



# 2009 CARBON NEUTRAL ACTION REPORT

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PLANS AND ACTIONS TAKEN TO REDUCE  
GREENHOUSE GAS EMISSIONS AT THE UNIVERSITY  
OF NORTHERN BRITISH COLUMBIA

## Executive Summary

In preparation for carbon neutrality in 2010, the University of Northern British Columbia (UNBC) has undertaken a variety of key actions with regard to reducing greenhouse gas emissions (GHG). In 2007, UNBC launched a sustainability initiative focused on its three primary functions: teaching, research and campus operations. Following this announcement a multi-stakeholder Green University Planning Committee was established to engage with the UNBC campus community and provide recommendations on strategies for reducing emissions and advancing campus sustainability. Operationally, UNBC is building upon its campus infrastructure to be a showpiece for bioenergy technology and using it as a platform for applied research and education that will directly benefit northern communities. In addition to its pledge to campus sustainability and extensive operational changes to reduce GHG emissions, UNBC has also initiated the process for hiring an Energy Manager to identify policies and strategies for reducing greenhouse gas (GHG) emissions and promote energy conservation among students, faculty and staff.

## Overviews

### Actions Taken to Reduce Greenhouse Gas Emissions in 2009

During 2009, UNBC participated in a diverse range of initiatives to reduce greenhouse gas emissions. These actions are described in more detail according to those that contribute to meeting the provincial carbon neutral mandate and those that will contribute the overall sustainability of our organization.

#### Actions Towards Carbon Neutrality

- Reduced fleet by one vehicle and commenced a feasibility study for replacing parking fleet with electric vehicles (CNAR Section A.1)
- Construction began on the Biomass Gasification Facility that will provide building heat using bioenergy in place of natural gas (CNAR Section A.2)
- UNBC completed an infrastructure upgrade to complete and enhance the efficiency of the existing utility corridor (CNAR Section A.2)
- Developed a policy for the disposal of refrigerants and management of fugitive emissions (CNAR Section A.2)
- Purchased SharePoint infrastructure and software (CNAR Section A.3)



## Actions To Reduce Provincial Emissions and Improve Sustainability

- Contracted an on-campus travel agency to streamline and track all University business travel (CNAR Section B.4)
- Appointed UNBC's first Green University Project Manager to coordinate all activities related to campus sustainability (CNAR Section B.5)
- Organized several community engagement and awareness events focused on various aspects of sustainability (CNAR Section B.5)
- Increased parking fees to discourage single occupancy commuting and provide a source of revenue for future sustainability initiatives (CNAR Section B.6)



## Operational Changes in 2009

In preparation for becoming carbon neutral in 2010, UNBC has commenced a series of operational changes to decrease the University's GHG emissions profile.

In early 2009, the University partnered with Western Economic Diversification and the Canadian Wood Pellet Association on a pilot project to investigate the use of wood pellets in a commercial heating application. The 1.4 million BTU pellet heating system was installed in the UNBC I.K. Barber Enhanced Forestry Lab and is expected to decrease CO<sub>2</sub> emissions by 118 tonnes per year. Researchers at UNBC will be conducting an energy balance on the pellet system to determine the energy value of pellets in a real application.

In the fall of 2009, UNBC began installation of a biomass gasification system that will provide heat to the core campus buildings. The facility is expected to displace an estimated 85% of current natural gas consumption and avoid 3,500 tonnes of CO<sub>2</sub> per year. The University's bioenergy program will help UNBC meet its current and future energy needs while reducing the campus greenhouse gas footprint and energy costs. The program will also provide unique opportunities for student and public education, innovative research, and the development of bioenergy projects for northern communities.

## Plans to Continue Reducing Greenhouse Gas Emissions 2010 – 2012

Over the next three years, UNBC will continue to make progress towards reducing greenhouse gas emissions by focusing on the following key areas: (a) target setting and key performance measurement, (b) operational enhancements and retrofits and (c) behavioural change education focused on energy conservation and greenhouse gas reduction.

