

**Carbon Neutral Action Report**  
**Ministry of Small Business, Technology and Economic Development**

**Executive Summary**

The Ministry of Small Business, Technology and Economic Development (STED) is small with approximately 160 employees divided between Vancouver and Victoria. In 2008, paperless meetings, tele and video conferencing, green procurement, waste management and energy efficiency were the focus of our climate action efforts. We have a fleet comprised of 1 hybrid vehicle and a bicycle. One half of our staff are located in the Jack Davis Building in Victoria, the 6th most energy efficient buildings in ARES portfolio of over 200 buildings. We are challenged to make large economical improvements to much of our operations. However, STED is responsible for or leads many of government's strategic initiatives including the Asia Pacific Initiative (API), the Trade Investments and Labour Mobility Agreement with Alberta (TILMA) and the labour mobility provisions under the Agreement on Internal Trade (AIT). These important international and national economic development files involve necessary frequent and long distance air travel comprising over half of our carbon emissions. In 2009 the Ministry is focusing on becoming proficient in the use of existing and new collaboration tools and technologies through the 2009 U2 Refresh.

**Objectives**

STED lead government in the development of the low carbon economic strategy.

**Part 1: Actions Taken to Reduce Greenhouse Gas Emissions in 2008**

**Overview**

In 2008 STED formed a Ministry Green Team and in collaboration with neighbouring Ministries in the Jack Davis Building in Victoria hosted an Earth day event that reached over 200 staff. We went on to led the implementation of a 7 stream waste management system, the first of its kind in the CRD that will divert over 80% of the building's waste from the landfill and received a SUMMIT award for the program. The Management Services Division at the request of the Green Team replaced bottled water in the Jack Davis Building with purified water delivered at the tap, installed sensors in interior washrooms, lunchrooms, filing and meeting rooms to reduce energy consumption. The Ministry incorporated the government high performance building standard and is seeking LEED Gold Certification for 2 new spaces that were planned and fitted out in 2008. The ministry's carbon footprint is predominantly related to intercity and international travel. The Executive has adopted a strategy of paperless meetings and incorporates teleconferencing, web meetings another collaboration tools. This practice has been extended to the entire Ministry and will be further supported with the rollout of the U2 Refresh in 2009. (underway)

**1.1 Mobile Fuel Combustion**

|  | STED shares a pooled fleet vehicle in Victoria with the Ministry of Energy Mines and Petroleum Resource (MEMPR) |  |  |
|--|---|--|--|
| Action   | Action Taken  | Outcome/Performance Measure                                  | Notes Clarifying Action Taken                                |
| Replaced # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid                         | Complete  | reduced fuel consumption per mile ( miles per litre/ gallon) |  |
| Encouraged use of public transit/active transportation                                   | In Progress   |  | Bus tickets and the Ministry bike are available to all staff |
| Encouraged alternatives to travel in fleet vehicles – bicycles, scooters, electric carts | Complete  |  | Ministry bike  |

**1.2 Stationary fuel combustion and electricity**

|   | Participated in lighting study for Jack Davis Building, installed sensors in all interior spaces to reduce electricity, |  |   |
|---|---|--|---|
| Action  | Action Taken  | Outcome/Performance Measure  | Notes Clarifying Action Taken   |
| Undertaken workstation tune-ups to help staff understand what they can do to reduce personal energy use | In Progress   | energy consumption data  | Planned workstation tune ups (WTU) for STED Staff . WTU will be conducted in 2009 completed.  |
| Supplied power bars – to turn off power to non-essential items when not in use (e.g. phone chargers)    | Complete  | energy consumption data  | completed in 2009   |
| Undertaken Monitor turn-off challenge   | Complete  | energy consumption data  | Implemented monitor turn off for all staff  |
| Replaced # computers with EnergyStar models   | In Progress   | energy consumption data  | Us2 refresh planned for 2009  |
| Asked staff to close blinds daily   |   |  | information provided  |
| Replaced Refrigerators (EnergyStar rated appliance)   | Complete  | reduced energy consumption   | Refrigerators replace October 2007  |
| Installed motion activated lights   | Complete  | reduced energy consumption   | installed motion sensors in interior room, e.g. Washrooms, file, janitor and utility rooms in 1 buildings (Jack Davis Building)   |
| Undertaken lighting retrofit  | Complete  | reduced energy consumption   | participated in EMPR led retrofit   |
| Applied for LEED existing building rating   | Complete  | Superior indoor air quality, expect benefits consistent with superior quality space.<br><br>certification from the CaGBC | Incorporated LEED Gold criteria in planning and implementation for 2 new spaces to be opened in 2009. Leed Gold certification applied for.<br><br>Applied for LEED CI on 2 projects - Asia Pacific Business Center (APBC) in Robson Square and space on Meares St in Victoria |
| Undertaken building energy audit at LOCATION(s)   | Complete  | reduced energy consumption   | Jack Davis Building   |

