

CLIMATE ACTION PLAN

2024



BELLEVUE
COLLEGE



Cover Photo: Bellevue College students mountain bike through Puget Sound Energy's Wild Horse Wind Farm, as part of the 2023 Fall Sustainability Series, in partnership with the Office of Sustainability and the BC Health & Wellness Center



**OFFICE OF
SUSTAINABILITY**



Land Acknowledgement

We pause to acknowledge that Bellevue College resides on the traditional and occupied land of the Coast Salish Peoples – past, present, and future – that includes but is not limited to: Snoqualmie, Suquamish, Duwamish, Nisqually, Tulalip, and Muckleshoot (Smulkamish, Stkamish, Skopamish, and Upper Puyallup). We honor their connection to the region, pay respect to Coast Salish Elders past and present, and stand in solidarity through their struggles with continued systemic oppression. We commit to care for the land and water, and center equity at the core of our (un)learning.

Labor Acknowledgement

We pause to recognize and acknowledge the labor upon which our country, state, and institution are built. We remember that our country is built on the labor of enslaved people who were kidnapped and brought to the US from the African continent and recognize the continued contribution of their survivors. We also acknowledge all immigrant labor including voluntary, involuntary, trafficked, forced, and undocumented peoples who contributed to the building of the country and continue to serve within our labor force. We acknowledge all unpaid care-giving labor. Finally, we acknowledge that our institution relies on hourly, student, contingent, and unpaid labor and we recognize those contributions.

Message From President May



I am very pleased to introduce the 2024 Climate Action Plan. This plan is another significant milestone in our commitment to sustainability and environmental stewardship. The importance of climate action cannot be overstated because it is fundamental to our mission of advancing global awareness, social equity, and helping to create a healthier future for everyone.

This Climate Action Plan is a comprehensive roadmap that outlines our strategies for reducing greenhouse gas emissions, enhancing energy efficiency, fostering a culture of sustainability across our campus, and much more. It reflects our common concern about the well-being of our community and the planet, and our shared support for initiatives to combat climate change and to mitigate its impacts.

We understand that the journey towards our goals like carbon neutrality or zero waste can be both challenging and rewarding. This plan is a testament to the collaborative efforts of our students, faculty, staff, and partners who have worked tirelessly to change culture to allow innovative solutions for a more sustainable future. It is also a celebration of the achievements that have brought us to this point. From renovations ensuring LEED® certifications to the integration of best practices in energy efficiency to innovative practices in our landscaping design, every step we take is a stride towards a greener, more sustainable tomorrow.

I invite you to a continued partnership in this crucial endeavor and I thank you for your support and commitment to continued, meaningful climate action. I hope this plan brings a sense of hope and a sense of urgency to the work we can do together to support and advance our shared efforts. Together, we can create a legacy of resilience and responsibility, paving the way for a cleaner, healthier, and more sustainable world.

A handwritten signature in black ink that reads "D May". The signature is fluid and cursive.

David May, Ph.D.
President, Bellevue College

Bellevue College: By the Numbers

18,204 STUDENTS
IN 2023

4 LEED® CERTIFIED
BUILDINGS

90KW

ONSITE SOLAR
GENERATION

180

GEOHERMAL
WELLS

100 ACRE
CAMPUS

972,631 SQUARE FEET, CAMPUS BUILDINGS



TABLE OF CONTENTS

I	Land & Labor Acknowledgements
II	Presidential Message
III	By the Numbers
1	Introduction
6	Energy & Built Environment
10	Transportation
14	Zero Waste
18	Culture & Learning
22	Natural Systems
26	Social Equity
28	Resilience



Introduction

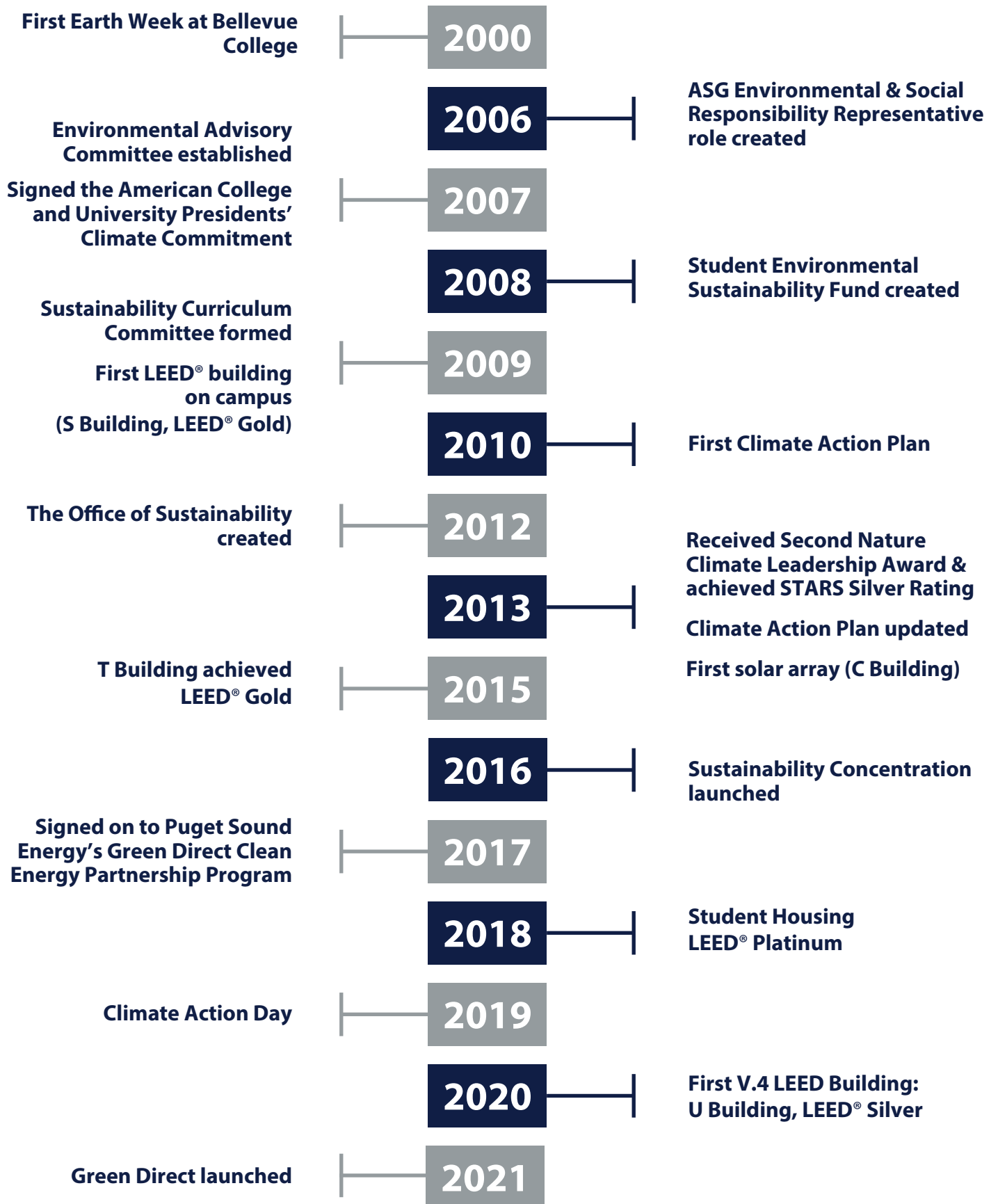
Bellevue College (BC) is the largest open-access institution of higher learning in Washington, with an enrollment of approximately 18,204 students. The college's mission is to teach excellence and advance the life-long educational development of its students while strengthening the economic, social, and cultural life of its diverse community. Committed to sustainability, BC strives to lower its greenhouse gas emissions and develop clean energy projects. The college is a signatory of the American College and University Presidents' Climate Commitment and pledged to be carbon neutral by 2050 with targets of a 5% reduction by 2015, a 20% reduction by 2020, and a 60% reduction by 2030. As a leader in sustainability, BC will continue to set an example in our region and demonstrate our commitment to clean energy and sustainable practices.

