



Sustainability Action Plan

Campus Operations

2014 – 2019



University of Victoria



Sustainability in action.

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1.0 Introduction and Background

The University of Victoria has a long history of leadership in sustainability. The campus has received international attention for our commitment to green campus operations, interdisciplinary research, real life learning opportunities and innovative community partnerships.

Sustainability is a commitment to future generations and requires the collective action of the university community through long term planning, shared learning, grassroots activities and institutional leadership. Moving forward, we look to build on the history of sustainability leadership at UVic.

This Action Plan builds on the success of the Sustainability Action Plan: Campus Operations 2009 – 2014, which was developed in conjunction with the university's adoption of a sustainability policy, in 2009. It allows for students, faculty, staff and community members to identify how they can contribute to and be a part of creating a sustainable campus over the next five years and beyond.

1.2 Final Report on the Sustainability Action Plan: Campus Operations 2009 – 2014

In 2008, the Sustainability Action Plan: Campus Operations 2009 – 2014 was prepared to guide the university's efforts toward greater sustainability in its operations. Along with its goals and actions, the Plan referenced the need to develop measurable indicators and provide for regular reporting on implementation activities related to its eight topic areas:

1. Energy and Climate
2. Transportation
3. Purchasing
4. Governance, Decision-making and Sustainability Resources
5. Buildings and Renovations
6. Grounds, Food and Urban Agriculture
7. Waste Management
8. Water Management

The Final Report on the Action Plan summarizes the efforts that were made to implement the Plan over its five year timeframe and the outcomes achieved relative to the Plan's 46 goals. Significant progress was made across all topic areas. The report highlights that 26 goals have been achieved, thirteen are in progress and seven have not been achieved and will be assessed as part of the process to renew the Action Plan. The complete report is available at: www.uvic.ca/sustainability under the Reports and Resources section.

1.3 Sustainability Tracking, Assessment and Rating System (STARS)

Various reports have been prepared on sustainability at UVic over the years, including an initial report in 2003, followed by a 2006 report and a 2009 – 2011 progress report. In January 2014 UVic completed a comprehensive assessment of sustainability under the Sustainability Tracking, Assessment and Rating System (STARS) developed by the Association for the Advancement of Sustainability in Higher Education (AASHE). The self-assessment provides a framework for measuring campus sustainability progress in relation to many other universities and colleges in North America and around the world.

The UVic submission received a Gold level rating based on its strong performance in the reporting categories of: Academics, Engagement, Operations, Planning & Administration and Innovation. Sustainability was shown to be integrated into the university's academic disciplines and nationally recognized programs relating to the sustainability of natural and social environments have been developed. The sustainability performance of campus buildings and operational practices, along with the commitment to sustainability coordination and engagement throughout the campus community were also highlighted.

UVic is the fifth post-secondary institution in Canada to receive a Gold rating. Over three hundred universities have participated in the STARS system and approximately 20% have received a Gold level rating. The rating is valid for up to three years requiring the university to perform a follow-up STARS report no later than 2017.

1.4 Renewal of the Sustainability Action Plan: Campus Operations for 2014 – 2019

The process to renew the Action Plan for the next five years involved three phases of engagement and plan development activities. During the first phase in January 2014, the Final Report on the current Plan and the STARS submission were completed, along with research on best practices from other post-secondary institutions.

The second phase in February and March focused on engagement activities with the campus community to generate ideas and perspectives to include in the new Plan. Open house sessions and workshops were held with students, faculty and staff to assist in obtaining input on ways to make UVic a more sustainable campus. An online survey was made available on the sustainability website. Meetings were also held throughout March and April with operational departments on campus, including Facilities Management, Parking and Transportation Services, Purchasing, and Food Services, to gather input on the goals and actions related to their areas.

In the third and final phase of the Plan renewal process in May, comments were received from the campus community on a draft Plan. The Sustainability Advisory Committee that acted as the steering committee for the project throughout the Plan renewal process, provided for final adjustments to the draft Plan and its approval.

