

# 2012 CARBON NEUTRAL ACTION REPORT





# JUSTICE INSTITUTE OF BRITISH COLUMBIA -2012 CARBON NEUTRAL ACTION REPORT

# EXECUTIVE SUMMARY

The Justice Institute of British Columbia (JIBC) is Canada's leading public safety educator - a dynamic postsecondary institution recognized nationally and internationally for innovative education and applied research in the areas of justice and public safety. JIBC offers a range of applied and academic programs (certificates, diplomas, and degrees) that span the spectrum of safety – from prevention to response and recovery.

JIBC is committed to reducing its carbon footprint and improving sustainability through environmentally responsible practices. In 2006 we began implementing operational changes which have resulted in significant reductions in energy and water consumption at our New Westminster and Maple Ridge campuses.

We have continued to reduce energy use and water consumption in 2012. At our New West campus, weather adjusted data indicates a reduction in energy consumption of 30 %, which has resulted in a corresponding decline in greenhouse gas emissions of approximately 30% when compared to our 2008 baseline. Water consumption in 2012 has also been reduced by approximately 38% compared to 2006. At our Maple Ridge campus, weather adjusted data indicates energy savings of approximately 27%, resulting in a decline in greenhouse gas emissions of approximately 27% when compared to our 2007 baseline for this campus.

In 2009, JIBC in partnership with BC Hydro completed an energy study of its New Westminster and Maple Ridge campuses to review the facilities' energy using systems; provide energy consumption baseline information; and develop detailed recommendations for cost-effective options to improve the energy efficiency of both facilities.

Several of the recommendations were implemented at our New West campus in 2009 and 2010, and implementation at our Maple Ridge campus began in 2011.

JIBC has established and continues to maintain a comprehensive recycling program that includes paper, cardboard, compost, printer toner cartridges, electronic equipment, fluorescent lamps, batteries, plastics, glass, metals, pallets and kitchen cooking oil. In addition, we encourage the use of re-usable dishes in our food services operation and require our janitorial contractors to use certified "green" cleaning products at our New Westminster, Maple Ridge and Okanagan campuses. In 2012 we expanded our electronics recycling program and added Styrofoam to the list of products we recycle.

gradieray

**Tracey Ternoway,** CA Vice-President, Finance and Administration

## GREENHOUSE GAS EMISSIONS AND OFFSETS APPLIED TO BECOME CARBON NEUTRAL IN 2012

- Buildings 570tonnes
- Fleet 78 tonnes\*
- Supplies 64 tonnes
- Offsets applied to become carbon neutral in 2012 712 tonnes

We are pleased to report that we have reduced our overall greenhouse gas emissions by 98 tonnes in 2012 when compared to 2011.

\*Greenhouse Gas emissions reported for fleet operations are net of 3 tonnes, which represent biomass emissions from the renewable fuel portion in emissions. As stated in "BC Best Practices 2012, Methodology for Measuring Greenhouse Gas Emission", the carbon dioxide emissions resulting from the combustion of biogenic fuel sources must be reported, but do not require offsets.

In addition, it was estimated that fugitive emissions from stationary cooling comprises less than .01% of JIBC's total emissions, and that ongoing effort to collect or estimate emissions from this source annually is disproportionately onerous. Thus, these emissions have been deemed to be out of scope and are not included JIBC's total greenhouse gas emissions profile or offset purchase.

# OVERVIEWS

# ACTIONS TAKEN TO REDUCE GREENHOUSE GAS EMISSIONS IN 2012

# Green Campus Team

JIBC's Green Campus Team was formed in 2011, with members representing all schools and divisions at JIBC, to provide a forum for the advancement and implementation of environmental sustainability initiatives; and facilitate cross - divisional communications on best practices and to encourage staff and student participation.

The Team also tracks performance and will establish benchmarks for future comparisons and targets for items such as fleet emissions, paper consumption, facilities energy consumption and waste management.

In 2012, the Team was instrumental in gaining Institute support for the elimination of binders for the majority of courses that still utilize paper based materials. In November, the team brought forward a proposal for more sustainable alternatives to delivering course materials and received approval to eliminate binders effective April 1, 2013.

