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Carbon Neutral
Action Report

**This is the BCLC
2013 Carbon Neutral
Action Report.***

**This report contains
our emissions profile,
offsets purchased,
the actions we have
taken to reduce GHG
emissions and our
plans to continue
reducing emissions in
2014 and beyond.**

*Gaming facilities, such as casinos, racetracks and lottery kiosks, are owned and operated by private sector service providers. Therefore, only BCLC offices in Kamloops and Vancouver, and the activities of BCLC staff, fall within the scope of this report.

Executive Summary

BCLC is committed to minimizing our environmental impact and we continue to take steps to promote sustainability through our staff, service providers, retailers and stakeholders. While 2013 has presented its challenges, BCLC made progress in a number of areas.

Environmental sustainability is part of our culture. In 2013, we participated in Bike to Work Week and the Commuter Challenge – friendly competitions between workplaces that encourage sustainable transportation. Our Vancouver office held a contest to encourage energy savings by switching off computer monitors at night – a simple action that can have a big impact.

We are also supporting our service providers to make improvements. We partnered with one of our community gaming centres to conduct an energy audit that identified opportunities to reduce electricity and natural gas consumption. More recently, we initiated a process that will help service providers monitor energy use in their facilities – which we hope will have positive impacts in the year ahead.

We remain on target to reach our 2020 goal of reducing reportable greenhouse gas emissions by 33 per cent as set by a 2007 baseline. In 2013, our reportable greenhouse gas emissions (GHG) were reduced by 29 tonnes. The decrease was not related to consumption, but was due to the BC Climate Action Secretariat reducing the GHG conversion factor for electricity that all public sector organizations use in their emissions calculations.

In 2012 we noted that our target would become more challenging to meet as the more easily achievable reduction opportunities had been addressed. The last twelve months have confirmed this perspective: we have not been able to implement projects that would lead to reductions in natural gas or fleet gas, which are our top-two sources of emissions. However, with our employees' support, enthusiasm and innovation, we will continue to seek out ways to reduce our negative impacts on the environment.

Although not part of our reportable emissions reductions, we are pleased with our progress on waste management. To remain compliant with the BC Recycling Regulation we chose to take on membership in Multi-Material BC (MMBC). Any of our lottery products, such as national lottery game tickets, Scratch & Win games, and materials used in direct marketing to players that may end up in the public waste stream, will be collected for recycling at BCLC's cost. MMBC membership was the most cost-effective option for us to achieve compliance with the regulation. We continued to divert end-of-life electronic and electrical equipment away from landfill and, in 2013, more than 44 tonnes of equipment was recycled. Towards the end of 2013 we began a project to introduce composting to our Kamloops facility. A pilot is due to run early in 2014 and we look forward to reporting back on our progress as part of our next Carbon Neutral Action Report.

While the footprint of BCLC's corporate offices may not be large compared to other public sector organizations, through actions by our staff, service providers, suppliers and retailers, we can provide leadership in minimizing the environmental impact where we work, how we travel and in our interactions with British Columbians.



Susan Dolinski

*Vice-President,
Social Responsibility and Communications*



2013 Greenhouse Gas Emissions

In 2013, our reportable greenhouse gas emissions (GHG) were reduced by 29 tonnes. The decrease was not related to consumption, but was due to the BC Climate Action Secretariat reducing the GHG conversion factor for electricity that all public sector organizations use in their emissions calculations.

The consumption of all reportable sources of GHG's – fleet gas, office paper, electricity and natural gas—increased in 2013 compared to 2012. This is primarily due to two factors: the number of Full Time Equivalents (FTEs) increased¹, which affected resource consumption; and, while our fleet size was reduced by two vehicles, we were no longer able to source the hybrid vehicle of choice so some non-hybrid vehicles were leased.

