Climate Change Action Plan

Central Washington University

Land Acknowledgement

We acknowledge the land on which Central Washington University resides. It is the historic home of the Yakama people. The federally recognized Confederated Tribes and Bands of the Yakama Nation is made up of Klikitat, Palus, Wallawalla, Wanapam, Wenatchi, Wishram, and Yakama people.

The Yakama people remain committed stewards of this land, cherishing it and protecting it, as instructed by elders through generations. We are honored and grateful to be here today on their traditional lands. We give thanks to the legacy of the original people, their lives, and their descendants. This statement is a reminder that the land is not owned. It is, rather, a gift that is inherited. In taking responsibility for that gift, we must think of the seven generations—of how we will pass this gift forward and create a legacy worthy of our inheritance.

This statement should disrupt our usual ways of thinking and being in the world to help us think beyond ourselves to something bigger. We aspire to this new way of thinking and being in all that we do.

Letter from President Wohlpart

Dear CWU Community,

We find ourselves at an inflection point as a society, and as an institution, about what we can — and should — be doing to combat the existential crisis of climate change.

Every year, we are reminded about the negative environmental impacts caused by releasing more greenhouse gases into the atmosphere. Scientists have warned us for decades that, if we want to preserve the long-term health of our planet, we cannot sustain the same level of carbon emissions we have grown accustomed to since the Industrial Revolution more than a century ago.

After years of unheeded advice and delayed policy decisions, countries around the world — including our own — are now coping with the severe consequences of inaction in the form of catastrophic natural disasters, record-breaking heat, and rising sea levels.

Central Washington University refuses to stand idly by as our environment struggles to adapt to these unfortunate realities. We have decided as a university community to take short- and long-term actions about ways we can move forward as an institution and dramatically curtail our reliance on fossil fuels.

The Climate Change Action Plan (CAP) outlined in this piece offers a detailed look at how CWU plans to do our part to preserve the planet and its many precious resources for generations to come.

One of the goals described in our Core Value of Stewardship states that CWU will "promote sustainable practices and responsible stewardship of land and resources to support an ecologically healthy and socially just world, while respecting and honoring Indigenous peoples."

As we seek ways to ensure the long-term health of our communities — and, by extension, the planet — the CWU community has collectively decided to reduce our greenhouse gas emissions by 45% by the year 2030, and 70% by 2040, when compared to 2005 levels. Our plan also includes:

- The integration of geothermal energy modules to heat and cool university facilities
- Providing additional solar infrastructure
- The full electrification of the university's fleet of vehicles by 2040

- Greatly expanding the number of electric vehicle charging stations available on campus

This is an important moment for the entire higher education sector, and CWU is rising to the challenge by taking bold action to significantly reduce our carbon emissions over the next 15 years. We are proud of the concrete steps we are taking to reduce our reliance on fossil fuels, and we will continue to bolster our commitment to this goal with our Climate Change Action Plan.

Another key element of this enormous undertaking is to prepare current and future generations to do the same, and we are committed to doing whatever it takes. Our main objective is for every member of the CWU community to model these changes for the benefit of society as a whole. We look forward to working alongside each of you to meet these goals.

The future of our communities, and our planet, depends on us following through on these promises.

Sincerely,

A. James Wohlpart
President

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Central Washington University's Commitments to Addressing Climate Change:

45% greenhouse gas emission reductions by 2030 and 70% greenhouse gas emission reductions by 2040 (compared to 2005 levels); zero-carbon emissions no later than 2050.

Focus Area	Objective	Strategy
Energy Efficiency & Conservation	Achieve an energy use intensity (EUI) target of 102 and below for campus buildings overall by 2028.	Implement energy efficiency and conservation measures for all CWU buildings, resulting in significant EUI reductions and energy cost savings.
Building Infrastructure	Reduce campus-wide natural gas consumption by an average of 5-7% per year between 2024 and 2030.	Finalize a 15-year Decarbonization Plan no later than July 2025. The Plan will outline energy solution pathways to decarbonize CWU's heating and cooling infrastructure.
Transportation	Electrify all CWU campus fleet vehicles by 2040 and install at least 30 electric vehicle charging stations on campus by 2030.	Develop and implement a CWU Zero-Emission Fleet Transition Plan. Prioritize installation of EV charging stations at newly constructed buildings, facilities, and high-traffic areas on campus.
Purchased Electricity	Install over 4 megawatts of renewable, emission-free electricity on university-owned properties and spaces by 2030.	Develop and implement a campus-wide solar development plan, maximizing solar installations at parking lots, roofscapes, and underutilized properties.
Waste Diversion	Reduce and divert 25% of all waste generated on campus by 2030, compared to 2023 levels.	Develop and implement a CWU Waste Diversion Plan in partnership with CWU Facilities, Dining, and Surplus.
Transportation/ Commuter Emissions	Reduce vehicle miles traveled to, from, and around campus by CWU employees and students by 20% by 2030, in comparison to 2024 levels.	Build and/or enhance alternative transportation infrastructure that supports significant reductions in miles driven in single-occupancy vehicles by CWU students and employees.

Biodiversity & Water Conservation	Promote and institute sustainable landscape management and water conservation practices. Restore terrestrial and aquatic landscapes to increase biodiversity on campus.	Increased collaboration among several CWU Departments to develop and begin implementing a Campus Restoration Plan and a Water Conservation Plan by 2026.
Sustainable Procurement	Create and implement a Sustainable Purchasing Plan in 2025.	CWU Contracts & Purchasing develops and adopts criteria, policies, and guidelines that support, 1) sustainable purchasing of commodities, 2) life cycle cost analysis for products and systems, and 3) product and services evaluation by summer 2025.
Education & Curriculum	Integrate sustainability and climate change education across the university curriculum, co-curricular activities, and the campus culture to provide students with the knowledge, skills, competencies, and values necessary to shape an equitable and sustainable future.	Train and incentivize faculty members to incorporate sustainability into the curriculum. Develop a Sustainability Center to increase experiential and applied learning opportunities, leadership development opportunities, and sustainability programming on campus and in the community.
Climate Resilience	Implement a campus-wide Climate Resilience plan by 2030 in collaboration with the local community, which will minimize climate impacts and disruptions to the university and community.	Develop a CWU Climate Resiliency and Emergency Preparedness Plan that will bolster the institution's ability to withstand climate impacts and natural disasters.
Sustainable Investments	Diversify CWU's financial portfolio with more sustainable investments and integrate Environmental, Social, and Governance factors into the university's investment strategy.	Increase collaboration between university stakeholders managing financial investments and facilitate ESG reporting.

Executive Summary

Central Washington University's (CWU) new Climate Change Action Plan (CAP) is our roadmap to becoming a zero-carbon campus no later than 2050. The CAP focuses primarily on priorities, goals, strategies, and actions to be accomplished before the end of 2030. CWU is committed to reducing our greenhouse gas emissions by 45% by 2030 and 70% by 2040, compared to 2005 levels. CWU is aligning our climate pollution reduction goals with the State of Washington, which includes achieving net-zero emissions no later than 2050. The CAP includes clear objectives and strategies across 11 focus areas, including Scope 1, 2, and 3 emissions as well as sustainability education, climate resiliency, and university investments. Strategies to address emissions from refrigerants and CWU's Aviation Program are not included in this CAP. However, planning will be underway to reduce emissions from refrigerants and the aviation program before 2030.

CWU is required to submit an annual Greenhouse Gas Emissions Reduction Strategy Report to the Washington State Department of Commerce per the State Agency Climate Leadership Act. Additionally, CWU is required by Washington State law to submit a Decarbonization Plan (2023 House Bill 1390) no later than July 2025. The Decarbonization Plan will support planning and implementation efforts to decarbonize CWU's campus district energy system in order to meet the State Energy Performance Standard. This CAP builds a strategic foundation to ensure that CWU is in compliance with the state of Washington's climate laws. Key elements of the CWU CAP will be included within institutional planning efforts for the next several years, including CWU's Capital Master Plan and Capital Infrastructure Plan.

The CWU Board of Trustees approved CWU's new Vision and Mission statement in May 2022, and adopted CWU's new Institutional Strategic Plan in July 2023. Per CWU's Institutional Strategic Plan, we are committed to developing and implementing a university-wide Climate Action Plan, which will serve as a holistic roadmap to decarbonize campus-wide infrastructure and operations, develop impactful sustainability programming for the campus community, and prepare our students for successful careers as all sectors build a more sustainable and equitable future.

Vision: Central Washington University will be a model learning community of equity and belonging.

Mission: In order to build a community of equity and belonging, Central Washington University nurtures culturally sustaining practices that expand access and success to all students. **We are committed to fostering high impact practices, sustainability, and authentic community partnerships that are grounded in meaningful relationships.**

Core Value #3: Stewardship: Central Washington University advances environmental, social, and economic sustainability in ways that support an ecologically and socially just world, and that honor the Indigenous peoples who have resided here since time immemorial and who continue to reside here. We nurture our internal talent through professional development opportunities, coaching and mentoring, and accountability enacted with care and compassion.

Initiative 1.1: Develop and implement a comprehensive, university-wide Sustainability & Climate Change Action Plan, which incorporates environmental, social, and economic considerations into university operations, infrastructure, and academic programs in collaboration with the local community.

