

# Ministry of Education

## 2009 Carbon Neutral Action Report

### Executive Summary

The Ministry of Education's actions serve as a model for Boards of Education as they work towards carbon neutrality. By encouraging sustainable education, supporting school and district sustainability initiatives, and assisting the Boards of Education to reduce their emissions, we can have influence far beyond our ministry.

In 2009, the Ministry made significant moves to reduce our largest sources of emissions – buildings and travel. By installing energy efficient computers with web-conferencing software, electricity was not only reduced but it also provided travel alternatives. The Ministry also focussed on sustainability efforts such as waste reduction and staff education and awareness through Green Team activities.



### Overview

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

Through 2009, there were a number of large changes made in the Ministry to reduce greenhouse gas emissions. All computers were replaced with energy efficient models, which have reduced electricity use – including a switch from CRT monitors to LCD versions for almost 90% of staff. With these new computers came new software to reduce travel and increase collaboration.

In addition, we made a commitment at the beginning of the year to purchase 100% recycled copy paper. This has substantially reduced our emissions from paper. Other actions have included staff awareness and education programs such as Target: Green Streets and Bike to Work Week to reduce emissions from commuting. While this does not directly reduce our Ministry's emissions, it does support the overall Provincial target of a 33% reduction in emissions by 2020.

#### Operational Changes in 2009

The only operational change in 2009 that may impact the Ministry's emissions profile is the separation of the Facilities department in June 2009. In the past, this group has provided support for Advanced Education and Education. As this group purchased paper for both ministries under the one line item before, the supplies data changed in SMARTTool as of June.

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

Through 2010 and beyond, the Ministry plans to increase the amount of virtual meetings using Live Meeting and reduce paper use through Collaboration tools such as Groove. Both of these emission reduction strategies will also generate a financial savings for the Ministry.

As budget allows, we will be investigating emissions reduction opportunities in our buildings such as lighting retrofits. We will also continue our existing sustainable practices such as our 100% recycled paper purchasing. In 2010, the Ministry's PaperCuts initiative will be implemented with the objective to reduce form printing and distribution, changing to online options or deleting forms. The ultimate goal is to eliminate paper forms by 2012.

In addition, the Green Team has planned a year of activities in line with other Green Teams across government to implement a coordinated approach to behavioural change. By running targeted activities with a goal to reduce greenhouse gas emissions and provide measurable results, the Green Team will be a major player in reducing the Ministry's greenhouse gas emissions in 2010. These activities include a focus on paper and energy reduction as well as personal commuting.

