



BC Innovation Council (BCIC)

2011 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.

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 sectors and supporting the commercialization of their technologies, BCIC is participating in their results, benefiting the environment both regionally and around the globe.

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 2011 greenhouse gas emissions were only 5 tCO₂e resulting in a total offsets purchase of 5 tCO₂e.

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.

A handwritten signature in black ink, appearing to read "Mark Payne".

Mark Payne, CEO

May 10, 2012

Date

OVERVIEWS

ACTIONS TAKEN TO REDUCE GREENHOUSE GAS EMISSIONS IN 2011

1. *Reduced paper use by setting all default printer settings to double-sided printing and using outdated printed paper and letterhead for printing.*
2. *Used office supplies made of recycled materials and with the least amount of packaging.*
3. *Used 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. *Replaced traditional bathroom flush mechanism with energy efficient sensors 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. *Provided each staff member with a paper waste recycling box at his/her desk.*
14. *Staff were given complementary tickets to attend the Annual EPIC EXPO ; a sustainable event that is seeks to educate and encourage individuals to make more environmentally conscious lifestyle choices.*

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

1. **Introduction of Flex Time System** – providing 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, removing chemicals such as formaldehyde and carbon monoxide.
3. **Commitment to Rent 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 closing 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** – reviewing parking fees, with consideration of modification to promote 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 AgriForest Bio-Technologies Ltd Innovative Food Systems Inc. L.W. Truscott Farms Daiya Foods Inc.</p> | <p>Mark Dance Course Participants 2011 McKay Creek Technologies Ltd - Water Treatment/Conservation Poncho Wilcox Energy - Clean Tech SmartCity Technology - Clean Tech Nanozen Inc - Air Conservation Axine Water Treatment - Clean Tech Terrella Energy System - Clean Tech SunCentral - Clean Tech Ecotagious - Clean Tech, ICT UNIQAIR - Air & Water Conservation Related Out of Ashes BioEnergy - Clean Energy Production (Bioscience)</p> |
| <p>BCIC-New Ventures BlueION Water Technologies Inc. Diacarbon Energy Inc. (2nd place WINNER) GreenScene AgriTek Inc. (1st place WINNER) KOK Technologies (2nd place WINNER) semiosBIO Technologies Inc.</p> | <p>BCIC-New Ventures Regional Companies Global Endeavours Ltd. , Creston (top 20) Mazza Innovation Ltd, Penticton (2nd prize) Waterpac, Trail (top 20)</p> |
| | <p>Mentor Program Greenscene AgriTek Inc. Habitat Enterprises Ltd Pacific Rim BioEnergy</p> |

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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 12/31/11) | Performance to Date (as of 12/31/11) | Steps Taken in 2011 | Steps Planned for 2012 -2014 | 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 2011 | | | | | | |
| Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings) | | | | | | |
| Appliances and electronic devices | | | | | | |
| Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases | Ongoing/In Progress | | | | | |
| Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases | Ongoing/In Progress | | | | | |
| Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases | Ongoing/In Progress | | | | | |
| Supplies (Paper) | | | | | | |
| Printer/document settings | | | | | | |
| Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.) | Ongoing/In Progress | | Determined on a project to project basis | | | |

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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 12/31/11) | Performance to Date (as of 12/31/11) | Steps Taken in 2011 | Steps Planned for 2012 -2014 | 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 Premiere's office for travel reduction | | | |
| Virtual meeting technology | | | | | | |
| Make desktop web-cameras available to staff | In Development | | Currently BCIC executives have cameras on their computers not the general staff | | | |
| Behaviour change program | | | | | | |
| Train staff in web-conferencing | Ongoing/In Progress | | As needed | | | |
| Train staff in video-conferencing or provide technical support for video-conferencing set-up | Ongoing/In Progress | | As needed | | | |
| Encourage staff to consider virtual attendance/presentation at events where possible | Ongoing/In Progress | | BCIC has asked staff to be concious of this | | | |
| Encourage carpooling to meetings | Ongoing/In Progress | | BCIC has asked staff to be concious of this | | | |
| Encourage alternative travel to meetings (e.g., bicycles, public transit, walking) | Ongoing/In Progress | | BCIC has asked staff to be concious of this | | | |
| 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 of our 2009/10 Service Plan. | | | |
| 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 2011 | | | |
| 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 2011 | | | |
| Awards/Recognition | | | | | | |
| Establish a sustainability/green awards or recognition program | Ongoing/In Progress | | | | | |
| Staff Professional Development | | | | | | |
| Support green professional development (e.g., workshops, conferences, training) | Ongoing/In Progress | | This notion has been discussed during our Management meetings | | | |

