



University of Victoria 2010 Carbon Neutral Action Report



**University
of Victoria**

University of Victoria – 2010 Carbon Neutral Action Report

Executive Summary

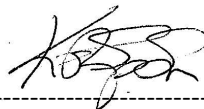
The University of Victoria (UVic) is committed to advancing sustainability in all areas of its operations. Recognizing the inherent link between climate action and promoting sustainability, UVic in 2010 continued to advance its carbon neutral commitments and activities within a broader sustainability framework. The Sustainability Policy approved in 2009 establishes an overarching framework that serves to assist the University community in incorporating sustainability into planning and decision-making. The Sustainability Action Plan for Campus Operations 2009-2014 includes aggressive greenhouse gas (GHG) emission reduction targets and an energy reduction strategy. The Action Plan builds on past successes with sustainability and provides a framework for collaboration, shared understanding and action.

Numerous activities were undertaken related to carbon neutrality in 2010. Extensive upgrades were undertaken on six of the oldest buildings on campus under the \$42.5 million Knowledge Infrastructure Program. The work included high efficiency window replacements, mechanical and electrical system improvements and other upgrades which will result in annual energy savings and reductions in GHG emissions. Other measures included the establishment of an energy manager position, a campus lighting audit, the installation of real time energy monitoring meters and software, the completion of a new LEED certified student residence building and the active involvement of a Sustainability Advisory Committee comprised of students, faculty and staff in advancing the implementation of various Action Plan projects. As one example, heating adjustments on campus during the December holiday period resulted in \$62,000 in energy savings and a reduction of GHG emissions by an estimated 210 tonnes. These positive results are encouraging as we continue to work towards our 20% GHG emission reduction goal in 2015 as outlined in the Sustainability Action Plan.

In 2010 the University of Victoria continued to build on its strong history of sustainability. Students, staff and faculty have taken an active role in assisting with the efforts to reduce campus energy consumption and GHG emissions and we are making progress in reducing our impact on the environment.



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University of Victoria

2010 Greenhouse Gas Emissions

The total GHG emissions for the University of Victoria are 15,545.90 tCO₂e. A breakdown of emissions is provided in Table 1 below.

University of Victoria – Greenhouse Gas Inventory 2010					
Reporting Unit	Fuel Type	Measure	Quantity	tCO ₂ e	Percentage of Emissions
Main Campus Buildings					
Heating Plants	Natural Gas	GJ	182,944.29	9,202.10	59.19%
Building Level NG	Natural Gas	GJ	55,512.82	2,792.29	17.96%
Electrical Stations	Electricity	GJ	203,941.22	1,407.19	9.05%
Campus Diesel (Generators)	Biodiesel 5%	GJ	124.61	8.63	0.06%
Campus Oil (Heating)	Light Fuel Oil	GJ	344.46	23.47	0.15%
Campus Propane (Heating and Generators)	Propane Gas	GJ	200.41	12.23	0.08%
Off Campus Buildings					
Leased Office Space	Electricity and Natural Gas	GJ	1,610.65	49.53	0.32%
Shared Operation Research Facilities	Electricity and Natural Gas	GJ	24,373.66	278.9	1.79%
UVic Facilities	Electricity and Natural Gas	GJ	5,033.55	147.53	0.95%
Total University Building Emissions			474,085.67	13921.87	89.55%
Properties Owned and Leased to External Organizations					
Leased to External Organizations	Electricity and Natural Gas	GJ	44,806.79	1,131.14	7.28%
Mobile Combustion					
Vehicle	Gas and Biodiesel 5%	Litres	130,886.66	300.79	1.93%
Procurement					
Paper		Pkg	44,259.00	192.06	1.24%
Total Emissions				15,545.90	

Table 1. Greenhouse gas emissions for the University of Victoria.

The primary source of emissions for UVic is from natural gas which is used as the primary heating fuel for the majority of buildings both on and off campus. Natural gas accounts for over 85% of the emissions associated

with the University of Victoria, while electricity accounts for 11%. Vehicle and paper emissions make up the remainder.

Offsets Applied to Become Carbon Neutral in 2010

The total emissions for the University of Victoria in the year 2010 is 15,556.85 tCO₂e.

This total excludes fugitive emissions. It was estimated that stationary fugitive emissions from cooling do not comprise more than 1% of the University of Victoria's total emissions and an ongoing effort to collect or estimate emissions from this source would be disproportionately onerous. For this reason, emissions from this source have been deemed out-of-scope and have not been included in the University of Victoria's total greenhouse gas emissions profile.

Also, as required by section 5 of the Carbon Neutral Government Regulation, 10.96 tCO₂e of emissions resulting from the use of bio-fuels were reported as part of our greenhouse gas emissions profile in 2010. However, they were not offset as they are out- of-scope under section 4(2)(c) of the Carbon Neutral Government Regulation.

Therefore, the total University of Victoria is required to offset is 15,545.90 tCO₂e for the 2010 calendar year.

Emission Reduction Activities

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 such as climate change. In 2010, various initiatives were taken to reduce GHG emissions as outlined below.