Reportable greenhouse gas emissions, in tonnes of carbon dioxide equivalent, for 2013

Electricity	135 tonnes
Natural gas	812 tonnes
Fleet gas	389 tonnes of which 375 tonnes must be offset
Supplies of office paper	30 tonnes
Diesel for building standby generators	8 tonnes
Fugitive sources	Out of scope as these emissions comprise less than one per cent of our total inventory
Total declared emissions	1,374 tonnes
Total emissions for offset	1,360 tonnes

Offsets Applied to Become Carbon Neutral in 2013

As required by Section 7 of the Carbon Neutral Government Regulation, BCLC has offset a total of 1,360 tonnes of carbon dioxide equivalent emissions from the following sources:

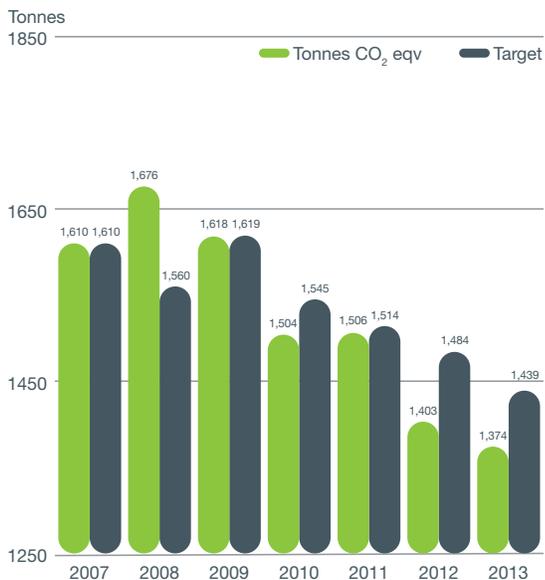
- Building operations, including the consumption of natural gas and electricity.
- Fleet gas consumption.
- Supplies of office paper.

The emissions offset does not include:

- 14 tonnes of bio carbon dioxide from fleet gas. The Province has deemed bio carbon dioxide out of scope for emissions offsets.
- A percentage of gas equal to the percentage of private kilometres driven with our fleet vehicles.
- Fugitive emissions from building and fleet refrigeration units. These sources account for less than one per cent of our total emissions inventory.

Note:

1. We acknowledge that the correlation between increased FTEs and increased emissions is not always direct. (FTEs can increase without an increase in emissions and vice versa.) In March 2014, BCLC initiated significant cost reduction initiatives, including the elimination of a number of FTE positions.



Note:

1. Our year-on-year target was set in 2009. The target is for reducing actual reportable emissions and is not intensity based. We are not considering resetting our annual targets at this time as we believe achieving year on year reductions will become more challenging over time.
2. We were responsible for vacant floor space in Richmond from mid-December 2010 to June 2011 following our move to a new Vancouver facility. This commitment resulted in slightly increased emissions for 2011 over 2010.

