University of Victoria

Sustainability Action Plan: Campus Operations

2009-2014

This document is double sided.

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Introduction:

The 2007 University of Victoria Strategic Plan "A Vision for the Future – Building on Strength" identified sustainability as a strategic priority for the institution.

"We are committed to promoting the development of a sustainable society through our programs of education and research and the stewardship of our own financial and physical resources."

The university recognizes that 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.

Meeting the institution's sustainability goals will depend upon the actions and strong connections between the four key areas of the university: teaching, research, community partnerships and operations. While the university's four Vice-Presidents have separate accountability for these areas, it is recognized there are important linkages between campus operations and the academic and community outreach activities of the university.

This action plan identifies the goals and actions that will assist in implementing the University of Victoria Sustainability Policy in the area of Campus Operations primarily within the portfolio of the Vice President of Finance and Operations.

Our Path to Sustainability:

We have called our journey a path to sustainability.

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

Canada represents a small fraction of the world's population, but uses far more than its share of the world's energy, and emits a large percentage of the world's carbon dioxide pollution. We are a country with a huge ecological footprint. Our current lifestyle comes at the expense of the health of the planet and its people. The University of Victoria recognizes that we must do things differently to succeed in this challenging environment. The actions we take today must ensure that the resources we leave behind are enough to sustain future generations and maintain a high quality of life.

The challenge of achieving this outcome is no small matter but we recognize that the University of Victoria is uniquely positioned to be a leader in sustainability:

- A strong commitment to sustainability enhances our competitive position among post secondary schools and offers a unique opportunity to recruit and retain outstanding students, faculty and staff.
- As a centre for innovation, the university offers practical technology and knowledge transfer to create healthy, green communities.
- Efforts to reduce resource use through conservation, recovery, demand management, and improved facility design, reduce the institution's long term operating costs.
- A commitment to sustainability supports the CRD Regional Growth Strategy and the associated policies and bylaws of our surrounding municipalities and the Province of BC.
- Sustainability leadership has the potential to attract significant external funding to UVic – research grants, corporate partnerships, foundation investments, philanthropic support.

- Our significant purchasing power provides us with the opportunity to signal demand for ethically sourced and environmentally responsible products in the marketplace.
- Sustainability fits within our commitment to be open, transparent and accountable.
- Our physical campus can act as a learning laboratory for innovative programs, policies, infrastructure and activities.

Proud of the Past, Looking to the Future:

The University of Victoria has a long history of leadership in sustainability.

Over the past few decades our campus has received international attention for our commitment to green campus operations, interdisciplinary research, real life learning opportunities, and innovative community partnerships.

Moving forward, we recognize that building on this history of leadership will include forming internal partnerships across departments in order to fully realize the benefits that sustainable solutions provide.

A number of departments and individuals have shown a commitment to leadership and creativity when it comes to sustainability on campus throughout the years. The sheer number makes it impossible to list them here. Several student-led sustainability organizations and individuals have given generously of their time and expertise to help contribute to creating the kind of campus they want for future students.

The campus community's on-going dedication has made it possible to create this action plan and for that, the University of Victoria offers our sincere gratitude.

Collaboration is at the core of sustainability; working together on these new opportunities is what will make the university successful in achieving its sustainability goals.

Operations as One Pillar of a Sustainable Campus:

To achieve the visions and goals in this plan will require a collaborative effort by individuals, departments, and the institution as a whole. The plan is a campus generated vision of where we, as the university community, want to be in the future with respect to campus operations.

The university recognizes that there are a number of interrelated environmental, cultural, economic, social and technological dimensions to the sustainability agenda, which itself is continuously evolving.

The University of Victoria Sustainability Policy states:

- Sustainability Activities will support the academic, teaching and research priorities, will draw upon the abilities and expertise of the University Community, and will be guided by the University's Strategic Plan.
- The university establishes and maintains strategic partnerships with communities, governments, corporations and other non-governmental organizations to develop and promote sustainable practices and to identify and address sustainability challenges.

This action plan allows for students, faculty, staff and community members to identify how they can contribute to and be a part of university success in sustainability.

The integrated and interdisciplinary nature of sustainability provides for a living laboratory on campus. A variety of departments, academic units and research entities across the campus will find interest and relevance in the learning opportunities that come from a green and vibrant campus.

Principles:

The principles that will shape and reinforce our commitment to sustainability within campus operations are outlined below. They help to build upon and strengthen the university overall.

Respect for Mission	Sustainability will support and reinforce the commitment to creating knowledge, fostering academic and experiential learning, and serving communities in British Columbia, in Canada and around the world.
Respect for Place	Our actions will support the unique quality of life and place in the Capital Region and Southern Vancouver Island.
Respect for History and Culture	We recognize our connection to the historical traditions of the Coast Salish and Straits Salish People on our campus and value the diversity of our Province and community today.
Respect for People	A knowledgeable, equitable and active campus population will contribute to a vibrant and healthy University community.
Respect for Future Generations	We will create a legacy for the future UVic community.
Respect for Natural Systems	We will be inspired by nature; valuing what we can learn from its systems and processes.
Respect for Energy, Water and other Natural Resources	We will reduce our demand, improve efficiencies, and implement the use of renewable resources.
Respect for Collaboration	Students, faculty, staff and the broader community are a part of the solution – we will work collaboratively on our path to sustainability.
Respect for Transparency and Accountability:	We hold ourselves to the highest standards for developing, monitoring and reporting on of our sustainability efforts.