This 2014-2019 Action Plan provides new and updated goals on strategic topics for campus sustainability that require attention over the next five years and beyond. A framework for future reporting on sustainability performance is also a key part of this Plan.

2.0 Sustainability Action Plan – Vision

2.1 Vision

A university that integrates sustainability practices and a culture of shared responsibility into all areas of its operations and services, and educates, inspires and motivates students, staff, faculty and community members in the same practices.

This vision is intended to assist in guiding the journey and process of the evolving transformation of the university campus, through all its activities and functions, into a more environmentally, socially and economically sustainable place to work and go to school. A collaborative effort by individuals, departments, and the institution as a whole will be required to achieve the visions and goals in the Action Plan. It is a living document and a multi-year plan. Contextual realities such as funding, partnership opportunities and legislation will likely evolve over the life of the Action Plan, and various directions outlined within it may need to be adjusted as the sustainability vision for campus operations is pursued.

Support for sustainability at the University of Victoria is represented at the institutional level by the Sustainability Policy and the Strategic Plan. The vision for the Sustainability Action Plan: Campus Operations 2014 – 2019 is framed by these two documents.

2.2 Sustainability Policy

The UVic Sustainability Policy (2009, No. 1794) outlines the university’s commitment to sustainability:

“The University of Victoria has a responsibility and desire to educate members of the University Community to engage effectively as global citizens, steward our natural resources in a responsible manner, and work towards a sustainable future in cooperation with organizations at the local, provincial, national and global level.”

The policy also defines what “sustainability” means to the university:

Sustainability is the state of achieving the ecological balance that allows social development and economic prosperity to be achieved across generations.

- Ecological Balance is the equilibrium between, and coexistence of, all organisms and their environment.
- Social Development encompasses a commitment to create social opportunities for individuals and groups to enhance overall community wellbeing.
- Economic Prosperity is a financially healthy state.

2.3 Strategic Plan

The **UVic Strategic Plan** (2012) includes in its Mission:

“Promoting the development of a just and sustainable society through our programs of education, research and the stewardship of our own financial and physical resources.”

Objective 35 is stated as:

“To demonstrate leadership in sustainability through the continued development and implementation of innovative operational practices and their integration with institutional planning activities.”

Key strategies:

- Develop, implement and enhance the ecological sustainability initiatives set out in the Sustainability Action Plan, further boosting UVic’s leadership in transportation demand management, energy management, lifecycle costing and environmental stewardship.
- Develop tools to measure sustainability performance in all our activities.
- Design and operate campus systems in a manner that allows for the integration of academic, teaching and research activities as appropriate.
- Promote the use of LEED (Leadership in Energy and Environmental Design) or similar green building standards in the construction of new facilities.”



3.0 Planning, Coordination and Administration

Mission: *To create a campus culture that provides for sustainability to be integrated into operational, administrative and planning processes, and advanced through collaboration and coordinated decision-making across the university.*

Background: The Office of Campus Planning and Sustainability is located within the portfolio of the Vice President of Finance and Operations and works closely with students, faculty, staff and the community in advancing sustainability on and off campus. Other departments, units and individuals also have key roles to play in service delivery and in advancing sustainability within their areas.

Collaboration is at the core of sustainability - working together on ongoing programs and developing new opportunities is what makes the university successful in achieving its sustainability goals. A Sustainability Advisory Committee, comprised of students, faculty and staff has been in place since 2009 and plays a key role in exchanging information on sustainability across campus and in addressing sustainability challenges and opportunities. There are many other means by which we can work together to advance sustainability across the institution, some of which are reflected in the goals below.

Goal 1: Integrate sustainability criteria into annual service and strategic plans for operational and service departments and review on a regular basis throughout the year.

Goal 2: Provide regular reports to the campus community on sustainability initiatives and Action Plan progress.

Goal 3: Enhance responsible investment policies to reflect industry best practices.

