

SUSTAINABILITY REPORT OKANAGAN CAMPUS



a place of mind

a place of mind



sustainability office - okanagan

This document was produced by the Sustainability Office at UBC's Okanagan Campus displaying the actions taken to reduce provincial emissions and improve Sustainability. Actions described are representative of the Carbon Neutral Action Report: Part B.

Kelowna, BC

THE MISSION OF THE SUSTAINABILITY OFFICE AT UBC'S OKANAGAN CAMPUS IS TO LEAD AND FACILITATE THE ADVANCEMENT OF A CULTURE OF SUSTAINABILITY AT THE CAMPUS BY BUILDING AND SUPPORTING THE **GROWTH OF ITS SOCIAL,** CULTURAL, ECOLOGICAL AND ECONOMIC SUSTAINABILITY.

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part **01**.

introduction

stablished in 2005, UBC Okanagan is a young undergoing campus expansion and development with the addition of new academic buildings, residences, and public realm to meet the needs of a growing population. With a demonstrated commitment to Sustainability, a key component of UBC Okanagan's expansion plan is the implementation of a geoexchange system to contribute towards the University's goal of being a net zero campus. All new academic buildings are designed to achieve a LEED[®] Gold rating utilizing the geothermal system for heating and cooling demands, and as well all existing academic buildings have been retrofitted to enable geothermal heating. In 2008 the Fipke Centre for Innovative Research was the first new academic building to utilize the geothermal system, earning an unprecedented five Green Globes for sustainable design and receiving the FortisBC PowerSense Partners in Efficiency rebate for more than \$127,000.

2009 marked the year of the completion of several green buildings. The University Centre Building was built to LEED[®] Gold standard and uses geothermal for heating and cooling. Its energy efficient design is expected to contribute to a 49% reduction in energy utilization as compared to a conventional building with the same design, receiving recognition from the PowerSense Conservation Award for saving an estimated 1,125,000 kWh per year. Phase 3 of student residences features two sites of 356 units equipped with energy efficiencies including high efficiency windows and HVAC systems, occupancy sensors, compact fluorescent lighting, heat recovery systems, and solar panels to preheat domestic hot water to minimize natural gas consumption.

With high commitment to carbon neutrality, UBC Okanagan will continue to pursue exploring and realizing sustainable actions and behaviours in all facets of Sustainability. Plans for 2010-2012 include strategizing growth of sustainable initiatives at the University including focusing on increasing efficiencies and reducing energy consumption of existing buildings, and reducing GHG emissions produced from the University's fleets.

Additional plans for the next several years include educating and engaging the campus community and promoting long-term sustainable behaviours such as resource conservation through behaviour change programs, further driving Sustainability into the core philosophy and culture at UBC Okanagan.

geothermal map





university culture & experience

presence

The presence of Sustainability as part of UBC Okanagan's culture is increasing and forms a strong basis in the reported experience of students, staff and faculty across campus.

Sustainable physical elements of the campus include features such as a wireless irrigation system to conserve water, a learning garden, recycling and composting facilities, campus features (banners, benches and waste receptacles) made from post-consumer recycled waste, campus trails, student collegia in new academic buildings, public realm and social spaces, bicycle facilities and many others.

A Student Sustainability Club supports the students to engage in discussion and action on sustainability, as well as an active student union executive that support and partner with UBC Okanagan on many sustainabilityrelated initiatives.

events

 UBC Okanagan has a range of events such as Bike to Work Week, World Water Day, Waste Audits and others that promote a sustainable campus.

In 2009 UBC Okanagan continued to provide the Irving K. Barber Distinguished Speaker's Series to bring intellectual leaders to the Okanagan to speak and engage students, staff and faculty as well as the larger community. Many of its sessions have focused on Sustainability.

community

2009 Sustainability focused community events led by UBC Okanagan's dedicated Sustainability office include:

 The first regional Sustainability youth forum: Kelowna City Mayor's Youth Forum in partnership with and held at UBC Okanagan.

Launch of the goBEYOND youthled climate change awareness, education and action program which engaged over 200 students in seven months, and opened its offerings to staff and faculty across the campus.

A new "Faculty Focus on Sustainability" Speaker Series to promote subject matter expertise on campus and engage members of the campus and local community as a means to build social Sustainability and new Sustainability research and industry collaborations.

 Launch of "UBC Okanagan's Sustainability Campus Tour Program", to demonstrate UBC Okanagan as a living laboratory and highlight measures we are taking to be a sustainable campus.