Action Plan Topic Areas:

We have intentionally divided this action plan into separate topics to allow us to focus our approach over the next five years. It is recognized that all of the topics are related-to and impact each other.

The Action Plan is divided into eight topic areas:

- Energy and Climate
- Transportation
- Purchasing

- Governance, Decision-making and Sustainability Resources
- Buildings and Renovations
- Grounds, Food and Urban Agriculture
- Waste Management
- Water Management

Each topic area includes:

- A vision
- Principles
- Goals
- A list of benefits to the university and community
- Actions 2009-2014

The numerical goals in each topic area have been established to reflect information provided in past operational studies and reviews and are intended to inspire leadership and action over a five year period.

Creating a Foundation for Institutional Sustainability:

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. It undertakes through its activities to improve the quality of life on campus and in the community by promoting triple bottom line perspectives within decision making across the institution.

To ensure a successful foundation for implementing the University of Victoria Sustainability Policy and this operational action plan, the Office of Campus Planning and Sustainability, in partnership with all campus stakeholders, will undertake the following actions:

FOUNDATION

1. **Develop and implement a sustainability communications strategy.**

This is a plan designed by a community of stakeholders. An effective communications strategy is central to the life of this plan and will help us report on our actions, successes and challenges. Regular communication on opportunities for engagement, action, and implementation will be needed for long term success and collaboration.

2. **Create a multi-stakeholder sustainability advisory committee on campus operations.**

Effective implementation of this plan will need to involve a wide array of members from the campus community. This committee will advise the Office of Campus Planning and Sustainability on matters relating to this Action Plan, help develop targets, and serve as a body to engage the wider campus community on making our efforts a success.

3. **Develop a revolving sustainability fund.**

The path to sustainability needs long term, stable funding from diverse sources**.** Best practices in this area indicate that a revolving fund, guided by a campus based advisory committee with contributions from the university, students, business partners, government and the broader community can assist in reviewing and advancing projects.

4. **Coordinate indicator reporting and develop a campus sustainability report card.**

Regular reporting will show the university community where our strengths and weaknesses are and allow us to effectively continue the conversation on where we need to go to reach the goal of sustainable campus operations. Over the next five years indicators will be refined with the assistance of the Sustainability Advisory Committee.

5. **Create an annual award or recognition program for campus community efforts in sustainability.**

In order to recognize the efforts, actions and programs implemented across the campus, the Office of Campus Planning and Sustainability will create an annual award program to celebrate individuals, student groups and departments.

6. **Develop a program to facilitate Sustainability Action Teams across campus.**

As a way to engage, motivate, educate and incent our campus community to fulfill the commitments in the University Sustainability Policy, a Sustainability Action Team Program will be established. Using best practices from other institutions and the Province of BC's "Green Teams", UVic will create a program that will focus on effective peer to peer education involving students, faculty, and staff.

A Campus Community Approach to Achieving this Plan:

The role of the campus community cannot be understated in the success of operational sustainability to date and the subsequent creation of this document.

The content of each topic in this action plan has been developed through a consultation process conducted throughout 2008 and early 2009, with widespread participation. We will continue to need the campus community's generous support as we move forward in achieving our goals. We recognize that sustainability is a commitment to future generations.

Sustainability at the University of Victoria is achievable. It will require both dedicated individuals and decision makers and a long term commitment to enhancing our quality of life and place.

The Sustainability Action Plan: Campus Operations builds on the University of Victoria's past successes with sustainability and provides a framework for collaboration, shared understanding, and action.

The Plan provides goals and direction for a wide range of different types of actions within eight inter-related topic areas. Implementation activities, projects and initiatives will be undertaken within the various decision making, planning and budgetary parameters set out by the university over the period 2009 to 2014. The Plan will need to respond to evolving conditions and opportunities with adjustments considered as part of the regular monitoring and reporting process.

1.0 Energy and Climate

Vision: *A campus that utilizes renewable energy sources for all of its energy needs.*

Principles:

- We recognize the importance of sharing our emission reduction strategies with other post secondary institutions, civil society, government and the business community.
- We recognize the importance of achieving an overall reduction in energy demand.

Goals:

- Become carbon neutral by 2010.
- Reduce campus electricity consumption by 20% by 2015.
- Increase our renewable energy portfolio.
- Reduce greenhouse gas emissions by 20% over 2007 baseline by 2015.
- Quantify the risks to university resources and infrastructure associated with global climate change by 2015.

Benefits to the University and Community:

- Reducing future operating costs.
- Modeling effective carbon reduction strategies will serve as an example for other public sector organizations.
- Reducing electricity and natural gas use will help reduce the demand for energy in the province.
- Measuring carbon emissions will help to target management and reduction strategies.

