

Executive Summary

Vancouver Island University (VIU) continues to build on and improve its strategies to lower its greenhouse gas emissions and increase activity, policy, and practice that supports the university's <u>Academic</u> and <u>Campus Master</u> plans. 2012 has seen continued efforts in carbon reduction through capital projects, procurement, teaching and learning, and behaviour outreach programs. As testament to these efforts, the new Cowichan Campus building has been recognized as a LEED[®] Gold building.

Although financial barriers have narrowed the scope of capital improvements, a number of small projects at VIU will assist in attaining lowered emission targets. Retrofits, improved ability to monitor and report energy use, an in-depth analysis of renewable energy possibilities and implementation of energy-saving software all contributed to VIU's carbon reduction efforts. Several departments have upgraded equipment that will also offer significant energy savings.

Sustainability across the curriculum is developing. More and more faculties are incorporating elements of sustainability into university curricula as well as expanding experiential learning opportunities to include sustainability capacities. Additionally, a number of programs are providing education to, or service to the community on climate change and sustainability issues.

Progression of VIU's culture of conservation is evident as behaviour change initiatives gather strength, as seen in an increase in student and staff engagement. The VIU community is now taking a more active role in suggesting development of initiatives as well as requesting established events such as Ugly Sweater week. Further, VIU was an active partner in Nanaimo's first Bike + Walk to School initiative in September and is looking forward to being an active partner in leading sustainability initiatives locally, regionally, and provincially.

Ric Kelm Executive Director, Infrastructure and Ancillary Services



2012 Greenhouse Gas Emissions

Total 2012 Greenhouse Gas emissions from all sources, as outlined in the Greenhouse Gas Reduction Targets Act are 3375.19 tCO₂e.

Although the table below shows a small increase in tCO_2e , there was an estimated 12% decrease in electrical consumption across all campuses, and a reduction natural gas consumption in all areas save for Nanaimo campus, which is has the largest energy consumption of all areas.

The breakdown of emissions is as follows:

2012/2011 tCO ₂ e Comparison	2012	2011	Change	% Change
Buildings (all campuses and facilities)	2966.05 tCO ₂ e	2809.86 tCO ₂ e	156.19 tCO ₂ e	5.56%
Mobile Combustion	255.62 tCO ₂ e	301.86 tCO ₂ e	-46.24 tCO ₂ e	-15.32%
Office Paper	97.71 tCO ₂ e	109.52 tCO ₂ e	-11.81 tCO ₂ e	-10.78%
Estimated Emissions	55.81 tCO ₂ e	55.81 tCO ₂ e	0 tCO ₂ e	0.00%
Total Offset Exempt	30 tCO ₂ e	30 tCO ₂ e	0 tCO ₂ e	0%
TOTAL	3375.19 tCO ₂ e	3277.05 tCO ₂ e	98.14 tCO ₂ e	<mark>2.99%</mark>

Offsets Applied to Become Carbon Neutral in 2012

Total offsets applied in 2012 total 3346 tCO₂e, with an additional 8 tCO₂e from 2011 because of amounts accounted for after the April 30, 2012 SMARTTool deadline.

Of the total emissions from all sources, 20 tCO2e (estimated) are deemed be from public transit (school bus), which are out of scope, and 10 tCO2e (estimated) from burning biogenic fuel, thus a total of 30 tCO2e (as calculated in SMARTTool) are exempt from offset purchase.



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Emissions Reduction Activities

Organizational, operational, and behavioural activities have contributed to emission reduction at all VIU locations.

Operationally, more fountains/water bottle filling stations were retrofitted supporting VIU's ban on bottled water sales which aids in preservation of water assets as well as decreases the need to manufacture and transport water to the campus. A utility monitoring and targeting program is supporting energy reduction efforts by breaking down energy use into smaller time increments thereby fostering the ability to monitor and analyze trends in utility use and so allowing measured and impactful decisions in both day to day use to be made as well as supporting more efficient identification of areas not running at maximum efficiency. A renewable energy options analysis has been undertaken to determine the best way to make use of limited resources, and, if possible, to leverage campus geographical features to bring about maximum result in providing energy to VIU's growing campus with the least environmental and fiscal impact possible. Verdiem software, which puts VIU's networked monitors and CPUs into sleep mode after

a period of disuse, is being rolled out across most of the campuses and is on track to for significant energy

avoidance.