The team also continued to promote the use of on line delivery for course materials and administrative reports. In 2012, JIBC took the bold step of transitioning our annual report from a printed document to a digital format. We estimate the Institute saved approximately 60,000 pages of paper by not printing the annual report. These initiatives helped contribute to a 13% reduction of paper use in 2012, when compared to 2011 consumption.

# **Technology Services**

Technology Services continued replacing physical servers with "virtual" servers as part of a long-term program to lower energy consumption and costs. Older technology required each server operating system to run on its own physical device, but as processor speeds have increased and newer methods have been developed, we are able to lower energy consumption by hosting multiple server operating systems on one physical device. The percentage of JIBC virtualized servers increased from 50% to 70% in 2012.

We also continued upgrading our computer operating system in 2012. The new system has superior energy saving features that include diming computer screens, slower disk rotational speed and superior auto sleep mode when computers are not in use. This project is expected to be completed in 2014.

The Institute has also implemented modern digital media sharing across the internet, which has reduced the need to create DVD's or tapes.

# Print/Copy Management Project

In 2011, JIBC conducted a detailed assessment of current state of the Institute's document technology and its environmental impact. The scope included the Institute's full range of printers, scanners, photocopiers, and multi-function devices, including those in our Print Shop.

The assessment confirmed significant opportunities for improving business processes, reducing environmental impact and cost, with optimization of devices. Based on findings from the assessment, we moved forward with a strategy to streamline our internal printing, reduce overall costs, and reduce our environmental impact.

The net result has been a 77% reduction of separate standalone output devices and an estimated ongoing reduction in energy consumption and waste generation of approximately 30%, when compared to the previous state.

## New Westminster Campus

We partnered with BC Hydro by joining the Continuous Optimization Program for Commercial Buildings. The program consists of two primary integrated components. The first component is re-commissioning, which includes activities that identify opportunities to optimize building energy use through the implementation of low-cost operational improvements and retrofits. The second component of the program is an electrical meter upgrade to provide for comprehensive analysis and reporting. The investigation phase of the program was launched and the upgraded meter was installed at the New Westminster campus in November 2012.

In 2011, we replaced full-sized wastebaskets in administrative offices with mini desktop garbage cans, and added compost bins at our New Westminster campus. In 2012, we expanded this composting program and more than doubled the amount of compostable materials being diverted from the landfill, from approximately 2,400 kilograms in 2011 to approximately 5,000 kilograms in 2012.

# Maple Ridge Campus

The building automation system (BAS) replacement project, which began in August, 2011, was completed in 2012.

The system changes implemented with this project allow for more precise control of the building heating and lighting systems, as well as better data collection for trend analysis and systems optimization.

Energy saving features of the new BAS include:

- Occupancy sensors in classrooms to control lighting and ventilation to conserve energy when rooms are unoccupied.
- Carbon monoxide sensors to reduce unnecessary running of circulation fans in unoccupied areas.
- Ambient light sensor in the main building hall will switch off interior lighting when ambient lighting from windows and skylights reaches adequate levels.
- Exterior building and street lighting automatically controlled based on a sunrise and sunset times, reducing unnecessary lighting.

In addition the site lighting for the campus was retrofitted, replacing 400 watt bulbs with a 150 watt alternative.

We also added the campus to our energy monitoring program with a third party provider of energy monitoring, targeting and reporting services. This will ensure energy reduction targets are being met, and that periods of off target energy performance are quickly identified so that corrective actions can be taken.

# Chilliwack Campus

We moved into a new larger classroom building in 2012. The new building's modern mechanical and lighting systems; complete with motion sensor controls are expected to reduce energy use intensity going forward.

# Victoria Campus

We continued to expand our recycling/composting program. The compostable material is picked up by Refuse, a company that uses people-powered pick up in the downtown Victoria area, partnering with the re-Cyclists who use pedal-powered tricycles for pickup.

Motion sensors have also been installed to turn lighting off when space is not occupied.

