

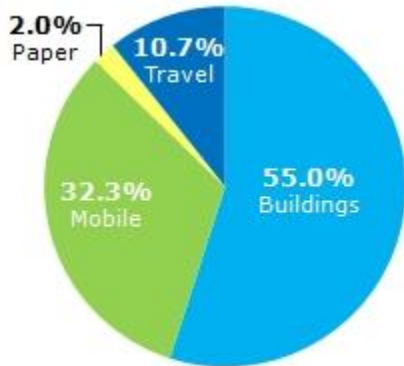
# CORE GOVERNMENT 2010 CARBON NEUTRAL ACTION REPORT



Ministry of Environment  
Victoria, B.C.  
June, 2011

# Core Government - 2010 Carbon Neutral Action Report

The B.C. Government began taking action to reduce greenhouse gas emissions in early 2007 by developing a carbon neutral program under Shared Services BC (SSBC) and by forming Green Teams in every ministry. Given its role as a shared service provider for buildings, fleet, information technology, and procurement, SSBC supplied valuable expertise in identifying and implementing organization-wide carbon reduction programs. Green Teams were focused on staff engagement and developing innovative approaches to sustainability in their offices.



**Core Government  
2010 GHG Emissions by Source**

Today, Green Teams and ministry staff continue to roll out internal, carbon reduction initiatives while SSBC looks at technological solutions to collaborating without the need for travel, green procurement opportunities, and energy management initiatives that can be applied to government's building portfolio.

## 2010 Greenhouse Gas Emissions

In 2010, Core government produced 94,494 tonnes CO<sub>2</sub>e from all sources covered by the *Greenhouse Gas Reduction Targets Act*.

In addition to measuring emissions from fleet vehicles, buildings, and paper, Core government is also required to report and offset emissions from business travel.

It was estimated that stationary fugitive emissions from cooling comprise less than 1% of Core government's total emissions and an ongoing effort to collect or estimate emissions from this source is disproportionately onerous. For this reason, emissions from this source have been deemed out-of-scope and have not been included in Core government's total greenhouse gas emissions profile.

## Offsets Applied to Become Carbon Neutral in 2010

In order to become carbon neutral for the 2010 calendar year, Core government invested \$2,323,778 in 92,951 tonnes CO<sub>2</sub>e of carbon offset from [Pacific Carbon Trust](#).

Please note that 1,543 tonnes CO<sub>2</sub>e of emissions from biofuels were reported as part of Core government's greenhouse gas emissions profile in 2010. However, they are not required to be offset as they are carbon neutral under the *Carbon Neutral Government Regulation*.

# Emissions Reduction Activities

## Success Stories

- Actions Taken in 2010
- Looking Ahead (2011-2013)

### > Actions Taken in 2010:

#### **Ministry of Labour, Citizens' Services and Open Government Conserves Energy**

The Ministry of Labour, Citizens' Services and Open Government is responsible for policies, programs and partnering with service contractors to deliver energy management initiatives that are applied to government's building portfolio. The following is a list of initiatives and results tied to the ministry's conservation strategy.

- A portfolio-wide account of energy consumption per square meter (Building Energy Performance Index) has been established. Preliminary estimates demonstrate that, while energy intensity based on raw consumption increased between 2009 and 2010 by approximately 1.8 per cent, when variations in weather conditions were considered, energy performance actually improved by approximately 2 per cent year over year.
- Building on previous investments in buildings, government completed \$1.8 million worth of efficiency projects in 2010. The five projects generated approximately \$464,000 and 28,700 GJ in annual savings.
- Five additional energy efficiency projects were begun in 2010. The projects will cost approximately \$800,000 and will generate annual cost savings of \$140,000 and approximately 10,000 GJ in energy savings.
- A commitment was made in 2009 to virtualize 65 per cent of its servers over 5 years, yielding substantial space and energy savings.

*“While climate change presents us with a tremendous challenge, the benefits of early decisive action far outweigh the economic costs of not acting. It also presents us with exciting new opportunities. It encourages efficiency, technological and social development, and ever greater collaboration. The Ministry looks forward to continuing our work on climate action and providing sustainability for future generations.”*

*- Lori Wanamaker, Deputy Minister,  
Public Safety and Solicitor General*

## **Green Teams Collaborate Across Government**

In 2010, Core Government's green teams collaborated to focus on an annual campaign of initiatives meant to engage their colleagues in easy actions that they can take at work and potentially at home. The campaign, which earned the green teams a Premier's Award for Cross-Government Integration, included the following:

- *Spring Greening* – The week of Earth Day, employees were asked to return unused office supplies (and in many cases larger IT equipment and furniture) for re-use. In 2010, 11 agencies collected 17,778 pounds of supplies. Going forward, the plan is to attribute a cost savings to supplies returned and support this with a sustainable purchasing strategy.
- *Target: Green Streets* – Held in September, this challenges staff to commute actively at least one day per week (including weekends). An online tool was developed to make it easy to sign up, track progress and report out on results. Over 2000 public service employees participated in 2010, saving over four tonnes of GHGs.
- *Hibernation Challenge* – In November, green teams asked staff to pledge to ten easy energy conservation actions such as turning off lights or wearing a sweater. 2061 staff signed up and committed to 15,218 energy-saving tasks. Staff was engaged through videos, posters and fun reminders.

## **Sustainable Procurement Policy Adopted by Ministry of Environment**

In February 2010, the Ministry of Environment (MoE) adopted a ministry-wide Sustainable Procurement Policy that addresses office products under \$5,000, travel and meetings. The policy directs staff to make sustainable purchasing decisions. Since adopting the policy, 90 per cent of all purchases by MoE headquarters' have been "Green Leaf" products from the government's distribution centre (compared to 17 per cent in 2008/09). The ministry has been successful in part because it is not just changing what it buys, but how it buys. Reducing consumption and reusing is a big part of that.

## **BC Public Service Agency Holds Virtual Conference**

On May 13, 2010, the BC Public Service Agency delivered an all-agency virtual teleconference involving 385 staff across five cities and 22 sites around B.C. The conference also involved a site in Montreal, a keynote speaker presenting virtually from Ontario and another from the United States. The head of the agency was interested in exploring new innovative ways to deliver a conference.

"The BC Public Service Agency expanded its climate action efforts in 2010 by encouraging a greater use of technology in everyday business. We believe that collaboration software such as LiveMeeting helps us with customer service excellence as it maintains our relationship with clients," said Lynda Tarras, head of the BC Public Service Agency.

*"The Ministry of Social Development is proud to have supported government and staff efforts in becoming carbon neutral in 2010. Over the past two years, the ministry has seen a 63% reduction in business travel and a 32% reduction in paper use."*

*- Mark Sieben, Deputy Minister,  
Social Development*

### **Ministry of Transportation Reduces Emissions through Fleet "Right Sizing"**

The Ministry of Transportation and Infrastructure continues work on multiyear initiatives to ensure the most appropriate technologies are being used in response to vehicle requirements: for example, upgrading to hybrid vehicles for urban and non-hauling purposes, and to bi-fuel and bio-diesel vehicles for highway and hauling purposes. Since 2004, the Ministry has replaced 30% of half-tonne trucks with quarter-tonne trucks and hybrids and has reduced the number of large Sport Utility Vehicles by 20% (replacing these with mid-sized cars).

Over the next year, the Ministry will replace 34 large SUVs with pick-up trucks and will achieve its target of having 18% of its fleet comprised of hybrid vehicles.

### **Ministry of Agriculture Automates Lighting**

The Ministry of Agriculture delivered a project focused on reducing unnecessary power consumption - saving both carbon and money. The lighting control system at their Victoria office previously left lights on all night unless they were manually turned off. To fix this, a computer control now turns off all lights at regular intervals each weekday. Turning the lights off on all five floors over 52 weekends equals savings of \$7,700 per year.

### **Office of the Auditor General Staff Divert Waste**

The Office of the Auditor General engaged in a climate action project in 2010 aimed both at reducing their own emissions, as well as promoting behaviour change in other organisations. Working with their landlord, they rolled out a recycling and composting program to their whole building.

## **> Looking Ahead (2011-2013):**

### **Ministry of Environment Challenges Others on Sustainable Procurement**

With the support of the Ministry of Labour, Citizens' Services and Open Government's Deputy Minister, the Ministry of Environment's Deputy Minister challenged other B.C. Government ministries to "meet or beat" their 90 per cent green purchasing achievement without increasing their spending budget. Participants will sign onto the challenge at the Distribution Centre's website and results and lessons-learned will be shared at the end of the year.

"At MoE, we have a vision for a sustainable organization that 'walks the talk.' To help fulfill this, we are changing the way we use office products, reducing cost, carbon and waste," said Cairine MacDonald, Deputy Minister of Environment.

*"In conjunction with the Climate Action Secretariat, the Ministry plans to provide information sessions to employees on sustainable behaviours at the workplace. The presentations will focus on habitual behaviours that have an opportunity for transformational change leading to energy conservation actions and reducing carbon emissions. This initiative is another step we are taking to further raise awareness of our responsibility towards environmental stewardship."*

*- Michael MacDougall, Chief Operating Officer,  
Ministry of Health*

### **“Power of 10” Targets Energy-Efficiency in the Workplace**

A multi-ministry pilot called the Power of Ten is currently being led by Shared Services BC and B.C. Government green teams. The pilot involves nine buildings that accommodate a total of 3,041 employees. Building energy use will be monitored using real-time metering technology where available and, after weather variation and operational efficiencies are accounted for, the impact of changes in employee behaviour will be calculated and used to inform energy-saving initiatives across government going forward.

### **Ministry of Education’s “Papercuts” Aims to Eliminate Paper forms by 2013**

The Ministry of Education’s “Papercuts” initiative focuses on the reduction, elimination, or transformation to electronic formats of the 50+ paper-based forms managed by the Ministry of Education. Since the project’s launch in May 2010, 5 forms were eliminated, 16 moved from paper to electronic format, and 11 more projects are planned or underway. The results have been significant. For example, the transformation of requests and payment for transcripts to an electronic format contributed to an estimated reduction of 70,000 pages per year

The initiative sets an ambitious goal of eliminating paper forms by 2013, recognizing benefits on five fronts: reducing carbon footprint, saving money, working smarter, increasing data security, and better service to the public.

