

# **Carbon Neutral Action Report**

## **University of Victoria**

### **Executive Summary**

The University of Victoria's 2007 Strategic Plan "A Vision for the Future – Building on Strength" identified sustainability as a priority for the institution. We recognize that sustainability is a commitment to future generations and requires the collective action of our entire community through long term planning, shared learning, grassroots activities and institutional leadership. Over the past ten years UVic has implemented a number of strategies to reduce electricity consumption, curb travel related emissions, and expand sustainable purchasing efforts. For more information on our sustainability portfolio visit [www.uvic.ca/sustainability](http://www.uvic.ca/sustainability).

Much of 2008 was devoted to developing a new campus Sustainability Policy and our Sustainability Action Plan: Campus Operations 2009 – 2014. The Action Plan is divided into eight topic areas including Energy and Climate, Transportation, Purchasing, Governance, Decision-making and Sustainability Resources, Buildings and Renovations, Grounds, Food and Urban Agriculture, Waste Management, and Water Management. The plan identifies key goals, actions and indicators in a number of areas that will help us achieve our goals of carbon neutrality and a sustainable campus community. It builds on our past successes with sustainability and provides a framework for collaboration, shared understanding, and action.

In the coming months, UVic will be embarking on a series of actions that will help to create a foundation for the successful implementation of our action plan.

These actions include:

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

An effective communications strategy 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.**

This committee will advise the Office of Campus Planning and Sustainability on matters relating to the 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 emission reduction 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.

**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.

In addition, the University of Victoria has committed to developing and implementing a multi-decade integrated energy plan for the institution. This strategy will prioritize conservation, efficiency, and renewable sources for the Gordon Head Campus and allow flexibility for future energy technologies.

## **Objectives**

**UVic has established a number of goals that relate to achieving carbon neutrality - these include:**

- Reduce campus electricity consumption by 20% by 2015.
- Quantify the risks to university resources and infrastructure associated with global climate change by 2015.
- 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.
- 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.
- 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.
- 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.
- Review and assess the opportunities for locally produced and other "low impact" food options to be made available on campus.
- Develop a streamlined, standardized, and consolidated Waste Management operating model by 2010.
- Achieve 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.

## Part 1: Actions Taken to Reduce Greenhouse Gas Emissions in 2008

### Overview:

UVic's commitment is holistic: we strive to integrate sustainability into our teaching, research, campus operations and community partnerships. This approach allows us to find synergies across disciplines and departments to find solutions to complex issues like climate change. In 2008, UVic completed the following actions:

- Offered extensive employee / student education and awareness activities
- Conducted an inventory of fleet vehicles
- Expanded local food options on campus
- Expanded our partnership with the Victoria Car Share Co-op
- Installed additional cycling infrastructure including end of trip amenities inside buildings such as showers, change rooms, and lockers.
- Expanded video conferencing facilities
- Hosted contest to support green ideas from community members, students, faculty and staff.
- Completed two Gold level LEED NC Green Buildings (Social Sciences and Mathematics and Administrative Support Building)
- Held multiple surplus furniture sales / donated old furniture to charity
- Used 5% Bio-diesel in tractors, generators and applicable fleet vehicles
- Conducted 2008 Traffic Audit
- Completed Long Term Traffic and Parking Study
- Initiated RFP for purchase of two Low Speed Electric Vehicles to replace gas powered fleet vehicles
- Created equipment fleet maintenance plan (gators, tractors, mowers etc)
- Included carbon footprint reporting as a part of RFP for Travel Management Services.
- Implemented fleet vehicle / bicycle maintenance program
- Completed building renovations and energy retrofits
- Introduced SharePoint technology for paperless meetings.
- Hosted Go Beyond Teach In: Climate Action Solutions for BC

### 1.1. Mobile Fuel Combustion:

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Replaced # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid	In progress	100% of all 2008 lease renewals were replaced by hybrid and/or electric vehicles (3).	UVic already has a extensive green fleet consisting of bicycles, electric gators, and hybrid cars.
Initiated new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	Complete		Annual Fleet maintenance program is already in place for both motor pool and operational fleet vehicles.
Established anti-idling behaviour change program (e.g. signs, stickers, messages)	In progress	75% of all loading zones have "Idle Free" signs.	
Encouraged car pooling in fleet vehicles	Complete		