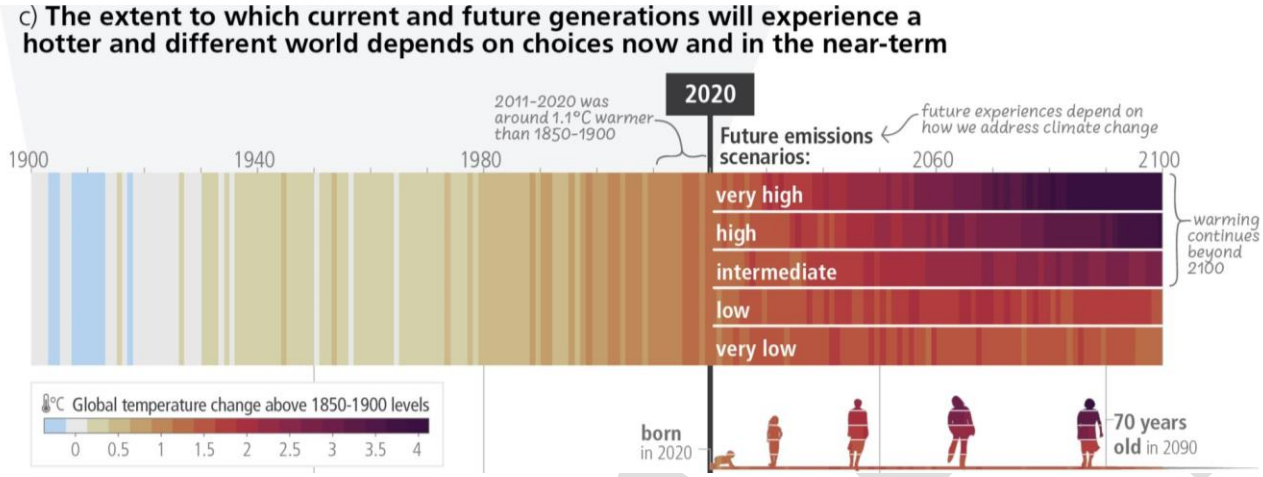
Initiative 1.2: Integrate sustainability into university-wide curriculum to provide students with the knowledge, skills, competencies, and values necessary to shape an equitable and sustainable future.

Introduction

The Intergovernmental Panel on Climate Change (IPCC) publishes scientific assessments on climate change and communicates the associated implications and future risks of a changing climate. According to the IPCC, human activities such as burning coal, natural gas, and oil have already transformed the planet at a pace and scale unmatched in recorded history. The 2023 IPCC synthesis report confirms that humanity has fundamentally and irreversibly transformed the Earth's system, primarily caused by the combustion of fossil fuels and significant deforestation.

In short, the vast majority of the global scientific community knows four things with very high confidence, 1) the Earth is warming, 2) warming is caused by human activities such as burning fossil fuels for energy, 3) human-caused warming is disrupting the Earth's entire climate, and 4) climate change poses extreme risks for humans.

Additionally, the United Nations' Paris Agreement, entered into force in November 2016, sets long-term goals for 195 members (194 states plus the European Union) of the United Nations Framework Convention on Climate Change (UNFCCC) to, "substantially reduce global greenhouse gas emissions to hold global temperature increase to well below 2°C above pre-industrial levels and pursue efforts to limit it to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change." As of the second half of 2023, global average air temperatures have already exceeded the 1.5 Celsius (2.7 degrees Fahrenheit) threshold since the dawn of the Industrial Revolution.



***Include footnote and source**

Current and future generations of students have a unique stake in how quickly institutions significantly reduce greenhouse gas emissions. Considering humankind has never been on this warming trajectory, climate mitigation and resiliency strategies implemented during the 2020's and 2030's will have profound impacts and consequences for the next several decades and potentially centuries.

CWU is committed to achieving the following objectives: 1) implementing climate mitigation strategies to achieve a zero-carbon campus no later than 2050, 2) building and instituting climate resiliency to withstand the shocks of a changing climate and warming world, 3) supporting frontline communities and producing equitable outcomes, and 4) equipping students, staff, and faculty with the knowledge, resources, and competencies to advance a healthy, equitable, and sustainable future.

CWU's CAP produces an ambitious, yet realistic roadmap to achieve the objectives listed above. After extensive engagement with the campus and local community, this plan outlines overarching goals, key performance indicators, objectives, strategies, and action steps to support CWU's commitment to reducing climate change impacts and ensuring a livable, equitable, and sustainable community for current and future generations.

CWU's Climate Change Action Planning Process & Engagement

For CWU to realistically achieve our overarching goal of becoming a zero-carbon campus no later than 2050 and reducing our greenhouse gas emissions by 45% by the end of 2030, campus-wide ownership and commitment to the implementation of CWU's CAP is essential. In 2023, the CWU Sustainability Office coordinated five campus-wide events and provided dozens of presentations to hundreds of CWU students, staff, and faculty during the CAP development process. Representatives from CWU Sustainability and Capital Planning and Projects also served on the Steering Committee for the City of Ellensburg's Sustainability and Energy Plan in 2023. CWU Sustainability, Capital Planning and Projects, Dining Services, and Housing and Residence Life departments as well as City of Ellensburg Utilities engaged in monthly climate and sustainability planning sessions to ensure that all entities were in alignment with the goals, objectives, strategies, and actions steps listed in this plan.

CWU Sustainability coordinated and facilitated five campus-wide Sustainability Forums in 2023 and early 2024. The purpose of the Sustainability Forums was to increase awareness of the urgency regarding climate change and broader sustainability issues and galvanize the campus community to provide input, guidance, and feedback during the developmental stages of CWU's CAP. As a result of the campus Sustainability Forums, key pillars, overarching goals, focus areas, strategies, and priority actions were identified, refined, and embedded within this CAP. The first Sustainability Forum, which occurred during Earth Week of April 2023, provided a high-level overview of the science behind climate change, the climate-related risks threatening the local community and region, and potential high-impact solutions for the university. Additionally, attendees at the Sustainability Forum provided insight and guidance on which climate mitigation and sustainability-related strategies should be prioritized and implemented over the next several years.

CWU Sustainability also presented to over 25 classes, student groups, leadership teams, and associations during the development of the plan. The objective of this extensive outreach and engagement campaign was to increase awareness of CWU's commitment to accelerating sustainability and climate change initiatives and provide opportunities for the campus community to share guidance and input as the university works to transform our infrastructure, operations, and culture amid a changing climate. After the plan's completion in March 2024, outreach and engagement will continue to ensure the campus community is playing a critical part in the implementation of the strategies and actions listed in the CAP.

CWU Climate Change Action Plan Vision & Key Pillars

Vision of CWU's Climate Change Action Plan: *CWU advances environmental, social, and economic sustainability in ways that support an ecologically healthy and socially just world, and that honor the Indigenous peoples who have resided here since time immemorial. The CWU CAP will promote sustainable practices and responsible stewardship of land and resources through incorporating environmental, social, and economic considerations into university operations, infrastructure, and academic programs in collaboration with the local community.*

As a result of the campus-wide Sustainability Forums, classroom presentations, surveys, and listening sessions, the following five key pillars of CWU's CAP were developed. The key pillars are not hierarchical; each pillar is equally important and serves as a foundational reference and guide for the implementation of the strategies and actions steps listed within each focus area of the CAP.

***Key Pillars of the CWU Climate Change Action Plan**

Per the key pillars of the CAP, the CWU campus community advocates for decarbonizing university infrastructure and operations, transitioning away from natural gas consumption, and installing renewable electricity (e.g., solar) on available spaces owned by the university.

The campus community also strongly encourages an in-depth evaluation of each strategy to ensure that our efforts to decarbonize campus do not unintentionally create unneccesary and disproportionate burdens to marginalized, historically-excluded communities. Additionally, the CWU community advocates for seeking pathways to produce more equitable outcomes as the campus builds out sustainability and decarbonization initiatives.

The third pillar of the CAP is campus and community collaboration. The campus community advocates for collaborating outside the confines of the CWU Ellensburg campus and working with the broader community throughout the implementation process. While many of the objectives and strategies listed in this CAP focus on decarbonizing the infrastructure and operations owned by the university, CWU is committed to collaborating with our university centers and leveraging partnerships with the City of Ellensburg, Kittitas County, Yakama Nation, local community groups, state agencies, and other higher-ed institutions to ensure a more collaborative response to climate change. CWU's CAP and the City of Ellensburg's recently adopted Sustainability & Energy Plan paves the way for more fruitful collaboration between the university and the local community for the next several years.

The campus community recognizes the critical need for the university to infuse and embed sustainability education and climate competencies across the curriculum, to increase sustainability literacy and empower future generations of climate and sustainability practitioners. For every sustainability and decarbonization initiative or project, there will be educational opportunities available for CWU students, staff, faculty, local community members, and other entities throughout the region. For example, during the design process of CWU's North Academic Complex — which will be heated and cooled using geothermal technology — efforts will be made to develop an educational dashboard outlining how the geothermal system operates and the role it plays in signficantly reducing carbon emissions.

The fifth and final key pillar of the CAP stresses the importance of compiling key performance indicators for each of the focus areas listed below to ensure that the objectives are clearly defined and measurable. The CAP will require a diligent approach to collecting accurate, campus-wide greenhouse gas, energy, transportation, waste,

water and curriculum-related data for the purpose of measuring progress and prioritizing strategies and action steps. CWU will also likely invest in SIMAP, a platform for higher education institutions to collect and measure Scope 3 emissions. CWU Sustainability, in coordination with CWU Capital Planning and Projects and other department leads, will be communicating and publishing CAP progress reports to the campus community on annual basis. CWU's annual progress reports will inform the campus community and leadership of the progress, successes, and challenges associated with each of the objectives and strategies listed in the CAP.

Incorporating Equity into the Climate Change Plan

It has been extensively documented that marginalized and historically excluded communities, including low-income communities, communities of color, and indigenous people, are disproportionately impacted by climate change and pollution. Additionally, systemic environmental racism— defined as intentional siting and installation of polluting, extractive, and/or hazardous waste facilities in close proximity to communities of color and indigenous people — is well-documented and has occurred in Washington and throughout the nation for the past several decades, producing inequitable health impacts to marginalized communities. Incorporating equity and inclusion within the University's strategic approach to climate mitigation and resilience is necessary to ensure that all campus and local community members have equitable access to a healthy, safe, and resilient environment, and are protected from the adverse and disproportionate impacts of climate change, environmental hazards, and structural and systemic racism.