### **Ministry of Transportation and Infrastructure Moving to LEED Gold Office**

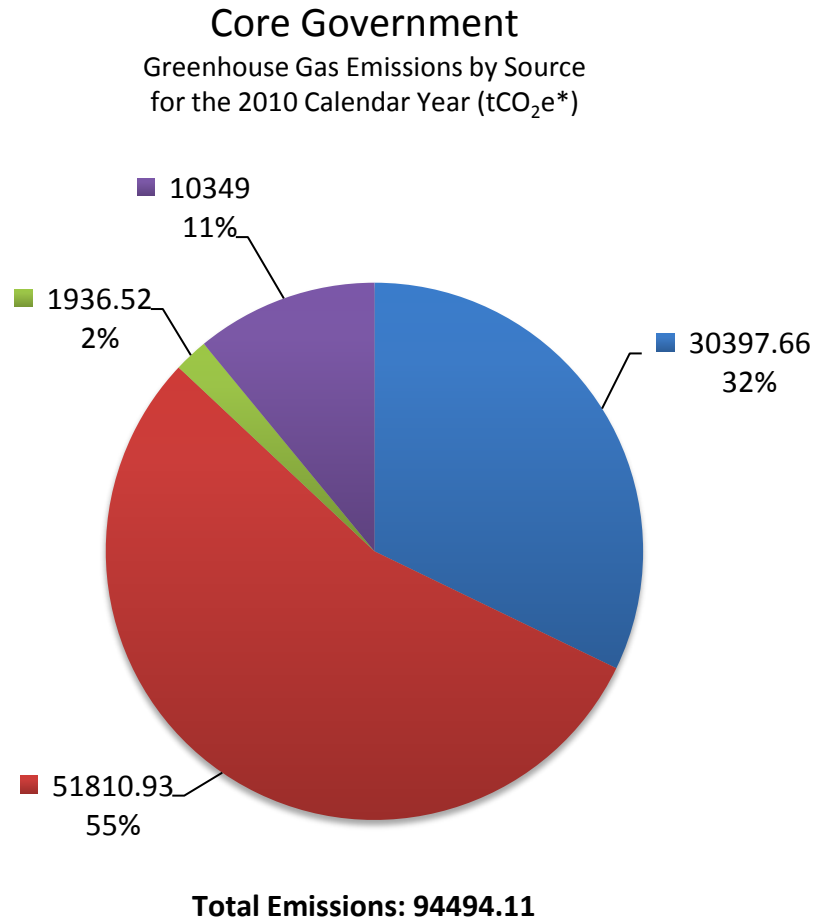
In 2011, the Ministry of Transportation and Infrastructure will be actively involved in the design of an office building targeting LEED Gold to be located in Metro Vancouver. Scheduled for completion in 2012, it will be the office for approximately 240 Ministry staff who are currently based in three older buildings in the area.

### **Ministry of Energy and Mines Commits to “Meeting Green”**

The Ministry of Energy and Mines’ Deputy Minister, Steve Carr, has committed that all meetings and events will follow the B.C. Government’s *Green Meeting Guide*. Key components of a “green meeting” include having zero paper, minimizing the need for travel for the meetings (including a Live Meeting option for all meetings), ensuring all food/beverages ordered for the meetings are organic or local, where possible, no bottled water (providing glasses and filtered water from the kitchen instead), asking that all attendees bring their own plates, cutlery and cups to events, and ensuring all materials used for events are recyclable.

# Core Government - 2010 Carbon Neutral Action Report

To read highlights and a carbon neutral summary for Core government, please visit [www.LiveSmartBC.ca](http://www.LiveSmartBC.ca). For a detailed list of actions by the BC Government's ministries and agencies to reduce greenhouse gas emissions, continue to next page.



- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion and Electricity (Buildings)
- Supplies (Paper)
- Business Travel

## Offsets Applied to Become Carbon Neutral in 2010

Total offsets purchased: **92951.11**. Total offset investment: **\$2,323,777.75**. Emissions which do not require offsets: **1,543** \*\*

\*Tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) is a standard unit of measure in which all types of greenhouse gases are expressed based on their global warming potential relative to carbon dioxide.

\*\* Under the *Carbon Neutral Government Regulation of the Greenhouse Gas Reduction Targets Act*, all emissions from the sources listed above must be reported. As outlined in the regulation, some emissions do not require offsets.

## Core Government - 2010 Carbon Neutral Action Report

### 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<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010  | Steps Planned for 2011 -2013   | Start Year          | End Year                    |
|--|----------------------------|---|--|--|---------------------|-----------------------------|
| <b>Mobile Fuel Combustion (Fleet and other mobile equipment)</b>                         |                            |   |  |  |                     |                             |
| <b>Vehicle fuel efficiency</b>   |                            |   |  |  |                     |                             |
| Replace vehicles with more fuel-efficient models   | Ongoing/In Progress        |   | <p>Starting in 2008, fuel efficiency performance was included as criteria in Invitations to Quote.</p> <p>11 ministries were actively replacing or investigating the replacement of conventional gasoline vehicles with hybrid models - including 3 ministries with some of the largest vehicle fleets. 33% of the Ministry of Children and Family Development's 519 fleet, for example, were hybrid models. At 604, the BC Government's fleet had one of the largest hybrid vehicle fleets in Canada.</p> <p>The Ministry of Social Development reported that 67% of its 105 vehicles are hybrid models.</p> <p>The Ministry of Transportation reported that 61% of its vehicles are not hybrids but are still fuel-efficient models.</p> | <p>Shared Services BC will continue to support ministry acquisitions of hybrid vehicles when a hybrid is available for the target vehicle class.</p> <p>A pilot is underway to test the use of Zero Emission Vehicles (ZEVs) within the BC Government fleet. Five Toyota Priuses have already been converted to plug-in technology. Going forward, the project will see up to 20 additional conversions or ZEV acquisitions.</p> | 2008                | No End Date<br>(Continuous) |
| Replace larger vehicles with smaller models according to fleet "right-sizing" principles | Ongoing/In Progress        |   | <p>Shared Services BC worked with ministry fleet managers to encourage right sizing vehicles in their fleet (matching appropriate vehicle to task).</p> <p>The Ministry of Transportation, for example, replaced two of their pickup trucks with hybrids in 2010. Also in 2010, the Ministry of Finance down-sized their fleet by 9 vehicles.</p>  | Right sizing will continue to be encouraged by SSBC and practiced by fleet managers.   | Started before 1995 | No End Date<br>(Continuous) |
| Perform regular fleet maintenance to improve fuel-efficiency                             | Ongoing/In Progress        |   | <p>Shared Services BC worked with ministry fleet managers to strengthen day-to-day application of sound fleet management practices which can have a substantial impact on the fuel economy and performance of ministry fleets. This includes regular maintenance and tire pressure checks, using only recommended octane fuels wherever practical.</p> <p>All Government vehicles were subject to regular maintenance according to a defined schedule. In addition to this, more than 50% of ministries and agencies with a vehicle fleet reported that they had incorporated monthly tire pressure checks into their vehicle maintenance schedules. This includes 3 of the largest ministry vehicle fleets.</p>                           | Fuel-efficient fleet maintenance practices will continue.  | Started before 1995 | No End Date<br>(Continuous) |



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| Action  | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010  | Steps Planned for 2011 -2013  | Start Year | End Year                    |
|---|----------------------------|---|--|---|------------|-----------------------------|
| Replace small maintenance vehicles with more fuel-efficient models  | Ongoing/In Progress        |   | <p>4 ministries reported action in this area as it applied to small motor vehicles they use as part of their operations (e.g., snowmobiles, ATVs, forklifts).</p> <p>The Ministry of Transportation (TRAN) noted that 75 % of small motor vehicles are fuel-efficient and in 2010 they replaced one snowmobile in 2010 with an efficient model.</p>  | TRAN will take another snowmobile out of service in 2011.   | 2008       | No End Date<br>(Continuous) |
| <b>Behaviour change program</b>   |                            |   |  |   |            |                             |
| Provide fleet driver training to reduce fuel use  | Ongoing/In Progress        |   | <p>Ministry Green Teams encouraged green driving techniques by promoting an on-line interactive application called "Drive Smart" and an "Easy Green Driving Guide". Both tools were produced by the BC Government and are available to all employees through an internal, green website.</p> <p>3 ministries reported that 100% of their drivers are trained - two of which have some of the largest fleets - Ministry of Transportation (TRAN) with 419 vehicles and Ministry of Children and Family Development (MCFD) with 519.</p> <p>Additionally, MCFD created a reduction goal for vehicle fleet fuel consumption and measured it on a regular basis.</p>   | <p>"Drive Smart" and the "Easy Green Driving Guide" will remain available to BC Government employees.</p> <p>In 2010, the Ministry of Attorney General and the Ministry of Public Safety and Solicitor General Green Team worked with the Justice Institute of BC (JIBC) to incorporate fuel-efficient driving into sheriff training by JIBC Pacific Traffic Education Centre (PTEC). Going forward, the training will be implemented at discretion of JIBC PTEC.</p> <p>TRAN will review the use of incentives to reward drivers with the lowest fuel consumption for their vehicle.</p> | 2010       | No End Date<br>(Continuous) |
| Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages) | Ongoing/In Progress        |   | <p>The Province has adopted an Idle Reduction guideline.</p> <p>In an effort to reduce unnecessary vehicle idling, broad based communications were provided to staff including a tool-kit located on an internal website with linkages to Air Quality BC's Idle Free Pledge, a downloadable poster, building signage, and in-vehicle stickers.</p> <p>42 anti-idling signs were erected at 26 Ministry of Transportation (TRAN) facilities across the province, including 3 parking compounds.</p> <p>The Ministry of Finance established an anti-idling policy and informed 100% of their fleet vehicle drivers. Similarly 3 other ministries provided idle-free toolkits to their fleets.</p> <p>3 ministries reported that 100% of their fleet have anti-idling stickers.</p> | <p>The online idle-free tool-kit will remain available to BC Government staff.</p> <p>20 anti-idling signs to be installed at 20 other TRAN facilities in the first 2 months of 2011. Additional anti-idling signs will be installed as new TRAN facilities are acquired.</p>   | 2009       | No End Date<br>(Continuous) |
| Encourage carpooling in fleet vehicles  | Ongoing/In Progress        |   | 12 ministries reported that carpooling was either encouraged or was standard practice. For example, the Ministry of Environment regional offices encouraged carpooling by arranging for staff with the same destination to travel together.  | The BC Government will continue to encourage carpooling in fleet vehicles where applicable.   | 2007       | No End Date<br>(Continuous) |
| Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)               | Ongoing/In Progress        |   | <p>A few ministries were quite active in this area.</p> <p>3 ministries reported the provision of free bus tickets or Sky Train passes for travel too meetings. Other ministries have purchased bicycles which are available to staff.</p>   | Alternatives to fleet vehicle travel will continue to be encouraged.  | 2007       | No End Date<br>(Continuous) |

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| Action  | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010  | Steps Planned for 2011 -2013  | Start Year             | End Year                    |
|---|----------------------------|---|--|---|------------------------|-----------------------------|
| <b>Other Mobile Fuel Combustion Actions</b>                                       |                            |   |  |   |                        |                             |
| Create infrastructure for plug-in hybrid or all electric vehicles                 | In Development             |   | Shared Services BC investigated building infrastructure requirements to support plug-in hybrid or all electric vehicles.   | Outlets will be installed across government in coordination with related building maintenance work.   | 2011                   | No End Date<br>(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        |   | <p>Energy performance of provincial buildings is comparatively evaluated on a building level using a Building Energy Performance Index (BEPI). A BEPI indicates the specific energy usage of a building and is calculated by determining the ratio of total energy used to the total area of the building. This data is normalized for weather conditions, which allows a building's performance to be compared effectively with other buildings, regardless of size or location.</p> <p>In 2010, Shared Services BC (SSBC) worked with the outsourced facilities provider, Workplace Solutions Inc. (BLJC-WSI), to develop a per building cost associated with enlisting in CaGBC's Green Up program and an implementation strategy that aligned with the new funding model as appropriate.</p>   | <p>SSBC's technical staff and BLJC-WSI will continue to use both the average provincial BEPI and individual buildings' BEPIs to identifying buildings that require attention to their energy performance.</p> <p>Going forward, SSBC will continue to work with BLJC-WSI to implement benchmarking.</p>   | Started before<br>1995 | No End Date<br>(Continuous) |
| Reduce office space (square meters) per employee                                  | Ongoing/In Progress        |   | <p>Shared Services BC (SSBC) 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. This work continued through 2010 to strategically leverage opportunities to divest leases when renewal is considered and when appropriate. In particular, ministry tenants were encouraged to identify surplus space that could be divested from the corporate portfolio in order to reduce operating costs and greenhouse gas emissions.</p> <p>4 ministries reported that this was completed in 2010 or earlier. 10 ministries and 3 agencies reported that at the end of 2010 it was still ongoing/in progress.</p> <p>The Ministry of Environment, for example dropped 4500 m2 from its building portfolio in 2010 (a space reduction of 9%). Similarly, the Ministry of Agriculture dropped a 1000 m2 from its building portfolio between April - Dec 2010.</p> | <p>Space rationalization will continue through 2011, with particular attention paid to alternative workplace strategies such as telecommuting, non-territorial workspaces.</p> <p>For example, in 2010 the Ministry of Labour, Citizens' Services and Open Government has initiated an Alternative Workplace Solutions (AWS) Pilot in the fall of 2010 to refurbish the top floor of SSBC's headquarters. Among other benefits, AWS will result in a smaller space footprint per employee. SSBC is considering plans to expand the project to the rest of headquarters and, if successful, the pilot will be considered as a model for future refurbishments to ministry facilities.</p> <p>As another example, the Ministry of Education will be moving out of three buildings and consolidating staff into one existing building and one new space. This consolidation is expected to reduce their overall energy footprint by using space more efficiently and reduce their leasing costs. The Ministry of Transportation also expects to see major reductions in space inventory in 2011 and 2012 as leases expire in more than 10 locations across BC.</p> | 2009                   | No End Date<br>(Continuous) |