With a view to VIU's Sustainability policy, several departments have purchased more efficient equipment to replace end-of-life models. Trades and Applied Technology continues to upgrade welding machines and other pieces of equipment that use less power to operate, are multifunctional and have greater output, and allow shaping and forming a broader range of materials using fewer energy resources. The cafeteria's recently acquired dishwasher will use less water and is more power efficient.

Behavioural programs continue to educate and engage the university community through interactive campaigns and activities. Ugly Sweater Week, occurring in conjunction with World Wildlife Federation's National Sweater Day encourages dressing appropriately for the environment rather than turning up the heat. The Green Giant initiative encouraged the VIU community to choose members who stood out in sustainability practice both on and off campuses and the six-week Power Quest challenge was a friendly competition between departments to see which team could identify and maintain a variety of sustainable behaviours. A Sustainability Fair in September welcomed new and returning students and staff helping to reinforce VIU's culture of conservation and a Hallowe'en Sustainability Costume contest demonstrated the community's creativity and passion. These and several other initiatives continue to develop community and involve VIU members in VIU's carbon emission reduction efforts as well as support behaviours in all the



Insulation Woman Hallowe'en Sustainability initiative

environments in which individuals participate.

VIU's 2013 carbon reduction activities include continuance of behaviour change programming, identification of and pursuance of operational efficiencies, and review and any necessary update of institutional sustainability practices. Additionally, many faculties continue to weave sustainability into curriculum as well as engage students in experiential projects with a strong sustainable component.

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Mobile Fuel Combustion (Fleet and other)					
Behaviour change program					
Provide fleet driver training to reduce fuel use	Not Yet				No End Date
•	Evaluated				(Continuous)
Introduce anti-idling policy and/or raise anti-idling awareness for fleet	Ongoing/In	New vehicles were fitted with the anti-idling campaign sticker, and	Continuation of the campaign.	2008	No End Date
drivers (e.g., signs, stickers, messages)	Progress	drivers were reminded of the requirement to avoid unnecessary idling.			(Continuous)
Encourage carpooling in fleet vehicles	Not Yet Evaluated				No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles,	Not Yet				No End Date
public transit, walking)	Evaluated				(Continuous)
Vehicle fuel efficiency					
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	Purchased two four-cylinder vans: one to replace an existing 6 cylinder van in the service of mail deliveries; and one to replace an existing 8 cylinder van in the service of facilities maintenance. While the former mail van has been disposed of, the former maintenance van has been retained although on reduced duties, as it has a bucket lift aboard that is still essential to VIU maintenance.	Continue to seek better fuel economy in replacement vehicles for university service.	2010	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	VIU has long been in the practice of regular servicing on fleet vehicles, on a seasonal basis (spring and fall), to maintain fuel and operational efficiencies.	Continued servicing.	2008	No End Date (Continuous)
Stationary Fuel Combustion, Electricity					
Behaviour change program					
Help staff reduce personal energy use through ""workstation tune-ups""	Not Yet Evaluated				No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress	This has been a regular recommendation to VIU faculty, staff, and students throughout the behaviour change program.	Occupants will be continually reminded in changing ways of the need to switch off and unplug wherever possible.	2008	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress	Various events were carried out in 2012 throughout the seasons, to encourage faculty, staff, and students to switch off or electrical equipment that was not in use.	Continuation of the reminders, prompts, and encouragements.	2009	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress	Throughout 2012, VIU occupants were reminded of the benefits from closing blinds against solar gain, and to open blinds when heat was needed.	Continuation of the program.	2009	No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	Not Yet Evaluated				No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside	Not Yet				No End Date
of regular business hours	Evaluated				(Continuous)
Encourage use of stairs instead of elevators	Not Yet Evaluated				No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress	Throughout the 2012 calendar year, occupants of the VIU facilities were reminded to turn lights off when rooms were not in use. Further, training sessions were held for cleaning staff and for security guards to encourage them to minimize electricity use, and to shut off lights in areas when not needed.	Continuation of the program.	2009	No End Date (Continuous)
	Not Yet	areas when not needed.			No End Date