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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
<b>Mobile Fuel Combustion (Fleet and other mobile equipment)</b>						
<b>Vehicle fuel efficiency</b>						
Replace vehicles with more fuel-efficient models	Ongoing/In Progress		Reduced the fleet by one vehicle this year.	2010-ongoing: Purchase only fuel efficient vehicles as new vehicles are required; formally adopt this as a UNBC policy.	2009	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress		As remaining vehicles expire we replace them with more fuel-efficient vehicles.	2010-ongoing: Continue to replace vehicles with more fuel-efficient vehicles as needed.	2009	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress		All vehicles are subject to a monthly performance maintenance program.	2010-ongoing: Continue to complete monthly performance maintenance on all vehicles; investigate more sustainable options for maintaining vehicles (e.g. toxic-free windshield wiper fluid).	2009	No End Date (Continuous)
Replace small maintenance vehicles with more fuel-efficient models	Ongoing/In Progress		Feasibility study to switch from a fossil fueled Ranger to an electric model.	2010-ongoing: Continue to assess the feasibility of replacing small vehicles with electric options.	2009	No End Date (Continuous)
<b>Behaviour change program</b>						
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	Ongoing/In Progress		Ordered Idle Free BC signage for all campus locations that are prone to idling behaviour (8 signs in total) and ordered anti-idling awareness materials (e.g. stickers and pamphlets) to provide to the UNBC campus community.	2010: Post all Idle Free BC signs, develop standard messaging to promote anti-idling amongst the UNBC campus community, organize events such as Anti-idling Awareness Day and work towards developing a formal UNBC Anti-Idling Policy.	2010	No End Date (Continuous)
<b>Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)</b>						
<b>Owned buildings</b>						
Establish energy performance baseline for owned buildings	In Development		Finalized the job description and responsibilities for an Energy Manager position.	2010: Hire an Energy Manager to establish energy performance baseline for owned buildings. 2010-ongoing: Perform annual assessment of building energy performance.	2010	No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Ongoing/In Progress		Implemented the mandatory requirement of all consultants and contractors to design and build all UNBC buildings to LEED gold standard.	2010-ongoing: Continue to enforce the mandatory requirement of all consultants and contractors to design and build all UNBC buildings to LEED gold standard.	2009	No End Date (Continuous)
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	In Development		Developed policy that requires all contractors handle and dispose of refrigerants in an environmentally sensitive manner.	2010-ongoing: Continue to enforce policy that requires all contractors handle and dispose of refrigerants in an environmentally sensitive manner.	2009	No End Date (Continuous)
Complete energy retrofits on existing, owned buildings	In Development		Completed an Energy Study to identify opportunities to complete energy retrofits on existing, owned buildings.	2010-ongoing: Determine the feasibility of energy retrofits, prioritize and complete as resources become available.	2009	No End Date (Continuous)
<b>Retrofitting owned buildings</b>						
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress		As part of the University's Bioenergy program, construction began on a new plant which will provide building heat using bioenergy in place of Natural gas.	2010: Complete the Bioenergy Plant and convert up to 85% of our natural gas usage to bioenergy. 2011-ongoing: Where financially feasible, implement energy saving projects across campus.	2009	No End Date (Continuous)

