

**Carbon Neutral Action Report
Ministry of Advanced Education and Labour Market Development**

Executive Summary

Through 2008, the Ministry of Advanced Education and Labour Market Development took a leading role in reducing greenhouse gas emissions and implementing sustainable operations. Building improvements including motion sensors and low flow fixtures have made our buildings more sustainable and implementing MFDs has reduced our electricity use. This, in combination with staff engagement, has started to shift the culture at our Ministry to include the environment.

Objectives

As our institutions are obliged to be carbon neutral, we have been working to connect them with each other to enable idea sharing.

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

Overview

There were two main areas we focussed on in 2008: building retrofits and staff engagement. By completing the BOMA Go Green certification process we identified opportunities to make changes and ensure our buildings are operating in a more sustainable manner such as installing motion sensors and low-flow washroom fixtures.

In addition, changes were made to our appliances within the building to reduce electricity including replacing refrigerators with EnergyStar appliances, changing to MFDs, and setting our computers into standby mode each night.

Another focus was on staff engagement and enabling staff to make changes to reduce emissions. This ranges from encouraging changes in day-to-day unit operations to reduce paper consumption to installing shower facilities and lockers to reduce commuting emissions. As well, learning opportunities were offered to educate staff on why changes need to take place to reduce greenhouse gas emissions.

1.1. Mobile Fuel Combustion

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Changed from gas to electric lawn maintenance equipment	In progress	Working with WSI to change equipment used on St. Ann's grounds	

1.2. Stationary fuel combustion and electricity

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Encouraged staff to use stairs	Complete		Signage next to stairwells
Turned off lights in unused rooms	In progress	Posters and stickers next to almost all light switches	Working to install motion sensors
Replaced Refrigerators (EnergyStar rated appliance)	In progress	# of refrigerators replaced = 4	As new fridges are ordered or old fridges are replaced, all will be EnergyStar
Replaced other appliances (with EnergyStar rated appliance)	In progress		Where possible, all appliances will be EnergyStar rated
Installed multi-function devices (and removed stand-alone printers/faxes)	Complete	36 MFD's installed across EDUC and ALMD Removed 176 other devices (108 printers, 18 scanners, and 50 copiers and faxes)	Standard is to install MFDs in all new offices
Replaced standard bulbs with CFLs	In progress	# of bulbs installed in desk lights = 5	Staff are offered CFL bulbs for their lights

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Installed motion activated lights	In progress	Installed motion sensors in all washrooms and some boardrooms = 35 installed	Will continue to install as needed
Undertaken lighting retrofit	In progress	WSI completed an energy analysis of St. Ann's and will be making changes to lighting.	
Implemented server virtualization	In progress	Under development	
Utilized desk-top power management settings on computer	Complete	As part of government-wide initiative	
Initiated corporate computer shut-down/wake-up for maintenance	Complete	As part of government-wide initiative	
Unplugged unused equipment	In progress	Encouraged staff through green tips	
Undertaken building energy audit at LOCATION(s)	Complete	WSI completed an energy analysis of St. Ann's.	Working to initiate suggested ideas

1.3. Supplies

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Committed to use 100% recycled paper	In progress	Central purchasing switched to 100% recycled	One person orders paper for half of ALMD
Installed wireless internet	Complete	835 Humboldt now has wireless internet available.	Allows staff and visitors to easily use laptops for meetings
Print-less signature line	Complete	Encourage staff to "think before you print" through signature addition	

1.4 Travel

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Set a X% Travel reduction goal	In progress	Established executive support for travel reduction goal	
Trained staff in the use of Live Meeting (or other desktop collaborative software)	In progress	Training staff on use of Elluminate	
Installed Video Conferencing facilities	In progress	Installing web conferencing cameras	
Supported alternative travel (bike/skateboard/walk/transit) for meetings	In progress	Staff encouraged to walk or take transit.	