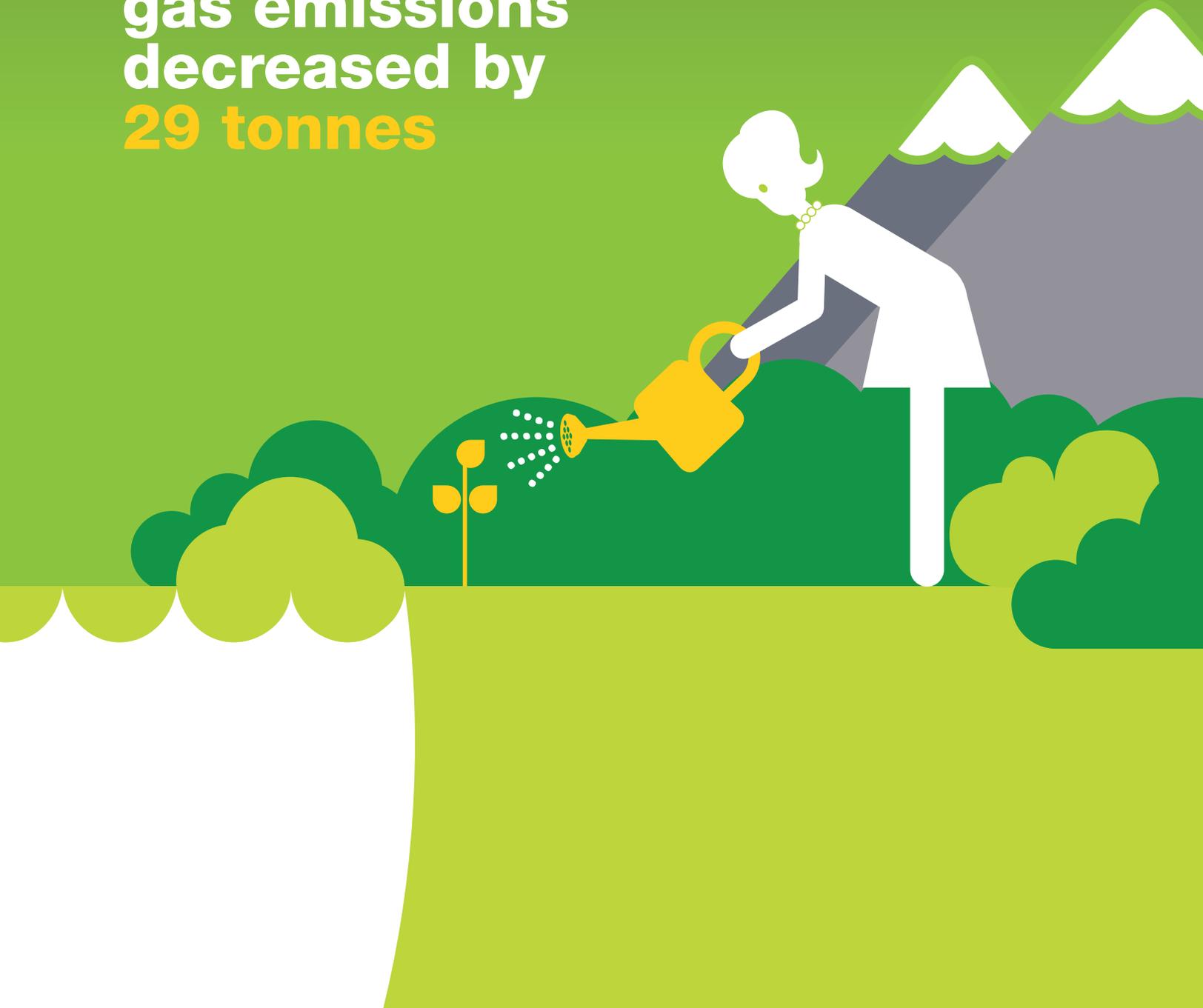
Fugitive Emissions

Although we monitor and record the amount of refrigerant added to building heating, ventilation and air conditioning systems and vehicle air-conditioning, the amount used is less than one per cent of our greenhouse gas inventory and as a result it does not qualify for disclosure and offsetting. In 2013, we replaced 9 Kg of building refrigerant that is out of the scope of the Carbon Neutral Government Regulation. No vehicle air-conditioning systems were topped up with refrigerant.





In 2013 our
reportable
greenhouse
gas emissions
decreased by
29 tonnes



Emissions Reduction Activities

Actions Taken to Reduce Greenhouse Gas Emissions in 2013

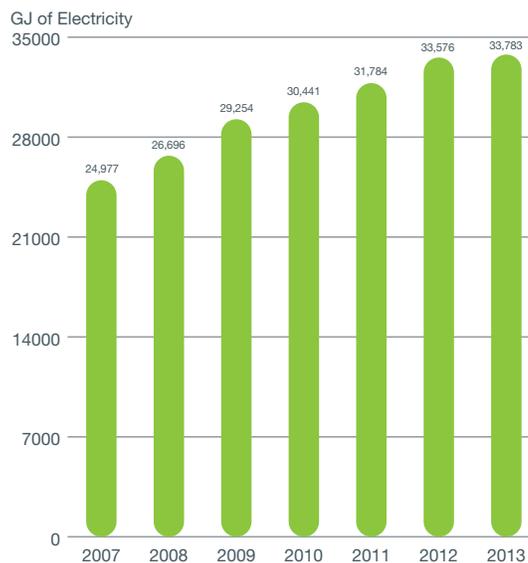
Electricity

Our electricity consumption has increased every year since we started measuring our impact in 2007. At the same time, the number of full-time equivalents (FTEs) had been increasing, which contributes to the increased consumption.

Minor building upgrades were completed at our Kamloops facility in 2013. Whenever we undertake these upgrades we install more energy efficient equipment.

Within our two office facilities we continued to run educational and behavioural change initiatives such as challenging and encouraging staff to switch off computer monitors overnight, and providing simple tips on how to reduce electricity use both at work and at home.

