

**Executive Summary**

In 2001, ICBC adopted an Environmental Policy, signed by the President and Chief Executive Officer, that included guiding principles for reducing waste and conserving energy and other resources. Since that time, ICBC has undertaken a broad range of measures to reduce waste and recycle paper, cardboard, beverage containers, toner cartridges, license plates, metals and plastics, dry cell batteries, fluorescent lamps, computers and other materials and equipment.

In 2002, ICBC became a Power Smart Partner with BC Hydro and significantly reduced annual electricity consumption at its Head Office building. Energy saving measures at Head Office and other ICBC buildings have included lighting replacements, direct digital controls, upgrades to heating, ventilation and air conditioning systems, and boiler and other equipment upgrades.

A Green Team was formed at ICBC in 1999 to engage employees and promote awareness of the above measures both at work and at home. The Green Team also encourages and supports alternative transportation by employees to and from work including carpooling and other types of ride sharing programs, transit subsidies, cyclist facilities and participation in the annual Commuter Challenge.

Numerous climate change and environment-related initiatives took place in 2008. First, a cross-divisional team prepared an estimate of the corporation's carbon footprint and provided recommendations to address climate change. This resulted, among other things, in the preparation of a detailed energy study of 15 owned buildings representing approximately 40% of the total area used for operations, and in the appointment of an energy manager.

A range of energy-saving upgrades were made to ICBC's buildings in 2008, including lighting upgrades in various locations (new fixtures, occupancy sensors and daylight harvesting); direct digital controls, fan replacement and solar collectors for domestic hot water heating at Head Office; and BOMA Go Green certification for Head Office (it should be noted that ICBC's Head Office makes up approximately 19% of the total area used for operations, and accommodates 24% of ICBC's employees). Nearly a third of the company's data centre servers were virtualized and rollout of more efficient computers and monitors was ongoing. As well, planning commenced for ICBC's first LEED Gold building.

The corporation also made good headway in saving paper in 2008. Office paper containing 30% post-consumer recycled fibre content became the standard. Paperless initiatives were launched in several departments, and groundwork was done for improved use of information-sharing technology. Rollout began of multi-function output units capable of double-sided printing to replace existing printers and copiers, significantly reducing the overall number of units, and saving both energy and paper. Enhanced recycling of paper products was introduced.

The corporation also ran a province-wide television, radio and web campaign to encourage all B.C. drivers to save fuel and fight climate change by adopting greener driving and vehicle maintenance practices.

A range of further environmental and energy-related initiatives are planned for the 2009 to 2010 timeframe, from building retrofits to using technology to reduce travel and paper use.

ICBC employees have indicated a strong interest in supporting the company's climate change and environmental programs, thus a key

feature of the 2009-2010 period will be communication and training to support broad employee involvement. Numerous events and activities are scheduled, including a company-wide energy conservation survey, campaigns, challenges, speaker events and training sessions. As well, the number of Green Team members will be increased and the role of members will be enhanced.

**Objectives**

Financial Responsibility – reducing operating costs through energy and materials conservation

Environmental Responsibility - in line with our corporate value of caring about our communities by being environmentally responsible, as well as our Environmental Policy to "use energy and materials wisely to conserve natural resources and reduce waste" .

Employee Engagement - increasing employee morale, attraction and retention

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

**Overview**

Key actions in 2008:

- Preparation of an estimate of ICBC's carbon footprint
- Preparation of an energy study of 15 key buildings
- Appointment of an energy manager
- Lighting measures, including fixture upgrades, occupancy sensors and daylight harvesting
- Mechanical and controls upgrades
- Solar domestic hot water heating
- Change to 30% post-consumer recycled fibre content in office paper
- Strong executive leadership and support of "paperless" initiatives
- Rollout of multi-function output devices with capacity to print double-sided
- Ongoing replacement of computer equipment with highly efficient models
- Ongoing support of alternative transportation, including transit pass programs, bike cages and participation in the Commuter Challenge
- Province-wide campaign to encourage all B.C. drivers to "drive smart, save green"

**1.1 Mobile Fuel Combustion**

Action		Outcome/Performance Measure	Notes Clarifying Action Taken
Replaced # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid	In Progress	Reduce fuel consumption; note that GHG emission reductions from all initiatives in this section will be tracked as part of corporate GHG inventory.	Performed review of total fleet mileage and usage and made recommendations for replacement and fleet consolidation; replaced two utility vehicles with high efficiency replacements.
Changed to manual lawn and yard maintenance equipment	In Progress	Reduce fuel consumption	Head Office only