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| Action   | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010  | Steps Planned for 2011 -2013  | Start Year | End Year                    |
|--|----------------------------|---|--|---|------------|-----------------------------|
| Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)                                    | Completed in 2010          |   | <p>Real time tracking and reporting of energy consumption in Government facilities has been identified as a key strategy to reduce energy consumption and greenhouse gas emissions across the Provincial real estate portfolio. Strategic pilot projects using a variety of real time metering systems have been implemented in various properties throughout the province, but a cost effective strategy to employ real time metering pervasively throughout the Provincial portfolio has yet to be realized.</p> <p>Results from this initiative were monitored throughout 2010.</p>   |   | 2009       | 2010                        |
| <b>Owned buildings</b>   |                            |   |  |   |            |                             |
| Establish energy performance baseline for owned buildings  | Ongoing/In Progress        |   | <p>Building level energy performance targets were identified as part of Shared Service BC and Workplace Solutions Inc. (BLJC-WSI)'s Energy Management and Conservation Strategy for core government buildings, which was implemented in 2009 to support efforts to address Provincial climate action targets and regulations as they relate to public sector facilities. The established goal Building Energy Performance Indicators (BEPIs) is based on a combination of empirical operator knowledge of building-specific systems and energy accounting data. The strategy provides direction for owned and managed buildings, new building projects and funding. In particular, it addresses:</p> <ul style="list-style-type: none"> <li>a. Optimal energy use and performance by identifying indicators and targets for energy use and GHG reduction</li> <li>b. Demand side management, including conservation actions intended to achieve energy use and GHG reduction targets</li> <li>c. Actions to confirm direction and ensure progress.</li> </ul> <p>In 2010, 50% of buildings owned by BC Government where SSBC pays energy directly to utility companies had BEPI targets.</p> | SSBC will continue to increase the percentage of buildings with BEPI targets where SSBC pays energy directly to utility companies to 67 per cent.   | 2009       | No End Date<br>(Continuous) |
| Register for performance labelling/certification for operations and maintenance of owned buildings (e.g., LEED EB:O&M) | Ongoing/In Progress        |   | <p>In 2010, Shared Services BC (SSBC) was not pursuing LEED EB:O&amp;M certification for any owned buildings. However, SSBC works with the Government's outsourced service provider for property management, Workplace Solutions Inc. (BLJC-WSI), to ensure the effective and continuous optimization of operations and maintenance (O&amp;M) practices in SSBC-managed government facilities.</p> <p>In facilities where SSBC has access to energy consumption information, quarterly reviews of building performance were undertaken at an enterprise level. Adjustments to building performance through O&amp;M activities took place, and capital and major asset maintenance projects were identified and implemented where budget allowed.</p>   | In facilities where SSBC has access to energy consumption information, quarterly reviews will continue to be undertaken, adjustments to building performance will continue to be actioned through O&M activities, and capital and major asset maintenance projects will continue to be identified . | 2009       | No End Date<br>(Continuous) |

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|---|----------------------------|---|---|---|---------------------|-----------------------------|
| Register for performance labelling/certification for commercial interiors of owned buildings (e.g., LEED CI)            | Ongoing/In Progress        |   | On behalf of Shared Services BC and ministry tenants, the province's outsourced service provider for property management, Workplace Solutions Inc. (BLJC-WSI), applied the LEED CI checklist for every construction and renovation project valued over \$80,000. Occasionally, if budget was available and was a priority for ministry tenants, LEED-CI certification was sought for tenant improvements to commercial interior spaces in owned facilities.   | If budget is available and is a priority for ministry tenants, LEED-CI certification will be sought for tenant improvements to commercial interior spaces in BC Government owned facilities.  | 2010                | No End Date<br>(Continuous) |
| Achieve LEED NC Gold certification at a minimum for new construction or major renovations                               | Ongoing/In Progress        |   | <p>Since 2007, LEED-NC Gold certification or better is a requirement for any major renovations or new construction project (in market space &gt;600m2). Construction of the Ministry of Public Safety and Solicitor General's New Women's Unit associated with the Prince George Regional Correction Centre was completed in 2010. This facility is targeting LEED-NC Gold.</p> <p>The Ministry of Transportation (TRAN)'s, Kamloops office (for which funding was approved prior the 2007 mandate) achieved LEED Silver certification in 2010.</p> | <p>Any new facilities or major renovations will be constructed to achieve LEED-NC Gold certification.</p> <p>The Province of British Columbia currently has 13 LEED-NC projects at various stages of construction underway. The Alouette Correctional Centre for Women is scheduled to complete construction in 2011. This facility is targeting LEED-NC Gold.</p> <p>TRAN will partner with Share Services BC to plan, design and construct renovations and to establish green building standards for buildings less than 600m2. This is already occurring for Ministry weigh scales for which a "Green Building Design Specifications and Planning Guide" is being developed for renovations to those facilities.</p> | 2007                | No End Date<br>(Continuous) |
| Incorporate integrated design process into new construction or during renovations of owned buildings                    | Ongoing/In Progress        |   | The inclusion of the Integrated Design Process (IDP) in procurement documents was piloted in 2009 and continued to be considered for procurement activities for new building developments and major renovation projects.  | The application of IDP principles will continued or new building developments and major renovation projects.  | 2007                | No End Date<br>(Continuous) |
| Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions | Ongoing/In Progress        |   | The management of refrigerant systems and associated emissions is an essential service provided by Shared Services BC's outsource service provider for property management, Workplace Solutions Inc. (BLJC-WSI), in accordance with laws and regulations. As required, precautions were taken to mitigate emissions, and emissions were reported per regulatory requirements.   | The management of refrigerant systems will continue to comply with Provincial regulation.   | Started before 1995 | No End Date<br>(Continuous) |

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| Action   | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010   | Steps Planned for 2011 -2013  | Start Year          | End Year                 |
|--|----------------------------|---|---|---|---------------------|--------------------------|
| Complete energy retrofits on existing, owned buildings     | Ongoing/In Progress        |   | <p>On behalf of ministry tenants, Shared Services BC (SSBC) successfully applied for retrofit funding through the Public Sector Energy Conservation Agreement to advance energy efficiency projects at 5 buildings in 2010. An estimated 7450 GJ/2,070,000 kWh of energy reductions are targeted and a significant amount of associated greenhouse gas emissions will be avoided as a result of these retrofits.</p> <p>In addition to building retrofits, SSBC and Government's outsource service provider for property management, Workplace Solutions Inc. (BLJC-WSI), undertook annual Major Asset Maintenance (MAM) to ensure the optimal performance of base building systems, including mechanical, lighting, and envelope. While information related to MAM projects that are driven by energy efficiency was not tracked at an aggregate level, a few ministries individually reported on these MAM projects. For example, the Ministry of Environment installed a more-efficient hot water on demand system for its headquarters' showers in Victoria and the BC Public Service Agency installed energy efficient lighting in their office.</p> <p>The Ministry of Attorney General reported five projects at four different court services locations including an air conditioning replacement for a more efficient unit, a building heating system upgrade, an elevator upgrade, an insulation replacement, and a lighting ballast upgrade. The Ministry of Public Safety and Solicitor General reported two project at correctional a facilities including a heating system upgrade and the replacement of a hot water tank.</p> | <p>On behalf of ministry tenants, SSBC and WSI have successfully applied for funding through the Powersmart Partner Express program to retrofit lighting systems to allow for the use of compact florescent and light-emitting diode (LED) bulbs and to upgrade T12 lamp fixtures with T8 replacements. The associated projects are expected to be implemented between January - September 2011.</p> <p>The Ministry of Advanced Education will install weather stripping on heritage windows at St. Ann's Academy to reduce drafts and maintain a more constant temperature, thereby reducing heating needs.</p> <p>A Ministry of Attorney General court services branch building in Surrey is planning on replacing the membrane on a skylight which will reduce the heating needs of the building.</p> | Started before 1995 | 2011                     |
| <b>Leased buildings</b>                                    |                            |   |   |   |                     |                          |
| Establish energy performance baseline for leased buildings | Ongoing/In Progress        |   | <p>Building level energy performance targets were identified as part of Shared Service BC (SSBC) and Workplace Solutions Inc. (BLJC-WSI)'s Energy Management and Conservation Strategy for core government buildings, which was implemented in 2009 to support efforts to address Provincial climate action targets and regulations as they relate to public sector facilities. The established goal Building Energy Performance Indicators (BEPis) is based on a combination of empirical operator knowledge of building-specific systems and energy accounting data. The strategy provides direction for leased buildings and funding. In particular, it addresses:</p> <ul style="list-style-type: none"> <li>a. Optimal energy use and performance by identifying indicators and targets for energy use and GHG reduction</li> <li>b. Demand side management, including conservation actions intended to achieve energy use and GHG reduction targets</li> <li>c. Actions to confirm direction and ensure progress.</li> </ul> <p>However, in many cases, SSBC does not pay for energy costs in leased buildings, therefore our ability to establish performance baselines was somewhat inhibited in 2010.</p>  | <p>Energy performance in leased facilities will continue to be reviewed, and tailored improvement plans implemented when and where appropriate and authorized.</p>  | 2009                | No End Date (Continuous) |

