impact, human health, diversity, equity or inclusion in the context of their participation in the UW community.
2. The Whole U plans to continue offering a seminar every quarter in collaboration with UW Sustainability and will add sustainability features to a monthly editorial calendar and encourage UW Sustainability to contribute articles or recommend other UW faculty and staff for participation.
3. UW Sustainability will revamp the Green Office and Lab Certification programs and include student ambassadors; provide student capstone internships to engage with underrepresented groups and RSOs; and develop an inclusion plan for outreach communication.

Responsible party

UW Sustainability & Whole U

Statuses and linkages

Whole U quarterly seminars and wellness programs, Green Office and Lab Certification Program, Sustainability Stories virtual and on-campus events, promoting virtual and on-campus events to underrepresented groups.

Financing

 Additional financing needed in FY2022.

Continued University support of the Whole U program will ensure this Action will involve reach to all UW faculty and staff members.

Metrics

- Number of participants as a percentage of the promotional reach of communication (e.g. website traffic, email distribution or newsletter subscribers) based on the FY21 baseline.
- Number of new certified offices and labs (when applicable for on-campus return) as a percentage of the promotional reach of communication (e.g. newsletter advertisement, tabling at events, presentations via in-person or online).
- Annual Sustainability Plan survey response count, beginning with the 2020 results and continuing with subsequent Annual Sustainability Plan surveys.

ACTION:

Expand professional development opportunities for faculty and staff



The Whole U will work with Professional and Organizational Development (POD) on incorporating further slides and information on important sustainability resources and training at New Hire Orientation. UW Sustainability will support the Whole U through resources such as campus sustainability data and metrics and facilitation for training programs. Established faculty will be encouraged to share and talk about their experience or on-going projects. We will explore creating an incentive for staff/faculty to attend sustainability & DEI events and have a quarterly reporting or check-in meeting with colleges and academic departments.

Steps we will take in FY 2022

1. Work with UW Departments to identify an incentive for staff/faculty to attend Sustainability/DEI related events.
2. Set up a way for departments (both academic and operational) to track sustainability and DEI related work/ classes/programs or training.

Responsible party

UW Sustainability & Whole U

Statuses and linkages

This will complement Target II (*Identify Minimum Learning Outcomes*)

Financing

🔍 Continued University support of the Whole U program will ensure this Action will involve reach to all UW faculty and staff members.

Metrics

- Calculate the number of new faculty and staff participation in the professional development network as a percentage of new hire orientations conducted.
- Calculate the number of existing faculty and staff participation in the professional development network as a percentage of those reached through outreach presentations and communications.
- Utilize surveys and survey data to measure engagement, and specifically to determine reach with underrepresented groups.

ACTION:**Inventory and expand community engagement****Part 1**

Build an inventory of courses with an existing community engagement component, and create a targeted outreach campaign to include departments with sustainability-focused community engagement work. Create a targeted outreach campaign to include departments with a focus on sustainability work. Work with Continuum College in developing innovative sustainability content, beginning with community lectures and summer youth programs. Create a list of underrepresented groups and establish a targeted outreach strategy for measuring engagement with underrepresented groups both online and in person.

Part 2

Expand Community Engagement across campus, while offering enough time for groups to review and add input.

Steps we will take in FY 2022

1. Utilize the course inventory being done as part of our AASHE STARS reporting to start an inventory of sustainability coursework.
2. Collect data on sustainability-focused Registered Student Organizations (RSOs), and promote student engagement with community service through these RSOs. Depending on current levels of engagement, provide information and resources to these RSOs regarding engagement with both episodic and long-term volunteer opportunities. Evaluate expanding opportunities to all RSOs.
3. Coordinate with Continuum College to incorporate sustainability into their curriculum, track attendance for these courses and offer continuing communications to attendees through newsletters, websites and social media.

Responsible party

UW Sustainability & Continuum College

Statuses and linkages

This will complement Target II.

Financing

No additional financing needed in FY 2021.

Metrics

- Number of attendees of Continuum College sustainability courses as a percentage of audience reached through promotions and marketing.
- Number of departments contacted with sustainability related community engagement programs or activities.
- Number of new student volunteers from RSOs as a percentage of service learners.



II. ONE UW-WIDE SUSTAINABILITY FRAMEWORK BY 2022

Target Actions

- Finalize and publish the university-wide definition of sustainability
- Develop standardized reporting of academic content
- Identify minimum learning outcomes
- Determine feasibility of a student sustainability hub

Sustainability Plan guiding principles



Ensure students achieve sustainability literacy



Keep equity and inclusion at the center



A clear, common definition of sustainability is necessary for effective communication and coordination around learning and action across campus. This Target invokes a campus-wide definition and standardized reporting of existing sustainability courses. To successfully facilitate this goal and others, an Academic Sustainability Manager will be hired.

The 2022 Action Plan will also lay foundations for the development of a UW-wide sustainability course or other general requirement, and begin work toward a common, minimum sustainability learning outcome by 2025.

ACTION:**Finalize and publish the university-wide definition of sustainability**

In FY 2021 we sought input from faculty, staff and students at all three UW campuses to create a definition of sustainability that would be used as a tool for engagement, a tool for deepening our individual understanding, a tool for developing common understanding, a tool for measuring progress toward sustainability goals and a tool for identifying research and coursework that is “sustainability-related.” The definition and information about the process we used to develop it can be found here:

green.uw.edu/plan/definition-sustainability

Steps we will take in FY 2022

1. We will present the final definition to the UW Environmental Stewardship Committee, seek endorsement from the Faculty Senate, the Board of Deans and Chancellors, the Provost and the Board of Regents and determine where to formally post the definition.
2. We will work with the Target I workgroup to generate engagement with the definition (e.g. release a challenge to all courses to explore what would need to change in order to live up to the definition, provide the definition to the heads/deans of departments/schools across all campuses and ask them to share and bring back any feedback.)
3. We will work with other target workgroups to explicitly align their work with the definition. (Timeframe of Fall quarter 2021)
4. We will create a position description for a .50 or 1.0 FTE Sustainability Academic Coordinator manager position to help in the advancement and implementation of academic and research goals contained in this plan. In this process, we will explore whether this person should serve all three campuses or whether we should have separate positions at each campus. (Timeframe of December 2021)

Responsible party

UW Sustainability, Population Health Initiative, EarthLab, Urban@UW, Faculty

Statuses and linkages

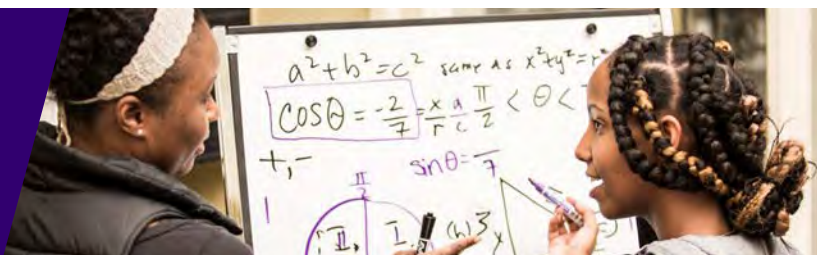
- Work with Population Health Initiative and UW Sustainability STARS reporting data on sustainability-focused courses to identify themes.
- Review and consider findings from prior work:
 - <https://green.uw.edu/content/sustainability-curriculum-committee>
 - https://green.uw.edu/sites/default/files/sustainability_across_the_curriculum_report.pdf

Financing

-  Funds for the Sustainability Academic Coordinator position (.5 or 1.0 FTE) are needed.

Metrics

- Getting the definition approved and posted by fall.
- Having conversations with the action owners about the implications for the definition for their action (by end of autumn quarter).
- Have a plan for broader engagement with the definition by the end of autumn quarter.