Encouraged use of public transit/active transportation	Complete		Employee Buss pass program investment \$350,000 per year. UPASS investment of \$180,000 per year.
Encouraged alternatives to travel in fleet vehicles – bicycles, scooters, electric carts	Complete		Comprehensive TDM Program in place to encourage alternative travel in fleet vehicles.
Changed from gas to electric lawn maintenance equipment	In progress		
Established travel reduction goals	Complete		Increase modal split of transit, cycling, walking and car pooling to 70% of modal split by 2014.
Adopted a travel policy	In progress		
Expansion of Car Share Co-op on Campus	Complete	4 car share vehicles now located on campus	Uvic offers free memberships in Victoria Car Share Co-op to employees who make commitment to transit, cycling or walking as main mode of commuting.
Expansion of telephone and videoconference	Complete	2 new facilities added as a part of new development	University systems continues to support education and training for facilities

## 1.2 Stationary fuel combustion and electricity

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Undertaken workstation tune-ups to help staff understand what they can do to reduce personal energy use	In progress		
Replaced # computers with EnergyStar models	In progress		
Encouraged staff to use stairs	In progress		Part of Active-U employee wellness program.
Turned off lights in unused rooms	In progress		
Replaced Refrigerators (EnergyStar rated appliance)	In progress		
Replaced other appliances (with EnergyStar rated appliance)	In progress		
Installed multi-function devices (and removed stand-alone printers/faxes)	Complete	Installed 125 new MFDs in 2008.	
Replaced standard bulbs with CFLs	Complete		On going lighting retrofits include newest technologies as a part of all building maintenance programs: CFLs, T5s. T8 low wattage etc.
Installed motion activated lights	Complete		
Undertaken lighting retrofit	Complete		On going lighting retrofits include newest technologies as a part of all building maintenance programs: CFLs, T5s. T8 low wattage etc.
Applied for LEED existing building rating	Complete	One building application submitted (GOLD) in 2008.	2 LEED Gold certified facilities already exist on campus.

Initiated or completed a building energy retrofit	Complete	Energy system retrofits are a key component of all building renovations and upgrades.	
Establish electrical energy goals	Complete	Reduce campus electricity consumption by 20% over 2007 baseline by 2015.	
Establish GHG reduction goal	Complete	Reduce GHG emissions by 20% over 2007 baseline by 2015.	
<b>1.3 Supplies</b>			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Committed to use 30% recycled paper	Complete		
Committed to use 100% recycled paper	Complete	100% of white paper used on campus has a content of 100% PCW. Includes computing labs, photocopiers, bookstore, library and all offices.	UVic established standard in 2007.
Initiated automatic double sided printing	Complete		UVic established standard in 2007.
Committed to hold paperless meetings	In progress		
Developed document library (online and one printed copy) for large documents	In progress		Library reserved reading room and department servers act as digital repository of papers/reports/data.
Used collaborative software to edit on-line	In progress		Administrative staff currently trying different models of collaborative software.
Re-used non-confidential scrap paper	Complete		Print shop creates notebooks from non-confidential scrap paper and sells them in the UVic Bookstore.
Used laptops/tablets	Complete		Laptops are standard practice for office suites.
Restructured a process to use less paper	Complete		Introduced direct deposit for cheque requisitions and travel reimbursement claims.
<b>Actions on non-paper related supplies:</b>			
Encouraged re-use of furniture and equipment	In progress	10 surplus asset sales held throughout 2008.	Multiple donations of free furniture to NGOs and Community Charity organizations.
<b>1.4 Travel</b>			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Set a X% Travel reduction goal	Complete		
Trained staff in the use of Live Meeting (or other desktop collaborative software)	In progress		
Installed Video Conferencing facilities	Complete		
Initiated Travel Policy	In progress		

Supported alternative travel (bike/skateboard/walk/transit) for meetings	Complete		
Expanded cycling infrastructure	Complete	188 new bike parking stalls installed on campus	Cycling comprises 7.1% of 2008 modal split.
Expanded motorcycle/scooter parking	Complete		
Installed E-Bike charging stations	Complete	4 new e-bike charging stations installed.	
Hosted special events: e.g. Bike to Work Week	Complete	50 UVic teams in 2008.	UVic has been a program participant and sponsor for 11 years.
Expanded space and support for SPOKES bike program	Complete	Program averaged 40 bicycles per month in 2008.	SPOKES refurbishes old, unwanted bikes and lends them out to staff free of charge for up to one year.
<b>1.5 Employee Engagement</b>			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Provided climate change education	In progress		Workshops, lectures, special events, forums and continuing studies programs focused on climate change education. Multiple community partners.
Provided conservation education	In progress		Workshops, lectures, special events, forums and continuing studies programs focused on conservation culture. Multiple community partners.
Held contests/support to generate ideas	Complete		Held Great Green Ideas contest from September - November 2008. 23 submissions. Winning ideas were incorporated into Sustainability Action Plan.
Provided green tips	Complete		UVic established Green Event Guidelines in 2007. Green tips are provided through campus publications, websites and special events.
Supported professional development	Complete		A number of employees attended professional development seminars, courses and conferences throughout 2008 with a focus on environmental stewardship and sustainability.
<b>1.6 Sustainability Actions (others)</b>			
Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Took water conservation measures – low flow showers or toilets, fix leaks	Complete		Standard practice to install low flow and water conservation measures.
Ran dishwasher only when full	Complete		

