

# Ministry of Environment

## 2009 Carbon Neutral Action Report

The Ministry of Environment is proud to champion energy conservation and is working to incorporate sustainable behaviours in all areas of business.

Our carbon profile pointed to business travel as a significant opportunity for emission reductions and we are trying to utilize collaboration software and other tools to curb these emissions. Tools like Live Meeting allowed us to keep our level of service high while achieving low travel emissions.

During 2009, we underwent an important organizational change when the Climate Action Secretariat joined the Ministry. The adaptation, policy and technical expertise of the Ministry's Climate Change Branch merged with the Secretariat, streamlining mitigation and adaption strategies in the climate action file. The result has been a single coordinated effort in reducing the impacts of climate change. The work accomplished by the Secretariat has been important in demonstrating the Ministry of Environment's leadership in climate action.

Ministry Green Team members are climate change leaders and champions of positive change. Their dedication and commitment to educating staff on the benefits of individual action has helped keep the climate agenda front and centre in our lives. This grassroots network of individuals is integral to the successful adoption of sustainable behaviour changes by the rest of us. Many initiatives, such as the Sustainable Procurement Policy and the adoption of collaboration software and associated tools, are driven and supported by Green Teams. By working with Green Teams across government, they contribute to and learn from wider behavioural changes.

In 2010, the efforts of the Ministry of Environment and the Environmental Assessment Office to reduce emissions will emphasise increasing infrastructure efficiency, including investments in energy efficient buildings, new technology and fuel-efficient vehicles. These improvements will support our efforts to transform our behaviour and business approaches.

We are adopting policies and Acts that inform the way we work and lay a foundation for innovation and strong actions going forward. By demonstrating climate action leadership as individuals and within the Ministry, we send a strong message and empower others. Climate change is a global issue that requires all of us to look at how we live, travel and work; every action taken has the power to enable and inspire changes today and in the future.



A handwritten signature in black ink, appearing to read 'D. Konkin'.

Doug Konkin  
Deputy Minister, Ministry of Environment



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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 larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress	50	% of vehicles down-sized since start year indicated	Research in process with manufacturers to determine viability of incorporating new hybrid vehicle types into the MOE Fleet	Looking into options of purchasing hybrid pick up trucks now that they are on the market for future vehicle purchases where is it feasible to do so and where it meets the business requirements	2009	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress			Reviewing maintenance schedules and tracking when complete	Reviewing maintenance schedules and tracking when complete	2009	No End Date (Continuous)
<b>Behaviour change program</b>							
Provide fleet driver training to reduce fuel use	In Development			Create framework for Green Leaders behaviour driven courses	Green Leaders Courses in process of being created: one specific course will be dedicated to Fleet drivers with an emphasis on anti-idling, driving smart, etc.	2010	2011
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	Complete			SSBC has made this information available. MOE has communicated this information to staff.		2008	2009
Encourage carpooling in fleet vehicles	In Development			Already in place, where possible when multiple staff from MoE are attending the same meetings they travel together as well as travel with other ministries employees.	Ministry Sustainable Procurement Policy is scoping environmentally responsible travel options for inclusion into 2010 - 12 implementation.	2008	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	In Development			Ministry Bicycles already encouraged for use in downtown areas of Victoria, British Columbia.	Ministry Sustainable Procurement Policy is scoping environmentally responsible travel options for inclusion into 2010 - 12 implementation.	2008	No End Date (Continuous)
<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.	Working with SSBC to reduce MOE's footprint overall by participating in community plans and RMC; 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>							

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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
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
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 BLIC-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	Ongoing/In Progress		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

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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
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. Anne'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 (78612), BC Centre for Disease Control (90258), FPI Colony Farms, Port Coquitlam Courthouse (78604), Robson Square (45047,46581, 43398), Vancouver Courts 17871), and Queen's Printer (10652).	2008	2010
<b>Leased buildings</b>						
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>						

