



University of Victoria

2011 Carbon Neutral Action Report



University
of Victoria



Executive Summary

The University of Victoria (UVic) continues to advance its carbon neutral commitments and activities within a comprehensive sustainability and institutional framework. Throughout 2011, the campus and broader communities were engaged in a process to review the university's strategic plan, which sets the direction to guide the university into the future. A key objective in the renewed strategic plan A Vision for the Future – Building on Excellence, provides for “demonstrating leadership in sustainability through the continued development and implementation of innovative operational practices and their integration with institutional planning activities.”

The university's Sustainability Action Plan for Campus Operations: 2009-14 continues to provide the guiding framework for the wide range of activities related to sustainability and carbon neutrality that were undertaken on campus in 2011. It contains a detailed series of sustainability goals and actions in operational areas such as waste management, energy conservation, greenhouse gas reduction, sustainable transportation, purchasing, food and green buildings. To highlight the progress the university has made towards achieving the Action Plan goals and targets, and to identify opportunities to improve the university's performance on sustainability issues, a comprehensive progress report was produced in 2011.

A key accomplishment of 2011 was the creation of the Integrated Energy Master Plan, which will assist the university in meeting the Action Plan's stringent energy reduction targets and policy. During the development of the plan, key energy management issues were reviewed and recommendations outlined for future action. Significant attention was also given to a range of ongoing energy retrofitting projects on campus in collaboration with the university's electricity and natural gas energy suppliers.

Another highlight of 2011 was the establishment of the Revolving Sustainability Fund with initial capital funding of \$250,000. The fund gave out its first loans in late 2011 for projects that will help reduce water consumption in chemistry teaching labs and electrical consumption in building operations. Also notable was the opening of the new South Tower student residence building to the Leadership in Energy and Environmental Design (LEED) green building rating system Gold standard. The facility joins five other LEED Gold buildings on campus.

Work on Action Plan implementation is ongoing to address other major campus sustainability challenges related to energy use, waste reduction, water management and other topics. Students, faculty and staff continue to take an active role in assisting with advancing sustainability across campus. We rely on their efforts, enthusiasm and interest to make progress in reducing energy consumption and limiting our greenhouse gas emissions.



University
of Victoria

Kristi Simpson

Associate Vice-President, Financial Planning and Operations
University of Victoria

2011 Greenhouse Gas Emissions

The total GHG emissions for the University of Victoria are 15,463 tCO₂e for the 2011 calendar year. A breakdown of 2010 and 2011 emissions is provided in Table 1 below.

Reporting Category	2010 tCO ₂ e	2011 tCO ₂ e	Percent Change
Main Campus Buildings	13,448.94	13,420.21	-0.21%
Off Campus Buildings	1,607.21	1,572.66	-2.15%
Mobile Combustion/Fleet	268.53	271.3	1.03%
Paper Supplies	192.06	199.13	3.68%
Total	15,517	15,463	-0.35%

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 2011

The total emissions for the University of Victoria in the year 2011 is 15,463 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 tCO₂e of emissions resulting from the use of bio-fuels were reported as part of our greenhouse gas emissions profile in 2011. 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 15,453 tCO₂e for the 2011 calendar year.

Changes to Greenhouse Gas Emissions and Offsets Reporting From 2010

Following the public release of the University of Victoria's 2010 Carbon Neutral Action Report, it was determined that the total emission for the calendar year were over reported by 38 tCO₂e for the 2011 calendar year and offsets required to become carbon neutral in 2010 were similarly over purchased by 38 tCO₂e.

The surplus of offsets purchased in 2010 has been applied again 2011 emissions offset purchase.

Emission Reduction Activities

UVic's commitment to sustainability and greenhouse gas reduction is comprehensive – 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 2011, various initiatives were taken to reduce GHG emissions as outlined below.