## PLANS TO CONTINUE REDUCING GREENHOUSE GAS EMISSIONS 2013 – 2015

JIBC's Green Campus Team will continue to provide a forum for the advancement and implementation of environmental sustainability initiatives at the Institute and encourage staff and student participation.

We also plan to implement a sustainable procurement policy that will encourage sustainable purchasing practices and outline the parameters that we expect our suppliers to work within. With new travel, courier and cartage agreements we plan to start tracking and managing our carbon footprint associated with these activities.

## New Westminster Campus

Complete the investigation stage of BC Hydro's Continuous Optimization Program which includes:

- Performing diagnostic monitoring and functional tests
- Development of master list of findings
- Prioritization and selection of operational improvements and retrofits

Implement selected operational improvements identified during investigation phase and verify results.

## Maple Ridge Campus

- Continue energy monitoring program with third party provider of energy monitoring, targeting and reporting services.
- Install a bottle filling station for student use to encourage the re-use of water bottles.
- Re-lamp all 32 watt high bay lighting with 25 watt bulbs.

## Chilliwack Campus

• Join Pulse Energy's Pulse Check program to analyze our buildings based on their load profiles and activity to identify actions that will reduce energy consumption.





#### JUSTICE INSTITUTE OF BRITISH COLUMBIA

715 McBride Boulevard New Westminster, BC V3L 5T4 Canada

TeL. 604.525.5422 Fax. 604.528.5518

> Chilliwack Campus 45300 Vimy Avenue Chilliwack, BC V2R 5X6 Tel. 604.847-0881

Maple Ridge Campus 13500 256th Street Maple Ridge, BC V4R 1C9 Tel. 604.462-1000

Okanagan Campus 825 Walrod Street Kelowna, BC V1Y 2S4 Tel. 250.469.6020

Vancouver Campus 555 Great Northern Way Vancouver, BC V5T 1E2 Tel. 604.528.5801

Victoria Campus 810 Fort Street Victoria, BC V8W 1H8 Tel. 250.405.3500

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Mobile Fuel Combustion (Fleet and other)		·		-	
Behaviour change program					
Provide fleet driver training to reduce fuel use	Not Yet				No End Date
5	Evaluated				(Continuous)
Introduce anti-idling policy and/or raise anti-idling awareness for fleet	Not Yet				No End Date
drivers (e.g., signs, stickers, messages)	Evaluated				(Continuous
Encourage carpooling in fleet vehicles	Not Yet				No End Date
5 1 5	Evaluated				(Continuous
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles,	Not Yet				No End Date
public transit, walking)	Evaluated				(Continuous
Vehicle fuel efficiency					(00000000000000000000000000000000000000
Replace vehicles with more fuel-efficient models	Not Yet				No End Date
Replace vehicles with more fuel emolent models	Evaluated				(Continuous
Replace larger vehicles with smaller models according to fleet "right-	Not Yet				No End Date
sizing" principles	Evaluated				(Continuous
Perform regular fleet maintenance to improve fuel-efficiency	Not Yet				No End Date
renominegular neer maintenance to improve fuel-eniciency	Evaluated				(Continuous
	Evaluated				Continuous
Stationary Fuel Combustion, Electricity	1				1
Behaviour change program					
Help staff reduce personal energy use through ""workstation tune-ups""	Not Yet				No End Date
	Evaluated				(Continuous)
Ask staff to unplug electrical equipment or switch off power bars when	Not Yet				No End Date
not in use	Evaluated				(Continuous)
Ask staff to unplug electrical equipment or switch off power bars when	Not Yet				No End Date
not in use	Evaluated				(Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling	Not Yet				No End Date
demands	Evaluated				(Continuous)
Encourage staff to use air dry setting on dishwashers	Not Yet				No End Date
5 , 5	Evaluated				(Continuous)
Provide tips to staff on saving energy in the office while working outside	Not Yet				No End Date
of regular business hours	Evaluated				(Continuous
Encourage use of stairs instead of elevators	Ongoing/In	The JIBC Wellness Committee encourages staff to use stairs with	Wellness Committee poster campaign will be continued.	2008	No End Date
	Progress	posters displayed at our New Westminster campus.	······································		(Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In	Turn off the lights stickers and posters are displayed at all	Turn off the lights campaign will be continued.	2008	No End Date
	Progress	campuses; Maintenance, Security and Janitorial Staff are regularly	ram on the lighte campaign will be contained.	2000	(Continuous)
	riogrooo	encouraged to ensure lights are turned off in unoccupied areas.			(Continuous)
Promote hot water conservation	Completed (in				No End Date
	Previous Year)				(Continuous)
IT power management	I Torrouge Toury				(Containadad)
Install power management software which shuts down computers	Ongoing/In	The percentage of desktop computers that shut down after business	Further evaluation of implementing full shutdown of computers.	2011	2014
outside of regular business hours	Progress	hours increased from approximately 5 to 60 percent in 2012.		2011	2017
Implement server virtualization	Ongoing/In	The percentage of virtualized servers increased from approximately	Continue to virtualize existing servers and add new servers as virtual	2010	2014
	Progress	50 to 70 percent in 2012.	machines onto fewer hosts, rather than adding negative hosts.	2010	2017
Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In	Increased the percentage of computers with Windows 7 software,	Further deployment of Windows 7.	2011	2014
Apply auto sloop settings on computer monitors and Or OS	Progress	which has better capabilities for enforcing sleep behaviour by 10		2011	2014