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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
Upgrade lighting systems during retrofits	Ongoing/In Progress			Began a detailed investigation into state-of-the-art lighting technologies for the campus. This was done through procurement of an Energy Study as well as through an in-house investigation.	2010-ongoing: Continue to develop and begin implementing lighting retrofit projects (including LED where viable) to reduce energy consumption.	2009	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress			Continued to operate a comprehensive control system that was installed in 1995.	2010-ongoing: Continue to upgrade and increase the efficiency of the current control system.	1995	No End Date (Continuous)
<b>IT power management</b>							
Implement server virtualization	Ongoing/In Progress	40	% of servers have been virtualized since start year indicated	40 servers were virtualized.	2010-2011: An additional 20 servers will be virtualized. Not all servers will be virtualized due to activities outlined in the UNBC risk management plan.	2008	2011
Apply auto-sleep settings on computer monitors and CPUs	In Development			Began to identify domain policies.	2010-2012: Identify the subset of systems that can be put into "sleep mode" and begin deployment.	2009	2012
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	70	% reduction in printers, copiers, and/or fax machines since start year indicated	Continued the campus wide replacement of stand-alone devices with multi-function devices.	2010-2012: Achieve an additional 15% reduction in single function machines.	2006	2012
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Complete	100	% of devices have auto-sleep settings applied	All equipment has been set to default on auto-sleep.		2003	2009
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	95	% of computers are ENERGY STAR rated	Capital Equipment Replacement cycle renews remaining computers with ENERGY STAR machines	2010-ongoing: Continue to replace computers with ENERGY STAR models during regular computer upgrades.	2009	No End Date (Continuous)
<b>Appliances and electronic devices</b>							
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress	55	% of fridges are ENERGY STAR rated	All RFP and Tender templates now specify that models must be ENERGY STAR rated.	2010-ongoing: Replace all reffridgerators with ENERGY STAR models during regular appliance upgrades.	2009	No End Date (Continuous)
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress			All RFP and Tender templates now specify that models must be ENERGY STAR rated.	2010-ongoing: Replace all reffridgerators with ENERGY STAR models during regular appliance upgrades.	2009	No End Date (Continuous)
Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases	In Development			Although UNBC does not purchase desk lamps, employees are encouraged to use only CFL bulbs in their personal desk lamps.	2010-ongoing: Ensure that all desk lamps are efficient models with CFL bulbs.	2009	No End Date (Continuous)
<b>Behaviour change program</b>							
Help staff reduce personal energy use through "workstation tune-ups"	In Development			Hired a Green University Coordinator to work on developing sustainability/green behaviour change programs.	A "Green Ambassador" program for staff and faculty is currently under development. The program will be aimed at promoting leadership across all UNBC departments and programs. Staff and faculty that participate in the program will be provided with training, resources, and designated work time for promoting sustainable behaviour within their department or program. The Green Ambassador program will focus on all aspects of sustainability including consumption and waste production, energy and water conservation, active transportation, food choices, etc.  Program development: February-August 2010 Program Launch: September 2010	2010	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	In Development				See Green Ambassador program	2010	No End Date (Continuous)

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Ask staff to close blinds at end of work day to reduce heating/cooling demands	In Development				See Green Ambassador program	2010	No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	In Development				See Green Ambassador program	2010	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	In Development				See Green Ambassador program	2010	No End Date (Continuous)
Encourage use of stairs instead of elevators	In Development				See Green Ambassador program	2010	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	In Development				See Green Ambassador program	2010	No End Date (Continuous)
Promote hot water conservation	In Development				See Green Ambassador program	2010	No End Date (Continuous)
<b>Other Stationary Fuel Combustion and Electricity Actions</b>							
<b>Supplies (Paper)</b>							
<b>Paper Type</b>							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	85	% of total paper purchased contains 30% recycled content	Negotiated through local public buying group to transition to Forest Stewardship Council (FSC) certified copy paper.	2010: Continue to negotiate for all bond paper to be purchased to FSC standards.	2009	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	In Development			Began to research the feasibility (technical, financial, etc.) of purchasing 100% post-consumer recycled paper.	2010-2012: Continue to investigate options for purchasing 100% post-consumer recycled paper and begin to work through some of the barriers associated with high post-consumer content paper (e.g. dust build up which disrupts photocopier and printer function).	2009	2012
<b>Printer/document settings</b>							
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	60	% of network printers or photocopiers are set to automatic double-sided	Encouraged the use of duplex printing.	2010: Develop a policy to set all UNBC networked printers and photocopiers to automatic double-sided.	2009	No End Date (Continuous)
<b>Electronic media in place of paper</b>							
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	40	% of staff workstations with software installed	Sharepoint infrastructure and software purchased; Collaborative software (i.e. Moodle, Blackboard, Groove, etc.) utilized in select departments at UNBC.	2010-2011: Deploy SharePoint software across all UNBC departments and programs.	2008	2011
Use electronic document library for filing common documents	In Development			Sharepoint infrastructure and software purchased	2010-ongoing: Deploy Sharepoint 2010 when released and begin transition across campus.	2009	No End Date (Continuous)
Post materials online that were previously printed	In Development			Sharepoint infrastructure and software purchased	2010-ongoing: Deploy Sharepoint 2010 when released and begin transition across campus.	2009	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Complete	100	% of staff on electronic payroll notification system	Any new employees hired in 2009 were set up on an electronic payroll notification system. System in place since 2004.	2010-ongoing: Maintain electronic payroll system.	2001	No End Date (Continuous)
<b>Behaviour change program</b>							