| 1.3 Supplies   |  |  |   |
|--|--|--|---|
|  | All printers have been set to duplex; all appear purchased is 100% post consumer content i.e. Recycled; All administrative staff participated in sustainable purchasing workshops in recognition of their purchasing power and influence over ministry procurement decisions. Their direct contact with service providers means they are able to make requests and influence service providers and identify service providers who are more aligned with carbon neutrality. |  |   |
| Action   | Action Taken   | Outcome/Performance Measure  | Notes Clarifying Action Taken   |
| Committed to use 100% recycled paper   | Complete   | reduce consumption of virgin paper   |   |
| Initiated automatic double sided printing  | Complete   | reduce paper consumption   |   |
| Committed to hold paperless meetings   | Complete   | reduce paper consumption,<br>lead ministry in the use of collaboration tools | Executive Commitment  |
| Developed document library (online and one printed copy) for large documents       | Complete   |  | SharePoint site   |
| Used collaborative software to edit on-line  | In Progress  |  | Will be completed in 2009 refresh   |
| Used laptops/tablets   | Complete   |  | U2 Refresh for entire ministry completed in 2009  |
| Purchased cradle to cradle goods   | Complete   |  | Trained all Admin staff on sustainable purchasing   |
| Chose "Green" items from Distribution Centre                                       | Complete   |  | Part of Sustainable purchasing training. Conducted Sustainable Purchasing Workshops for all Admin staff in Ministry. DM and ADM of Management Services spoke with participants to convey importance of their role in Ministry procurement |
| 1.4 Travel   |  |  |   |
|  | Live meeting, video conferencing were introduced initially by the green team as an alternative to travel.  |  |   |
| Action   | Action Taken   | Outcome/Performance Measure  | Notes Clarifying Action Taken   |
| Set a X% Travel reduction goal   | In progress  | reduce carbon emission as recorded in SMARTEC                                | Travel is necessary for international and national files. Planned participation in certain files requiring travel was reduced   |
| Trained staff in the use of Live Meeting (or other desktop collaborative software) | In progress  | reduce carbon emission as recorded in SMARTEC                                | Green Team provided staff with training and demonstration opportunities to use collaboration tools. Included full suite of collaboration tools and training in 2009 U2 refresh Planned. Complete in 2009.                                 |
| Installed Video Conferencing facilities  | Complete   |  | Executive teleconferencing and video conferencing part of Ministry toolkit  |

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|  |   |  |   |
|--|---|--|---|
| Initiated Travel Policy  | Complete  | reduce carbon emission as recorded in SMARTEC  | Executive teleconferencing and video conferencing part of Ministry toolkit  |
| Supported alternative travel (bike/skateboard/walk/transit) for meetings | Complete  |  | provided Ministry Bike and bus tickets for business travel  |
| <b>1.5 Employee Engagement</b>   |   |  |   |
|  | The Guy Dauncy event, lighting retrofits, LEED Gold certification, the JDB 7 stream recycling program, the battery recycling program, |  |   |
| <b>Action</b>  | <b>Action Taken</b>   | <b>Outcome/Performance Measure</b>   | <b>Notes Clarifying Action Taken</b>  |
| Provided climate change education  | Complete  | delivered 2 sessions to over 200 people in Victoria and around the Province through teleconferencing | Guy Dauncey speaking event on Earth day 2008  |
| Provided conservation education  | In progress   | ongoing waster management initiative   |   |
| Held contests to change behaviour/make pledges                           | Complete  |  | part of Earth Day activities and Recycling and Waste Reduction Week and ongoing component of Green Team activities  |
| Developed Green Teams  | Complete  | Award winning Green team   | Award winning Green team  |
| Supported Green Teams (resources)  | Complete  |  | Green team provided with 2 days of team building training and full time support (1 FTE)   |
| Provided green tips  | Complete  | hits to SharePoint site  | Developed Ministry SharePoint site with tips, blog etc. Green Team Lead provided weekly tips  |
| Supported professional development                                       | Complete  |  | Green team provided with 2 days of team building training and full time support (1 FTE)<br>All Admin staff provided with sustainable purchasing workshops and message from the DM |
| Added green work goal to performance management                          | In progress   |  | Staff are free to include their EPDPs   |

