



BC Innovation Council (BCIC)

2010 Carbon Neutral Action Report

EXECUTIVE SUMMARY

The British Columbia Innovation Council (BCIC) promotes the development of entrepreneurs and the commercialization of technology, making BC a great place to start and grow technology companies. BCIC recognizes that its contributions as a Crown agency and those of its clients in the non-governmental sector are important in achieving the Province's Climate Action targets.

Over the years, BCIC has taken many steps to align its internal operations and procedures to mitigate the effects of greenhouse gas emissions and other pollutants that contribute to climate change and global warming. We take pride that our total 2010 greenhouse gas emissions were only 6.29 tCO₂e.

Efficiency and environmental consciousness are threads that run throughout all of BCIC's programs and initiatives. BCIC's programs promote the growth of technology companies across all sectors including clean technology. By enabling these programs and supporting the commercialization of their technologies, BCIC is playing a part in their results benefiting the environment both regionally and around the globe.

Perhaps the most influential tool BCIC has to support BC's Climate Action Plan is that of communication. Over the past year, BCIC has become increasingly active in social media and has made it a priority to profile BC companies including those that are focused on new technologies that address global challenges, ecological and conservation issues. By increasing awareness and spreading their successes, BCIC hopes to inspire a new generation of like-minded technologies to market.

A handwritten signature in black ink, appearing to read "Danny Robinson", is written over a horizontal line.

Danny Robinson, CEO

April 30, 2011

Date

OVERVIEWS

ACTIONS TAKEN TO REDUCE GREENHOUSE GAS EMISSIONS IN 2010

1. *Reduced paper use by encouraging two-sided printing and use of outdated printed paper and letterhead for printing.*
2. *Use of office supplies made of recycled materials and with the least amount of packaging.*
3. *Use of 100% recycled paper.*
4. *Promoted energy conservation by encouraging staff to turn off computers, printers, photocopiers and other equipment at the end of the day. For computers not turned off each day, ensured monitors were set to their most energy efficient settings or automatic power-off.*
5. *Switched to non-toxic, environmentally friendly cleaning products and encouraged building maintenance to use green cleaning products.*
6. *Replacement of tradition bathroom faucets with energy efficient, sensor taps to reduce water waste.*
7. *Encouraged carpooling among staff commuting into office daily.*
8. *Enrolled staff in Translink's Employer Pass program and membership with Cooperative Auto Network to encourage use of public transit.*
9. *Discouraged printing of unnecessary files/papers.*
10. *Requested the use of FSC Certified paper when producing promotional materials.*
11. *Instituted a lighter, more casual dress code in warmer spring/summer months to keep cooling costs down.*
12. *Encouraged recycling of kitchen waste including glass, plastic, cardboard and other materials.*
13. *Each staff member is provided with a paper waste recycling box at their desk.*