Decarbonization Goals

Bellevue College is working to achieve carbon neutrality by 2050, as pledged in the Presidential Climate Commitment, pursuing decarbonization pathways that decrease this timeline. If the goal is achieved prior to this date, pursue pathways that make BC carbon negative, prioritizing carbon insetting* wherever possible, rather than utilizing offsets to achieve this goal.

* Carbon insetting refers to the practice of decarbonization within an organization's value chain and physical footprint, rather than compensating for emissions through offsets elsewhere.

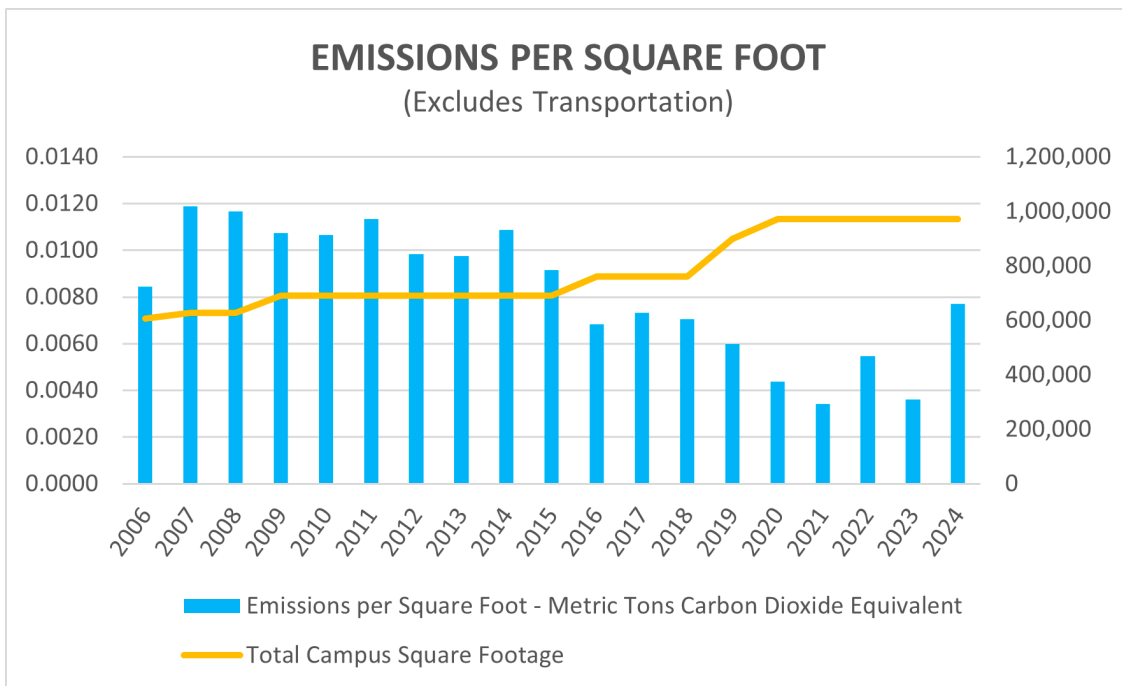
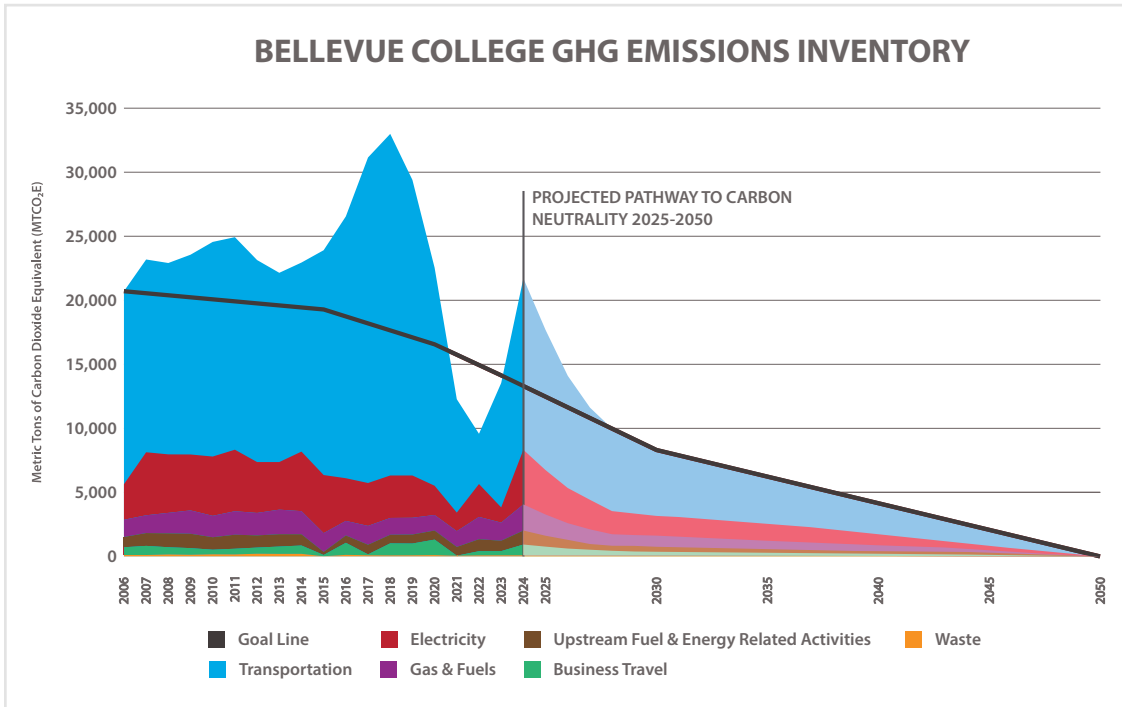
Sustainability at Bellevue College