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
		percent, to approximately 60 percent of machines.			
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices as part of a print management strategy	Completed (in Reporting Year)	In 2011, JIBC conducted a detailed assessment of current state of the Institute's document technology and its environmental impact. The scope included the Institute's full range of printers, scanners, photocopiers, and multi-function devices, including those in our Print Shop.		2012	2012
		In 2012 we moved forward with a strategy to streamline our internal printing, reduce overall costs, and reduce our environmental impact. The net result has been a 77 percent reduction of separate standalone output devices and an estimated ongoing reduction in energy consumption and waste generation of approximately 30 percent, when compared to the previous state.			
Apply auto-sleep settings on printers, fax machines, and/or multi- function devices	Completed (in Reporting Year)	Stand-alone printers removed and replaced with multifunction devices. Auto sleep settings applied on all multifunction devices.		2012	2012
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	Increased percentage of Energy Star compiant equipment from 35 to 65 percent.	Continue to replace older equipment with Energy Star compliant equipment.	2009	No End Date (Continuous)
Leased buildings Establish energy performance baseline for leased buildings	Not Yet				No End Date
о, - С	Evaluated				(Continuous)
Lease space with operations and maintenance performance labelling/certification (e.g., LEED EB:O&M)	Not Yet Evaluated				No End Date (Continuous)
Lease space with commercial interiors performance labelling/certification (e.g., LEED CI)	Not Yet Evaluated				No End Date (Continuous)
Lease space in buildings with new construction performance labelling/certification (e.g., LEED NC)	Not Yet Evaluated				No End Date (Continuous)
Develop a green lease policy that requires green features to conserve energy be included in all lease negotiations	Not Yet Evaluated				No End Date (Continuous)
Owned buildings					
Establish energy performance baseline for owned buildings	Ongoing/In Progress	In 2010 we began an energy monitoring program with a third party provider of energy monitoring, targeting and reporting services at our New Westminster campus to ensure energy reduction targets were being met, and that periods of off target energy performance are quickly identified so that corrective actions can be taken. In 2012 we continued monitoring the New Westminster campus; we also added our Maple Ridge campus to the program.	We plan to continue the metering and monitoring programs at our New Westminster and Maple Ridge campuses. We also plan to join the BC Hydro Pulse Check metering program at our Maple Ridge and Chilliwack campus.	2010	No End Date (Continuous)
Register for performance labelling/certification for operations and maintenance of owned buildings (e.g., LEED EB:O&M)	Not Yet Evaluated				No End Date (Continuous)
Register for performance labelling/certification for commercial interiors of owned buildings (e.g., LEED CI)	Not Yet Evaluated				No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Not Yet Evaluated				No End Date (Continuous)
Perform energy retrofits on existing, owned buildings	Ongoing/In Progress	We partnered with BC Hydro by joining the Continuous Optimization Program for Commercial Buildings. The program consists of two primary integrated components. The first component is re-	Complete the investigation stage of BC Hydro's ™Continuous Optimization Program which includes:	2012	2014