## 1.2 Stationary fuel combustion and electricity

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Replaced # computers with EnergyStar models	In Progress	Reduce electricity use; approximately 65% of computers installed are EnergyStar models; note that GHG emission reductions from all initiatives in this section will be tracked as part of corporate GHG inventory.	Purchasing new EPEAT® Gold, EnergyStar 4.0-compliant computers.
Turned off lights in unused rooms	In Progress	Reduce electricity use	Signage in many locations
Replaced Refrigerators (EnergyStar rated appliance)	In Progress	Reduce electricity use	Replacement of refrigerators completed in Head Office
Installed multi-function devices (and removed stand-alone printers/faxes)	In Progress	Reduce electricity use	The project goal is to consolidate the total number of output devices by 50%.
Replaced standard bulbs with CFLs	In Progress	Reduce electricity use	Replacement of incandescent bulbs with fluorescent lamps is ongoing. Estimated to be 95% completed.
Installed motion activated lights	Complete/In Progress	Reduce electricity use	Complete for Head Office (interior lighting) and 7 other locations (washroom lighting); occupancy sensors being installed in new buildings and during renovations
Undertaken lighting retrofit	In Progress	Reduce electricity use	Head Office - perimeter daylight harvesting and lighting replacements complete; 38 locations - lighting replacement completed or ongoing
Implemented server virtualization	In Progress	Reduce electricity use; successfully virtualized 32% of servers	
Utilized desk-top power management settings on computer	In Progress	Reduce electricity use	Display monitors only - sleep mode after 60 minutes of inactivity
Undertaken building energy audit at LOCATION(s)	Complete	Identify initiatives to reduce energy use	Energy audits completed for: Head Office, Central Estimating Facility and 13 Claims Centres representing approximately 40% of the total area used for operations

Initiated or completed a building energy retrofit	In Progress	Reduce energy use	BOMA Go Green certification for Head Office; lighting, heating, mechanical, controls and domestic hot water and other items listed separately in this section.
		Reduce natural gas use	Solar Domestic Hot Water Heating - Head Office. Installed independent gas fired modulating boilers with solar augmentation (two arrays)
		Reduce energy use	HVAC direct digital controls - Head Office. Replaced pneumatic system with direct digital controls; provided building manager training.
		Reduce electricity use	Fan Retrofit - Head Office. All intake and exhaust fans replaced with high efficiency motors.
Removal of halon from emergency fire suppression system - Burnaby Records Retention	Complete	Prevent GHG emissions	
New LEED Gold building	In Progress	Reduce energy use	Driver Licensing Centre to be completed in 2010
Reduced emergency generator run time - Head Office	Complete	Reduce fuel consumption	

### 1.3 Supplies

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Committed to use 30% recycled paper	Complete	Reduce carbon footprint; note that GHG emission reductions from all initiatives apart from enhanced paper recycling in this section will be tracked as part of corporate GHG inventory.	Applies to all office paper and highest-volume forms
Committed to use 100% recycled paper	In Progress	Reduce carbon footprint	Complete for business cards only
Initiated automatic double sided printing	In Progress	Reduce paper use	Connected to rollout of multifunction devices
Committed to hold paperless meetings	In Progress	Reduce paper use	Commenced in various departments
Developed document library (online and one printed copy) for large documents	In Progress	Reduce paper use	Libraries of month end reports accessible through webpages created for various groups across the corporation. Central library in use for Executive meetings.
Used laptops/tablets	In Progress	Reduce paper use	Increased use of laptops and ongoing tablet pilot
Restructured a process to use less paper	In Progress	Reduce paper use	Vehicle registration/taxation data collection process changed from paper-based to electronic; Risk Underwriting replaced paper customer files with electronic files

#### 1.4 Travel

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Supported alternative travel (bike/skateboard/walk/transit) for meetings	In Progress	Reduce GHG emissions	For meetings: Transit tickets provided or carpooling encouraged; For meetings and employee commuting to and from work: Participation in employer transit pass programs; preferred carpool parking at Head Office and other locations; free parking for Jack Bell Rideshare participants; bicycle lock-up with lockers, capacity doubled in 2008; participation in 2008 Commuter Challenge and Bike to Work Week.