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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	43	% of servers have been virtualized since start year indicated	Shared Services BC committed to virtualizing 65% of core government servers over 5 years between 2009 and 2014. As part of this initiative, an 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	No End Date (Continuous)
Apply auto-sleep settings on computer monitors and CPUs	Complete	100	% of computers have auto-sleep settings applied	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			Government policy states that stand-alone printers/photocopiers/fax machines are no longer to be purchased; as current leases expire they are replaced with MFD's.	Government policy states that stand-alone printers/photocopiers/fax machines are no longer to be purchased; as current leases expire they are replaced with MFD's.	2008	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	Corporate Services Division has provided guidance for this information as related to the Ministry of Environment.		2008	2009
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			new purchases always use this guideline in MOE	new purchases always use this guideline in MOE	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			only replacing when no longer working	only replacing when no longer working	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			This measure is being tackled on a branch specific basis rather than a ministry-wide policy.	This is being proposed for consideration in Ministry Sustainable Procurement for 2011 - 12.	2008	No End Date (Continuous)
<b>Behaviour change program</b>							
Help staff reduce personal energy use through "workstation tune-ups"	Ongoing/In Progress			Awareness through MoE Green team led initiatives	Cross-Government Green team initiative: Workstation Tune-up	2010	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress			Awareness through MoE Green team led initiatives	Cross-Government Green team initiative: Workstation Tune-up	2010	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress			This direction has been given for all 1st floor locations and has been encourage for all remaining floors.	This direction has been given for all 1st floor locations and has been encourage for all remaining floors.	2008	No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	Ongoing/In Progress			Where applicable, this information is being transmitted by office led green teams	Where applicable, this information is being transmitted by office led green teams	2009	No End Date (Continuous)
Encourage use of stairs instead of elevators	Ongoing/In Progress			Signs posted at elevators and on boards identifying what energy is saved (2975 Jutland specifically)	Signs posted at elevators and on boards identifying what energy is saved (2975 Specifically); Cross-Government green team challenge to take the stairs	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
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress			Periodic email reminders to staff.	Periodic email reminders to staff; Cross-Government Green Team initiative: Workstation Tune-up	2008	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress			Hot water tanks have been turned down as well as pilot scheduled to reduce by 1 tank in change rooms - specific to 2975 Jutland	Hot water tanks have been turned down as well as pilot scheduled to reduce by 1 tank in change rooms. Specific to 2975 Jutland	2009	2010
<b>Supplies (Paper)</b>							
<b>Paper Type</b>							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress			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%	2010/2011: Use 100% recycled paper for all products (e.g. Envelopes, business cards, etc)	2007	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	Ongoing/In Progress			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.	2010/2011: Use 100% recycled paper for all products (e.g. Envelopes, business cards, etc)	2007	No End Date (Continuous)
<b>Printer/document settings</b>							
Switch networked printers and photocopiers to automatic double-sided	Complete	100	% of network printers or photocopiers are set to automatic double-sided	Reduce paper use through doubly siding as default setting on all MoE printers, multi-functional devices		2008	2009
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	Complete	100	% of network printers have 'print and hold' settings applied	This option is available on all MFD's		2008	2009
Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.)	Ongoing/In Progress			Sustainable Procurement Policy	Reduced printing through new printing software, paperless approvals, faxes; Paperless meetings by integrating innovative technology into the workplace (e.g. PC tablets). Paperless filing, contracts; Green Teams Cross-government annual campaign initiative: Great Paper Chase	2008	No End Date (Continuous)
<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	As part of the U2 refresh project pushed out by Shared Services BC, all users were given collaboration software (Microsoft LiveMeeting, Groove, and OneNote)		2008	2009
Use electronic document library for filing common documents	Ongoing/In Progress			Corporate Memory document library system has been launched and is currently being implemented through the CM Stewardship committee	Continue to promote and track compliance of CM through report back structure of stewardship committee.	2008	No End Date (Continuous)
Post materials online that were previously printed	In Development				Green Teams Cross-government annual campaign initiative: Great Paper Chase	2010	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Complete	100	% of Employees have electronic pay stubs	All ministries were switched to paperless paystubs effective January 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			Training for the collaboration tools is being led through several ministries for all of government.	MoE Green team has agreed to be leaders for our ministry and aims to support the use of collaboration tools in any capacity necessary. Sustainable Procurement Policy Implementation Team to assist with staff engagement and paper reduction challenges.	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
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress			Ministry Green Teams supplied staff with incentives and region specific campaigns to encourage behaviour change with regard to reducing the amount of paper used in offices.	Green Teams Cross-government annual campaign initiative: Great Paper Chase; Green Leaders Courses being developed in consultation with PSA/PICS, one of which tackles Green Meetings and associated behaviour changes. Sustainable Procurement Policy Implementation Team to assist with staff engagement and paper reduction challenges.	2010	2011
Encourage re-use of scrap paper	Ongoing/In Progress			Individual offices encourage the re-use of scrap paper to varying degrees depending on the sensitivity of content of the scrap paper being re-used.	Green Teams Cross-government annual campaign initiative: Great Paper Chase. Sustainable Procurement Policy Implementation Team to assist with staff engagement and paper reduction challenges.	2010	2011
<b>Business Travel</b>							
<b>Policy and budgeting</b>							
Create a low-carbon travel policy or travel reduction goal	In Development				Ministry Sustainable Procurement Policy in process of determining action items, education and awareness building related to sustainable travel options (i.e. Training, information sheets, protocols, etc.)	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	As part of the U2 refresh project pushed out by Shared Services BC, all users were given collaboration software (Microsoft LiveMeeting, Groove, and OneNote)		2008	2009
Make desktop web-cameras available to staff	In Development				Desk top webcams available for purchasing to ministry staff (100 webcams and 100+ headsets have been purchased)	2009	2010
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress			2 Portable Video- Conferencing units have been purchased and 6 Polycorn Roundtable Video Conferencing units have been purchased	Distribution or system for borrowing will be established and implemented cross-ministry	2009	2010
<b>Behaviour change program</b>							
Train staff in web-conferencing	In Development				Training for use of technology will be coordinated in tandem with implementation of technology distribution cross-ministry	2009	2010
Train staff in video-conferencing or provide technical support for video-conferencing set-up	In Development				Training for use of technology will be coordinated in tandem with implementation of technology distribution cross-ministry	2009	2010
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress			Information was available to staff regarding the benefit of reducing business travel and utilizing the collaboration tools as a way of participating in events virtually and saving emissions from travel.	Green Teams Cross-government annual campaign initiative: Great Paper Chase	2009	2010
Encourage carpooling to meetings	Ongoing/In Progress			Currently being pursued on a branch specific basis as applicable	Will continue to be encouraged in a regionally specific context.	2009	No End Date (Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress			Ministry bike available for borrowing within MoE Victoria offices; Target: Green Streets commuter challenge launched in 2009 cross-government, 200 MoE staff participated.	Green Teams Cross-government annual campaign initiative: Target Green Streets, Commuter Challenge	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	Complete		MoE Green team was endorsed by ministry executive to engage in any activities deemed necessary to encourage and support behaviour change within the ministry.		2009	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Ongoing/In Progress		Informally through ministry green teams and specific branches as applicable in 2009.	Green Leaders courses are being created, one target audience of which would be Green team members as well as drivers of fleet vehicles, administrative staff, and frequent travellers.	2010	2011
<b>Staff Professional Development</b>						
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress		Informally through ministry green teams and specific branches as applicable in 2009.	Green Leaders courses are being created, one target audience of which would be Green team members as well as drivers of fleet vehicles, administrative staff, and frequent travellers. Sustainable Procurement Policy and Implementation training sessions and workshops to be held for all staff, starting spring 2010.	2010	2011
Include green options in employee performance measurement system	Ongoing/In Progress		Informally through ministry green teams and specific branches as applicable in 2009.	Executive have suggested that any green actions should be reflected in EPDP's of applicable staff.	2010	No End Date (Continuous)
<b>Staff awareness/education</b>						
Provide education to staff about the science of climate change	In Development			Green Leaders Courses are being developed through collaboration with Pacific Institute for Climate Solutions, Climate Action Secretariat and Public Service Agency; these courses will elaborate on the science behind Climate Change as well as linking with Action Opportunities for encouraging behaviour change within Ministries.	2008	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress		Informally through ministry green teams and specific branches as applicable in 2009.	Ministry green team is coordinating with applicable branches in order to provide learning opportunities such as lunch and learns on this topic as well as other subjects of interest. These meetings are being offered to staff from all ministries.	2009	No End Date (Continuous)
Provide green tips on staff website or in newsletters	Ongoing/In Progress		Internal Communications highlights sustainable behaviour in internal communications, websites, emails etc	Sustainable Procurement Policy Website and Newsletter to be launched in spring 2010.	2008	2009
Provide sustainability education during new staff orientation	Ongoing/In Progress		Public Service Agency in discussions with Climate Action Secretariat are including Green Links to actions going on within the Public Service to their Oath and Orientation Agenda.	Public Service Agency will include information during their oath and orientation. All new staff who receive purchasing cards or who have administrative duties will also be required to take a learning session on MoE's sustainable procurement policy.	2010	No End Date (Continuous)
<b>Client/public awareness/education</b>						