Actions:

- Provide for operational departments and units to address and report on progress related to relevant Action Plan goals as part of their annual service plans.
- Develop a plan to assist in integrating key sustainability goals between operations, academics and engagement.
- Investigate the tracking of greenhouse gas emissions generated by university travel (students, staff and faculty).
- Investigate the creation of a “green fund“ to provide financial support for sustainability projects on campus initiated by students and staff that cannot be funded by core budgets (e.g. more water fountain upgrades in office areas).
- Work to enhance responsible investment reporting practices and transparency.
- Continue to explore best investment practices based on the use of environmental, social and governance (ESG) principles such as:
 - In evaluating prospective investment managers, considers how ESG issues are incorporated into the investment decision making process, and;
 - Request annual disclosure by investment managers regarding the processes by which ESG factors are incorporated into the investment decision-making process.
- Investigate the requirements and process to become a signatory to the UN Principles on Responsible Investment.

Monitoring: Data collection, monitoring and reporting on sustainability progress is one of the activities undertaken by the Office of Campus Planning and Sustainability in conjunction with others across campus. The Office will endeavor to collaborate on the annual service plans of the individual operational units as part of the monitoring effort for the goals in this area.

The reports will be shared with others across campus to further the integration of the operational areas' various sustainability goals. Reports will be customized for each operational area. Information would be as relevant as possible for each area's decision-making processes. Individual reports will be prepared for each action that requires investigation and exploration. One general annual report and all individual reports will be made publicly available.



4.0 Engagement

Mission: *To provide opportunities for students, staff, faculty and community members to learn, share knowledge and collaborate through coordinated programs of engagement, events, training, education and celebration.*

Background: Collaboration and the exchange of ideas are core principles that shape and reinforce the commitment to sustainability at UVic. The Office of Campus Planning and Sustainability has developed a series of programs that are specifically designed to engage the campus community in sustainability including Sustainability Action Teams (in offices, student residences and labs), Sustainability Champion Awards (for staff and students) and the Revolving Loan Fund. The Office also hosts, and co-hosts with other departments, many public lectures, workshops, film screenings and outreach programs (e.g. Love-A-Mug week and Bike to Work week) that inform and engage the campus and surrounding community in sustainability-related actions, ideas and themes.

Goal 1: Develop and implement programs and activities that assist the campus community in contributing to the achievement of sustainability goals.

Goal 2: Work with campus partners to increase the awareness of local and global sustainability issues within the campus population and the surrounding community.

Goal 3: Create new programming for the Sustainability Action Team program with offices, labs, and residences.

Goal 4: Engage the local community in the university's sustainability initiatives and develop programs to work collaboratively on issues of mutual interest and benefit.

Actions:

- Develop a social media communications plan to allow for sustainability news and information to reach more students.
- Update the Sustainability website to increase user friendliness, engagement, integration with other departments and improve content presentation.
- Develop a strategy to better integrate sustainability principles and practices into the university's event planning, marketing and communications activities.
- Develop and promote presentations by the Sustainability Coordinators in classes, to student clubs and other groups on campus and in the community.
- Work with Student Affairs to increase the levels of sustainability information and education into new student orientation programming and campus tours.
- Work with Student Residences Services to develop sustainability programming for student residents and family student housing residents.
- Develop a plan to survey and work with lab users to assist in increasing knowledge levels relative to green lab approaches.
- Develop a strategy to enhance staff engagement in Green Office programming on an ongoing basis.
- Work in conjunction with campus departments and units to investigate creating partnerships and linkages with local governments and other organizations on sustainable community development and research opportunities that connect the university with the community.
- Work with the Community Mapping Initiative and students to create a new Campus Community Map.

Monitoring: The Office's website, Facebook page and Twitter posts act as online hubs for communicating and reporting on a variety of sustainability initiatives, programs, events and activities that take place across campus. Tracking activity on these platforms will provide important matrices to assess levels of engagement and reach. Other monitoring activities will include recording the number of people who subscribe to the weekly sustainability newsletter, attend events and who participate in the Sustainability Action Team program. The Office can also track the number of presentations given to classes and to groups on campus and in the community.