The CAP will not be successful unless equity and inclusion are incorporated into CWU's climate mitigation, resilience, and sustainability education strategies. As CWU implements multiple initiatives and projects to achieve the objectives listed across 11 focus areas, it is critical for project managers to be inclusive, transparent, and collaborative with the campus community. Each of the 11 focus areas within the CAP include equity considerations, for the purpose of identifying potential burdens to vulnerable community members and evaluating opportunities to produce more equitable outcomes. Additional considerations and strategies to produce more equitable outcomes will be adopted as CWU Sustainability collaborates with the CWU Office of Diversity, Equity, and Inclusivity, Diversity and Equity Center, Equity Services Council, Wildcat Essentials Coalition, Capital Planning and Projects, and the Basic Needs Center, along with an expanding network of campus partners. CWU Sustainability and other departments will seek partnerships with the Confederated Tribes and Bands of the Yakama Nation, Yakama Forest Products, APOYO, HopeSource, the City of Ellensburg, and local community

groups as the university transforms, decarbonizes, and strengthens our infrastructure, operations, and programming amid a changing climate and warming world.

Between 2024 and July 2025, CWU Sustainability and Capital Planning and Projects will be collaborating with McKinstry Consulting and Cascadia Consulting to develop a Community Engagement Plan. The Community Engagement Plan will outline CWU's approach to transparency and engagement for capital projects, climate action initiatives, and new sustainability programs. Additionally, the Community Engagement Plan will utilize best practices for outreach and leverage screening tools that integrate environmental, demographic, and health disparity data to evaluate the needs of marginalized and historically excluded community members. As a result, extensive and meaningful community engagement efforts will be underway to inform, consult, involve, collaborate with, and empower marginalized and historically excluded campus community members throughout the implementation of the CAP.

History of Sustainability & Stewardship at CWU

Fall 2007 – President McIntyre signs Presidents' Climate Commitment

Spring 2010 – CWU staff develop the institution's first Climate Change Action Plan

Fall 2017 – CWU Sustainability Council and first CWU Sustainability Café launched

Fall 2018 – CWU Wildcat Neighborhood Farm established

July 2019 – CWU receives an AASHE STARS Bronze Certification

Fall 2019 – Sustainability Minor and Certificate Launched

October 2019 – CWU President Gaudino announces a 5% carbon reduction goal

January 2020 – CWU hires our first Sustainability Coordinator

February 2020 – CWU designated as a Tree Campus Higher Education University

July 2022 – CWU receives an AASHE STARS Silver Certification

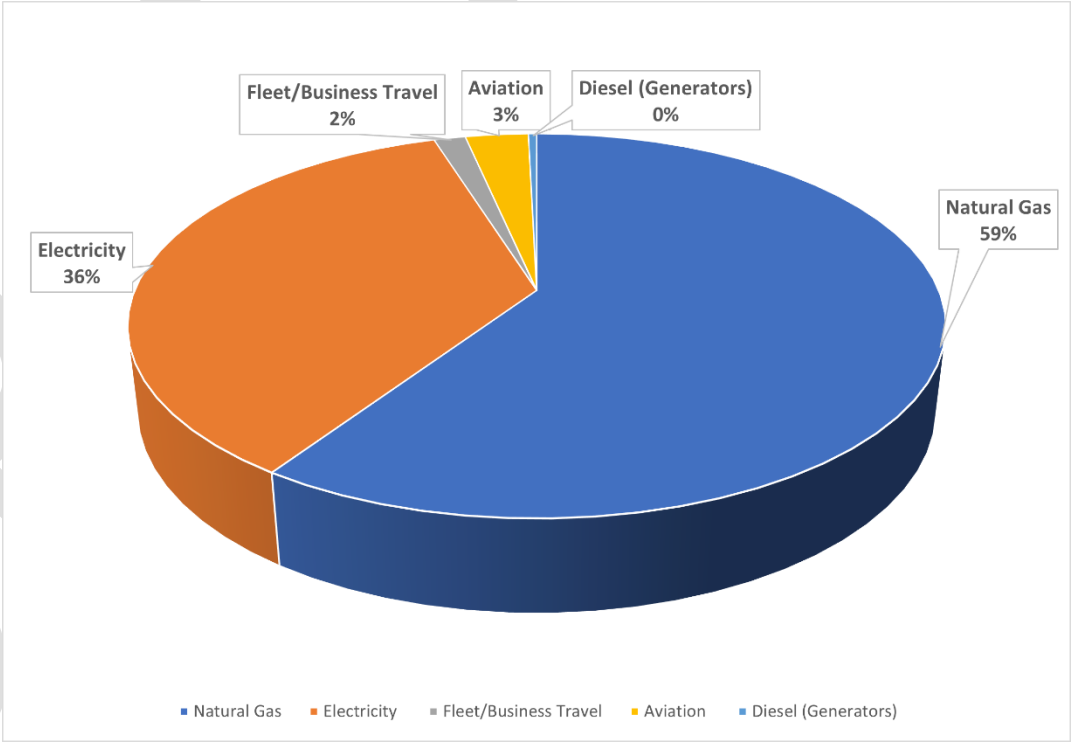
December 2022 – CWU Sustainability Officer is hired, directly reporting to the CWU Senior Vice President and Chief Financial Officer

July 2023 – CWU's Institutional Strategic Plan includes a commitment to developing and implementing a Climate Change Action Plan.

March 2024 – CWU develops and completes our new Climate Change Action Plan

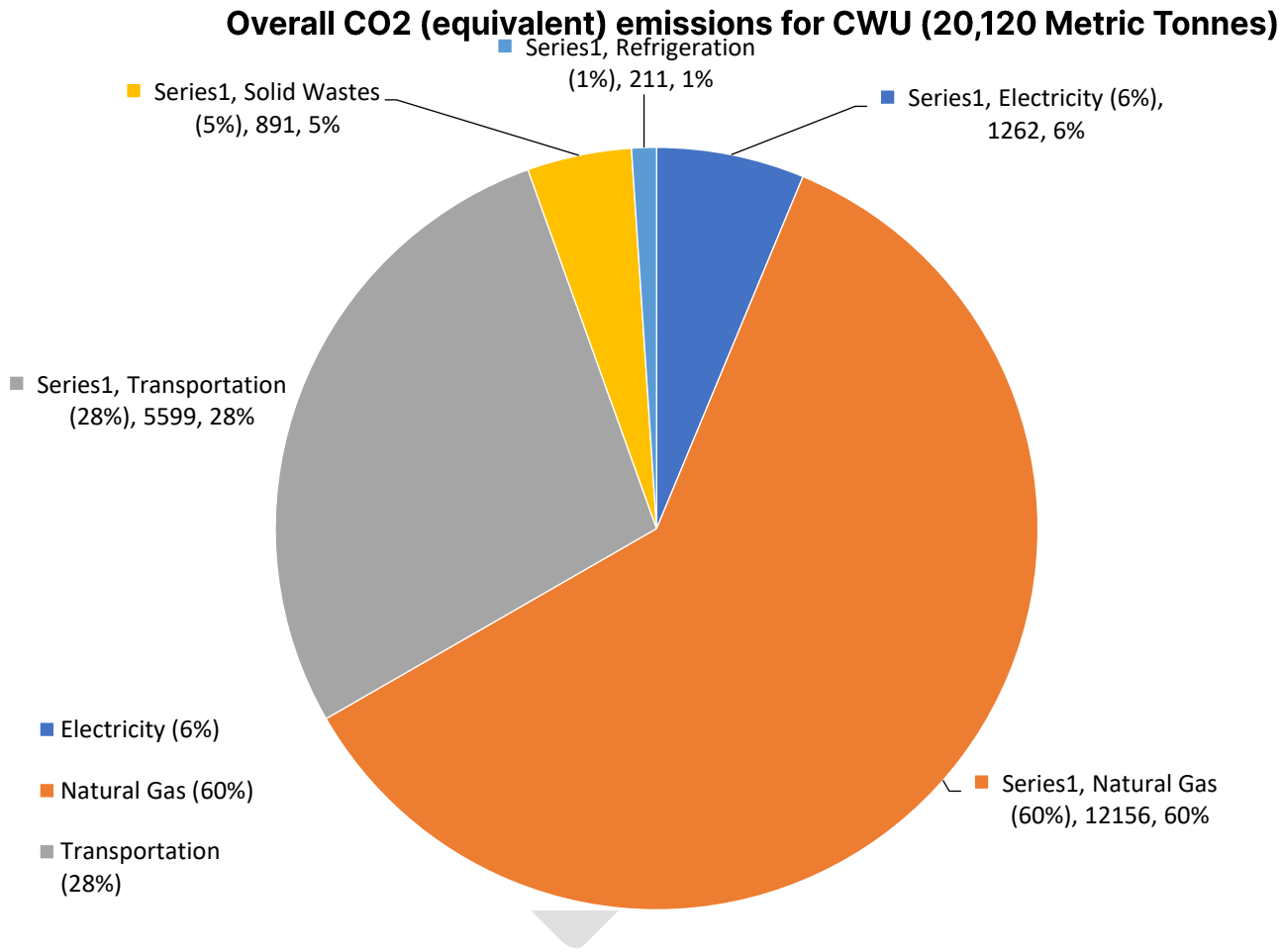
CWU 2022 Greenhouse Gas Inventory – Scope 1 & 2 Emissions

CWU's 2022 greenhouse gas (GHG) inventory highlights the primary sources of carbon dioxide and methane emissions from the buildings, infrastructure, vehicles, diesel powered generators, and aviation program owned by CWU. Natural gas consumption, diesel powered generators, aviation, and fleet/business travel all fall under Scope 1 emissions. Scope 2 emissions include purchased electricity. Approximately 95% of CWU's Scope 1 and 2 emissions are attributable to heating, cooling, and powering campus-owned infrastructure, revealing which sectors should be listed as priorities for decarbonization.