## Core Government - 2010 Carbon Neutral Action Report

| Action   | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010   | Steps Planned for 2011 -2013  | Start Year | End Year                    |
|--|----------------------------|---|---|---|------------|-----------------------------|
| Lease space with operations and maintenance performance labelling/certification (e.g., LEED EB:O&M)                | Completed in 2010          |   | <p>A number of factors were considered during lease negotiations for BC Government space. The environmental performance of leased space was addressed where feasible through the use of 'green' lease schedules, which are intended to improve performance regarding conservation of energy and water, waste reduction and recycling, and support of green team activities. While performance labelling and certification of leased space is desirable, other priorities may have taken precedent (such as location, building occupancy costs, unique space programming requirements, etc.) during the selection of a new space or renewing an existing lease.</p> <p>The Ministry of Community, Sport &amp; Cultural Development and the Ministry of Jobs, Tourism, and Innovation jointly completed and submitted a LEED Existing Building: Operation &amp; Maintenance certification application in 2010 for their office at 800 Johnson Street. A rating of LEED-EB:O&amp;M Gold is expected.</p>   |   | 2009       | 2010                        |
| Lease space in buildings with new construction performance labelling/certification (e.g., LEED NC)                 | Completed in 2010          |   | <p>A number of factors were considered during lease negotiations for BC Government space. The environmental performance of leased space was addressed where feasible through the use of 'green' lease schedules, which are intended to improve performance regarding conservation of energy and water, waste reduction and recycling, and support of green team activities. While performance labelling and certification of leased space is desirable, other priorities may have taken precedent (such as location, building occupancy costs, unique space programming requirements, etc.) during the selection of a new space or renewing an existing lease.</p> <p>BC Government's 8 independent agencies (Office of the Auditor General, Elections BC, Information and Privacy Commissioner, Office of the Conflict of Interest Commissioner, Office of the Merit Commissioner, Office of the Ombudsman, Office of the Police Complaint Commissioner, and the Representative for Children and Youth) moved into same building at 947 Fort Street in Victoria on November 1st, 2010. The building is targeting LEED-NC Gold.</p> |   | 2007       | 2010                        |
| Develop a green lease policy that requires green features to conserve energy be included in all lease negotiations | Ongoing/In Progress        |   | <p>A significant number of Government's building portfolio is leased space. SSBC undertook 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. These schedules were considered during the negotiation of new leases and lease renewals.</p>  | <p>Green lease performance will continue to be an area of focus during the 2011-2013 period, and will be incorporated into the development of a Real Estate Strategy for government's building portfolio.</p> | 2009       | No End Date<br>(Continuous) |
| <b>IT power management</b>   |                            |   |   |   |            |                             |

## Core Government - 2010 Carbon Neutral Action Report

| Action  | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010  | Steps Planned for 2011 -2013   | Start Year | End Year                    |
|---|----------------------------|---|--|--|------------|-----------------------------|
| Install power management software which shuts down computers outside of regular business hours  | Ongoing/In Progress        |   | Since July 2008, Shared Services BC has implemented a desktop power management program which has resulted in 10 million kilowatt hours of savings per year. During 2010, electricity savings from workstation power management approximated 30% to 40% (relative to the July 2008 benchmark) and resulted in \$516,000 (12 x 43,000) of savings.   | All new workstations will be subject to the same power management settings.  | 2008       | No End Date<br>(Continuous) |
| Implement server virtualization   | Ongoing/In Progress        |   | In 2009, Shared Services BC made a commitment to virtualize 65% of government servers over 5 years, yielding substantial space and energy savings. Since 2009, in the hosting space, they have transformed 360 servers – 287 were decommissioned; 91 were transformed to virtual and 33 to physical. Of the servers that weren't decommissioned, 75% were transformed to virtual.  | Servers will continue to be virtualized according to the 5-year schedule until 2013.   | 2009       | 2013                        |
| Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices    | Ongoing/In Progress        |   | In 2010, 1,940 multifunction devices (MFDs) were deployed. Each MFD yields potential energy savings of 30% to 75% depending on the equipment they're replacing.<br><br>3 ministries reported that replacements had taken place before 2010. 14 ministries and 2 agencies reported that this was ongoing.<br><br>The Public Service Agency reported that they had completed this action in 2010 by replacing the remainder stand-alone models with multi-function devices. Similarly, the Ministry of Transportation replaced the remaining stand-alone fax and copier machines with MFDs - achieving a 90% reduction in printers, copiers, and/or fax machines since 2008. | MFDs will continue to be deployed across Government.<br><br>Despite already seeing a 30% reduction in printers since 2007, the Ministry of Advanced Education and the Ministry of Education reviewed the printing habits of their staff and developed a strategy for further reducing their printers in 2011 onward. | 2007       | No End Date<br>(Continuous) |
| <b>Appliances and electronic devices</b>  |                            |   |  |  |            |                             |
| Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases | Ongoing/In Progress        |   | A Corporate Supply Agreement (CSA) which Shared Services BC negotiated on behalf of core government and to facilitate the purchase of energy efficient refrigerators was still in effect in 2010.<br><br>Generally, most ministries and agencies reported that they have a policy in place to replace refrigerators with energy star models on an as needed basis.<br><br>Two ministries and one agency reported that more than 80% of their refrigerators are ENERGY STAR rated.  | All new refrigerator purchases across Government will be ENERGY STAR-rated.  | 2008       | No End Date<br>(Continuous) |

## Core Government - 2010 Carbon Neutral Action Report

| Action   | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010  | Steps Planned for 2011 -2013  | Start Year | End Year                    |
|--|----------------------------|---|--|---|------------|-----------------------------|
| Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases           | Ongoing/In Progress        |   | <p>13 ministries and 3 agencies reported that this action was ongoing. Most noted that although there is no formal policy, most new appliances and electronic devices are ENERGY STAR rated.</p> <p>Two ministries and 1 agency reported that more than 95% of their television monitors are ENERGY STAR rated.</p> <p>The Ministry of Environment's Sustainable Procurement Policy encourages the purchase of energy-efficient appliances. Similarly, this was part of the purchasing policy for the former Public Affairs Bureau. 100% of were ENERGY STAR rated models.</p>   | <p>Future purchases of appliances and electronic devices by the Ministry of Environment will comply with their Sustainable Procurement Policy. Working with SSBC, the Ministry will encourage other ministries to develop similar policies and source ENERGY STAR models for future purchases.</p>  | 2008       | No End Date<br>(Continuous) |
| Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases | Ongoing/In Progress        |   | <p>3 ministries completed this action in 2010 or earlier. 14 ministries and 2 agencies reported this as an ongoing initiative.</p>   | <p>Ministries will continue to replace lighting with more efficient models.</p>   | 2008       | No End Date<br>(Continuous) |
| <b>Behaviour change program</b>  |                            |   |  |   |            |                             |
| Help staff reduce personal energy use through "workstation tune-ups"   | Ongoing/In Progress        |   | <p>The workstation tune-up was a key Green Team initiative in 2008 and 2009 across the BC Government with the support of an online tool developed by BC Hydro. The tool was updated in 2010.</p> <p>11 ministries and 2 agencies reported that this was an ongoing initiative.</p> <p>The former Ministry of Energy and Mines and Petroleum Resources, which first developed the workstation tune-up initiative, provided workstation tune-ups to other ministries located in their headquarter office building during the month of May.</p> <p>70% of the former Public Affairs Bureau completed the workstation tune-up in 2010 as it was a key focus of their Green Team Outreach Strategy.</p> | <p>The updated online workstation tune-up tool will be made available to BC Government employees on an internal website. Green Teams will continue to promote its usage.</p> <p>The most impactful energy saving behaviours from the workstation tune-up tool will be promoted through a year-long, multi-ministry Pilot called the Power of Ten. Led by Shared Services BC and BC Government Green Teams, the Pilot involves nine buildings that accommodate nine ministries and a total of 3041 employees.</p> <p>The Ministry of Aboriginal Relations and Reconciliation will host "lunch and learns" or workshops to educate staff on workstation tune-ups.</p> | 2008       | No End Date<br>(Continuous) |
| Ask staff to unplug electrical equipment or switch off power bars when not in use  | Ongoing/In Progress        |   | <p>In December 2010, the BC Government Green Teams launched an employee engagement initiative called the "Hibernation Challenge" in which staff were encouraged to adopt energy-saving behaviours during the coldest and darkest days of the year by taking on between 1 and 10 tasks.</p> <p>During the three-week initiative, 2061 staff from all BC Government ministries signed up and committed to a total of 15,218 energy-saving tasks.</p> <p>Reducing phantom power load by unplugging electrical equipment or switching off power bars was one of the behaviours encouraged. 1,196 employees committed to this task.</p>   | <p>The BC Government Green Teams will update and continue to use the annual Hibernation Challenge as a way to motivate energy-saving behaviours in the office.</p> <p>Up to 500 power bars will be distributed to the Power of Ten Pilot participating ministries in the spring of 2011 to encourage this behaviour.</p> <p>The Government Communications and Public Engagement agency purchased Smart Strip power bars and will continue to distribute them to staff in 2011.</p>  | 2007       | No End Date<br>(Continuous) |



## Core Government - 2010 Carbon Neutral Action Report

| Action   | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) |  | Steps Taken in 2010  | Steps Planned for 2011 -2013   | Start Year | End Year                    |
|--|----------------------------|---|--|--|--|------------|-----------------------------|
| Ask staff to close blinds at end of work day to reduce heating/cooling demands                       | Ongoing/In Progress        |   |  | <p>This was one of tasks of the Hibernation Challenge. 1,444 employees committed to this task.</p> <p>15 ministries and 2 agencies reported that this was either completed in 2010 or an ongoing initiative. Most commonly, this action was encouraged through e-mail reminders or green tips on employee websites or newsletters.</p>   | <p>This action will be encouraged in future cross-Government Green Team initiatives including the annual Hibernation Challenge and the 2011 Power of Ten Pilot. 3041 employees in nine Power of Ten buildings will be given more direction on closing blinds seasonally and according to their north-south/east-west orientation.</p>  | 2007       | No End Date<br>(Continuous) |
| Provide tips to staff on saving energy in the office while working outside of regular business hours | Ongoing/In Progress        |   |  | <p>An Easy Green Guide on this topic was available to BC Government employees on an internal website.</p> <p>This was also one of tasks of the Hibernation Challenge. 1,482 employees committed to this task.</p>  | <p>This action will be encouraged in future cross-Government Green Team initiatives including the annual Hibernation Challenge and the 2011 Power of Ten Pilot. The 3041 employees in the nine Power of Ten buildings will be provided with specific "after-hours" guidelines to ensure they leave the lowest energy footprint possible in their respective building.</p> <p>In future years, the Power of Ten will expand to more buildings, and so will the production of building-specific guidelines to maximize energy efficiencies and account for variation with respect to the occupant controls in each building.</p> | 2007       | No End Date<br>(Continuous) |
| Encourage use of stairs instead of elevators   | Ongoing/In Progress        |   |  | <p>From May 17-21, 2010 - Ministry of Finance challenged other agencies to a "Take the Stairs Challenge". 19 ministries and agencies participated.</p> <p>Signs located near the elevator and stairwells encouraged staff to take the stairs and save energy.</p>  | <p>This action will be encouraged in future cross-Government Green Team initiatives.</p>   | 2010       | No End Date<br>(Continuous) |
| Provide reminders for turning off lights (e.g., signs, stickers, messages)                           | Ongoing/In Progress        |   |  | <p>The most popular task that staff committed to during the Hibernation Challenge was: "I'll turn off the lights when I'm the last to leave a room, or if I notice an empty room with lights on." 1,941 employees committed to this task.</p>  | <p>This action will be encouraged in future cross-Government Green Team initiatives. Permanent signage and prompts will be posted and/or maintained in the nine buildings participating in the Power of Ten Pilot. The signage is useful for the 3041 employees in those buildings, as well as their visitors.</p>   | 2007       | No End Date<br>(Continuous) |
| <b>Other Stationary Fuel Combustion and Electricity Actions</b>                                      |                            |   |  |  |  |            |                             |
| Include GHG emissions reduction as an environmental stewardship priority                             | Ongoing/In Progress        |   |  | <p>Shared Services BC includes energy management and GHG emissions reduction as a component of their ISO 14001:2004 registered Environmental Management System. Objectives are:</p> <ol style="list-style-type: none"> <li>1. To establish effective and required performance measurements and reporting mechanisms of energy use and greenhouse gas emission reductions.</li> <li>2. To optimize energy use through standardized operational best practices.</li> <li>3. To execute demand side management, including tenant conservation actions and infrastructure improvements intended to achieve energy use and GHG reduction targets.</li> <li>4. To explore, pursue and implement clean power supply opportunities that align with government priorities.</li> </ol> | <p>The BC Government will continue its registration of Environmental Management System to ISO 14001:2004 standard</p>  | 2010       | No End Date<br>(Continuous) |
| Install low-flow showerheads to conserve hot water   | Completed in 2010          |   |  | <p>The former Ministry of Energy and Mines and Petroleum resources replaced all showerheads in its office change rooms with water-efficient models to save on hot water usage.</p>   |  | 2010       | 2010                        |