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
	Evaluated				(Continuous)
IT power management					
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress	Power Management software licences were implemented on the approximately 2000 desk top computers at the Nanaimo Campus, in 2012. The Powell River Campus was completed in 2011, and opportunities will be sought to increase the program in the future.	Continuation of the program as funds are allocated.	2011	2012
Implement server virtualization	Ongoing/In Progress	Discrete servers replaced with virtual servers throughout the year, as demand arose for additional server capacity.	Continuation of the program for energy conservation and heat reduction benefits, along with the performance improvements of the concept.	2010	No End Date (Continuous)
Apply auto-sleep settings on computer monitors and CPUs	Not Yet Evaluated				No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install	Not Yet				No End Date
multi-function devices as part of a print management strategy	Evaluated				(Continuous)
Apply auto-sleep settings on printers, fax machines, and/or multi- function devices	Ongoing/In Progress	All new printers procured in calendar 2012 are either multi-function or double-sided printing capable.	Continuation of the program.	2010	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	VIU procures computers that are certified by a system equivalent to Energy Star.	Continuation of the program.	2009	No End Date (Continuous)
Owned buildings					
Establish energy performance baseline for owned buildings	Ongoing/In Progress	An energy performance baseline was established in 2009, and has been used throughout the years to assess performance as well as energy consumption variations. In addition, planning has been conducted on implementing Energy Management Information System (EMIS) for specific buildings of the VIU Nanaimo Campus.	As funds allow, the EMIS improvement will be applied to buildings in the oranization in future years.	2009	No End Date (Continuous)
Register for performance labelling/certification for operations and	Not Yet				No End Date
maintenance of owned buildings (e.g., LEED EB:O&M)	Evaluated				(Continuous)
Register for performance labelling/certification for commercial interiors of owned buildings (e.g., LEED CI)	Not Yet Evaluated				No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Ongoing/In Progress	While the most recent buildings in the VIU inventory were completed in 2010 and 2011, and reported in those years, VIU plans to seek LEED certification on future buildings being planned in 2012.	Continuation of planning buildings for VIU occupancy that achieve LEED certification.		No End Date (Continuous)
	Ongoing/In Progress	While Provincial funds were not allocated for continued energy retrofits at VIU, VIU funded minor lighting improvements in the Welding Shop, converting from High Intensity Discharge fixtures to fluorescent in the Shop, for energy conservation, and for improved lighting.	VIU will continue to seek opportunities to perform energy conservation projects at facilities of the organization.		No End Date (Continuous)
		Additionally, VIU funded a project to design and prepare tender documents for replacing all outdoor lighting at the Nanaimo Campus with LED fixtures.			
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	In Development	VIU is woking to formalize an Ozone Depleting Substance management plan, but in the meantime is maintaining records of refrigerant gases leaked and leak inspection tests.	A formal ODS management plan will be implemented.	2012	No End Date (Continuous)
Planning/management					
Reduce office space (square meters) per employee	Ongoing/In Progress	Continue to seek opportunities for reducing office space sizes. While VIU uses GOSS as a guide for establishing office space sizes,	Continuation of the program.	2008	No End Date (Continuous)