1.5 Employee Engagement

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Provided climate change education	Complete	Hosted numerous lunch and learns, provided information on intranet site, green lead spoke at division meetings	
Provided conservation education	Complete	Hosted numerous lunch and learns, provided information on intranet site, green lead spoke at division meetings	
Developed Green Teams	Complete	Green Teams in two major buildings	
Supported Green Teams (resources)	Complete	Through Facilities & Support Services	
Provided green tips	Complete	Monthly green tips distributed	Catering,, Green meetings; Reducing paper use; Saving lighting energy; Greening holidays; Employee travel; Waste reduction

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Added green work goal to performance management	In progress	Established SHR support for incorporating "green" into EPDP	
Developed "green" intranet site	Complete	Updated regularly with tips, events, suggestions	http://gww.avedintra.gov.bc.ca/green_team

1.6 Sustainability Actions (others)

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Took water conservation measures – low flow showers or toilets, fix leaks	Complete	Installed low flow toilets/urinals; auto flow faucets in all buildings	
Reduced/replaced bottled water with filtered or refrigerated water	In progress	Filtered water in place, working to remove bottled water	
Improved recycling measures	Complete	Raised recycling levels to include multis, compost, soft plastics, paper at St. Ann's Staff run recycling program at StudentAid BC through PMD	
Supported composting	Complete	Organics collection available at St. Ann's	Including paper towel collection in washrooms
Purchased green cleaning products	Complete	As part of Bee Clean contract	
Used green (low-e paints)	In progress	All upgrades use low-VOC materials	
Supported sustainable procurement practices	In progress	Part of Procurement Policy on Climate Change Working Group	
Adopted low-carbon contracting practices	In progress	Part of Procurement Policy on Climate Change Working Group	
Installed lockers and improved shower facilities	Complete	Larger lockers installed and additional shower facilities at 835 Humboldt	
Upgraded paper towel dispensers	Complete	Installed new paper towel dispensers with single-sheet dispensers to reduce waste. New paper towels are 100% recycled fibres	
Battery recycling	In progress	Working with AIR to establish program	
Building location	In progress	New buildings are chosen with proximity to transit and other ALMD buildings in mind	

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

Overview

Our main focus to reduce emissions over 2009 will be reducing business travel. By educating staff on travel alternatives such as Live Meeting, we endeavour to maintain a high level of service while reducing travel. Staff engagement activities such as Bike to Work Week, the Commuter Challenge/GreenRide Thursdays, and Earth Day events will continue to be a mainstay in our programs. In addition, ensuring our buildings are operating as designed (i.e. lights turning off at night) and investigating options for retrofits in the future will be accomplished in 2009.

2.1. Mobile Fuel Combustion

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Provide driver training to reduce fuel use	Planned	One staff member with fleet vehicle (DM) to be trained		
Encourage use of public transit/active transportation	Planned	Tracking use of bus passes	Purchasing bus passes for staff to use	
Change from gas to electric lawn maintenance equipment	In progress	Working with WSI to change equipment used on St. Ann's grounds		

2.2. Stationary Fuel Combustion (including electricity)

Action	Action Taken	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	Planned	Number of staff completing workstation tune-up (self reporting through survey)	Utilizing online workstation tune-up tool	April-May 2009
Supply power bars – to turn off power to non-essential items when not in use (e.g. phone chargers)	Planned	Connected to workstation tune-ups		2009-2010
Undertaken Monitor turn-off challenge	In Progress	Challenge held at Student Aid office		First quarter, 2009
Replace # computers with EnergyStar models	Planned	Through U2.0 refresh		May-Sept 2009
Ask staff to close blinds daily	Planned	Connected to workstation tune-ups		April-May 2009
Encourage staff to use stairs	In Progress	Posters near stairwells		2009-2010
Turn off lights in unused rooms	In Progress	Posters in boardrooms near light switches		2009-2010
Replace Refrigerators (EnergyStar rated appliance)	In Progress	As new fridges are ordered or old fridges are replaced, all will be EnergyStar		2009-2010
Replace other appliances (with EnergyStar rated appliance)	In Progress	Where possible, all appliances will be EnergyStar rated		2009-2010
Install multi-function devices (and remove stand-alone printers/faxes)	In Progress	All new offices have MFDs installed		2009-2010
Replace standard bulbs with CFLs	In Progress	# of bulbs installed in desk lights	Staff are offered CFL bulbs for their lights	2009-2010
Install motion activated lights	In Progress	# of motion sensors installed	Will continue to install as funding becomes available	2010