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
		commissioning which includes activities that identify opportunities to optimize building energy use through the implementation of low-cost operational improvements and retrofits. The second component of the program is an electrical meter upgrade to provide for comprehensive analysis and reporting. The investigation phase of the program was launched and the upgraded meter was installed at the New Westminster campus in November 2012.	<ul> <li>Performing diagnostic monitoring and functional tests</li> <li>Development of master list of findings</li> <li>Prioritization and selection of operational improvements and retrofits</li> <li>Implement selected operational improvements identified during investigation phase and verify results.</li> </ul>		
Incorporate a refrigerant management strategy into regular building management/maintenance to reduce fugitive emissions	Ongoing/In Progress	The JIBC has an established regular maintenance program for refrigeration equipment at our owned facilities to help minimize fugitive emissions from this equipment.	Maintenance programs will be continued.	2008	No End Date (Continuous)
Planning/management					
Reduce office space (square meters) per employee	Not Yet Evaluated				No End Date (Continuous)
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	Ongoing/In Progress	We partnered with BC Hydro by joining the Continuous Optimization Program for Commercial Buildings. Participation in the program includes an electrical meter upgrade to provide comprehensive analysis and reporting. The upgraded meter was installed at our New Westminster campus in November 2012.	We plan to continue the metering program at our New Westminster campus. We also plan to join the BC Hydro Pulse Check metering program at our Maple Ridge and Chilliwack campuses.	2010	No End Date (Continuous)
Retrofit details for owned buildings					
Upgrade lighting systems during retrofits	Ongoing/In Progress	Site lighting at our Maple Ridge campus was retrofitted, replacing 400 watt bulbs with a 150 watt alternative. All remaining T-12 lamps at our New Westminster campus were retrofitted with T-8 lamps. Motion sensors were installed to control lighting at our Victoria campus.	Implement retrofits identified by Continuous Optimization Program at our New Westminster campus. Re-lamp 32 watt high bay lighting with 25 watt bulbs at our Maple Ridge campus.	2012	2014
Upgrade/adjust control systems during retrofits	Completed (in Reporting Year)	<ul> <li>In 2012 we completed a building automation system (BAS) replacement project at our Maple Ridge campus.</li> <li>The system changes implemented with this project allows for more precise control of the building heating and lighting systems, as well as better data collection for trend analysis and systems optimization. Energy saving features of the new BAS includes:</li> <li>Occupancy sensors in classrooms to control lighting and ventilation to conserve energy when rooms are unoccupied.</li> <li>Carbon monoxide sensors to reduce unnecessary running of circulation fans in unoccupied areas.</li> <li>Ambient light sensor in the main building hall will switch off interior</li> </ul>		2011	2012

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
		lighting when ambient lighting from windows and skylights reaches			
		adequate levels.			
		- Exterior building and street lighting automatically controlled based			
		on a sunrise and sunset times, reducing unnecessary lighting.			
Supplies (Paper)					
Behaviour change program					
Train staff to use collaborative software for electronic editing (e.g.	Not Yet				No End Date
SharePoint, Groove, etc.)	Evaluated				(Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no	Completed (in				No End Date
handouts)	Previous Year)				(Continuous)
Electronic media in place of paper					
Install collaborative software for electronic editing (e.g. SharePoint,	Not Yet				No End Date
Groove, etc.)	Evaluated				(Continuous)
Use electronic document library for filing common documents	Completed (in				No End Date
	Previous Year)				(Continuous)
Switch to an electronic payroll notification system in place of paper pay	Not Yet				No End Date
stubs	Evaluated				(Continuous)
Paper Type					
Purchase 30% post-consumer recycled paper	Ongoing/In	The Print Shop, which prints the majority of Institute course	Expand use of 30% recycled content paper throughout the Institute.	2009	No End Date
	Progress	materials, continued using paper with 30% recycled content.			(Continuous)
Purchase 40% post-consumer recycled paper	Not Yet				No End Date
	Evaluated				(Continuous)
Purchase 100% post-consumer recycled paper	Not Yet				No End Date
	Evaluated				(Continuous)
Printer/document settings					
Switch networked printers and photocopiers to automatic double-sided	Completed (in	All networked printers with this capability have been set to default		2012	2012
	Reporting Year)	double sided printing.			