This 2022 GHG inventory does not include Scope 3 emissions. Scope 3 emissions can be attributed to material waste generated on campus being sent to the local landfill, upstream/downstream emissions associated with goods and services, and commuter emissions (e.g. staff, students, and faculty commuting round trip to campus with internal combustion vehicles). There are currently 15 categories listed under Scope 3 emissions, which are the most difficult to measure and control. This CAP includes three Scope 3 emission categories: waste, commuter emissions, and procurement as a result of the feedback received from the campus community. The remaining Scope 3 emission categories will be addressed utilizing SIMAP software and will be included in overall sustainability strategic planning at CWU between 2024 and 2025.

CWU 2005 Greenhouse Gas Inventory – Scope 1 & 2 Emissions



Scope 1 Strategies

- **Energy Efficiency & Conservation**
- **Building Infrastructure**
- **Transportation (CWU Fleets & Electric Vehicle Charging Infrastructure)**

Energy Efficiency & Conservation

Summary: Increasing energy efficiency and conservation at buildings owned by CWU will be an integral first step toward achieving a zero-carbon campus. As of 2023, CWU owns and manages 44 academic and auxiliary buildings over 20,000 square feet in size. CWU has a total of 19 Tier 1 buildings (building size of 50,000 square feet and more) and 25 Tier 2 buildings (building size of 20,000 square feet and more). Buildings slated for demolition before 2030 will not be included within the scope of this CAP.

CWU is required to comply with the State of Washington's Clean Building Performance Standard (2019 House Bill - 1257) and 2023 House Bill 1390), which sets requirements for decarbonization planning for campus district energy systems to meet the Washington State Energy Performance Standard. Historically, CWU has consistently invested in large-scale energy efficiency measures, as evident by the university's building footprint increasing and our overall energy consumption decreasing simultaneously over the past two decades. As of 2024, CWU has a campus-wide energy use intensity (EUI) of 116. Washington State's Clean Building Performance Standard requires CWU to achieve a campus-wide EUI of 102 by 2028. CWU selected McKinstry Consulting to lead the development of CWU's 15-year Decarbonization Plan, which will be submitted to Washington State no later than July 2025. Deliverables within the Decarbonization Plan will include strategies to systematically advance energy efficiency measures for CWU's 44 Tier 1 and Tier 2 buildings.

The CWU Capital Planning and Projects Department (CPP) and the CWU Sustainability Office will collaborate with McKinstry Consulting to assess CWU's current energy metering system for steam, natural gas, chilled water, and electricity, and provide recommendations for immediate implementation to collect baseline data and add energy metering devices at 44 academic and auxiliary buildings on the Ellensburg campus. CWU will prioritize energy efficiency and conservation measures to significantly reduce energy consumption at 44 of CWU's largest buildings, in compliance with Washington State's Clean Building Performance Standard and HB 1390.

Objective(s): Achieve an EUI target of 102 and below for campus buildings overall by 2028.

Projected GHG Emission Reductions (low, medium, high impact): High Impact

Strategy: Install metering systems and implement energy efficiency and conservation measures for 44 of CWU's largest buildings, which will result in significant EUI reductions and energy cost savings before 2030.

Action Steps:

- CWU student peer-to-peer educators/sustainability ambassadors educate campus community on energy efficiency and conservation best practices and help embed sustainability within campus culture.
- McKinstry develops a metering gap analysis report and a metering project directive report for the purpose of assessing CWU's current metering system for steam, natural gas, chilled water, and electricity. McKinstry provides recommendations for immediate implementation of collecting baseline energy data.
- CWU Capital Planning and Projects and Facilities Management lead the multi-phased installation of energy metering systems at CWU's 44 Tier 1 and Tier 2 buildings. Energy metering systems will be installed at remaining smaller buildings after Tier 1 and Tier 2 buildings are completed.
- McKinstry provides Rough Order of Magnitude pricing for existing building commissioning of Tier 1 and Tier 2 buildings.
- CWU Capital Planning and Projects and CWU Facilities Management Department institutes a Facilities Services Resource Management Plan, which includes guidelines and establishes general operating standards for energy and resource consumption in occupied buildings at CWU.
- Depending on funding, costs, and potential investment returns, a combination of the following energy efficiency measures will likely include, but not be limited to:
  - Retrocommissioning, a building energy optimization process, for the purpose of improving how building equipment and systems function together.
  - Investments in lighting fixtures and controls upgrades; steam trap maintenance; steam coil replacements; new exhaust fans; new zone dampers and control valve replacements; heat recovery run around loops; exhaust retrofits; low-flow fume hoods; building envelope and insulation upgrades; window replacements; DHW heat pumps for residence halls. Investment in high-impact energy efficiency measures at CWU's Science 1 building, which has an EUI of 245 as of 2024, the largest energy user on campus.
- Establish a $1 million CWU Green Revolving Loan Fund to finance energy efficiency projects with demonstrable energy cost savings.

Department Lead(s): CWU Capital Planning and Projects Department

Initial and Ongoing Costs: $40 million in energy efficiency measures. $200-250 million for deferred maintenance.

Funding Opportunities: Washington State Office of Financial Management – Capital and Operation Budget Requests, CWU Green Revolving Loan Fund; WA, Clean Building Performance Standard Early Adopter Incentive Program, Inflation Reduction Act - Energy Efficient Commercial Building Deduction

Phasing Plan: Energy metering installation and energy efficiency measures will begin with Tier 1 buildings, followed by Tier 2 buildings. Energy efficiency measures will be completed at all remaining buildings below 20,000 square feet after Tier 1 and Tier 2 buildings are completed in 2027 and 2028.

Equity Considerations: Energy efficiency upgrade projects supported through the CWU Green Revolving Loan Fund shall be identified and prioritized for CWU residential halls and student housing to ensure students have access to comfortable living conditions.

Co-Benefits: Measurable and significant energy savings and costs, reduction of natural gas consumption, lower building energy and electricity loads, reduced upfront costs for renewable electricity and energy projects, and improved living conditions and health and wellbeing for the campus community.

Building Infrastructure

Summary: CWU's main campus includes nearly 200 buildings encompassing over 4.6 million square feet. Washington State's climate change policies are requiring institutions and communities to transition away from natural gas consumption and invest in building electrification and zero-carbon heating technologies. Approximately 60% of CWU's greenhouse gas emissions can be attributed to using natural gas for heating buildings across campus. CWU owns and manages a district energy system (also referred to as a central plant), which consists of three water-cooled chillers and four steam hot water (HW) boilers that provide the majority of the current heating and cooling for campus buildings.

CWU Capital Planning and Projects (CPP) partnered with third-party consultants to begin assessing geothermal potential for campus. The Ellensburg aquifer provides CWU a unique opportunity to invest in and install open-loop ground source heat pumps throughout the entire campus without causing environmental damage from nonrenewable resource extraction. As a result, CWU can significantly reduce greenhouse gas emissions by installing geothermal infrastructure and transitioning away from natural gas consumption.

CWU's stand-alone, open-loop ground source heat pump system at the North Academic Complex and Geo-eco Center is the University's first step towards implementing geothermal technology to heat and cool buildings and reduce natural gas consumption on campus. CWU selected McKinstry Consulting to lead the development of a 15-year Decarbonization Plan (per the requirement of WA State HB1390) and propose one energy solution (e.g., geothermal) to transition away from natural gas consumption. The Decarbonization Plan will provide a playbook to retrofit and connect campus buildings to heat pump systems and achieve a zero-carbon campus.

Objective: Reduce campus-wide natural gas consumption by an average of 5-7% per year between 2024 and 2030.

Projected GHG Emission Reductions: High Impact

Strategy: Finalize a 15-year Decarbonization Plan no later than July 2025. The plan will outline energy solution pathways to decarbonize CWU's heating and cooling infrastructure.

Action Steps:

CWU Decarbonization Plan in partnership with McKinstry will include the following milestones:

- Steam distribution recommendations memo, including recommendations to reduce distribution losses throughout the existing steam network.
- McKinstry Consulting proposes three energy solutions to CWU CPP and Sustainability.
- CWU Executive Leadership Team and CPP select a campus-wide energy solution proposed by McKinstry consulting.
- McKinstry provides a Rough Order of Magnitude (ROM) for each of the facilities connected to the campus district heating and cooling system for the scope of work required to implement the selected energy solution.
- A Capital Budget request proposal is developed for the selected energy solution (e.g., potentially geothermal).
- A 15-year Decarbonization Plan is developed in partnership with McKinstry by July 2025, ensuring compliance with the requirements of HB 1390.
- Institute a long-term HB 1390 Compliance Strategy within CWU's Capital and Infrastructure Master Plan.

Additional action steps include:

- Solicitation of engineering resources to assist with attaining the objectives listed in the Decarbonization Plan.
- Prioritize decarbonized energy solutions for Capital Budget Requests and utilize ESCO projects whenever possible.
- Plan for and install low-temperature, hot water infrastructure to support the transition to zero carbon heating and cooling for all campus buildings.

Department Lead(s): CWU Capital Planning and Projects

Initial and Ongoing Costs: $300 million

Funding Opportunities: Biennium Capital and Operating Budget Requests - WA State Office of Financial Management; Inflation Reduction Act – Elective Pay Provisions; WA State Department of Commerce; Federal grants.

Phasing Plan:

- January 2024 – July 2025: CWU CPP and Sustainability collaborate with McKinstry Inc. on an 18-month, multi-deliverable project to ensure compliance with HB 1390.
- May 2024: CWU selects primary energy solution to decarbonize built infrastructure across campus.
- August 2024: Detailed analysis of selected energy solution and capital budget request completed.
- September 2024: CWU CPP submits Capital Budget Request for 2025-2027 biennium.
- May 2025: 15-year Decarbonization Plan is finalized and submitted to the WA Department of Commerce no later than July 2025.
- May 2025: Energy Management and Operations and Maintenance Plan completed.