Actions Taken to Reduce Greenhouse Gas Emissions in 2011

- Established the \$250,000 University of Victoria Revolving Sustainability Fund. This fund provides resources for energy, greenhouse gas, and water use reduction projects that can demonstrate cost savings to the university. The cost savings are then used to pay back the fund within five years or less. The fund is managed by the Office of Campus Planning and Sustainability with an advisory committee that makes recommendations for project approvals to the Associate Vice-President, Financial Planning and Operations. Project ideas are solicited from the campus community and from within the university's operating units. The first loans from the fund were approved in November 2011.
- Continued to construct new buildings on campus to the LEED Gold building standard. The new South Tower Residence is the first green residence on campus and will be the sixth LEED Gold (awaiting certification) building on campus.
- Implemented phase one of the lighting upgrade project which was the result of audits in 2010 that identified opportunities on campus to convert to lower wattage T8 lamps.
- Reduced water use throughout the summer months with the summer naturalization project. In select areas of campus, irrigation and mowing were discontinued during the summer months to save on water use and maintenance costs, while providing a more natural feel to campus.
- Presented the inaugural Sustainability Champion Award to a staff member whose efforts to make his or her workplace more sustainable had the most "meaningful and enduring contribution towards the sustainability goals of the university".
- Upgraded the waste systems in classrooms and lecture halls across campus. All garbage and blue recycling bins were removed and replaced with 3-bin sorting stations in the hallways (mixed paper, bottles/can/hard plastics & landfill waste). Also in September 2011, a new recycling and composting awareness program was launched in the student residences; garbage chutes were closed in select buildings, and bottles/cans/hard plastics recycling collection bins were added to some floors.
- Piloted the Sustainability Action Team program. Staff and other building users in six campus buildings were encouraged to team up with colleagues to work together to conserve energy, reduce waste and promote sustainable transportation choices as part of the Conservation



Awareness Building Challenge. The initiative was coordinated by the Office of Campus Planning and Sustainability and Facilities Management, with support from BC Hydro's PowerSmart program.

- The University of Victoria's commitment to sustainability in operations is captured in the Sustainability Action Plan for Operations: 2009-2014. In 2011, the Office of Campus Planning and Sustainability produced a report updating the campus community on the progress made on the plan and opportunities for improvement in our journey towards sustainability. The report also provided the framework for the ongoing use of indicators to assess the future progress on important goals.

Plans to Continue Reducing Greenhouse Gas Emissions 2012-2014

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.

A priority for the university in 2012-2014 will be to implement the recommendations of the Integrated Energy Master Plan. The plan provides a comprehensive, long term vision for energy use on campus and will be an invaluable tool going forward. The recommendations made in that document will provide a framework in which the university can work to attempt to meet all our GHG emissions reductions goals.

Other greenhouse gas reduction efforts will focus on:

- Continued implementation of a Revolving Sustainability Fund to provide capital for innovative energy reduction projects
- Behavior change initiatives and programs that focus on the main users of the campus such as our Sustainability Action Team program
- Implementation of future phases of the Continuous Optimization Program
- Continued strengthening of our partnerships both on campus and within the broader community

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



University of Victoria - 2011 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 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	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	33	% of vehicles are fuel- efficient models	5 additional electric gators were purchased.	Continue to replace aging vehicles with more efficient models	2010	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress			Fleet purchasing decisions go through an evaluation process in an effort to right-size the fleet.	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 specifically to improve fuel-efficiency	Ongoing/In Progress	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.	Continue to perform regular maintenance on all vehicles.	2010	No End Date (Continuous)
Replace small maintenance vehicles with more fuel-efficient models	Ongoing/In Progress	76	% of small maintenance vehicles are fuel-efficient	5 additional electric gators were added to the small maintenance vehicle fleet	None, the only remaining vehicles that are not fuel efficient are specialty vehicles like street sweepers or fork lifts.	2000	No End Date (Continuous)
Behaviour change program							
Provide fleet driver training to reduce fuel use	In Development			Continued promotion of anti-idling on campus.	Continued promotion of anti-idling on campus.	2010	No End Date (Continuous)
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)							
Planning/management							
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	Developed plans to install additional heating flow BTU metering in additional residences on campus.	Install metering in additional buildings on campus. Upgrade existing meters to improve accuracy of readings at campus academic buildings.	2010	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	Established baselines for major groupings of buildings (e.g. residences, academic buildings etc.)	For individual buildings over 30,000 square feet, baselines will be programmed into our metering systems to allow quicker more accurate yearly data comparison.	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	South Tower Residence was completed in 2010 and the LEED submission was made in 2011. LEED Gold certification is expected.	All new buildings will continue to follow UVic's Sustainability Action Plan, which sets LEED Gold as the minimum certification for all new buildings.	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.	None	2009	No End Date (Continuous)
Perform energy retrofits on existing, owned buildings	Ongoing/In Progress	30	% of owned buildings have undergone energy retrofits since start year indicated	Seismic upgrading which will improve thermal performance and energy efficiency was completed in 6 building in June 2011. In addition, UVic implemented phase one of BC Hydro's Continuous Optimization program in 6 buildings to reduce energy use through low-cost operational and maintenance changes (including lighting retrofits).	Phase 2 of the continuous optimization program will start in 2012 will include 6 additional buildings. Phase 3 will begin in 2013 and include 7 additional buildings.	2009	No End Date (Continuous)
Retrofitting owned buildings							
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	7	% 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.	2009	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In Progress	100	% of retrofits since start year indicated had lighting systems upgrades	All buildings which have undergone energy retrofits have had lighting retrofits as part of the upgrade.	Phase 2 and phase 3 of the Continuous Optimization Program will continue to upgrade more buildings on campus with more efficient lighting	2009	No End Date (Continuous)