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
		circulation and support spaces, efforts are made to reduce sizes where possible. Only minor office moves were made in calendar 2012, and in each case, existing space and improvements were used, avoiding costly changes to established finishes.			
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	Ongoing/In Progress	While no Provincial funds were assigned to continue the effort to instal more sub-metering within the VIU organization, VIU continues to plan future projects that will increase the ability to meter gas, electricity, and water consumption at every facility.	Continuation of the program.	2010	No End Date (Continuous)
Retrofit details for owned buildings					
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	Replaced burned out heat exchangers in 3 separate buildings during the year. Replaced one HVAC unit with a heat pump instead of a packaged heating air conditioning unit. Performed air balance improvements, to obtain better performance from existing HVAC units and their related distribution systems.	Will continue to seek opportunities for HVAC improvements in the future, particularly making the best of existing systems.	2010	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In Progress	At the Welding Shop, replaced existing High Intensity Discharge systems with more energy efficient fluorescent fixtures. An added benefit of these fixtures is that since fluorescent fixtures re-strike almost immediately, the lighting system can be switched off during lunch and coffee breaks, in addition to at end of shift.	Will continue to seek opportunities to improve lighting quality and improve energy conservation.	2009	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	No physical changes were made to control systems within the 2012 calendar year, however, planning was advanced on future improvements to control systems including implementation of: 1. carbon dioxide / occupancy sensors, for reduced fresh air demand, and reduced heating / cooling demand; 2. increased sub-metering and increased mechanical re- commissioning; 3. An Energy Management Information System (EMIS) based on improvements to existing controls (ESC Enterprise), specific to each building regardless of size; 4. Integration of room booking with HVAC scheduling.	Implementation of planned improvements will occur when funding is made available.	2010	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Ongoing/In Progress	Weather stripping was replaced on all doors to Building 300, for improved energy performance and improved comfort.	Continuation of the weather stripping and draft-caulking in target buildings.	2009	No End Date (Continuous)
Supplies (Paper)					
Behaviour change program					
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Not Yet Evaluated				No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Not Yet Evaluated				No End Date (Continuous)
Electronic media in place of paper				0010	
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	Various deaconal areas of VIU are experimenting the merits of electronic media in support of or in replacement of traditional classrooms. Additionally, VIU departments seek methods of	Continuation of the work.	2010	No End Date (Continuous)

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
		distributing information on methods that do not include printed paper sheets.			
	Ongoing/In Progress	Over time, VIU is storing documents on web servers, and making them available to authorized users, both to avoid the use of paper, and to reduce the storage space requirements. Additionally, retrieval of needed documents can be simpler, from electronic document libraries.	Continuation of the program.	2010	No End Date (Continuous)
		In 2012, Facilities Services & Campus Development placed important studies and documents in an electronic document library, and continues to do so as documents are developed.			
		In prepvious years, As-Built construction drawings were stored on a document Library, and experiments have begun in the storage of maintenance information for new developments in the same library.			
Switch to an electronic payroll notification system in place of paper pay	Completed (in				No End Date
stubs	Previous Year)				(Continuous)
Paper Type					
Purchase 30% post-consumer recycled paper	Ongoing/In	The standard for purchasing at VIU is to purchase 30% recycled	Continuation of the program.	2009	No End Date
	Progress	paper. Some offices also procure only 100% recycled paper.			(Continuous)
Purchase 40% post-consumer recycled paper	Not Yet				No End Date
	Evaluated				(Continuous)
Purchase 100% post-consumer recycled paper	Not Yet				No End Date
	Evaluated				(Continuous)
Printer/document settings					
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In	The standard at VIU is to set up printers in central locations for	Continuation of the program.	2010	No End Date
	Progress	shared use, and to set them up to print double sided.			(Continuous)