ACTION:**Develop standardized reporting of academic content**

Catalogue and identify all existing sustainability-oriented courses through the design of a standardized reporting system that incorporates a shared sustainability framework.

Steps we will take in FY 2022

1. Using the shared sustainability framework as a reference, build a centralized reporting platform to collect information across campuses and assess the degree to which sustainability is incorporated in existing courses. Developing and implementing common metrics for tracking progress towards the attainment of this goal set forth in this plan are essential to realizing the goals of tri-campus coordination and accountability.
2. To ensure the proper entry of data, design a set of instructions on how to use the reporting system that will be displayed online.
3. Create communication material that will be offered to administrators, personnel in charge of academic affairs and students in each College and School across the UW. It may also be available to students.

Responsible party

UW Sustainability, Population Health Initiative, EarthLab, Urban@UW, Faculty

Statuses and linkages

This will be overseen by the UW Sustainability Project Manager who coordinates STARS reporting in partnership with Population Health and cataloging of academic research. Tied to Target I – *Inventory and Expand Community Engagement*.

Financing

No additional financing needed in FY 2022.

Metrics

- Number of new courses added, measured against 2021 STARS academic course data.
- Yes/No completion of inventory.

ACTION:**Identify minimum learning outcomes**

Initiate a consultative process to identify core sustainability skills and competencies for all UW students as an initial step to develop a university-wide set of learning outcomes that can be incorporated in existing and new courses, regardless of the discipline or concentration, in order to address a full range of ecological, social, and economic dimensions of sustainability. This target could open the space to considering a university-wide sustainability credit in the future.

Steps we will take in FY 2022

1. Identify inclusive sustainability academic objectives that can be incorporated in existing and new courses.
2. Benchmark from ASU and other universities that have undertaken similar efforts to integrate sustainability core competencies in curriculum.
3. Facilitate professional development opportunities for faculty and other instructors to foster the creation of innovative and interdisciplinary pedagogical strategies around inclusive sustainability.
4. Create a digital space where instructors can find tools and resources to better incorporate inclusive sustainability academic objectives in their courses.

Responsible party

UW Sustainability, Population Health Initiative, EarthLab, Urban@UW, Faculty

Statuses and linkages

This is tied to the UW-Wide Sustainability Definition.

Financing

No additional financing needed in FY 2022.

Metrics

We will develop baseline data to determine where inclusive sustainability objectives can be incorporated and how those objectives will impact course outcomes.

ACTION:

Determine feasibility of a student sustainability hub



Determine the feasibility for a student-facing Sustainability Hub on the Seattle Campus; including the need, use cases, potential location, funding and staffing. The goal is to develop a tri-campus model for ongoing student sustainability engagement and research through the UW-wide Sustainability Framework, using the Campus as a Living Lab for implementation of the Sustainability Plan. The feasibility study will be managed by UW Sustainability in collaboration with the Campus Sustainability Fund, and potential funding partnerships with the Population Health Initiative, EarthLab, the College of the Environment, the College of Built Environments, ASUW, GPSS and Student Services.

Steps we will take in FY 2022

1. Establish a project team to be sponsored by UW Sustainability that includes the Sustainability Action Plan Project Coordinator, CSF Program Manager, UW Sustainability DEI Coordinator and students from ASUW, GPSS, Student Life, and RSOs and the University Environmental Stewardship Committee.
2. Work with campus stakeholders to determine the scope, opportunities, and barriers through interviews, research into existing UW Centers/Initiatives and case studies of other universities. Review and present to ASUW, GPSS, Student Life and administrative stakeholders.
3. Publish a report which details the need for the Student Sustainability Hub, use cases, potential locations, funding model, and partnerships with other departments or programs.

Responsible party

Campus Sustainability Fund

Statuses and linkages

This Action is closely linked with other UW Sustainability Plan Actions: One UW Wide Sustainability Framework by 2022; Double Student, Staff and Faculty Sustainability Impressions by 2024; Double Sustainability Research Projects by 2025. These could be coordinated with the Sustainability Academic Coordinator position suggested in Target II - *Finalize and publish the university-wide definition of sustainability.*

Financing

For FY21, UW Sustainability hired a .50 FTE graduate student Project Coordinator dedicated to the implementation of the Sustainability Action Plan and the steps associated with this and other actions of the plan. The funding for this position should be maintained.

For FY22, UW Sustainability and the Campus Sustainability Fund hired a .50 FTE graduate student Program Operations and DEI Coordinator position. This position will be supporting the work of this action by facilitating inclusive and diverse outreach and student engagement.

Future financing for implementation and staffing of the Student Sustainability Hub could come from multiple sources including a resource pooling of departments/units such as Campus Sustainability Fund, Student Life, Provost Office (for academics), Population Health Initiative, Earthlab, and student government bodies GPSS and ASUW. A student fee could also be a potential funding option.

Metrics

The second year of this action will focus on gathering data associated with the feasibility of establishing a Student Sustainability Hub, and we will therefore achieve the following:

- Cataloging student-centered services from all campuses that are related to sustainability.
- Perform an analysis of the potential impacts and outcomes of a Sustainability Hub.
- Benchmark with peer institutions and perform a gap analysis.



III. DOUBLE SUSTAINABILITY-ORIENTED RESEARCH PROJECTS BY 2025

Target Actions

- Develop a sustainability research catalog
- Expand campus as a living laboratory

Sustainability Plan guiding principle



Choose our research conscientiously

Our work on the sustainability definition in FY21 guides this next year of our goal to increase sustainability-oriented research.

We will further this work through a comprehensive sustainability research inventory.

We will also begin to expand our work beyond the walls of higher education, making our campuses and surrounding communities living laboratories that provide rich collaborations and shared positive outcomes.

ACTION:**Develop sustainability research catalog**

In conjunction with the working sustainability definition developed in FY21, we will dedicate efforts to identifying the impact of academic research to our communities, faculty and our campuses. It will begin with development of a catalog to identify living lab sustainability-oriented research projects and opportunities across the UW. We will focus resourcing, funding and attention to nurture some of these seminal projects, with lessons learned and outcomes then broadly disseminated to support others down that path. Besides increasing transparency, inclusion and coordination among UW researchers, this will serve a second purpose as the baseline count of sustainability-oriented research projects; this is the count that will be doubled by 2025 according to the target. The catalogue will help to understand the University's research activities and help develop faculty incentives that would align with this target. As a R1 public institution, we will also work on engagement with the academy to ensure there is broad support to engage our research faculty.

Steps we will take in FY 2022

1. Continue to highlight existing platforms, tools, and funding resources that support interdisciplinary research projects across UW drawing upon prior work from the UW Sustainability research portal.
2. Support Target II action to hire a .50 Academic Coordinator through benchmarking what this position description should include, writing the job description and providing a recommendation to the Provost office.
3. Using the shared sustainability framework as a reference, build on existing UW systems and processes to coordinate centralized reporting that collects information across campuses and assess the degree to which sustainability (following a holistic and shared definition) is incorporated in existing research projects and funding initiatives.
4. Establish a baseline procedure to collect and share information about UW research impact in our communities.


Responsible party

UW Sustainability, Population Health Initiative, EarthLab, Urban@UW

Statuses and linkages

Work with Campus Sustainability Fund, Population Health Initiative, EarthLab, Urban@UW, UW Tacoma, UW Bothell and UW Sustainability using STARS reporting data on sustainability-focused research to identify themes.

Financing

 Funding for a .50 Academic Coordinator from an existing position or a new hire. This could be the position described in Target II.