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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>							
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	100	% of vehicles are subject to regular maintenance for fuel efficiency	As part of vehicle lease	As part of vehicle lease	2008	No End Date (Continuous)
<b>Behaviour change program</b>							
Provide fleet driver training to reduce fuel use	Complete	100	% of current drivers are trained	Our one fleet driver (the Deputy Minister) has completed the online driver training		2009	2009
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	Complete	100	% of current drivers are trained	As part of green driver training		2009	2009
<b>Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)</b>							
<b>Planning/management</b>							
Enrol in a building energy benchmarking program (e.g., GREEN UP)	Ongoing/In Progress			Shared Services BC partnered with the Canada Green Building Council to contribute to an energy benchmarking database for the Green Up initiative. Utility data from eight buildings were included in the initiative.	By December 2010 SSBC will be working with WSI to develop a per building cost associated with enlisting in CaGBC's Green Up program and an implementation strategy that aligns with the new funding model as appropriate (i.e. SSBC voted appropriation, cost recoverable or a blend)	2009	No End Date (Continuous)
Reduce office space (square meters) per employee	Ongoing/In Progress			Shared Services BC launched a portfolio-wide building and space rationalization initiative in 2009 to reconcile workspace allocations with government office space standards, and to consolidate customer workspaces where appropriate and available.	Space rationalization will continue through 2010 to strategically leverage opportunities to divest leases when renewal is considered and when appropriate.	2009	2012
<b>Owned buildings</b>							
Establish energy performance baseline for owned buildings	Ongoing/In Progress			Building level energy performance target setting was identified as one of six key priorities under an Energy Management and Conservation Strategy for core government buildings. The Strategy was completed in the spring of 2009. Shared Services BC, in partnership with government's outsource service provider for property management (BLIC-WSI) launched a building level energy performance target setting initiative in December of 2009. The results of this initiative will enable WSI operations and management teams to better monitor energy performance relative to a realistic baseline Building Energy Performance Index (BEPI) goal. The established goal BEPI is based on a combination of empirical knowledge of building-specific systems and energy accounting data. Issues related to tenant behaviour that may have a significant impact on the goal BEPI is being flagged for follow-up with appropriate client services and green team representatives.	A summary of operational efficiency opportunities and target building energy performance index will be finalized by end of Q2 2010. An implementation strategy will be follow, to be implemented Q3 and Q4 of 2010.	2009	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
Register for performance labelling/certification for operations and maintenance of owned buildings (e.g., LEED EB:O&M)	Ongoing/In Progress		During the first quarter of 2009, SSBC participated in the LEED Canada 2009 initiative. Eight buildings were selected to participate in a benchmarking exercise. A workshop was also conducted by the Canada Green Building Council, during which participants from BLJC-WSI and SSBC completed a LEED certification gap analysis on selected buildings. In addition, two private sector landlords of buildings where government employees are accommodated have recognized the Province's interest in third party verification of government space. The eight buildings involved in the pilot included 3350 Douglas in Victoria, a building occupied by Citizens' Services staff.	A draft LEED EB-OM attainment strategy has been developed for further review during fiscal 2010/11.	2009	2011
Register for performance labelling/certification for commercial interiors of owned buildings (e.g., LEED CI)	Ongoing/In Progress		Two LEED CI certifications are being pursued at Robson Square in Vancouver. One is for showcase and hosting and one for the Asia Pacific Business Centre.	Other opportunities will be explored as they arise.	2008	2010
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Ongoing/In Progress		Several owned buildings were considered for LEED certification during the 2009 calendar year, including the Squamish-Lil-Wat Cultural Centre, the CL3 Laboratory at the Abbotsford Agricultural Centre, the Burnaby Youth Justice Services Centre, the Revelstoke Ambulance Station, and the Capital and infrastructure projects at several Correction Centres.	Any new facilities or major renovations will be constructed to achieve LEED Gold certification.	2008	2010
Incorporate integrated design process into new construction or during renovations of owned buildings	In Development		The inclusion of the Integrated Design Process in procurement documents was piloted during the 2009 calendar on an adhoc basis by Shared Services BC. Process expectations were reviewed and a plan to better incorporate IDP expectations is being considered for future procurement activities.	The integrated design process will be further incorporated into procurement of new building developments as they arise.	2008	2010
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	Complete		The management of refrigerant systems and associated emissions is an essential service provided by Shared Services BC's outsource service provider for property management - WSI in accordance with laws and regulations. As required, precautions are taken to mitigate emissions, and emissions are reported per regulatory requirements.		2005	No End Date (Continuous)
Complete energy retrofits on existing, owned buildings	Ongoing/In Progress		SSBC successfully applied for retrofit funding through the Public Sector Energy Conservation Agreement to advance energy efficiency projects at several buildings, including the Prince George Courthouse (107k kWhs saved), Prince George Youth Custody Centre (800 GJ's saved), Robson Square Complex (7,460 GJs saved), BC Centre for Disease Control (2,060 GJs saved), Colony Farms Forensic Hospital (3,000 GJs saved), Abbotsford Agriculture Centre (1,600 GJs saved), and St. Ann's Academy (728 GJs saved). It is expected a significant amount of associated greenhouse gas emissions will be diverted as a result of these retrofits.	A list of potential projects has been scoped out for submission into the third PSECA funding intake. Approvals for projects are expected during Q3 2010. Projects (in some cases adding to previous retrofit measures in previous years) are proposed at Abbotsford Agricultural Centre, BC Centre for Disease Control, FPI Colony Farms, Port Coquitlam Courthouse, Robson Square, Vancouver Courts, and Queen's Printer.	2008	2010
<b>Leased buildings</b>						