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

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Business Travel					
Behaviour change program					
Train staff in web-conferencing	Ongoing/In Progress	Web-conferencing is used by various departments to reduce emissions associated with travel, and with time lost to travel, and has been used on an ad hoc basis. For example, in 2012, Facilities Services & Campus Development made Energy Management presentations to BC Hydro via web-conferencing, each fiscal Quarter.	Continuation of the Program.	2010	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress	VIU personnel attend webinars where personal attendance is not critical.	Continuation of the Program.	2009	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress	VIU personnel use the car pooling concept wherever possible, to avoid unnecessary use of the fleet vehicles, and to reduce greenhouse gas emissions.	Continuation of the program.	2008	No End Date (Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress	When travelling to Vancouver, VIU personnel will seek travel options that offer carbon reduction (e.g., a local sea plane service) as a routine component of its business operations.	Continuation of the effort.	2009	No End Date (Continuous)
Policy and budgeting					
Create a low-carbon travel policy or travel reduction goal	Not Yet Evaluated				No End Date (Continuous)
Virtual meeting technology					
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	In Development	VIU Information Technology department is evaluating web- conferencing software, in cooperation with faculty.	Continuation of the program.	2011	No End Date (Continuous)
Make desktop web-cameras available to staff	Not Yet Evaluated				No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Completed (in Previous Year)				No End Date (Continuous)
Education, Awareness, and Engagement					
Awards/Recognition					
Establish a sustainability/green awards or recognition program	Ongoing/In Progress	VIU awarded contributors to the various Behaviour Change events (Workplace Conservation Awareness campaign, for one), to encourage green behaviours.	Continuation of the events and awards.	2009	No End Date (Continuous)
Staff Professional Development					
Support green professional development (e.g., workshops, conferences, training)	Not Yet Evaluated				No End Date (Continuous)
Include green options in employee performance measurement system	Not Yet Evaluated				No End Date (Continuous)
Staff awareness/education					
Provide education to staff about the science of climate change	Ongoing/In Progress	A VIU student club known as ACER (Action against Climate change through Education and Research) presents a very well planned information session on the Science of Climate Change. In 2012, ACER delivered it to the general populous of the VIU Nanaimo Campus during Power to Change Week, in addition to the ACER presentations made routinely to local secondary schools.	Continuation of the presentations.	2009	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Not Yet Evaluated				No End Date (Continuous)

Actions to Reduce Provincial Emissions and Improve Sustainability

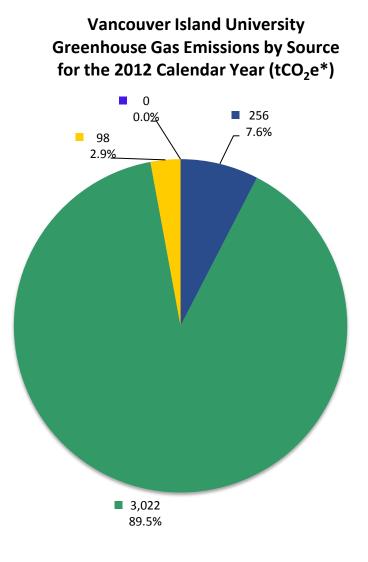
The actions listed below contribute to a reduction in greenhouse gas emissions from sources that fall outside of the reporting requirements defined in the carbon neutral government regulation of the Greenhouse Gas Reduction Targets Act. Public sector