Metrics

To establish a baseline metric the second year, we will develop a process for gathering input and assess how we are engaging across our campuses. Quantitative and qualitative data will assess the following measures:

- Representation of diversity, co-curricular groups and RSOs.
- Assessments of the outputs and progress the diverse groups were able to realize.
- Community-based research projects will be identified this year to establish a baseline number beginning with an assessment with Population Health, EarthLab and Urban@UW.

ACTION:**Expand campus as a living laboratory**

Through the formal adoption of the UW-wide sustainability definition, develop a program to transform UW's campuses into living laboratories for sustainability research. Integrating academic and research areas of interest with operational targets and sustainability actions will provide opportunities for all UW members to collaborate on innovative strategies to address some of the most urgent challenges at different scales. This action also entails expanding our work beyond the walls of higher education, across local, regional and global scales; viewing our campuses and the surrounding communities as living laboratories that provide rich opportunities for action oriented, community based participatory research and service learning to address the complexities of sustainability challenges in a responsive and equitable way. Through this action, UW will support more sustainable communities and students fluent in climate justice, sustainability, and resiliency.

Steps we will take in FY 2022

1. Identify and promote opportunities in which UW researchers and students can create and participate in projects that engage UW Facilities and central administration units to transform the campuses, reduce the operations environmental footprint while alleviating burdens of our existing policies and procedures that negatively impact underrepresented groups on campus.
2. Develop and promote existing tools, training, and internal funding for culturally responsible forms of research and engagement and appropriate interactions with non-UW members.
3. Identify funding mechanisms to coordinate faculty focus groups that will provide incentives. This will serve to identify opportunities and barriers for increasing sustainability-related research.
4. Seek opportunities for meaningful forms of engagement and research through equity and inclusion with local, regional, and global communities to address environmental challenges and causes.

Responsible party

UW Sustainability, Population Health Initiative, Campus Sustainability Fund, EarthLab, Urban@UW

Statuses and linkages

These could be overseen by the suggested Academic Coordinator position.

Financing

 Additional financing needed in FY 2022.

Possible sources:

- Use revolving funds from any savings in operations linked to the decarbonization program and create task forces specifically to apply for state, regional and national grant opportunities.
- Create a special sustainability endowment or green fund coming from donations in collaboration with UW Advancement.
- Identify and strengthen existing sources of funding for research (Campus Sustainability Fund, EarthLab's Innovation Grants, Population Health Initiative pilot research grants, Urban@UW Spark Grants).

Metrics

To establish a baseline metric the second year, we will develop a process for gathering input from across our campuses and piloting collaboration projects between academic research and campus operations. Quantitative and qualitative data will assess the following:

- Number of living lab projects from Seattle, Bothell and Tacoma campuses.
- Representation of diverse co-curricular groups and RSOs from Seattle, Bothell, Tacoma campuses.
- Qualitative impact of pilot project(s) with campus operations for faculty.



IV. COMPREHENSIVE EQUITABLE PURCHASING TARGETS BY 2022

Target Actions

- Campus awareness related to supplier diversity
- Implement a Supplier Code of Conduct

Sustainability Plan guiding principle



Keep equity
and inclusion
at the center

Procurement comprises a significant portion of UW's spending. With its purchasing decisions UW can endorse suppliers who are practicing sustainability; we aspire to have 100% of them aligned with our Supplier Code of Conduct. We are quickly working to incorporate students' voices in purchasing decisions. As we work with campus units and departments to develop equitable purchasing targets, we will follow the state's goals for minority-, women- and veteran-owned businesses under the Results Washington strategic framework.

ACTION:**Campus awareness related to supplier diversity**

Historically, procurement has been perceived solely as a professional function, unrelated in any direct way to the university's students. In recent years the power for purchasing decisions to express institutional values has become much more widely acknowledged. This plan strives to build a cohesive community stewarding social equity and physical environments; we have the opportunity to further promote social responsibility in our purchasing, and to engage our communities in this effort.

We will expand student presence in the UW Procurement Services office,¹ with up to three students fulfilling intern, liaison or coordinator positions. This offers the dual win of on the one hand offering a very valuable opportunity to increase real-world learning for students; and on the other hand providing a well-structured pathway for students to influence purchasing choices. Through the Business Diversity and Equity Program, we will leverage the work of the Supplier Diversity RSO and partner for new opportunities to strengthen the visibility of local, minority, women-owned and tribal-owned businesses. Additionally, Procurement Services will identify "capstone" or "keystone" projects suitable for student teams, possibly in partnership with Foster School of Business Consulting and Business Development group, Program on the Environment, or the Buerk Center for Entrepreneurship. Through the work of the Business Diversity & Equity program managed by UW Facilities, we will include student internships that are working on inclusion planning and sustainable purchasing.

Steps we will take in FY 2022

1. Coordinate outreach visits to campus departments to discuss supplier diversity and sustainability.
 - Review department purchasing history prior to the outreach.
 - In collaboration with procurement staff, share information about available contracts with minority-, women- and veteran-owned small businesses.
 - Partner with the Foster Consulting and Business Development Center.
 - Develop information sessions and tools to connect departments with minority-, women- and veteran-owned small businesses.


Responsible party

Procurement Services

Statuses and linkages

Procurement Services and the Business Diversity & Equity programs have student interns in place, and is well under way toward identifying additional student projects.

Financing

 Funding for student positions in UW Procurement Services has been approved by UW Finance. Business Diversity & Equity (BDE) within UW Facilities funds student internships through a UW Endowment for diversity outcomes.

Metrics

- Goal of two department visits per month. Baseline is based on the number of departments subscribing to the Procurement Service Campus Newsletter as of July 1, 2021.
- Track number of departmental visits as a percentage of subscribers.
- Report and publish diversity spend across the enterprise, including second-tier spend with large companies holding University contracts.

¹ The UW Procurement Services office does not serve UW Medicine purchasing.

ACTION:

Implement a Supplier Code of Conduct



The global recognition of the importance of purchasing means that the world of equitable purchasing standards is expanding. UW aspires to have 100% of suppliers agreeing to our Supplier Code of Conduct.

In addition, our state government has offered a strategic framework, *Results Washington*, that includes a goal to increase state agency and educational institution utilization of certified small and diverse businesses in contracts and procurement to the following percentages:

- Minority-owned businesses: 10 percent
- Women-owned businesses: 6 percent
- Veteran-owned businesses: 5 percent

UW Procurement Services will align its diversity contracting spend goals both with *Results Washington* and with diverse business spending goals for federal contracts. Supporting language will be incorporated in solicitation templates and forms. Starting in FY19, Business Diversity & Equity began focusing on analyzing procurement and spend data to determine current levels and future goals. In FY2021 we will map a pathway to those goals, and begin laying out the iterative process for measuring progress.

Steps we will take in FY 2022

1. Report the number of contract suppliers who have agreed to the University Supplier Code of Conduct.
 - Create a communication plan for internal and external communications.
 - Create a means to collect information.
 - Publish the information.

Responsible party

Procurement Services and UW Facilities Finance and Administration Business Diversity & Equity

Statuses and linkages

Supplier Code of Conduct is published on Procurement Services website and included in many, but not all University contracts.

Reports have been obtained from major contract suppliers; reporting format for 2nd tier diversity spend is being finalized.

Financing



No additional financing needed in FY 2022.

Metrics

- 100% of contract suppliers agree to the Code.



V. 5% LOWER EMISSIONS FROM PROFESSIONAL TRAVEL BY 2025

Target Actions

- Facilitate department/unit-specific travel reduction
- Implement programs for offsetting air travel emissions

Sustainability Plan guiding principle



Use resources responsibly



Decarbonize

In 2020, professional air travel at the UW decreased more than 60% as a result of the mandatory stay at home orders and public health crisis. While some work of the university was negatively impacted, we quickly developed new skills for working and gathering virtually and experienced benefits such as increased participation, and reduced costs.

