# BC Games Society - 2011 Carbon Neutral Action Report

## **Executive Summary**

Given the small size of this Crown Corporation, the BC Games Society takes seriously its ability to impact change regarding opportunities related to the reduction of GHG. Working throughout BC, the BC Winter and BC Summer Games have become catalysts for permanent change when it comes to staging sport and cultural events. Templates, plans, and leadership left behind after the conclusion of a BC Games leads to future events adopting policies and practices used during Games.

Our torch is a prime example of leading the industry to more sustainable events. The BC Games torch that was built in 2009 is a result of our desire to "green the Games". This one-of-a-kind "green" ceremonial cauldron is electrically powered and uses 850 watts to power the LED flame, which is just over 2,000 kWh over 100 days of operation for each Games. The prior natural gas powered torch used 900,000 cubic feet of natural gas, which was enough natural gas to fuel more than ten average-sized homes for a year. This torch itself removes 12 tones of GHG, and saves 900,000 cubic feet of natural gas each Games.

We place high importance on the legacy we leave in the communities. As the mission of the BC Games Society is "to provide an opportunity for the development of athletes, coaches and officials in preparation for higher levels of competition in a multi-sport environment which promotes interest and participation in sport and sporting activities, individual achievement, and community development", BC Games Society believes that being carbon neutral is simply the best way to lead the Host Communities to more sustainable events and to show the athletes, coaches, officials and volunteers that they can help to make the Games green and leave less impact on the community. BC Summer Games and BC Winter Games are hosted around BC and each Host Society is provided with guidelines that are improved after every BC Games. Each Host Society has an Environment Chair that is provided guidelines to help make the Games green and to help keep the greenhouse gas emissions low.

# 2011 Greenhouse Gas Emissions

In 2011, approximately 928.64 GigaJoules of energy and 140 packages of paper were used, which created 6.95 tonnes of greenhouse gases. In 2010, we created the same amount of greenhouse gas from the building, but we cut down on paper. In 2010, we used 230 packages of paper compared to only 140 in 2011. Although we are utilizing the website and email for sharing information, the significant decrease is a usual occurrence in the off-Games year and is expected to increase nominally in 2012. A recently concluded office renovation brought in new lighting and HVAC systems which are expected to reduce our energy consumption by 1,086 kWh. Exact figures will be known in time for our 2012 report to the Climate Action Secretariat.

# **Offsets Applied to Become Carbon Neutral in 2011**

The BC Games Society created 6.95 tonnes of emissions in 2011, which was rounded up to seven tonnes. In February 2012, BC Games Society purchased offset through Pacific Carbon Trust and became carbon neutral for the 2011 calendar year.

# **Emissions Reductions Activities**

### Actions Taken to Reduce Greenhouse Gas Emissions in 2011

Since over 90% of our greenhouse gas is created by the building, the society, with the help of a commercial realtor, explored alternate office space, recognizing the importance of sustainability and overall costs. Unfortunately, renting office space in a LEED building is not financially feasible for us at this time; however, the BC Games office had undergone a renovation to make it more eco-friendly. As our current lease at 990 Fort Street in Victoria is in an older building with limited energy efficient assets, we decided to change the heating/cooling system, and lighting and removed walls and added more glass to increase the amount of natural light. The BC Games office now has only high efficiency fluorescent lights. This change in lighting saves 1086 kWh per year. Our heating/cooling system was upgraded as well and we now have a roof top unit that will supply tempered air and remove the entire reliance on the hot water base board heat that was used in the past.

The BC Games office in Victoria with all nine staff members takes the following steps to keep the emissions low:

- renting a new energy efficient photocopier/printer/fax
- using 100% recycled paper
- using a two-sided photocopier and printers
- increased recycling capacity to include plastics, bottles, cans, compostable materials
- using people-powered recycling company to collect compost
- leasing water filter system for drinking water
- Energy Star<sup>™</sup> fridge and microwave
- where practical, using conference calls for meetings
- when available, renting hybrid vehicles
- implemented scent-free policy
- using reusable cutlery, plates, glasses, cups during staff and Board meetings

Pertaining to our Games host community operations, the BC Games Society:

- implemented a no idling policy for all Games vehicles
- moved Guidelines for the Host Community transfer of knowledge program to an online resource, resulting in a substantial paper reduction
- continues our policy which states athletes must be housed in close proximity to their competition site to encourage walking to their competition
- utilizes, where possible, chartered highway coaches which are fueled by bio-diesel (of all 31 external coaches for the 2012 BC Winter Games 25 units ran a B5 or 5% blend of Bio-diesel and 6 units ran B10 or 10% Bio-fuel. Please note that due to cold temperatures, for Winter Games we are unable to use much over this blend as the bio-fuel gels and significantly impacts operations)
- encourages use of PowerPoint presentations as a means of eliminating paper
- utilizes online volunteer registration for volunteers and participants which reduces paper and vehicle use as process can be done from home or office.