5.0 Operations, Facilities and Services



5.1 Buildings

Mission: *To construct, renovate, maintain and operate campus buildings to green building standards and practices.*

Background: The university is committed to progressive green building technologies and design and accountability in building maintenance and performance that meets the needs of the campus community. As of 2014, the campus has six LEED Gold certified buildings and a seventh targeted for a Gold rating is under construction scheduled to be completed in the spring of 2015. Our existing buildings are managed sustainability including the primary use of green cleaning products, low-VOC paints and most have individual energy monitoring meter systems. Our largest buildings are undergoing heating, ventilation and cooling system upgrades, and many are receiving energy efficient lighting upgrades.

Goal 1: Ensure all new buildings and major renovation¹ projects achieve the standard of LEED Gold or equivalent certification.

Goal 2: Utilize sustainable green building practices for all renovation and building construction projects that are below the threshold for mandatory LEED Gold or equivalent certification.

Goal 3: Utilize sustainable operational and building maintenance practices in all campus buildings and facilities.

Goal 4: Develop systems that provide for the reduction, measurement and reporting of construction and demolition waste.

Actions:

- Prepare campus green building guidelines that provide sustainability design priorities and performance criteria specific to UVic that will assist with the application of LEED gold or equivalent criteria for new capital building projects and major renovation projects on campus.
- Conduct a post occupancy evaluation for new building projects to assess whether the projected levels of energy and environmental performance made at the design stage are achieved.
- Review green cleaning practices and develop a green cleaning policy.
- Review and update the Campus Design and the Campus Sustainability Guidelines, including information on sustainable operational and building management practices.
- Investigate approaches to monitoring and tracking construction waste from renovation projects on campus.

¹ Renovation work with a scope that exceeds 75% of the original building cost is classified as “major”.

Monitoring: The LEED certification process by the Canada Green Building Council utilizes a number of criteria in its building classification systems. To pursue LEED certification, information for new building projects needs to be collected as part of the building process, and therefore LEED certification itself acts as the major monitoring process for those projects. Facilities Management (FMGT) maintains detailed routine operational and maintenance schedules. These schedules will inform the monitoring effort. Other aspects of building performance relate to the Energy section of this plan. Tracking construction waste from renovation and demolition projects will require a review of possible measurement and reporting systems.



5.2 Computing

Mission: *To deliver computing services and infrastructure that meets the teaching, research and administrative needs of the campus community, while advancing the sustainability goals of responsible procurement, energy management and waste reduction.*

Background: University Systems operates an extensive network of computing infrastructure and online digital environments that support students, faculty and staff needs and is an important component of the efficient functioning of the teaching, research and administrative areas of the university. Green computing initiatives by the department have helped in creating awareness around energy use and savings, along with responsible e-waste disposal and sustainable purchasing practices.

Goal 1: Maximize the energy efficiency of information systems infrastructure across campus.

Goal 2: Develop systems and procedures that help reduce paper use in computer labs, offices and in administrative procedures across the university.

Goal 3: Ensure that green manufacturing standards and energy saving criteria are applied to all computing services purchasing decisions (EPEAT Gold and Energy Star rated).

Actions:

- Investigate and report on the opportunities to increase data centre energy efficiencies.
- Review the opportunities to extend power management measures across campus for computing equipment that utilize industry best practices.
- Develop a program of office and lab computing system audits to determine areas for improvement and staff training on energy management.
- Review printer and photocopier operating standards in offices and labs, and the opportunities to reduce energy and paper use through electronic document management practices, the use of network printers, and double-sided printing.
- Report on information systems infrastructure improvements and the steps that are undertaken to implement server and storage solutions that are energy efficient, innovative and reliable.

Monitoring: Energy efficiency opportunities in the data centres will be investigated as a coordinated effort between University Systems and Facilities Management. Opportunities for the extension of power management measures, and power management audit programs will be communicated and implemented in collaboration with University Systems. The energy saving results will be monitored in relation to these efforts and reported on in association with the Energy section of this Plan. Paper use will be tracked through copy paper purchases and will speak to the success of electronic document management and double-sided printing promotional efforts. University Systems will report on its purchasing practices.