Our goals for the next fiscal year are to build on what we learned to minimize unnecessary travel and to continue to pursue strategies for offsetting emissions from travel that is core to our mission.

ACTION:

Facilitate department/unit-specific travel reduction



We will encourage individual units and departments to adopt air travel reduction strategies that are tailored to their own activities and needs. The goal will be to help each department address the cost/benefit of travel to the individual, the unit and the work of the University, and thoughtfully discern when traveling is the best option.

Steps we will take in FY 2022

1. Streamline the process of giving units on campus access to their travel data and related analytics.
 - We will provide online access to travel data, updated monthly, to enable units to track their own behavior and emissions.
2. Develop templates for travel policies that will include a definition of professional travel to be adopted by individual departments and units.
 - We will create travel policy templates inspired by the videoconferencing statement created by the Department of Philosophy and the travel strategy of the Tyndall Center for Climate Change Research.
3. Develop department-level air travel data reporting and make it accessible and inclusive. To support information about air travel related activity, we will conduct an analysis of financial impact savings from reduced air travel and associated costs. Additional qualitative assessments will be conducted for promoting health and well-being by not engaging in air travel.
4. UW Sustainability will update the current reduction target that aligns with the emissions reduction goal set by the State of Washington.
5. The working group (including members from the UW Travel office and UW Sustainability) will develop communications about the negative impacts of travel, the benefits of travel alternatives, and technologies to support these alternatives.
6. Create a recognition program rewarding on-campus innovators. The structure is yet to be determined, but it is likely to (1) provide separate awards for the three campuses; (2) include one class of award(s) based on a quantitative GHG reduction metric; and (3) include one class of award(s) based on an individual's innovation, leadership or advocacy.

7. For future activity, lobby the Association for the Advancement of Sustainability in Higher Education (AASHE) for inclusion of professional air travel as a mandatory credit in version 3.0 of the Sustainability Tracking Assessment and Rating System (STARS). Concurrently, reach out to other national and regional sustainability related conference organizers to encourage use of telepresence.

Responsible party


UW Sustainability

Statuses and linkages

Beginning with UW's 2017 greenhouse gas inventory (and accompanying baseline adjustment process), the University has established a methodology for computing a significant percentage of total professional air travel miles each year from existing data sources.

Academic departments are actively seeking opportunities to promote hyper-local conferencing.

Financing

 The recognition program can be funded with a surcharge applied to internal purchases of greenhouse gas offsets (see Action below).

Metrics

- The primary metrics for Action success will be the travel footprint dashboard described in Step 1, the model guidelines for air travel reduction, the communication strategy, and the rewards program.

ACTION:**Implement programs for offsetting air travel emissions**

UW is working toward being a regional leader in ethical and appropriate greenhouse gas (GHG) offsets purchasing. During 2019 UW issued a request for procurement (RFP) and has since established a contractual relationship with GHG offsets broker ACT/ Evergreen. UW's RFP was designed to select an offsets broker (rather than a single offset generation project) giving UW the broadest possible access to the voluntary GHG offsets market, with credible assurance and verification embedded in the offsets projects. Through the Washington Institutions of Public Higher Education clearinghouse, all public colleges and universities in Washington State will be able to take advantage of the winning broker's services to make the best possible choices for offset purchases.

Wisely purchased GHG offsets have three important co-benefits, beyond simply reducing UW's carbon footprint:

- GHG offsets can provide financial support to developing nations, or economically disadvantaged communities in Washington.
- GHG offsets support low-carbon innovation.
- The selection of GHG offset type and assessment of GHG offset quality are an educational opportunity and provide an immediate impact to air quality and overall health.
- Carbon offsets raises and increases awareness of the amount of air travel and could serve as an incentive to change behavior for decreasing air travel.

In addition to an offset program, we will work to create and implement a program to mitigate air travel emissions through carbon-reducing projects on campus. This should work closely with Targets VIII and X of the plan to engage ideas for the types of projects that could be identified for an internal offsets program.

Steps we will take in FY 2022

1. Create a policy for a voluntary travel offsets program across campuses, focusing on faculty and staff, and engage students for project identification for carbon offsets, while inviting student research projects that evaluate the cost of carbon.
2. Establish a task force to develop an internal carbon offsets program that engages departments and faculty research.

3. Outline steps to take to eliminate all air travel emissions by 2050.


Responsible party

UW Sustainability

Statuses and linkages

This effort will be led by UW Sustainability and UW Facilities, but include broad outreach to the students, staff and faculty and engagement for educational opportunities. An internal carbon offsets program is linked to Targets VIII and X for identifying the types of projects that could be funded and measuring the amount of GHG emissions reductions from the UW inventory.

Financing

 No additional financing required for FY 2022. This will be coordinated through current staffing from UW Sustainability, UW Facilities and Procurement Services.

Metrics

- The primary metric will be the ratio of air travel offsets purchased, divided by total quantity of air travel reported in UW's annual GHG inventory.
- A secondary metric will be the ratio of air travel offsets purchased divided by the year-on-year difference in air travel emissions.
- An additional metric will be a clear understanding of the feasibility of an internal offset program, as well as offsetting all travel related GHG emissions. If deemed feasible, then a preliminary action plan for moving the efforts forward.



VI. 35% OF FOOD IS FROM LOCAL SOURCES BY 2025

Target Action

- Increase sourcing of local foods 1% each year based on a 2021 baseline
- Expand plant-based options by 10% by 2025
- Increase student engagement education and understanding of impact of plant-based options

Sustainability Plan guiding principles



Keep equity and inclusion at the center



Use resources responsibly



Our food is particularly emblematic of sustainability, a personal and literal symbol of the connection between the social and the environmental. The physically closer we are to the original sources of our food, the greater our ability is to affect positive change.

At all three campuses, focusing on local food sources means we are engaging with, investing in, and providing support to our local food systems while reducing the carbon footprint of our community.

ACTION:

Increase sourcing of local foods 1% each year based on a 2021 baseline



UW Housing and Food Services (HFS) Dining will actively seek to partner with suppliers and local vendors to raise the fraction of foods procured from within a 250-mile radius five percentage points, to a total of 35% of all foods procured. These Actions will aid in the support of the local food system while reducing the overall carbon footprint.

Steps we will take in FY 2022

1. Analyze existing product purchases from our primary distributor in an effort to identify opportunities to migrate spend to local business within 250 miles of campus.
2. Expand current UW Farm programming; enhance interdepartmental collaboration and planning.
3. Increase student engagement through local vendor stories, tabling, and student facing information and resources.

Responsible party

Housing & Food Services

Statuses and linkages

To be successful and maintain a sustainable procurement approach, HFS Dining will need to balance the UW community demand with budgetary allowances as the increase of 1% year over year may result in higher food costs. In the event that these changes lead to higher food costs, UW Dining will seek direct support from Committee and Executive Leadership in the justifications for increased costs as result of this target. Additionally, HFS Dining will monitor the tolerance of higher priced menu items and will address the need for reevaluation of this target in the event increased costs are not tolerated and cannot be mitigated.

Financing

Financing for FY 2022 is contingent as described below.

The cost of food is considered an operating cost within the HFS Dining budgets and is a part of the greater annual fiscal year budget creation and ongoing budget management processes. As a self-sustaining auxiliary, HFS Dining operates without outside financial assistance, including from the University of Washington or state funds. As a result, the services it provides are largely paid for through operating revenue from on-campus customers.