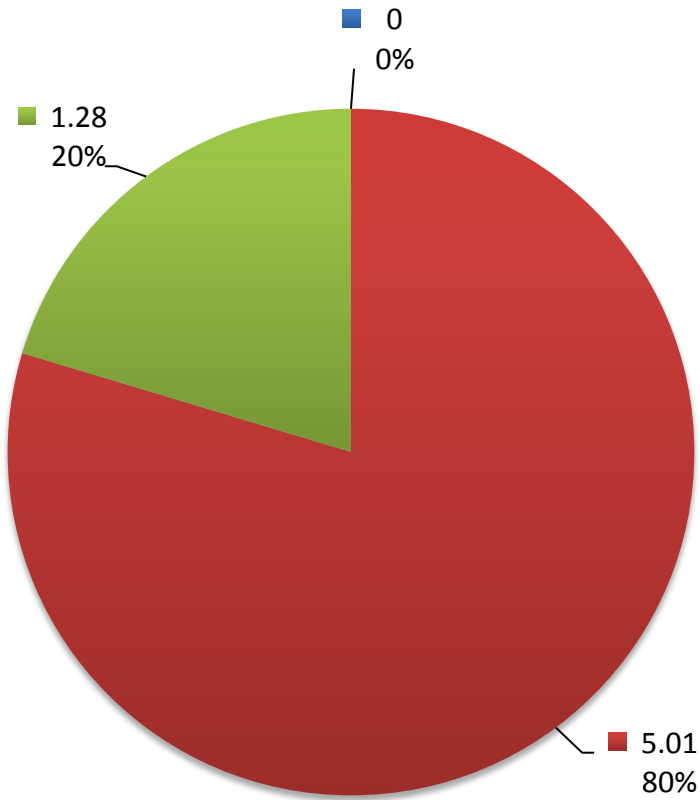
CONSIDERATIONS IN CONTINUING TO REDUCE GREENHOUSE GAS EMISSIONS IN 2011 – 2013

1. **Introduction of Flex Time System** – the opportunity for staff to work additional hours during work week in return for a day off every second week. Benefits: reduced commuting times and operational emissions on flex day.
2. **Use of Greenery Within Office Environment** – with cleansing and aesthetic benefits, plants such as the Peace Lily will be brought in. NASA celebrated the peace lily and named it among the top ten indoor plants for its ability to clean the air, remove chemicals such as formaldehyde and carbon monoxide from the air.
3. **Commitment to Rental Cars with GPS Systems** – when necessary to equip staff with vehicle rentals, ensuring provision of GPS system limits unnecessary additional car travel.
4. **Regular Reminder to Staff** – reminding staff of the various initiatives previously and to-be implemented, such as the closing of blinds at the end of the day.
5. **Virtual Attendance** – encouraging staff to attend virtual events and meetings with use of webcams.
6. **Green Professional Development** – supporting staff to undertake training to broaden awareness of green initiatives and environmental improvements.
7. **Staff Parking & Carpooling** – review of parking fee modification, with consideration of carpooling policy. Enforcement of carpooling policy as it relates to travel for meetings.

PARTNERSHIPS AND COMMUNITY OUTREACH: BCIC PROVINCE-WIDE CARBON REDUCTION INITIATIVES

<p>BCIC General BlueION Water Technologies Future Vehicle Technologies Green Tech Avenue Inc SunCentral iDUS Allison Schaap – scholarship recipient Enviro-Quest Technologies Inc Catalyst Power Inc. Diacarbon (aka: Paramount Ag-Research Inc EnvirEau Technologies Inc</p>	<p>Mark Dance Course Participants 2010 Powerdisc - Clean Tech (Fuel Cell) Urbanstream - Energy Conservation Electromotion - Clean Tech (Alt Heat source) CrossWind - Clean Energy (Wind) Ripe - Clean Tech (Fuel Cell) IsCleaner - ICT - (for Clean Tech) Quadrogen Solar Power - Clean Tech (Alt Energy) Float Tech - Energy Conservation Awesense - Electricity Loss Discovery Ronin Fuel Cell -Fuel Cell Pulse Energy - Building Energy Monitoring and Optimization Foodtree - Local Ingredients data for consumers EnergyAware - Energy conservation Habitat Enterprises - Carbon Credit Production</p>
<p>BCIC-New Ventures Solegear Bioplastics (winner) EnergyCzar (top 10) GreenScene AgriTek Inc. (top 25) Lumira Technologies (top 25) Purion (top 25)</p>	<p>BCIC-New Ventures Regional Companies Reel Safe Fish (winner) Rapid Water Testing (top 20) A22 Rent-a-bike (top 20) EcoMeter (top 20) HydraCat (top 20) Wolf Trailers (top 20) KoK Technology (top 20)</p>
<p>Globe Companies Saltworks Corvus Energy Air Phaser Environmental Ltd Aquavive Technologies Endurance Wind Power Inc.</p>	<p>CONNECT Speakers/Leaders Lignol Energy Light-based Technology Rapid Electric Vehicles Pulse Energy</p>
<p>TIA Winners Nexterra Systems Corp</p>	<p>Newsletter EnWave Corporation</p>
<p>CAT Winner AgriForest Biotech Ltd.</p>	<p>Twitter/Case Study Library Ballard Power Systems</p>

BC Innovation Council (BCIC) Greenhouse Gas Emissions by Source for the 2010 Calendar Year (tCO₂e*)



Total Emissions: 6.29

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion and Electricity (Buildings)
- Supplies (Paper)

Offsets Applied to Become Carbon Neutral in 2010

Total offsets purchased: **6.29**. Total offset investment: **\$157.25**. Emissions which do not require offsets: **0** **

*Tonnes of carbon dioxide equivalent (tCO₂e) 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.

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Actions Towards Carbon Neutrality

The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act*.

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Mobile Fuel Combustion (Fleet and other mobile equipment)						
This section is either not applicable, not yet evaluated, or was completed before 2010						
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)						
IT power management						
Implement server virtualization	Ongoing/In Progress		Although considered in 2010, it was deemed too risky for privacy in keeping our files secure and back up in order.			
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress		BCIC currently shares 1 multifunctional device with the other tenants of our office floor. We still operate several stand-alone printers and 1 fax machine.			
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress		We don't anticipate computer upgrades for 2011.			
Appliances and electronic devices						
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress		BCIC shares the refrigerators with the other tenants of our floor. The BCTIA are the landlords of the floor and are the owners of the refridgerators.			
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress		As per the above			
Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases	Completed in 2010		BCIC only has 3 desk top lamps in our office. All bulbs were replaced with CFLs.		2008	No End Date (Continuous)
Behaviour change program						
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress					
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress		BCIC has asked staff to be conscious of this.	Quarterly reminder issued to staff.	2008	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress		Our lights automatically turn off daily.			
Supplies (Paper)						
Printer/document settings						
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	Completed in 2010		Our printers do not offer this option. 0% option		2009	2010
Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.)	Ongoing/In Progress		BCIC will investigate this option		2009	No End Date (Continuous)

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Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Electronic media in place of paper						
Post materials online that were previously printed	Ongoing/In Progress		This is determined on a project to project basis.	Consider hiring a student to pdf softcopy our hard copy archiving.	2008	No End Date (Continuous)

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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 organizations can optionally use this section to report on actions that will help British Columbia meet its provincial greenhouse gas reduction targets, engage the public, and improve environmental sustainability across all aspects of their organization.