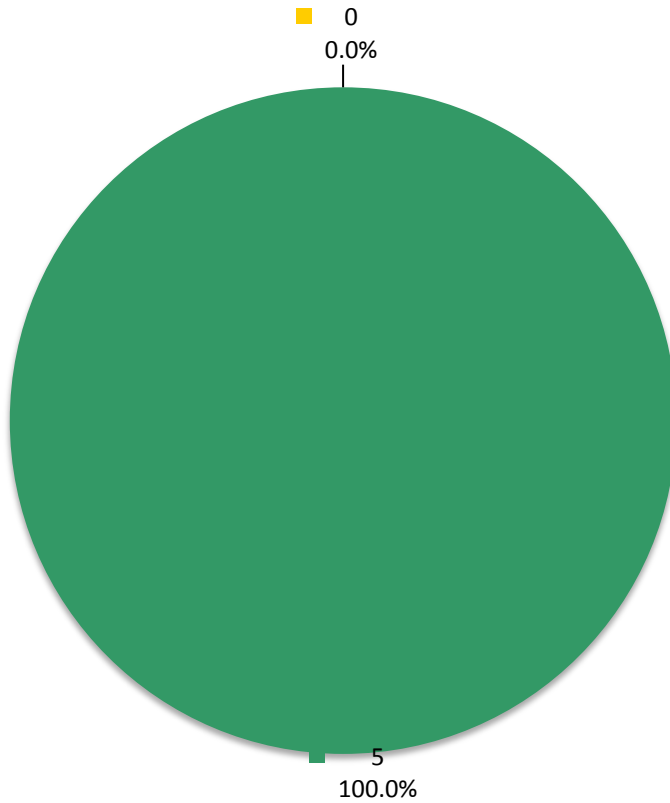
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| Action | Status (as of 12/31/11) | Performance to Date (as of 12/31/11) | Steps Taken in 2011 | Steps Planned for 2012 -2014 | Start Year | End Year |
|--|----------------------------|---|--|------------------------------|------------|----------|
| Include green options in employee performance measurement system | Ongoing/In Progress | | This notion has been discussed during our Management meetings | | | |
| 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 | | | |
| 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 | | | |
| Provide green tips on staff website or in newsletters | Ongoing/In Progress | | This notion has been discussed during our Management meetings | | | |
| Provide sustainability education during new staff orientation | Ongoing/In Progress | | This notion has been discussed during our Management meetings | | | |
| 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 | | | |
| Provide green tips on client/public website or in newsletters | Ongoing/In Progress | | This notion has been discussed during our Management meetings | | | |
| 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 tenants of our shared work space | | | |
| 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 tenants of our shared work space | | | |
| 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 | | | | | |
| 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 | | | | | |
| Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags | Ongoing/In Progress | | BCIC only uses sustainable cleaning products, etc | | | |
| Commuting to and from home | | | | | | |
| Encourage commuting by foot, bicycle, carpool or public transit | Ongoing/In Progress | | BCIC has asked staff to be concious of this | | | |
| 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 a locker and shower facilities | | | |

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| Action | Status (as of 12/31/11) | Performance to Date (as of 12/31/11) | Steps Taken in 2011 | Steps Planned for 2012 -2014 | 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 | | | |

**BC Innovation Council
Greenhouse Gas Emissions by Source
for the 2011 Calendar Year (tCO₂e*)**



Total Emissions: 5

■ Stationary Fuel Combustion (Building Heating and Generators) and Electricity

■ Supplies (Paper)

Offsets Applied to Become Carbon Neutral in 2011 (Generated May 18, 2012 10:10 AM)

Total offsets required: **5**. Total offset investment: **\$125**. 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.