Greenhouse Gas Tracking

In 2006, Bellevue College began tracking and reporting organizational greenhouse gas emissions (GHG) in the Clean Air-Cool Planet Campus Carbon Calculator. In recent years, BC has transitioned to using the Sustainability Indicator Management and Analysis Platform (SIMAP), the University of New Hampshire’s carbon and nitrogen-accounting platform. This annual reporting and analysis has driven transformational change over time, supporting the identification and implementation of key decarbonization pathways.

As the Bellevue College campus has grown, sustainable building has led to a net decline in emissions per square foot.



Key Decarbonization Pathways and Focus Areas

Electrification- Reduction or elimination of GHG-emitting energy sources for buildings and transportation

Energy Resilience- Pursuit of increased renewable generation and energy storage on campus

Increased Carbon Sequestration- Reforestation/urban forestry management

Waste Reduction- Reduced tri-stream waste, focusing on landfill, followed by mixed recycling

Social Equity- Prioritize inclusion of disadvantaged and under-resourced communities in CAP planning and implementation; center Indigenous placekeeping in grounds management

Climate Adaptation- Increase resilience of physical infrastructure concurrently with other pathways

Culture & Learning- Imbue BC curriculum with CAP work areas and concepts; offer students a variety of engagement opportunities via sustainability-centered events and community partner volunteering

Planning Process

In Fall Quarter 2023, Office of Sustainability staff conducted outreach throughout the Bellevue College campus collecting feedback for an update of the BC Climate Action Plan (CAP). Twenty three presentations were given to classes across curriculum areas, sharing BC’s current GHG inventory, the current CAP, and planned CAP update sections. Additionally, an in-person listening session entitled ‘Climate Change is Scary’ was held on October 31, 2023. During this listening session, students were empowered to share their feedback on CAP priorities and their climate concerns in a variety of ways. Finally, an online survey was available to the campus community throughout the quarter, offering an additional modality for sharing feedback.



Climate Action Plan Survey Responses

Compiled results of 530 Bellevue College campus community survey responses in Fall Quarter, 2023



96%

Of respondents are concerned with climate change



39%

Rated energy and built environment the top priority for this update



70%

Know someone affected by climate impacts



50%

Rated improved air quality as the most important co-benefit of climate action

Top Responses to

What would you like to see included in the social equity section of the plan?

Access to Healthy Food Options

Resource Equity & Accessibility

Funding & Support for Education

Accessibility & Improved Opportunities

Community & Gender Inclusivity

Student Engagement & Assistance

Based on feedback collected, the Office of Sustainability worked with College stakeholder groups to draft the CAP Update in Winter Quarter 2024. Following a final round of draft feedback, the finalized CAP Update is shared widely with the campus community as part of BC's 2024 Earth Month programming.

By the Numbers Engagement- Fall Quarter 2023

23 PRESENTATIONS TO CLASSES
THE CLIMATE ACTION PLAN

60
LISTENING SESSION
PARTICIPANTS

8 CAMPUS GROUPS REVIEWED
ACROSS THE CURRICULUM

530
COMMUNITY SURVEY
RESPONSES

1 IN-PERSON LISTENING SESSION
OCT 31 "CLIMATE CHANGE IS SCARY"

ENERGY & BUILT ENVIRONMENT

Energy and its use in buildings is a key component of decarbonization. With the required transition to 100% clean energy generation in Washington State by 2030, Bellevue College is working to increase community resilience and add distributed energy generation locally. With 90kW of solar arrays currently installed, and an estimated 70kW planned for installation in the near-term, the College is working towards reducing grid usage needs.

However, expanding Electric Vehicle (EV) charging access will cause a dramatic increase in power grid needs as the transportation sector decarbonizes. Bellevue College is planning a Solar Plus Storage system on-campus in 2024, which once installed will reduce net energy consumption, and increase energy resilience.



COMPLETED GOALS

- New construction met minimum LEED® silver standards
- Upgrade of HVAC control systems/software
- Increased on-campus energy production with geothermal heating in T and R buildings
- Installation of water and energy submeter systems in all buildings
- Green energy purchasing - Power Purchase Agreement with Puget Sound Energy (PSE Green Direct Program) for a wind and solar project from 2021-2031, providing nearly 100% renewable electricity. This initiative was supported by the Student Environmental Sustainability Fund (SESF)



provides resources for students, faculty, and staff to promote, enhance, and support sustainability and create a campus that is environmentally responsible.

KEY FOCUS AREAS

- Improve building envelopes and energy efficiency, exceeding Washington State Clean Buildings Act Energy Use Intensity targets prior to tiered compliance deadlines
 - Upgrade HVAC control systems
 - Fully staff control technician positions
- Continue rooftop solar installations, adding Building H and W arrays
- Plan and construct a Solar plus Storage installation on campus, creating a microgrid and dramatically reducing energy costs
- Build to LEED® Silver standards or better
- Opportunistically replace lighting with LEDs throughout campus and add lighting sensor automation where possible
- Participate in Demand Response program with PSE, encouraging grid stability and receiving incentives for decreasing load demands during peak use times
- Explore additional options for campus energy production, including small-scale wind and additional solar/geothermal
- Partner with Information Technology Services to improve sustainable practices including server virtualization, energy monitoring tools, green IT purchasing, and e-waste policies
- Include Housing, Buildings U and W in the next Green Direct Purchasing Agreement

R Building and courtyard



T Building, built with rapidly renewable materials



LEED®

Bellevue College is committed to sustainable buildings with all new construction meeting LEED® Silver certification or higher. LEED® is a green building rating system that provides ‘a framework for healthy, highly efficient, and cost-saving green buildings, which offer environmental, social and governance benefits.’

Currently, Bellevue College has 4 LEED® certified buildings on campus: the S Building, the T Building, the H Building (Student Housing), and the U Building (Student Success Center).

S Building- Built in 2009, the S Building was the first LEED® building constructed on campus, reaching LEED® Gold Certification.

T Building- Certified LEED® Gold in 2015 and featuring earth tubes, a green roof, and the use of rapidly renewable materials.