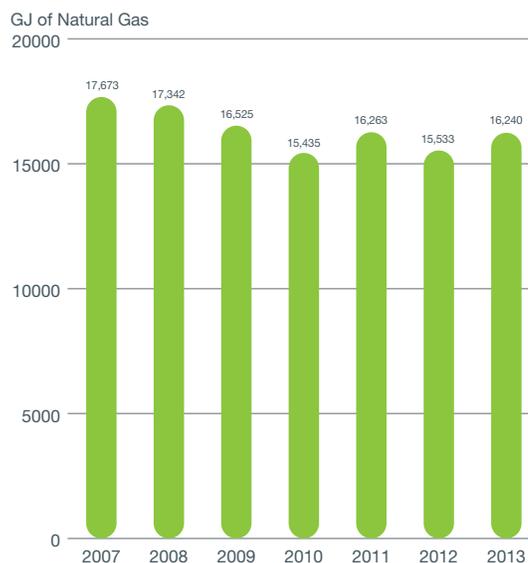
Note: December 2010 to June 2011 BCLC was still responsible for vacated floor space in Richmond



Natural Gas

In 2013, the consumption of natural gas increased compared to 2012. Unfortunately we were unable to replace the inefficient boilers in our Kamloops facility with modern, efficient alternatives that would help us to reduce our natural gas consumption. The Kamloops facility continues to consume over 90 percent of BCLC's total natural gas use while accounting for 57 percent of our total floor space.

Note: December 2010 to June 2011 BCLC was still responsible for vacated floor space in Richmond.

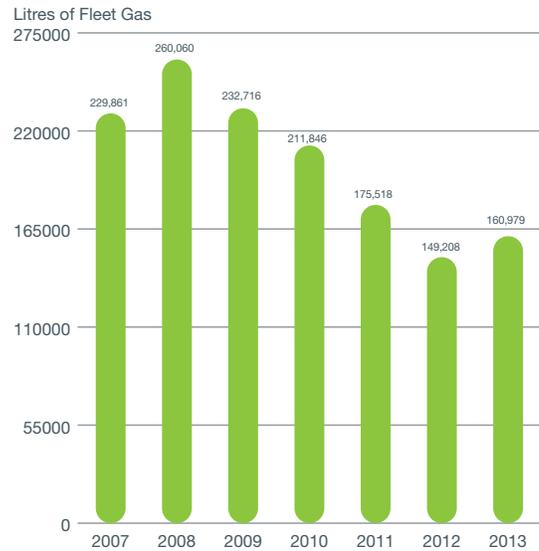


Fleet Gas

In 2013, we were unable to continue replacing all end-of-lease fleet vehicles with hybrid alternatives as suitable hybrid alternatives were no longer available. Replacements for end-of-lease vehicles have been non-hybrid.

We do not declare or offset private use of our fleet vehicles. BCLC's fleet slightly reduced in size compared to 2012 and had 94 active vehicles at the end of 2013. As with previous years, small variations of one to three vehicles occur over the year.

Note: BCLC stopped accounting for private Km driven in fleet vehicles from 2009 onwards.



Office Paper

In 2013, our office paper purchases increased for the first time since 2009. Despite this, our purchase levels still remain lower than years previous to 2012.

We will monitor our consumption in 2014 to ascertain if the increase was a one-off or whether we need to review how we use paper.

Note: BCLC only accounted for letter-sized paper in 2007 and 2008. From 2009 onwards we have reported the purchase of 8.5" x 11" (letter), 8.5" x 14" and 11" x 17" office paper.



Other Activities

In addition to reducing our reportable emissions, our employees have continued to find ways to address our wider environmental impacts. Here are examples of their passion and innovation:

