

Carbon Neutral Action Report Ministry of Transportation and Infrastructure

Executive Summary

Climate Action in the Ministry of Transportation and Infrastructure (MoT) in 2008 focused on achieving a thorough understanding of benchmark emissions, determining the most effective way of increasing staff awareness and education, implementing immediate changes and planning future actions to reduce carbon emissions.

Ministry operations are managed out of our Victoria headquarters office, three regional offices located in Burnaby, Kamloops and Prince George, 30 district and area offices and 32 vehicle inspection stations across the province.

Early action in 2008 in the area of energy reduction included opening a new Kamloops Transportation Building seeking LEED Gold certification; installing 40 video conferencing units to cut down on business travel; pursuing enhanced waste management and recycling programs; completing energy efficiency assessments at selected vehicle inspection stations and installing office lighting retrofits in our Victoria HQ office.

To increase staff education and awareness we launched our improved Climate Action Program (CAP) "Getting There Green" intranet site creating a two-way line of communication for employees to receive climate action information and give feedback; providing staff with a number of tools and resources on the website including climate action articles, an online library of books and DVDs, an interactive Green Calendar of key dates and events, and personal carbon calculators. We encouraged the continued growth of local Green Teams by providing a venue for staff to post their interests, connect with others, register a team, and create a profile of achievements.

We also focused on reducing vehicle emissions by announcing the Provincial Transit Plan to double transit rider ship by increasing travel choices for people around the province, with new fleets, green technology, new rapid transit lines and RapidBus BC; promoting idle reduction with a campaign that involves both staff and contractors; continuing to green our fleet with more energy efficient vehicles and exploring alternatives to staff travel for meetings.

Objectives

We are enabling British Columbians to reduce GHG emissions through the Provincial Transit Plan, a \$14 billion plan that calls for an investment in four new rapid transit lines in Metro Vancouver, \$1.2 billion for a new, high capacity RapidBus BC service and \$1.6 billion investment in 1,500 new, clean energy buses to provide communities around the province with improved bus service; and by promoting hybrid or other highly energy efficient taxis in the Vancouver and Victoria areas.

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

Overview

During 2008 the Ministry of Transportation and Infrastructure reduced greenhouse gas emissions by continuing our Greening the Fleet program, promoting ride sharing and idle reduction initiatives, reducing business travel and reducing energy consumption related to computers, facilities and office equipment and supplies.

The Ministry has raised staff awareness and understanding of climate change, its impact, GHG emissions and their sources. We have encouraged employees to come forward with their own suggestions and to take action in the workplace that can result in lasting behavioural change.

Sustainability actions were promoted and supported through both Local Green Teams and the CAP Intranet Site, we will continue to promote green housekeeping and improved recycling in our facilities.

1.1 Mobile Fuel Combustion

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Replaced # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid	Complete	<p>Increased use of Liquid Propane Gas vehicles from 20% to 42% of fleet.</p> <p>Converted two hybrid vehicles to plug-in hybrid electric.</p> <p>Increased the number of hybrids in our fleet from 39 to 57.</p> <p>5 alternative fuel conversions are being tested on Commercial Vehicle Safety Enforcement (CVSE) fleet Tahoe's and one hybrid Escape has been added to the fleet to confirm it's appropriateness for certain lighter duty CVSE functions.</p>	Our Greening the Fleet program of replacing gasoline only vehicles with hybrid, diesel and bi-fuel vehicles has an objective of 100% conversion to a 'green fleet' by 2012.
Provided driver training to reduce fuel use	In Progress	All fleet vehicles fuel usage is monitored and employees are being provided with information to increase fuel efficiency.	Driver education has been centralized through a program being developed by Ministry of Labour and Citizen Services. This will be implemented in MoT as soon as it is completed and distributed.
Initiated new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	In Progress	Vehicle maintenance is as per PHH and manufacturers recommendations. We will be reviewing fleet drivers adherence to ensure drivers are following recommendations.	