In keeping with two of the BC Games Society core values, which state, "our dynamic approaches continually redefine and determine the most efficient and effective method of delivering event management services and programs" and "commitment to social issues affecting all British Columbians", we continue to refine our work and seek ways to minimize our carbon footprint.

## Plans to Continue Reducing Greenhouse Gas Emissions 2012 – 2014

The society has undergone renovations at the end of 2011 and, at the beginning of 2012, the thermostat and control board will be changed. This new control board will be able to change the settings remotely and therefore minimize the maintenance of building temperature needs. The afterhours heating/cooling will be almost completely removed. This was not possible in the past.

BC Games Society will also continue expanding the website and post more material online and reduce printing. When possible, correspondence will be sent electronically to further decrease the amount of paper used.

Eight out of nine staff members walk, bike, use public transit or carpool to work. We continue to use conference calling as a means of communication and web-cameras are available for staff to use.

## **Operational Changes in 2011**

The BC Games office has been recycling for a number of years, but in 2011 we added soft plastic recycling and composting. Adding composting reduces our waste to almost zero. We are using a people-powered resource recovery company to remove our compost. The company is local and uses only bicycles to collect the compost bins (See Figure 1).



Kelly Mann President and CEO

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 <i>Greenhouse Gas Reduction Targets Act</i> .								
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 equip	ment)							
This section is either not applicable, not yet evaluated, or was compl	eted before 2011							
Stationary Fuel Combustion, Electricity and Fugitive Em	issions (Buildings)							
Leased buildings								
Lease space with operations and maintenance performance labelling/certification (e.g., LEED EB:O&M)	Ongoing/In Progress	0	% of leased buildings have operations and maintenance labelling/certification	Even though our office is not labeled/certified, in 2011 and beginning of 2012 we renovated to make the office more energy efficient. We now have a new control circuit board, and a roof top unit that will supply tempered air and remove the entire reliance on the hot water base board heat. With this new unit, we are able to customize the temperature, resulting in minimum heat after/before hours.	Beginning of 2012 we will complete the work on the heating system. We will be able to operate the heating/cooling system remotely, to minimize energy use after hours.	2011	2012	
Lease space with commercial interiors performance labelling/certification (e.g., LEED CI)	Completed in 2011	0	% of leased buildings have commercial interiors labelling/certification	Even though our office is not labeled/certified, in 2011 we have undergone renovation to add more natural light and replaced lighting to have only fluorescent high efficiency bulbs. We will be saving approximately 1086 kWh per year.		2011	2011	
Appliances and electronic devices			_					
Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases	Completed in 2011			In 2011, as part of our renovation, we replaced bulbs for flourescent high efficiency bulbs in the entire office.		2011	2011	
Behaviour change program								
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress			Staff is encouraged to turn off equipment when not in use.	Continue reminding staff of energy conservation.	2009	No End Date (Continuous)	
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress			Staff is encouraged to conserve energy whenever possible.	When hiring new staff, their training will contain information about energy conservancy.	2010	No End Date (Continuous)	
Encourage use of stairs instead of elevators	Ongoing/In Progress			Staff is being reminded to use stairs instead of the elevator.	Continue reminding staff to take the stairs instead of the elevator.	2008	No End Date (Continuous)	
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress	_		Staff members turn off their light, but if they do not, they are reminded. Since our office is very small, verbal reminders are sufficient.	Continue providing reminders to staff to turn off the lights.	2008	No End Date (Continuous)	
Promote hot water conservation	Ongoing/In Progress			Staff is encouraged to conserve hot water.	Continue promoting hot water conservancy.	2010	No End Date (Continuous)	
Other Stationary Fuel Combustion, Electricity, and Fugitive Emissions Actions								

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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		
Use of energy efficient multi-purpose device	Completed in 2011			Even though our lease was not over, in 2011, BC Games started leasing a new energy efficient multi-purpose device. This device has excellent energy saving settings, so it does not keep the toner as warm as other devices.		2011	No End Date (Continuous)		
Supplies (Paper)									
Paper Type									
Purchase 100% post-consumer recycled paper	Ongoing/In Progress	100	% of total paper purchased contains 100% recycled content	BC Games Society purchases only 100% recycled paper and is encouraging our Host Communities to do the same.	We plan to continue using only 100% recycled paper and encouraging the BC Games Host Communities (through written guidelines) to use only 100% recycled paper.	2009	No End Date (Continuous)		
Electronic media in place of paper									
Post materials online that were previously printed	Ongoing/In Progress			<ul> <li>BC Games Rules are no longer printed - only available online.</li> <li>Registration is also online, instead of on paper.</li> <li>BC Games also moved "Guidelines for the Host Community" transfer of knowledge to an online resource, resulting in a substantial paper reduction.</li> <li>BC Games Medical and Dietary forms are only available online.</li> <li>When applicable, BC Games sends correspondence via email instead of on paper.</li> </ul>	Continue providing most of the Games material online, sending correspondence electronically, and also evaluating the option of having the Guidelines for the Host Community entirely online.	2008	No End Date (Continuous)		
Switch to an electronic payroll notification system in place of paper pay stubs	Ongoing/In Progress			Payroll was switched to partially electronic in 2010. BC Games Society no longer receives pay stubs and other documentation via mail, but print in house.	We are evaluating having 100% paperless payroll.	2010	No End Date (Continuous)		
Behaviour change program									
Encourage re-use of scrap paper	Ongoing/In Progress			Staff is encouraged to reuse paper - one-sided printed material is also cut to be used for note paper.	Continue encouraging re-using paper.	2009	No End Date (Continuous)		
Other Paper Supplies Actions									
Paper supplies donation	Ongoing/In Progress			When we have paper supplies that are no longer needed, we donate it to schools/daycares.	Continue enouraging re-using paper supplies.	2010	No End Date (Continuous)		
Calendars - electronic and board	Ongoing/In Progress			Our staff does not print their calendars. Instead, we use a board to mark who is where, as well as take advantage of electornic calendars to keep track of the travel.	Continue using electronic devices to save paper.	2010	No End Date (Continuous)		

