



CARBON NEUTRAL ACTION REPORT



The Ministry of Small Business, Technology and Economic Development (STED) has approximately 205 employees who occupy five buildings located in Vancouver and Victoria. STED shares 1 hybrid fleet vehicle and a bicycle in Victoria with the Ministry of Energy, Mines and Petroleum Resources (EMPR) and has no fleet vehicles in Vancouver.

STED's Victoria employees are primarily located in the Jack Davis Building (JDB) which is the 6th most energy efficient building in Shared Service BC's (SSBC) +200 building portfolio. In 2009, the JDB's window seals were repaired to restore the building to its designed energy efficiency level and the HVAC system was rebalanced to deal with previous tenant improvements that affected its operation.

In Vancouver, STED and SSBC incorporated high performance building standards and applied for LEED Gold Certification in new space that was fitted out in 2008/09: the Asia Pacific Business Centre located at Robson Square.

As part of the government-wide space consolidation initiative in 2009, STED did not renew leases in the Terasen Building in Victoria and at 1095 W Pender in Vancouver thereby reducing its office footprint and increasing the density of its remaining locations at the JDB in Victoria and Robson Square and Canada Place in Vancouver.

The Ministry is challenged to make large scale economic or environmental improvements on its own given its small staff complement, its limited capital budget and its minimal control of facility operations. However, STED is also responsible for developing and leading many of the provincial government's strategic initiatives that ultimately contribute to carbon neutrality by fostering more modern, efficient and cleaner economic activity. This includes initiatives such as the Asia Pacific Trade Initiative (APTI), the Trade, Investment and Labour Mobility Agreement with Alberta and Saskatchewan (TILMA), the Innovative Clean Energy Fund (ICE) and the labour mobility provisions under the Agreement on Internal Trade (AIT). These important interprovincial, national and international economic development files often require long distance air travel which makes up over half of STED's carbon emissions.

In 2009, the government wide U2 Refresh program enabled the Ministry to increase its utilization of existing and new collaboration software tools and technologies including the installation of videoconferencing and virtual meeting equipment and remote file sharing programs in order to better manage its long distance travel requirements. STED's carbon footprint is predominantly related to intercity and international travel but STED Executive is implementing a strategy of paperless meetings that incorporates teleconferencing, web meetings and other electronic collaboration tools wherever possible. In 2009/10 STED has begun installation of Roundtable technology in all its office locations. STED employees have a very high compliance rate for the Province's travel carbon calculator (SMARTEC).

STED leads by example in its internal operations and through its programs, agencies and subsidiaries.

In Victoria, STED's award winning Green Team collaborated with co-located Ministries in the JDB to host Earth Day, Bike to Work Week and Target Green Streets events that reached over 200 staff. The Ministry won two of three categories in the Target Green Streets commuting challenge in September 2009. The Green Team also worked with the Employee Health and Wellness Committee and the Innovation Committee to promote clean/green/healthy workplace and low carbon lifestyle initiatives. Other carbon neutral initiatives introduced in 2008/09 included paperless meetings, web conferencing, video conferencing and green procurement.

Better waste management and energy efficiency continue to be the focus of our climate action efforts. STED continues to operate the 7 Stream waste management system (the first of its kind in the CRD) to enable diversion of over 80% of the JDB's waste from the Victoria landfill. STED received a SUMMIT award for this program in 2008. A similar program has been adopted in 2009 at STED's new Asia-Pacific Business Centre facility in Vancouver's Robson Square.

STED's Management Services Division, at the request of the Green Team, has replaced bottled water in the Jack Davis Building and the Asia Pacific Business Centre with purified tap water systems, installed motion activated light sensors in washrooms, lunchrooms, filing and meeting rooms to reduce energy consumption.

In summary, STED's operations, its workplace culture and its staff committees make it a leading ministry in managing government's own carbon footprint. In addition, STED's strategies and programs support development of BC's low carbon economy through innovation initiatives, technology investments and associated regulatory reforms.