Actions: 2009 - 2014

- Develop and implement an energy strategy that focuses on conservation, efficiency, and the use of renewable energy sources for the Gordon Head Campus.
- Conduct a review of the existing central heating plants and distribution infrastructure on campus.
- Develop and set requirements for new appliances/equipment/lights to meet or exceed energy star or equivalent type standards.
- Measure and report on GHG emissions on an annual basis.
- Investigate the potential for integrated resource recovery, should the CRD proceed with a sewage treatment program in close proximity to the Gordon Head Campus.
- Assess the operational needs for weekend use of buildings and limit heat requirements.
- Install laundry lines in cluster and family student housing.
- Concentrate evening classes in a few buildings.
- Install motion sensors in all lunchrooms and washrooms on campus.
- Continue to conduct lighting and mechanical retrofits.
- Install daylight sensors in all foyers and hallways.
- Sub-meter, by utility, all buildings and develop ongoing monitoring and feedback systems for energy consumption – ideally visible to campus users in building foyers.
- Offer energy audits to departments – equipment, lights, ‘phantom loads’
- Ensure all computer labs have auto-sleep or shut down mode when not in use.
- Require the use of compact fluorescent light bulbs for any office or housing unit that uses personal task lighting.
- Retrofit machines and equipment to power down/off in the silent or non-use hours.
- Encourage the adoption of the Climate Change Statement of Action for Canada among universities, colleges and other post secondary institutions.

2.0 Transportation

Vision: *A campus that has sustainable travel options for every campus community member and acts as a hub in a regional sustainable transportation network.*

Principles:

- We will remain open and accessible while significantly reducing the volumes of single occupant vehicle traffic on campus.
- We support the creation of sustainable transportation networks in the region

Goals:

- Increase bus use, cycling, and carpooling to 70% of campus modal split by 2014.
- Reduce the number of fleet vehicles that consume fossil fuels to 40% of total vehicle fleet.
- Increase support for persons with a disability as it relates to travel, parking and transportation choice.
- Quantify the emissions generated by university business-travel annually starting in 2012 to assist in developing reduction strategies.
- Work with neighbouring municipalities on linked transportation strategies to more than double the per capita proportion of bicycle use by 2014.
- Build a foundation for greater co-operation and co-ordination of sustainable transportation initiatives in the region.

Benefits to the University and Community:

- Reduced congestion and emissions associated with transportation.
- Better transit infrastructure and supply serves the whole campus community.
- Enhanced end-of-trip amenities provide support for those using active transportation.
- Better utilization of the existing campus parking supply.

Actions: 2009 - 2014

- Work with the municipalities to have bike lanes extended to all entrances of the Gordon Head campus.
- Create continuous pedestrian facilities (sidewalks, curb cuts, etc) around the Ring Road.
- Work with BC Transit and the CRD to enhance transit service that could include a Light Rapid Transit (or equivalent) line to campus.
- Conduct Accessibility and Universal Access reviews as part of the development and design of new on-campus transportation facilities.
- Make showers, change areas and clothing lockers available in every building.
- Continue to expand standard bike parking, bike shelters, and bike lockers.
- Expand hybrid vehicles and other low emission technologies (eg: bikes, gators, scooters etc) in UVic fleet and motor pool rentals.
- Consult with campus organizations representing persons with a disability in order to provide increased options for accessing campus.
- Work with the District of Saanich and District of Oak Bay on projects that help to jointly achieve reductions in greenhouse gas emissions.
- Create a Guaranteed Emergency Ride Home program
- Develop a “reimbursement claim” system for those who cycle for work related activities.
- Enhance way-finding signs to encourage drivers to use the more remote parking lots.
- Expand space and support for the UVic SPOKES program.

- Consolidate shipments of supplies to campus to reduce emissions.
- Expand and enhance access to video conferencing infrastructure.
- Provide enhanced incentives for employees returning parking permits to switch to sustainable transportation.
- Develop an enhanced faculty/staff transportation programs that take into account possible coordination opportunities with Camosun College and Royal Roads University.
- Review the balance and allocation between General, Reserved and Student Resident parking stalls.
- Review eligibility requirements for the Employee Bus Pass program every two years.
- Conduct a detailed review of the transit exchange and consider alternatives to having the BC Transit buses circulating on the Ring Road.
- Review course times, employee shifts and BC Transit Schedules to maximize transit service opportunities to campus.
- Consider incentives to encourage drivers to park in remote lots.
- Investigate a “park and ride” service for areas in the region with high campus populations and that are not well served by public transit.
- Create a formal telecommuting program for employees.
- Create partnerships with local bike shops to offer zero-interest loans for new bicycles for people that commute by cycling to campus.
- Review and update the plans for student on campus housing.

3.0 Purchasing

Vision: *All major purchasing decisions are made using a triple bottom line decision making framework.*

Principles:

- We recognize that procurement of goods has a social, environmental and economic impact on the region
- We will use the magnitude of our purchasing power to advance sustainability outside of the university's borders.
- We welcome businesses of all sizes to provide goods and services to the campus community.
- We expect businesses and service providers to adhere to a supplier's code of conduct.
- Branded clothing and products are ethically sourced and environmentally responsible.

Goals:

- Utilize a triple bottom line framework for major purchasing decisions by 2010.
- By 2012, establish a regional or provincial sustainability purchasing initiative to incubate ideas and support for sustainability purchasing policies and practice.
- Serve fair trade certified products that are readily available (Coffee, Tea, Chocolate, Sugar etc.) in 100% of food outlets on campus.
- Design purchasing agreements that accommodate different sizes and types of businesses.
- Increase purchasing of local goods and services.

Benefits to the University and Community:

- Campus purchasing power can help change market demand for products and services.
- Triple bottom line decision making will act as a model for other public institutions and local governments.
- Ethical purchasing standards provide an opportunity to show leadership.
- Learning obtained through lifecycle analysis in purchasing decisions will be shared with the external community.