## Core Government - 2010 Carbon Neutral Action Report

| Action   | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010   | Steps Planned for 2011 -2013   | Start Year | End Year                    |
|--|----------------------------|---|---|--|------------|-----------------------------|
| Encourage staff to wear an extra layer of clothing at work instead of turning up their personal thermostat or bringing as space heater | Ongoing/In Progress        |   | <p>This was also one of tasks of the Hibernation Challenge. 1,482 employees committed to this task.</p> <p>12 ministries and 2 agencies reported ongoing action in this area, mostly through tips provided by Green Teams.</p>  | <p>BC Government Green Teams promoted wearing a sweater during WWF's "National Sweater Day" on February 17.</p> <p>The Ministry of Environment went one step further and reduced the average temperature for the one day event in both of its Victoria office locations.</p>   | 2010       | No End Date<br>(Continuous) |
| <b>Supplies (Paper)</b>  |                            |   |   |  |            |                             |
| <b>Paper Type</b>  |                            |   |   |  |            |                             |
| Purchase 30% post-consumer recycled paper  | Ongoing/In Progress        |   | <p>The BC Government's central supply distribution center in Victoria offered a wide array of copy paper (e.g. 8.5 x 11 and 8.5 x 14 and 11 x 17 - white and colours) with 30% recycled content and paper that is Sustainable Forest Initiative (SFI)-certified.</p> <p>Almost all ministries and agencies asked their purchasing authorities to purchase paper with recycled content. The Ministry of Environment, for example, mandated this practice through its sustainable procurement policy. Those that had not started purchasing paper with 100% recycled content were encouraging the purchase of 30% recycled content, at minimum.</p> <p>Some ministries noted that 11 x 17 sized paper purchased contained only 30% post-consumer recycled content because of the limited availability this format with 100% recycled content, The former Ministry of Energy, Mines and Petroleum Resources, for example, said that 100% of is 11 x 17 sized paper was of this type.</p> | <p>The BC Government's central supply distribution center in Victoria will continue to offer copy paper with 30% recycled content.</p> <p>The BC Government will continue to encourage shift from virgin paper to at least 30% for sizes larger than 8.5 x 11.</p>   | 2007       | No End Date<br>(Continuous) |
| Purchase 100% post-consumer recycled paper   | Ongoing/In Progress        |   | <p>The BC Government's central supply distribution center in Victoria offered various formats of copy paper with 100% recycled content (e.g. white or 3-hole punched 8.5 x 11 and 8.5 x 14).</p> <p>All ministries and agencies reported that this action was ongoing or in development and 3 ministries and 1 agency reported that 90% or more of their standard 8.5 x 11 copy paper contained 100% recycled content.</p> <p>In 2010, the former Public Affairs Bureau eliminated the production of paper copies of daily news clips and switched from 30% recycled-content paper to 100% recycled-content paper. This lead to a reduction in paper-related emissions of 60% between 2009 and 2010.</p>  | <p>The BC Government's central supply distribution center in Victoria will continue to offer various formats of paper with 100% recycled content and will pursue other formats of paper with 100% recycled content as they become available through distributors.</p> <p>The Ministry of Labour, Citizens' Services and Open Government will consider adopting aggressive procurement targets similar to those found in the procurement policy of the Ministry of Environment.</p> | 2007       | No End Date<br>(Continuous) |
| <b>Printer/document settings</b>   |                            |   |   |  |            |                             |

## Core Government - 2010 Carbon Neutral Action Report

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|--|----------------------------|---|--|---|---------------------|-----------------------------|
| Switch networked printers and photocopiers to automatic double-sided                                   | Ongoing/In Progress        |   | <p>Since 2008, Shared Services BC has been proactively working with ministries and enabling auto-duplex on all capable printers at no cost. All multi-function devices (MFDs) deployed in 2010 had auto-duplex applied as a default unless a specific request was made due to special requirements.</p> <p>Almost all ministries and agencies reported that this was either completed prior to 2010 or was an ongoing initiative.</p> <p>5 ministries and 1 agency reported that 95% or more of their network printers had double-sided printing applied as the default setting.</p> | <p>All new MFDs deployed will have auto-duplex applied as a default unless a specific request is made due to special requirements.</p> <p>SSBC will continue to work with ministries who wish to enable auto-duplexing on existing printers.</p>                                    | 2008                | No End Date<br>(Continuous) |
| Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs                | In Development             |   | <p>This cannot be applied on the BC Government's printers directly, so employees were encouraged by Green Teams to change the settings at their own workstations.</p> <p>3 agencies and more than 50% of ministries said that some work had been done in this area, mostly through their Green Team's staff engagement initiatives.</p>  | <p>Green Teams will raise awareness of this workstation setting through the 2011 cross-Government "Great Paper Chase" Green Team Initiative.</p>  | 2008                | No End Date<br>(Continuous) |
| Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.) | In Development             |   | <p>While encouraging the use of the "print and hold" setting, Green Teams also encouraged changing the margin sizes on internal documents.</p>   | <p>The Ministry of Environment will encourage this practice on publicly-released reports in addition to internal documents.</p> <p>Green Teams will investigate the possibility of modifying the Government-wide MS Office configuration to a reduced margin size as a default.</p> | 2008                | No End Date<br>(Continuous) |
| <b>Electronic media in place of paper</b>  |                            |   |  |   |                     |                             |
| Use electronic document library for filing common documents  | Ongoing/In Progress        |   | <p>Network drives are used extensively across government for filing. MS SharePoint and Groove are also used for efficient document-sharing between different work units.</p> <p>The Ministry of Education's "Papercuts" initiative focused on the reduction, elimination or transformation to electronic formats of the 50+ paper-based forms managed by the Ministry of Education - recognizing benefits on 5 fronts: reducing carbon footprint, saving money, working smarter, increasing data security, and better service to the public.</p>                                     | <p>Continue to encourage the efficient use of electronic document filing.</p> <p>The Ministry of Education's "Papercuts" initiative sets an ambitious goal of eliminating paper forms by 2013.</p>  | Started before 1995 | No End Date<br>(Continuous) |
| <b>Behaviour change program</b>  |                            |   |  |   |                     |                             |

## Core Government - 2010 Carbon Neutral Action Report

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|--|----------------------------|---|---|--|---------------------|-----------------------------|
| Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.) | Ongoing/In Progress        |   | <p>All ministries reported that this was an ongoing initiative. A few, such as the former Ministry of Tourism, Trade, and Investment held lunch and learn sessions on the use of Microsoft collaboration tools such as Groove, Live Meeting, and Office Communicator.</p> <p>7 ministries and 1 agency reported that 20% or more of their staff had received training. At 78%, the Ministry of Education had reported the highest percentage.</p> <p>The total number of Groove users across the BC Government was 6810 with an average of 875 active users per month. Each Groove workspace had an average of 7.84 users.</p>  | <p>The Ministry of Advanced Education will offer internal training sessions to staff on a two-month rotation.</p> <p>The Ministry of Jobs, Tourism and Innovation held a lunch and learn during Earth Week 2011 on SharePoint and other types of collaborative software as part of a "paperless office" theme day.</p> | 2009                | No End Date<br>(Continuous) |
| Encourage staff to hold paperless meetings or presentations (i.e., no handouts)                  | Ongoing/In Progress        |   | <p>Two ministries reported they were developing initiatives around this action while 14 ministries and 3 agencies reported that this action was ongoing.</p> <p>In 2010, the BC Public Service Agency Executive lead by example by holding "paperless" meetings through the use of Groove.</p>  | Green Teams will continue to encourage paperless meetings and presentations through the 2011 cross-Government "Great Paper Chase" Green Team Initiative.   | 2007                | No End Date<br>(Continuous) |
| Encourage re-use of scrap paper  | Ongoing/In Progress        |   | <p>Over 50% of ministries reported action in this area.</p> <p>As part of the office consolidation project early 2010, the former Ministry of Energy and Mines and Petroleum Resources Green Team encouraged paper re-use through by creating a "Green Move Checklist". Re-use was enabled by placing boxes for scrap paper by most major print stations. Encouraging paper re-use was included in staff orientation materials.</p> <p>The Ministry of Finance Green Team created and distributed paper notebooks made out of paper that had only been used on one side and ran a pilot project dedicating one printer drawer to paper that had only been used on one side.</p> | Encourage paper reuse through the 2011 cross-Government "Great Paper Chase" Green Team Initiative.   | 2007                | No End Date<br>(Continuous) |
| <b>Other Paper Supplies Actions</b>  |                            |   |   |  |                     |                             |
| Encourage efficient use of paper as standard procedure in printing services                      | Ongoing/In Progress        |   | <p>Queen's Printer (QP) provides both publishing and printing services to the BC Government and the broader public sector.</p> <p>QP engaged in upfront consultation with their clients to ensure all communication requirements were met while achieving the most efficient use of paper-based materials. Optimal paper selection reduced the weight for shipping, and right sizing raw paper product reduces waste in the print house.</p>  | QP will continue with its paper-efficiency consultations with clients.   | Started before 1995 | No End Date<br>(Continuous) |
| <b>Business Travel</b>   |                            |   |   |  |                     |                             |
| <b>Policy and budgeting</b>  |                            |   |   |  |                     |                             |

## Core Government - 2010 Carbon Neutral Action Report

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|--|----------------------------|---|--|---|------------|-----------------------------|
| Create a low-carbon travel policy or travel reduction goal               | Ongoing/In Progress        |   | <p>8 ministries and 1 agency reported that action was taken in 2010 or was ongoing. 5 ministries reported that this action was in development.</p> <p>The Ministry of Environment passed a Sustainable Procurement Policy which encourages staff to achieve the lowest carbon emissions possible while travelling, by assessing method of travel and accommodation.</p> <p>Similarly, as part of its Green Team Outreach Strategy, the former Public Affairs Bureau initiated a travel policy and in 2010, 75% of their staff booked a green hotel for accommodation.</p> <p>The Ministry of Children and Family Development created a business travel emissions reduction goal and measured reductions on a regular basis.</p>  | Additional ministries, such as the Ministry of Labour, Citizens' Services, and Open Government are looking to develop a low carbon travel policy.   | 2007       | No End Date<br>(Continuous) |
| <b>Virtual meeting technology</b>  |                            |   |  |   |            |                             |
| Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.) | Ongoing/In Progress        |   | <p>Starting in 2009, Shared Services BC rolled out desktop collaboration tools to more than 36,000 workstations across core government (e.g., LiveMeeting, instant messaging, peer-to-peer file sharing). Monitoring statistics show that between early 2010 and late 2010, a 33 - 50% usage increase was seen for a typical peak hour (from 40 - 60 simultaneous web conferences in early 2010 to 60 - 80 simultaneous web conferences in late 2010).</p> <p>A service that allows clients from outside of the BC Government to attend Live Meeting web-conferences without the need to install special software has also been in place since 2008. A significant usage increase was seen between 2009 and 2010. Presenters used the service 11% more in 2010 while audience participation increased 54% meaning that more people were connecting into the meetings virtually than in 2009.</p> | Web-conferencing software will remain available to BC Government staff and will be upgraded as the technology improves.   | 2008       | No End Date<br>(Continuous) |
| Make desktop web-cameras available to staff                              | Ongoing/In Progress        |   | <p>16 ministries and 2 agencies reported action in this area. 4 of those ministries and one agency said that 100% of their staff had access to desktop web cameras. Ministry of Education, for example, had one webcam available for every 3 workstations. These were shared amongst their staff.</p> <p>The Ministry of Agriculture piloted their usage to see if availability of webcams encouraged Live Meeting use.</p>  | The Ministry of Jobs, Tourism and Innovation and the Ministry of Sport, Tourism, and Cultural Development are planning to install desktop web cameras on all employees' workstations during 2012. | 2008       | No End Date<br>(Continuous) |