ACTIONS TAKEN TO REDUCE GREENHOUSE GAS EMISSIONS IN 2009

1. Continued cutting down paper use through two-sided printing, reusing outdated printed paper and letterhead, and creating a common bulletin board with announcements.
2. Continued green procurement training to procure supplies made of recycled materials wherever possible and to minimize packaging.
3. Continued use of 100% recycled paper where possible.
4. Turned off all electronic equipment whenever possible and ensured Energy Star rated equipment (monitors, printers, and copiers, refrigerators, dishwashers, etc.) was in operation wherever possible.
5. Encouraged staff to bring in reusable plates, cups and utensils.
6. Made indoor plants an important part of office décor: adding humidity to the dry atmosphere, purifying the air, deadening noise, and serving as living room dividers.
7. Used electricity wisely by checking that all computers/monitors were set to their most energy efficient settings (e.g. monitors were set to shut off after 15 minutes of no use) and reminding staff to switch off lights when leaving a room for more than a few minutes.
8. Ensured employees used environmentally friendly and recyclable office products wherever possible (i.e. 100% recycled paper, refillable ink cartridges, non-toxic highlighters, etc.).
9. Encouraged WSI's cleaning company to use green (non-toxic) cleaning products.
10. Transportation: continued availability of bike rooms and showers where Ministry facilities permitted.
11. Encouraged staff to read on-screen and print documents only when absolutely necessary and to not print documents in color if it's not needed.
12. STED's Green Team won 2 of 3 categories in the September 2009 Target Green Streets Commuting Challenge.
13. The Green Team conducted workstation tune up and put all peripheral devices into power bars that can be switched off at the end of the day.
14. Continued to make transit tickets and a loaner bicycle available for staff to travel to local business meetings.
15. Encouraged the use of low VOC paints for tenant improvements and repairs wherever possible.



Ministry of
Small Business,
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Actions Towards Carbon Neutrality

The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act*.

| Action | Status (as of 12/31/09) | Performance to Date (as of 12/31/09) | Steps Taken in 2009 | Steps Planned for 2010 -2012 | Start Year | End Year |
|---|----------------------------|---|---|---|------------|--------------------------|
| Mobile Fuel Combustion (Fleet and other mobile equipment) | | | | | | |
| Vehicle fuel efficiency | | | | | | |
| Replace vehicles with more fuel-efficient models | Ongoing/In Progress | | 1 - continue to share 1 hybrid vehicle with the Ministry of Energy, Mines and Petroleum Resources | 1 - continue to share 1 hybrid vehicle with the Ministry of Energy, Mines and Petroleum Resources | 2007 | No End Date (Continuous) |
| Replace larger vehicles with smaller models according to fleet "right-sizing" principles | Ongoing/In Progress | | The Ministry's only vehicle is a hybrid | 1 - continue to share 1 hybrid vehicle with the Ministry of Energy, Mines and Petroleum Resources | 2007 | No End Date (Continuous) |
| Perform regular fleet maintenance to improve fuel-efficiency | Ongoing/In Progress | | The Ministry's only vehicle is a hybrid | Regular maintenance per government fleet policy | 2007 | No End Date (Continuous) |
| Replace small maintenance vehicles with more fuel-efficient models | Ongoing/In Progress | | The Ministry's only vehicle is a hybrid | Regular maintenance per government fleet policy | 2007 | No End Date (Continuous) |
| Behaviour change program | | | | | | |
| Encourage carpooling in fleet vehicles | Ongoing/In Progress | | This is done thru travel approval coordination and meeting attendance management where possible | The Ministry will continue to minimize travel through "live meeting", teleconferencing and videoconferencing | 2008 | No End Date (Continuous) |
| Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking) | Ongoing/In Progress | | In Victoria, bus tickets and a loaner bicycle in the Jack Davis Building have been available since 2008 | The Ministry plans to continue these measures | 2008 | No End Date (Continuous) |
| Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings) | | | | | | |
| Planning/management | | | | | | |
| Enrol in a building energy benchmarking program (e.g., GREEN UP) | Ongoing/In Progress | | 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 Shared Services BC will be working with Workplace Solutions Incorporated (WSI) to develop a per building cost associated with enlisting in Canadian Green Building Council's Green Up program and an implementation strategy that aligns with the new funding model as appropriate (i.e. Shared Services BC's voted appropriation, cost recovery or a blend). Meanwhile adjudication of LEED-CI application at Asia Pacific Business Centre at Robson Square in Vancouver and window seal replacement/heating system tuning at Jack Davis Building in Vancouver both continue. | 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. The Ministry's space consolidation project planned for 2010 in Vancouver and Victoria will reduce its overall footprint. | Space rationalization will continue through 2010 to strategically lever opportunities to divest leases when renewal is considered and when appropriate. These Ministry initiatives will result in a greater % of staff occupying owned (greener) vs. leased (not so green) buildings | 2009 | 2012 |
| Owned buildings | | | | | | |