### 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

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
Business Travel					
Behaviour change program					
Train staff in web-conferencing	Not Yet				No End Date
-	Evaluated				(Continuous)
Encourage staff to consider virtual attendance/presentation at events	Not Yet				No End Date
where possible	Evaluated				(Continuous)
Encourage carpooling to meetings	Not Yet				No End Date
	Evaluated				(Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit,	Not Yet				No End Date
walking)	Evaluated				(Continuous)
Policy and budgeting					
Create a low-carbon travel policy or travel reduction goal	In Development	In 2012 we began work on new travel, courier and cartage agreements that will allow us to track and manage our carbon footprint associated with these activities.	Implement new travel, courier and cartage agreements.	2012	2013
Virtual meeting technology					
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Not Yet				No End Date
	Evaluated				(Continuous)
Make desktop web-cameras available to staff	Not Yet				No End Date
	Evaluated				(Continuous)
Install video-conferencing units in meeting rooms or provide mobile	Not Yet				No End Date
video-conferencing units	Evaluated				(Continuous)
Education, Awareness, and Engagement					
Awards/Recognition					
Establish a sustainability/green awards or recognition program	Not Yet				No End Date
	Evaluated				(Continuous)
Staff Professional Development					
Support green professional development (e.g., workshops, conferences,	Not Yet				No End Date
training)	Evaluated				(Continuous)
Include green options in employee performance measurement system	Not Yet				No End Date
5 T T T ,	Evaluated				(Continuous)
Staff awareness/education					
Provide education to staff about the science of climate change	Not Yet				No End Date
	Evaluated				(Continuous)
Provide education to staff about the conservation of water, energy, and	Not Yet				No End Date
raw materials	Evaluated				(Continuous)
Provide green tips on staff website or in newsletters	Ongoing/In	The JIBC Green Campus Team contributes articles and tips on	The Team will continue to contribute to the weekly news letter.	2011	No End Date
	Progress	sustainability to the Institute electronic news letter.			(Continuous)
Provide sustainability education during new staff orientation	Not Yet				No End Date
	Evaluated				(Continuous)
Team-building					(
Create Green, Sustainability, Energy Conservation, or Climate Action	Ongoing/In	The JIBC Green Campus Team was formed in 2011, with members	The Green Campus Team will continue to provide a forum for the	2011	No End Date
Teams with executive endorsement	Progress	representing all schools and divisions at JIBC, to provide a forum for the advancement and implementation of environmental sustainability initiatives; and facilitate cross - divisional communications on best	advancement and implementation of environmental sustainability initiatives at the Institute and encourage staff and student participation.		(Continuous)

### Actions to Reduce Provincial Emissions and Improve Sustainability

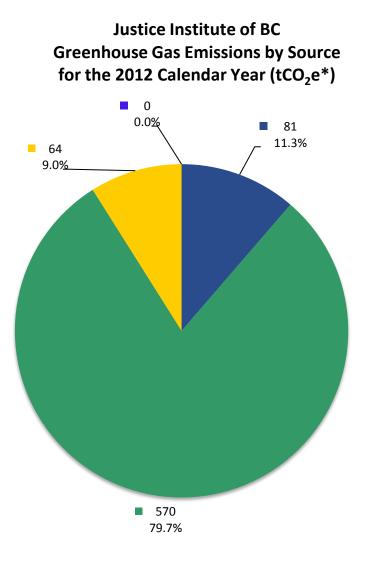
The actions listed below contribute to a reduction in greenhouse gas emissions from sources that fall outside of the reporting requirements defined in the carbon neutral government regulation of the Greenhouse Gas Reduction Targets Act. Public sector