Equity Considerations: Continued increase of natural gas rates and heating costs; Ensure campus community members are included in the planning process for large-scale fuel-switching projects; Increase access to comfortable living conditions for students.

Co-Benefits: Improved air quality; Educational opportunities for campus, local community and region; More efficient and modern energy systems on campus; Significant long-term cost savings against natural gas rate increases.

Transportation

Summary: This section addresses both CWU's vehicle fleet and electric vehicle (EV) charging infrastructure and does not include transportation emissions resulting from CWU staff, faculty, and students commuting to and from the university nor does it include airline travel emissions from staff, faculty, and students (scope 3). Transportation is the largest source of greenhouse gas emissions in the State of Washington (approximately 40%). The acceleration of zero-emission vehicles (ZEV) and EV charging infrastructure is a critical part of Washington's commitment to achieving 95% greenhouse gas reductions by 2050.

As of 2023, CWU owns and maintains 209 vehicles within our campus fleet, including the motor pool and department-owned vehicles. Of the 209 vehicles, CWU owns one electric vehicle and 16 hybrid vehicles. Four primary barriers facing ZEV adoption include affordability, charging infrastructure, performance (e.g., range anxiety), and availability. As battery and vehicle technology continues to evolve, CWU will strategically and systematically replace all gas and diesel vehicles with low-to-zero emission vehicles by 2040. As CWU replaces our fleet with ZEVs by 2040, we will also invest in electric vehicle charging infrastructure across campus to support and keep pace with the adoption of ZEVs.

Objective: Replace all gas and diesel-powered campus fleet vehicles with zero-emission vehicles by 2040 and install at least 30 electric vehicle charging stations on campus by 2030.

Projected GHG Emission Reductions: Low Impact

Strategy: Develop and implement a CWU Zero-Emission Fleet Transition Plan. Prioritize installation of EV charging stations at newly constructed buildings, facilities, and high traffic areas at campus.

Action Steps:

- A CWU Zero-Emission Fleet Transition team assembled in 2024 begins developing a plan to replace gas and diesel-powered fleet vehicles with ZEVs and install at least 30 electric vehicle charging stations across campus by 2030.
    - The team develops strategies to optimize and right-size fleet vehicles as is reasonably practicable.
    - Develop and enforce a no-idling policy for CWU owned, campus fleet vehicles.

- The plan will include strategies to pursue bulk-buying opportunities and purchase on average 12 ZEVs per year between 2024 and 2040. As CWU gas and diesel-powered vehicles approach end –of-life, hybrid and ZEVs options will be prioritized for new fleet purchases, supported by available rebates.
- Secure funding to install dual-head, level 2 EV charging stations in high traffic areas and in close proximity to CWU campus fleets, including Jongeward, Student Union Recreation Center, McIntyre Music Building, Nicholson Pavilion, and Tomlinson Stadium.
- CPP installs three new EV charging stations on average for new buildings constructed on campus. Five EV charging stations are installed at the North Academic Complex.

Department Lead(s): CWU Facilities Management in coordination with CWU Sustainability, Auxiliary Enterprises, Athletics, Admissions, Campus Police, and Contracts, Purchasing, and Surplus.

Initial and Ongoing Costs: $20 million for adoption of 200 zero-emission vehicles and $600,000 to install 30 dual-head, level 2 electric vehicle charging stations on campus.

Funding Opportunities: Washington State Department of Ecology, Washington State Department of Commerce, Inflation Reduction Act elective provisions

Phasing Plan: In 2024 and 2025, a Zero-Emission Fleet Transition Team will develop a plan to strategically decarbonize CWU's campus fleet by 2040 and install 30 EV charging stations by 2030. Between 2025 and 2030, CWU will seek to replace 50 gas powered passenger cars and light-duty trucks with ZEV options, including all-electric, plug-in hybrid electric vehicles, and/or fuel cell electric vehicles. Addressing medium- and heavy-duty trucks and vehicles will likely take place after 2030.

Equity Considerations: Incorporate measurable criteria and institute best practices to ensure ZEV purchases and EV charging infrastructure do not negatively impact marginalized campus and community members. Site EV charging infrastructure through meaningful campus and community engagement. Purchase ZEVs from manufacturers and suppliers who employ proven safe, ethical, and fair labor practices.

Co-Benefits: Reduction of local air pollution, increased public health benefits, and lower fuel costs/improved fuel economy.

Scope 2 Strategies – Electricity

Summary: CWU's main campus purchases and imports our electricity from the City of Ellensburg Municipal Utilities. The City of Ellensburg's electricity fuel mix is 95% carbon free, predominantly comprised of hydroelectric power. The Clean Energy Transformation Act (CETA) requires Washington State to achieve a 100% clean electricity supply by 2045. CWU submits an annual GHG inventory to the Washington State Department of Commerce (WA Commerce). According to the GHG inventory criteria established by WA Commerce, CWU's electricity mix accounts for 36% of the University's Scope 1 and 2 emissions. This is a signal for the institution to invest in and install on-site renewable electricity across campus in order for CWU to achieve its GHG emission reduction goals.

Recognizing that central Washington experiences an average of 200+ sunny days per year, building rooftops, parking lots, and university-owned properties serve as valuable real estate for turning sunlight into electricity for campus and potentially the local community. Additionally, as the local community and region continues to transition away from natural gas use and moves toward building and transportation electrification, there is a need for substantial investment in local renewable electricity generation. As of 2023, CWU consumes approximately six megawatts of electricity on campus during peak periods of operations. As the university moves forward with investing in geothermal infrastructure, fleet electrification, and EV charging infrastructure, CWU's electricity consumption will continue to increase. The following objectives, action steps, and phasing plan will be prioritized before 2030, with the intent of installing 8-10 megawatts of renewable electricity before 2040.

Objective: Install over four megawatts of renewable, emission-free electricity on university-owned properties and spaces by 2030.

Projected GHG Emission Reductions: Medium Impact

Strategy: Develop and implement a campus-wide solar development plan, maximizing solar installations at parking lots, roofscapes, and underutilized properties.

Action Steps:

- CWU considers requiring solar installations on all new building construction projects.

- In partnership with the City of Ellensburg Municipal Utility and support from third-party consultants, develop a CWU Solar Project Development Plan by 2025 for the purpose of exhausting all opportunities to generate on-site solar on university-owned properties.
- Assess and catalog site opportunities (e.g., buildings, parking lots, CWU-owned properties) and collect electricity data for all CWU buildings.
- Calculate cost savings and payback periods for on-site solar investments.
- Develop and issue request for proposals for on-site solar generation.
- Partner with third-party experts to design and construct solar arrays on multiple roofscapes and parking spaces at CWU and identify renewable energy credit opportunities.
- Seek guidance to ensure projects are feasible, cost-effective, and supported by the local community.
- Leverage funding opportunities and rebates for solar installations on campus.
- Train staff on operations and maintenance of photovoltaic systems.
- Explore Power Purchase Agreements and local community solar projects in partnership with the City of Ellensburg Municipal Utilities by 2025.
- Explore opportunities to install a microgrid on campus to increase resiliency.
- Collect, evaluate, and report out data and progress associated with solar development on an annual basis.

Department Lead(s): CWU Sustainability and Capital Planning and Projects

Initial and Ongoing Costs: $10,000,000 for four megawatts of renewable electricity installations.

Funding Opportunities: Biennium Capital and Operating Budget Requests - WA State Office of Financial Management; Washington State Department of Commerce grants; Inflation Reduction Act – Elective Pay Provisions/Investment Tax Credits; CWU fundraising campaigns; Low-interest loans; Federal grants.

Phasing Plan: Design a CWU Solar Project Development Plan by 2025, which will chart a pathway to exhausting all opportunities to generate on-site renewable electricity; Assess and catalog site opportunities and collect electricity data; Develop on-site solar request for proposals; Leverage funding opportunities and rebates for solar installations on campus; Explore Power Purchase Agreements and local community solar projects in partnership with the City of Ellensburg Municipal Utilities by 2025. Invest in solar projects between 2024 and 2030.

Equity Considerations: Institute a transparent process for designing and developing renewable electricity projects. Engage the Ellensburg community as the University explores potential sites for renewable electricity projects. Create educational and vocational opportunities for campus and local community.

Co-Benefits: Long-term utility cost savings; Resilient, reliable, and self-sufficient power generation; Vocational training and new employment opportunities.

Scope 3 Strategies

- **Waste Diversion**
- **Transportation/Commuter Emissions**
- **Biodiversity and Water Conservation**
- **Sustainable Procurement**

Waste Diversion

Summary: CWU is the largest generator of waste in Kittitas County and has unique opportunities to significantly divert that waste from the county landfill by advancing recycling and composting initiatives over the next several years. A wide range of campus waste, ranging from food to products purchased and discarded by the campus community is hauled away to the landfill instead of being reused, recycled, or composted, accounting for powerful methane emissions entering into the Earth's atmosphere.

On a global scale, nearly eight billion people currently require 1.75 planet Earths for the resources consumed and waste generated across the world. It is projected that human civilization will use nature two times faster than planet Earth's biocapacity can regenerate by 2030. It is estimated that if everyone consumed as many resources as the average US citizen, we would need four planet Earths to sustain everyone's lifestyles around the world. We only have one planet Earth.

After extensive campus community engagement through CWU Sustainability Forums and classroom presentations, students were consistently surveyed on which strategies and focus should be prioritized in the CCP. Waste diversion has been identified as a top 3 priority strategy for the University. CWU Sustainability, Dining Services, Wildcat Farm, Facilities Management, and Auxiliary Enterprises underwent extensive planning efforts to identify the following waste diversion strategies and action steps:

Objective: Reduce and divert 25% of all waste generated on campus by 2030, compared to 2023 levels.