Actions: 2009 - 2014

- Develop a triple bottom line framework that integrates life cycle analysis into purchasing decisions.
- Review supplier codes of conduct on a regular basis to ensure the most up to date practices and legislation are included.
- Investigate Forest Stewardship Certification for the UVic Print Shop.
- Provide information on ethical and sustainable products used on the UVic campus and showcase the suppliers/manufacturers that provide them.
- Assess availability of Fair Trade food and beverage products on campus.
- Expand the range of UVic branded materials (clothing, binders, mugs, etc) which promote environmental responsibility and ethical production.
- Expand the use of 100% recycled paper products on campus.
- Evaluate and monitor the market-wide impacts of sustainability purchasing on an ongoing basis.

- Increase communications on the benefits of strategic alliances and the process of creating them.
- Develop an equipment and furniture inventory and replacement program that allows for the reuse of equipment and furniture where possible prior to recycling.
- Develop additional product for service agreements – for example, ‘extended manufacturer responsibility’ regarding the recycling/reusing of the packaging their items arrive in, as well as the item itself.

4.0 Governance, Decision-making and Sustainability Resources

Vision: *A university that integrates sustainability issues into decision making and utilizes innovative funding mechanisms to further advance sustainability efforts.*

Principles:

- Governance structures for campus sustainability exist to meet the needs of our campus community.
- We will have processes for decision making and resolving conflicts related to sustainability goals, initiatives and indicators.
- Our investments will produce an overall positive impact on society and minimize negative impacts on the environment.
- We value the knowledge and expertise of our campus community members.

Goals:

- Implement a campus sustainability communications strategy by the end of 2009.
- Publish a sustainability report card with quantitative indicators annually beginning in 2011.
- Provide organizational systems and resources to implement and monitor this action plan.
- Host special events which promote the exchange of sustainability knowledge among our campus community members.
- Promote triple bottom line perspectives in decision making across the institution**.**
- Increase participation in the Community Green Map System.

Benefits to the University and Community:

- Effective implementation of the sustainability policy.
- Clear structure allows for the university community and public to understand where opportunities for involvement exist.
- Increased, long-term, broad based participation in the path to sustainability.
- Increased accountability for progress made and long term trends.
- The campus community will be engaged, educated and active in sustainability.
- Increased knowledge will enhance our sustainability actions.

Actions: 2009 - 2014

- Encourage all university-owned entities and properties to develop sustainability action plans.
- Develop a comprehensive sustainability communications strategy.
- Establish a sustainability advisory committee for campus operations.
- Improve the availability of library resource materials on sustainability for use by students, faculty and staff.
- Assist departments in identifying resources needed to implement the Action Plan.
- Investigate becoming a satellite campus for the 2009 Bioneers Conference.
- Create an annual award or recognition program for campus community efforts in sustainability.
- Evaluate our current investment approach with the view to identifying ways to address social responsibility.
- Establish a revolving sustainability fund to invest in projects and provide assistance to individuals, groups and departments.

- Incorporate sustainability into departmental service planning within campus operations.
- Develop a sustainability report card in conjunction with the work on indicator reporting and the sustainability advisory committee on campus operations.
- Review departmental policies and practices in order to improve alignment with the action plan for campus operations.
- Support peer to peer sustainability learning opportunities.
- Provide resources to expand the Campus Community Green Map System to connect with regional mapping efforts.
- Undertake a project that examines the Ecological Footprint of the university.
- Educate Campus Community Members about best practices and programs in sustainability.
- Continue to build long term relationships with donors interested in sustainability issues.
- Create a Sustainability Action Team program on campus that is open to students, faculty, and staff.

5.0 Buildings and Renovations

Vision: *A campus where all facilities are built or renovated to meet current green building standards and act as physical tools of education for both the campus and broader community.*

Principles:

- Building and renovation programs will give priority to the academic, teaching and research mission.
- We integrate learning opportunities through the design and operation of our buildings and facilities.
- We create spaces both inside and out that promote and enhance social interaction.
- We showcase the arts – inside buildings and throughout the built environment.
- We design buildings for future durability, flexibility and usability.
- We recognize that campus development needs to preserve the spirit of place and respect our long term commitment to sustainability.

Goals:

- 100% of all capital building projects and major renovations will utilize an integrated approach to building planning, design, construction and operations.
- 100% of all new buildings will be constructed and certified as LEED Gold facilities.
- 50% of all major renovation projects registered in the LEED EB (existing buildings) program.
- 100% of all building spaces are cleaned with green cleaning techniques and products by 2011.
- To maintain and maximize the utilization of our physical infrastructure.

Benefits to the University and Community:

- Green buildings reduce resource use and create healthy work and study environments.
- Innovative buildings provide unique education opportunities.
- The ability to model new technology, products and construction practices.

Actions: 2009 - 2014

- Establish building audit system and prioritization list for renovations.
- Quantify and recognize the health and productivity benefits of green buildings.
- Integrate future climate conditions into the design of heating, ventilation and cooling systems in all new buildings and major retrofits.
- Develop a collaborative planning, design and operational feedback loop for new construction and renovation projects.
- Create a business case for the implementation of green cleaning standards for on campus student housing services.
- Provide additional benches and picnic tables to enhance outdoor meeting spaces.
- Minimize the footprint of new development on campus.
- Implement Smart Growth principles wherever possible in campus development.
- Expand the use of indoor plants to existing buildings to improve indoor air quality, aesthetics, and overall quality of spaces of the built environment.
- Showcase green features/benefits of each building by integrating information signs and displays.
- Continue to create office and classroom spaces with windows that open.