OKANAGAN CAMPUS FACT 250 trees were planted on campus in 2009



dedicated resources

UBC's Place and Promise, Sustainability Academic Strategy, and UBC Okanagan's emergent Academic Strategic Action Plan position Sustainability as a core value and commitment on the part of the University.

UBC Okanagan's commitment to Sustainability is demonstrated by a recently dedicated office for Sustainability on the Okanagan campus with two dedicated FTE's as well as staff and support networks, and a Sustainability Working Group. The office provides the support to realize UBC Okanagan's Sustainability goals and ensures compliance with the Provincial Government's mandate of carbon neutral operations for all Public Sector Organizations in 2010. Sustainability research is supported by the Okanagan Sustainability Institute.

2009 marked the year for the establishment of Sustainability baselines across academic and operational sectors at UBC Okanagan, serving as direction for developing future targets and goals.

The student body at UBC Okanagan is engaged through the "Sustainability Club".

In fall 2009 the dedicated Sustainability Office at UBC Okanagan hired a work study student as the goBEYOND Campus Coordinator to launch the goBEYOND program.

UBC Okanagan Human Resources provides annual staff awards, of which Sustainability is one.

UBC Okanagan has won awards in the areas of healthy workplace culture, sustainable building design and performance efficiency, and has a high level of performance in this area.



fleet, operations, & transportation

fleet

 Within facilities fleet, there are 14 golf carts, 4 vehicles and 1 bobcat. 4 out of 14 golf carts (29%) run on electricity, with all 14 eventually becoming electric.

reduction

As of May 2009, telecommuting guidelines have been established for Management & Professional staff of UBC.

 UBC Okanagan has and uses video conferencing technology to assist in the avoidance of travel and has launched a travel tracker pilot in 2010 to help baseline flight and travel emissions data.

transportation

UBC Okanagan has a U-Pass program, which is a mandatory program for all students. This pass costs \$50/semester, however, the University subsidizes the cost by 10% which reduces the price to \$45/semester. The U-Pass allows for unlimited access to the Kelowna Regional Transit System and access to HandyDART.

UBC Okanagan's Car-Pooling program is a free registration program for vehicles who must have two or occupants. Every parking lot on campus has dedicated car-pool spaces. Registration, including finding a ridematch is available online at www.carpool.ca

UBC Okanagan has bicycle routes on campus, primarily on the main roads throughout campus, totaling 8-10km of bike routes. Trail access to the campus is currently being considered as part of the overall campus planning process.

Secure Bicycle storage was made available in September 2009 with the completion of the new University Centre.

Bike racks are located outside of every building and a covered back rack by the bus loop.

Cycling end of trip facilities are located in the following locations:

- 1. Gymnasium (showers & lockers) To use these facilities, membership is required at a cost of \$30/student + \$20 for locker service and \$20 towel service.
- 2. Science Building (showers) This consists of showers in the men's and women's washroom and are open to the public.
- 3. University Centre End of trip facilities are planned but specific detailed information is not available.

OKANAGAN CAMPUS FACT transit ridership volumes post u-pass increased by 48% from 2006-2007



buildings

All new academic buildings are built to LEED Gold standard and new residential buildings follow UBC's Residential Environmental Assessment Program (REAP)

All new academic buildings are heated and cooled using geothermal technology and all existing academic buildings are being retrofitted to enable heating using geothermal.

All buildings are committed to achieving key green building features. For example:

- All buildings contain water source heat pumps, low water usage units.
- Minimized construction waste is in the specs in the construction documents.
- All renovations and new buildings have sustainable criteria.

UBC Okanagan incorporates several green practices in the construction of their building including:

- Green roofs Planned for Engineering/Management Building and new residence building
- Specific low flow water fixtures
- Water leak detection / repair systems in the gymnasium
- Light pollution reduction measures
- Locally sourced building materials
- Recycled material content
- Energy efficiency lighting and sensors in classrooms and labs

Sub-metering of all buildings (electricity and gas) will be complete in spring 2010.

FortisBC PowerSense Conservation Award 2009

2009 marked the year for the completion of the University Centre, gaining recognition for its green building technologies with a total estimated savings of 1,125,000 kWh annually.



landscape & grounds

UBC Okanagan does not use pesticides or herbicides in landscape management as a general rule. However, in 2009 a limited amount of pesticides were used due to substantial construction across the campus.

UBC Okanagan has 2 pesticide free areas – the daycare and the courtyard.

The campus uses calcium chloride – (Road guard plus 8) (tiger calcium) for de-icing purposes.