Projected GHG Emission Reductions: Medium Impact

Strategy: Develop and implement a comprehensive CWU Waste Diversion Plan in partnership with CWU Facilities Management, Dining, Wildcat Farm, Surplus, and several other departments.

Action Steps:

- Develop a comprehensive, campus-wide waste tracking and audit checklist.
    - Identify and quantify primary sources of waste, including pre- and post-consumer food waste.
    - Conduct quarterly pre-consumer and bi-annual post-consumer food waste audits.

- Invest in and install a 30’ x 10’ industrial composter at the CWU Wildcat Farm, which will enable the university to divert up to 1,000 lbs. of food waste from the landfill on a daily basis.
    - Hire an equipment operator to maintain and manage the composter at the Wildcat Farm and institute pickups of pre-consumer food waste from the SURC kitchen, Panda Express, Tunstall Commons, and Student Village no later than 2026.
- Increase donations and engagement at CWU Surplus.
- CWU Sustainability facilitates post-food waste diversion trainings in partnership with CWU Dining and other departments. Develop and provide training on waste diversion and sorting to ensure limited contamination of recycling and compost receptacles.
- Student and new employee orientation includes information and resources regarding waste diversion and proper waste disposal.
- CWU Student Ambassadors (peer-to-peer educators) collaborate with CWU Housing, Residential Hall Association, Wildcat Farm, and the Basic Needs Center to increase education and engagement regarding waste diversion and food recovery.
- Collaborate with CWU Dining and food providers on campus to reduce single use plastics and increase capacity to utilize reusable ware.
- Institute education and engagement activities to increase knowledge of waste impacts on the environment.
- Install standardized waste receptacles that are clearly labeled (e.g., landfill, recycling, and composting) for campus community members.

Department Lead(s): CWU Sustainability, Facilities Management, Dining Services, Wildcat Farm, Auxiliary Enterprises, and Surplus

Initial and Ongoing Costs: $300,000 - $1,000,000

Funding Opportunities: WA State Department of Commerce, Washington State Legislature – Capital and Operating Budget Requests, federal and non-federal grants.

Phasing Plan: A comprehensive, campus-wide Waste Diversion Plan will be completed no later than 2026. Planning is already underway to design and implement pre-consumer food waste reduction efforts across campus. By late 2025/early 2026, CWU will install an industrial composter at Wildcat Farm to begin accepting pre-

consumer food waste. Post-consumer food waste initiatives will commence after pre-consumer food waste is adequately addressed. It is anticipated that a full-scale food waste diversion program will be operational by 2030.

Equity Considerations: Implement an equitable planning and implementation process to ensure waste diversion opportunities are affordable, accessible, reliable, and fairly distributed throughout the campus community.

Co-Benefits: Reduced landfill costs, increased collaboration with campus and local community, increased education and awareness of waste reduction, energy savings, and natural resource conservation.

Transportation/Commuter Emissions

Summary: CWU has an important role to play in reducing emissions from staff, students, and faculty commuting in single-occupancy gas- or diesel-powered vehicles to and from the university. Reducing commuter emissions and changing commuter behaviors are some of the biggest challenges associated with addressing climate change, especially considering the rural environment of Kittitas County, where employees and students must rely on single-occupancy vehicles to commute to the Ellensburg campus. The University's strategies to reduce commuter emissions will require utilizing a new data management system to measure vehicle miles traveled by employees and students, and exploring solutions that will offer practical, convenient, low-cost, and accessible alternative modes of transportation. Walking, bicycling, micromobility (e.g., electric-powered scooters or e-bicycles), and public transit are examples of alternative transportation.

This section outlines the initial planning and implementation efforts that build and/or enhance alternative modes of transportation for the campus community. Addressing commuter emission reductions will require a multi-phased, coordinated effort in partnership with the campus and local community, including the City of Ellensburg. Fortunately, there are already local and regional resources available for campus and local community members. Local and regional alternative transportation resources include the fare-free Central Transit bus system, Flixbus, Yakima-Ellensburg Commuter, Bellair Airporter, and a bike-friendly infrastructure. CWU is committed to collaborating with local partners and the campus community to further build out and encourage alternative forms of transportation for students and employees.

Objective: Vehicle miles traveled to, from, and around campus by CWU employees and students is reduced by 20% by 2030, in comparison to 2024 levels.

Projected GHG Emission Reductions: Medium Impact

Strategy: Build and/or enhance alternative transportation infrastructure that supports significant reductions in miles driven in single-occupancy vehicles by CWU students and employees.

Action Steps:

- Utilize a Scope 3 emission tracking platform (e.g., SIMAP) to begin measuring and tracking vehicle miles driven by CWU employees and students.

    - Review past CWU commuter behavior surveys and issue new campus-wide surveys to begin measuring total vehicle miles driven by students and employees.
- Develop a commuter emission reduction team, comprised of campus and local community members to explore alternative transportation options.
    - Coordinate and facilitate CWU Sustainability Forums and engage with the broader campus community to identify and evaluate commuter behavior patterns as well as barriers, opportunities, and solutions related to alternative transportation. Explore incentives to increase alternative transportation use across campus.
    - Collaborate with the City of Ellensburg on increasing Central Transit ridership and accessibility.
    - Collaborate with CWU Centers to explore and enhance alternative transportation opportunities for students.
    - Prioritize planning efforts that will reduce vehicle miles driven by employees and students living within a two-mile radius of the Ellensburg campus.
    - Explore practical opportunities to invest in alternative transportation options (e.g., bike-sharing, bike rentals, micromobility) that will encourage students and employees to not drive from one area of campus to another area of campus on a daily basis.
- Support Student Sustainability Ambassadors and peer-to-peer educators in promoting and encouraging commuter emission reduction behaviors across the campus community.

Department Lead(s): CWU Sustainability with the support of Campus Housing, Residential Hall Association, and Facilities Management.

Initial and Ongoing Costs: To be determined depending on which decisions and investments are made to build out and enhance alternative transportation options for campus community members. Annual SIMAP subscription ranges from $500 - $750 to track vehicle miles driven and other Scope 3 emissions.

Funding Opportunities: Washington State Department of Transportation, grants.

Phasing Plan: Within 12 months of the adoption of this plan, efforts will be made to begin tracking vehicle miles driven by campus community members and forming a commuter emission reduction team. Between 2025 and

2030, there will be a multi-phased and multi-pronged approach to building out and/or enhancing alternative transportation infrastructure.

Equity Considerations: Assess and overcome barriers to entry for alternative transportation; implement an equitable planning and implementation process to ensure alternative transportation options are affordable, accessible, reliable, safe, and fairly distributed throughout the campus community.

Co-Benefits: Reduced air pollution, improved public health and well-being, traffic and congestion reductions, and fuel cost savings for commuters.

Biodiversity & Water Conservation

Summary: Biodiversity represents the total variety of life on planet Earth, and the network of biodiversity expressed by biological interactions in ecosystems provides many benefits to human societies such as: 1) provisioning services, 2) regulating services, 3) cultural services, and 4) supporting services. These services are collectively called ecosystem services, which provide tangible benefits to society that are typically not monetized.

Globally, biodiversity is in crisis as human populations expand and intensify resource use. Two key factors leading to biodiversity reduction are land development and climate change, which alters the physical determinants of the physiological functions of life. The UN Climate Action Report documents how reducing biodiversity loss is a key driver in fighting climate change. Biological systems are key "sinks" of carbon dioxide, meaning they can pull carbon out of the atmosphere that remains after fossil fuel combustion and store it in biological material, slowing the growth of carbon dioxide levels.

By expanding native biodiversity improvements into CWU's CCP, we can increase our ability to mitigate carbon dioxide emissions while updating the campus landscape to be more compatible with native species, thus minimizing our impact on regional biodiversity and improving the campus aesthetic to promote mental health and psychological well-being. Biodiversity improvements can also have secondary effects by reducing fertilizer and pesticide inputs required to keep campus grounds in a state that does not match our ecoregion.

Projected GHG Emission Reductions: Low Impact

Strategy: Increased collaboration among CWU Grounds, Facilities Management, Biology Department, Wildcat Farm, Sustainability, and Capital Planning and Projects to develop and begin implementing a Campus Restoration Plan and a Water Conservation Plan by 2026.

Action Steps:

Campus Restoration and Stormwater Management Plan:

- Compile a team of department leaders and biology students to initiate planning efforts.

    - To support future campus restoration, CWU Sustainability works collaboratively with representatives from Facilities, Grounds, and the CWU Biology Department to highlight areas where sustainable landscaping and/or restoration projects could improve habitat conditions for the species of our region.
- Compile existing biodiversity into one repository to serve as baseline for the species known to use campus.
- Increase the use of native plants in landscaping, especially those that provide forage to bird and insect species native to our region.
- Incorporate creative stormwater management to create habitats on campus in appropriate areas.
- Employ methods that ensure over 50% of campus grounds are managed without the use of inorganic fertilizers and chemical pesticides.
- Create a monitoring plan and perform repeated surveys to measure changes in species using our campus.

Water Conservation Plan:

- Quantify and evaluate potable and irrigation water usage at CWU.
- Develop measurable water conservation goals for campus.
- Prioritize tactics that address the largest sources of water leaks on campus.
- Identify and employ additional water conservation practices for landscaping, residential halls, and large water users on campus.

Department Lead(s): CWU Grounds and Facilities Management, CWU Biology Department, Sustainability.

Initial and Ongoing Costs: $400,000 for metering irrigation water. Staff time for developing the Campus Restoration Plan and Water Conservation Plan.