Actions Taken to Reduce Greenhouse Gas Emissions in 2010

- Initiated upgrades to energy metering systems in buildings across campus to allow for detailed real time energy tracking and monitoring on a building by building basis. This system will also allow us to create very accurate energy consumption baseline data to compliment the campus level baselines measured in 2009, and closely monitor our energy reduction efforts in the years to come.
- Reduced the temperature settings and turned off all unnecessary lighting and electrical equipment over the December holiday shutdown period, resulting in \$62,000 in energy savings and a reduction of greenhouse gas emissions by 210 tonnes
- Completed the terms of reference and a request for proposal process for a Campus Integrated Energy Master Plan that will focus on conservation, efficiency and the use of renewable energy sources.
- Established an Energy Manager position responsible for the development of a comprehensive energy management, monitoring and data analysis program including identifying, assessing, and implementing opportunities for reducing electricity, fuel usage, water consumption, along with an assessment of renewable and alternate energy opportunities.
- Launched the Sustainability Action Team program involving staff, students and faculty from six campus buildings (comprising 20% of campus gross square meters) who will compete to see which can reduce the most electricity and waste during a three month period in early 2011.
- Promoted alternate transportation through installation of more covered bike parking and bike lockers, participation in bike to work week and transportation tune up programs, completion of a comprehensive campus multi modal transportation study, and continuing general outreach and stakeholder engagement.
- Performed lighting audits to plan for conversion to lower wattage T8 lamps throughout the campus.

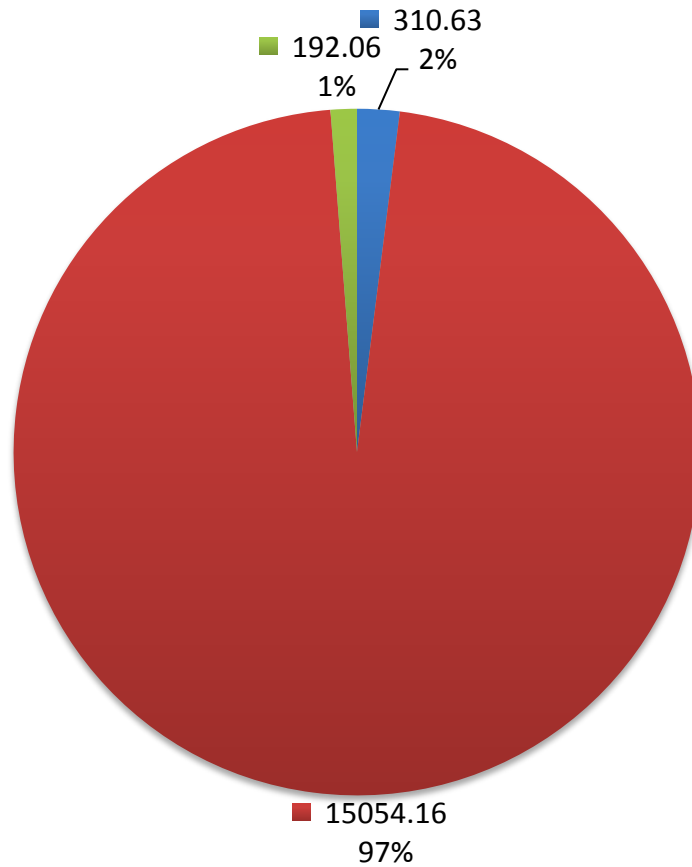
Plans to Continue Reducing Greenhouse Gas Emissions 2011-2013

The University of Victoria has a strong history in sustainability and is committed to achieve our goals of 20% electricity and GHG emissions reductions by 2015. UVic employs a range of methods to reach these goals which extend from sustainable purchasing policies to continuous optimization programs for energy use.

Since over 85% of the GHG emissions from UVic are generated from natural gas used for heating, efforts in 2011 will be focused on the completion of the integrated energy master plan for campus that will highlight areas for improvement. Attention will also be given to the implementation of a revolving sustainability loan fund to provide funding for innovative energy reduction projects, and on behavior change initiatives and programs that focus on the main users of the campus.

For additional information on sustainability at the University of Victoria, please see our website at www.uvic.ca/sustainability.

University of Victoria Greenhouse Gas Emissions by Source for the 2010 Calendar Year (tCO₂e*)



Total Emissions: 15556.85

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion and Electricity (Buildings)
- Supplies (Paper)

Offsets Applied to Become Carbon Neutral in 2010

Total offsets purchased: **15545.89**. Total offset investment: **\$388,647.25**. Emissions which do not require offsets: **10.96** **

*Tonnes of carbon dioxide equivalent (tCO₂e) is a standard unit of measure in which all types of greenhouse gases are expressed based on their global warming potential relative to carbon dioxide.

** Under the *Carbon Neutral Government Regulation of the Greenhouse Gas Reduction Targets Act*, all emissions from the sources listed above must be reported. As outlined in the regulation, some emissions do not require offsets.

University of Victoria - 2010 Carbon Neutral Action Report

Actions Towards Carbon Neutrality

The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act*.