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Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	60	% of staff currently have received collaborative software training	Encourage the use of collaborative software tools and provide necessary training.	2010-ongoing: Continue to encourage the use of collaborative software tools and provide necessary training.	2004	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	In Development			The Information Technology Services Department begins to investigate the use of laptops, readers and tablets on a university wide level.	2010-2011: ITS will monitor the availability of new technology and determine the appropriate products/solutions.	2009	2011
Encourage re-use of scrap paper	Ongoing/In Progress			The UNBC Shipping and Receiving Department re-uses scrap paper by making small notepads out of scrap paper and distributing to university departments.	2010: Encourage the re-use of scrap paper on a campus wide level and advertise the notepads made by the Shipping and Receiving Department.	2010	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
<b>Business Travel</b>							
<b>Policy and budgeting</b>							
Create a low-carbon travel policy or travel reduction goal	In Development			Contracted an on-campus travel agency to streamline university business and research travel.	2010: Work with on-campus travel agency to develop a system for tracking all University business travel and associated emissions 2011: Develop a low carbon travel policy	2010	No End Date (Continuous)
<b>Virtual meeting technology</b>							
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Ongoing/In Progress	100	% of computers have web-conferencing software installed	All new computers were installed with web-conferencing software.	2010-ongoing: Continue to provide web-conferencing software for all new computers.	2004	No End Date (Continuous)
Make desktop web-cameras available to staff	Ongoing/In Progress	10	% of staff have access to a desktop web-camera	Evaluated Desktop Video Conferencing Software and continue adoption of collaboration software.	2010-2011: Make desktop web-cameras available to all staff.	2007	2011
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress	2	% of meeting rooms have access to video-conferencing equipment	Proposed expansion of video conferencing in meeting rooms.	2010-ongoing: Expand video conferencing to an additional 10% of UNBC meeting rooms.	2004	No End Date (Continuous)
<b>Behaviour change program</b>							
Train staff in web-conferencing	Ongoing/In Progress	30	% of staff are trained in web-conferencing	Continued adoption and training of web-conferencing software.	2010-ongoing: Continue the adoption and training of web-conferencing software.	2005	No End Date (Continuous)
Train staff in video-conferencing or provide technical support for video-conferencing set-up	Ongoing/In Progress	100	% of staff are trained in video-conferencing or have access to technical support	Technical support provided for video-conferencing setup.	2010-ongoing: Continue to provide support and encourage user training for self sufficiency.	2006	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	In Development			Began organizational discussions about strategies to encourage a change in behaviour to chose virtual attendance/presentation where possible.	2010-ongoing: Continue to evaluate the need for face-to-face as opposed to virtual conferences or meetings; identify effective incentives or strategies for encouraging virtual conferencing.	2009	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress			Encouraged carpooling when meetings are held off-campus	2010-ongoing: Continue to encourage carpooling to off-campus meetings 2010-2012: Develop a ride-sharing tool to create the incentive for UNBC staff, faculty and students to carpool to meetings.	1995	No End Date (Continuous)
<b>Education, Awareness, and Engagement</b>							
<b>Team-building</b>							
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	In Development			The UNBC Green University Planning Committee, comprised of senior administrative staff, suggest that sustainability working groups be formed.	2010: Form working groups in the areas of "Green Teaching", "Green Research" and "Green Operations" to faciliate more action-oriented projects.	2010	2010