Student Housing- Bellevue College’s first housing building opened in 2018 and is the College’s highest rated LEED® Building, reaching LEED® Platinum. This building showcases a large rain garden, an energy and water dashboard, and a solar-ready rooftop. Solar panel purchase and installation is planned for the 2023-2025 Biennium.

U Building- BC’s first Version 4 LEED® certified building. With higher green standards, this building has a variable refrigerant low (VRF) heating and cooling system, all low-emitting materials, coatings, and paint, and low water-use fixtures, and is LEED® Silver.

W Building- The future W Building will be the fifth LEED® certified building on campus, with a goal of reaching LEED® Silver Certification.

Housing Water and Energy Conservation

In 2022, the Office of Sustainability ran the first Electricity Conservation Competition at Housing with the goal to educate, create awareness, and reduce energy consumption. Wing communities within housing compete against one another annually to reduce the most electricity use over a 2-week period. The energy and water dashboard displayed in the pizza cafe and available online shows utility consumption for each community and allows residents to keep track of energy reduction goals.

During the first year of the competition, every community improved during the second week!

R Building solar array



U Building

The Student Success Center is BC's first version 4 LEED® certified building and is certified LEED® Silver. LEED® is a green building rating system that provides "a framework for healthy, highly efficient, and cost-saving green buildings, which offer environmental, social and governance benefits."

As a hub for student resources and activities, this building exemplifies the College's commitment to advancing pluralism, inclusion and global awareness. With these themes at the forefront, the U Building has an abundance of sustainable features incorporated throughout.

A variable refrigerant flow (VRF) heating and cooling system, energy efficient lighting, building controls, and other energy saving strategies allow the SSC to require 20% less energy compared to current industry standards. To reduce Volatile Organic Compounds (VOCs), low-emitting products were used for 100% of the paints and coatings, flooring, ceilings, walls, and insulation. In addition, urinals, toilets, and low flow water

fixtures were installed to reduce water usage by over 35%.

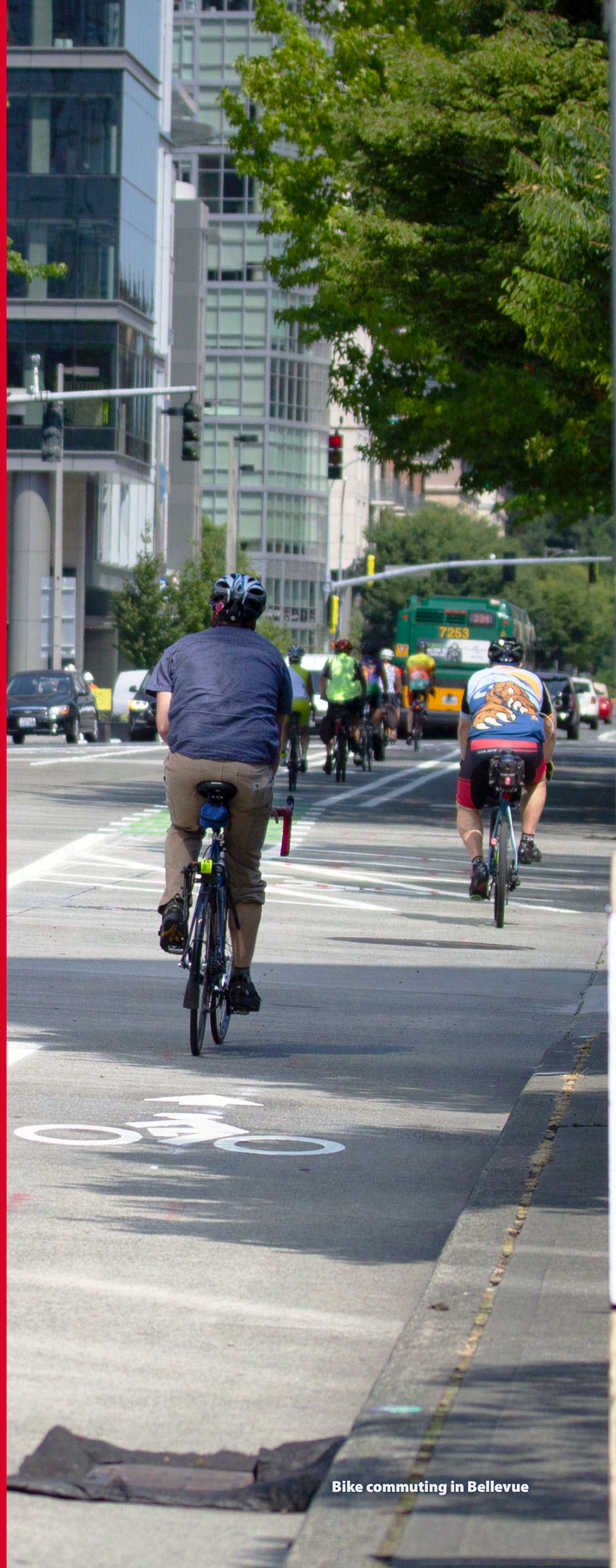
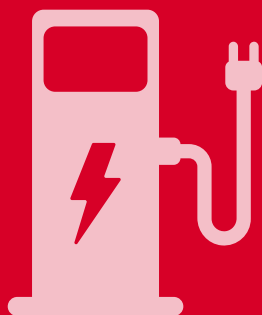
Distributed Energy Generation

Bellevue College currently has 90kW of onsite rooftop solar generation on the C and R buildings, as well as geothermal heating in the R and T Buildings. With plans to install an additional 35kW of rooftop solar on the future W building and ~35kW on student housing, the College is working to be a leader in distributed energy generation. These resources help reduce strain on the electric power grid, as well as BC's lower energy costs.

As the College moves forward with plans to install a Solar plus Storage system onsite, tying these solar arrays with energy storage will further reduce costs and electricity use. This system will also increase resiliency and offer learning opportunities for the campus community.

TRANSPORTATION

Transportation is the leading source of greenhouse gas emissions for Bellevue College; in fact, this sector accounts for more emissions than all other categories combined. This matches regional GHG emissions trends, and is a focus for municipal climate planning. In recent years, the Covid-19 pandemic has changed the landscape for hybrid/virtual curriculum offerings, shifting more courses to formats that don't require commuting.