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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 education to clients/public about the science of climate change	Ongoing/In Progress		Easy Green Guides created through SSBC and promoted through Ministry Green Teams	Green Leaders Courses are being developed through collaboration with Pacific Institute for Climate Solutions, Climate Action Secretariat and Public Service Agency; these courses will elaborate on the science behind Climate Change as well as linking with Action Opportunities for encouraging behaviour change within Ministries.	2008	No End Date (Continuous)
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress		This information and other Individual actions are available through the Live Smart BC website	Currently being done within specific branches of the ministry, providing content specific information to stakeholders and clients.	2008	No End Date (Continuous)
Provide green tips on client/public website or in newsletters	Ongoing/In Progress		This information and other Individual actions are available through the Live Smart BC website as well as the internal to government Where Green Ideas Work website.	Currently being done within specific branches of the ministry, providing content specific information to stakeholders and clients.	2008	No End Date (Continuous)
<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		Ministry Water Act Modernization consultation; Shared Services BC's Technical Standards require water efficient fixtures when new developments and major tenant improvements are undertaken in owned government facilities.	Discussion paper and follow-up actions being evaluated	2009	2012
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.		2007	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.		2007	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	Complete		Recycling and Waste Management program promoted through ministry green teams, dependent on individual buildings, and budget for branches specific to those buildings. Cost-prohibitive to have a ministry wide policy at this point; Shared Services BC lead the development of a solid waste reduction program in 2009. Buy in to the program is at the discretion of Ministry customers.	Information related to waste-management programs available to ministry offices will continue to be available through Green Team and MoE's Sustainable Procurement Policy website.	2009	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.		2008	No End Date (Continuous)
<b>Procurement (non-paper supplies)</b>						
Incorporate minimum recycled content standards into procurement policy for consumable, non-paper supplies (e.g., writing instruments, binders, toner cartridges, etc.)	Ongoing/In Progress		Research and Development for Minister Sustainable Procurement Policy incorporated these ideals as apply and can be implemented specifically in the Ministry of Environment.	Sustainable Procurement Policy approved by Executive February 1, 2010; Implementation includes monitoring and tracking as well as next steps for expanding into non-paper products. Distribution Centre of Victoria offers a selection of Green office Products, All things being equal staff will be directed/trained to purchase more sustainable options. (Note: this will be promoted through branch challenges under certain product categories to be determined in 2010)	2009	No End Date (Continuous)