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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
Provide resources and/or dedicated staff to support teams	In Development		Hired a Green University Coordinator to work on providing resources to staff and support with green initiatives in all departments.	2010: Expand UNBC Green Office Staff to include Student Green Interns. 2010-2011: Create a Green University Centre to serve as a hub for sustainability and climate action related activities and resources. 2011-ongoing: Continue to increase resources and support for enhancing the sustainability of UNBC.	2010	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	In Development		Some staff participated in community-based social marketing training sessions.	2010: Hold events focused on behaviour change education including, Green Day 2010 and Bottled Water Free Day 2010; UNBC Green Coordinator will give class guest lectures focused on fostering sustainable behaviour at UNBC. 2010-ongoing: Seek opportunities to provide formal staff training on behaviour change (e.g. community-based social marketing).	2010	No End Date (Continuous)
<b>Awards/Recognition</b>						
Establish a sustainability/green awards or recognition program	In Development		Hired a Green University Coordinator to work on developing green awards/recognition program.	2010-2012: In coordination with the Green Ambassador program a Green Leadership Recognition Program will be developed; Green Leaders will be recognized during the Annual UNBC Employee Recognition Banquet. An undergraduate student sustainability leadership award will be established. This award will be given to a student who has demonstrated leadership on campus sustainability and living a low carbon lifestyle.	2010	2012
<b>Staff Professional Development</b>						
Support green professional development (e.g., workshops, conferences, training)	In Development		Staff supported in green professional development (e.g. staff trained and certified as an Energy Manager, staff completed Greenhouse Gas Inventory ISO courses, staff attended national seminar on Greenhouse Gas Emissions, staff attended CAUBO Leadership in Sustainability Workshop, staff attended AASHE Annual Campus Sustainability Conference). Purchasing Department has allocated a budget for supporting green training and conferences.	2010: Will work with Continuing Education and other departments to offer increased support and opportunities for offering green professional development at UNBC. Will support staff in attending various 'green' workshops, conferences and training.	2010	No End Date (Continuous)
<b>Staff awareness/education</b>						
Provide education to staff about the science of climate change	In Development		UNBC Second Annual Green Day (January 20, 2009). UNBC's Green Day is an annual event that is focused on promoting education and awareness about sustainable behaviour by sharing information on the various aspects of sustainable living (i.e. food, energy, transportation, waste reduction/recycling, water conservation, etc.). The event is held during the winter semester and brings together UNBC staff, faculty, students and the broader community of Prince George.	UNBC Third Annual Green Day (January 15, 2010)	2008	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	In Development		UNBC Second Annual Green Day (January 20, 2009)	UNBC Third Annual Green Day (January 15, 2010) Bottled Water Free Day (March 11, 2010) 2010: Green Ambassador Program will provide education to staff about the conservation of water, energy and raw materials.	2008	No End Date (Continuous)