Funding Opportunities: Washington State Legislative Funding – Capital or Operating Budget Requests, WA Department of Ecology, and the Environmental Protection Agency.

Phasing Plan: Department leads begin meeting during the Summer/Fall Quarters of 2024 to initiate coordination efforts for the CWU Campus Restoration Plan and Water Conservation Plan. Both plans are completed by summer 2025. Implementation occurs in late 2025.

Equity Considerations: Department leads consider potential unintended consequences or disproportionate impacts to historically excluded and marginalized campus and local community members. Project leads seek an inclusive process during the planning and implementation phases.

Co-Benefits: Improved campus aesthetic, increased biodiversity, sustainable landscape practices employed from a grounds/maintenance perspective, and increased water conservation, carbon sequestration, and soil quality.

Sustainable Procurement

Summary: CWU purchases roughly $100 million in goods and services on an annual basis. CWU possesses the purchasing power to help reduce GHG emissions associated with purchasing and obtaining goods and services for the university. Unfortunately, most goods and services do not include the social costs of carbon (e.g., damages to society resulting from emitting carbon dioxide). Infusing sustainability-related criteria within CWU procurement policies will help reform system-wide purchasing processes, help alleviate risk, and reduce upstream emissions with respect to procuring goods and services for the university.

Objective: Create and begin implementing a Sustainable Purchasing Plan by 2025.

Projected GHG Emission Reductions: Medium Impact

Strategy: CWU Contracts and Purchasing develops and adopts criteria, policies, and guidelines that support, 1) sustainable purchasing of commodities, 2) life cycle cost analysis for products and systems, and 3) product and services evaluation by summer 2025.

Action Steps:

- CWU Sustainability, Contracts, Purchasing and Surplus Office, Auxiliary Enterprises, and other departments begin collaborating on developing a policy on sustainable purchasing and procurement, which will encourage institutional purchasing practices that are socially just, support human and ecological health, and promote economic well-being.
- The team develops, publishes, and institutes ethical, equitable, and sustainable purchasing/procurement criteria to be applied when evaluating:
  1) Chemical-intensive products and services, 2) consumable office supplies and cleaning/janitorial products, 3) furniture and furnishings, 4) food and beverage service providers, 5) garments and linens, 6) professional service providers, 7) information technology products and services, 8) promotional products (SWAG), 9) landscaping products, and 9) transportation (e.g., campus fleet) and fuels

Department Lead(s): CWU Contracts, Purchasing and Surplus Office, Facilities Management, Dining Services, Wildcat Shop

Initial and Ongoing Costs: Funding for one full-time equivalent position to manage and measure the impacts of CWU's Sustainable Procurement Plan.

Funding Opportunities: N/A

Phasing Plan: Sustainable Purchasing team begins to draft sustainable procurement/purchasing guidelines and policies in 2024. Emissions tracking associated with CWU procurement of goods and services begins in 2024/2025. New CWU sustainable procurement/purchasing policies are implemented in 2025.

Equity Considerations: CWU Sustainable Procurement/Purchasing policies and guidelines are aligned with CWU's diversity, equity, and inclusion values and goals, wherever possible and applicable. CWU seeks to prioritize spending on university goods and services in partnership with underrepresented entities, including minority and women-owned businesses as well as emerging, small, local businesses.

Additional Strategies

Education & Curriculum

Summary: A primary function of universities is to educate students, and universities are uniquely positioned to prepare students to understand and address climate and other sustainability challenges. Incorporation of sustainability into education and the curriculum helps train future leaders and workers in creating a more sustainable future. Climate change education is critical to raise awareness and capacity to support climate change mitigation and adaptation. More broadly, sustainability education helps prepare students to support sustainability, including the United Nations' 17 Sustainable Development Goals, which span major sustainability challenges including climate change, global poverty and inequality, natural resource depletion, and environmental degradation. Having sustainability education incorporated across the university helps ensure that sustainability education is comprehensive, includes diverse topics, and provides students with a broad understanding of sustainability.

Objective: Integrate sustainability and climate change education across the university curriculum, co-curricular activities, and the campus culture to provide students with the knowledge, skills, competencies, and values necessary to shape an equitable and sustainable future.

By 2030:

- Provide incentives for faculty to integrate sustainability into the curriculum and provide ongoing multidisciplinary training to support faculty integration of sustainability in the curriculum.
- Increase the number of departments offering a sustainability course from 80% to 100%.
- Increase the percentage of sustainability courses from 14% to 20%
- Increase the percentage of students graduating from a program that requires an understanding of sustainability from 18% to 25%
- Develop a Sustainability Center that brings together students, faculty, staff, and the community to collectively advance sustainability knowledge and address critical sustainability challenges.

Strategy: Train and incentivize faculty members to incorporate sustainability into the curriculum. This may include program and course learner outcomes, syllabi, modules, or specific lessons. Develop a Sustainability Center to increase experiential and applied learning opportunities, leadership development opportunities, and sustainability

programming on campus and in the community, all of which are critical to building sustainability skills, values, and competencies, and preparing future sustainability leaders.

Action Steps: Create a faculty-led effort to train and incentivize faculty to incorporate sustainability into the curriculum through professional development opportunities including the Piedmont/Ponderosa Model, which is a national model for faculty development and curricular innovation around sustainability. The expanded sustainability in the curriculum professional development initiative will aim to increase the number of departments offering sustainability courses, and the percentage of students graduating with an understanding of sustainability. Develop a Sustainability Center that will empower students, faculty, staff, and the community to address critical issues related to sustainability and climate change and provide employment opportunities for students to serve as Sustainability Ambassadors.

Department Lead(s): CWU faculty-led *Sustainability in the Curriculum Team* for sustainability in the curriculum. Sustainability Center for sustainability programming and co-curricular activities.

Initial and Ongoing Costs: Sustainability in the curriculum professional development workshops ($20,000/year); Sustainability Coordinator to support sustainability education and programming ($xx/year); Sustainability Ambassadors to support student peer-to-peer education ($xx/year); development and operation of a Sustainability Center.

Funding Opportunities: WA State Legislation, Federal and non-federal grants, CWU Foundation

Phasing Plan: Ongoing sustainability in the curriculum professional development workshops will begin in 2024. Hiring of a Sustainability Coordinator and Sustainability Ambassadors by fall 2024 will increase sustainability programming and peer-to-peer education. The Sustainability Center will be launched by fall 2025 or 2026.

Equity Considerations: Students from all backgrounds and academic programs are provided with sustainability in the curriculum learning opportunities. Paid student positions through the Sustainability Ambassador programs remove financial barriers to participation in sustainability efforts.

Co-Benefits: Educate and train the future generation of sustainability and climate practitioners and leaders. Students are more competitive in the workforce, as many employers are looking for employees with sustainability knowledge and competencies.

Climate Resilience

Summary: As of the second half of 2023, global average air temperatures have already exceeded the 1.5 degrees Celsius (2.7 degrees Fahrenheit) threshold since the dawn of the Industrial Revolution. If these global average air temperature levels continue to rise unabated, it will be increasingly difficult for humanity to avoid the severe, physical consequences of warming that threaten local communities and ecosystems.

According to the Fifth U.S. National Climate Assessment, the Pacific Northwest is already experiencing negative impacts caused by human-caused climate change. As a result of climate change and global warming conditions, the Pacific Northwest will continue to experience rising temperatures, more frequent and severe heat waves, reduced snowpack, diminishing stream flows, high-severity wildfires, post-fire flood impacts, flooding, and more intense precipitation events. These impacts threaten physical infrastructure, regional agricultural systems, natural ecosystems, water availability and quality, hydropower capacity, and public health. Unfortunately, climate impacts are not evenly distributed. Marginalized and historically excluded communities are disproportionally impacted by these climate change and environmental impacts. Therefore, it is imperative for institutions and local communities to not only reduce climate warming emissions, but also implement climate adaptation and resilience strategies. Climate adaptation and resilience strategies aim to prepare institutions and local communities to withstand the shocks of extreme weather events and natural disasters fueled by a warming and changing climate.

CWU is not immune to the social, environmental, and economic ramifications of a warming climate. Climate resilience planning and implementation will help CWU alleviate potential climate-related damages facing the most vulnerable campus community members, the institution, and the local community.

Objective: Implement a campus-wide Climate Resilience Plan by 2030 in collaboration with the local community, which will minimize climate impacts and disruptions to the university as a result of high-severity wildfires, drought, power outages, flooding, extreme heat, and severe weather events.

Strategy: Develop a CWU Climate Resiliency and Emergency Preparedness Plan that will bolster our ability to withstand the shocks of climate impacts and natural disasters.

Action Steps:

- Conduct a “Climate Change Risks, Needs, and Vulnerability Assessment”, which will help evaluate where and how the institution is vulnerable to climate change impacts and determine the critical needs of marginalized and underserved campus communities.
- Coordinate climate resiliency research, planning, and implementation efforts in partnership with City of Ellensburg, Kittitas County, and local and regional partners.
- Align CWU climate resilience planning and implementation efforts with Washington State’s Climate Resilience Strategy, which prioritizes environmental justice and focuses on addressing climate change risks and vulnerabilities.

Department Lead(s): CWU Sustainability, Capital Planning and Projects, Facilities Management Division, Academic Departments

Initial and Ongoing Costs: $200,000 for the Climate Change Risks, Needs, and Vulnerability Assessment and Plan; Projected costs to support resilient infrastructure (e.g., battery storage replacing diesel-powered generators) is to be determined but will be included in the updated version of this plan.

Funding Opportunities: Climate Resiliency Planning and Preparedness grants from WA Department of Ecology and WA Department of Commerce; federal grants.