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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 6 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 (BLJC-WSI) launched a building level energy performance target setting initiative in December 2009. The results of this initiative will enable Workplace Solutions' operation & 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 significantly impact the BEPI goal are being flagged for follow-up with appropriate client services and green team representatives. The ministry's Jack Davis Building and Asia-Pacific Business Centre locations will have energy performance baselines. | A summary of operational efficiency opportunities and target building energy performance index will be finalized by end of Q2 2010. An implementation strategy will follow, to be implemented Q3 and Q4 of 2010. The Ministry's space consolidation project means a greater % of staff occupying owned (greener) vs. leased (not so green) buildings and a smaller overall footprint. | 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 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 |

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| Complete energy retrofits on existing, owned buildings | Ongoing/In Progress | | Shared Services BC 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 Youth Custody Centre (800Gj's saved), Robson Square Complex (7460 Gj's saved) BC Centre for Disease control (2060 Gj's saved), Abbotsford Agricultural Centre (1600 Gj's saved) and St. Anne's Academy (728 Gj's saved). It is expected that a significant amount of associated greenhouse gas emissions will be diverted as a result of these retrofits. For the Ministry, the Jack Davis Building window seals were replaced and the HVAC was re balanced. | A list of potential projects has been scoped out for submission to the 3rd Public Service Energy Conservation Agreement 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 | No End Date (Continuous) |
| Leased buildings | | | | | | |
| 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 follow, to be implemented Q3 and Q4 of 2010. This is a Shared Services BC responsibility. New energy efficient systems for the BC Showcase at Robson Square were installed in 2008 and became operational in 2009 (now Ministry of Healthy Living and Sport) | 2009 | No End Date (Continuous) |
| 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 |