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Mobile Fuel Combustion (Fleet and other mobile equipment)							
Vehicle fuel efficiency							
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	13	% of vehicles are fuel- efficient models	Two trucks were replaced with more fuel efficient models in 2010. There are now 6 fuel efficient vehicles in the 47 vehicle motor pool fleet. The facilities management utility vehicle fleet has been moving toward an emissions-free fleet with over 60% electric vehicles. Fuel efficient fleet management is also combined with a program to add to the staff bicycle fleet.	Reduce the number of fleet vehicles that consume fossil fuels to 40% of total vehicle fleet. Expand hybrid vehicles and other low emission technologies (eg: bikes, gators, scooters) in UVic fleet and motor pool rentals.	2000	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress	4	% of vehicles down-sized since start year indicated	Fleet purchasing decisions go through an evaluation process in an effort to down-size fleet. Two campus security vehicles were replaced in 2010 with more fuel efficient models.	Fleet purchasing decisions include "right-sizing" principles as common practice. Extensive use of electric "gators" for operational activities that previously employed vehicles will be expanded where possible,	2000	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Completed in 2010	100	% of vehicles are subject to regular maintenance for fuel efficiency	Annual fleet maintenance program in place for both motor pool and operational fleet vehicles.		2010	2010
Replace small maintenance vehicles with more fuel-efficient models	Ongoing/In Progress	70	% of small maintenance vehicles are fuel-efficient	The facilities management utility vehicle fleet has been moving toward an emissions-free fleet with over 60% electric vehicles. Additionally, biodiesel (5%) is used in the equipment, tractors, generators and applicable fleet vehicles.	Expand hybrid vehicles and other low emission technologies (eg: bikes, gators, scooters) in UVic fleet and motor pool rentals.	2000	No End Date (Continuous)
Behaviour change program							
Provide fleet driver training to reduce fuel use	In Development			Campus anti-idling policy implemented.	The campus is currently planned to encourage efficient driving. In addition, most operational vehicles are electric and anti-idling programs are in place. Training for fuel efficient driving is not a priority, but will be researched as a possibility.	2010	No End Date (Continuous)
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	Completed in 2010			Implemented campus anti-idling policy. 75% of loading zones have "Idle Free" signs. Promoted CRD Anti-idling bylaw at outreach events (stickers, brochures).		2010	2010
Encourage carpooling in fleet vehicles	Ongoing/In Progress			Profile created in an online ride sharing program to facilitate easier ride sharing. Ride sharing was advertised as part of larger transportation demand strategy	Fleet vehicles are not often used off campus and therefore really aren't a good match for a ride share programs. However, the opportunities to facilitate more ride sharing in general on campus will be explored.	2010	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	Ongoing/In Progress			Encouraged various campus services (e.g. mail delivery) to be performed on foot or by bicycle where possible.	Investigate completing a campus walking and biking master plan. Continue to work with transit providers to optimize transit services to campus.	1996	No End Date (Continuous)
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)							
Planning/management							

University of Victoria - 2010 Carbon Neutral Action Report

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Enrol in a building energy benchmarking program (e.g., GREEN UP)	Ongoing/In Progress			Established an energy manager position responsible for the development of a comprehensive energy management, monitoring and data analysis program. Benchmarks were established for campus, but an official benchmarking program wasn't utilized.	Assess benefits to an official benchmarking program.	2010	No End Date (Continuous)
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	Ongoing/In Progress	85	% of buildings have a real time metering system installed	Pulse Energy and additional Schneider ION metering infrastructure and programs were installed in 85% of campus, including all major buildings.	Investigate installing similar systems in off campus buildings. Pilot a system to install energy metering information visible to campus users in building foyers. Investigate feasibility of sub-metering building natural gas use from the district heating system.	Started before 1995	No End Date (Continuous)
Owned buildings							
Establish energy performance baseline for owned buildings	Ongoing/In Progress	85	% of owned buildings have an established energy performance baseline	Energy intensity baseline data was collected for electricity, natural gas and water usage at a campus level for the entire campus and at a building level for the 85% of buildings that were upgraded with sub-metering.	Continue to expand monitoring capabilities to refine level of detail available through monitoring to allow more detailed baselines.	2010	No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Ongoing/In Progress	5	% of owned buildings are certified LEED NC Gold or LEED NC Platinum	A new residence building was constructed in 2010 and was built to LEED gold standards.	There are now 6 buildings on campus which are either certified LEED Gold or awaiting certification. The campus Sustainability Action Plan for Operations includes a stated goal that all new buildings will be constructed to LEED Gold standards.	2009	No End Date (Continuous)
Incorporate integrated design process into new construction or during renovations of owned buildings	Ongoing/In Progress	100	% of buildings built or renovated since start year indicated used the integrated design process	As per campus sustainable development guidelines, utilizing an integrated design process for new construction and renovations is standard practice on campus. Integrated design process guidelines are being written into construction contract requirements.	Develop/document a consistent, collaborative planning, design and operational feedback loop for new construction and renovation projects.	2006	No End Date (Continuous)
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	In Development			Refrigerant management strategy meets or exceeds national Ozone-Depleting Substance (ODS) regulations.	Develop refrigerant consumption data reporting system for SMARTTool GHG inventory.	2009	No End Date (Continuous)
Complete energy retrofits on existing, owned buildings	Ongoing/In Progress	4	% of owned buildings have undergone energy retrofits since start year indicated	A number of buildings on campus underwent seismic upgrading which will improve thermal performance and energy efficiency. Uvic is also participating in BC Hydro's Continuous Optimization to reduce energy use through low-cost operational and maintenance changes. In addition, plans to undertake a campus wide lighting retrofit were developed and funded in 2010 and will get underway in 2011.	Complete in 2011 an Integrated Energy Master Plan that will focus on conservation, efficiency and use of renewable energy sources. Further, plans are underway to develop a Building Condition Assessment framework that would prioritize building renovation/retrofit projects.	2010	No End Date (Continuous)
Retrofitting owned buildings							
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	17	% of retrofits since start year indicated had heating, cooling, and ventilation systems upgrades	One building involved in seismic upgrades received a mechanical system upgrade as well.	The Integrated Energy Management Master Plan which is currently in development will identify the optimal areas for efficiency upgrades in the future.	2010	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In Progress			A campus wide lighting retrofit plan was developed and funded in 2010 and will get underway in 2011.	10000 bulbs on campus will be converted to more efficient models. In 2011 alone, this will represent 20% of the lighting on campus. Plans to install motion sensors in all lunchrooms and washrooms on campus and daylight sensors in all foyers and hallways. An outside LED lighting pilot is also planned.	2010	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	In Development			36% of buildings have DDC controls that are monitored/controlled from centralized LAN network	The Integrated Energy Management Master Plan which is currently in development will identify the optimal areas for efficiency upgrades in the future.	2007	No End Date (Continuous)