Due to the effects of the COVID-19 pandemic, there are complex considerations with upcoming budget creation and management. HFS Dining's operating revenue is directly dependent upon the resident occupancy and number of people on campus. Additionally, HFS Dining will need to make changes to accommodate necessary regulations stemming from COVID-19 which are likely to come at an additional cost. All of these elements will need to be considered in conjunction with the potential increased costs of local food when pursuing these targets and may impact food cost budget.

Metrics

- Percent of food expenditures on sources within 250 miles. (Additional metrics to be defined during FY 2022.)

ACTION:

Expand plant-based options by 10% by 2025



Increasing plant-based food options provides choices that are healthy for both our community and our planet. Recent science tells us plant-based options have been shown to emit lower greenhouse gasses than animal-based products. This focus allows UW Dining to provide more sustainable options on campus, including those grown sustainably and responsibly within our local food system.

Steps we will take in FY 2022

1. Expand plant-based options available to students in food service units.
 - Develop additional plant based options for Dining menus.
 - Increase plant-based protein purchases.

Responsible party

Housing and Food Services

Statuses and linkages

Plant-based food will support our local food purchase while reducing associated greenhouse gas emissions. Additionally, increased plant based options will continue to support the UW Farm program on UW Seattle campus.

Financing

No additional funding needed.

Metrics

- Plant-based options as a total percentage of menu items; total amount of plant-based proteins by pound per MCURC Protein Flip reporting; Star Aashe plant-based reporting.

ACTION:

Increase student engagement education and understanding of impact of plant-based options



Food systems play an important role for sustainability practices. It can significantly reduce carbon emissions from production and natural resource use, while ensuring sourcing is ethically and responsibly managed.

Steps we will take in FY 2022

1. Collaborate with faculty Dr. Yona Sippos from the UW Nutritional Sciences Program to increase student led research around plant-forward impact and education.

Responsible party

Housing and Food Services

Statuses and linkages

Supports Target III, *Campus as a Living Laboratory*. Increase sustainability related research on campus. Increase student engagement in campus sustainability.

Financing

Needed financing will be assessed in FY22.

Metrics

- Establish baseline on the number of students engaged with research project.



VII. 6% DECREASE IN SINGLE-OCCUPANCY COMMUTING RATE PER CAMPUS BY 2028

Target Actions

- Encouraging sustainable transportation options and telework post COVID-19
- Evaluate expansion and demand of daily parking options
- Promote U-CAR and UW Shuttle service for mid-day travel

Sustainability Plan guiding principles



Keep equity and inclusion at the center



Use resources responsibly



Decarbonize

Updated from original target in FY21 Sustainability Action Plan "12% or less of commutes are single-occupancy by 2028."

Transportation accounts for 45% of total carbon emissions in the state of Washington. Reducing the campus drive alone rate reduces greenhouse gases and other impacts on our transportation system, but also increases accessibility for those moving around the community. At all three campuses, the University is committed to developing policies and programs to increase use of sustainable commuting while advocating for increased transportation options with our local, regional, and state agencies. The FY21 target has been updated to reflect a reduction for Bothell, Seattle and Tacoma campuses.

ACTION:**Encouraging sustainable transportation options and telework post COVID-19**

COVID-19 has had a significant impact on the travel behavior of our campus communities. Since the pandemic, the majority of students, staff and faculty have been learning or working from home. For those coming to campus, the availability and safety of shared transportation options (transit, carpooling, etc.) has compelled many to drive alone to campus.

With this disruption to the typical commute, there is an opportunity to change people's travel behavior to more sustainable modes as they begin to return to campus.

Steps we will take in FY 2022

1. Track research on transit recovery and COVID-19 transmission on transit, sharing findings with the campus community.
2. Develop an outreach and education campaign promoting active and shared transportation options.
3. Provide resources to encourage continued telework arrangements for employees that are able to work remotely.
4. Advocate for increased transit service levels.

Responsible party

UW Transportation Services departments at Bothell, Seattle and Tacoma

Statuses and linkages**Target I: Double Student, Staff and Faculty Sustainability Engagement by 2024**

UW Transportation Services meets with UW Sustainability at least quarterly to discuss promotion of sustainable transportation options and programming.

Target III: Double Sustainability Oriented Research Projects by 2025

- Transportation Services participated in two Sustainability Studio projects each year to help research opportunities to increase sustainable transportation usage on campus.
- Transportation Services is partnering with PacTrans on research of commuting by essential workers during COVID-19.

Target V: 5% Lower Emissions from Professional Travel by 2025

Both targets are looking at opportunities to increase remote work and conferencing options to decrease carbon emissions from travel.

Financing

Programs to support reducing single-occupancy vehicle commuting are already funded through a combination of parking revenue, student and employee fees, and institutional funding.

Metrics

- The Seattle campus conducts an annual transportation survey of staff, faculty and students to learn about their commuting behavior. Progress toward this Action will be tracked through the continued administration of the annual transportation survey.
- Each year the Bothell campus does an intercept survey to find the mode split, although the 2020 survey was suspended due to minimal traffic caused by the pandemic.
- The Bothell and Tacoma campuses both conduct biennial transportation surveys of staff and faculty through the Washington State Commute Trip Reduction program.

ACTION:

Evaluate expansion and demand of daily parking options



Providing daily parking options to students, staff and faculty allows them to save money every time they do not drive to campus. This can encourage commuters to use sustainable transportation options on the days that they do not need to drive to campus.

Steps we will take in FY 2022

1. Expand Pay-Per-Use Parking (PPUP) to the S1 garage on the Seattle campus.
2. Evaluate daily parking permit options at the Tacoma campus.
3. Adjust demand for daily parking by focusing on reducing quarterly permit sales volume at the Bothell campus.

Responsible party

UW Transportation Services departments at Bothell, Seattle and Tacoma

Statuses and linkages

Daily parking options are currently available to employees on the UW Seattle campus through Pay-Per-Use Parking (PPUP) at gated facilities and daily parking permits available for purchase online for non-gated facilities.

Daily and hourly visitor parking options are available at all three campuses.

Financing



Parking operations are funded through the sale of parking permits and products at each campus.

Metrics

Progress toward completion of the Action will be measured by:

- Number and type of parking permits sold.
- Utilization of parking facilities.

ACTION:**Promote U-CAR and UW Shuttle service for mid-day travel**

The Transportation Services Shuttles service provides a vital connection for faculty and staff between campus and medical facilities across the city. The U-CAR program provides a critical function to allow campus community access to a vehicle for business-related trips. Both of these services allows staff, faculty and students to use commute options other than driving alone and still be able to complete the work they need to without having to bring their personal vehicle to campus, helping to reduce carbon emissions related to transportation.

Steps we will take in FY 2022

1. Develop and implement a marketing plan for UW Shuttle services to UW Medical Center employees and patients.
2. Develop and implement a marketing plan for U-CAR service at all three campuses.

Responsible party

UW Transportation Services at Seattle

Statuses and linkages

Target X: 45% reduction of greenhouse gas emissions by 2030

Exploring opportunities to transition UW Fleet to electric vehicles and capacity for parking to house solar canopies.