#### 1.5 Employee Engagement

Action	Action Taken	Outcome/Performance Measure	Notes Clarifying Action Taken
Provided conservation education	In Progress	Reduce waste and GHG emissions	Intranet and print articles; Environmental Services website with tips and information; training
Held contests to change behaviour/make pledges	In Progress	Reduce waste and GHG emissions	Commuter Challenge; Bike to Work Week
Supported Green Teams (resources)	In Progress	Reduce waste and GHG emissions	Supported Green Team members in responding to site-specific queries, ranging from recycling to alternative transportation; team members assisted with implementation of ongoing mini-bin and battery-recycling programs
Provided green tips	In Progress	See conservation education	
Supported professional development	In Progress	Reduce waste and GHG emissions	Training provided to employees within environmental department; training session provided internally for broader management

## 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	In Progress	Reduce water consumption; GHG emission reductions from reduced hot water use will be tracked within corporate GHG inventory.	Aerators installed on all head office taps; Toilets replaced with low-flow in 11 locations; replaced taps with sensor taps in 11 locations
Improved recycling measures	In Progress	Reduce waste	Enhanced blue box program in 35 locations; fluorescent tube recycling company-wide; drycell battery recycling for employees.
		Reduce waste and GHG emissions	Enhanced paper recycling company-wide.
Used re-usable dishes	In Progress	Reduce waste	Complete in majority of locations
Purchased green cleaning products	in Progress	Reduce environmental footprint	"Green" cleaning products and procedures in place for Head Office; in progress for other locations.
Supported sustainable procurement practices	In Progress	Reduce GHG emissions and environmental footprint	Prepared sustainable procurement toolkit; investigated e-procurement
Province-wide public information campaign to reduce emissions from vehicles	In Progress	Reduce GHG emissions	ICBC's province-wide "drive smart, save green" campaign included television, radio and web promotions of green driving practices, including tips for reduced fuel use, focussing on driving habits, tire pressure, idling and regular maintenance.

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

<b>Overview</b>	<p>Key actions planned for 2009-2010:</p> <ul style="list-style-type: none"> <li>• Awareness-building and employee involvement through newsletters, intranet articles, announcements, surveys, contests, campaigns, speakers and training</li> <li>• Expansion of numbers and role of the Green Team</li> <li>• Creation and communication of an Energy Policy</li> <li>• Lighting, heating, mechanical and controls measures</li> <li>• Further rollout of measures to reduce or eliminate paper use</li> <li>• Use of collaborative software and increased use of online meeting tools</li> <li>• Changes to fleet and revised fleet policy and procedures</li> <li>• Sustainable procurement practices</li> </ul>
-----------------	--

## 2.1 Mobile Fuel Combustion

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Replace # of TYPE OF VEHICLE with MORE EFFICIENT VEHICLE/Hybrid	In Progress	Reduce fuel consumption; note that GHG emission reductions from all initiatives in this section will be tracked as part of corporate GHG inventory.	Fleet replacements with high efficiency vehicles; fleet rationalization	2010
Provide driver training to reduce fuel use	Planned	Reduce fuel consumption	Updated training, policy, procedures	2010
Initiate new fleet maintenance program (could include – changing filters, checking tire pressure, regular check-ups)	Planned	Reduce fuel consumption	See above	2010
Establish anti-idling behaviour change program (e.g. signs, stickers, messages)	Planned	Reduce fuel consumption	See above	2010

## 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	Planned	Reduce electricity use; note that GHG emission reductions from all initiatives in this section will be tracked as part of corporate GHG inventory.		2009-2010
Supply power bars – to turn off power to non-essential items when not in use (e.g. phone chargers)	Planned	Reduce electricity use	Related to workstation tune-ups	2009-2010
Replace # computers with EnergyStar models	Planned	Reduce electricity use; approximately 25% of computers will be replaced with EnergyStar models		2009
Turn off lights in unused rooms	In Progress	Reduce electricity use	Intranet announcements, training sessions and local prompts	2009-2010
Replace Refrigerators (EnergyStar rated appliance)	In Progress	Reduce electricity use	Prepare assessment of current inventory by end of Q1 2010	2010
Replace other appliances (with EnergyStar rated appliance)	In Progress	Reduce electricity use	Prepare assessment of current inventory by end of Q1 2010	2010
Install multi-function devices (and remove stand-alone printers/faxes)	In Progress	Reduce electricity use	The project goal is to consolidate the total number of output devices by 50%. We expect to meet or exceed this goal at the completion of the project in 2009.	2009
Replace standard bulbs with CFLs	In Progress	Reduce electricity use	Replacement of incandescent bulbs with fluorescent lamps complete	2010
Install motion activated lights	In Progress	Reduce electricity use	Occupancy sensors being installed in new buildings and during renovations	