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Undertake lighting retrofit	In Progress	WSI completed an energy analysis of St. Ann's and will be making changes to lighting.	2009
Utilize desk-top power management settings on computer	In Progress	As part of government-wide initiative	May-Sept 2009
Unplug unused equipment	In Progress	Encouraged staff through green tips	April-May 2009
Initiate or complete a building energy retrofit	Planned	As a result of BOMA Go Green audit	2009

2.3. Supplies

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Commit to use 100% recycled paper	In Progress	# of 100% recycled paper packs purchased	2009
Initiate automatic double sided printing	In Progress	All new MFDs set to double-side	2009
Change document template margins	Planned		2010
Commit to hold paperless meetings			
Use collaborative software to edit on-line	In Progress	Through SharePoint and other Microsoft Collaboration tools	2009
Re-use non-confidential scrap paper	In Progress	StudentAid BC collects all OSU paper and uses it to create notebooks	2009-2010
Use laptops/tablets	In Progress	Increasing use through refresh	May-Sept 2009
Restructure a process to use less paper	Planned	Working to identify processes	
Actions on non-paper related supplies:			
Choose "Green" items from Distribution Centre	Planned	Educating staff through DCV lunch & learn, Easy Green Office document	Jun-09
Encourage re-use of furniture and equipment	In Progress	All office furniture purchased by facilities is of high quality and easily transformed to fit space requirements	2009-2010
Pooled laptops	Planned		As part of refresh, a pool of laptops will be available for use which will reduce paper requirements for meetings May-Sept 2009

2.4 Travel

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Train staff in the use of Live Meeting (or other desktop collaborative software)	Planned	% of staff provided training Increase levels of staff using LiveMeeting or Elluminate	Training Oct 2009
Support alternative travel (bike/skateboard/walk/transit) for meetings	Planned	Use of transit passes	Provide transit passes for inter-Victoria travel 2010
Develop taxi use baseline	Planned	Track and reduce number of inter-Victoria taxi trips	2009

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2.5 Employee Engagement

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken	
Provide climate change education	Planned	Number of lunch and learns offered Number of staff attending lunch and learns Number of staff attending 2009 version of Climate Action 101 and 102	Feedback will be collected from lunch and learn attendees	2009
Provide conservation education	Planned	Number of lunch and learns offered Number of staff attending lunch and learns	15 people attended first lunch & learn of 2009 on home energy retrofit grants Feedback will be collected from lunch and learn attendees	2009
Hold contests to change behaviour/make pledge	Planned	GreenRide Thursdays under development for ministry		
Hold contests/support to generate ideas	Planned	% of staff who participated in commuter challenge	Commuter challenge/GreenRide Thursdays	2009
Develop Green Teams	In progress	Establishment of ALMD Green Team		2009
Support Green Teams (resources)	In progress	Resources through Facilities		
Provide green tips	In progress	Monthly green tips provided to staff	Tips so far in 2009 - Electronics recycling and Earth Hour	2009
Support professional development				
Add a green work goal to performance management	Planned	Number of staff with green goals in EPDPs	Working with SHR to develop	2010
Reduce SOV employee commuting	Planned	% of staff participating in cross-government commuter challenge to educate staff on alternatives and garner commitment	Baseline on employee commuting habits must be developed first	2009
Bike to Work Week participation	Planned	% of staff participating in Bike to Work Week		May-09

2.6 Sustainability Actions (others)

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken	
Improve recycling measures	Planned	Implement styrofoam recycling in main buildings		2010
Support composting	In progress	Landfill diversion rates	Organics collection signage upgraded at 835 Humboldt Organics collection under development for 1106 Cook	2009
Use green (low-e paints)	In progress	All upgrades use low-VOC materials	All upgrades use low-VOC materials	2009-2010
Support sustainable procurement practices	In progress		Part of Procurement Policy on Climate Change Working Group	2009
Adopt low-carbon contracting practices	In progress		Part of Procurement Policy on Climate Change Working Group	2009