<p>Established anti-idling behaviour change program (e.g. signs, stickers, messages)</p>	<p>Complete</p>	<p>An anti-idling campaign is in place encouraging employees and contractors to reduce idling themselves and with equipment operators and traffic management on construction sites. Bumper stickers, static sticks and contract language in place. Anti-idling signs installed at rest areas.</p>	
<p>Encouraged car pooling in fleet vehicles</p>	<p>Complete</p>	<p>Work completed with "Jack Bell" to add a new meeting module to the Jack Bell Website to promote ride-sharing the meetings.</p> <p>Ride-sharing and car-pooling options promoted on our CAP Intranet Site.</p> <p>Where large meetings are necessary, we have encouraged staff to use buses rather than single occupancy vehicles. This was successful with a Project Management Meeting in Penticton where numbers of staff travelled from the Burnaby Regional office.</p>	
<p>Encouraged use of public transit/active transportation</p>	<p>Complete</p>	<p>Expanded our Bike to Work Week investment by 4x previous provincial support to an investment of \$140k.</p>	
<p>Established travel reduction goals</p>	<p>Complete</p>	<p>Established a travel reduction goal of 25% which has resulted in reduced GHG emissions.</p>	
<p>Other</p>	<p>Complete</p>	<p>30% of fleet converted to low profile, low voltage LED emergency lighting (roto lights and CVSE police lights).</p>	<p>Consisting of 90 new 2008 vehicles upfit at original installation and 40 field services vehicles retro fit plus 20 CVSE retrofit with LED police light systems. This allows these vehicles to comply with anti-idling. The low profile also reduces wind drag and will reduce fuel consumption on the highway.</p>

1.2 Stationary fuel combustion and 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	Information being shared through CAP Intranet Site and Green Teams.	
Supplied power bars – to turn off power to non-essential items when not in use (e.g. phone chargers)	Complete	All workstations in Kamloops Transportation Building supplied with power bars to maximize energy efficiency.	
Undertaken Monitor turn-off challenge	In Progress	Initial message distributed from ISB with Green Teams distributing material to encourage staff to turn off monitors, office lights and other equipment when not in use.	
Replaced # computers with EnergyStar models	In Progress	In process with current refresh of Ministry computers.	
Used air dry setting on dishwashers	Complete	Being encouraged through Local Green Teams	
Encouraged staff to use stairs	Complete	MoT 'Transaction' challenge encouraged stair use.	
Turned off lights in unused rooms	Complete	Promoted through Local Green Teams and the CAP Intranet Site.	
Installed multi-function devices (and removed stand-alone printers/faxes)	Complete	New leases are Multi Functional Devices, stand alone devices have been minimized where operationally feasible.	
Installed motion activated lights	Complete	New Kamloops Transportation Building has 100% motion activated lights.	
Undertaken lighting retrofit	Complete	Partial lighting retrofit completed in Victoria office.	
Implemented server virtualization	Complete	We are running multiple servers virtually on one PC (server).	
Utilized desk-top power management settings on computer	Complete	Implemented by policy across the Ministry fall 2008.	
Initiated corporate computer shut-down/wake-up for maintenance	Complete	We now install software and security patches/maintenance to computer using the "Wake on LAN" technology.	
Unplugged unused equipment	In Progress	Ongoing communication through Local Green Teams	
Applied for LEED existing building rating	In Progress	Awaiting LEED certification for Kamloops Transportation Building	
Undertaken building energy audit at LOCATION(s)	Complete		
Other	Complete	Elevators in our headquarters office are being upgraded to more energy efficient models.	

1.3 Supplies

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Developed document library (online and one printed copy) for large documents	Complete	Electronic data rooms implemented in Kickinghorse, Sea to Sky, Gateway and Evergreen major project offices.	
Used collaborative software to edit on-line	In Progress	On line meeting tools being used to edit on-line documents	
Chose "Green" items from Distribution Centre	in progress	Encouraged green purchasing through Local Green Teams.	
Encouraged re-use of furniture and equipment	in progress	Facility and administrative staff continue to shop and move surplus office furniture and equipment through WARE.	

1.4 Travel

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Trained staff in the use of Live Meeting (or other desktop collaborative software)	In Progress	On line Live Meeting training offered to staff Ministry wide.	
Installed Video Conferencing facilities	Complete	40 video conferencing units installed across the ministry	
Mandated car pooling to government meetings	Complete	Staff attending the 2008 Project Management Conference travelled by bus rather than individual vehicles reducing GHG emissions.	
Supported alternative travel (bike/skateboard/walk/transit) for meetings	In Progress	Zero or low carbon travel modes (biking, walking and rollerblading), links to carpooling and vanpooling services and SMARTTEC tips and updates are provided on the CAP Intranet.	
Other:	In Progress	Staff are encouraged to utilize Green Key hotels and conference facilities for large meetings.	