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Establish energy performance baseline for leased buildings	Ongoing/In Progress			The same building level energy performance target setting exercise that is being applied to owned buildings is also being rolled out to leased facilities. The results of this initiative will enable WSI operations and management teams to better monitor and manage energy performance where they have influence, relative to a realistic baseline Building Energy Performance Index (BEPI) goal. The established goal BEPI is based on a combination of empirical knowledge of building-specific systems, lease terms, and energy accounting data where known. Issues related to tenant behaviour that may have a significant impact on the goal BEPI is also being flagged for follow-up with appropriate client services and green team representatives.	A summary of operational efficiency opportunities and target building energy performance index will be finalized by end of Q2 2010. An implementation strategy will be follow, to be implemented Q3 and Q4 of 2010.	2009	2010
Lease space with operations and maintenance performance labelling/certification (e.g., LEED EB:O&M)	Ongoing/In Progress			The known leased spaces where a green building or energy performance label has been sought (lead by landowners) include: 818 Fort Street (BOMA BEST Level 2), 1007 Fort Street (BOMA BEST Level 2), 1405 Douglas (BOMA BEST Level 2), 1802 Douglas (BOMA BEST Level 2), 3350 Douglas (BOMA BEST Level 3), 395 Waterfront (Gatehouse BOMA BEST Level 3), and 800 Johnson (LEED Gold). The following buildings have successfully passed their audits and are awaiting official confirmation of certification by BOMA; the Belmont Building (BOMA BEST Level 2), the Robert Kerr Building (BOMA BEST Level 2) and 3960 Quadra (BOMA BEST Level 3).	Other opportunities will be explored as they arise.	2008	2010
Lease space with commercial interiors performance labelling/certification (e.g., LEED CI)	Ongoing/In Progress			LEED CI certification was registered for one building within SSBC's portfolio (i.e., 976 Meares Street in Victoria).	Other opportunities will be explored as they arise.	2008	2010
Lease space in buildings with new construction performance labelling/certification (e.g., LEED NC)	Ongoing/In Progress			LEED certification was pursued in one new and leased building development projects, in Kamloops, occupied by the Ministry of Transportation.	Any new facilities or major renovations will be constructed to achieve LEED Gold certification.	2008	2010
Develop a green lease policy that requires green features to conserve energy be included in all lease negotiations	Complete			A significant amount of government's building portfolio is leased space. SSBC has focused a considerable amount of research and analysis on green lease schedules that are intended to improve performance regarding conservation of energy and water, waste reduction and recycling, and support of green team activities. Schedules that have been drafted and available for use on new leases and lease renewals.		2008	No End Date (Continuous)
<b>IT power management</b>							
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress	99	% of computers shut down automatically outside of regular business hours	In 2008, software was applied to all Ministry computers which powers them down outside of regular business hours (unless they cannot be powered down due to critical business needs). The same software was applied to any new workstations acquired in 2009.	Ensure any new workstations acquired between 2010 – 2010 have power management software installed.	2008	No End Date (Continuous)
Implement server virtualization	Ongoing/In Progress			Shared Services BC committed to virtualizing 65% of core government servers over 5 years between 2009 and 2014. As part of this initiative, a number of Ministry servers were virtualized in 2009.	As a best practice, server virtualization will be considered before any additional servers are added core government's data warehouse.	2009	2012