5.3 Dining Services

Mission: *To be an institutional model of sustainability, leading the way through innovative local purchasing initiatives and operational sustainable practices that minimize our carbon footprint and provide high quality, ethically sourced, nutritious and diverse food options that sustain the health and wellbeing of our community.*

Background: Food Services is a leader in locally-sourced food purchasing. An audit of purchasing contracts indicates that almost half of all food served is locally sourced from either Vancouver Island or the Lower Mainland of BC, including most of the fresh produce. All of the pizza comes from local pizzerias that use local ingredients (where possible) in the toppings, and all of the baked goods (bread, muffins, cakes, pastries, bagels, etc.) sold on campus come from local bakeries. Poultry is purchased from local farms and all eggs used are “cage-free.” Efforts are being made to continually increase the selection of local cheeses and meats originating from Vancouver Island farms. UVic also sells 100% organic, fair trade coffee, most of which is roasted and packaged locally.

Goal 1: Benchmark and increase the number of local food producers and suppliers and maintain an active preference for Island produced products.

Goal 2: Enhance waste reduction and diversion practices in campus food outlets.

Actions:

- Investigate certification as a Fair Trade Campus.
- Create and implement a communications and awareness plan for Food Services regarding their locally sourced food options and the attention given to waste management and zero waste operations.
- Review opportunities to expand on the zero waste food approaches for all of the dining services outlets on campus.
- Continue to build relationships with local food producers.

Monitoring: Awareness of local food on campus would be measured by surveying students who frequent the various food outlets on campus. Milestones relative to the marketing campaign could also be established such as the formation of a Food Services Local Food Communications Team. Periodic waste audits of campus food outlets will also be conducted.



5.4 Energy

Mission: *To maintain a campus that fosters an energy conservation culture that utilizes innovative technologies and promotes occupant engagement to continually improve building performance, as well as providing a comfortable learning and work environment.*

Background: UVic has conducted an annual greenhouse gas inventory and has been “carbon-neutral” since 2010 under the British Columbia government’s carbon neutral legislation. This has provided the university with very detailed and consistently measured greenhouse gas emission and energy emissions data. Between 2010 and 2013, UVic reduced its overall greenhouse gas emissions by 17%, as well as campus electricity use by 4% and natural gas use by 9%.

These reductions were achieved primarily through programs that improved the energy efficiency of some of our largest buildings with support from BC Hydro’s Continuing Optimization Program. Initiatives included lighting and equipment upgrades, and fine tuning the heating, ventilation and cooling (HVAC) systems,

turning down the heat over holiday periods and various behavior change programs. In all cases the Research Safety program of the Occupational Health, Safety and Environment Department works to support faculty, staff and students in creating safe work environments by recognizing and controlling hazards and promoting safe work practices.

The Revolving Sustainability Fund has provided funding for some projects that have greatly improved the energy efficiency of the power systems in the Enterprise Data Centre, the University Centre parkade and lighting systems in various areas around campus.

Goal 1: Achieve a total institutional greenhouse gas emissions reduction of 30% by 2019, relative to 2010 as the baseline year.²

Goal 2: Reduce campus electricity consumption intensity by 8% by 2019, relative to 2010 as the baseline year.³

Goal 3: Reduce campus natural gas consumption intensity by 12% by 2019, relative to 2010 as the baseline year.⁴

Goal 4: Implement renewable energy demonstration projects on campus that help reduce greenhouse gas emissions and overall energy use.

Actions:

- Implementation of the key recommendations in the 2011 Campus Integrated Energy Master Plan including:
 - Assess the replacement of the aging natural gas powered hot water boiler district energy system with a new high efficiency system.
 - Continue to implement the BC Hydro funded Continuing Optimization Program, Phases 2 and 3, to improve the energy efficiency in the largest campus buildings.
 - Install a demonstration solar thermal array system.
- Implement recommendations from completed energy studies and conduct energy studies in buildings where they have not yet been completed.
- Expand work with building users in offices and student residences on energy efficiency behaviour change programs via the Sustainability Action Team program (see also Engagement section).
- Upgrade the aging outdoor light fixtures around campus with new, high efficiency systems and provide for the installation of motion-controlled lights in selected common areas of campus buildings and residences.