## Core Government - 2010 Carbon Neutral Action Report

| Action   | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010   | Steps Planned for 2011 -2013   | Start Year | End Year                    |
|--|----------------------------|---|---|--|------------|-----------------------------|
| Install video-conferencing units in meeting rooms or provide mobile video-conferencing units | Ongoing/In Progress        |   | <p>10 ministries and 2 agencies reported that this was complete in 2010 or earlier, while almost all the remaining ministries said this action was ongoing/in progress.</p> <p>4 ministries and one agency reported that 100% of their staff had access to video-conferencing equipment for meetings.</p> <p>Based on the uptake seen in other ministries in previous years, the Ministry of Environment purchased 3 Roundtable conference web-cams which could be signed out by staff in Victoria.</p> <p>In late November 2010, Shared Services BC launched a pilot of Telepresence technology in 4 sites (2 in Victoria, 2 in Vancouver). These Telepresence sites are slated for use by senior government staff (Assistant Deputy Ministers and above).</p>   | For the telepresence sites, usage will tracked to evaluate performance, travel costs avoided and impact on GHG emissions.  | 2007       | No End Date<br>(Continuous) |
| <b>Behaviour change program</b>  |                            |   |   |  |            |                             |
| Train staff in web-conferencing  | Ongoing/In Progress        |   | <p>In partnership with Microsoft, Shared Services BC offered Government-wide training that involved group training, online coaches and a train-the-trainer "Passport" program that encouraged volunteer trainers to increase their number of trainees and accumulate passport-style stamps.</p> <p>The Ministry of Attorney General and the Ministry of Public Safety and Solicitor General reported that several hundred of their staff attended Live Meeting training sessions.</p> <p>The Ministry of Health raised the profile of Live Meeting with a series of Live Meeting Challenges, where participants learned about the tool, used it to play a fun "green trivia" game, and were directed to further government-sponsored training. Hands-on demonstrations were then offered to further build support and capacity. The final push was to develop Live Meeting "Experts" within the administrative support group, to act as resources for other staff within the Division.</p> <p>Live Meeting usage manuals, developed by the Ministry of Agriculture, were included with the Ministry of Environment Round Table cameras.</p> | SSBC will continue to offer the Passport Program, now called the Virtual Train-the-Trainer Program.  | 2009       | No End Date<br>(Continuous) |
| Train staff in video-conferencing or provide technical support for video-conferencing set-up | Ongoing/In Progress        |   | <p>The former Ministry of Energy and Mines and Petroleum Resources' provided training sessions and created user manuals for the equipment in each video-conferencing room. Similarly, the Ministry of Finance provided instructions and technical support for its video conferencing sites.</p>   | <p>Technical support and training sessions will continue.</p> <p>Green Teams will look into creating an effective video-conferencing booking system for all BC Government staff and provide online access to training resources.</p> | 2008       | No End Date<br>(Continuous) |

## Core Government - 2010 Carbon Neutral Action Report

| Action   | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010   | Steps Planned for 2011 -2013   | Start Year | End Year                    |
|--|----------------------------|---|---|--|------------|-----------------------------|
| Encourage staff to consider virtual attendance/presentation at events where possible | Ongoing/In Progress        |   | <p>16 ministries and 3 agencies reported that this was Ongoing/In Progress.</p> <p>On May 13, 2010, the Public Service Agency delivered an all-Agency virtual teleconference involving 385 staff, in five cities across BC, and 22 site locations. The conference also involved a site in Montreal, a key note speaker presenting virtually from Ontario and another from the United States. The Head of the Agency was interested in exploring new innovative ways to deliver a conference and modeling best practices in terms of the use of collaboration tools and reduced travel.</p>  | <p>BC Government employees will be encouraged to increase their use of Live Meeting and other virtual conferencing technology as it becomes available.</p> <p>The Public Service Agency's HR Transformation includes strategies to transition its courses to elearning, LiveMeeting and other technology to reduce the costs and carbon footprint related to delivering training.</p> <p>In March 2011, the Ministry of Attorney General will begin a series of videoconference sessions where over 120 of our senior leaders from across the province would come together with the goal of building a leadership community and improving communications across all levels the Ministry.</p> | 2007       | No End Date<br>(Continuous) |
| Encourage carpooling to meetings   | Ongoing/In Progress        |   | <p>Most ministries maintain an informal policy to share taxis for local business travel.</p> <p>This practice was encouraged by the Green Teams. For example, the various Ministry of Aboriginal Relations and Reconciliation retreats and events always had a Green Team member participating in the planning of the event to ensure that carpooling, BC Transit and walking are encouraged for staff to get to/from meetings.</p>   | Ministries and Green Teams will continue to promote this practice  | 2007       | No End Date<br>(Continuous) |
| Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)   | Ongoing/In Progress        |   | <p>Various efforts by Green Teams helped raise awareness in this area.</p> <p>The Ministry of Agriculture Green Team, for example, produced "Low Carbon Transportation Options" posters for building lobbies with information about eco-friendly means of travel between buildings in Victoria.</p> <p>The Ministry of Health conducted a "Green Behaviours" survey with their staff and found 12% of staff travel to meetings by car/taxi, 2% use a ministry hybrid and 1% carpool. 64% walk, bike or use public transit and an additional 21% do not travel to meetings.</p> <p>3 ministries reported the provision of free bus tickets or Sky Train passes for travel too meetings. Other ministries have purchased bicycles which are available to staff.</p> | Ministries and Green Teams will continue to promote this practice  | 2007       | No End Date<br>(Continuous) |

## Core Government - 2010 Carbon Neutral Action Report

### 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<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010  | Steps Planned for 2011 -2013  | Start Year | End Year                    |
|---|----------------------------|---|--|---|------------|-----------------------------|
| <b>Education, Awareness, and Engagement</b>   |                            |   |  |   |            |                             |
| <b>Team-building</b>  |                            |   |  |   |            |                             |
| Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement | Ongoing/In Progress        |   | <p>All ministries and agencies reported that they had created Green Teams with endorsement from their Executive, much of which took place in 2007 and 2008.</p> <p>Despite significant staffing/financial pressures some ministries managed to reinvigorate their team in 2010, such as the Ministry of Social Development whose Deputy Minister signed off a decision note to re-establish the ministry's Green Team and the Ministry of Citizens' Services who increased their membership from 44 members to 70 in 2010.</p> <p>Just over one third of ministries reported that they had between 20 and 75 active members on their green teams.</p>  | The BC Government will identify successful approaches to managing and supporting Green Team in the long term and will aim to increase participation across all ministries and agencies. | 2007       | No End Date<br>(Continuous) |
| Provide resources and/or dedicated staff to support teams   | Ongoing/In Progress        |   | <p>The Ministry of Environment's Climate Action Secretariat developed coordinator packages (including posters, e-mail templates, and informational resources) that could be easily used by Green Teams to engage their fellow employees. Each package was centered around 1 of 5 cross-Government green initiatives which took place in 2010.</p> <p>On average, each ministry and agency provides half of a full-time employee to implement Green Team activities among other carbon neutral initiatives in their organization. A few ministries have rotating, full-time co-op students supporting Green Teams.</p> <p>Some teams, such as the Ministry of Citizens' Services Green Team, were given a small budget for their 2010 events and initiatives.</p> | The BC Government will identify successful approaches to managing and supporting Green Teams in the long term and will aim to increase resourcing across all ministries and agencies.   | 2007       | No End Date<br>(Continuous) |
| <b>Awards/Recognition</b>   |                            |   |  |   |            |                             |



## Core Government - 2010 Carbon Neutral Action Report

| Action  | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010   | Steps Planned for 2011 -2013   | Start Year | End Year                    |
|---|----------------------------|---|---|--|------------|-----------------------------|
| Establish a sustainability/green awards or recognition program                  | Ongoing/In Progress        |   | <p>Green Team achievements from 2009 were celebrated in 2010 at the Annual Green Team Summit. All ministries and agencies were eligible. Nominations were evaluated by an award committee and 5 different awards were presented to finalists at the Summit including the "LiveSmart Champion Award for Individuals", the "Leaping Barriers Award", the "Ministry Expansion Award" the "Collaboration Award" and the "Performance Award".</p> <p>Additionally, a few ministries awarded green behaviour individually. For example, the former ministry of Tourism, Trade and Investment and the Ministry of Community Sport and Cultural Development's annual APPLE Awards and the Ministry of Finance's annual APEX Awards both include a category for sustainability/environmentalism. The former Ministry of Energy and Mines and Petroleum Resources and the Ministry of Agriculture also presented awards and/or certificates of recognition to Green Team members and other employees in 2010.</p> | <p>The 2011 Annual Green Team Summit included nominations and awards for 2010 - including "LiveSmart Champion Award for Individuals", the "Resilience Award", the "Supporting Cast Award" the "Performance Award" and the "Golden Footprint Award".</p> <p>The annual summits will continue.</p> | 2008       | No End Date<br>(Continuous) |
| <b>Staff Professional Development</b>   |                            |   |   |  |            |                             |
| Support green professional development (e.g., workshops, conferences, training) | Ongoing/In Progress        |   | <p>9 ministries and 2 agencies reported that this was an ongoing initiative and one ministry reported that this was in development.</p> <p>For example, the former Ministry of Citizens' Services Green Team organized educational training through the Natural Step program. The former Ministry of Energy and Mines and Petroleum Resources supported Green Team members attending the Greening Government Conference hosted by the Province of Ontario.</p> <p>The annual Green Team Summit is was attended by close to 100 employees from across Government and was seen as a key networking/learning opportunity for Green Team members.</p>   | <p>The Ministry of Agriculture Green Team will attempt to make environmental leadership courses available to Ministry members in consultation with the Ministry's Business Improvement Group.</p>  | 2007       | No End Date<br>(Continuous) |