Reduced/replaced bottled water with filtered or refrigerated water	In progress	8 water filling stations and fountains were installed in 2008.	Part of Sustainability Action Plan to promote non-bottled drinking water.
Improved recycling measures	Complete		New containers and infrastructure to increase source separation.
Supported composting	Complete	3 outdoor compost stations; 260 office compost bins.	Standard practice to compost all food waste from cafeterias, food outlets and eateries.
Used re-usable dishes	Complete		
Purchased green cleaning products	Complete		UVic has been running a green cleaning program since 2001.
Used green (low-e paints)	Complete		
Supported sustainable procurement practices	In progress		Current purchasing policy already supports sustainable procurement.

## Part 2: Plans to Continue Reducing Greenhouse Gas Emissions 2009 -- 2011

### Overview:

The University has identified a number of strategies to implement in the coming years, a few of the highlights include:

- Develop and implement a multi-decade energy and water master plan for the Gordon Head Campus that prioritizes conservation, efficiency, and renewable resources.
- Continue to replace fuel based fleet to hybrid or electric technologies
- Continue to expand education on climate change issues and solutions.
- Expand furniture re-use / donation program
- Develop a driver training workshop to reduce fuel use in fleet vehicles
- Expand Travel Choices Program to offer increased sustainable transportation options for students, faculty and staff
- Where applicable, transition from gas powered equipment to either manual or electric
- Supply power bars to residences and employees to shut off non-essential power supplies.
- Include sustainability reporting as a part of department service plans
- Encourage all university-owned entities to develop sustainability strategies
- Investigate "low carbon" food options / menus in cafeterias and eateries.

### 2.1 Mobile Fuel Combustion

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Replace # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid	In progress		All fleet vehicles are being replaced as leases expire annually.	On going
Provide driver training to reduce fuel use	Planned			Spring 2010
Establish anti-idling behaviour change program (e.g. signs, stickers, messages)	In progress		Expand to remaining 25% of loading zones and provide education to visitors through campus security.	Fall 2009
Encourage car pooling in fleet vehicles	Planned			On going

Encourage use of public transit/active transportation	Planned	Part of comprehensive TDM program.	On going
Encourage alternatives to travel in fleet vehicles – bicycles, scooters, electric carts	Planned	Part of comprehensive TDM program.	On going
Change from gas to electric lawn maintenance equipment	Planned		On going
Change to manual lawn and yard maintenance equipment	Planned	Review with Grounds Division underway to identify opportunities for manual lawn and yard maintenance.	Fall 2009
<b>2.2 Stationary Fuel Combustion (including electricity)</b>			
Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken
Undertake workstation tune-ups to help staff understand what they can do to reduce personal energy use	Planned		Fall 2010
Supply power bars – to turn off power to non-essential items when not in use (e.g. phone chargers)	Planned		Fall 2009
Replace # computers with EnergyStar models	Planned	All computers will be replaced with energy star models.	As required
Ask staff to close blinds daily	Planned	Education program with assistance from Janitorial division	Summer 2009
Encourage staff to use stairs	Planned		On going
Turn off lights in unused rooms	In progress		On going
Replace Refrigerators (EnergyStar rated appliance)	In progress		On going
Replace other appliances (with EnergyStar rated appliance)	In progress		On going
Install motion activated lights	Planned		As identified
Undertake lighting retrofit	Planned		On going
Apply for LEED existing building rating	Planned		On going
Undertake building energy audit at LOCATION(s)	Planned		Fall 2009
Conduct a review of central heating plants and distribution infrastructure.	Planned		Spring 2009
Investigate the potential for integrated resource recovery as a part of CRD sewage treatment strategy	Planned	MOU being established with CRD for resource recovery opportunities.	Spring 2009
Develop and implement an energy strategy for campus that prioritizes conservation, efficiency, and renewable sources	Planned		2009 - 2012
<b>2.3 Supplies</b>			
Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken
Commit to hold paperless meetings	In progress		On going