² Total institutional greenhouse gas emissions include all properties that the university owns, operates and leases from other entities, on and off campus, consistent with the Province of British Columbia's carbon neutral legislation. The data is measured on a calendar year basis.

³ Energy intensity for electricity is based on the building energy performance index (BEPI) of kwh / m² of campus floor space, and based on weather corrected data for the 4th quarter of each fiscal year.

⁴ Energy intensity for natural gas is based on the building energy performance index (BEPI) of e-kwh / m² of campus floor space, and based on weather corrected data for the 4th quarter of each fiscal year.

- Review building usage patterns and provide for evening and weekend activities to be consolidated into selected buildings to assist in energy savings.
- Review funding opportunities from the Revolving Sustainability Fund for energy intensive equipment and lighting upgrades where funding from base budgets or other sources is not available.

Monitoring: The annual Carbon Neutral Action Reports and the greenhouse gas inventory, along with annual reports to BC Hydro and Fortis BC provide detailed quantitative information and data on campus energy consumption. Other reports and surveys can provide information on building occupant behaviours that can assist in better understanding campus energy use and possible opportunities to achieve reductions. Energy consumption reductions which result from behaviour change and engagement campaigns will be reported in association with the Engagement section of this report.



5.5 Grounds

Mission: *To create and maintain a campus landscape that minimizes environmental impacts, enhances biodiversity and maintains aesthetic values.*

Background: UVic's overall character is a physically compact campus with buildings set in a landscape that includes open space, formal lawn areas and plantings, and nearby natural forested areas. Finnerty Gardens is also a significant feature of the landscaping of the campus, along with the natural environment of Mystic Vale. Facilities Management plays a key role in grounds maintenance, stormwater management and in providing for imaginative and environmentally sensitive landscape architecture.

Goal 1: Reduce the quantity and improve the water quality of stormwater on campus that enters the local drainage and stream networks.

Goal 2: Protect and manage the ecological diversity of the natural areas on campus and enhance the use of native species in campus landscape management.

Goal 3: Develop a formalized Integrated Pest Management Plan as part of the overall grounds management system.

Actions:

- Update the 2004 Stormwater Management Plan for the campus.
- Investigate the feasibility of edible landscapes and other food growth options on campus.
- Develop a campus grounds management plan that includes formal pest management procedures, tree management and natural area protection approaches and guidelines for campus landscaping and the use of native species.

Monitoring: Facilities Management operational programs provide for the collection of information on landscape management activities and procedures on campus. The formal ground management plan would further augment and consolidate this information and facilitate ongoing monitoring. Updated information on stormwater management practices would be derived from updates to the campus Stormwater Management Plan and stormwater development permits applications for new capital projects. Parking and Transportation Services manages parking lot operations and has the responsibility for planning upgrades and adjustments in conjunction with Facilities Management. A report on the feasibility of an edible landscape and other food growth options on campus will be created.



5.6 Purchasing

Mission: *To provide purchasing and supply management services to the campus community that achieve best value and apply triple bottom line principles to procurement initiatives, incorporating financial, social, and environmental considerations to supply management decisions.*

Background: Purchasing and supply management functions at UVic are largely centralized within the Purchasing Services Department, which is committed to procurement best practices that balance economic priorities with social responsibility and environmental sustainability values. With its range of purchasing activities, the impact of university operations through direct spending and the multiplier effect on the local economy of greater Victoria is substantial.

The Department encourages internal clients and external suppliers to identify products, services, or processes that promote environmental stewardship and social responsibility, including environmental benefits such as reduced life cycle costs, reduced energy consumption, recycled content, recyclability, extended product life, and decreased maintenance.

Goal 1: Review purchasing procedures and develop refinements that assist in furthering the incorporation and formal application of triple bottom line sustainability criteria in procurement decisions

Goal 2: Further develop reporting systems that include information on the source and environmental footprint of goods and services purchased by the university.