University of Victoria - 2010 Carbon Neutral Action Report

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Improve building insulation (including windows) during retrofits	Ongoing/In Progress	100	% of retrofits since start year indicated had insulation improvements	All buildings that underwent seismic upgrading also received new windows in affecting areas of the buildings.	The Integrated Energy Management Master Plan which is currently in development will identify the optimal areas for efficiency upgrades in the future.	2010	No End Date (Continuous)
Install an on-site renewable energy demonstration project	In Development				The Integrated Energy Management Master Plan which is currently in development will identify the opportunities for renewable energy demonstration projects in the future.	2010	No End Date (Continuous)
IT power management							
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress			Many of our computer labs in various libraries and buildings automatically shut down at the end of the day. We are working to implement this in offices as well through campus where appropriate. In the meantime, we are educating staff to manually shut down their workstations and other equipment at the end of the work day.	Continue to work with University Systems on installing software to shut down computers on networks in labs and offices.	2008	No End Date (Continuous)
Implement server virtualization	Ongoing/In Progress			Continued to advance the administrative server virtualization program.	Continue to advance the administrative server virtualization program.	2006	No End Date (Continuous)
Apply auto-sleep settings on computer monitors and CPUs	In Development			Investigated ramifications of different settings and how much energy can be saved.	We are continuing to encourage staff and computer support staff to apply these settings on their computers through our Sustainability Action Team program and creation of a Green IT booklet for campus distribution in 2011. Investigate possibility of making it university policy.	2010	No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress			We have an exclusive contract with a office equipment supplier to replace all stand alone office equipment with multifunction machines. Most offices now have one of these units.	Continue to encourage all administrators to consolidate office equipment into one standalone unit.	2007	No End Date (Continuous)
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Ongoing/In Progress			Our new multifunction machines come pre-programmed to automatically go into sleep mode after a period of inactivity.	Continue to encourage all administrators to consolidate office equipment into one standalone unit with power saving settings turned on.	2009	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Completed in 2010	100	% of computers are ENERGY STAR rated	All new computers shipped through our Technology Solutions Centre are the highest ENERGY STAR rated computers.		2010	2010
Appliances and electronic devices							
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress			All new re Fridgerators purchased through our Purchasing Services department are ENERGY STAR rated.	Will continue replacing old re Fridgerators with ENERGY STAR rated ones on an ongong, as needed , basis.	2009	No End Date (Continuous)
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress			All new appliances and electronic devices purchased through our Purchasing Services department are ENERGY STAR rated.	Will continue replacing old appliances and other electronic equipment with ENERGY STAR rated ones on an ongong, as needed , basis.	2009	No End Date (Continuous)
Behaviour change program							
Help staff reduce personal energy use through "workstation tune-ups"	In Development			Started investigating best options for computer settings and drafting the UVic Green Guide and Green IT booklets.	Publish the UVic Green Guide, Green IT booklet and launch Sustainability Action Team program, all of which will contain info on these best practices for campus.	2010	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	In Development			Started discussions with University Systems and Facilities Management regarding use of power bars and phantom load.	Publish the UVic Green Guide, Green IT booklet and launch Sustainability Action Team program, all of which will contain info on these best practices for campus.	2010	No End Date (Continuous)

University of Victoria - 2010 Carbon Neutral Action Report

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Encourage staff to use air dry setting on dishwashers	In Development			Started early discussions on how to promote this.	Publish the UVic Green Guide, update website tips, and launch Sustainability Action Team program, all of which will contain info on these best practices for campus.	2011	No End Date (Continuous)
Encourage use of stairs instead of elevators	In Development			Continued promotion of Active U among staff on campus.	Publish the UVic Green Guide, update website tips, and launch Sustainability Action Team program, all of which will contain info on these best practices for campus.	2011	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress			Campus Security officers have been placing BC Hydro "Turn Off The Lights" stickers around campus in offices, classrooms, labs and washrooms as part of their regular routine. This messaging wil also be a key behaviour change goal in our Sustainability Action Team program in 2011.	Publish the UVic Green Guide, update website tips, and launch Sustainability Action Team program, all of which will contain info on these best practices for campus.	2010	No End Date (Continuous)
Promote hot water conservation	In Development			Started early discussions on how to promote this.	Publish the UVic Green Guide, update website tips, and launch Sustainability Action Team program, all of which will contain info on these best practices for campus.	2011	No End Date (Continuous)
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	10	% of total paper purchased contains 30% recycled content	Developed more robust monitoring systems to track paper usage from all units on campus. Purchasing policy requires recycled content paper.	Continue to work with campus population to encourage purchase of paper with recycled content.		
Purchase 100% post-consumer recycled paper	Ongoing/In Progress	81	% of total paper purchased contains 100% recycled content	Developed more robust monitoring systems to track paper usage from all units on campus. Purchasing policy requires recycled content paper.	Continue to work with campus population to encourage purchase of paper with recycled content.		
Printer/document settings							
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress			All computer labs on campus default to double sided mode, and more and more offices are changing the default settings as well, in particular those with new multiplex units.	Continue to encourage use of double sided printing settings in all offices through Sustainability Action Teams, website tips and UVic Green Guide distribution.	2008	No End Date (Continuous)
Electronic media in place of paper							
Use electronic document library for filing common documents	Ongoing/In Progress			Continuing to create shared document libraries and servers for departments across campus.	Continue promoting this technology across campus offices through Sustainability Action Teams, website tips and UVic Green Guide distribution.	2005	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress			More and more documents are being distributed electronically including inter-departmental invoices for printing services. Purchase requisitions and purchase orders, and reimbursements for employee expenses and travel claims (through automatic deposits)	Continue to work with operational and administrative units to reduce amount of paper documents distributed.	1995	No End Date (Continuous)
Behaviour change program							
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress			University Systems conducts training sessions with staff on software packages, including ones like these on a demand basis, office by office.	Continue to encourage staff to use online collaboration tools.	2009	No End Date (Continuous)