## Ministry of Environment - 2009 Carbon Neutral Action Report

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
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		Phase 2 of Sustainable Procurement Policy to be implemented in 2010 lists this as a possible course to be pursued.	Sustainable Procurement Policy approved by Executive February 1, 2010; Implementation includes monitoring and tracking as well as next steps for expanding into non-paper products. Distribution Centre of Victoria offers a selection of Green office Products, All things being equal staff will be directed/trained to purchase more sustainable options. (Note: this will be promoted through branch challenges under certain product categories to be determined in 2010). SSBC is currently investigating an enhanced green strategy for space tenant improvements under its Climate Action Program.	2009	No End Date (Continuous)
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Complete		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.		2004	No End Date (Continuous)
Require a minimum purchase of sustainable, and organic food and beverages supplied by contracted food suppliers or caterers	Ongoing/In Progress		Ministry Green Team has accumulated resources to encourage sustainable choices with regards to catering	Ministry Sustainable Policy will also include protocols and best practices for conducting Green Meetings. A guideline has been developed and staff will be informed of this new meeting requirement.	2007	No End Date (Continuous)
<b>Building construction, renovation, and leasing</b>						
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.		2009	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.		2009	No End Date (Continuous)
<b>Indoor air quality</b>						
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	Ongoing/In Progress		Common across government through Occupational Health and Safety (OSH)	Common across government through Occupational Health and Safety (OSH)	2007	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).		2007	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		This is being done on a case by case basis across ministry where job requirements allow.	This is being done on a case by case basis across ministry where job requirements allow.	2007	No End Date (Continuous)

## Ministry of Environment - 2009 Carbon Neutral Action Report

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 commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress		Ministry of Environment participated in a cross-government Commuting Challenge wherein 200 staff participated.	Target: Green Streets (Commuting Challenge) is set to run again in 2010, MoE plans to increase the level of participation from last year.	2007	No End Date (Continuous)
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress		Although not a requirement, the provision of showers and bike locking facilities is a consideration of providing accommodations to ministry customers by Shared Services BC. Tenant improvements associated with the addition of showers and bike locking facilities that are requested and funded by Ministry customers will be reasonably considered by Shared Services where they can be provided.	No further SSBC action planned beyond consideration of Ministry requests for enhanced foot and cycling facilities. Where possible these are incorporated. Bicycle storage/lock up areas are also provided at most facilities	2007	No End Date (Continuous)
Provide secure bicycle storage	Ongoing/In Progress		Although not a requirement, the provision of bike storage is a consideration of providing accommodations to ministry customers by Shared Services BC. Tenant improvements associated with the addition of bike storage equipment that is requested and funded by Ministry customers will be reasonably considered by Shared Services where they can be provided. Ministry of Environment buildings- 2975 Jutland, 395 Waterfront Crescent both have secure bike-lock up facilities	No further SSBC action planned beyond consideration of Ministry requests for secure bicycle storage. 2975 Jutland, 395 Waterfront Crescent both have secure bike-lock up facilities	2007	No End Date (Continuous)