## Core Government - 2010 Carbon Neutral Action Report

| Action  | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010  | Steps Planned for 2011 -2013  | Start Year | End Year                    |
|---|----------------------------|---|--|---|------------|-----------------------------|
| Include green options in employee performance measurement system                      | Ongoing/In Progress        |   | <p>One branch of the Ministry of Education started including green goals in their BC Government Employee Professional Development Plans (EPDPs). Afterward, this practice expanded to all branches. The Green Team provided a list of suggested actions and executives encouraged their staff to include at least one goal. In 2010, 50% of the ministry's employees had a green goal in their EPDP.</p> <p>At the former Ministry of Energy and Mines and Petroleum Resources, an email was sent to staff encouraging them to put a green goal in their EPDP, one of their ADMs blogged about it on the Ministry Intranet site, and the Green Team Lead presented on EPDP Green Goals to each Executive Committee at ministry headquarters. Each executive supported this.</p> <p>At the Ministry of Agriculture, green goals were included in the EPDP framework in 2010.</p> <p>Across the rest of the BC Government there are isolated examples of Green Team members adding green goals to their EPDPs, but the practice is not necessarily widespread.</p> | The Ministry of Energy and Mines will continue to promote EPDP Green Goals as communication for EPDPs goes out.   | 2007       | No End Date<br>(Continuous) |
| <b>Staff awareness/education</b>  |                            |   |  |   |            |                             |
| Provide education to staff about the science of climate change                        | In Development             |   | The Ministry of Environment worked with the Pacific Institute for Climate Solutions in developing a Climate Change 101 online course for BC Public Servants.   | The first module of the Climate Change 101 online course will be piloted in early 2011. The course will eventually become part of the courses offered by the BC Public Service Agency's Learning Center to all employees.   | 2007       | No End Date<br>(Continuous) |
| Provide education to staff about the conservation of water, energy, and raw materials | Ongoing/In Progress        |   | Green Teams across Government raised awareness through lunch and learn presentations and documentary film screenings.  | <p>BC Government Green Teams will continue to be a major source of conservation literature and promotion.</p> <p>The Ministry of Energy and Mines and the Public Service Agency's Learning Centre is currently offering a course to staff on "Clean Energy for your Home, Office and Community".</p> <p>As well, several teams celebrate Earth Day (April 22) each year with educational and awareness activities. For example, the Ministry of Labour, Citizens' Services and Open Government Green Team set up information booths in three Victoria buildings that accommodate over 1200 employees.</p> | 2007       | No End Date<br>(Continuous) |

**Core Government - 2010 Carbon Neutral Action Report**

| Action  | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010  | Steps Planned for 2011 -2013  | Start Year | End Year                    |
|---|----------------------------|---|--|---|------------|-----------------------------|
| Provide green tips on staff website or in newsletters         | Ongoing/In Progress        |   | <p>Numerous articles, tips and links to external articles were posted to BC Government Green Team websites, newsletters, and other communications channels on an ongoing basis. For example, the former Ministry of Citizens' Services Green Team launched a sustainability newsletter in October of last year. The Green Team Newsletter contained global climate change information and local examples of sustainability initiatives.</p> <p>The Ministry of Agriculture's Abbotsford Green Team posted green tips and information about climate change on the 'green board' in the lobby of the building.</p> <p>The Ministry of Attorney General and the Ministry of Public Safety and Solicitor General shared monthly "Green Tips" through e-mail and provided information and resources to learn more about these topics.</p> <p>The former Ministry of Labour's communities Green initiatives and behaviour change campaigns through their "Work and Wellness" newsletter.</p> | <p>Ministries and agencies will continue to post green tips on their intranet sites.</p> <p>The Ministry of Environment's Climate Action Secretariat is looking to improve access to green resources through the Government-wide intranet site.</p> | 2007       | No End Date<br>(Continuous) |
| Provide sustainability education during new staff orientation | Ongoing/In Progress        |   | <p>10 ministries and two agencies reported that this action was either ongoing or was in development.</p> <p>For example, the former Ministry of Energy, Mines and Petroleum Resources Green educate new staff on the recycling program at their head office and web-conferencing tools. They also offered a workstation tune up, if requested.</p> <p>The former Public Affairs Bureau's Human Resources included a link to the Green Team intranet site in the orientation materials.</p>  | <p>The BC Government will look at opportunities to incorporate green training into the Oath Ceremony materials for new employees, reinforcing why we are consistently named as one of "Canada's Greenest Employers".</p>                            | 2007       | No End Date<br>(Continuous) |
| <b>Client/public awareness/education</b>                      |                            |   |  |   |            |                             |

## Core Government - 2010 Carbon Neutral Action Report

| Action   | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010  | Steps Planned for 2011 -2013  | Start Year          | End Year                 |
|--|----------------------------|---|--|---|---------------------|--------------------------|
| Provide education to clients/public about the science of climate change                        | Ongoing/In Progress        |   | <p>As outlined in their annual service plans, it is the role of a number of ministries and agencies to work with external partners and raise British Columbian's awareness of climate change as well as promote opportunities to reduce GHG emissions. For example, at the Ministry of Environment, this is the primary role of the Climate Action Secretariat's "LiveSmart" outreach program.</p> <p>The Ministry of Agriculture worked with the industry-led Climate Action Initiative Committee (CAIC) to educate clients and the public. CAIC has a website and fact sheets, which were made available at various forums and events.</p> <p>The Ministry of Education worked with Wild BC to produce climate change lesson plans &amp; activities for teachers which are now posted on the internet.</p> <p>In cooperation with the BC Road Builders and Heavy Construction Association, the Ministry of Transportation (TRAN) developed best practices guidelines to reduce greenhouse gas emissions in B.C. road building and highway maintenance activities.</p>  | In 2011, TRAN will assess the possibility of developing a Climate Action in Transportation site to provide the public with more information regarding climate action initiatives in transportation and related areas. | Started before 1995 | No End Date (Continuous) |
| Provide education to clients/public about the conservation of water, energy, and raw materials | Ongoing/In Progress        |   | <p>As outlined in their annual service plans, this is the role of a number of ministries and agencies.</p> <p>For example, the former Ministry of Energy and Mines and Petroleum Resources, co-wrote a paper with Pulse Energy on achieving energy savings through behaviour and the use of an energy information system, presented on the paper at an ACEEE Conference in California, and delivered multiple webinars with Pulse Energy to the public on the results of this paper. Further, their Green Team participated in "Bring Your Kids to Work Day" by talking with the kids about what 'green' things they do at home, and what 'green' things we do at work.</p> <p>The Building and Safety Standards Branch of the Ministry of Social Development posted information on the reasons and objectives of the Greening the BC Building Code initiative, including requirements for new buildings to be Solar Hot Water ready, to install high efficiency toilets, to improve energy performance and to use non-potable water for toilet-flushing and sub-surface irrigation.</p> <p>The Ministry of Environment's Water Stewardship Division's "Living Water Smart" outreach program educated British Columbians about water conservation through websites and through public consultation on modernizing the Water Act.</p> | As outlined in their annual service plans, this role will continue for a number of ministries and agencies.   | Started before 1995 | No End Date (Continuous) |

## Core Government - 2010 Carbon Neutral Action Report

| Action   | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010  | Steps Planned for 2011 -2013   | Start Year             | End Year                    |
|--|----------------------------|---|--|--|------------------------|-----------------------------|
| Provide green tips on client/public website or in newsletters  | Ongoing/In Progress        |   | This information appeared on a number of websites including the Ministry of Environments LiveSmartBC.ca website. Further an online community was created and supported by the Climate Action Secretariat in 2010 - encouraging "Climate Action Leaders" from ENGOs, Local Governments, the Public Sector, etc. to share information. The web space relied on innovative social media/used-driven-content software to facilitate sharing and keep the content relevant and fresh.                         | The Ministry of Environment's LiveSmartBC.ca website will continue to provide tips and the "Climate Action Leaders" web space will continue to be supported. | 2008                   | No End Date<br>(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        |   | Shared Services BC's Technical Standards require water efficient fixtures when new developments and major tenant improvements are undertaken in owned government facilities. Fixture performance beyond the levels established in the Technical Standards may have been provided at the request of ministry customers if funding allowed.  | The Technical Standards are periodically updated, when and if new technology and processes emerge and should be considered for a new construction project.   | Started before<br>1995 | No End Date<br>(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 by Shared Services BC (SSBC) was done on a case by case basis to meet both customer programming needs and required codes and standards.   | Potable water management by SSBC will continue to be considered on a case by case basis according to the SSBC's Technical Standards.                         | 2002                   | No End Date<br>(Continuous) |
| Introduce a stormwater management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales)  | Ongoing/In Progress        |   | Stormwater 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 (SSBC)'s Technical Standards require the consideration of indigenous plants and other water reduction strategies where appropriate. Stormwater management and landscaping expectations beyond the levels established in the Technical Standards may have been provided at the request of ministry customers if funding allowed. | Potable water management by SSBC will continue to be considered on a case by case basis according to the SSBC's Technical Standards.                         | 2002                   | No End Date<br>(Continuous) |
| <b>Waste reduction/diversion</b>   |                            |   |  |  |                        |                             |

## Core Government - 2010 Carbon Neutral Action Report

| Action   | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010  | Steps Planned for 2011 -2013   | Start Year             | End Year                    |
|--|----------------------------|---|--|--|------------------------|-----------------------------|
| Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities | Ongoing/In Progress        |   | <p>In partnership with Government's outsourced facilities provider, Workplace Solutions Inc. (BLJC-WSI), Shared Services BC lead the development of a solid waste reduction program in 2009 which includes "hard to recycle" items such as Styrofoam and soft plastic recycling as well as organics composting. Buy-in to the program was at the discretion of ministry customers. In 2010, 9 ministries and 1 agency had implemented the program across various Victoria office buildings with between 4 and 7 streams of recycling/waste diversion. To improve upon the program in 2010, the former Public Affairs Bureau's Graphics Unit replaced all the recycling signage in their kitchens with better visuals and more specific instructions. The Green Team lead then shared these posters with all the cross-government Green Teams.</p> <p>Also in 2010, Green Teams across Government ran an "Earth Day Spring Greening" event to collect and return unused office equipment to Asset Investment Recovery (for reuse in Government or sale on BC Auction) and unused office supplies to ministry supply cabinets. 11 ministries and agencies collected 17,778 pounds of supplies.</p> <p>Green Teams often help establish a "zero waste" goal for BC Government social events. For example, the former Ministry of Energy and Mines and Petroleum Resources ensured the Family BBQ event had all appropriate recycling bins for cooks and attendees and set up a recycling game. At the Public Service Week Luncheon they did not purchase pre-packaged snacks, provided organics, multi, and soft plastic recycling bins and helped the clean up crew dispose of everything appropriately.</p> | The multi-stream recycling program is still offered by BLJC-WSI to ministry tenants who request it. For example, a seven stream enhanced recycling program was implemented by the Ministry of Transportation in early 2011 for their headquarters location. The program serves approximately 1,000 staff from 8 agencies in the Ministry's Headquarters' precinct area.                          | 2009                   | No End Date<br>(Continuous) |
| Implement a hazardous waste reduction and disposal strategy  | Ongoing/In Progress        |   | <p>Shared Services BC maintains an ISO Certified Environmental Management System (EMS). The EMS provides a disposal strategy for hazardous waste in all government facilities. The EMS does not cover smaller items like batteries and compact fluorescent light bulbs (CFLs).</p> <p>Government Green Teams provided information and methods for safely disposing smaller items, including the collection of batteries through BC's Call2Recycle battery recycling program. The Ministry of Agriculture, for example, reported that 33 kg of batteries were collected at of their Victoria offices in 2010.</p>   | <p>On July 1, 2010, Asset Investment Recovery stopped collecting and handling battery recycling for the BC Government because of the introduction of new BC-wide battery recycling stewardship program with Call2Recycle in June.</p> <p>BC Government Green Teams will work with their facilities management units to establish more Call2Recycle drop-off locations in Government offices.</p> | Started before<br>1995 | No End Date<br>(Continuous) |
| <b>Procurement (non-paper supplies)</b>  |                            |   |  |  |                        |                             |