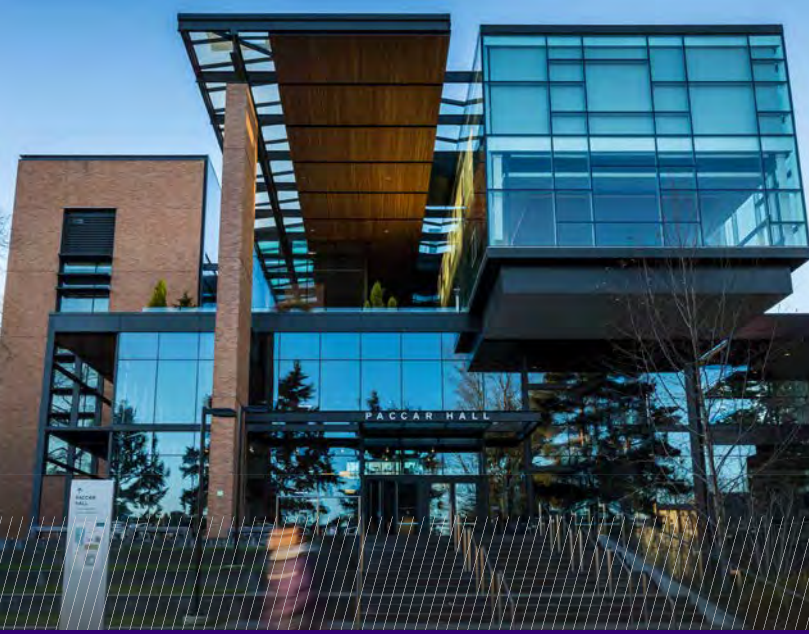
Financing

UW Shuttles are funded through partnerships with UW Medical Center, Harborview, School of Medicine, Fred Hutchinson, Seattle Cancer Care Alliance, and Seattle Children's Hospital. The program is also funded through parking revenue and institutional funding.

Metrics

Progress toward completion of the Action will be measured by:

- Ridership numbers on shuttle services.
- U-CAR rentals, mileage and utilization.



VIII. 15% LOWER ENERGY USAGE INTENSITY BY 2025

Target Actions

- Implement cost effective conservation investments
- Expand campus Meter Monitor O&M program
- Develop a Demand Side Management (DSM) approach

Sustainability Plan guiding principle



Use resources responsibly



Eighty percent of the world's greenhouse gas emissions come from combusting fossil fuels to generate energy, including electricity. We need to do our part toward reducing energy consumption. Achieving this goal will require accelerating the implementation of energy conservation projects, targeting older and less efficient buildings for deep retrofits, and ensuring all new buildings meet the UW Green Building Standard to minimize water and energy consumption. The expanded use of utility metering and monitoring based commissioning will keep buildings operating optimally.

Water conservation

UW will monitor opportunities to reduce water consumption for new building construction, maintenance and irrigation. In collaboration with academic units, UW Facilities will explore paths to research the feasibility of enhancing water reduction through the use of new technologies or integration into campus planning.

ACTION:**Implement cost effective conservation investments**

In 2015, comprehensive energy engineering audits of 112 campus buildings identified energy conservation opportunities requiring \$25 million of capital investment but avoiding \$5 million in energy waste annually. Once the initial \$25 million capital investment is made, additional conservation investments can be pursued at \$5 million per year, resulting in optimization to the built environment by 2025 operating at least 15% more efficiently than the 2015 baseline audit condition. Once optimized the building stock will be monitored (see *Expand Campus Meter Monitor O&M Program* below) both to insure persistence of the energy cost avoidance, and to identify additional conservation opportunities.

Steps we will take in FY 2022

1. Execute 17 minor conservation projects in 30 campus buildings avoiding an estimated \$1 million annual utility cost (completing mid FY22). Estimated capital cost will be \$3.2M, of which \$1.6 million can be recovered in utility rebates.
2. Begin initial design, permitting and equipment procurement for a UW Tower Energy Improvement Project. This project will demonstrate hot water energy transfer from data center waste heat to heat the office tower. The project will replace end-of life, inefficient electric resistance boilers at the tower, using one or more replacement heat recovery chillers at the data center. The project will involve DDC controls upgrades and potentially thermal storage.
3. Conduct in-house energy engineering analysis in coordination with the One Capital Plan and other initiatives to identify one or more co-funding opportunities for a major renovation or deep retrofit in FY2023-FY2025, that can support future revolving fund revenues.

Responsible party

UW Facilities Campus Energy, Utilities and Operations

Statuses and linkages

From 2015 to present, the resource conservation program has invested \$5 million in 32 projects capturing \$2.2 million in utility rebates and avoiding \$624,000 in annual utility cost. These past and future building efficiency activities

incrementally bring the campus into compliance with Washington State Clean Buildings Code, City of Seattle Benchmarking and Tune-up Ordinances. These Actions also support the overarching initiative to meet State greenhouse gas reduction targets (see Target X). Future investments must be coordinated and augmented with the One Capital Plan, facility preservation fund and program renewal investment funds. Additionally, resource conservation investments must be coordinated with self-sustaining units' capital investment programs.

Financing

A Green Revolving Fund (GRF) has been conceptually approved by senior leadership. Last year, the detailed design of the fund model was completed and broadly socialized with stakeholders. Assuming the GRF is approved by UW decision makers, the revolving fund will be seeded with sufficient funding to generate future revenue to sustain the \$3.2 million in conservation projects going forward. Additional larger projects could be funded via debt.

Metrics

- Energy Use Intensity (EUI): energy consumed per year per gross square foot of conditioned space (weather and occupancy normalized). Campus reduction is measured against the baseline of 2020 EUI. Campus target as measured against Washington State Clean Buildings Code Annex Z.7.
- Net Savings (NS) (present value of lifetime utility cost avoided less the discount rate).
- Savings to Investment Ratio (SIR) (Net Savings divided by net capital investment).

ACTION:**Expand campus Meter Monitor O&M program**

Expand and fully fund the UW Facilities Meter Monitor Program. Hire a full time program manager, and modernize data collection technology. Formalize, document and begin automation of program business processes, measures and outputs. Track and report key performance indicators no less than quarterly.

Steps we will take in FY 2022

1. Operationalize the Meter Monitor Program's "MBCx process" in seven additional campus buildings. Replace the legacy Campus Energy dashboard. Implement the research and academic data portal tool in OSiSoft to greatly expand access to campus energy data.
2. Fund \$250k in on-going annual program operations & maintenance, and hire a Meter Monitor Program Manager to manage the MBCx process and new building integrations in 14 buildings by end of FY2022.


Responsible party

UW Facilities Campus Energy, Utilities and Operations

Statuses and linkages

The Meter Monitor Program is an extension of a American Recovery and Reinvestment Act legacy Smart Grid program. In addition to ensuring the persistence of utility costs avoided by the Action Implement Cost Effective Conservation Investments above, this Action is an early contributor to the Portfolio Management Strategy that is a UW Facilities strategic priority for FY2022. This Action will significantly improve UW Facilities operational and maintenance efficiency.

Financing

 Financing for this Action is currently funded by the electrical budget to meet state and local reporting requirements. Step 2 is not funded and will require a budgetary allocation from central administration.

Metrics

- Maintenance of net EUI reduction over time.
- Reduction of annual Operations and Maintenance cost, divided by work order cost of implementing target EUI outcome.

ACTION:**Develop a Demand Side Management (DSM) approach**

A significant untapped opportunity for conservation existing within the control of campus programs and academic units at the building use management and administration level. Building upon the existing 'Green Labs' program developed by UW Sustainability, the DSM will engage sustainability champions in our buildings to self organize for the purpose of raising awareness and modifying occupant behaviors that affect building energy consumption.

Steps we will take in FY 2022

1. Develop, publish and communicate: program overview, goals and guiding principles document; a building champion roles and responsibility guidance document; sign-up seven "pilot" facilities by close of FY22.
2. Develop program education materials plans and a program building level execution methodology. Develop communications plans with requirements. Launch beta test materials and plans in seven "pilot" facilities.