University of Victoria - 2010 Carbon Neutral Action Report

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress		Encourage staff to go paperless as much as possible through use of overhead projectors, iPads, and laptop computers in meetings. Our Board Of Governors meeting materials are now almost entirely electronic where they used to be printed.	Continue to encourage staff to go paperless as much as possible through use of overhead projectors, iPads, and laptop computers in meetings.	2009	No End Date (Continuous)
Encourage re-use of scrap paper	Ongoing/In Progress		Offices have bins to collect used paper for scrap paper use. But is difficult when printers default to double sided and are shared by many people.	Continue to encourage staff to re-use scrap paper for notes, etc.	2006	No End Date (Continuous)

University of Victoria - 2010 Carbon Neutral Action Report

Actions to Reduce Provincial Emissions and Improve Sustainability

The actions listed below contribute to a reduction in greenhouse gas emissions from sources that fall outside of the reporting requirements defined in the carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act*. Public sector organizations can optionally use this section to report on actions that will help British Columbia meet its provincial greenhouse gas reduction targets, engage the public, and improve environmental sustainability across all aspects of their organization.

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Business Travel							
Virtual meeting technology							
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Ongoing/In Progress	50	% of computers have web-conferencing software installed	Software is available for all staff on a request basis.	Promote use of software for more purposes across campus	2008	No End Date (Continuous)
Make desktop web-cameras available to staff	Ongoing/In Progress	25	% of staff have access to a desktop web-camera	Hardware is available on some new computers being distributed on campus, but not all as are not needed by all support staff.	Promote use of Skype and other video technologies to those with cameras.	2010	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress			We have 3 different sized meeting rooms equipped with state-of-the-art video conferencing technology available for rent by campus users. In additional, approximately 7 classrooms and lecture theatres have videoconferencing technology available for faculty and students.	More videoconferencing technology will be installed in classrooms and lecture theatres across campus.	2008	No End Date (Continuous)
Behaviour change program							
Train staff in web-conferencing	Ongoing/In Progress			Staff can obtain free training anytime upon request	Continue to train more staff and promote use	2008	No End Date (Continuous)
Train staff in video-conferencing or provide technical support for video-conferencing set-up	Ongoing/In Progress	100	% of staff are trained in video-conferencing or have access to technical support	All staff have access to video-conferencing training and support	Continue to train more staff and promote use	2009	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress			Many meetings and conferences encourage participation virtually. Audio Visual webcast services are available for any campus events.	Continue to promote virtual attendance at events throug website, UVic Green Guide and newsletters, plus communication with onsite event planners.	2009	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress			Our campus is relatively small and very walkable, and not that many trips are made off campus locally to meetings, so carpooling is not really a significant issue.	Continue to promote carpooling and all other forms of sustainable transportation to staff through website, UVic Green Guide and newsletters.	2005	No End Date (Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress			We continue to promote free employee membership in the Victoria car Share Co-op with 3 vehicles parked on campus for members use. Many employees who normally cycle or use transit to get to work use these cars for occasional travel to meetings off campus. Usage fees are claimable for reimbursement. However, since most of our staff and faculty meetings are with others also on campus, most people just walk to meetings.	Continue to promote employee membership in the Victoria Ca Share Co-op.	2007	No End Date (Continuous)
Other Business Travel Actions							
Investigate possible use of provincial "Smart Tec" software to track emissions from employee business travel.	In Development			Participant in SMARTTec pilot program.	Review pilot program outcomes and investigate campus was implementation on a voluntary use basis.	2010	2011
Education, Awareness, and Engagement							
Team-building							

University of Victoria - 2010 Carbon Neutral Action Report

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	In Development		Developed Sustainability Action Team program for launch in early 2011. Created PowerPoint presentations, posters, and drafted UVic Green Guide.	Launch Sustainability Action Team program in early 2011 with a kick off lunch, and competition between six campus buildings for the most waste reduction and most electricity saved. Roll out program further in fall of 2011.	2009	No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	In Development		Organized staff in Sustainability Office, and Facilities Management to support upcoming team launch. One Sustainability Coordinator is taking the lead and has significant time allocated in the coming year.	Create listserve and webtools to support Sustainability Action Teams. Be prepared to respond to a lot of questions and comments from team members.	2009	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	In Development		The Sustainability Action Teams will be provided with some basic information on social marketing and will be encouraged to promote them throughout their buildings during their initial presentations and in follow up meetings and emails.	Launch Sustainability Action Team program with behaviour change training component, publish the UVic Green Guide, launch new sustainability website, publish Green IT booklet. Give presentations on greening the workplace to staff outside of formal Sustainability Action Team program as well as student groups.	2009	No End Date (Continuous)
Awards/Recognition						
Establish a sustainability/green awards or recognition program	In Development		Continued to research awards programs best practises. Joined planning committee for Connect U campus conference where awards will be handed out.	Establish more detailed criteria for both team and individual awards. Work with Human Resources Staff Recognition Committee for assistance. Hand out first awards at Connect U staff conference in June 2011.	2009	2011
Staff Professional Development						
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress		Staff are encourage to take advantage of professional development opportunities including those related to sustainability, especially for those working directly in this area.	Encourage more support (i.e. budget, time) for staff to participate in professional development opportunities.	2007	No End Date (Continuous)
Staff awareness/education						
Provide education to staff about the science of climate change	Ongoing/In Progress		Ongoing information passed on through promotion of public lectures, seminars, films, Continuing Education courses, website, email lists and newsletters.	Ongoing information passed on through promotion of UVic Green Guide, Sustainability Action Team program, public lectures, seminars, films, Continuing Education courses, website, email lists and newsletters.	2000	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress		Ongoing information passed on through promotion of lectures, seminars, films, Continuing Education courses, website, email lists and newsletters.	Ongoing information passed on through promotion of UVic Green Guide, Sustainability Action Team program, public lectures, seminars, films, Continuing Education courses, website, email lists and newsletters.	2000	No End Date (Continuous)
Provide green tips on staff website or in newsletters	Ongoing/In Progress		The Sustainability web portal (www.uvic.ca/sustainability) provides extensive information on campus sustainability initiatives. Our weekly email and our Facebook page are also avenues to share information, as is regular coverage of our programs through the campus newsletter.	Will be launching new website that will contain more "news" and "tips" sections, enhancing use of Facebook page, beginning use of Twitter, continuing with weekly email and regular coverage in campus newsletter.	2008	No End Date (Continuous)
Provide sustainability education during new staff orientation	Ongoing/In Progress		New staff orientation sessions now include a regular sustainability component informing new staff about campus sustainability initiatives (e.g. subsidized employee bus passes and composting systems) and ways to participate. The UVic Employee Orientation Handbook also now contains updated information on our sustainability initiatives.	Work with Human Resources to ensure the sustainability component is entrenched in regular new staff orientation meetings and materials.	2009	No End Date (Continuous)
Client/public awareness/education						