| <b>1.6 Sustainability Actions (others)</b>                                |                     |   |   |
|---|---------------------|---|---|
| <b>Action</b>   | <b>Action Taken</b> | <b>Outcome/Performance Measure</b>  | <b>Notes Clarifying Action Taken</b>  |
| Took water conservation measures – low flow showers or toilets, fix leaks | complete            |   | In new facilities and renovations   |
| Reduced/replaced bottled water with filtered or refrigerated water        | complete            |   | Replace bottled water I the Jack Davis Building with filtered water   |
| Improved recycling measures   | complete            | Shared Services BC and WSI have access to the metrics and have been asked to provide them to the GT. The programs is the first in the CRD and is expected to redirect 80% of building waste from the landfill. Programs as introduced in October 2008. GT members from STED, EMPR and (then) SBR provided onsite training to all building staff and continue to provide guidance on waste sorting. The STED GT won a SUMMIT Award for leadership in waste management. | Introduce battery recycling in all STED Offices. Led introduction of 7 stream waste management program in Jack Davis Building                       |
| Supported composting  | complete            |   | Organics are a major component of the 7 stream waste management program and replace a worm composting system that has been in place for many years. |
| Used green (low-e paints)   | in progress         |   | In new facilities and renovations   |
| Supported sustainable procurement practices                               | complete            |   | See above. Provided sustainable purchasing training to all admin staff  |

**Part 2: Plans to Continue Reducing Greenhouse Gas Emissions 2009 -- 2011**

**2.1 Mobile Fuel Combustion**

| <b>Action</b>   | <b>Action Planned</b> | <b>Outcome/Performance Measure</b>   | <b>Notes Clarifying Action Taken</b>   | <b>Timeframe</b> |
|---|-----------------------|--|--|------------------|
| Encourage use of public transit/active transportation                                   | In Progress           |  | Bus tickets, and ministry bike available to all staff; Bike to Work Week supported in both Vancouver and Victoria  |                  |
| Encourage alternatives to travel in fleet vehicles – bicycles, scooters, electric carts | In Progress           |  | ministry Bike provided in Victoria   |                  |
| Establish travel reduction goals  | in progress           | Travel is expected to be reduced in 2009 due to a 25% reduction in the travel budget and the availability of a full suite of collaboration tools in the U2 Refresh (completed) | travel is 90% of STED's footprint and is essential to the Ministry's work. Technology is being given a greater emphasis and expected to offset travel as we become more proficient at the tools that are now becoming available to us. |                  |

**2.2 Stationary Fuel Combustion (including electricity)**

| Action   | Action Planned | Outcome/Performance Measure   | Notes Clarifying Action Taken                 | Timeframe |
|--|----------------|---|---|-----------|
| Undertake workstation tune-ups to help staff understand what they can do to reduce personal energy use | in progress    | 150 WTU completed with over 100 active participants.  | WTU completed                                 |           |
| Supply power bars – to turn off power to non-essential items when not in use (e.g. phone chargers)     | in progress    | 150 WTU completed with over 100 active participants.  | WTU completed                                 |           |
| Undertaken Monitor turn-off challenge  | in progress    | 150 WTU completed with over 100 active participants.  | WTU completed                                 |           |
| Replace # computers with Energy Star models  | in progress    | 150 WTU completed with over 100 active participants.  | U2 refresh underway                           |           |
| Ask staff to close blinds daily  | in progress    |   | staff have been provided with the information |           |
| Encourage staff to use stairs  | Planned        |   |   |           |
| Turn off lights in unused rooms  | in progress    | Installed sensors in all interior spaces to reduce energy consumption Jack Davis Buildings                              | completed                                     |           |
| Replace Refrigerators (Energy Star rated appliance)  | in progress    |   |   |           |
| Apply for LEED existing building rating  | in progress    | LEED Gold certification expected for Meares St space and the Asia pacific Business Centre in Robson Square in Vancouver | In new and renovated spaces                   |           |
| Undertake building energy audit at LOCATION(s)   | in progress    | STED is a small Ministry in 6 buildings and is not the lead tenant.   | Jack Davis Building                           |           |
| Initiate or complete a building energy retrofit  | in progress    | STED is a small Ministry in 6 buildings and is not the lead tenant.   | Jack Davis Building                           |           |