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Apply auto-sleep settings on computer monitors and CPUs	Complete			As part of the U2.0 upgrade, workstations had their setting applied so that after 5 minutes of inactivity, all workstation CPU go into sleep mode and each monitor displays a screen saver. After another 5 minutes the monitor goes into sleep mode as well.		2008	2009
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	20	% reduction in printers, copiers and/or fax machines since start year indicated	Stand alone printers and fax machines have been removed as moves have occurred over 2009.	Stand alone printers and fax machines are being reviewed, Ministry policy is to install MFDs in any new work sites	2006	No End Date (Continuous)
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Ongoing/In Progress	90	% of devices have auto-sleep settings applied	All new MFDs are energy star and have automatic sleep modes	All new devices to have auto-sleep settings applied	2006	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	99	% of computers are ENERGY STAR rated	All Ministry workstations computers and monitors were replaced with ENERGY STAR models as part of the Government-wide U2.0 upgrade.	A few workstations that require specialized applications were not replaced during the upgrade. These will be replaced as new versions of the applications (compatible with the newer operating system) become available.	2008	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	10	% of fridges are ENERGY STAR rated	1 new energy star refrigerator in 2009	As refrigerators are replaced, Energy Star appliances will be purchased	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			Staff are encouraged to use CFL bulbs	Staff are encouraged to use CFL bulbs	2007	No End Date (Continuous)
<b>Behaviour change program</b>							
Help staff reduce personal energy use through "workstation tune-ups"	Ongoing/In Progress			WSTU has been distributed to all 285 staff members through green tips	Larger workstation tune-up program to be deployed in 2010	2009	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress			Encouraged through green tips	Larger workstation tune-up program to be deployed in 2010	2009	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress			Encouraged through green tips	Larger workstation tune-up program to be deployed in 2010	2009	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	Complete			Monthly green tips distributed on how to reduce energy		2009	2009
Encourage use of stairs instead of elevators	In Development				Stair challenge to be run as part of exercise challenge starting in March 2010	2010	2010
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress			Signs and stickers posted (and maintained) in major boardrooms	Ongoing maintenance and changing of posters to catch people's attention	2007	No End Date (Continuous)
<b>Supplies (Paper)</b>							
<b>Paper Type</b>							
Purchase 30% post-consumer recycled paper	Complete	2	% of total paper purchased contains 30% recycled content	Reduced overall office paper usage by 12.4% in 2009 vs. 2008 and usage of virgin paper (0% recycled content) by 26.8% while increasing the usage of 30% recycled content paper by 3.1%	Working to change these purchases to 100% recycled	2007	2009

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Purchase 100% post-consumer recycled paper	Ongoing/In Progress	90	% of total paper purchased contains 100% recycled content	Increased the usage of 100% recycled content office paper by almost 200% while reducing overall office paper usage by 12.4% in 2009 vs. 2008.	Will work to change virgin paper purchases to at least 30% if not 100% recycled. Continue purchase of 100% recycled letter size paper at main building, possible change to 100% recycled legal paper	2009	No End Date (Continuous)
<b>Printer/document settings</b>							
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	100	% of network printers or photocopiers are set to automatic double-sided	Where possible, all printers are set to double-side	All new printers/MFDs will be set to automatically double side	2006	No End Date (Continuous)
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	In Development				Will be part of paper reduction campaign in 2010	2010	No End Date (Continuous)
Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.)	Ongoing/In Progress			Contacted Ministerial Correspondence Unit regarding margin change	Following up to ensure change takes place	2009	2010
<b>Electronic media in place of paper</b>							
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Complete	100	% of staff workstations with software installed	SharePoint is widely used throughout the Ministry, Groove is available on every workstation		2008	2009
Use electronic document library for filing common documents	Ongoing/In Progress			All divisions have shared drives and the majority of major ministry projects have SharePoint sites	Ongoing promotion of changing to electronic filing	2007	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress			Streamlining Initiative - tracking reductions or elimination of reporting requirements on school districts. One third of all reporting requirements have been either streamlined or eliminated so far.	Implementation of PaperCuts campaign in 2010 to reduce form printing and distribution, changing to online options or deleting forms. Goal of eliminating paper forms by 2012	2008	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Complete	100	% of excluded employees only able to access their pay advice online	Change occurred across government on January 1, 2009		2009	2009
<b>Behaviour change program</b>							
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	10	% of staff currently have received collaborative software training	Development of training videos and other tools occurred in 2009	Training on SharePoint and Groove scheduled for first quarter, 2010	2009	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress			Staff encouraged through green tips and suggestions from Green Team members	Ongoing monitoring and promotion	2007	No End Date (Continuous)
Encourage re-use of scrap paper	In Development				Developing OSU booklets for paper reduction challenge	2010	No End Date (Continuous)
<b>Business Travel</b>							
<b>Policy and budgeting</b>							
Create a low-carbon travel policy or travel reduction goal	In Development			Travel substantially reduced in 2009 due to budget restrictions	Monitoring travel through 2010, will implement travel reduction goal if travel returns to normal levels	2009	No End Date (Continuous)
<b>Virtual meeting technology</b>							
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Complete	100	% of computers have web-conferencing software installed	Live Meeting installed on all workstations, Elluminate used across the Ministry		2006	2009