University of Victoria - 2011 Carbon Neutral Action Report

[illegible]

University of Victoria - 2011 Carbon Neutral Action Report

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Paper Type							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	7	% of total paper purchased contains 30% recycled content	UVic's paper purchasing policy to purchase only 100% post consumer recycled content has been in place since 2008. All major purchasing of paper supplies for the Print Shop, labs, library, etc. are 100% post consumer recycled content.	Continue to enforce 100% post consumer recycled paper purchasing policy across all departments on campus.	2008	No End Date (Continuous)
Purchase 40% post-consumer recycled paper	Ongoing/In Progress	0	% of total paper purchased contains 40% recycled content	UVic's paper purchasing policy to purchase only 100% post consumer recycled content has been in place since 2008. All major purchasing of paper supplies for the Print Shop, labs, library, etc. are 100% post consumer recycled content.	Continue to enforce 100% post consumer recycled paper purchasing policy across all departments on campus.	2008	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Ongoing/In Progress	92	% of total paper purchased contains 100% recycled content	UVic's paper purchasing policy to purchase only 100% post consumer recycled content has been in place since 2008. All major purchasing of paper supplies for the Print Shop, labs, library, etc. are 100% post consumer recycled content.	Continue to enforce 100% post consumer recycled paper purchasing policy across all departments on campus.	2008	No End Date (Continuous)
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). Campus memos to staff about parking permits and other important information are now distributed via email instead of paper. Board of Governors' meeting packages are now distributed electronically instead of by paper.	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)
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.	Continue to encourage individual departments and faculty to go paperless as much as possible. Promote less use of paper posters to advertise events.	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.	No specific action by the administration on this.	2006	No End Date (Continuous)