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Provide green tips on staff website or in newsletters	In Development		Green facts included on UNBC Green Website.	2010: A monthly "green" newsletter will be developed for the UNBC campus community. The first issue will be sent out in the Summer 2010. Updates will be made to the current UNBC Green Website and will continue on a weekly basis.	2010	2010
Provide sustainability education during new staff orientation	In Development		Hired a Green University Coordinator to work on incorporating sustainability education into new staff orientation.	2010: Incorporate sustainability into the new staff orientation program.	2010	2010
<b>Client/public awareness/education</b>						
Provide education to clients/public about the science of climate change	Ongoing/In Progress		UNBC Second Annual Green Day (January 20, 2009)	UNBC Third Annual Green Day (January 15, 2010)	2010	No End Date (Continuous)
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress		UNBC Second Annual Green Day (January 20, 2009)	UNBC Third Annual Green Day (January 15, 2010) Bottled Water Free Day (March 11, 2010)	2010	No End Date (Continuous)
Provide green tips on client/public website or in newsletters	In Development		UNBC Green Website provides information on green facts to the public.	2010: Develop a monthly "green" newsletter for the UNBC campus community; this newsletter and other green news/events will be posted on the UNBC Green Public Website	2010	2010
<b>Other Sustainability Actions</b>						
<b>Water conservation</b>						
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	In Development		Continued to build on the use of indigenous grass species and lowmow/grow living walls to reduce the need for maintenance and water use.	2010-2012: Formally adopt a potable waster management strategy.	2009	No End Date (Continuous)
Introduce a stormwater management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales)	In Development		Continued use of stormwater retention pond for the collection of stormwater; Sustainable Landscape Research.	2010-2011: Investigate further opportunities for sustainably managing stormwater (e.g. green roofs, rain gardens, etc.)	1995	No End Date (Continuous)
<b>Waste reduction/diversion</b>						
Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities	Ongoing/In Progress		Joined a Canada wide campaign focused on phasing out bottled water on university and college campuses. Purchased/installed 10 new recycling stations across the campus. Provided financial assistance to the volunteer compost program to build a bear-proof fence around the compost site to ensure the continuation of the program. Contrated a recycling service for all types of paper.	2010: Events to promote education and awareness focused on waste reduction and encouraging sustainable consumption and behaviour (e.g. Bottled Water Free Day, Student Residence Spring Cleaning); hire a Waste Reduction Coordinator; expand recycling services to Student Residence. 2011: Install appropriate number of water fountains and eliminate the sale of bottled water on campus. 2010-2012: Ensure that all food service areas have sufficient reuseable dishes and a washing station; implement a program to decrease the use of disposable hot beverage cups.	2010	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	In Development			2010-2012: Implement a formal hazardous waste reduction and disposal strategy.	1995	No End Date (Continuous)
<b>Procurement (non-paper supplies)</b>						
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		Continued to operate informal green standards for purchasing furniture and carpeting.	2010-2012: Establish written green standards to be made available to the UNBC campus community.	2009	No End Date (Continuous)
<b>Building construction, renovation, and leasing</b>						

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Establish a policy to reuse materials where possible and divert construction and demolition debris from landfills and incineration facilities	Ongoing/In Progress		All construction and demolition debris reused or recycled when possible.	2010-2012: Continue procedures for reusing and recycling construction and demolition debris; develop a formal written policy outlining the current best practices.	1995	2012
<b>Indoor air quality</b>						
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	Ongoing/In Progress		A scent-free policy is enforced on a Departmental basis.	2010-ongoing: Continue to enforce a scent-free policy on a Departmental basis	2009	No End Date (Continuous)
<b>Commuting to and from home</b>						
Offer staff a compressed work week	Ongoing/In Progress		Staff are considered for a compressed work week on an individual and departmental basis.	2010-ongoing: Continue to offer staff a compressed work week.	2009	No End Date (Continuous)
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress		Began working with the UNBC Northern Tranist Improvement Committee on developing strategies to commute by foot, bicycle, carpool or public transit.	2010: Assess the feasibility of providing a Staff/Faculty U-pass; investigate strategies for building on the current UNBC Carpool Policy and increasing participation in the program; participate in Bike to Work Week and provide incentives to staff/faculty who participate.	2006	No End Date (Continuous)
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	In Development		Investigated options for providing shower facilities for staff/students who commute by foot or bicycle.	2010: Install shower facilities and make Northern Sports Centre shower facilities available to foot and bicycle commuters free of charge.	2009	No End Date (Continuous)
Provide secure bicycle storage	In Development		Investigated options for sourcing and siting bike lockers for staff/students who commute by bicycle.	2010: Purchase and install bike lockers; monitor useage.	2009	No End Date (Continuous)
Modify parking fees or parking availability for staff/students	Complete		Increased parking fees to discourage single occupancy commuting and to provide funding for campus green initiatives.		2009	2009