6.0 Campus Grounds, Food and Urban Agriculture

Vision: *An organically landscaped and managed campus that enhances biodiversity and offers healthy, local and diverse food choices.*

Principles:

- The University of Victoria views its landscape as a 'living laboratory' – a place of academic study and community learning.
- We value and recognize the inherent and tangible environmental benefits of landscapes.
- We develop and maintain natural landscapes that have highly diverse genetic populations of native plant species and reflect the nature of the bioregion.
- We will engage the broader community in enhancing the campus landscapes.

Goals:

- Develop a process to review protection of natural areas outlined in the 2003 Campus Plan beyond 2013.
- Eliminate toxic chemicals from routine landscape management by 2012.
- Reduce the amount of impermeable surfaces on campus.
- Restore unhealthy natural areas on campus.
- Increase accessibility to healthy and diverse food options.
- Review and assess the opportunities for locally produced and other "low impact" food options to be made available on campus.
- Create a program to coordinate and support academic study and research in our campus landscapes by 2010.
- Ensure that 75% of all new plants installed on campus are native.
- Ensure that 50% of natural areas on campus are healthy natural areas.
- Increase spending on organic and fair trade food and beverages.

Benefits for the University and Community:

- Locally-sourced, healthy food and beverage options support the BC economy.
- Enhanced biodiversity and ecosystem health that contributes to resiliency of the region.
- Our campus acts as a demonstration site and learning laboratory.

Actions: 2009 - 2014

- Develop a process for planning a Village Centre and Multi-Modal Transportation Hub on campus.
- Conduct a biophysical inventory every two years starting in 2010 to document change in campus landscapes and provide information for restoration.
- Include an ecosystem based management approach for lands use decision making.
- Increase nutritional and sustainable food and beverage options on campus.
- Continue implementation of storm water management best practices in the built environment and campus landscapes.
- Develop interpretive information for campus landscapes.
- Implement the campus way finding strategy.
- Investigate a "low impact" menu/café on campus that serves organic, local or seasonal dishes.
- Create public food spaces (kitchens, microwaves, public water, etc…)
- Develop a management plan for University Cedar Hill Corner that will guide its use in the short term and the process for master plan preparation.
- Review campus landscape standards and management practices, including the use of mowers and blowers and inorganic fertilizers.

- Provide nutritional information on foods served in cafeterias and campus food outlets.
- Expand access to nutritional foods outside of regular university working hours.
- Create a demonstration garden at the family student housing area.
- Develop a plan to naturalize children play areas within applicable Child Care Centres on campus.
- Work with local farmers and producers to enhance production and supply of produce in the local community through Purchasing programs and initiatives.
- Establish mechanisms that allow UVic to purchase local goods and services while ensuring compliance with trade agreements such as TILMA.
- Develop a process to review the Memorandum of Understanding with the Campus Community Gardens by 2010.

7.0 Waste Management

Vision: *A zero waste institution.*

Principles:

- We will focus on the hierarchy of waste management: reduce, reuse, and then recycle, in recognition that reduced consumption has a far greater effect on waste management than either reuse or recycling.
- We will minimize the impact of hazardous wastes on the environment through effective source control strategies.
- We recognize our responsibility for pollution prevention in our air sheds, waterways and physical landscapes.

Goals:

- A streamlined, standardized, and consolidated Waste Management operating model by 2010.
- A waste diversion rate of 75% by 2012.
- Achieve a construction demolition waste diversion rate of greater than 75%.
- Ensure 100% of all university electronic waste is recycled domestically.
- Measure the amount of hazardous waste we produce annually.

Benefits to the University and Community:

- Reduce pressures and extend capacity of the Hartland landfill.
- Model resource recovery in the region.
- Reduce operating costs related to waste disposal.

Actions: 2009 - 2014

- Develop a plan for implementing a streamlined, standardized, and integrated Waste Management system that expands our current recycling and waste diversion efforts.
- Develop clear, consistent education and infrastructure for recycling and composting.
- Investigate purchasing an in-vessel compost machine for the campus with other CRD municipalities.
- Eliminate disposable take-out containers and utensils in all university operated food service and retail outlets.
- Establish new programs to educate the campus community about the importance of waste management.
- Review and update source control strategies related to hazardous waste and land, water and air shed pollution prevention.
- Expand programs to reduce the amount of hazardous waste generated on campus.
- Require double siding where possible and practical for all university documents.
- Expand the number of outdoor compost stations.
- Host personal electronic recycling events on a regular basis.
- Host a specialty plastics community recycling event once a semester.
- Eliminate plastic bags in retail outlets on campus.
- Implement an education program to ensure widespread understanding of personal and department waste generation and diversion.
- Develop a waste management planning and resource recovery system for large scale campus events.

- Expand the number of documents available in electronic form and provide opportunities for the digital review of University documents.

8.0 Water Management

Vision: *The University is an innovator in water use reduction, recovery, reuse and stewardship practices.*

Principles:

- We value water resources.
- We protect, restore and enhance watersheds on campus.
- We design our campus landscapes with native, drought tolerant species.

Goals:

- Reduce water consumption by 25% through conservation and innovation by 2015.
- Decrease rainwater runoff by 10% by 2012.
- Increase campus community access to public water for drinking.
- Expand the system and the use of treated waste water on campus.

