

Selkirk College - 2009 Carbon Neutral Action Report

Executive Summary

One of the six strategic directions at Selkirk is “Sustainability: Toward Selkirk College as a Green College. “

Selkirk has taken a number of major initiatives in 2009 in meeting this strategic direction. The HVAC at the Selkirk campus was updated to current energy and air quality standards. This capital project was completed in 2009 at a cost of approximately \$1.8 million. Upgrades to the Silverking campus boilers were also undertaken at a cost of \$0.4 million. Both of these major initiatives will go a long way towards reducing greenhouse gases and improved energy efficiencies as Selkirk positions itself towards carbon neutrality in 2010. The two capital upgrades were estimated to reduce gas consumption by up to 40%. Dishwashers in our cafeteria were replaced in 2009 and as a result have reduced both power and water consumption. These capital expenditures have led to major reductions in Green House Gas emissions

Operational changes to be undertaken in 2010 and onwards into subsequent years include a review of photocopiers and document management initiatives. Xerox has now completed a paper and copier study and Selkirk is looking to begin implementing the desired recommendations later in 2010. Recycling stations have been deployed on the Castlegar Campus in 2009 and have been well utilized.

The sustainability committee promoted a power down program during 2009. This program was a peer based initiative intent on behavioural change. The program encouraged employees to turn off lights and electronic equipment when they were absent from their offices.

Selkirk plans to make continued efforts in reducing green house gas emissions within its facilities footprint. Various initiatives are underway. College vehicles operators will be encouraged not reduce vehicles idling. Two composting stations will become functional in the summer of 2010. Additional stations will be deployed depending on the availability of composting material.

A new HRIS/Payroll system has been implemented as of January of 2010 at a cost of \$250,000. The new payroll system has eliminated printed cheque stubs while providing employees an electronic copy of all pay receipts. Virtualization will be implemented during the 2010 fiscal year and into 2011. This project is estimated to cost approximately \$75,000. Virtualization will continue to replace conventional servers as their useful life expires.

Selkirk College is committed to the continued reduction of green house gas emissions. Environmental sustainability is a trait of the Selkirk culture and community it serves. Selkirk will continue to be a leader in reducing green house gases within the Kootenay Boundary area.

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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 equipment)						
Vehicle fuel efficiency						
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	100 % of vehicles are subject to regular maintenance for fuel efficiency	Maintenance of vehicles is done on a regular milage or time basis. This includes tune ups and oil changes	Maintence Logs are maintained	2008	No End Date (Continuous)
Behaviour change program						
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	In Development		Educate users and ensure proper signage	Post reminders in on vehicle dashes	2011	No End Date (Continuous)
Encourage carpooling in fleet vehicles	Complete		Whenever possible all employees are encouraged to carpool whether by College or personal vehicles by moral swaison		2009	No End Date (Continuous)
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)						
Planning/management						
Enrol in a building energy benchmarking program (e.g., GREEN UP)	Ongoing/In Progress		Engaged Stantec to develop a Facility Master Plan which will include a Building Conditions Aseessment report	Stantec will provide the report in May of 2010	2009	No End Date (Continuous)
Owned buildings						
Establish energy performance baseline for owned buildings	Complete	85 % of owned buildings have an established energy performance baseline	Completed Environmental Baseline study for Castlegar and Nelson campuses		2009	No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Ongoing/In Progress		New Student Residence building in Neslon is targeting a LEED Gold certification. Renovation to be complete by March 31, 2011.	Started constuction in 2010	2010	2011
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	Ongoing/In Progress		Castlegar Campus HVAC upgrade	Completed project in 2010	2009	2010
Complete energy retrofits on existing, owned buildings	Ongoing/In Progress	85 % of owned buildings have undergone energy retrofits since start year indicated	Completed for Silverking campus (Energy Efficiency Upgrades) amd for Catlegar campus (HVAC upgrades)	Completion of HVAC in 2010	2009	2010
Leased buildings						
Establish energy performance baseline for leased buildings	Ongoing/In Progress		Engaged Stantec to develop a Facility Master Plan which will include a Building Conditions Aseessment report	Report is to be compeleted in 2010	2009	2010
IT power management						
Implement server virtualization	In Development		Subsequent to calendar end, equipment has been ordered.	Implementation of Virtual server	2009	No End Date (Continuous)
Apply auto-sleep settings on computer monitors and CPUs	Complete	100 % of computers have auto-sleep settings applied	All new momitors are equiped witj autosleep		2005	No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress			Printer study will be completed in 2010 and action to be taken in that calendar year	2011	2012