## Core Government - 2010 Carbon Neutral Action Report

| Action   | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010  | Steps Planned for 2011 -2013  | Start Year | End Year                    |
|--|----------------------------|---|--|---|------------|-----------------------------|
| Incorporate minimum recycled content standards into procurement policy for consumable, non-paper supplies (e.g., writing instruments, binders, toner cartridges, etc.) | Ongoing/In Progress        |   | <p>SSBC's centralized office supplier offered more than 600 Eco-logo certified or environmentally preferable products, including re-manufactured toner cartridges, pens with recycled content and refillable ink cartridges, and biodegradable corn plastic mugs and rulers.</p> <p>The Ministry of Environment released a Ministry-wide Sustainable Procurement Policy which addresses office products under \$5,000, travel and meetings and directs staff to make sustainable purchasing decisions. Since the Policy was implemented, 90% of all purchases by Ministry headquarters' have been green products from the Government's distribution center (compared to 17% in 2008/09).</p>   | <p>With the support of the Ministry of Labour, Citizens' Services and Open Government's Deputy Minister, the Ministry of Environment's Deputy Minister challenged other BC Government Ministries to "meet or beat" their 90% green purchasing achievement without increasing their spending budget. Results of the challenge will be tracked throughout 2011.</p> | 2008       | No End Date<br>(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        |   | <p>Across Government many ministries, such as the Ministry of Advanced Education, are purchasing 100% recyclable carpet tile made from recycled content. This procurement practice is consistent with Shared Services BC (SSBC)'s Technical Standards for new development or major renovations.</p> <p>Also, to ensure effective use of Government assets, ministries and agencies will typically look for used office furniture, cubicle dividers, etc. through the BC Government's central asset warehouse.</p> <p>Supported by their Sustainable Procurement Policy, the Ministry of Environment (ENV) put in place an Eco-Chair Purchasing initiative. As a result, 100% of chairs purchased at ENV Headquarters in 2010 have been Cradle-to-Cradle certified. The former Ministry of Energy, Mines and Petroleum Resources also reported the purchase of Cradle-to-Cradle chairs.</p> | <p>The purchasing of 100% recyclable carpet tile made from recycled content will continue as per SSBC Technical Standards for new development or major renovations.</p> <p>The reuse of office furniture, cubicle dividers, etc. through the BC Government's central asset warehouse will continue to be encouraged.</p>  | 1999       | No End Date<br>(Continuous) |
| Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags   | Ongoing/In Progress        |   | <p>In 2009, Shared Services BC's outsource service contractor for property management, Workplace Solutions Inc. (BLJC-WSI), issued a new janitorial contract that specified the usage of Green Seal and/or Ecologo products. This contract was still in place in 2010 and performance was audited by WSI.</p> <p>Among its suite of services, Product Distribution Centre offered janitorial and cleaning products designed to meet most industrial cleaning requirements including EcoLogo certified 70% recycled content garbage and laundry bags, recycled paper towels, and EcoLogo certified biodegradable cleaning products.</p>   | <p>No additional plans to improve janitorial performance beyond the 2009 contract requirements is planned.</p>  | 2009       | No End Date<br>(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                          | Ongoing/In Progress        |   | <p>Under it's Master Services Agreement (MSA) with outsource service provider, Workplace Solutions Inc. (BLJC-WSI) WSI, Shared Services BC required that 80% of waste be diverted from landfills on projects over \$80,000 in the Lower Mainland and Southern Vancouver Island where diversion facilities are available.</p>   | <p>The 80% waste diversion clause under the MSA will continue.</p>  | 2003       | No End Date<br>(Continuous) |

## Core Government - 2010 Carbon Neutral Action Report

| Action  | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010   | Steps Planned for 2011 -2013  | Start Year | End Year                    |
|---|----------------------------|---|---|---|------------|-----------------------------|
| 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. Lifecycle costing and triple bottom line planning services were available for use during project planning and business case development and are employed at the discretion of ministries.   | SSBC's Technical Standards will continue to be applied to major project developments.   | 1999       | No End Date<br>(Continuous) |
| <b>Indoor air quality</b>   |                            |   |   |   |            |                             |
| Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)  | Ongoing/In Progress        |   | <p>A scent-free workplace was promoted by WorkSafeBC and the Occupational Health and Safety Regulation.</p> <p>13 ministries and 3 agencies reported action in this area. The ministry of Education, for example, had sent-free signage up on all floors of their headquarter building in Victoria as did the former Public Affairs Bureau.</p>   | A sent-free workplace will continue to be promoted.   | 2007       | No End Date<br>(Continuous) |
| Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture | Ongoing/In Progress        |   | Shared Services BC's Technical Standards include consideration for reducing volatile organic compounds. Also, VOCs were considered for all projects where LEED certification was pursued. Performance beyond the levels established in the Technical Standards may have been provided at the request of ministries.   | SSBC's Technical Standards, including standards that address volatile organic compounds, will continue to be applied during the 2011-13 reporting period.   | 1999       | No End Date<br>(Continuous) |
| <b>Commuting to and from home</b>   |                            |   |   |   |            |                             |
| Introduce telework/work from home policy  | Ongoing/In Progress        |   | <p>The Government of BC recognizes employee needs for flexibility, having supportive managers/supervisors and building a culture that embraces flexibility.</p> <p>A flexible work options toolkit was available for employees and managers/supervisors across the BC Public Service to initiate and sustain flexible workplaces and included telework policies and forms.</p> <p>The Ministry of Children and Family Development introduced telework/work from home policy in 2010 and continued to expand teleworking arrangements with a focus on cost neutrality and candidate suitability.</p> <p>In the Ministry of Social Development, individual work units investigated the impacts of staff teleworking and of the 'hoteling' program on business operations.</p> | <p>The flexible work options toolkit will remain available to BC Government employees and supervisor support will be encouraged.</p> <p>The Ministry of Labour, Citizens' Services and Open Government plans to initiate a telework pilot in 2011. Though specific targets have not been set or approved at the date of this report, this proposed pilot is widely regarded in the Ministry as a key project that will contribute significantly to the organization's overall sustainability efforts.</p> | 2006       | No End Date<br>(Continuous) |
| Offer staff a compressed work week  | Ongoing/In Progress        |   | <p>The toolkit, mentioned above, contained guidelines, considerations, key steps and the tools and resources needed to successfully implement "flex days" in the BC Public Service.</p> <p>In the Ministry of Education and the Ministry of Advanced Education, 75% of staff had a compressed workweek.</p>   | <p>The flexible work options toolkit will remain available to BC Government employees and supervisor support will be encouraged.</p> <p>One area of the Ministry of Social Development implemented a 4-day compressed work week pilot. Results of the pilot will be reviewed in 2011.</p>   | 2006       | No End Date<br>(Continuous) |



## Core Government - 2010 Carbon Neutral Action Report

| Action   | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010  | Steps Planned for 2011 -2013   | Start Year             | End Year                    |
|--|----------------------------|---|--|--|------------------------|-----------------------------|
| Encourage commuting by foot, bicycle, carpool or public transit                          | Ongoing/In Progress        |   | <p>From September 13, 2010 to October 1, 2010, Green Teams promoted an internal, BC Government initiative called "Target: Green Streets" for the second year in a row. Employees were encouraged to commute by foot, bicycle, carpool or public transit in place traveling alone by vehicle and track the resulting emissions prevention using an online tool developed by Government. Throughout the initiative, staff were encouraged to sign up and participate through videos, blogs, and articles posted on the BC Government intranet site. In 2010, 2036 participants signed up and contributed to a total reduction 4106 kg CO2e. Additionally, 677 employees signed an Idle-Free Pledge.</p> <p>The Ministry of Aboriginal Relations and Reconciliation Green Team provided \$20 rebates to staff who purchased bicycle/walking safety gear.</p> <p>Although the Ministry of Social Development did not officially participate in Target: Green Streets initiative, a recent survey found that up to 78% of staff in some areas use alternative modes to transportation to commute.</p> | The Target Green Streets initiative will continue as a cross-Government Green Team initiative.   | 1995                   | No End Date<br>(Continuous) |
| Provide shower or locker facilities for staff/students who commute by foot or by bicycle | Ongoing/In Progress        |   | <p>Although not a requirement, the provision of showers and locker facilities is a consideration of providing accommodations to ministries by Shared Services BC (SSBC). Tenant improvements associated with the addition of showers and bike locking facilities that were requested and funded by ministries were reasonably considered by Shared Services BC where they could be provided.</p> <p>Roughly 50% of ministries and agencies reported that this action was completed before 2010, while the remaining 50% reported that this was an ongoing initiative.</p> <p>At this point, only some of the BC Government facilities have shower or lockers available to staff and it differs from ministry to ministry/building to building. For example, 60% of Ministry of Advanced Education staff work in a facility with lockers and showers compared to 20% of Ministry of Education staff.</p>  | Tenant improvements associated with the addition of showers and locker facilities will continue to be reasonably considered by SSBC at the request of ministries and agencies. | Started before<br>1995 | No End Date<br>(Continuous) |
| Provide secure bicycle storage   | Ongoing/In Progress        |   | <p>Although not a requirement, the provision of bike storage is a consideration of providing accommodations to ministries by Shared Services BC (SSBC). Tenant improvements associated with the addition of bike storage equipment that were requested and funded by ministries were reasonably considered by Shared Services BC where they could be provided.</p> <p>As with the provision of shower facilities, above, 50% of ministries and agencies reported that this action was completed before 2010, while the remaining 50% reported that this was an ongoing initiative.</p>   | Tenant improvements associated with the addition of bike storage equipment will continue to be reasonably considered by SSBC at the request of ministries and agencies.        | Started before<br>1995 | No End Date<br>(Continuous) |

## Core Government - 2010 Carbon Neutral Action Report

| Action   | Status<br>(as of 12/31/10) | Performance to Date<br>(as of 12/31/10) | Steps Taken in 2010  | Steps Planned for 2011 -2013  | Start Year          | End Year                 |
|--|----------------------------|---|--|---|---------------------|--------------------------|
| Modify parking fees or parking availability for staff/students | Ongoing/In Progress        |   | <p>One ministry, the Ministry of Finance, reported that this action was completed in 2010. They reduced the parking availability to only the Deputy Minister and Assistant Deputy Ministers.</p> <p>9 other ministries reported that this was an ongoing action in 2010. For example, three ministries reported that they had reduced their parking availability by a total of 5 stalls.</p> <p>The Ministry of Jobs, Tourism, and Innovation and the Ministry of Community, Sport and Cultural Development made up to two spots available to employee carpool groups.</p>   | Modifications to parking will continue to be evaluated by ministries and agencies as a cost-saving measure but also to encourage multi-modal commuting to work. | Started before 1995 | No End Date (Continuous) |
| <b>Other Sustainability Actions</b>                            |                            |   |  |   |                     |                          |
| Follow sustainable printing standards                          | Ongoing/In Progress        |   | <p>Queen's Printer (QP) provides both publishing and printing services to Government and the broader public sector and is certified by three forest stewardship associations: Forest Stewardship Council (FSC), Sustainable Forest Initiative (SFI), and Programme for the Endorsement of Forest Certification (PEFC).</p> <p>QP offered a broad range of post-consumer recycled content paper and card stocks, whitened with reduced chlorine options such as elemental chlorine-free or processed chlorine-free.</p> <p>QP used non-toxic, low VOC, and vegetable-based inks. Further, inks were re-used and recycled to avoid waste. In addition, water based glues were available for binding.</p> <p>100% of the materials printed by the former Public Affairs Bureau used paper with recycled content and sustainable printing standards.</p> | QP will continue to practice sustainable printing practices and will make improves as new printing technology becomes available.                                | Started before 1995 | No End Date (Continuous) |