University of Victoria - 2010 Carbon Neutral Action Report

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Provide education to clients/public about the science of climate change	Ongoing/In Progress		Ongoing information provided through public lectures, seminars (some of which are now broadcast live on the internet and taped for later viewing), workshops, Continuing Studies courses, publishing editorials and interviews in local, national and international media, publishing many research reports and policy papers (many available free of charge).	Ongoing information will be provided through public lectures, seminars (some of which are now broadcast live on the internet and taped for later viewing), workshops, Continuing Studies courses, publishing editorials and interviews in local, national and international media, publishing many research reports and policy papers (many available free of charge).	Started before 1995	No End Date (Continuous)
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress		Ongoing information provided through public lectures, seminars (some of which are now broadcast live on the internet and taped for later viewing), workshops, Continuing Studies courses, publishing editorials and interviews in local, national and international media, publishing many research reports and policy papers (many available free of charge).	Ongoing information will be provided through public lectures, seminars (some of which are now broadcast live on the internet and taped for later viewing), workshops, Continuing Studies courses, publishing editorials and interviews in local, national and international media, publishing many research reports and policy papers (many available free of charge).	Started before 1995	No End Date (Continuous)
Provide green tips on client/public website or in newsletters	Ongoing/In Progress		The Sustainability web portal (www.uvic.ca/sustainability) provides extensive information on campus sustainability initiatives that is accessible by the community. Our weekly email and our Facebook page are also avenues to share information, as is regular coverage of our programs through the campus newsletter, student newspaper, and local media.	A new Sustainability web portal (www.uvic.ca/sustainability) will be launched in early 2011 and will provide more extensive information on campus sustainability initiatives that is accessible by the community. Our weekly email and our Facebook page are also avenues to share information, as is regular coverage of our programs through the campus newsletter, student newspaper, and local media. The additional use of Twitter to share information will be explored.	Started before 1995	No End Date (Continuous)
Other Education, Awareness, and Engagement Actions						
Host annual Green Drinks event on campus	Ongoing/In Progress		We have hosted Green Drinks events on campus before, but in 2010 hosted our first annual St. Paddy's Day Green Drinks on campus to celebrate "all things green" at UVic. It is an informal way to share ideas, hear about some of the great work going on regarding sustainability in operations, teaching and research with each other and the community.	We will host an annual St. Paddy's Day Green Drinks on campus as it is very popular and a successful tool for sharing ideas and communicating initiatives.	2007	No End Date (Continuous)
Develop stronger social media presence as tools to engage and inspire	In Development		We created a Facebook page for UVic Office of Sustainability, and created a Twitter account. We will use these tools more in the future to share information on events and to share news items related to sustainability.	Develop a strategy to use Facebook and Twitter social media tools to effectively engage students and staff in sustainability events and initiatives on campus and in the community.	2010	No End Date (Continuous)
Host a video contest regarding sustainability initiatives on campus	In Development		Created initial concepts on how to engage students in sustainability initiatives through creation and promotion of short videos related to campus sustainability initiatives.	Host a video contest with students on campus sustainability with a particular focus on recycling and composting programs in the fall of 2011. Distribute videos across campus, post to YouTube and on Facebook links and websites.	2010	2012
Other Sustainability Actions						
Water conservation						
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Ongoing/In Progress		A campus wide water audit was undertaken which identified all areas that substantial water savings can be realized. This include retro-fitting fixtures, appliances and water routines.	Measures identified in the water audit will be implemented starting in 2011. It is estimated that a 25% reduction in water usage should be possible on campus within 2 years.	2009	No End Date (Continuous)
Put in place a potable water management strategy to reduce potable water demand of building-level uses such as cooling tower equipment, toilet fixtures, etc. and landscape features	Ongoing/In Progress		New buildings on campus currently use treated waste water for flushing toilets and utilize water efficient fixtures. The water audit will identify areas for improvement for the future and opportunities for retrofits.	Measures identified in the water audit will be implemented starting in 2011. It is estimated that a 25% reduction in water usage should be possible on campus within 2 years.	2009	No End Date (Continuous)