Actions:

- Develop educational programs and training on triple-bottom line evaluation criteria and various eco-certification systems to assist in purchasing processes.
- Further refine the evaluation framework and reporting system for sustainable triple bottom line procurement decision-making
- Develop a follow up mechanism to monitor supplier and service provider financial, social, and environmental performance.
- Develop sustainable procurement guidelines for clients and end users.
- Develop reporting systems that assist in tracking the origin of goods purchased by the university.

Monitoring: Purchasing Services will report on procurement triple bottom line initiatives and on the environmental footprint of goods and services acquired by the university, to identify the extent to which sustainability is integrated into UVic purchasing decisions.



5.7 Transportation

Mission: *To offer sustainable travel options for every campus community member and visitors, and to act as a hub in a regional sustainable transportation network.*

Background: Since UVic conducted its first comprehensive travel mode study in 1996, the portion of people choosing to travel to campus by means other than the single occupancy vehicle (e.g. transit, cycling, walking, carpooling) has increased from 42.5% to 60.3%, an increase of almost 18%. This increase is the result of a number of successful Transportation Demand Management programs including the student UPass program, an employee subsidized bus pass option, and a partnership with the Victoria Car Share

Co-op. The university has continued to work closely with BC Transit and neighbouring municipalities to improve transit service and access to campus via dedicated bike paths. UVic also offers many programs to support cyclists including a Campus Bike Centre, a Bike Kitchen, a bike and gear locker rental program, the SPOKES bike loan` program and thousands of racks conveniently located across campus.

Goal 1: Increase the use of transit, cycling, walking and carpooling to 70% of the transportation modal split by 2019.

Goal 2: Improve the sustainability of the campus fleet by reducing fuel consumption by 10% through staff training and gradual replacement of vehicles with the most fuel-efficient versions on the market.

Actions:

- Promote events such as bike repair classes, other seminars and bike locker rental opportunities at the Campus Bike Centre to increase its profile and use.
- Develop a campus Cycling Master Plan and plan for annual bike parking improvements, in coordination with the Cycling Advisory Committee.
- Liaise with local municipalities, the regional district, and community groups to promote cycling and to advance cycling network improvements, with links to the campus.
- Create an agreement with SPOKES to provide improved operational support for the program.
- Develop promotions to encourage more staff and faculty to use transit and to join the car share co-op and review opportunities to expand the employee bus pass program.
- Work with Facilities Management and Parking and Transportation Services to develop a system to monitor the fuel use of university fleet vehicles and to assist in reducing overall fuel consumption levels through staff training.
- Develop fleet replacement and purchasing criteria that advance the use of electric or hybrid vehicles and the most fuel efficient models, relative to operational needs.
- Develop improved website communications and new incentive based programs to promote transportation choices other than the single occupancy vehicle including transit, car share co-op, electric charging stations, bike lockers and other sustainable transportation alternatives.
- Undertake regular liaison with BC Transit to ensure that their service delivery decisions take campus community interests for improved bus service routing, scheduling and passenger convenience into account.

Monitoring: Information on progress relative to Transportation goals is available from periodic comprehensive campus traffic surveys. Other matrices can be used to track the success of transportation demand management programs including tracking the number of people participating in Bike to Work Week, making use of new cycling facilities, the number of employee bus passes sold relative to the number of parking permits sold. The percentage of electric and hybrid fleet vehicles in the campus fleet will also be tracked, along with fuel consumption.





5.8 Waste

Mission: *To provide services and infrastructure that advance the university as a Zero Waste campus.*

Background: UVic's waste reduction practices have improved substantially since 2009. The implementation of the consolidated waste management approach through the Waste Reduction Unit facilitated many important initiatives and enabled the consistent tracking of those improvements. For example, a major change to the classroom building recycling system was implemented in 2011 by removing all bins from classrooms and lecture theatres and replacing them with expanded waste sorting stations in hallways and common areas. Similar changes were also piloted in five office buildings in 2013 through the sorting-at-source recycling pilot, which involved installing centralized waste sorting bins throughout office buildings and eliminating desk side recycling bin janitorial service. Food waste composting collection systems have also improved on campus, which assisted University Food Services in composting almost all food waste produced in their operations and enabled campus users to more easily find composting facilities across campus. The result was a continually increasing waste diversion rate which reached 68% in 2013, up from 64% in 2011. At the same time, product stewardship programs for electronics, small appliances and batteries greatly improved. UVic is a leader in waste diversion among BC post-secondary institutions and these goals are intended to maintain that position of leadership.