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|--|----------------------------|---|--|---|------------|-----------------------------|
| Develop a green lease policy that requires green features to conserve energy be included in all lease negotiations | Ongoing/In Progress | | A significant amount of government's building portfolio is leased space. Shared Services BC 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 are available for use on new leases and lease renewals. The Ministry's Asia Pacific business Centre lease at Robson Square has green power monitoring and water & waste disposal systems per LEED CI requirements but was entered into in 2008: occupancy was in 2009. | The Ministry has no new leases planned for 2010-2012 | 2008 | No End Date (Continuous) |
| IT power management | | | | | | |
| Install power management software which shuts down computers outside of regular business hours | Complete | | Part of government's U2 refresh in 2009 | | 2008 | 2009 |
| Implement server virtualization | Complete | | The Ministry's server virtualizations were substantially completed (independent of Workplace Technology Services & Common IT initiatives) in 2009 | Substantially complete in 2009 | 2008 | 2009 |
| Apply auto-sleep settings on computer monitors and CPUs | Complete | | Part of government's U2 refresh in 2009 | | 2008 | 2009 |
| Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices | Ongoing/In Progress | | Space consolidation project and multifunction device (MFD) reconfiguration provides an opportunity to rationalize equipment deployment in 2010 after consolidation moves are complete. | 2010/11 priority for the Ministry's Information Management Branch | 2009 | 2010 |
| Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices | Ongoing/In Progress | | Part of government's U2 refresh 2009 | To be continued in 2010 as part of rationalization resulting from space consolidation | 2008 | 2009 |
| Replace computers with ENERGY STAR models during regular computer upgrades | Complete | | Part of government's U2 refresh in 2009 | | 2008 | 2009 |
| Appliances and electronic devices | | | | | | |
| Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases | Complete | | Completed in 2007 | This will continue as part of the Ministry's space consolidation project and Green Team monitoring activities | 2007 | 2009 |
| Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases | Complete | | Completed in 2008 | This will continue as part of the Ministry's space consolidation project and Green Team monitoring activities | 2008 | 2009 |
| Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases | Ongoing/In Progress | | The Ministry's space consolidation moves in 2009/10 allow for retrofit and replacement as required | This will continue as part of the Ministry's space consolidation project and Green Team monitoring activities | 2008 | No End Date (Continuous) |
| Behaviour change program | | | | | | |
| Help staff reduce personal energy use through "workstation tune-ups" | Ongoing/In Progress | | The Ministry's space consolidation moves in 2009/10 provide opportunities for tune-up and retrofit/replacement as required | This will continue as part of the Ministry's space consolidation project and Green Team monitoring activities | 2009 | No End Date (Continuous) |
| Ask staff to unplug electrical equipment or switch off power bars when not in use | Ongoing/In Progress | | The Ministry's Occupational Health and Safety committee conducts building reviews to remind staff to disconnect/remove appliances | This will continue as part of the Ministry's space consolidation project and Green Team monitoring activities | 2009 | No End Date (Continuous) |
| Encourage staff to use air dry setting on dishwashers | In Development | | The ministry has only 1 dishwasher in the Jack Davis Building and 1 in Robson Square's Asia-Pacific Business Centre (both Energy Star). Other leased facilities may have dishwashers owned by landlords. | This will continue as part of the Ministry's space consolidation project and Green Team monitoring activities | 2008 | No End Date (Continuous) |