• The University's sports fields are equipped with artificial turf to mitigate the need for irrigation.

The University uses the Hunter Irrigation System to control water used for irrigation. This system consists of a computer program weather station that reduces water use based on outside temperatures.

Campus storm water is piped into a retention pond behind the Engineering and Management building. The sustainable management of campus storm water is an ongoing project which seeks to reduce the need to use the city of Kelowna's storm water system.

• 25% of the paving on the campus is currently pervious, with plans to increase this number.

In 2009 UBC Okanagan's tree replanting program, as part of its Wildland Fire Management Plan demonstrated UBC Okanagan's commitment to balancing growth and development with responsible preservation of the natural environment. 250 trees were planted on campus in 2009, 50 of which were Douglas Fir and 200 Ponderosa Pine.



waste management

UBC Okanagan has a recycling program in existence on the campus for bottles, cans, paper, cardboard, batteries, Styrofoam, e-waste, and plastic. A program using large green dumpsters will help capture the weight and volume of recycling on campus.

 UBC Okanagan laboratories currently did not have a chemical re-use program in 2009, however, a solvent distillation pilot is currently underway.

UBC Okanagan has a hazardous waste management disposal plan in place and is planning to respond to the projected increase in hazardous waste streams that are associated with newly constructed research facilities on campus. In 2008, the following amounts of waste were collected and disposed: 1.572 tonnes of solid chemical hazardous wastes; 2076 litres of liquid chemical hazardous wastes; 3.535 cubic metres of solid biohazard wastes; 0 radioactive waste.

In 2009 innovative Green Research initiatives were presented to the UBC Okanagan research community.

Campus composting will be active in the spring of 2010. It is estimated that approximately 60% to 80% of all food waste will be diverted from the landfill by composting (vegetables, coffee grinds, peels and food scraps off plates) through the University's composting program.

All landscape waste is recycled on-site to divert waste from the landfill.

The cafeteria uses both bulk condiment dispensers and packaged condiments; however the focus is on eliminating packages with bulk dispensers.

- All take out containers are 100% compostable.
- All napkins are made from 100% recycled paper and are 100% compostable.
- Pizza boxes are recycled.
- Cutlery is 100% biodegradable.

part **08**.

supply management & procurement

UBC Okanagan has the Principles of Sustainability for Supply Management program in place. <u>http://www.supplymanagement.ubc.ca/Purchase/principled%20model.pdf</u>

UBC Okanagan has a Supplier Code of Conduct Policy for social and environmental responsibility requirements in procurement contracts over a certain dollar amount. <u>http://www.supplymanagement.ubc.ca/Supplier%20code%20ofconduct%202008%20July%2016.</u> <u>pdf</u>

• UBC Okanagan has a green cleaning services procurement agenda.

UBC has a sustainable purchasing guide <u>http://www.supplymanagement.ubc.ca/Sustainability/ubc_sustainable_purchasing_guide.pdf</u>

The University has an environmentally friendly paper purchasing policy such that 100% post consumer recycled product and 30% post consumer multi-use paper is available through its contracted supplier.

UBC Okanagan is dedicated to using recycled materials for landscape infrastructure such as UBC Okanagan banners, benches and trash cans. For example, Wishbone Modena benches http://www.wishboneltd.com use a high content of recycled material. One bench may contain 728 recycled pop cans or 112 licence plates and 256 milk jugs.

Waste receptacles (Chase Park Litter Receptacles) have a recycled content of 61% or greater, which 37% or greater is post consumer and 24% or greater is post industrial. Each receptacle is 100% recyclable (<u>http://www.landscapeforms.com/en-US/Pages/default.aspx</u>

The University has a no-sweat procurement policy, which is initiated through the bookstore as the primary clothing provider for campus, but also provides references to other departments.



food services

UBC Okanagan does source a considerable amount of locally grown fruits, vegetables and protein. Within the University' food services, food sourced locally includes:

- 60% of the fruit,
- 50% of the vegetables and
- 5-10% of the protein

■ 15 % of the local food served at through the University's food services is organic.

UBC Okanagan has committed to serving coffee that is fair trade (95%), nearly half of which is organic (30%).

The cafeteria uses both bulk condiment dispensers and packaged condiments; however the focus is on eliminating packages with bulk dispensers.

- All take out containers are 100% compostable.
- All napkins are made from 100% recycled paper and are 100% compostable.
- Pizza boxes are recycled.
- Cutlery is 100% biodegradable.