Responsible party

UW Facilities Campus Energy, Utilities and Operations

Statuses and linkages

Positive proactive communication with building occupants increases goodwill and opens doors to active communication and higher understanding. Empowering building occupants to actively modify wasteful behaviors builds trust and alignment of purpose. A strong engagement program will lead to greater campus support and alignment for future energy transformation decisions.

Financing

Funding requirements will be assessed and developed using experiences from the seven building "pilot" at the end of FY 2022. There is no additional funding needed for FY22.

Metrics

- EUI reduction per pilot building per month and in the future per year.



IX. 10% LESS SOLID WASTE BY 2025

Target Actions

- Divert compostable waste from recycling and landfill
- Implement low-waste campus kitchens
- Reduce single-use disposable items

Sustainability Plan guiding principles



Use
resources
responsibly



Decarbonize

Everything we throw away is something that we don't need. That may seem self-evident, but combined with life-cycle thinking it means an opportunity to reduce manufacturing emissions, energy consumption, transportation, and even raw materials extraction associated with whatever object we didn't need. "Reduce, reuse, recycle" remains a powerful hierarchy of solid waste management, but there are even more details of product and materials management, economics, and urban ecology that can receive both our research and operational attention.

ACTION:**Divert compostable waste from recycling and landfill**

The UW landfilled 4,812 tons of material in FY2019; the 2025 goal is to generate less than 4,332 tons annually. Based on the 2018 waste characterization study, we estimate that 19% of our landfilled waste is compostable paper and 14% is food waste. UW generates about twice as much compostable waste compared to recyclable waste. While UW recycles 63% of recyclable materials that are discarded, only 46% of compostable waste is composted on campus (48% of it is landfilled and 5% of it contaminates our recycling). The UW generated 1,933 tons of mixed recycling. Based on the same study, we estimate that the recycling is contaminated by 7% food waste and 6% compostable paper.

Recycling has been available in many forms on campus for decades but compost is relatively new. By focusing on increasing access to and awareness of compost on campus, the UW can not only reduce the amount of landfilled material and the corresponding carbon footprint, but also ensure our recyclable items are clean and recycled successfully.

Steps we will take in FY 2022

1. Increase compost capacity.
2. Increase outreach/awareness for proper waste sorting.

Responsible party

UW Recycling

Statuses and linkages

There are compost bins in every kitchen, dining area, and restroom in every building on campus. Most buildings have compost bins in lobbies, public areas and hallways as well, but there are still several that don't meet new waste infrastructure guidelines with expanded compost collection. UW Recycling currently advertises the importance of composting on digital boards in Residence Halls, Dining Halls and the HUB. UW Recycling also provides free training and resources about composting to all UW Seattle staff, faculty and students and can be leveraged for use by Bothell and Tacoma campuses.

Financing

UW Recycling's operating budget should cover the work of increasing awareness and improving infrastructure so people can compost rather than recycle/landfill their compostable material.

Metrics

- Compost rate/# of buildings with added composting facility (37 buildings in Seattle).
- Number of outreach events and number of attendees

ACTION:**Implement low-waste campus kitchens**

By FY2023, HFS will seek to have all UW Dining kitchens transition to low-waste by reducing waste volumes by 10%. Current kitchen waste levels are a result of over-production and over-purchasing due to a lack of robust historical data, analysis, and forecasting tools. Increased data creates more informed forecasting, which in turn allows UW Dining to more accurately estimate the volume and needs of patrons. HFS will take actions to increase the accuracy of these estimates which will ultimately result in a 10% reduction of over-production and over-purchasing, to be maintained in perpetuity.

Steps we will take in FY 2022

1. Identify all non-HFS dining locations.
2. Create training materials for low waste kitchens.
3. Provide training materials and meet with non-HFS dining leaders.


Responsible party

UW Recycling and Housing and Food Services

Statuses and linkages

Over-production and over-purchasing tracking is currently being manually facilitated within HFS Dining units with some limitations including but not limited to comprehensive cost tracking, production scheduling, and automated menu-driven ordering. Weekly inventory data is also being recorded via mobile inventory and is routinely reviewed for appropriate stock levels. In order to achieve automated data retention, tracking and analysis, HFS Dining must complete implementation of CBORD FSS within its dining units.

Financing

 Implementation of manual over-production and over-purchasing tracking necessitated a nominal investment and is currently being utilized in units. The purchase and implementation of weekly inventory occurred in fall of 2019. Implementation of the menu management software required to achieve low-waste in perpetuity will require a budget of approximately \$171,000, requested and approved in April 2019. These costs include software and technology investments as well as implementation consulting and staff training; additional costs will be reassessed as they arise.

Metrics

- Number of dining units provided information.

Waste Diversion Through Donation

Besides reducing our kitchen waste, we also have a plan for better handling the waste that we do have. Some high-quality food waste can avoid either landfilling or composting, and instead be donated to other organizations. 2019 food recovery for donation was 15,000 pounds (9,000 pounds from Housing & Food Services/Dining, and 6,000 pounds from UW Recycling's student moveout collection program). Our goal is to reach 16,000 pounds collected for donation by 2022.

ACTION:**Reduce single-use disposable items**

The University of Washington has partnered with the Post-Landfill Action Network for an Atlas Fellowship to complete a holistic assessment of the UW's waste reduction across the three campuses. With the report, the UW will have a better understanding and benchmarks of what systems we have in place and what systems are needed to reduce waste.

Steps we will take in FY 2022

1. Complete and review a tri-campus zero waste assessment report.
2. Share results with stakeholders and identify opportunities.

Responsible party

UW Recycling

Statuses and linkages

The zero-waste assessment will provide us information on our entire waste infrastructure, and the findings will inform our efforts to reduce single-use disposables, as well as other current and future Actions under this target.

Financing

UW Recycling's budget will include the work of reviewing the assessment report and sharing results with stakeholders.

Metrics

- After the assessment is completed, we will evaluate possible measures and determine metrics.



X. 45% REDUCTION OF GREENHOUSE GAS EMISSIONS BY 2030

Target Actions

- Electrify UW Transportation Services
- Plan to repower the Seattle campus
- Implement Campus Solar Plan

Sustainability Plan guiding principle



Decarbonize

Climate change is the environmental issue of our time. The UW is a world-class research center in climate-related topics; in fact climate change's centrality to our academic life is reflected in a Guiding Principle of this Sustainability Strategy. We're going to follow through on our sustainability commitment by embarking on a major energy planning process to drastically reduce the Seattle Campus district heating system's demand for fossil fuels, and reduce our dependence on utility energy with solar photovoltaic power on all our campuses.

This Target is relative to a 2005 baseline, for consistency with Washington State law. All other Targets in the UW Sustainability Plan are relative to a 2020 baseline.

ACTION:

Electrify UW Transportation Services



UW aspires to convert its fleet to all-electric (EVs) and hybrid electric vehicles (PHEVs) (with the exception of selected emergency vehicles), deliver a full complement of vehicle charging equipment for fleet and public use in campus parking facilities. Current opportunities to recoup charging costs are limited to parking permit fees and fleet rental agreements, though EV charging raises capital and utility costs.

The estimated 14 megawatts (MW) of installed solar capacity possible on UW transportation assets (parking lots) could produce approximately 14 gigawatt hours (GWhs) of electricity per year, if fully deployed, which is currently about 5 percent of Seattle campus electricity demand. Another 500 and 170 kW are available on Bothell and Tacoma lots, respectively.

Steps we will take in FY 2022

1. Target 50-70 vehicle replacements per year transitioning from ICE (internal combustion engines) to EV as market forces allow, pursuing new vehicle asset classes after initial prices decline to fleet and economy rates.
2. Implement charging infrastructure in concert with transition to EV and solar canopy installation, and develop a consolidated rate structure and implementation solution for parking with charging.
3. Implement a two-pronged strategy for solar canopy and EV charging installation in coordination with the Campus Solar Plan of utility scale systems based on available finance and small systems specific to existing user characteristics.