University of Victoria - 2010 Carbon Neutral Action Report

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Introduce a stormwater management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales)	Ongoing/In Progress		Continued use of the Integrated Stormwater Management Plan (2004), Campus Sustainable Development Guidelines and LEED Gold commitments make sure all new development has integrated stormwater management	Continued implementation of stormwater plan for natural areas on campus to prevent erosion and land degradation. Participation in regional watershed planning initiatives.	2009	No End Date (Continuous)
Waste reduction/diversion						
Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities	Ongoing/In Progress		In order to meet our Waste Reduction goal of a 75% waste diversion rate by 2012, we have implemented many new initiatives across campus to increase recycling and composting rates. These include the completion of an "in-building" recycling pilot study to assess new recycling signage and bin systems. We held several planning meetings with building users and janitorial staff to assess new systems. We hosted our first "Love A Mug" campaign in October to reduce the use of paper coffee cups during national Waste Reduction week. Continued to work closely with dining outlet managers to develop the most suitable waste reduction systems for their facilities. We also implemented a new system of collecting waste across campus that greatly reduced the number of trips our waste hauling company makes to campus, increased efficiencies of collections, and produce more detailed, timely and accurate data on waste and recycling collected.	We will continue to refine our recycling and composting systems including participating in Recyclemania, a friendly competition between universities across North America to see who can reduce the most waste. Waste reduction will also form a strong component of our Sustainability Action Team program and teams will be competing on waste reduction. We will also work with Residence Services to promote better recycling practices in our student residences. Also, in the fall of 2011 we will implement a new recycling system for classroom buildings in order to capture more waste by moving all bins outside of the classrooms and into hallways. This change will require extensive behaviour change education with both students and faculty to be successful.	2008	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress		For many years UVic has had a "zero waste" strategy for hazardous waste generated in our research labs. Nothing goes down the drain or is disposed of in the general waste or recycling stream that is deemed even remotely hazardous.	In 2011, we are enhancing our ongoing hazardous waste program by establishing a baseline chemical inventory which will, in the future, help lab users minimize chemical usage by utilizing a common database of chemicals. This will hopefully help researchers share inventories, and also help minimize the amount of chemicals ordered for teaching and research purposes. We are also working with the Sciences to see where less harmful materials can be replaced with materials that pose a greater health and environmental risk.	2005	No End Date (Continuous)
Procurement (non-paper supplies)						
Incorporate minimum recycled content standards into procurement policy for consumable, non-paper supplies (e.g., writing instruments, binders, toner cartridges, etc.)	Ongoing/In Progress		Our Purchasing Services department has instituted progressive sustainability provisions in all sourcing of purchasing contracts. These provisions can be, but are not limited to, reducing, reusing and recycling resources, disposal of organic and other solid waste, conservation efforts in regards to transportation, energy and water, disposal of hazardous waste, and/or giving back to the community. In particular, we have special agreements with our office supplies providers to supply us with the most environmentally responsible products and minimize packaging when shipping supplies to campus.	Continue to work with Purchasing Services to source the most environmentally & socially responsible goods and services for use on campus where economically feasible, and to give preference to local businesses where possible.	2008	No End Date (Continuous)
Establish green standards for goods that are replaced infrequently and/or may require capital funds to purchase (e.g., office furniture, carpeting, etc.)	Ongoing/In Progress		Our Purchasing Services department has instituted progressive sustainability provisions in all sourcing of purchasing contracts. These provisions can be, but are not limited to, reducing, reusing and recycling resources, disposal of organic and other solid waste, conservation efforts in regards to transportation, energy and water, disposal of hazardous waste, and/or giving back to the community. In particular, our main furniture supplier provides office furniture made from recycled materials, and we either re-sell, re-purpose or recycled all of our surplus furniture.	Continue to work with Purchasing Services to source the most environmentally & socially responsible goods and services for use on campus where economically feasible, and to give preference to local businesses where possible.	2008	No End Date (Continuous)