University of Victoria - 2011 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 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Business Travel						
Virtual meeting technology						
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Ongoing/In Progress		Software is installed on computers of staff and faculty who require it.	Continue to install software on computers of staff and faculty who require it.	2007	No End Date (Continuous)
Make desktop web-cameras available to staff	Ongoing/In Progress		Most new computers come with cameras. As older computers are replaced, more and more staff will have cameras available, but many staff do not need to access this hardware on a regular basis.	Provide computers with cameras to staff who require it.	2008	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress		UVic has 3 web-conferencing meeting rooms available for rent to any campus department. Mobile web-conferencing equipment and staff are also available for rent for any event.	Continue to promote use of video-conferencing as an alternative to travel to meetings, interviews, presentations, etc. Provide live webcasting of more and more lectures and seminars.	2009	No End Date (Continuous)
Behaviour change program						
Train staff in web-conferencing	Ongoing/In Progress		Staff are offered free training and support on an ongoing/as needed basis.	Continue to train and support staff on technology as required.	2008	No End Date (Continuous)
Train staff in video-conferencing or provide technical support for video conferencing set-up	Ongoing/In Progress		Staff are offered free training and support on an ongoing/as needed basis.	Continue to train and support staff on technology as required.	2008	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress		Staff are offered this option for some meetings and public lectures.	Continue to promote to promote this technology to meeting and event organizers and advertise options to staff.	2008	No End Date (Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress		Full time staff are offered a free membership in the Victoria Car Share Co-op and there are 3 fleet vehicles parked on campus for convenient access during the day for off campus appointments and meetings. Staff without parking permits can also purchase a monthly bus pass at less than half the normal rate. UVic owns a number of vehicles including a hybrid car, that can be rented by staff for group travel to meetings and other events.	Continue to promote transportation demand management strategies related to travel off campus for meetings and appointments, as well as commuting to work.	2005	No End Date (Continuous)
Education, Awareness, and Engagement						
Team-building						
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Ongoing/In Progress		Launched first Sustainability Action Team program with teams in six campus buildings competing for 3 months on energy conservation (electricity) and waste reduction. Also hosted energy reduction challenge in student residence buildings.	Continue with Sustainability Action Team program in more buildings on campus and hold competitions between them on energy and waste reduction. Also continue to host and refine programs in student residences.	2011	No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	Ongoing/In Progress		Staff teams are supported by the Sustainability Coordinator, with help from the Energy Manager and Waste Reduction Coordinator. Student teams in residences are supported by the same people, plus staff in Residence Services.	Continue support from Sustainability Coordinator, Energy Manager, Waste Reduction Coordinator and Residence Services, as required.	2011	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Ongoing/In Progress		All Sustainability Action Teams are provided with basic training from the Office of Campus Planning & Sustainability and consultants working with BC Hydro Powersmart on social marketing. They are then encouraged to create their own programming for what they think will work best in their particular work environment (which can vary greatly across campus). Student leaders were provided with training from grad students from the Environmental Psychology program.	Continue to support new Sustainability Action Teams with basic social marketing training through presentations and workshops.	2010	No End Date (Continuous)
Awards/Recognition						
Establish a sustainability/green awards or recognition program	Ongoing/In Progress		Launched first Sustainability Champion Award, a peer nominated process to recognize a staff person for their exceptional contribution towards sustainability on campus.	Raise the profile of the Sustainability Champion Award on campus and investigate integrating it into other established staff recognition programs. Also create a similar award for students and faculty.	2011	No End Date (Continuous)
Staff Professional Development						

University of Victoria - 2011 Carbon Neutral Action Report

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress			Sustainability Coordinators participate in regular workshops, seminars and attend conferences related to campus sustainability. Some Facilities Management staff attend workshops such as 'green labs' and participate in professional development webinars and conferences on energy management and waste reduction.	Staff working on sustainability issues on campus are encouraged to take appropriate training to update their skills as required.	2007	No End Date (Continuous)
Staff awareness/education							
Provide education to staff about the science of climate change	Ongoing/In Progress			The university hosts many events related to the science of climate change that are free for staff to attend. The many research centers on campus that work in areas related to climate change also have information on their websites. UVic's Pacific Institute for Climate Solutions also created a series of educational videos that are available to staff.	Continue to provide information through the sustainability website, the UVic Green Guide, stickers, email list serves, and social media.	Started before 1995	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress			Information is provided through the sustainability website, the UVic Green Guide, Sustainability Action Team training, posters, stickers, email list serves and social media.	Continue to provide information through the sustainability website, the UVic Green Guide, Sustainability Action Team training, posters, stickers, email list serves and social media.	2006	No End Date (Continuous)
Provide green tips on staff website or in newsletters	Ongoing/In Progress			Information is provided through the sustainability website, the UVic Green Guide, email list serves, and social media.	Continue to provide information through the sustainability website, the UVic Green Guide, stickers, email list serves, and social media.	2006	No End Date (Continuous)
Provide sustainability education during new staff orientation	Ongoing/In Progress			Sustainability Coordinators are asked to participate in new staff orientation workshops on a regular basis. The employee manual was updated to include references to sustainability initiatives on campus and links to sustainability website.	Ensure sustainability is part of new staff orientation workshops and online materials.	2010	No End Date (Continuous)
Client/public awareness/education							
Provide education to clients/public about the science of climate change	Ongoing/In Progress			The university hosts many events related to the science of climate change that are free or available at a minimal cost for the public to attend. Many events are now also offered live over the internet. The many research centers on campus that work in areas related to climate change also have information on their websites. UVic's Pacific Institute for Climate Solutions also created a series of educational videos that are available to the public on YouTube and through various UVic websites.	Continue to host many events related to the science of climate change and promote them to the public via list serves, social media, newspaper ads, and websites.	Started before 1995	No End Date (Continuous)
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress			The university hosts many events related to conservation of resources that are free or available at a minimal cost for the public to attend. Many events are now also offered live over the internet. The sustainability website also offers a lot of useful information that can be applied beyond the campus or classroom. Assistance is also offered via email and phone to the public requesting information.	Continue to host many events related to the conservation of resources and promote them to the public via list serves, social media, newspaper ads, and websites.	Started before 1995	No End Date (Continuous)
Provide green tips on client/public website or in newsletters	Ongoing/In Progress			Information is provided through the sustainability website, the UVic Green Guide, email list serves, and social media.	Continue to provide information through the sustainability website, the UVic Green Guide, stickers, email list serves, and social media.	Started before 1995	No End Date (Continuous)
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 comprehensive water audit was conducted on campus by the Capital Regional District Environmental Partnerships division. This audit inventoried all water fixtures, estimated potential savings, and recommended a course of action for the university to follow to reduce our water use.	The first phase of the water fixture upgrade program will take place during the summer of 2012, with further phases completed in subsequent 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.	The first phase of the water fixture upgrade program will take place during the summer of 2012, with further phases completed in subsequent years. This process includes once through cooling upgrades and toilet fixtures.	2009	No End Date (Continuous)
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.	2004	No End Date (Continuous)