Responsible party

Transportation Services

Statuses and linkages

Analysis of the opportunity to electrify the UW Seattle fleet and parking services and capacity for parking to house solar canopies has been completed and a report will be released in June 2021. The same analysis has been applied to the Bothell and Tacoma campuses. There are linkages between these targets and actions, and the goal of reducing commuting to campus via single occupancy vehicles.

Financing

 The strategy to electrify UW Transportation Services is shown in Steps 1, 2, and 3. Step 1, though currently tied to the vehicle replacement schedule and reduced cost of ownership to UWT for EV in comparison to ICE, can accelerate as additional funds become available. Step 2 requires a review and development of a rate policy to recoup the cost of capital investment and electricity for charging. Step 3 capital investments and charging infrastructure are suitable for capitalization through the green revolving fund. Full buildout of 14 MW of solar requires an estimated total \$28 - \$30 million in capital expenditures plus an additional \$438,000 for electrical distribution upgrades. Besides the funding stream from electric surcharges, we forecast \$46-48 million in cost avoidance from vehicle fuels and utility payments.

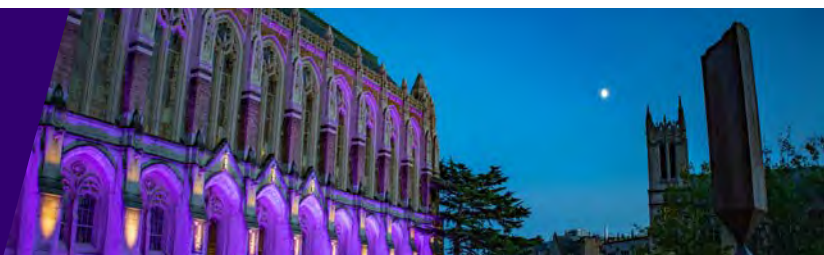
Metrics

Progress toward completion of the Action will be measured by:

- Number of UW fleet vehicles transitioned from ICE to either EV or PHEV.
- kW of charger-connected solar capacity.
- Number of parking spaces having charger access.
- A proposed rate structure and payment method for vehicle charging.

ACTION:

Plan to repower the Seattle campus



UW aspires to complete, by December 31, 2021, a Campus Energy phased strategic approach that outlines a pathway forward for a significant decarbonization of the Seattle campus by 2030, or earlier. Development of the plan will include key stakeholder involvement led by the Campus Energy Program Manager. During the process of creating the Campus Energy Plan, the Stakeholder team will consider options for evaluating technological and financially viable strategies for achieving the carbon reduction goals while maintaining reliable and cost effective service – including heat and steam sterilization – to the hospital and other campus buildings.

Besides technological innovation, this project will require financial innovation as well. Modernizing the Seattle campus district heating system will be among UW's largest capital projects to date, and multiple financing models need to be comparatively evaluated.

Steps we will take in FY 2022

1. Engage in the planning and design of the current 2021 maintenance and repair project intended to enhance the power plant reliability "Power Plant Phase 1 Infrastructure Renewal." Engagement to focus on evaluating options for reduced energy consumption.
2. Conduct a long term strategic planning summit with "key stakeholders" with an outcome defining an overall approach for a phased transition towards significant decarbonization of the Seattle campus heating & cooling plants by 2030.
3. Leverage the approach defined in strategic planning summit to scope and fund required consulting services, studies and/or preliminary design efforts for phases moving forward.

Responsible party


UW Facilities

Statuses and linkages

In March 2020, UW Facilities issued a Request for Information (RFI) to solicit ideas from experts around the country for planning, building, and financing a low-carbon energy system. These responses are currently being reviewed by the Energy Roadmap Team which includes support from the Engineering Services and UW Sustainability departments.

Several other universities have completed or launched similar projects. Stanford University recently completed a new combined heating and cooling plant that is perceived as a particularly successful example. The new Stanford plant, when combined with solar power procurement, reduced Stanford GHG emissions by about 72 percent from its peak levels.

Financing

 A thorough review of the engineering and financial options is needed before assigning a budget estimate to such a large scale project. UW is targeting development to start in 2023, with first phase completion in 2028.

Metrics

- Completion of each listed FY2022 Step shall serve as the measure of progress during FY2022.

ACTION:**Implement Campus Solar Plan**

Develop and implement a phased roll out of campus solar plans for UW Seattle, Tacoma, and Bothell campuses. On the Seattle campus, 173 out of 372 buildings are suitable for solar photovoltaics and could support 15 megawatts (MW) of capacity, or 15 gigawatt-hours (GWh) of electricity per year, which is equivalent to about 5 percent of campus electricity demand. (This is in addition to the 14 MW of solar potential on parking areas described in the action to Electrify UW Transportation Services.) At UW Bothell, 13 of the 28 buildings analyzed are suitable, for a capacity of 1.2 MW (with another 500 kW potential on garages and lots). At UW Tacoma, there are 18 out of 33 buildings suitable for a capacity of 1 MW (and about 180 kW in parking canopies). The Seattle campus currently has 6 rooftop arrays, while Bothell has 6 arrays, most of which are on transportation assets.

Steps we will take in FY 2022

1. Review and approve a Campus Solar Plan, with identified funding mechanisms, for developing solar assets on campus buildings by 2035. Anticipated completion: December 31, 2021.
2. Revise campus design guidelines to include solar and related infrastructure investments for new and existing buildings. Anticipated completion: March 31, 2022.
3. Install 1 MW per year on buildings and 1 MW per year as canopies on transportation assets. Anticipated completion: June 31, 2022 for year one and action is ongoing.


Responsible party

UW Resource Conservation in coordination with UW Solar

Statuses and linkages

Solar installations on UW campuses also reduce building energy usage intensity, and can be integrated into thermal systems for compounded savings. On the Seattle campus, solar energy reduces the peak load demand for electricity, buying time to make larger scale investments needed to decarbonize the power plant. UW hosts solar photovoltaics developed by the UW Solar Group, part of the UW Clean Energy Institute, on the Mercer A Apartments (35 kW), Alder Hall (50 kW), Elm Hall (25 kW), Maple Hall (25 kW), the Life Sciences Building (105 kW), in rooftop and solar shading fins). In addition, research and student projects have resulted in arrays on the IMA Building, Merrill Hall, Power Plant roof, and the Mechanical Engineering Building. University of Washington's Bothell campus also hosts 122 kW of solar photovoltaic, on the library building and parking garages.

Financing

 Solar, with reduced utility costs as returns on investment, fit the parameters for finance with a revolving fund. There is also potential for investments from local utilities, the U.S. Department of Energy, donors, or other parties. Current capital costs estimates are \$2-2.5 M per MW, which save 130 percent of these costs in avoided utility payments over the 25 years of the warranty.

Metrics

- Quarterly progress of completing campus solar plan and campus design guidelines.

SUSTAINABILITY IS IN OUR NATURE

Sustainability efforts are ongoing at the UW. **UW Sustainability** is a central resource office for information regarding activities, projects, initiatives, campus engagements and programs.

Visit **green.uw.edu** to stay up to date.

Keep informed on the Sustainability Action Plan FY22 quarterly progress by visiting:
green.uw.edu/dashboard.

We welcome your comments and feedback for the FY22 Plan.

Please send inquiries to:
sustainability@uw.edu

The online version of this and future Sustainability Action Plan documents, as well as any updates to elements of this plan will be posted at **green.uw.edu/plan**.

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