Develop document library (online and one printed copy) for large documents	In progress		On going
Restructure a process to use less paper	Planned		Where appropriate
<b>Actions on non-paper related supplies:</b>			
Purchase cradle to cradle goods	Planned		Where appropriate
Develop a triple bottom line framework for university purchasing	Planned	Currently sustainability is an element of UVic's purchasing policy, but we would like to actually create a TBL framework for major purchasing decisions.	Winter 2009
Consolidate shipments of supplies to campus	Planned	As a part of work with corporate suppliers and strategic alliances, Purchasing is working to consolidate supply delivery to campus for items such as office goods.	On going
Develop additional product service agreements, for example: extended manufacturer responsibility regarding the reuse and recycling of packaging and the item itself	Planned		On going

#### 2.4 Travel

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Initiate Travel Policy	In progress		A new employee travel policy is being developed that is in line with our Sustainability Action Plan goals.	Winter 2009
Mandate car pooling to government meetings	Planned			On going
Support alternative travel (bike/skateboard/walk/transit) for meetings	Planned			On going
Develop a plan for a village centre and multi-modal transportation hub	Planned		This planning study will allow UVic to look at future development options for a village centre concept designed around our main transit exchange and student services.	Fall 2009
Automate Employee Bus Pass	Planned		Transition program from monthly cards to employee swipe card technology, similar to the UPASS program.	Fall 2009
Expand incentives for drivers who switch to sustainable transportation	Planned		Incentives could include contests, prizes, rewards and perks for those who have formal carpools registered with campus security.	On going
Construct Bicycle Kitchen	Planned		Self serve bicycle repair station that is open to the public.	Summer 2009

<b>2.5 Employee Engagement</b>				
Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Provide climate change education	In progress		Continuing studies, events, lectures, forums and workshops to be hosted with on and off campus partners.	On going
Provide conservation education	In progress		Continuing studies, events, lectures, forums and workshops to be hosted with on and off campus partners.	On going
Develop Green Teams	Planned		Sustainability action teams to be created in every department to help implement sustainability policy and Action Plan.	Fall 2009
Support Green Teams (resources)	Planned		Staff in the Office of Planning and Sustainability will be dedicated to support teams on an ongoing basis.	On going
Provide green tips	In progress			On going
Support professional development	Planned		Staff in a number of departments will be sent to seminars, workshops and conferences focusing on environmental stewardship, life cycle analysis, and sustainability.	On going
Encourage all university owned entities to develop their own sustainability strategies	Planned			2009 - 2011
Include Sustainability Reporting as a part of all UVic department service plans	Planned		Annual department service plans will require details on efforts related to achieving campus sustainability goals and plans for upcoming year.	Fall 2009
Encourage the adoption of the Climate Change Statement of Action for Canada at other PSEC institutions	In progress			On going
<b>2.6 Sustainability Actions (others)</b>				
Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Reduce/replace bottled water with filtered or refrigerated water	Planned		Expand re-useable water bottle filling stations as a part of building renovation program.	
Improve recycling measures	Planned		Implement new monitoring and measurement metrics for waste management. Develop new RFP for waste/recycling/composting programs.	
Support composting	Planned			
Use re-usable dishes	Planned			
Purchase green cleaning products	Planned			

Support sustainable procurement practices	Planned		
Adopt low-carbon contracting practices			
Investigate "low carbon" menu options at cafes and eateries on campus	Planned	Increase the amount of organic, fair trade, and locally sourced food served in cafes and food outlets on campus.	Summer 2009
<b>ADD ANY ADDITIONAL ACTIONS TAKEN OR PLANNED IN THE ROWS BELOW. PLEASE INDICATE WHICH SECTION THE ACTION BELONGS IN BY INCLUDING THE NUMBER E.G. 2.6 SUSTAINABILITY</b>	<b>Action Planned</b>	<b>Outcome/Performance Measure</b>	<b>Notes Clarifying Action Taken</b>
Host World Student Environment Conference (2.6)	Planned		Delegates from around the world will gather at UVic to discuss student action on climate change. Jun-09
Publish a sustainability report card with quantitative indicators annually beginning in 2011 (2.6)	Planned		Using the STARS and CSAF frameworks, UVic will publish a standard set of indicators for sustainability in teaching, operations, research and community partnerships. 2011