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
		practices and to encourage staff and student participation.			
		The Team also tracks performance and will establish benchmarks for			
		future comparisons and targets for items such as fleet emissions,			
		paper consumption, facilities energy consumption and waste			
		management.			
Provide resources and/or dedicated staff to support teams	Completed (in				No End Dat
	Previous Year)				(Continuous
Providing behaviour change education/training to teams (e.g.,	Not Yet				No End Dat
ommunity-based social marketing)	Evaluated				(Continuou
Other Sustainability Actions	1	1			1
Adaptation to Climate Change					
Assessed whether extreme weather events and/or long term changes in	Not Yet				No End Date
limate will affect the organization's business areas	Evaluated				(Continuous
ntegrated considerations of extreme weather events and/or long term	Not Yet				No End Date
changes in climate into the organization's decision making.	Evaluated				(Continuous
Building construction, renovation					
Establish a policy to reuse materials where possible and divert	Not Yet				No End Date
construction and demolition debris from landfills and incineration facilities	Evaluated				(Continuous
ncorporate lifecycle costing into new construction or renovations	Not Yet Evaluated				No End Date (Continuous
Commuting to and from home					
Introduce telework/work from home policy	Not Yet				No End Date
	Evaluated				(Continuous
Offer staff a compressed work week	Not Yet				No End Date
	Evaluated				(Continuous
Encourage commuting by foot, bicycle, carpool or public transit	In Development		Car pooling will continue to be encouraged.	2012	No End Dat
		professional development day to answer questions from staff			(Continuous
		regarding car-pooling and ride share options. Information boards were placed around the campus for staff and students to view.			
Provide shower or locker facilities for staff/students who commute by	Completed (in				No End Date
oot or by bicycle	Previous Year)				(Continuous
Provide secure bicycle storage	Completed (in				No End Date
	Previous Year)				(Continuous
Procurement (non-paper supplies)					
Incorporate minimum recycled content standards into procurement	Not Yet				No End Date
policy for consumable, non-paper supplies (e.g., writing instruments,	Evaluated				(Continuous
binders, toner cartridges, etc.)					
Establish green standards for goods that are replaced infrequently	In Development		Implement a sustainable procurement policy	2012	2013
and/or may require capital funds to purchase (e.g., office furniture,		encourage sustainable purchasing practices and outline the			
carpeting, etc.)		parameters that we expect our suppliers to work within.			
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Completed (in Previous Year)				No End Date (Continuous
Waste reduction/diversion					

### 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

Action	Status	Steps Taken	Steps Planned	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	JIBC has established and continues to maintain a comprehensive recycling program that includes paper, cardboard, printer toner cartridges, electronic equipment, fluorescent lamps, batteries, plastics, glass, metals, pallets and kitchen cooking oil. In addition, we encourage the use of re-usable dishes in our food services operation. In 2011 we added compostable materials, and in 2012 we expanded our electronics recycling program and added Styrofoam to the list of products we recycle.	Continue recycling program.	2008	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress	JIBC has established and continues to maintain a comprehensive recycling program that includes, printer toner cartridges, electronic equipment, fluorescent lamps and batteries. In 2012 we expanded our electronics recycling program to include a wider variety of equipment.	Continue recycling program.	2009	No End Date (Continuous)
Water conservation					
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Completed (in Previous Year)				No End Date (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	Not Yet Evaluated				No End Date (Continuous)
Introduce a stormwater management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales)	Not Yet Evaluated				No End Date (Continuous)



#### **Total Emissions: 715**

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion (Building Heating and Generators) and Electricity
- Supplies (Paper)
- Fugitive Sources

#### Offsets Applied to Become Carbon Neutral in 2012 (Generated May 27, 2013 11:38 AM)

Total offsets required: 712. Total offset investment: \$17,800. Emissions which do not require offsets: 3 \*\*

\*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.