Bike commuting in Bellevue

COMPLETED GOALS

- Hired a Commute Trip Reduction (CTR) coordinator within the Office of Sustainability
- Promoted and facilitated flexible study and work schedules, increasing options for employees
- Implemented visible, paid parking procedure for campus community
- Created a new policy and price scale to discourage parking use, explicitly valuing parking spots and maintenance costs associated with parking
- Conducted an annual transportation survey, with intent to decrease Single Occupancy (SOV) commuting and increase alternative commuting options
- Improved incentives for alternative transportation, including increasing carpool spots and changing carpool to 2 riders per car (2011)
- Encouraged biking to campus with bike racks, free gym privileges (showers, lockers, etc.) access to outlets for e-bike charging, a bike rental program and bike repair tools
- Implemented transit technology solutions including education on available apps for bus schedules and traffic monitoring
- Implemented approval requirement for all conference-related travel

ORCA Plus

BC offers students double their money back when purchasing a bus pass through the college. One Regional Card for All (ORCA) cards provide access to public transit in the greater Puget Sound region.

KEY FOCUS AREAS

- BC Fleet Decarbonization:
 - Establish and implement a policy of no new fossil-fuel powered vehicle or equipment purchases
 - Finalize and implement a fleet decarbonization plan, achieving a fully electric fleet by 2035
- Proactively seek funding for electrification projects, including addition of EV and e-bike chargers, additional solar arrays, and establishment of a campus microgrid to offset additional load to the grid from transportation electrification
- Encourage alternative transportation:
 - Expand the subsidized ORCA bus pass program and other incentives for non-SOV commuting
 - Encourage bike commuting with expansion of available amenities, including bike lockers, additional bike repair stations, ongoing bike repair classes, and bike activities such as 'buddy rides,' a Bike Club, bike lane installation, and PE credits
 - Assess and promote new, low carbon ride share options to the community, including peak-hour shuttle options for Eastgate light rail and expanding Bellhop service
 - Collaborate with Public Safety to develop policies and enhance incentives for alternative commuting
- Continue to grow relationships with HopeLink, Sound Transit, Choose Your Way Bellevue, and King County Metro to provide the campus community with transportation resources
- Increase usage of new EV/hybrid parking garage spaces



Electric Vehicle and E-Bike Charging

Bellevue College hosts 10 Level 2 EV chargers and 2 DC fast chargers currently, located in 3 areas around campus. The Office of Sustainability has proactively pursued grant funding to add additional EV chargers around campus, applying for \$1.65 million in local, state, and federal funding in 2023, with plans on the horizon to continue adding capacity throughout campus. Ensuring that a variety of different charging ports and charging capacity is available is a priority.

Additionally, the Office of Sustainability worked with the Bellevue College Foundation to purchase additional bike racks for Student Housing through the Foundation's Mini-Grant Program. These recently installed racks provide access to outlets for commuter e-bike charging. Campus Operations working to site E-bike charging options in additional key locations around campus in the future.

Alternative Transportation

With single occupancy commuting as the largest source of greenhouse emissions for Bellevue College, the Office of Sustainability creates programming to encourage alternative commute modes to campus. Established in 2018, the Bike Rental Program increases access to bicycles by providing quarterly rentals to students, faculty, and staff. The bicycles come in various sizes, and rentals include a helmet, lights, locks, two saddlebags, a pump, and a repair kit.

BC campus, located just off I-90 and near the Eastgate Park and Ride, which is the largest park and ride in King County, provides an optimal location for the community to access charging infrastructure. The College encourages carpooling with reduced cost carpool parking passes.

ORCA card subsidies are another important piece of alternative transportation programming.

Fleet Decarbonization

Bellevue College is currently participating in the Breaking Barriers Collaborative's Fleet Decarbonization Accelerator program. As part of this program, the Sustainability Office is preparing a Fleet Decarbonization Plan, identifying and prioritizing fleet vehicles for electrification, and laying out a pathway to do so. This plan will include all campus vehicles, including those used by personnel for on and off-campus transportation, as well as additional fossil-fueled heavy equipment such as forklifts, and smaller equipment used by the grounds team including leaf blowers and string trimmers.

Bike Rental Program

The Bellevue College Bike Rental Program provides bikes to students and employees for quarterly rentals. Bikes are available in extra-small to extra-large sizes on a first-come, first-serve basis, and come with a helmet, lights, locks, 2 saddlebags, a tire pump, and repair kit. The Office of Sustainability is working to add bike rack rentals and bike lockers to the program in the future to help make bike commuting more accessible.



ZERO WASTE

Waste is an area of ongoing outreach and education, as packaging updates continually cause consumers to face challenges with proper waste sorting. Bellevue College is working to drive down campus waste generation through community education, increased adoption of compost and recycling, and encouraging reusables adoption. As a member of the Post Landfill Action Network, BC connects with other higher education institutions on best practices in waste management.



Students perform a waste audit on BC campus



COMPLETED GOALS

- Elimination of chlorofluorocarbon (CFC) use in refrigerants on campus
- Expansion of recycling and compost to all areas of campus, and improvement of waste sorting signage materials
- Increase compostables on campus; explore expansion of composting program in future Community Garden
- Creation of policy and culture shift to reduce paper use through ongoing community education and the use of Papercut printing platform

KEY FOCUS AREAS

- Reduction of Food Services waste:
 - Expansion of reusable foodware pilot to additional areas of campus food service
 - Revision of BC purchasing policy, eliminating sales of single-use plastic bottles and bags on campus
 - Work with Food Services to increase partnerships for local organic agriculture
- Establishment of campus community 'Buy Nothing' donation/sharing program and other programming for hard to recycle items
- Ongoing waste sorting education-campus-wide



Student run upcycling event for Sustainability Concentration project

Water bottle filling station



Housing Donation Room

Bellevue College's first housing building opened in 2018, with capacity for 400 students. To address landfill waste generated during move-out and move-in, the Office of Sustainability transforms the 2nd floor lounge into a donation room during these periods. Residents can leave usable, working condition items they no longer want, or take items they can use. The program encourages residents to not discard their unwanted items, but instead give them a second life and reduce landfill waste, while helping others in need.

Reusable Foodware Program

Beginning Fall 2023, BC piloted a reusable foodware program in the Cafeteria. This pilot, a partnership between Food Services and the Sustainability Office, introduces stainless steel salad bowls and small plate trays for diners to use on campus. This program allows the campus community to choose between taking compostable foodware to-go, or using reusables they can return to designated locations in the cafeteria. This program reduces waste from food service, and lowers carbon emissions.

Water Bottle Refill Stations

In Spring of 2022, 20 new water bottle filling stations were installed throughout campus to improve access to drinking water and reduce single-use plastic. Locations were determined by feedback from a campus-wide survey, along with consideration of electrical and plumbing access. New stations were put in A, B, C, D, E, G, L, N, Q, R, and S Buildings, resulting in all buildings on campus now having one bottle filling station. The new filling stations increase opportunities for our campus community to use refillable water vessels, and reduce the need for single-use plastics, decreasing the college's overall waste stream.