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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
Make desktop web-cameras available to staff	In Development				Webcams planned for purchase in 2010	2010	No End Date (Continuous)
<b>Behaviour change program</b>							
Train staff in web-conferencing	Ongoing/In Progress	20	% of staff trained are in web-conferencing	Trained small groups of staff in 2009, developed videos on how to use Live Meeting	Training larger groups in 2010	2006	No End Date (Continuous)
Train staff in video-conferencing or provide technical support for video-conferencing set-up	In Development				Evaluating existing video conferencing facilities, older equipment and may not work with new video conferencing equipment	2004	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress			Numerous meetings have been held using Elluminate in 2009	Ongoing promotion of Elluminate and Live Meeting as presentation/meeting alternative	2006	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress			Promotion through green tips	Continued promotion through green tips	2007	No End Date (Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress			Promotion through green tips	Continued promotion through green tips, monitoring of taxi use may occur at future date	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
<b>Education, Awareness, and Engagement</b>							
<b>Team-building</b>							
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Ongoing/In Progress			Continued meeting of the Ministry Green Team with additional members joining. Green teams won an award at the annual Green Team summit for Collaboration on our refresh waste diversion project.	Expansion of team to include members from all branches	2006	No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	Ongoing/In Progress			Continued support of dedicated Sustainability Project Officer	Continued support of dedicated Sustainability Project Officer	2007	No End Date (Continuous)
<b>Awards/Recognition</b>							
Establish a sustainability/green awards or recognition program	In Development				Planned for 2010	2010	No End Date (Continuous)
<b>Staff awareness/education</b>							
Provide education to staff about the science of climate change	Ongoing/In Progress			Lunch and learns held; speakers included BC Hydro, reFUSE. Cross-government information sessions made available to staff. Green tips distributed.	Continuation of lunch and learns including PCT planned for March. Also linking with cross government options	2007	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress			Lunch and learns held, speakers included BC Hydro, reFUSE. Green tips distributed	Continuation of lunch and learns including PCT planned for March. Also linking with cross government options	2007	No End Date (Continuous)
Provide green tips on staff website or in newsletters	Ongoing/In Progress	100	% of months with green tips distributed	Tips distributed to all staff, topics included Easy Green Guides, scanning, SMARTTEC, and Earth Hour	Continuation of green tips	2007	No End Date (Continuous)
Provide sustainability education during new staff orientation	Ongoing/In Progress			Green Team is present at new staff orientation	Aim to secure spot in orientation week for 2010	2008	No End Date (Continuous)
<b>Client/public awareness/education</b>							
Provide education to clients/public about the science of climate change	Ongoing/In Progress			Climate change lesson plans & activities developed for teachers and posted on Wild BC website: <a href="http://wildbc.org/index.php/programs/climate-change-education/">http://wildbc.org/index.php/programs/climate-change-education/</a>	French translations	2008	No End Date (Continuous)
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress			Information included in Sustainable Schools Best Practices Guide	Include in Green Schools Newsletters	2008	No End Date (Continuous)
Provide green tips on client/public website or in newsletters	Ongoing/In Progress			Green Schools Newsletter, Green Schools website ( <a href="http://www.bced.gov.bc.ca/greenschools/">http://www.bced.gov.bc.ca/greenschools/</a> )	Continuation of newsletter and website	2009	No End Date (Continuous)
<b>Other Education, Awareness, and Engagement Actions</b>							
Provide sustainability best practices to clients	Ongoing/In Progress			Sustainable Schools Best Practices Guide ( <a href="http://www.bced.gov.bc.ca/greenschools/pdfs/sustbestpractices.pdf">http://www.bced.gov.bc.ca/greenschools/pdfs/sustbestpractices.pdf</a> )	French translation and promote to all schools	2009	No End Date (Continuous)
Development of sustainability education framework	Ongoing/In Progress			Sustainability Course Content: A Curriculum Framework	Work with schools and districts to implement into local courses	2009	No End Date (Continuous)