University of Victoria - 2010 Carbon Neutral Action Report

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Ongoing/In Progress		Green cleaning program established for new LEED residence. Inegrated all campus cleaning supply purchasing into one green cleaning agreement.	Green cleaning program will be extended to all campus residences.	2009	No End Date (Continuous)
Require a minimum purchase of sustainable, and organic food and beverages supplied by contracted food suppliers or caterers	Ongoing/In Progress		The amount of sustainable and organic food purchases varies by product type and time of year. For example, 100% of the coffee purchased by UVic Food Services is organic and fair trade, as are many of the teas and sugar, all year long. We purchase organic produce from local suppliers when it's in season, but over all we purchase 40% of our produce from local farmers. Our eggs are also all "cage-free" and sourced mainly from Vancouver Island producers, but it depends on supply. Most of the fish purchased is Ocean Wise, and we do not serve farmed salmon.	Investigate feasibility of further requirements for certification such as the SPCA Farm certification	2007	No End Date (Continuous)
Indoor air quality						
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	Ongoing/In Progress		UVic enforces "Guidelines for Dealing with Scented Products in the Work Place" through our Human Resources department.	We will continue to enforce "Guidelines for Dealing with Scented Products in the Work Place" through our Human Resources department.	2008	No End Date (Continuous)
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	Ongoing/In Progress		Our contracts with furniture and carpet suppliers were selected because they can supply UVic with items from manufacturers that are either ISO 140001 or have equivalent internal practices and the products are Greenguard certified, which means that they are made sustainably, i.e. reduced waste and energy consumption during manufacture and are low or no VOC. paints used in new buildings are all low VOC as required by LEED standards.	In 2011 we will be issuing new RFPs for furniture and carpet suppliers that will be required to meet even stronger sustainability criteria such as low VOC content and "cradle to grave" waste management practises.	2006	No End Date (Continuous)
Commuting to and from home						
Introduce telework/work from home policy	In Development		Our Human Resources department has drafted a proposal regarding staff telecommunity/work from home policy.	The proposal for this policy is being evaluated by the senior administration in early 2011 and could become formal policy later in the year.	2010	2011
Offer staff a compressed work week	In Development		While there is no formal university policy about this, some departments to offer their staff a flexible work week, within collective agreement guidelines.	Hold discussions with Human Resources regarding the creation of a university policy around flexible work weeks to offer staff options of a compressed work week.	2011	No End Date (Continuous)
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress		We continue to promote our comprehensive Transportation Demand Management program that includes a subsidized employee monthly bus pass (55% off regular price), the student Upass program, free employee membership in the Victoria Car Share Co-op, promote use of Ride Sharing matching software, added more bike lockers, promote use of showers available in 9 campus buildings, built more covered bike parking, heavily promoted Bike To Work Week (43 teams in 2010), opened our Bike Kitchen (self-service bike repair kiosk open 24/7) and support SPOKES (bicycle bursary program for students and staff providing use of free, reconditioned bikes).	Will continue to promote programs created in 2010 and before, plus will enhance the employee subsidized bus pass program to add payment to staff card and allow for prepayment of more than one month at a time, develop a plan to add more covered bike parking, and add more showers and lockers in buildings.	Started before 1995	No End Date (Continuous)
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress		We currently have showers available in 9 campus buildings, and lockers in many more.	Add more showers in buildings when buildings are rennovated (at least 2 more in 2011).	Started before 1995	No End Date (Continuous)
Provide secure bicycle storage	Ongoing/In Progress		We currently have 96 private bike lockers available for rent, and space to lock almost 3000 bikes, some of which are covered rack systems.	No plans to expand current bike locker program in 2011, although we will be adding more covered bike parking in well lit, secure areas.	2006	No End Date (Continuous)

University of Victoria - 2010 Carbon Neutral Action Report

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Modify parking fees or parking availability for staff/students	Ongoing/In Progress		We continue to reduce the ratio of number of parking spots to the size of the campus population. Each time a building renovation is done or new building added, we seek a Parking Variance from the local municipality. Parking rates were increased slightly mostly to reflect the inclusion of HST. A new "inter-semester" (November through February) parking pass was initiated, mostly to satisfy the demand by those who may drive often in the winter, but cycle, walk or take transit when the days are longer and weather is better.	We will continue to reduce the number of parking spots per campus user through Parking Variances.	2006	No End Date (Continuous)
Other Sustainability Actions						
Support Campus Community Garden	Ongoing/In Progress		We worked closely with the Campus Garden members to create a plan to move the garden to a larger location in late 2011 and increase learning opportunities.	Complete the move of the garden in late 2011. Assist the members in creating more learning opportunities related to urban agriculture.	2007	No End Date (Continuous)
Create new community garden in Family Student Housing Project	Ongoing/In Progress		We worked closely with Residence Services to create a survey of residents to assess different options for the size and location of a community garden in the Family Student Housing Complex.	Construction of garden.	2010	2011
Drinking fountain upgrade program	Ongoing/In Progress		The water fountains in 8 buildings on campus were retrofitted with spouts for easy filling of water bottles. This is meant to encourage use of refillable bottles instead of buying bottled water.	Remaining buildings will be upgraded as funding allows.	2010	No End Date (Continuous)
Host free community E-Waste Recycling days	In Development		We drafted plans to host one or more free e-waste recycling days on campus in partnership with two local companies through our corporate strategical alliance program.	Plans to host two free e-waste recycling days on or near Earth Day that also coincides with student residence move-outs in mid to late April. The intention is that these become annual events.	2010	No End Date (Continuous)
Host monthly community recycling depots	Ongoing/In Progress		On the second Saturday of each month, UVic hosts a Pacific Mobile Depot community recycling event on campus. Campus residents and community members can bring their hard to recycle items such as Styrofoam, soft plastics and electronics to be collected and recycled for a small fee. A student sustainability group provides the volunteers for these events and collects a small stipend for their efforts.	Continue to host monthly recycling events with volutneers provided by students.	2010	No End Date (Continuous)
Conduct bi-annual traffic survey	Completed in 2010		We completed our bi-annual Traffic Survey that gives us detailed data on the number of trips to campus by SOV, MOV, transit, cycling, walking and other means over a survey period of one week. We use this data to compare against previuos years to assess the effectiveness of our Transportation Demand Management initiatives.		1996	2010
Investigate purchase of meat and/or poultry from SPCA certified farms.	In Development		Hosted preliminary meetings with students and representatives from SPCA.	We plan to investigate the feasibility of purchasing a portion of our meats and/or poultry from SPCS certified farms.	2010	2011
Book Store phasing out plastic bags	Ongoing/In Progress		The UVic Book Store implemented a policy in the fall of 2010 to give out 12,000 reusable bags at the beginning of term. During the promotional period, these bags were available for \$.99 and plastic bags available for \$.05.	Utimately we would like to phase out the use of plastic bags altogether. We will continue discussions on how to do this most effectively.	2010	No End Date (Continuous)
Purchase portable water bottle filling station	In Development		Created proposal to purchase a portable water bottle filling station for use at events across campus and potentially in the surrounding community. This will greatly reduce the amount of bottled water purchased and resulting waste.	The portable machine is due to arrive in early 2011 at which time we will create a plan for its use across campus and potentially in the community in conjunction with student sustainability groups.	2010	No End Date (Continuous)