Another round of funding in the 2023-2025 Biennium will provide additional filling stations in areas that need improved drinking water access.



Reusable foodware in the cafeteria

Mini-Max Waste Bin Program

In 2023, the Office of Sustainability established a new standard for waste management in campus buildings. The Mini-Max program streamlines and standardizes waste bins, while reducing landfill waste, making sorting easier for staff, faculty, and students, and giving custodians more time for essential cleaning tasks. A linerless deskside bin system includes recycling, compost, and landfill and eliminates single-use plastic liners. New tri-stream bins provide everyone with recycling, compost, and landfill options in common spaces, expanding access to recycling and compost campus-wide.



Tri-stream waste sorting and Mini-Max bins

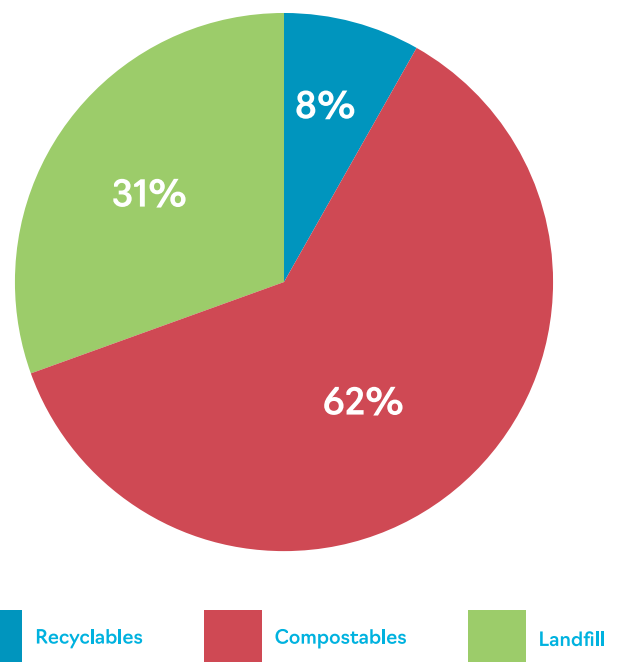
Tri-Stream, Deskside Bins

have been successfully implemented at other institutions of higher education.*

For example:

- Dartmouth College, which increased its recycling rate by 33% and reduced the amount of waste sent to landfills by 200 tons within one year.
- Sonoma State University, which increased its recycling rate by 55% within one year.
- University of North Carolina at Charlotte, which increased its recycling rate by 20% and saved \$13,000 annually on garbage bag liners.
- University of Minnesota Duluth decreased the amount of recyclables in its garbage by 14% and reduced the total amount of waste sent to the landfill by almost 20%.

C Building Waste by Mass



A series of waste audits was performed in the C Building 2017-2019. These audits found that a majority of waste put in the landfill bins was compostable, and led to increased composting options on campus including Mini-Max and paper towel composting programs.

* Source: <https://facilities.uw.edu/services/recycling/minimax-program>

CULTURE & LEARNING

Bellevue College has worked hard to weave sustainability into the campus curriculum throughout academic study areas. Since the last CAP update, the Sustainability Curriculum Committee has convened and worked to introduce sustainability concepts into courses across the curriculum at BC. The Office of Sustainability was also formed and has worked to engage community partners with students, staff, and faculty, as well as bringing a variety of programming to campus.



Students learning how to cook vegetarian dishes on a field trip to 21 Acres Farm

COMPLETED GOALS

- Convened a Sustainability Curriculum Committee to oversee sustainability education
- Office of Sustainability created to coordinate campus activities and sustainability efforts (with two full-time staff and 1 part-time permanent staff)
- Creation of a resource center and workshops to assist faculty in teaching sustainability (including climate issues) across the curriculum
- Creation of sustainability “modules” that can be used across the curriculum



OFFICE OF SUSTAINABILITY

was created to coordinate campus activities and sustainability efforts (with two full-time staff and one part-time permanent staff)

KEY FOCUS AREAS

- Ongoing engagement of sustainability throughout campus curriculum:
 - Establish a Sustainability First Year Seminar (FYS) course, serving as a gateway to the Sustainability Concentration
 - Incorporate sustainability into the new General Education plan
 - Leverage Sustainability Concentration to increase campus engagement in green initiatives
- Increase communication of sustainable practices, engagement opportunities, and campus goals, working with Sustainability Curriculum Committee, the Office of Sustainability, and KBCS
- Revise the BC Sustainability Policy for specificity and alignment with the 2024 CAP
- Create a model ‘green’ home in one of the BC campuses houses to test technology, teach, and serve as a community model; explore relocating Office of Sustainability to this site
- Divestment of staff and faculty retirement funds
- Strengthen relationships with community partners, providing students with pathways into the sustainability job market



BC students attend a Mountains to Sound Greenway stewardship event

Sustainability Curriculum Committee

Since Fall 2018, the Sustainability Curriculum Committee, in collaboration with the Faculty Commons, the Office of Sustainability, the RISE Learning Institute, Seattle Colleges, and now the State Board of Community and Technical Colleges has supported BC faculty in developing and implementing lessons intended to instill a sense of urgency for addressing the looming threats of climate disruption and educate about adaptation and mitigation strategies, using a justice lens and an eye toward disrupting systems of oppression through civic engagement. Along with creating teaching modules for faculty to use in their classes, the committee also runs a quarterly Climate Justice Book Club to read and discuss significant books related to Climate Justice.

Little Free Library

In 2023, Bellevue College opened its first Little Free Library (LFL) and joined a network of over 100,000! Funded by the Student Environmental Sustainability Fund, it's located south of the Pizza Café entrance at Student Housing (H Building). This new campus and community resource expands access to books, supports learning, inspires readers, and sparks conversation within our community on topics related to sustainability, the environment, climate justice, and social justice.

Campus Sustainability Programming

The Office of Sustainability hosts Earth Month programming each April, and the Fall Sustainability Series at the beginning of each academic year. A variety of events offer ways for students to get involved in campus restoration work, engage in hands-on learning opportunities with community partners, and learn about a wide

range of sustainability topics. These events bring together our campus community and have grown significantly since the first Earth Week was held at Bellevue College in 2000.

Through programming, social media, a website, and a quarterly newsletter, the Office of Sustainability provides campus with resources, educational material, and opportunities for involvement related to sustainability. These efforts foster an engaged community and infuse sustainability into the campus culture.