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| Provide tips to staff on saving energy in the office while working outside of regular business hours | Ongoing/In Progress | | Green Team members provide recommendations to all ministry staff by email | This will continue as part of the Ministry's space consolidation project, Occupational Health and Safety inspections and Green Team monitoring activities | 2008 | No End Date (Continuous) |
| Encourage use of stairs instead of elevators | Ongoing/In Progress | | Jack Davis Building stair climbing challenges and Healthy Living initiatives are part of the Ministry's work culture | Ministry staff in the Jack Davis Building expect to continue stair climbing challenges with reports to Exec thru the Green team | 2008 | No End Date (Continuous) |
| Provide reminders for turning off lights (e.g., signs, stickers, messages) | Ongoing/In Progress | | Motion sensitive light systems were installed in Jack Davis Building common areas and at Robson Square in 2008/09 where safe and applicable | The Ministry will continue to investigate opportunities for motion sensor light systems | 2008 | No End Date (Continuous) |
| Promote hot water conservation | Ongoing/In Progress | | This is part of the Ministry's general Green Team energy conservation promotion activities | This will continue as part of the Ministry's space consolidation projects and Green Team promotion/monitoring activities | 2008 | No End Date (Continuous) |
| Supplies (Paper) | | | | | | |
| Paper Type | | | | | | |
| 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% | This initiative will continue | 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. | This initiative will continue | 2007 | No End Date (Continuous) |
| Printer/document settings | | | | | | |
| Switch networked printers and photocopiers to automatic double-sided | Ongoing/In Progress | | Continue to reconfigure printers and copiers (default) | The Ministry's space consolidation project and U2 refresh review will increase % of photocopiers with this feature | 2008 | No End Date (Continuous) |
| Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs | Ongoing/In Progress | | Continue to reconfigure printers, copiers and MFD's (default) | The Ministry's space consolidation project will increase % of photocopiers with this feature | 2008 | No End Date (Continuous) |
| Electronic media in place of paper | | | | | | |
| Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.) | Complete | | Part of government's U2 refresh 2008/09 | This will continue as part of future refresh programs | 2008 | No End Date (Continuous) |
| Use electronic document library for filing common documents | Ongoing/In Progress | | Sharepoint site, Groove etc. are being actively promoted | Continue to evaluate technology-based opportunities in this area | 2008 | No End Date (Continuous) |
| Post materials online that were previously printed | Ongoing/In Progress | | Ministry websites and electronic notifications are in place | Continue to evaluate technology-based opportunities in this area | 2008 | No End Date (Continuous) |
| Switch to an electronic payroll notification system in place of paper pay stubs | Complete | | This was previously initiated and continues as default | | 2008 | 2009 |
| Behaviour change program | | | | | | |
| Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.) | Ongoing/In Progress | | This was promoted thru the Ministry's IT group , Employee Advisory Committee and Green Teams for identifiable projects and committees | Online self-paced training continues to be made available and IT group can provide assistance on request | 2008 | No End Date (Continuous) |
| Encourage staff to hold paperless meetings or presentations (i.e., no handouts) | In Development | | Roundtable technology, videoconferencing and paperless meetings promoted by Green Team, IT group and Employee Advisory Committee | Roundtable meeting technology installation will complete in 2010/11 | 2008 | No End Date (Continuous) |