Goal 1: Increase the waste diversion rate to 75% by 2019.

Goal 2: Reduce the total amount of waste produced as measured in kilograms per campus user (students, staff and faculty) by 2019, relative to 2010 as the baseline year.

Goal 3: Provide for responsible hazardous waste management on campus and reduce where possible the use of hazardous materials.

Actions:

- Expand composting on campus.
- Advance sorting-at-source systems across all university office locations.
- Investigate opportunities for a campus “free store”.
- Conduct waste reduction focused campaigns and events.
- Develop and implement a program for the installation of additional electric hand dryers in campus washrooms to reduce the use of paper towels.
- Integrate green labs information into the lab Safety Committee meetings.
- Investigate individual hazardous waste streams to help identify waste reduction options.

Monitoring: Waste is measured by the amount produced and diverted monthly on an ongoing basis. Periodic waste audits provide more details about the composition of the waste streams. Other qualitative metrics, through surveys or short form interviews, should be collected in conjunction with waste reduction campaigns and events along with quantitative metrics of participation. Systems are in place to review hazardous waste streams and to allow for improved metrics to be developed. Waste reductions which result from behaviour change and engagement campaigns will be reported in association with the Engagement section of this report.



5.9 Water

Mission: *To be an innovator in water use reduction, recovery, reuse and stewardship practices.*

Background: In 2011 the Capital Regional District worked with the university to produce a comprehensive water use audit that detailed water usage across campus in buildings and on grounds. It provided a list of recommendations on ways to conserve water through mechanical and operational improvements, and educational programs. The university has implemented many of these recommendations, reflected in the fact that water usage declined by 20% between 2009 and 2013. Water conservation measures, including the replacement of inefficient water fixtures in classroom buildings and student residences will continue over the next five years. Water consumption on campus is also largely impacted by the activities of the Outdoor Aquatic Unit; however its impact may vary depending upon the extent of the Unit's usage in the future.

During the last five years, 75 water fountains across campus were retrofitted with spouts that allow for the easy refilling of personal water bottles creating “water bottle filling stations”, and new water fountains were installed in food service areas. The university also purchased a mobile water bottle filling station for use at outdoor events.

Goal 1: Reduce campus water consumption by 25% by 2019, relative to 2010 as the baseline year.

Goal 2: Retrofit 25 water fountains in campus buildings for easy refilling of personal water bottles.

Actions:

- Continue to implement the recommendations from the 2011 CRD Water Use Audit including replacement of washroom fixtures with the most efficient models.
- Review and assess future approaches for the use of the treated (grey) water system from the Outdoor Aquatics Unit.
- Assess opportunities to utilize funding from the Revolving Loan Fund to assist in the supplemental financing of water reduction initiatives.
- Continue to implement expanded “naturalized” areas on campus that do not require irrigation.
- Develop a plan to upgrade more water fountains on campus in classroom and office areas.

Monitoring: Utility invoices for water usage assist in measuring and recording total water usage on campus. Other reporting measures for new building construction and renovations can provide data and information to track water management efforts on campus. Progress on fountain retrofits will be tracked.

6.0 Reporting

Action Plan implementation over the next five years will require a major collaborative effort from students, staff and faculty to work together to achieve progress towards the goals outlined. A key part of achieving success will be the processes that are set out for measuring, assessing and reporting on the Plan.

The Monitoring sections of the Plan provide for data collection and reporting on operational metrics related to conservation and savings, qualitative metrics such as surveys to measure attitudes and opinion changes and financial tracking on the use and impacts of programs and resources.

Key reporting activities include the preparation of a mid-term report of the Plan in 2017 and a final report in 2019. An update to the university's STARS report is also scheduled for 2017.



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