Undertake lighting retrofit	In Progress	Reduce electricity use	4 facilities in 2009; 6 in 2010	2009-2010
Implement server virtualization	In Progress	Reduce electricity use	Continue to identify candidates for virtualization	2009
Utilize desk-top power management settings on computer	In Progress	Reduce electricity use	Display monitors only	2009
Initiate or complete a building energy retrofit	Planned	Reduce energy use	Lighting, heating, mechanical and controls items listed separately in this section.	2010
		Reduce energy use	Envelope upgrades - Head Office	2010
		Reduce energy use	Mechanical and controls modifications - Head Office	2009
"Spring cleaning" campaign for electronic document storage	Planned	Reduce electricity use		2009
Creation and communication of an Energy Policy	Planned	Reduce energy use	Policy to include reduction targets	2009

### 2.3 Supplies

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Initiate automatic double sided printing	In Progress	Reduce paper use; note that GHG emission reductions from all initiatives in this section will be tracked within corporate GHG inventory.	Connected to rollout of multifunction devices	2010
Commit to hold paperless meetings	In Progress	Reduce paper use	Various meetings across the corporation	2009
Develop document library (online and one printed copy) for large documents	In Progress	Reduce paper use	Corporate project underway to develop document libraries for insurance documentation	2010
Use collaborative software to edit on-line	Planned	Reduce paper use	Training planned to encourage use of existing tools; one information services project planned relating to the use of software to support collaboration.	2010
Use laptops/tablets	In Progress	Reduce paper use	Increased use of laptops and ongoing tablet pilot	2010
Restructure a process to use less paper	In Progress	Reduce paper use	All output devices able to scan documents; policy to retain no more than one hard copy of each document	2010

## 2.4 Travel

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Train staff in the use of Live Meeting (or other desktop collaborative software)	Planned	Reduce GHG emissions from travel		2009
Install Video Conferencing facilities	Planned	Reduce GHG emissions from travel		2009-2010
Support alternative travel (bike/skateboard/walk/transit) for meetings	In Progress	Reduce GHG emissions	For meetings: Transit tickets provided or carpooling encouraged; For meetings and employee commuting to and from work: Participation in employer transit pass programs; preferred carpool parking at Head Office and other locations; free parking for Jack Bell Rideshare participants; bicycle lock-up with lockers; participation in Commuter Challenge and Bike to Work week.	

## 2.5 Employee Engagement

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Provide climate change education	Planned	Reduce GHG emissions; 80% of employees aware of carbon neutral goal by end of 2009.	Climate Change Action Program website launched; various internal web and print newsletters featuring climate change; employee energy conservation survey; various speakers scheduled	2009
Provide conservation education	Planned	Reduce waste and GHG emissions	Internal web and print newsletters; speakers; training	2009
Hold contests to change behaviour/make pledge	Planned	Reduce waste and GHG emissions		2009-2010
Hold contests/support to generate ideas	Planned	Reduce waste and GHG emissions	Call for suggestions on internal website and in Employee Conservation Survey	
Support Green Teams (resources)	In Progress	Reduce waste and GHG emissions	Executive support for Green Team participation and increased membership; Green Team contests and rewards; training/webmeetings; members continue to support a range of environmental initiatives	2009
Provide green tips	In Progress	Reduce waste and GHG emissions	Available regarding public transit, recycling, battery recycling since 1999, green driving tips launched in 2008; tips for energy and paper use reduction planned for 2009.	2009

**2.6 Sustainability Actions (others)**

Action	Action Planned	Outcome/Performance Measure	Notes Clarifying Action Taken	Timeframe
Purchase green cleaning products	In Progress	Reduce environmental footprint	Requirement to use "green cleaning products" included in all new contracts	2010
Support sustainable procurement practices	In Progress	Reduce environmental footprint	Sustainability considerations added to standard competitive bid documents; prepare business case for e-procurement.	2009
			Head Office cafeteria discontinues use of Styrofoam take-out containers, to be replaced with sustainable alternatives (e.g., fibreware, bioplastics) and encouraging staff to bring in their own containers.	2009
Adopt low-carbon contracting practices	In Progress	Reduce environmental footprint	Language regarding energy efficiency incorporated into standard contract documents for equipment	2009