BC's first Little Free Library, located outside Student Housing

Teaching For CO2 Draw Down

Over the past three years, BC's Teaching for CO2 Drawdown project has moved beyond our college as we've rapidly become a local, regional, national, and even global leader at the forefront of climate justice across the curriculum in higher education. From 2019 – 2023, our faculty professional development (PD) curriculum has been used locally by Seattle Colleges (2019 – 2023), the University of Washington (2021 – 2023), and the State Board of Community and Technical Colleges (2023) to support faculty lesson development and implementation across the curriculum at their institutions. For year six of the Teaching for CO2 Drawdown project, we will continue to evolve our project to meet the needs of students and faculty and take advantage of new collaborations that

will further enrich our project and benefit the college.

Faculty Retirement Fund Divestment

As the climate crisis intensifies, a key opportunity to accelerate the transition to green energy is reducing available funding for the oil and gas industry. Retirement funds have historically been a key funding source for the fossil fuel industry, and so encouraging BC staff funds to divest from this area is a priority. In the coming years, the Sustainability Curriculum Committee will work with the Office of Sustainability and Human Resources to provide information on current retirement fund allocations, and opportunities to shift investments to support clean energy.



Pamela SeaMonster shares Indigenous science during a workshop on native camas plants at BC campus

NATURAL SYSTEMS

As the effects of the climate crisis are increasingly felt at the local level through changes in temperature, precipitation, and wildfire frequency, natural systems are being tested. Bellevue College is working towards good environmental stewardship through effective urban forestry management at its 100-acre campus, incorporating native plants into campus grounds, and improving stormwater management. Staff and faculty are working together to include these concepts into curriculum and provide opportunities for hands-on learning on campus.



BC students and Grounds Team during the Student Housing clean up event

KEY FOCUS AREAS

- Support Indigenous placekeeping through ongoing programming, prescribed burns, and Lushootseed translations on campus signage
- Achieve SalmonSafe certification; based on SalmonSafe expert assessment, develop a campus stormwater management plan
- Grounds Management - Improvement of wildlife habitat and biodiversity through:
 - Achieving Level II Arboretum accreditation, increasing to 100 tagged species on campus
 - Development and execution of an urban forestry management plan, with the intent of expanding tree canopy cover
 - Planting for low water use grounds management
 - Reduction of pesticide use, exploring Wild Your Campus Certification
 - Creation and execution of a Grounds Equipment Decarbonization Plan
- Increase native plants on campus and reduce invasive species wherever possible

Native Plant Restoration and Biofiltration

In 2023, Bellevue College was awarded a grant from the National Wildlife Federation and Mutual of Omaha for a native plant restoration and biofiltration project on the east side of campus. The planned project will take place along the east side of Lots 3 and 5 where a drainage area links to a seasonal pond. The project will include removal of non-native invasive plant species, replanting with native vegetation, and installation of compost biofiltration devices to filter stormwater.

The Office of Sustainability and Grounds Team will involve campus community volunteers in all phases of the project, offering opportunities for hands-on engagement. The Chemistry Department will additionally engage in stormwater sampling before and after the project to assess filtration efficacy.



Salmon Recovery

The Pacific Northwest salmon population has declined in recent years with a severe threat known as 6ppd-quinone being identified as a major contributor. Released from vehicle tires, this toxic chemical gets carried away in water runoff. Making its way into streams and rivers, 6ppd-quinone kills coho salmon before they spawn. Promising scientific studies show that bio-filtration devices can reduce heavy metals, environmental contaminants, polycyclic aromatic hydrocarbons (PAHs). With the NWF grant, Bellevue College will help restore ecosystem health and the salmon population in the greater Lake Washington watershed.

Forest Management Plan

Bellevue College Governance Proposal #1266 - Campus Tree Health was enacted in 2023 to assess and address urban forest baseline health. Through this initiative, an arborist was contracted to catalog and assess potential risks for the 2,500+ trees on campus with a diameter at breast height (DBH) of 2" or more.

As we move forward, addressing the deferred maintenance needs of our urban forest will require the removal of a substantial number of dead or dying trees. Our goal is to improve the overall health of the campus ecosystem; every tree we cut down will be used on campus to enhance the landscape in some way, whether through mulching, habitat enhancement with woody debris, or projects like our campus Stumpery, utilizing woody materials removed from campus as planting substrate and structures. In the future, tree canopy added will be selected to be resilient to projected climate change impacts.

The Office of Sustainability and Grounds Team are collaborating to form an Eastside Urban Forests Working Group, seeking involvement from local tribes, non-profits, and other municipalities working to preserve ecosystem health. This coalition will gather quarterly for knowledge sharing and collaboration where possible.

Grounds Small Equipment Decarbonization

As the College advances decarbonization of its fleet, the Sustainability Office and Grounds Team are working to eliminate fossil fuel-based small equipment used in grounds management. Priority areas and timeline for transition to all electric equipment will be identified in the College's Fleet Decarbonization program. Reducing gas powered equipment on campus will help us all breathe easier!



BC students and Grounds Team remove invasive English Ivy during a stewardship event

Grounds Resources & Ethics

The Bellevue College Grounds Team is building a web resource of past completed projects that will complement the Arboretum website information. Examples of past projects include the Native Berry Garden, L-Building raised beds, replanting in the flagpole circle, the Basalt Native Plants Bed, and the Stumpery. The Ground Team's ethic is: Avoid Doing Harm, Fix Problems, and Build Community.

Their current work focuses on:

- Increasing pollinator food sources, habitat, and over-wintering habitat
- Reducing noxious weeds
- Increasing climate resilience by using heat and drought tolerant plants
- Selecting garden bed plants that provide ecosystem benefits, Indigenous cultural uses, plant pigments, or edible, when possible



Arboretum

In March 2023, Bellevue College became a Certified Arboretum, and the 7th accredited arboretum under the ArbNet program in Washington State. The arboretum includes all of BC campus and is split into four unique zones; the Native Berry Patch, the Shady Glen, the Woodland Boulevard, and the Urban Forest Loop.

Led by the Office of Sustainability and the Grounds Team, 56 woody plant species have been tagged and catalogued in an online database. This public database showcases photos by Bellevue College’s Introduction to Digital Photography class taught by Chris Arslain, as well as details on each plant species in the collection.

The Arboretum’s mission is to educate, engage, and provide a place to connect with nature for students, faculty, staff, and the surrounding community, all while conserving the immense diversity of woody plants on campus. Stewardship opportunities have provided a wonderful way for people to be involved with maintaining spaces within the arboretum. As a result, 2,900 pounds of invasive English ivy was removed from campus in 2023.

The Office of Sustainability and Grounds Team are continuing efforts to improve the arboretum by working with a Snohomish Tribal Elder to incorporate Lushootseed names for native plant identification signage, as well as add larger informational signage for each zone within the arboretum.