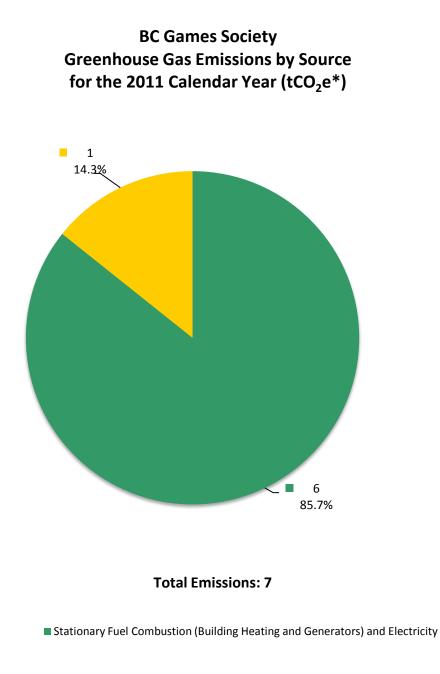
#### Actions to Reduce Provincial Emissions and Improve Sustainability

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 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						
Behaviour change program						
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress		BC Games staff is encouraged to consider attending meetings via conference call or via computer.	Staff will be reminded to consider other ways for meeting; i.e. teleconferencing.	2009	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress		Staff is continuously reminded to carpool to meetings whenever possible.	Staff will be reminded to continue carpooling whenever possible.	2009	No End Date (Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress		When available, staff is encouraged to rent hybrid vehicles and book hotels in close proximity to the meeting venues to eliminate travel.	Continue renting hybrid vehicles and hotel rooms close to the venues to reduce travel.	2009	No End Date (Continuous)
Education, Awareness, and Engagement						
Staff awareness/education						
Provide sustainability education during new staff orientation	Completed in 2011		Orientation binder has been updated to include sustainability education.		2011	No End Date (Continuous)
Client/public awareness/education						
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress		<ul> <li>Created guidelines to encourage "Green Games" for the Host Communities.</li> <li>Implemented a no idling policy for all Games vehicles in the Host Communities.</li> <li>Require housing athletes and coaches close to their sport venues to encourage walking to their competition.</li> </ul>	Continue creating guidelines for "Green Games" for the next Host Communities and encourage the Host Communities to create their own "greening policies".	2011	No End Date (Continuous)
Other Sustainability Actions						
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.)	Ongoing/In Progress		Even though we do not have a policy in place (due to the size of our organization it is not applicable), we purchase binders, pens, toner cartridges, etc that are made from recycled materials.	Continue purchasing more products made from recycled materials.	2011	No End Date (Continuous)
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Ongoing/In Progress		Even though due to the size of our organization we do not have a purchasing program in place, we buy sustainable products - i.e. biodegradable J-cloths, biodegradable and natural concentrated hand and dishwashing soaps, and biodegradable trash bags.	Continue purchasing sustainable products.	2011	No End Date (Continuous)
Require a minimum purchase of sustainable, and organic food and beverages supplied by contracted food suppliers or caterers	Ongoing/In Progress		Host Communities are encouraged to use local foods whenever possible. Also, cutlery, plates, glasses and cups used at the Games are reusable.	Continue promoting sustainable foods for the Host Communities.	2008	No End Date (Continuous)
Other Sustainability Actions						

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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
Implement composting	Ongoing/In Progress		In 2011, BC Games Society hired local people-powered company to collect our compost. We have indoor compost bins with filters and outdoor compost bin that reduce the amount of garbage to minimum.	Continue recycling and composting to reduce the amount of garbage to almost zero.	2011	No End Date (Continuous)



Supplies (Paper)

Offsets Applied to Become Carbon Neutral in 2011 (Generated May 18, 2012 10:06 AM) Total offsets required: 7. Total offset investment: \$175. Emissions which do not require offsets: 0 \*\*

\*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.