UBC Okanagan food services provider, Aramark has changed its practices to support Sustainability. They now use environmentally friendly green chemicals and products and biodegradable garbage bags that decompose in 60 days. Aramark has also implemented an aggressive recycling program for all bottles, glass, plastic, metal, and cardboard. In the spirit of social responsibility, the money from recycling pop bottles and cans donated to the Kelowna and District Society for Community Living is used to benefit the greater community

Aramark has also developed a partnership with the Kelowna Farmers' and Crafters' Market and continues to increase the amount of produce and items purchased locally. All the herbs used at Aramark are grown on campus and fertilized with the high-grade compost produced at UBC Okanagan.

sustainability office - okanagan

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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 12/31/09)	Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year		
Mobile Fuel Combustion (Fleet and other mobile equip	ment)							
Vehicle fuel efficiency								
Replace vehicles with more fuel-efficient models	In Development		Baseline assessment of types of vehicles in fleet.	As existing vehicles are retired they will be replaced with high efficient and/or hybrid vehicles.	2008	No End Date (Continuous)		
Replace larger vehicles with smaller models according to fleet "right- sizing" principles	In Development		As existing vehicles are retired they will be replaced with high efficient and/or hybrid vehicles.	As existing vehicles are retired they will be replaced with high efficient and/or hybrid vehicles. Size will be considered and a purchasing factor balanced according to vehicle needs.	2008	No End Date (Continuous)		
Perform regular fleet maintenance to improve fuel-efficiency	Complete	% of vehicles are subject to 100 regular maintenance for fuel efficiency	All vehicles are regularly maintained which includes following the vehicles recommended maintenance schedule.	Continue regular maintenance of all vehicle fleet.	2005	No End Date (Continuous)		
Replace small maintenance vehicles with more fuel-efficient models	Ongoing/In Progress	29 % of small maintenance vehicles are fuel-efficient	Currently 29% of golf carts are electric.	Replace with electric/new technologies.	2005	No End Date (Continuous)		
Behaviour change program								
Provide fleet driver training to reduce fuel use	Complete	100 % of current drivers are trained	100% of all new driving employees are trained.	Mandate pre-trip inspections for fleet vehicles (internal Facilities policy)	2010	2011		
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	Ongoing/In Progress		Policy considered.	Anti-idling policy implemented in February 2010.	2009	2010		
Encourage carpooling in fleet vehicles	Ongoing/In Progress		Carpooling in fleet vehicles to be included in anti-idling policy.	Continue to promote under Anti-Idling Policy.	2009	2010		
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	Ongoing/In Progress		To be included in anti-idling policy.	Promote walking where possible.	2009	2010		
Stationary Fuel Combustion, Electricity and Fugitive Em	issions (Buildings)							
Planning/management								
Enrol in a building energy benchmarking program (e.g., GREEN UP)	In Development		Conducting our own benchmarks through SMARTTool as well as cost benefit analysis of green projects aimed to mitigate energy consumption and overall carbon production.	Take action on performance standards and consider enrolling in formal building energy benchmarking program.	2009	No End Date (Continuous)		
Reduce office space (square meters) per employee	Ongoing/In Progress		New buildings factor in ratio.	Continue to factor in ratio for new construction.	2005	No End Date (Continuous)		
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	In Development		Electricity subs & metering planned for 100% of electric and 80% of gas in buildings.	Submetering to be completed in 2010.	2009	2010		
Owned buildings								
Establish energy performance baseline for owned buildings	Ongoing/In Progress		The 2009 baselines will be established using the SMARTTool reporting software and with submetering.	Baselines will be established in 2010.	2010	2011		