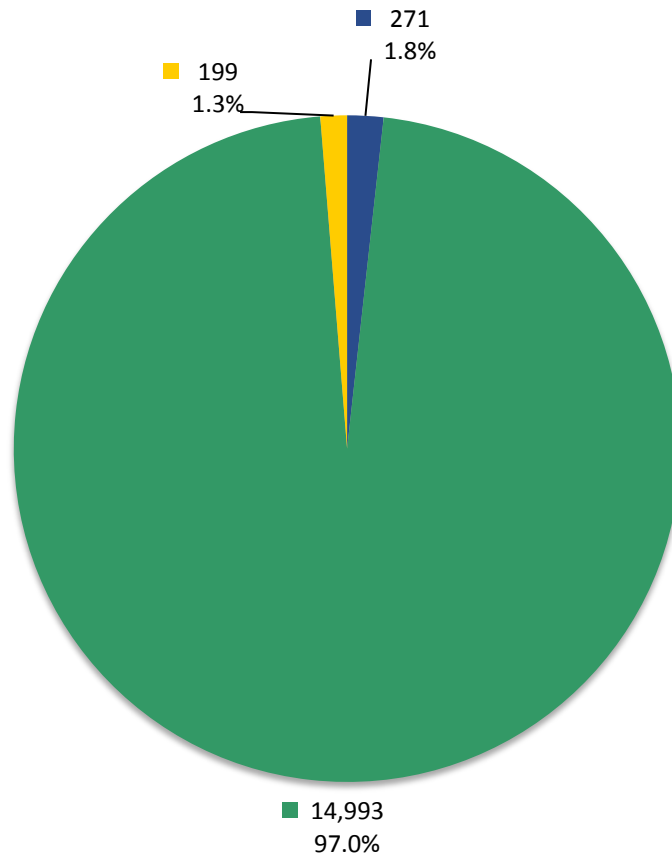
University of Victoria - 2011 Carbon Neutral Action Report