Benefits to the University and Community:

- Reduce demands on the regional water supply.
- Provide learning opportunities through water reduction, treatment and reuse programs.
- Create a sense of stewardship and responsibility of water resources.

Actions: 2009 – 2014

- Continue to implement storm water management best practices in all new and existing developments on campus.
- Use potable water only for necessary activities and prioritize watering.
- Continue to retrofit all toilets, faucets and taps to low flow options.
- Implement standards that ensure that every new development has no net increase in rainwater runoff.
- Promote the high quality of CRD water through education programs and add new drinking water stations designed to accommodate filling bottles.
- Work with authorities (eg: province, CRD, VIHA, etc…) to expand the campus treated waste water system to irrigation, athletic and ornamental purposes.
- Participate in community watershed planning and activities.
- Restore and enhance creeks and/or water features in natural areas on campus.
- Install rain barrels at family and cluster housing.
- Ensure that irrigation systems are monitored and controlled by evapo-transpiration sensing systems.
- Develop a program to retrofit all housing units on campus to utilize water efficient equipment (showers, dishwashers, faucets, laundry machines etc).
- Convert additional landscaped areas to bioswales and natural detention ponds.
- Minimize the extent of power washing by combining it with mechanical activities.

Implementation

The University of Victoria recognizes that our path to sustainability will evolve as we accomplish tasks and reach milestones.

There are a number of interrelated environmental, cultural, economic, social and technological dimensions to the sustainability agenda. This action plan for campus operations is a living document. Contextual realities such as funding, partnerships, and legislation will change and therefore the document will have to change accordingly.

Actions may or may not lead to our intended goals; indicators will tell us where we are making progress and where more effort will need to be applied. This is a multi-year plan that will be implemented by numerous people and be lead by various departments primarily within the portfolio of the Vice-President Finance and Operations.

The following actions have been selected to receive priority attention and to commence the implementation of the action plan.

ACTIONS TO COMMENCE IMPLEMENETATION

1. **Develop and implement an energy strategy that prioritizes conservation, efficiency, and renewable sources for the Gordon Head Campus**

In order to reduce greenhouse gas emissions associated with energy use (specifically heating, cooling and electricity) and meet targets outlined in Bill 44, the University of Victoria needs to conduct a campus energy audit and develop a strategy to implement large-scale renewable energy sources on campus.

2. **Create a triple bottom line framework that takes into account the financial, social and environmental factors of purchasing decisions.**

In order for our campus community to understand the strategic choices involved in sustainability, major purchasing decisions should consider economic, environmental and social factors. UVic Purchasing Services has already started to implement these types of practices however it is important that we develop a standard approach.

3. **Develop an integrated Waste Management operating model that builds upon our current standards for recycling and waste diversion.**

Waste is one of the most tangible ways we can see the results of our personal and institutional decisions. In order to ensure that we are effectively reducing waste generation and diverting the maximum amount of materials from the landfill, a comprehensive waste management strategy with the goal of resource recovery will need to be developed.

4. **Expand and enhance access to video and telephone conferencing infrastructure.**

Video and telephone conferencing can be an effective way to reduce emissions and the economic costs related to travel for the entire campus community. It will be important to provide training and to remove barriers associated with this technology to promote its use as a reliable and effective means for doing business.

5. **Install new drinking water stations across campus, designed to accommodate filling bottles.**

Water is essential to human health. Access to it should be convenient. A number of new buildings and recent retrofit projects have included the installation of water stations and have proved to be very popular. This project will expand access to drinking water in a number of high traffic buildings on campus.

6. **Develop a process for planning a Village Centre and Multi-Modal Transportation Hub on campus.**

As described in the 2003 Campus Plan, and as a part of the most recent Long Term Traffic and Parking Study, a Village Centre and Multi-Modal Transportation hub are two key elements of a sustainable campus. Planning for this type of infrastructure is a first step in the creation of a mixed use development with services that will enhance the area as a centre of university life.

7. **Include sustainability as a part of Department Service Plans within campus operations.**

In order to bring sustainability into central focus for operations and to create a sense of responsibility, it is imperative that it be explicitly considered in Departmental Service Plans.

8. **Investigate the creation of a "low impact" menu/café on campus.**

Sustainable food systems are critical to reducing emissions and supporting the local economy. Using current and new business partners, the University will investigate a new menu within food service outlets, or potentially a café, that focuses on low impact food choices.

9. **Encourage all university-owned entities and properties to develop sustainability strategies.**

Ultimately the University of Victoria wants to ensure that all of its properties and ventures adopt sustainability approaches, strategies and plans. Carbon emissions are also required information under Bill 44 and are included in the University of Victoria's GHG annual footprint.

As annual work programs and priorities are established, other specific actions outlined in the Plan will be assessed as part of the departmental service plan development and delivery process.

Sustainability Reporting and Accountability:

A series of potential indicators that are based on best practices in reporting and from established sustainability assessment frameworks[1] for post secondary institutions is outlined below. The University of Victoria is already measuring some of these indicators.

Indictors will be revised and refined to ensure they appropriately reflect the direction and focus for our campus. The sustainability advisory committee will provide advice and feedback with respect to the indicators and their ongoing reporting.

Greenhouse Gas Emission Reductions
Total amount of annual GHG equivalent tones generated by the campus (including electricity, heating, cooling, fleet vehicles, fuel oils, waste, and purchased products) that have been reduced since the previous year.