**2.3. Supplies:**

| Action                                     | Action Planned | Outcome/Performance Measure                            | Notes Clarifying Action Taken   | Timeframe |
|--|----------------|--|---|-----------|
| Commit to use 100% recycled paper          | in progress    |  | Us Refresh completed and is expected as staff become more proficient with the collaboration tool and the tablets to use less paper. |           |
| Initiate automatic double sided printing   | in progress    |  |   |           |
| Commit to hold paperless meetings          | in progress    |  |   |           |
| Use collaborative software to edit on-line | in progress    | reduce travel, energy consumption and pare consumption | U2 refresh in 2009  |           |
| Re-use non-confidential scrap paper        | in progress    |  | U2 refresh in 2009  |           |
| Use laptops/tablets                        | in progress    | reduce travel, energy consumption and pare consumption | U2 refresh in 2009  |           |

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|   |             |  |                    |
|---|-------------|--|--------------------|
| Restructure a process to use less paper       | in progress | reduce travel, energy consumption and pare consumption | U2 refresh in 2009 |
| Purchase cradle to cradle goods               |             | training provided in 2008                              |                    |
| Choose "Green" items from Distribution Centre |             | training provided in 2008                              |                    |
| Encourage re-use of furniture and equipment   | in progress |  |                    |

### 2.4 Travel

| Action   | Action Planned | Outcome/Performance Measure | Notes Clarifying Action Taken   | Timeframe |
|--|----------------|-----------------------------|---|-----------|
| Set a X% Travel reduction goal   | in progress    |                             | encourage use of collaboration tools, video and teleconferencing and supplement with travel |           |
| Train staff in the use of Live Meeting (or other desktop collaborative software) | in progress    |                             |   |           |
| Install Video Conferencing facilities  | in progress    |                             |   |           |
| Support alternative travel (bike/skateboard/walk/transit) for meetings           | in progress    |                             |   |           |

### 2.5 Employee Engagement

| Action  | Action Planned | Outcome/Performance Measure | Notes Clarifying Action Taken  | Timeframe |
|---|----------------|-----------------------------|--|-----------|
| Provide climate change education                | in progress    |                             | Green Team activities  |           |
| Develop Green Teams                             | in progress    |                             |  |           |
| Support Green Teams (resources)                 | in progress    |                             |  |           |
| Provide green tips                              | in progress    |                             |  |           |
| Support professional development                | in progress    |                             | Green team was supported by 1 full time staff member in 2008.<br>Staff are able to incorporate green action items in their EPDPs |           |
| Add a green work goal to performance management | in progress    |                             | All staff are free to do so.   |           |

### 2.6 Sustainability Actions (others)

| Action   | Action Planned | Outcome/Performance Measure | Notes Clarifying Action Taken  | Timeframe |
|--|----------------|-----------------------------|--|-----------|
| Reduce/replace bottled water with filtered or refrigerated water | in progress    |                             |  |           |
| Improve recycling measures                                       | in progress    |                             |  |           |
| Support composting   | in progress    |                             |  |           |
| Use re-usable dishes   | in progress    |                             |  |           |
| Purchase green cleaning products                                 | in progress    |                             |  |           |
| Use green (low-e paints)   | in progress    |                             | This is a standard in the ARES Technical standards and has been for many years |           |
| Support sustainable procurement practices                        | in progress    |                             | training to admin staff completed  |           |