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
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			Waste reduction policy and practices continue to be refined through standardization of signage, bin designs and increasing the number of recycling and composting collection options across campus. Paper recycling and garbage bins were removed from most classrooms and lecture theatres and replaced them with 3-bin sorting stations in hallways. Increased awareness of composting system (in particular for paper coffee cups and paper towels) and increased number of voluntary office composting programs and other in-building bins. Promoted waste reduction with annual Love-A-Mug coffee cup campaign and upgrading water fountains across campus for easy refilling of reusable water bottles. UVic has a goal of a 75% waste diversion rate and at the end of 2011 were at about 65%.	Continue to promote successful recycling and composting systems and efficiencies in collection systems. Also continue to promote waste reduction in particular around reusable coffee cups and water bottles. UVic will also continue to encourage university departments to use less materials in their day to day operations including packaging, plastic bags in the bookstore, and gifts for volunteer and conference participants.	Started before 1995	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress			UVic has a "zero waste down the drain" policy and provides yearly educational training for new and continuing staff about hazardous waste policy and practices. All hazardous waste is measured and disposed of using the strictest safety standards, including auditing of all 3rd party contractors.	Continue to implement and refine policies and practices to do with hazardous waste usage and disposal.	Started before 1995	No End Date (Continuous)
Procurement (non-paper supplies)							
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			UVic purchasing policy and practice incorporates a quadruple bottom-line decision-making framework for requests-for-proposals and supplier contracts. The overall sustainability of a product is a factor for office furniture, electronics, appliances, etc.	Continue to promote green purchasing policies and practices for all purchasing and supplier contracts. Work with our suppliers to assist them to green their businesses and the supply chain.	2005	No End Date (Continuous)
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Ongoing/In Progress			UVic's green cleaning program was launched as a pilot in 2000 and now covers approximately 85% of campus. The program utilizes cleaning products that meet or exceed Green Seal GS37 or Environmental Choice ECP 33 certification programs. The program also employs a microfibre cleaning system that reduces the need to use some chemicals altogether. A pilot program to try these products in the student residences was started in 2011 and if successful, will result in 100% of the campus being covered.	Implement the green cleaning program to 100% of campus.	2000	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			UVic purchases 30 - 40% local (and organic where possible) produce from Vancouver Island, 100% organic & fair trade coffee, local cage-free eggs, local poultry, no farmed fish, and all baked goods and pizza come from local suppliers.	Continue to work with local food suppliers to bring supply Food Services with healthy, diverse, and sustainable food options. Investigate the purchase of SPCA certified meat and poultry.	2004	No End Date (Continuous)
Building construction, renovation, and leasing							
Establish a policy to reuse materials where possible and divert construction and demolition debris from landfills and incineration facilities	Ongoing/In Progress			During construction of the new South Tower residence, greater than 75% of waste that was generated, was diverted from the landfill.	Continue to reuse materials and divert waste from the landfill where possible.	2008	No End Date (Continuous)
Indoor air quality							
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	Ongoing/In Progress			Products with low VOC's are used in all new buildings and building renovations.	Continue to use low VOC's products in new buildings and building renovations.	2006	No End Date (Continuous)
Commuting to and from home							
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress			UVic has a number of transportation demand management initiatives that strongly encourage the use of alternative transportation by staff and students. These include a student UPass system where every student is given a free bus pass as part of their tuition, a subsidized employee bus pass system where staff and faculty can purchase a monthly bus pass at less than half the normal rate if they do not have a parking permit. UVic also offer employees free membership in the Victoria Car Share Co-op and offers priority parking for car pools. Free refurbished bikes are available for loan from our SPOKES program, we have 96 bike lockers for rent and a 24 Hour outdoor Bike Repair kiosk.	Continue to promote the many transportation demand management initiatives including expanding sheltered and secure bike parking, working with local governments to improve cycling access to campus, and working with BC Transit to improve transit service. Also investigating the possibility of staggered class start times to ease transit loads at peak times, and adjusting parking rates and eligibility.	1999	No End Date (Continuous)

University of Victoria - 2011 Carbon Neutral Action Report

Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)		Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress			Free showers and day lockers are offered to all staff and students in our main gym. Approximately 10 buildings have showers and lockers for use by building occupants.	Complete construction on new athletics and recreation facility that will have showers and lockers, plus bike parking in the parkade.	Started before 1995	No End Date (Continuous)
Provide secure bicycle storage	Ongoing/In Progress			96 individual bike lockers are available for rent by staff and students. There are approximately 2,200 individual bike racks available across campus.	The new athletics building parkade will include at least 64 covered, secure bike parking stalls. A campus bike plan is being considered which will help determine where to create more covered, secure bike parking on campus.	2006	No End Date (Continuous)
Modify parking fees or parking availability for staff/students	In Development			Reviewed options for changing the availability of parking and parking pricing systems to help ease demand for parking at peak times.	Continue to review and consider options for parking policies to ease demand for parking.	2010	No End Date (Continuous)

University of Victoria Greenhouse Gas Emissions by Source for the 2011 Calendar Year (tCO₂e*)



Total Emissions: 15,463

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion (Building Heating and Generators) and Electricity
- Supplies (Paper)

Offsets Applied to Become Carbon Neutral in 2011 (Generated May 18, 2012 11:28 AM)

Total offsets required: **15,453**. Total offset investment: **\$386,325**. Emissions which do not require offsets: **10** **

*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.