Fuel combustion: Fleet Vehicles
Total number of fleet vehicles (not equipment) that use fossil fuels, divided by the total number of fleet vehicles available, multiplied by 100.

[1] Campus Sustainability Assessment Framework (CSAF) and Sustainability Tracking, Assessment and Rating System for Colleges and Universities (STARS).

Transportation Model Split
Measure the % modal split of transportation to campus every 2 years.

Supplier Code of Conduct
Confirmation that UVic has and acts on a supplier code of conduct that sets expectations about the social and environmental responsibility of vendors with whom the university does business with.

LEED™ Certified Buildings
Total number of buildings completed in the previous three years that have been certified to LEED™ silver, gold or platinum standard divided by the total number of buildings completed in the previous three years; multiply by 100.

Green Cleaning Practices
Campus cleaning service is Green Seal certified or meets the certification criteria for the Green Seal Environmental Standard (GS-42).

Impermeable surface
Total area of impermeable surfaces (in hectares), divided by the total campus land area; multiply by 100.

Healthy Natural Areas
Total area (in hectares) of healthy natural areas, divided by the total area (in hectares) of all natural areas (including healthy and degraded systems); multiply by 100.

Pesticide and Herbicide Use
Total volume of solid and liquid pesticides and herbicides (including both plant and animal poisons of all types) used annually (in liters), divided by the total hectares of managed greenspace.

Native Plants
Total number of native plants installed (number of individual plants) annually in managed greenspaces, divided by the total number of plants installed in that year; multiply by one hundred.

Protection of Natural Areas
Total area (in hectares) of natural areas protected for the long-term through policy, covenant, or other non-alterable protection strategy, divided by the total area (in hectares) of natural areas; multiply by 100.

Diet Types: Omnivore, Vegetarian and Vegan Food Options
Total annual number of meal servings (i.e. breakfast, lunch and dinner) provided by all food service outlets on-campus that have the above listed diet types provided for in the serving, divided by total number of meals servings provided by all food services each year; multiply by 100.

Organic and Fair Trade Food and Beverages
Total annual dollar value of certified organic, and/or fairly traded food products for all outlets selling food (prepared and unprepared) on campus, divided by the total annual food budget; multiply by 100.

Waste diversion rate
Tonnes of recyclables/organics diverted from the landfill divided by the total amount of waste collected annually; multiply by 100.

Hazardous waste
Total weight of solid and liquid hazardous waste produced (in kilograms) annually, divided by the total number of CCMs.

Construction and demolition wastes
Institution diverts a large amount of its non-hazardous construction and demolition waste from the landfill and/or incinerator. The diversion rate is calculated by dividing the weight or volume of materials recycled, donated, or otherwise recovered by the sum of the weight or volume of materials land filled or incinerated and the weight of materials recycled, donated, or otherwise recovered.

Electronics Recycling
Confirmation that UVic has a comprehensive electronic waste (e-waste) recycling and/or reuse program. The program includes collecting all institution-owned electronic products and electronic materials from students submitted through annual events.

Potable Water Consumed
Total annual volume of potable water consumed by the campus for all uses (in liters), divided by the total number of CCMs.

Treated waste-water reuse
Total volume of grey water and/or treated waste water (in liters) that is reused onsite, divided by the total volume of water consumed (in liters) annually by the campus for non-potable water requiring uses (i.e. toilets, irrigation, etc); multiply by 100.

Appendix A:
Glossary of Terms

Glossary of Terms:

Bill 44: Province of British Columbia's 2007 Greenhouse Gas Reduction Targets Act.

Biophysical: Relating to biological and physical processes.

Broader Community: Capital Regional District.

Carbon Neutral: To have no net greenhouse gas emissions. This is achieved through a three step, annual process. First, a measurement of greenhouse gas emissions is conducted to identify sources and total amount. Second, actions are taken to reduce the amount of greenhouse gas emitted by the institution for the reporting period. Third, the remaining emissions are netted to zero through the purchase of emissions offsets. For public institutions in British Columbia, this means purchasing offsets through the Pacific Carbon Trust.

CCM: Campus Community Member.

Ecological balance: is the equilibrium between, and coexistence of, all organisms and their environment.

Economic prosperity: is a financially healthy state.

Ecosystem-based management: an integrated approach to management that considers the entire ecosystem, including humans. The goal of ecosystem-based management is to maintain an ecosystem in a healthy, productive and resilient condition so that it can provide the services humans want and need. Current approaches usually only focus on a single species, sector, activity or concern; but ecosystem-based management considers the cumulative impacts of different sectors.

Emissions offset: certified reduction of emissions, as established, approved or recognized under the regulations for the purpose of:

(a) Reducing greenhouse gas emissions, or

(b) Reducing atmospheric greenhouse gas concentrations through storage, sequestration or other means.

Greenhouse gas: Any or all of carbon dioxide, methane, nitrous oxide, hydro fluorocarbons, perfluorocarbons, sulphur hexafluoride and any other substance prescribed by regulation.

Healthy Campus: The emotional, physical, cultural, and mental well being of our campus community members.

Life cycle analysis: An analysis of the environmental impact of a product during the entirety of its life-cycle, from resource extraction to post-consumer waste disposal. It is a comprehensive approach to examining the environmental impacts of a product or package.

Local: Defined geographically to include all of Vancouver Island and the Lower Mainland.

Major purchasing decisions: This term will be defined at a future date through work by Purchasing Services in the context of the University's purchasing obligations.