SOCIAL EQUITY

Bellevue College is recognized throughout the region for its leadership in advancing principles of diversity, equity, inclusion, and access (DEI&A). BC promotes student success by providing high-quality, flexible, accessible educational programs and services; advancing pluralism, promoting inclusion and global awareness; and acting as a catalyst and collaborator building partnerships to reach educational equity for students throughout the vibrant Eastside King County region.

Social equity should be interwoven into all aspects of the Climate Action Plan and is a critical component of the work of moving towards decarbonization together. Environmental justice is at the core of efforts to equitably transition off of fossil fuels. Bellevue College leadership is working to engage community members in all aspects of planning pathways to achieve carbon neutrality by 2050.



Planting in the BC garden with the Black Student Union

KEY FOCUS AREAS

- Increase on-campus CSA deliveries to monthly, providing students with low-cost, local, organic fruits and vegetables while supporting local small farm agriculture
- Reduce the availability of single-use plastics use on campus
- Increase the availability of programming around environmental justice on campus, including this area into the campus curriculum
- Complete the new Community Garden, to be located north of the parking garage, providing campus community members with access to garden and green space
- Increase plant-based dining options

Based on campus community feedback, focus areas for social equity in the 2024 CAP are:

- Increasing access to healthy foods
- Funding & support for education
- Resource equity & accessibility
- Community & gender inclusivity
- Student engagement & assistance
- Accessibility & improved opportunities

Community Garden

As identified in feedback gathering for the CAP update, increasing access to healthy foods is a priority for the campus community. Plans are currently underway for a Community Garden north of the Parking Garage along Kelsey Creek road. The Garden will include 4 greenhouses, a covered outdoor learning space, composting area, space for the campus apiary, and garden beds. The Campus Operations team is working to

finalize plans for this space, which will be a wonderful resource to campus for many years to come.

Once the Community Garden is installed and operational, the Sustainability Office will work with BC staff and faculty to promote and encourage use of this facility. The space will serve as a significant resource to the BC Garden Club, BC Beekeeping Club, Botany courses, and campus community, providing the space to engage in growing plants and outdoor education.



Community Supported Agriculture

Based on the popularity of the Spring/Fall CSA program, the Sustainability Office is piloting a monthly CSA program in 2024. This program, which is subsidized by the SESF, brings low-cost organic fruits and vegetables to campus sourced from a local farm cooperative. Following the January through August pilot, the Sustainability Office will assess campus demand for program expansion and potentially continue ongoing monthly CSA boxes.

RESILIENCE

Resilience is moving to the forefront of community priorities as climate patterns shift. Bellevue College is pursuing energy resilience, and working to build capacity for Campus Operations' response to facilities and infrastructure challenges. In recent years, summer and winter temperature extremes, unusually heavy precipitation, and air quality impacts from wildfire smoke have impacted the built environment and campus community. This has highlighted the need for attention to energy efficiency, improved building envelopes, stormwater infrastructure, and air quality monitoring and filtration.



KEY FOCUS AREAS

- Energy Resilience - Planning and installation of a Solar plus Storage system on campus, creating an on-site microgrid
- Physical infrastructure - Advancing energy efficiency and building envelope improvement projects, modernizing aging HVAC systems
- Stormwater Management - Development and implementation of a stormwater management plan, with capacity for high intensity precipitation events, in tandem with achieving SalmonSafe certification
- Community preparedness – increase resource availability for emergencies and natural disasters, including development and implementation of a plan for air quality response during wildfire smoke events



Salmon Safe

With intense precipitation events on the rise in the Pacific Northwest, the need for effective stormwater management is clear. Bellevue College has begun assessment of the campus by SalmonSafe, a nonprofit working to reduce impacts to local salmon populations caused by stormwater toxics. Based on the findings of the SalmonSafe assessment, the College will develop

and implement a stormwater management plan, continuing to work to reduce runoff of toxics from buildings and parking lots on campus into streams.

Students in the Chemistry department will continue to engage in stormwater monitoring as this project is underway, tying curriculum into environmental recovery goals. The Office of Sustainability is also working to strengthen relationships with community partners working in the salmon recovery space, offering students opportunities to engage in hands-on work off campus.

Solar Plus Storage

In 2023, Bellevue College was awarded \$100,000 in grant funding from the Washington State Department of Commerce for planning of a Solar plus Storage system on campus. The funds will be available in July 2024, at which point the College will begin work on the project. The focus for this funding is to increase energy resilience by providing battery storage that will reduce grid loads and allow the College to operate as a community disaster relief center in the event of a natural disaster or other grid emergency. BC Public Safety and the Sustainability Office are partnering with the City of Bellevue Emergency Management Personnel to plan a site that will support local emergency response operations. The Sustainability Office is additionally participating in a National Renewable Energy Laboratory (NREL) Clean Energy to Communities cohort, and attending training on microgrid installation, in preparation for the project.

As energy sourcing shifts away from fossil fuels, demands on the electrical grid will increase substantially, with broad EV adoption and charging needs, and the Washington State Clean Buildings Act driving decarbonization. As grid capacity needs increase, a future Solar plus Storage system will allow the College to significantly reduce organizational energy costs, as well as strain on the grid.

Acknowledgements

Authors

Sara Holzknecht
Director, Office of Sustainability

Elissa Gordon
Associate Director, Office of Sustainability

Contributing Author - Natural Systems

Branden Ellsworth
Building & Grounds Supervisor

Graphic Designer

Dennis Tso
*Digital Media and Communications Coordinator,
Office of Sustainability*

Additional Gratitude

Pablo Ortega
Outreach Coordinator, Office of Sustainability

Graciella Nzowo
Outreach Coordinator, Office of Sustainability

Herman Yurevich
Transportation Coordinator, Office of Sustainability

Chris Arslain
Photography Faculty

Shel Stoner
Sustainability Volunteer Researcher

Photography Credit

Amber Nicholson
Dennis Tso
Erika LaMothe
Elissa Gordon
Peter Prescott
Sara Holzknecht
Bellevue College Institutional Advancement
LMN Architects

Past members of the Environmental Advisory Committee, and everyone involved in authoring past Climate Action Plans.

Thank You!

We welcome your comments and feedback on the Climate Action Plan.

Please send inquiries to
sustainability@bellevuecollege.edu

For a digital version, please scan here:



Bellevue College does not discriminate on the basis of race, color, national origin, language, ethnicity, religion, veteran status, sex, sexual orientation, including gender identity or expression, disability, or age in its programs and activities. Please see policy 4150 at bellevuecollege.edu/policies/. The following people have been designated to handle inquiries regarding non-discrimination policies: Title IX Coordinator, 425-564-2641, Office C227, and EEOC/504 Compliance Officer, 425-564-2178, Office R130.