Phasing Plan:

- Utilizing the most recent climate science data, conduct a Climate Change Risks, Needs, and Vulnerability Assessment in partnership with the campus and local community.
- Integrate assessment results into CWU climate resiliency and emergency preparedness planning.
- Explore updating institutional policies to better reflect climate resiliency and preparedness planning and implementation.
- Evaluate and implement cost-effective climate resilience measures for the purpose of managing risks, safeguarding the campus and local community, and absorbing and recovering from climate impacts.
- Begin implementing climate resilience initiatives before 2030, including bolstering climate-related emergency preparedness and communications planning.

- To manage the risk of sustained power outages, secure funding for clean energy storage, located specifically at CWU-owned buildings which provide emergency resources and shelter during natural disaster events.

Equity Considerations: Ensure planning efforts anticipate and meet critical needs and prioritize emergency preparedness for vulnerable campus community members. Prioritize regional resilience actions that advance social equity and include local and Indigenous knowledge.

Co-Benefits: Reduced risks to public health and well-being; increased capacity to absorb and recover from sustained power, heating, and cooling outages; reduced upfront costs and impacts associated with responding to natural disasters; increased nature-based solutions create new greenspaces; adoption of self-sufficient, clean energy storage infrastructure.

Sustainable Investments

Summary: This section addresses environmental, social, and governance (ESG) aspects of CWU university and foundation investments. CWU's total investment pool exceeds $60 million, and other university committees are actively developing policies to manage these investments with sustainability in mind. ESG is a framework commonly used to assess organizational commitments to sustainability and ethical practices. The environmental pillar looks at how an entity or institution impacts the environment, including climate change and greenhouse gas emissions, pollution and waste management, resource usage and conservation, and biodiversity and habitat protection. The social pillar examines how an entity interacts with its stakeholders, including employees, customers, communities, and suppliers. The governance pillar focuses on a entity's leadership and decision-making processes.

Climate change is the defining challenge of our time and ESG investing prioritizes entities with strong environmental practices. This helps steer capital towards solutions that combat climate change and build a greener future for all. Organizations with robust ESG practices often demonstrate better governance, risk management, and employee relations. This translates to greater resilience in the face of economic and social challenges, ultimately leading to more stable and reliable returns for investors.

For CWU, ESG investing isn't just about financial returns; it's about aligning university investments with our mission, vision, and values. The CWU Council on Investor Responsibility (CIR) and the Finance and Audit Committee of the CWU Foundation Board, are developing policies to manage CWU's investments with ESG considerations taken into account. CIR meetings are open to the campus community for input on the university's investments, and university stakeholders can engage in discussion on CWU's investments at Sustainability Forums.

Objective: Diversify CWU's financial portfolio with more sustainable investments and integrate ESG factors into the university's investment strategy.

Projected GHG Emission Reductions: Medium Impact

Strategy: Increase collaboration between university stakeholders managing financial investments; facilitate ESG reporting; increase campus stakeholder engagement with university investments.

Action Steps:

- Have CIR representatives meet with the Finance and Audit Committee of the CWU Foundation Board.
    - Discuss broader university investment strategy with focus on sustainability.
- Obtain ESG performance of our investments, analyze them and report.
- Develop and adopt ESG investment policies and have them approved by the Board of Trustees.
- Consider negative and positive screens on investment (positive screens prioritize companies leading in ESG, while negative screens exclude those lagging in ethical practices or harming the environment).

Department Lead(s): CWU Council on Investor Responsibility, and Finance and Audit Committee of the CWU Foundation Board

Initial and Ongoing Costs (if applicable): ESG database(s) (10-30k annually).

Phasing Plan: Academic Year 2023-2024: Elect policies for ESG investing

- Academic Year 2024-Ongoing:
    - Actively manage university investments with ESG considerations taken into account.
    - Improve ESG performance of university's investments.
    - Develop additional positive and/or negative screens for university investments.
    - Enhance reporting on university investments.

Equity Considerations: Increase member diversity on the CIR committee. Consider diversity-related issues in university investments.

Co-Benefits: A sustainable investment portfolio becomes a living classroom, providing students with real-world examples of ESG principles in action. This can be integrated into course curriculum, research projects, and internships, enriching academic and professional development.

Leading the way in green finance attracts positive attention and strengthens the university's reputation as a forward-thinking institution committed to social responsibility. This can attract top talent, students, and donors, boosting overall community engagement and pride. Investing in environmentally responsible companies often

aligns with long-term financial stability. Companies with strong ESG practices tend to demonstrate better risk management and resource efficiency, potentially leading to more reliable returns and even cost savings.

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Key Terms

- **Association for the Advancement of Sustainability in Higher Education (AASHE):** AASHE empowers higher education faculty, administrators, staff and students to be effective change agents and drivers of sustainability innovation.
- **Biodiversity:** Short for biological diversity, biodiversity is the variety of all living things in the world or in a particular habitat or ecosystem.
- **Climate Justice:** *Acknowledges climate change can have disproportionately harmful social, economic, and public health impacts on disinvested populations (e.g. marginalized and historically excluded populations). (Yale Climate Connections)*
- **Climate Mitigation:** Efforts and measures to reduce or prevent greenhouse gas emissions from entering the Earth's atmosphere. Mitigation efforts also include the decarbonization of infrastructure and operations of a given entity.
- **Climate Resilience:** *The ability to prepare for, recover from, and adapt to climate change-related impacts, including more frequent and severe weather events, prolonged droughts, high severity wildfires, and extreme heat. (Center for Climate and Energy Solutions)*
- **Diversity, Equity, and Inclusion:** Justice, equity, diversity, and inclusion are all core to CWU's values and mission to increase access to higher education for everyone regardless of identity. At CWU we work to ensure everyone's voice is not only heard, but recognized and valued. CWU consistently strives to provide a safe, welcoming, and forward-thinking institution for all employees, students, and community members.
- **Earth Charter:** *A document with sixteen principles that drive a global movement towards a more just, sustainable, and peaceful world. (Earth Charter)*

- **Environmental Justice:** *The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations, and policies. (U.S. EPA)*
- **Fossil Fuels:** *An energy source formed in the Earth's crust from decayed organic material. Conventional fossil fuels include petroleum, natural gas, and coal. (US Energy Information Administration Glossary)*
- **Geothermal Energy:** *Geothermal energy is heat energy from the earth – Geo (earth) + thermal (heat). Wells, ranging from a few feet to several miles deep, can be drilled into underground reservoirs to tap steam and very hot water that can be brought to the surface for use in a variety of applications, including electricity generation, direct use, and heating and cooling. (US Office of Energy Efficiency and Renewable Energy)*
- **Greenhouse Gas Emissions:** *Greenhouse gases trap heat and make the planet warmer. Human activities are responsible for almost all of the increase in greenhouse gas emissions in the atmosphere over the last 150 years. The largest source of greenhouse gas emissions from human activities in the United States is from burning fossil fuels for electricity, heat, and transportation. (US EPA)* The most prevalent and major greenhouse gases include carbon dioxide, methane, nitrous oxide.
- **LEED Buildings:** *Leadership in Energy and Environmental Design (LEED) provides a framework for healthy, highly efficient, and cost-saving green buildings, which offer environmental, social, and governance benefits. (US Green Building Council)*
- **Net-Zero:** A target of completely negating the amount of greenhouse gas emissions produced by human activity, to be achieved by reducing emissions and implementing methods of absorbing carbon dioxide from the atmosphere.
- **Renewable Energy:** Energy that is produced from sources such as geothermal, solar, and wind, which are naturally replenished and do not emit greenhouse gas emissions during operation.
- **Scope 1 Emissions:** Greenhouse gas emissions from sources that are owned or controlled by the university. University-owned infrastructure and assets including vehicles, equipment, stationary sources (e.g., campus district energy system/central steam plant), and fugitive emissions from refrigeration are examples of Scope 1 emissions.
- **Scope 2 Emissions:** Greenhouse gas emissions resulting from the generation of electricity, heat, or steam purchased by the university. Purchased electricity, heating/cooling, and steam are examples of Scope 2 emissions.
- **Scope 3 Emissions:** Greenhouse gas emissions from sources not owned or directly controlled by the university but related to university activities. Examples of Scope 3 emissions include transmission and distribution losses (electricity), university air travel, employee and student commutes, investments, contracted solid waste, contracted wastewater, and use of sold products. There are currently 15 categories that fall under Scope 3 emissions. Scope 3 emissions are the most difficult to quantify, measure, and manage.

- **Sustainability:** Sustainability addresses "meeting the needs of the present generation without compromising the ability of future generations to meet their own needs" (UN Brundtland Commission, 1987), and includes three pillars: environment, economy and equity.
    - **Environmental Sustainability** includes conserving natural resources and protecting global ecosystems, now and in the future.
    - **Economic Sustainability** supports long-term economic prosperity without negatively impacting social, environmental, and cultural aspects of a community.
    - **Equity/Social Sustainability** relates to the fair treatment and involvement of all people. All people should have similar rights and opportunities, and have their basic needs met to maintain an acceptable quality of life. Inter-generational equity balances meeting current needs while also considering the needs of future generations.
- **Sustainability Tracking, Assessment and Rating System (STARS):** A transparent, self-reporting framework for over 600 colleges and universities to measure their sustainable performance via the Association for the Advancement of Sustainability in Higher Education (AASHE).
- **Sustainable Procurement:** *Ensuring that the goods, products, and services a higher education institution purchases are as sustainable as possible, with the lowest environmental impact and most positive social results (United Nations Development Program).*
- **United Nations Sustainable Development Goals:** *The Sustainable Development Goals are the blueprint to achieve a better and more sustainable future for all. (United Nations Sustainable Development Goals)*
- **Waste Diversion:** *Minimizing solid waste generation through source reduction, recycling, reuse, or composting. Waste diversion reduces disposal costs, the burden on landfills, and reduces methane emissions (US EPA).*

To access additional information regarding sustainability and climate change solutions at Central Washington University, please visit cwu.edu/sustainability or email sustainability@cwu.edu.