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Business Travel						
Policy and budgeting						
Create a low-carbon travel policy or travel reduction goal	Ongoing/In Progress		BCIC follows the direction of the Premiere's office for travel reduction.	BCIC will consult with our Ministry to see how they have approached this issue and follow their lead.	2008	No End Date (Continuous)
Virtual meeting technology						
Make desktop web-cameras available to staff	In Development		Currently BCIC executives have cameras on their computers, but not the general staff.	As our computers require replacing, they will be phased out in favour of computers with web cameras.	2008	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress		BCIC uses a videoconferencing unit in our private boardroom.			
Behaviour change program						
Train staff in web-conferencing	Ongoing/In Progress		As needed.		2008	No End Date (Continuous)
Train staff in video-conferencing or provide technical support for video-conferencing set-up	Ongoing/In Progress		As needed.		2008	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress		BCIC has asked staff to be conscious of this.		2008	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress		BCIC has asked staff to be conscious of this.		2008	No End Date (Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress		BCIC has asked staff to be conscious of this.		2008	No End Date (Continuous)
Education, Awareness, and Engagement						
Team-building						
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Ongoing/In Progress		Although this notion was captured in a Measure which was included in the BCIC 2008/09 Service Plan, it was edited out for the 2009/10 Service Plan.	No further discussions has taken place around this.	2008	2010
Provide resources and/or dedicated staff to support teams	Ongoing/In Progress		BCIC did not have the operating budget to dedicate a team to this in 2010	This activity is under consideration for 2011.	2010	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Ongoing/In Progress		BCIC did not have the operating budget to dedicate a team to this in 2010	This activity is under consideration for 2011.	2010	No End Date (Continuous)
Awards/Recognition						
Establish a sustainability/green awards or recognition program	Ongoing/In Progress		This notion has been discussed during our Management Meetings.	This activity is under consideration for 2011.	2010	No End Date (Continuous)
Staff Professional Development						

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Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress		This notion has been discussed during our Management Meetings.	This activity is under consideration for 2011.	2010	No End Date (Continuous)
Include green options in employee performance measurement system	Ongoing/In Progress		This notion has been discussed during our Management Meetings.	This activity is under consideration for 2011.	2010	No End Date (Continuous)
Staff awareness/education						
Provide education to staff about the science of climate change	Ongoing/In Progress		This notion has been discussed during our Management Meetings.	This activity is under consideration for 2011.	2010	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress		This notion has been discussed during our Management Meetings.	This activity is under consideration for 2011.	2010	No End Date (Continuous)
Provide green tips on staff website or in newsletters	Ongoing/In Progress		This notion has been discussed during our Management Meetings.	This activity is under consideration for 2011.	2010	No End Date (Continuous)
Provide sustainability education during new staff orientation	Ongoing/In Progress		This notion has been discussed during our Management Meetings.	This activity is under consideration for 2011.	2010	No End Date (Continuous)
Client/public awareness/education						
Provide education to clients/public about the science of climate change	Ongoing/In Progress		This notion has been discussed during our Management Meetings.	This activity is under consideration for 2011.	2010	No End Date (Continuous)
Provide green tips on client/public website or in newsletters	Ongoing/In Progress		This notion has been discussed during our Management Meetings.	This activity is under consideration for 2011.	2010	No End Date (Continuous)
Other Sustainability Actions						
Water conservation						
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Ongoing/In Progress		This option would need to be discussed with all the tenants of our shared work space.		2010	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	Ongoing/In Progress		This option would need to be discussed with all the tenants of our shared work space.		2010	No End Date (Continuous)
Procurement (non-paper supplies)						
Incorporate minimum recycled content standards into procurement policy for consumable, non-paper supplies (e.g., writing instruments, binders, toner cartridges, etc.)	In Development			BCIC endeavours to be both fiscally and environmentally responsible and thoughtful when making purchases for consumable supplies.	2008	No End Date (Continuous)
Establish green standards for goods that are replaced infrequently and/or may require capital funds to purchase (e.g., office furniture, carpeting, etc.)	In Development			BCIC has not found itself in a position to consider this but certainly would be mindful should the occasion come about.	2009	No End Date (Continuous)
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Ongoing/In Progress		BCIC only uses sustainable cleaning products, etc		2008	No End Date (Continuous)
Commuting to and from home						
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress		BCIC has asked staff to be conscious of this.		2008	No End Date (Continuous)
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress		The building in which BCIC are tenants, has locker and shower facilities.		2005	No End Date (Continuous)

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Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Provide secure bicycle storage	Ongoing/In Progress		GWL Manages our office building, there is secure bike storage in the underground parking area.		2005	No End Date (Continuous)