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|--|----------------------------|---|---|--|------------|-----------------------------|
| Encourage re-use of scrap paper | In Development | | This was promoted thru the Ministry's Facilities Group and Green Teams for appropriate situations | This continues as part of the Ministry's Green Team and Facilities Group activities | 2008 | No End Date (Continuous) |
| Business Travel | | | | | | |
| Policy and budgeting | | | | | | |
| Create a low-carbon travel policy or travel reduction goal | Ongoing/In Progress | | Roundtable and videoconferencing (including overseas capacity) is now encouraged to avoid travel. The ministry has a high compliance rate for SMARTEC (travel carbon calculator tool) completion. | Roundtable technology installation will be completed in 2010/11 | 2008 | No End Date (Continuous) |
| Virtual meeting technology | | | | | | |
| Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.) | Ongoing/In Progress | | Videoconferencing was installed in Victoria and Vancouver. Roundtable meeting technology was ordered in 2009 & installed early 2010. Web conferencing technology coming in 2010 | The Ministry will continue to provide these alternative options and evaluate technology based opportunities in this area | 2008 | No End Date (Continuous) |
| Make desktop web-cameras available to staff | In Development | | Web conferencing technology planned for 2010 on some individual computers | The Ministry will continue to investigate these alternatives and evaluate technology based opportunities in this area | 2009 | No End Date (Continuous) |
| Install video-conferencing units in meeting rooms or provide mobile video-conferencing units | Complete | | Videoconferencing installed in Vancouver and Victoria main sites. Roundtable meeting technology ordered in 2009 & installed early 2010. Web conferencing technology planned for 2010 on some individual computers | The Ministry will continue to investigate these alternatives and evaluate technology based opportunities in this area | 2008 | 2009 |
| Behaviour change program | | | | | | |
| Train staff in web-conferencing | Ongoing/In Progress | | Ministry staff trained for various locations (including backup) | Provide more staff training | 2008 | No End Date (Continuous) |
| Train staff in video-conferencing or provide technical support for video-conferencing set-up | Complete | | Ministry ensures technical support is available to all users | Provide more staff training | 2008 | No End Date (Continuous) |
| Encourage staff to consider virtual attendance/presentation at events where possible | Ongoing/In Progress | | The Ministry's travel approval process considers this alternative case by case | The Ministry will continue to review electronic options as part of travel approval process | 2008 | No End Date (Continuous) |
| Encourage carpooling to meetings | Ongoing/In Progress | | The Ministry's travel approval process considers this alternative case by case | The Ministry will continue to review electronic options as part of travel approval process | 2008 | No End Date (Continuous) |
| Encourage alternative travel to meetings (e.g., bicycles, public transit, walking) | Ongoing/In Progress | | The Ministry has a bicycle and bus tickets which are promoted as travel alternatives thru Green Team | The Ministry will continue to provide these alternative travel options | 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 |
|---|-------------------------|--------------------------------------|---|--|------------|--------------------------|
| Education, Awareness, and Engagement | | | | | | |
| Team-building | | | | | | |
| Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement | Complete | | Completed in 2008 | Continue Green Team activities reporting thru Executive Financial Officer to Ministry Executive | 2008 | 2009 |
| Provide resources and/or dedicated staff to support teams | Complete | | Completed in 2008 | Green Team and Employee Action and Advisory Committee members are volunteers who are recognized by Ministry Executive | 2008 | 2009 |
| Providing behaviour change education/training to teams (e.g., community-based social marketing) | Ongoing/In Progress | | The Ministry provides ongoing training and orientation for new members and new projects as the team evolves | The Ministry will continue Green Team orientation, training and promotion to support activities | 2008 | No End Date (Continuous) |
| Awards/Recognition | | | | | | |
| Establish a sustainability/green awards or recognition program | Ongoing/In Progress | | The Ministry has a Green committee and active program in place... Efforts vary each year with events and program changes | Continue this program (sponsored by Ministry Executive) | 2008 | No End Date (Continuous) |
| Staff Professional Development | | | | | | |
| Support green professional development (e.g., workshops, conferences, training) | Ongoing/In Progress | | Ongoing Green Team responsibility to obtain approvals and access ministry training budgets for these purposes | The Ministry has preserved training budgets for 2010/11 and the Green Team will have access if needed | 2008 | No End Date (Continuous) |
| Include green options in employee performance measurement system | In Development | | Employee Performance and Development Plan (EPDP) process: management allows employee defined categories and comments that could apply here | Green issues can be included in Employee Performance and Development Plan (EPDP)for 2010/11 | 2008 | No End Date (Continuous) |
| Staff awareness/education | | | | | | |
| Provide education to staff about the science of climate change | In Development | | The Ministry's Green Team is a joint operation with Energy, Mines and Petroleum Resources so it has access to Alternative Energy Division as well as Innovative Clean Energy Fund info. This also includes some Climate Change info | Continue to stay current with technological advances as part of program responsibilities | 2008 | No End Date (Continuous) |
| Provide education to staff about the conservation of water, energy, and raw materials | Ongoing/In Progress | | Ongoing Green Team responsibility | Green Team responsibility continues | 2008 | No End Date (Continuous) |
| Provide green tips on staff website or in newsletters | Ongoing/In Progress | | Ongoing Green Team responsibility | Green Team responsibility continues | 2008 | No End Date (Continuous) |
| Provide sustainability education during new staff orientation | Ongoing/In Progress | | The Ministry's new employee orientation includes an intranet website reference to Green Team info | Green Team responsibility to maintain this info continues | 2008 | No End Date (Continuous) |
| Client/public awareness/education | | | | | | |
| Provide education to clients/public about the science of climate change | Ongoing/In Progress | | Part of Innovative Clean Energy Fund program and BC Immigrant Investment Fund/BC Renaissance Capital Fund reporting responsibilities | Continue technological aspects as part of Innovative Clean Energy Fund program and BC Immigrant Investment Fund/BC Renaissance Capital Fund reporting responsibilities | 2008 | No End Date (Continuous) |