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<b>Other Sustainability Actions</b>						
<b>Water conservation</b>						
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Ongoing/In Progress		Low flow toilets and taps were installed in the washrooms of our main building in 2008, ongoing maintenance of these occurred in 2009 Shared Services BC's Technical Standards require water efficient fixtures when new developments and major tenant improvements are undertaken in owned government facilities.	Ongoing maintenance through 2010. Investigation of low flow taps for kitchen sinks if budget allows	2008	No End Date (Continuous)
Put in place a potable water management strategy to reduce potable water demand of building-level uses such as cooling tower equipment, toilet fixtures, etc. and landscape features	Complete		Potable water management by Shared Services BC is done on a case by case basis to meet both customer programming needs and required codes and standards.		2008	No End Date (Continuous)
Introduce a storm water management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales)	Complete		Storm water management is considered on a case by case basis when determining the building site and systems design from a whole buildings perspective. Shared Services BC's Technical Standards require the consideration of indigenous plants and other water reduction strategies where appropriate.		2008	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		4 stream waste disposal installed in our main building in 2008 (organics, soft plastic, glass/tin/plastic, garbage). Ongoing maintenance of signs and staff awareness building in 2009. Addition of refundables bin in 2009. Green teams won an award at the annual Green Team summit for Collaboration on our computer refresh waste diversion project. An estimate of our recycled materials: innumerable cardboard boxes; 30+ garbage bags of soft plastic; 300 hard plastic forms (monitors); 15+ garbage bags of Styrofoam; stacks of CDs.	Ongoing staff education and monitoring of waste contamination	2008	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Complete		Hazardous waste reduction and disposal is managed by Shared Services BC in accordance with strict laws and regulations.		2009	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.)	Ongoing/In Progress		All carpet replacements are made with Interface carpet tile. Ongoing reuse of office furniture or purchase of used materials through AIR	SSBC is currently investigating an enhanced green strategy for space tenant improvements under its Climate Action Program.	2006	No End Date (Continuous)
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Ongoing/In Progress		In 2009, Shared Services BC's outsource service contractor for property management - WSI, issued a new janitorial contract that specified the usage of Green Seal and/or Ecologo products. Performance is audited by WSI.	SSBC is currently investigating an enhanced green strategy for space tenant improvements under its Climate Action Program.	2004	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	Complete			Under it's Master Services Agreement with WSI, Shared Services BC requires that 80% of waste be diverted from landfills on projects over \$80k in the Lower Mainland and Southern Vancouver Island where diversion facilities are available.		2005	No End Date (Continuous)
Incorporate lifecycle costing into new construction or renovations	Complete			Shared Services BC's Technical Standards are based on lifecycle costing. All major projects where the Technical Standards are applied (e.g. Major tenant improvements and new construction) have been considered under a lifecycle costing model.		2008	No End Date (Continuous)
<b>Indoor air quality</b>							
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	Ongoing/In Progress	100	% of floors with scent-free policy signage	Scent-free signage was implemented in 2009	Continuation of scent-free policy	2009	No End Date (Continuous)
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	Complete			Shared Services BC's Technical Standards include consideration for reducing volatile organic compounds. Also, VOCs have been considered for all projects where LEED certification has been pursued (see section A2).		2008	No End Date (Continuous)
<b>Commuting to and from home</b>							
Introduce telework/work from home policy	In Development			Shared Services BC conducted a study on the potential for and implications of a significant and mandated teleworking strategy. While more research is needed, while environmental impacts associated with transportation to and from work were assumed to be reduced, the potential net reduction in carbon emissions was inconclusive, as was the impact on the quality of program delivery to the public by various ministry customers.	Further investigation will be conducted once the standardized shared services model has been further defined and implemented, which is expected to be complete by Q4 2010.	2009	2011
Offer staff a compressed work week	Ongoing/In Progress			Majority of staff are on a compressed work week. As new staff arrive, most are offered a compressed work week schedule	Ongoing compressed work week policy	2005	No End Date (Continuous)
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress			Placed 3rd in Target: Green Streets program in 2009, ongoing high participation in Bike to Work Week	Continued promotion, participation again in Target: Green Streets and Bike to Work Week	2009	No End Date (Continuous)
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress			Shower facilities are available in nearby buildings, shower facilities at 514 Superior now available to staff	Review of possible installation of shower facilities at 620 Superior pending budget	2008	No End Date (Continuous)
Provide secure bicycle storage	Ongoing/In Progress			Secure bike lockers available to staff on rotational basis	Ongoing availability of bike lockers	2006	No End Date (Continuous)
<b>Other Sustainability Actions</b>							
Battery recycling	Ongoing/In Progress	2	Boxes of batteries sent for recycling	Implemented battery recycling in 2 building through AIR	Expanding recycling program to another building	2009	No End Date (Continuous)