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Provide green tips on staff website or in newsletters	Not Yet				No End Date
	Evaluated				(Continuous)
Provide sustainability education during new staff orientation	Not Yet				No End Date
	Evaluated				(Continuous)
Team-building					
Create Green, Sustainability, Energy Conservation, or Climate Action	Not Yet				No End Date
Teams with executive endorsement	Evaluated				(Continuous)
Provide resources and/or dedicated staff to support teams	Not Yet				No End Date
	Evaluated				(Continuous)
Providing behaviour change education/training to teams (e.g.,	Not Yet				No End Date
community-based social marketing)	Evaluated				(Continuous)
Other Sustainability Actions					
Adaptation to Climate Change					
Assessed whether extreme weather events and/or long term changes in	Not Yet				No End Date
climate will affect the organization's business areas	Evaluated				(Continuous)
Integrated considerations of extreme weather events and/or long term	Not Yet				No End Date
changes in climate into the organization's decision making.	Evaluated				(Continuous)
Building construction, renovation					
Establish a policy to reuse materials where possible and divert	Ongoing/In	Re-use of functional materials and recycling of usable equipment	Continuation of the policy.	2008	No End Date
construction and demolition debris from landfills and incineration facilities	Progress	has long been a practice at VIU, as employees work to do more with			(Continuous)
		less. Furniture, kitchen equipment, fans, and miscellanous electrical			()
		and mechanical components are re-used wherever possible.			
Incorporate lifecycle costing into new construction or renovations	In Development	The VFA Audit of buildings and assets has helped VIU to set up a	Continuation of the work.	2011	No End Date
		process for life cycle planning of equipment and systems, and to		-	(Continuous)
		plan for in-time replacement in the future. Life cycle costing is carried			()
		out by consultants for decisions on major equipment purchases.			
Commuting to and from home					
Introduce telework/work from home policy	Not Yet				No End Date
	Evaluated				(Continuous)
Offer staff a compressed work week	Not Yet				No End Date
	Evaluated				(Continuous)
Encourage commuting by foot, bicycle, carpool or public transit	Not Yet				No End Date
	Evaluated				(Continuous)
Provide shower or locker facilities for staff/students who commute by	Ongoing/In	While no new lockers or showers were installed in buildings at VIU,	Continuation of the program.	2008	No End Date
foot or by bicycle	Progress	plenty of such facilities exist on most campuses.			(Continuous)
Provide secure bicycle storage	Ongoing/In	In 2012, VIU encouraged cyclers to ride to work and school more	An addition is planned to the larger shelter.	2011	No End Date
, ,	Progress	often, through the provision of additional under-cover bicycle	, ,		(Continuous)
	0	storage. A project in 2011 saw the erection of a large bicycle shelter			· · · · · ·
		with lock up facilities and repair equipment. And in 2012, an			
		additional smaller shelter was established on another corner of the			
		campus in Nanaimo.			
Procurement (non-paper supplies)					
Incorporate minimum recycled content standards into procurement	Not Yet				No End Date
policy for consumable, non-paper supplies (e.g., writing instruments,	Evaluated				(Continuous)
binders, toner cartridges, etc.)					``````,

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

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Establish green standards for goods that are replaced infrequently	Ongoing/In	VIU Purchasing Department monitors purchase requests with the	Continuation of the program.	2008	No End Date
and/or may require capital funds to purchase (e.g., office furniture,	Progress	goal (among their regular financial goals) of increasing purchases of			(Continuous)
carpeting, etc.)		equipment that meets environmental standards such as Energy Star.			
Implement sustainable purchasing program for cleaning products,	Ongoing/In	VIU continues to insist on the use of sustainable cleaning products	Continuation of the policy.	2008	No End Date
disposable paper products and trash bags	Progress	within its operations.			(Continuous)
Waste reduction/diversion					
Put in place an operations policy to facilitate the reduction and diversion	Ongoing/In	VIU has long practiced the policy of recycling as many materials out	Continuing to seek ways to divert waste from the waste stream.	2008	No End Date
of building occupant waste from landfills or incineration facilities	Progress	of the waste stream as reasonably possible, including the recycling			(Continuous)
		of styrofoam.			
Implement a hazardous waste reduction and disposal strategy	Ongoing/In	VIU has long practiced the recycling of batteries and fluorescent	Continue to seek opportunities to reduce hazardous waste materials.	2008	No End Date
	Progress	lamps. In 2012, new Provincial legilsation allowed VIU to recycle			(Continuous)
	-	more than just fluorescent lamps, which will help to reduce the waste			
		stream.			
Water conservation					
Establish a water conservation strategy which includes a plan or policy	Completed (in				No End Date
for replacing water fixtures with efficient models	Previous Year)				(Continuous)
Put in place a potable water management strategy to reduce potable	Not Yet				No End Date
water demand of building-level uses such as cooling tower equipment,	Evaluated				(Continuous)
toilet fixtures, etc. and landscape features					· · · · ·
Introduce a stormwater management landscape strategy (e.g.,	Not Yet				No End Date
vegetated roofs, permeable paving, rain gardens, bioswales)	Evaluated				(Continuous)



Total Emissions: 3,375

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

Offsets Applied to Become Carbon Neutral in 2012 (Generated May 27, 2013 11:54 AM)

Total offsets required: 3,346. Total offset investment: \$83,650. Emissions which do not require offsets: 30 **

*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.