| Provide green tips on client/public website or in newsletters | Ongoing/In Progress | | Ministry Green Team emails all staff with tips (i.e. Earth Day, etc.) and maintains intranet website info | Green Team responsibility to maintain this info continues | 2008 | 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 |
|--|----------------------------|---|---|--|------------|-----------------------------|
| Other Sustainability Actions | | | | | | |
| Water conservation | | | | | | |
| Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models | Complete | | Shared Services BC's Technical Standards require water efficient fixtures when new developments and major tenant improvements are undertaken in owned government facilities. The Ministry has ongoing wastewater management initiatives that include Jack Davis Building and Robson Square (owned buildings). | Low consumption water fixtures are used to replace existing where possible (i.e. provided funding available) | 2007 | 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 | Ongoing/In Progress | | Potable water management is considered on a case by case basis to meet both customer programming needs and required codes and standards. The Ministry's Asia-Pacific Business Centre installed low flush toilets and water fixtures as part of its 2008/09 construction project | For the Ministry, low consumption water fixtures will be used to replace existing where possible (i.e. provided funding available) | 2008 | No End Date (Continuous) |
| Introduce a storm water management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales) | Ongoing/In Progress | | Storm water management is considered on a case by case basis when determining the building site and systems design from a whole building perspective. Shared Services BC's Technical Standards require the consideration of indigenous plants and other water reduction strategies where appropriate. The Ministry's Asia Pacific Business Centre has a storm water handling system that is part of Robson Square drainage and a partially green roof that is part of the facility design. Part of Robson Square sewer/drain system was upgraded and repaired in 2008/09 for the BC Showcase project. | Robson Square plaza remediation will continue in 2010/11 and includes re-roofing and drainage systems | 2008 | 2010 |
| Waste reduction/diversion | | | | | | |
| Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities | Ongoing/In Progress | | Shared Services BC led the development of a solid waste reduction program in 2009. Buy-in to the program is at the discretion of Ministry customers. The Ministry of Small Business, Technology and Economic Development's Green team supports significant waste reduction/recycling program. | Continue Green Team efforts in 2010/11 and 2011/12 | 2008 | No End Date (Continuous) |
| Implement a hazardous waste reduction and disposal strategy | Ongoing/In Progress | | Hazardous waste reduction and disposal is managed by Shared Services BC strictly in accordance with prevailing laws and regulations. The Ministry's Green Team is aware that WHMIS training is available thru its Occupation Health and Safety committee. A battery disposal recycling program is in place in the Jack Davis Building | Continue Green Team efforts in 2010/11 and 2011/12 | 2008 | No End Date (Continuous) |
| Procurement (non-paper supplies) | | | | | | |
| Incorporate minimum recycled content standards into procurement policy for consumable, non-paper supplies (e.g., writing instruments, binders, toner cartridges, etc.) | Ongoing/In Progress | | Green purchasing training has been provided to those with procurement authority and a message from the Deputy Minister was sent in 2009. | Continue Green Purchasing training efforts in 2010/11 and 2011/12 | 2009 | No End Date (Continuous) |
| 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 | | The Ministry's Facilities Team works with Shared Services BC to ensure these products are given consideration. Asia Pacific Business Centre has applied for LEED-CI Gold certification and its products qualify for this. | Continue to meet Green Purchasing standards re building/furniture/equipment upgrades and maintenance wherever possible | 2008 | 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 |
|---|----------------------------|---|---|--|------------|-----------------------------|
| 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. The Ministry's Jack Davis Building and Robson Square facilities use green cleaners (Bee Clean) as they are provincially owned buildings. | Continue to meet Green cleaning and maintenance standards re building/furniture/equipment wherever possible | 2009 | No End Date (Continuous) |
| Require a minimum purchase of sustainable, and organic food and beverages supplied by contracted food suppliers or caterers | In Development | | Green Team works with Ministry Health & Wellness committee to promote healthy food choices and healthy meetings | Continue to promote and pursue healthy food choices per ActNOW recommendations for Ministry meetings and events | 2009 | No End Date (Continuous) |
| Building construction, renovation, and leasing | | | | | | |
| Establish a policy to reuse materials where possible and divert construction and demolition debris from landfills and incineration facilities | In Development | | Under its Master Services Agreement with Workplace Solutions Inc. (WSI), Shared Services BC requires that 80% of waste be diverted from landfills on projects over \$80k in the Lower Mainland and South Vancouver Island where diversion facilities are available. The Ministry's Asia Pacific Business Centre and BC Showcase construction projects documented landfill diversions as part of the LEED -CI process. Other projects (i.e. reno's) have met these standards although not documented in the same way due to scale. Asset disposals administered by facilities team are completed thru Shared Services BC/WSI according to their green standards. | STED/EMPR's Innovation Savings program is set up to encourage ideas such as reuse of furniture and equipment to avoid unnecessary disposals. The Innovation Team, Facilities staff, Green Team and Executive support this. | 2008 | No End Date (Continuous) |
| Incorporate lifecycle costing into new construction or renovations | Ongoing/In Progress | | 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. The Ministry's Asia-Pacific Business Centre's construction project included lifecycle costing considerations as part of LEED -CI process. Other recent projects completed thru Shared Services BC/WSI (i.e. reno's and security upgrades) have met these standards although not documented in the same way. | The Ministry has no new construction planned | 2008 | No End Date (Continuous) |
| Indoor air quality | | | | | | |
| Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.) | Complete | | Signage has been placed in key Ministry locations. | The Ministry will continue evaluation of need/opportunities in this regard | 2008 | 2009 |
| 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 (VOC's). Also, VOC's have been considered for all projects where LEED certification has been pursued (see A2) For the Ministry, low VOC paint and carpet tiles were used wherever possible in 2009/10. | The Ministry will continue to use low VOC construction materials wherever possible according to Shared Services BC standards | 2008 | 2009 |
| Commuting to and from home | | | | | | |