1.5 Employee Engagement

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Provided conservation education	Complete	CAP Intranet Site includes on line library of articles, books, videos and DVDs	
Held contests to change behaviour/make pledges	Complete	"Why Climate Change Matters" photo contest CAP Kids Zone coloring contest	
Developed Green Teams	Complete	8 Local Green Teams have been established where staff are encouraged to promote climate action, develop individualized logos, generate ideas and local initiatives.	
Supported Green Teams (resources)	Complete	Green Team Module in CAP Intranet. Green Team promotional resources mailed to established local Green Teams	

Provided green tips	Complete	Green tips posted on CAP Intranet site and in MoT quarterly Road Runner newsletter.
Supported professional development	Complete	Ministry staff attended carbon neutral and government climate action programs including: - Oregon Environmental Council's "Cutting Carbs" workshop, - "Faster Freight, Cleaner Air", Air and Marine Sector conference on "Strategies to Reduce Greenhouse Gases", Fraser Basin Council workshops on "Improving Fuel Efficiency for Trucks" and - Pacific Northwest Economic Region Summit for presentations on the Western Climate Initiative Cap and Trade System.

1.6 Sustainability Actions (others)

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Ran dishwasher only when full	Complete	Encouraged through Local Green Teams and education provided through Power Smart.		
Reduced/replaced bottled water with filtered or refrigerated water	Complete	Encouraged through Local Green Teams.		
Improved recycling measures	Complete	Encouraged through Local Green Teams and CAP intranet education and activities.		
Supported composting	Complete	Compost bins for paper towels, food and other organic waste are used in our Nanaimo, Saanich, Burnaby and Kamloops offices.		
Used re-usable dishes	Complete	Promoted the use or re-use or biodegradable products such as pens, beverage cups and plates.		
Purchased green cleaning products	Complete	Green housekeeping standards adopted in Kamloops Transportation Building.		
Used green (low-e paints)	Complete	Use in Kamloops Transportation Building during construction.		
Supported sustainable procurement practices	Complete	Encouraged through CAP Intranet and Local Green Teams		
Other:	Complete	Composting toilets and solar-powered LED lighting have been installed at rest areas on the Trans Canada Highway.		

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

Overview	<p>We will continue efforts to reduce greenhouse gas emissions by providing Drive Smart BC training to staff, further promoting idle reduction and ride sharing, encouraging the use of live meeting and video conferencing, and researching the potential to invest in bicycles and/or scooters for staff to commute to meetings.</p> <p>We will work to acquire the energy consumption data for each of our individual buildings, where this can be acquired staff will be challenged to reduce their consumption by 5% in 2009. During the energy challenge we will not only encourage staff to take the actions outlined below and also share energy reducing actions they've discovered themselves.</p>
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2.1 Mobile Fuel Combustion

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Provide driver training to reduce fuel use	Planned		Preparing to deliver driver education training as completed by MLCS.	May
Initiate new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	In Progress		Driver fleet challenges in the process of being developed for CAP Intranet.	May
Establish anti-idling behaviour change program (e.g. signs, stickers, messages)	In Progress		We will continue to promote idle reduction as initiated last fall. Idle reduction signage will be installed at Ministry offices and compounds.	September
Encourage car pooling in fleet vehicles	In Progress		Staff will be encouraged to ride-share to large meetings.	Ongoing
Encourage use of public transit/active transportation	Planned		We will promote public transit use through the transit pass program.	
Encourage alternatives to travel in fleet vehicles – bicycles, scooters, electric carts	Planned		Investigating the potential to invest in bicycles and scooters for staff use to commute to meetings.	June

2.2 Stationary Fuel Combustion (including electricity)

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Undertake building energy audit at LOCATION(s)	Planned		Proposed for Commercial Vehicle Weight Stations, specific locations not yet determined.	Fall 2009

2.3 Employee Engagement

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Hold contests/support to generate ideas	Planned		2nd annual "Why Climate Change Matters" photo contest will be held in early summer	Jul-09