Multi-stakeholder: Stakeholder groups can include members of different departments, students, faculty, staff, government, community, alumni, First Nations etc.

Natural Systems: Systems that mimic natural processes.

Renewable Energy: Clean, non-nuclear, and perpetual energy -- includes but not limited to, hydro electricity, geothermal, solar, wind, and hydrogen.

Social Development: Encompasses a commitment to create social opportunities for individuals and groups to enhance overall community well-being.

Strategic Alliance: A Strategic Alliance (also called Strategic Partnership, Marketing Partnership or Marketing Alliance) is a contractual arrangement between the University and an external organization that sets out an agreed-upon exchange of cash, goods and/or services that have a direct measurable value. It is mutually beneficial to both the University and the external organization.

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

Triple Bottom Line: The combination of economic, social and environmental factors or performance measures.

Xeriscaping: An environmentally friendly form of landscaping that uses a variety of indigenous and drought-tolerant plants, shrubs, and ground cover.

Appendix B:
Additional Actions 2009 - 2014

Additional Actions: 2009 – 2014

These are a list of additional actions that were generated through the consultation process. They require further review and may be considered if the opportunities arise.

Energy and Climate:

- Consider providing a "resources" budget to departments that includes incentives reduce consumption and outputs.
- Integrate software that automatically turns off office computers at night time.
- Provide additional training to janitorial and office staff on energy saving strategies.
- Install user control systems.
- Develop a strategy to reduce air pollution related to academic and research work on campus (go beyond dilution).
- Implement bi-level lighting in corridors and stairwells during off-hours.
- Provide an "example monthly utility bill" to those living in cluster and family housing so that they can see their consumption of electricity and hot water.
- Expand late night class offerings in summer semester; reduce late night class offerings in winter semester.

Transportation:

- Eliminate annual parking permits and transition to semester permits.
- Develop marked bicycle lanes on the campus roads.
- Construct solar powered recharging station for electric vehicles.
- Require sustainable transportation options be integrated in the planning of large events and conferences on campus.
- Support an extended greenway between UVic and Downtown.
- Offer a membership to the Victoria Car Share Co-op for all students who do not own or operate vehicles in Greater Victoria.
- Restrict people who live in family/cluster/dorm housing from purchasing annual parking permits.
- Develop a trip planning assistance program for students, faculty and staff.
- Start a shuttle for the Ring Road.
- Provide virtual carbon debt tracking on u-Source.

Ethical and Sustainable Purchasing:

- Participate in a sustainable purchasing cluster in the CRD/BC.
- Provide support to Purchasing Services and Housing Food & Conference Services to enhance local food purchasing.
- List sustainability efforts of UVic suppliers on the purchasing website.
- Designate "free swap" spaces for individual and institutional surplus assets.
- Create a real and virtual warehouse where surplus assets can be stored and reused.
- Consider prioritizing hotel accommodations with Green Key ratings.

Governance, Decision Making & Sustainability Resources:

- Conduct a sustainability innovation competition for students.
- Investigate recognition programs for students who serve on operations committees of the institution.
- Work with the Municipality of Saanich and District of Oak Bay to assist with the development of a harmonized set of bylaws pertaining to the campus.

- Develop a database of local, regional and provincial stakeholders to assist with on-going engagement and dialogue.

Green Buildings and Renovations:

- Survey occupants of a new facility or major renovation within nine months of project completion to ensure building and system performances are maximized.
- Implement an inter-departmental sustainable building research program
- Increase space utilization when renovating existing buildings.
- Develop incentives for efficient use of under-used space.
- Retrofit Family Student and Cluster Housing to reduce energy and water consumption and improve indoor air quality.
- Create a sustainability welcome and education centre on campus.

Campus Grounds, Food and Urban Agriculture:

- Create edible landscapes throughout the campus.
- Establish measures to permanently protect the Bowker Creek's headwaters on campus.
- Construct an amphitheatre to act as an outdoor classroom.
- Shift resources dedicated to maintaining lawn spaces into maintaining natural landscapes.
- Expand options for those living on campus to grow their own food.
- Convert lawn space (and other areas, such as roofs where possible) into 'naturescapes'. Prioritize locations to be highly visible areas on campus.
- Provide diverse food options that help contribute to a low GHG food system.
- Structure sourcing documents and processes to enhance support for local food production and supply.
- Establish a campus native nursery and plant/seed exchange program.

Waste Management

- Integrate office compost pick up as a part of new waste management system.
- Ensure that our campus has the facilities or systems in place to accept 100% of recyclable items in the CRD and are available at convenient locations across the campus.
- Add infrastructure to accommodate cloth diapers in child care services.
- Compost all paper towels from bathrooms.
- Eliminate desktop printers and redundant electronics.
- Construct/designate "free swap" spaces on campus for clothing, books and other useable goods.
- Encourage departments to allow the electronic submissions of academic assignments and papers.

Water Management

- Expand treated waste water system infrastructure whenever roadway/sewer projects are undertaken.
- Connect applicable residences to campus treated waste water system for flushing purposes.
- Expand the use of permeable paving on campus.
- Regularly test efficiency and maintain campus irrigation systems – include a leakage and pressure audit.
- Install water meters in every building.

- Reduce bottled water consumption within housing, food and conference services and recreational events and activities.
- Provide appropriate training and education for staff that are responsible for irrigation on campus.
- Audit campus cafeteria dishwashers / washing equipment.