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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 printers, copiers, fax machines, and/or multi-function devices	Ongoing/In Progress			still have to complete faxes	ongoing for 2010 as faxes are replaced	2007	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	60	% of computers are ENERGY STAR rated	As we replace them we are ensuring they are EnergyStar	Ongoing for 2010 as computers are replaced	2007	No End Date (Continuous)
Appliances and electronic devices							
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress			Replace obsolete equipment with ENER STAR	Replace obsolete equipment with ENER STAR	2007	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			Flourescents are the prevalent lighting source at our campuses	Replace burnt lights with energy efficient lighting	2007	No End Date (Continuous)
Behaviour change program							
Help staff reduce personal energy use through "workstation tune-ups"	Complete	100	% of current staff have completed a workstation tune-up	"Power down" program is a program to turn off electrical appliances and equipment		2009	2009
Encourage staff to use air dry setting on dishwashers	Complete			Completed		2009	2009
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Complete			"Power down" program		2009	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress			Energy Efficient Dishwashers purchased	Completed	2009	2009
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	In Development			Reviewing Purchasing requirements as part of Sustainability work	Continueing review	2009	No End Date (Continuous)
Printer/document settings							
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress			Printer study to be complete in 2010	Implementation of the studies recommendations	2009	2012
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	Complete	100	% of network printers have 'print and hold' settings applied	Completed		2007	No End Date (Continuous)
Electronic media in place of paper							
Use electronic document library for filing common documents	In Development			Is part of the Printer Review	Implementations of the printer report	2009	2012
Post materials online that were previously printed	Ongoing/In Progress			Use of Moodle	Continued use	2008	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Ongoing/In Progress			Completed January 15, 2010	Completed	2009	2010
Behaviour change program							
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress			Ongoing education	ongoing	2008	No End Date (Continuous)
Encourage re-use of scrap paper	Ongoing/In Progress			Ongoing education	ongoing	2008	No End Date (Continuous)

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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 12/31/09)	Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Business Travel						
Behaviour change program						
Train staff in video-conferencing or provide technical support for video-conferencing set-up	In Development		Discussion regarding technology and options has occurred. Complete evaluation in 2010 and move forward as budget allows.	Implementation planned	2010	2012
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress		use of web conferencing reducing business travel	Continued and expand use	2008	2012
Encourage carpooling to meetings	Complete		ongoing	ongoing	2008	No End Date (Continuous)
Education, Awareness, and Engagement						
Team-building						
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Complete		Sustainability Committee meets monthly.	Ongoing	2008	No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	Complete		Completed	Ongoing	2009	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Ongoing/In Progress		"Power Down" program	Ongoing	2009	No End Date (Continuous)
Staff Professional Development						
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress		ongoing	ongoing	2009	No End Date (Continuous)
Staff awareness/education						
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress		PD courses offered annually to staff surrounding this issue.	Ongoing	2008	No End Date (Continuous)
Provide green tips on staff website or in newsletters	Ongoing/In Progress		ongoing	Ongoing	2008	No End Date (Continuous)
Client/public awareness/education						
Provide education to clients/public about the conservation of water, energy, and raw materials	In Development		Selkirk College Environmental Study presentation to the public will occur in 2010	Presentation to public in 2010	2009	2010
Other Sustainability Actions						
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		Composter will help eliminate some waste that is currently going to landfill. As well developed a surplus disposal program.	Completion of composter	2009	2010
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.)	In Development		Will be part of the Capital Planning Committee mandate for 2010.	will review anytime any materials are purchased	2008	No End Date (Continuous)
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	In Development		Reviewing costs for green cleaning products versus current	will review anytime any materials are purchased	2008	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		Wood waste is offered to students and staff	Ongoing evaluation of surplus construction goods	2008	No End Date (Continuous)

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Incorporate lifecycle costing into new construction or renovations	Ongoing/In Progress	100	% of business cases incorporating lifecycle costing since start year indicated	is part of the Residence Renovation project	Ongoing whenever a new project is undertaken	2009	No End Date (Continuous)
Indoor air quality							
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	Ongoing/In Progress			Currently signage in gym and some bathrooms (promoting but not enforced).	Ongoing	2008	No End Date (Continuous)
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	Ongoing/In Progress			Low volatile organic compounds in paint is procured where suitable.	Ongoing	2008	No End Date (Continuous)
Commuting to and from home							
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress			Bike to work day / Carpool site / etc.	Ongoing	2008	No End Date (Continuous)
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Complete			Available in two campuses		2008	No End Date (Continuous)