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|--|----------------------------|---|--|--|------------|-----------------------------|
| 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 required, 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. The Ministry of Small Business Technology and Economic Development currently has a telecommuting policy under review/development as part of its space consolidation project. | The Ministry expects to complete telecommuting policy review process in 2010/11. | 2009 | 2011 |
| Offer staff a compressed work week | In Development | | To be considered if compatible with employment standards, collective agreements and similar existing initiatives | The Ministry expects to complete the investigation/consideration process in 2010/11 | 2009 | 2011 |
| Encourage commuting by foot, bicycle, carpool or public transit | In Development | | Green Team has promoted this in 2009 | Ministry participation in events such as Bike to Work Week and Green Streets programs to continue if centrally initiated | 2008 | 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 BC where they can be provided. the Ministry's Jack Davis Building and Terasen Building (Victoria) and Asia-Pacific Business Centre (Vancouver) are complete. Vancouver (Canada Place and 1095 W Pender St) office locations are near to LRT stations . | The Ministry will consider additional options for Canada Place and 865 Hornby staff in 2010/11 | 2008 | 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 accommodation to Ministry customers by Shared Services BC. Tenant improvements associated with the bike storage equipment that are requested and funded by Ministry customers will be reasonably considered where they can be provided. All major Ministry locations have bike storage access. | The Ministry will continue to make availability of bike parking a priority in its facility considerations. | 2008 | No End Date (Continuous) |
| Modify parking fees or parking availability for staff/students | In Development | | The Ministry's Jack Davis Building and Terasen Building (Victoria) and Asia Pacific Business Center and Canada Place (Vancouver) have paid temporary parking available. | The Ministry will continue to ensure temporary pay parking is available at its facilities. | 2008 | No End Date (Continuous) |