Action	Status (as of 12/31/09)		Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Register for performance labelling/certification for operations and maintenance of owned buildings (e.g., LEED EB:O&M)	Ongoing/In Progress			All buildings incorporate green technologies, however upgrades to existing buildings in 2009 did not register for performance labelling/certification.	Continue to incorporate green standards and technologies into existing building upgrades.	2005	No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Ongoing/In Progress			All new academic buildings received LEED Gold rating or equivelent. All new residential buildings received UBC REAP Silver green building rating.	All new buildings to receive LEED Gold rating or equivelent. All new residential buildings to receive REAP Silver or higher.	2005	No End Date (Continuous)
Incorporate integrated design process into new construction or during renovations of owned buildings	Ongoing/In Progress			Construction and renovation design phases include collaboration of all parties to improve the overall quality of the design phase and building efficiency.	Continue to incorporate an integrated design phase for new construction and renovations of owned buildings.	2005	No End Date (Continuous)
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	Ongoing/In Progress			Geothermal system mitigates all fugitive emissions. All new buildings will be heated and cooled using geothermal.	All new buildings to be heated and cooled by geothermal.	2008	No End Date (Continuous)
Complete energy retrofits on existing, owned buildings	Complete			100% of existing academic buildings retrofitted to enable geothermal heating.		2008	2009
Retrofitting owned buildings							
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress			Ventilation updated to energy efficiency codes (exhaust air for fume hoods) in Science building. CO2 sensors installed in ventilation system in Admin Building.	Install occupancy sensors on ventillation for other existing academic buildings.	2009	2012
Upgrade lighting systems during retrofits	Ongoing/In Progress			Phase our T-12's to T-8's in lighting systems.	Continue to phase out T-12's to T-8's and consider Gym lights as future project.	2009	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress			Motion lighting installed in classrooms and labs.	Motion lighting installed in classrooms and labs. Computer controlled lighting in hallways. Zone lighting control in parking lots. LED lighting for signage on campus. Occupancy sensors in Arts and Sciences to be installed for ventilation.	2008	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Ongoing/In Progress			Admin Building upgrades included insulation improvements. Solar film on windows in Library, Fipke, and Tim Hortons.	New buildings to incorporate green roofs.	2009	No End Date (Continuous)
Install an on-site renewable energy demonstration project	Ongoing/In Progress			Geothermal heats all existing academic buildings. Domestic hot water tank replacement gas to electric in Science building.	Ensure renewable energy projects in new academic buildings.	2007	No End Date (Continuous)
Leased buildings							
Establish energy performance baseline for leased buildings	Ongoing/In Progress			Submetering of leased buildings (Library, UNC, Fipke)	Establish energy performance baseline for leased spaces in 2010.	2009	2010
Develop a green lease policy that requires green features to conserve energy be included in all lease negotiations	Ongoing/In Progress			Install submeters to understand energy utilization by Leasees	Track energy utilization by Leasees and propose energy mitigation strategies as appropriate.	2009	No End Date (Continuous)
IT power management							
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress	20	% of computers shut down automatically outside of regular business hours	All computer labs are set to automatic shut-off between 12am-7am (Mac computers are set to "sleep").	Improve user education on shutting down computers.	2005	No End Date (Continuous)
Implement server virtualization	Ongoing/In Progress	50	% of servers have been virtualized since start year indicated	Currently half of servers are virtualized.	Will continue to transition as old equipment is retired and new equipment is purchased.	2007	No End Date (Continuous)

Action	Status (as of 12/31/09)		Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Apply auto-sleep settings on computer monitors and CPUs	Complete	100	% of computers have auto-sleep settings applied	Settings are always applied to computer monitors and CPU's.	Promote leaving setting on with educational program.	2005	No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	15	% reduction in printers, copiers, and/or fax machines since start year indicated	Subsidized Xerox program to encourage b&w multi-function machines.	Due to confidentiality, mandating is difficult. Continue to educate and encourage people to use multi-function machines and increase financial incentives.	2007	No End Date (Continuous)
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Complete	100	% of devices have auto-sleep settings applied	All settings are set to auto-sleep.		2005	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Complete	100	% of computers are ENERGY STAR rated	100% of computers are ENERGY STAR rated.		2005	No End Date (Continuous)
Appliances and electronic devices							
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress			Procurement directive in place to source ENERGY STAR rated products campus wide.	Continue to transition to high efficient ENERGY STAR equipment as existing, less efficient equipment is retired.	2008	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			Procurement directive in place to source ENERGY STAR rated appliances and electronic devices for future purchases.	Audit Science Building for innefficient/outdated appliances and develop partnership with supplier to facilitate appliance replacement. Continue to purchase ENERGY STAR appliances and electronic devices as existing equipment is retired.	2008	No End Date (Continuous)
Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases	Ongoing/In Progress			Educational event encouraged the campus to trade in their existing incadecent light bulbs for free high efficient light bulbs.	Continue to source high efficient light bulbs for future purchases, as well as promote to the campus community.	2009	No End Date (Continuous)
Behaviour change program							
Help staff reduce personal energy use through "workstation tune-ups"	Ongoing/In Progress			Looking at developing staff educational program.	2010 launch of "Greening Your Office" staff/faculty educational campaign to promote Sustainability as well as offer green tips, information, and products to decrease the campus' carbon footprint, as well as individual carbon footprints. Launch of campus-wide Sustainability publication 2010 will promote and encourage Sustainability behaviours.	2009	2010
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress			Looking at developing staff educational program.	Staff educational campaign will be launched in 2010. Launch of campus- wide Sustainability publication 2010 will promote and encourage Sustainability behaviours.	2009	2010
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress			Looking at developing staff educational program.	Staff educational campaign will be launched in 2010. Launch of campus- wide Sustainability publication 2010 will promote and encourage Sustainability behaviours.	2009	2010
Encourage staff to use air dry setting on dishwashers	Ongoing/In Progress			Looking at developing staff educational program.	Staff educational campaign will be launched in 2010. Launch of campus- wide Sustainability publication 2010 will promote and encourage Sustainability behaviours.	2009	2010
Provide tips to staff on saving energy in the office while working outside of regular business hours	Ongoing/In Progress			Looking at developing staff educational program.	Staff educational campaign will be launched in 2010. Launch of campus- wide Sustainability publication 2010 will promote and encourage Sustainability behaviours.	2009	2010
Encourage use of stairs instead of elevators	Ongoing/In Progress			Looking at developing staff educational program.	Staff educational campaign will be launched in 2010. Launch of campus- wide Sustainability publication 2010 will promote and encourage Sustainability behaviours.	2009	2010

Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress		Looking at developing staff educational program.	Staff educational campaign will be launched in 2010. Launch of campus- wide Sustainability publication 2010 will promote and encourage Sustainability behaviours.	2009	2010
Promote hot water conservation	Ongoing/In Progress		Looking at developing staff educational program.	Staff educational campaign will be launched in 2010. Launch of campus- wide Sustainability publication 2010 will promote and encourage Sustainability behaviours.	2009	2010
Other Stationary Fuel Combustion and Electricity Actions						
Fuel combustion analysis on boiler systems conducted every 5 years.	Ongoing/In Progress		Developed plan to ensure analysis occurs every 5 years.	Ensure fuel combustion analysis conducted in 2010/2011.	2005	No End Date (Continuous)
Supplies (Paper)						
Paper Type						
Purchase 30% post-consumer recycled paper	Complete	100 % of total paper purchased contains 30% recycled content	Document Management Strategy in place; all copy paper purchased through Unisource contract contains a minimum of 30% recycled content. All virgin copy paper orders received by the vendor are substituted with 30% recycled content. Negotiated paper contract with the vendor to provide campus community 30% pcw for the same price as virgin copy paper.		2009	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	In Development		Individual units may choose to purchase 100% pcw.	This item will be considered as a component of the new Xerox document management strategy.	2009	No End Date (Continuous)
Printer/document settings						
Switch networked printers and photocopiers to automatic double- sided	In Development		2009 Xerox document management strategy.	Planned action to educate staff/faculty to print double sided. Xerox assessment to streamline technology and equipment use.	2010	No End Date (Continuous)
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	In Development		All student print jobs must be released.	Assess feasibility of implementing in all departments. Increase educational program.	2005	No End Date (Continuous)
Electronic media in place of paper						
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress		All staff workstations have access to software. Smart boards have also been implemented.	Increase education and promotion for staff to use the software.	2005	No End Date (Continuous)
Use electronic document library for filing common documents	Complete		There is a shared campus drive in which all departments have access.		2005	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress		Departments have varying policies for document management systems. Traditional paper documents have been transferred online using the UBC Website (such as campus maps, documents, online registrations, etc). All departments have access to a shared drive which serves as an electronic library.	Promote posting materials online to decrease paper use.	2005	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Complete		Electronic payroll has replaced paper pay stubs.		2007	No End Date (Continuous)
Behaviour change program						
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress		Certain departments on campus have made efforts towards using less paper at meetings through technology, such as smart boards. Materials have also been posted online for video and audio conferencing between campuses.	Staff educational campaign will be launched in 2010. Launch of campus- wide Sustainability publication 2010 will promote and encourage Sustainability behaviours.	2006	No End Date (Continuous)

Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Encourage re-use of scrap paper	Ongoing/In Progress		Non-confidential scrap paper is made into notepads is certain departments.	Staff educational campaign will be launched in 2010. Launch of campus- wide Sustainability publication 2010 will promote and encourage Sustainability behaviours. Reused paper pads will be made from one- sided printed paper collected at UBC Okanagan and will be available to faculty and staff in 2010.	2008	No End Date (Continuous)
Other Paper Supplies Actions						
Centralized printing tracking	Complete		All print jobs are tracked in a centralized system.		2005	No End Date (Continuous)