- **Video Conference Technology:** In 2013, we conservatively estimated we were able to avoid approximately 250 tonnes of greenhouse gas emissions by utilizing video-conference technology to hold meetings between our Kamloops head office and Vancouver facility. Video-conferencing use has increased and in 2013 we recorded the most reportable hours of conferencing, the highest number of attendees and the most conferences booked since we began collecting data in 2009. The financial savings of reducing travel between Kamloops and Vancouver were also considerable.
- **Operational Waste Management:** The Government of B.C.'s Recycling Regulation was expanded to paper products and packaging materials in 2014 and we signed up to a province-wide compliance program. The program will offer us the most effective compliance process and we have indicated our intention to become program members.
- **Waste Management Infrastructure:** We continued our progress in diverting waste from landfill in Vancouver – in 2013 just under 90 per cent of wastes were recycled or composted. Progress has been made at our Kamloops facility and in 2014 we will run a pilot program to assess the viability of introducing a composting program throughout the facility. We will report on our progress in the 2014 CNAR.
- **Alternate Transportation:** Once again BCLC employees participated in Spring Bike to Work Week. Our Kamloops riders biked over 700 Km, avoiding 145Kg of carbon dioxide emissions. The Commuter Challenge was favoured by our Vancouver employees and over the week nearly 2300 Km were logged, avoiding 316Kg of emissions.
- **Service Partner Engagement:** Working with two of our casino service providers, we will pilot a project in 2014 that provides service providers limited access to our social responsibility reporting tool. This gives service providers improved functionality in energy reporting and allows BCLC to monitor energy consumption at casino premises. The pilot project is due to launch in April 2014 and we look forward to reporting on our progress.

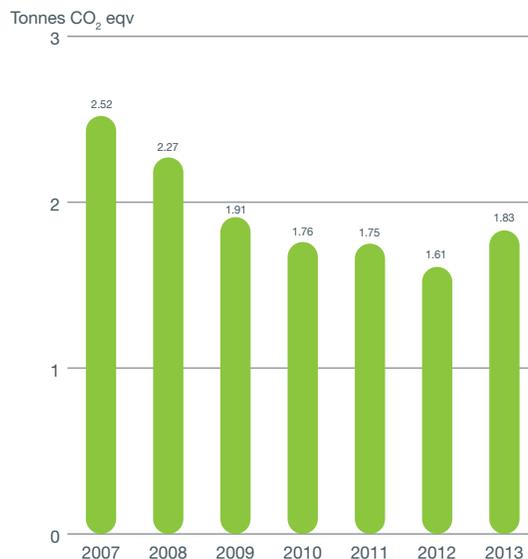


Operational Changes in 2013

Our reportable greenhouse gas emissions decreased by 29 tonnes to 1,374 tonnes when compared to our 2012 performance. This meets expectations as reported in the 2012 Carbon Neutral Action Report.

For 2013 our GHG emissions per FTE are 1.83 tonnes CO₂ equivalent. Whilst this appears higher than in 2012, we have only included FTE's based at our Kamloops and Vancouver facilities as we believe this more accurately reflects our impact. If we used total FTE's (including staff based at locations other than our Kamloops and Vancouver offices) to calculate the measure, the total would have been 1.5 tonnes CO₂ equivalent. From 2013 onwards we will only report emissions per FTE based at our two main facilities.

We reset our annual target in 2009 to aim for smaller, incremental decreases in the early years of our emissions reductions activities. We believe meeting our long-term target of a 33 per cent reduction in emissions from a 2007 baseline year will continue to be challenging as we have reached a point where meaningful reductions will only be achieved through projects requiring greater capital expenditure. Our challenge is to continue to meet our increasing net income and social responsibility goals while reducing actual emissions, and so far we are succeeding.



Plans to Continue Reducing Greenhouse Gas Emissions 2014/15

Although climate change has not been identified as a specific risk to BCLC in our current 2013/14 – 2015/16 Service Plan, the level of reportable greenhouse gas emissions remains a distinct performance measure. BCLC's Board of Directors and Executive Team continue to support our efforts to pursue environmental sustainability and carbon neutrality by engaging staff through conscientious business practices. Over the next two years we will continue to improve our environmental performance by addressing our operational footprint and encouraging our employees to make sustainable choices both in the office and outside of work.

We will be reviewing our fleet management in 2014 with a view to reducing reportable emissions from this source and will continue to seek ways to reduce emissions from the natural gas used at our Kamloops head office.

We plan to reduce our reportable operational emissions by 33 per cent from a 2007 baseline by 2020. This remains a challenging target. However, we will continue to pursue emissions reductions to meet the Government of B.C.'s expectations.

In 2013, BCLC
offset **1,360**
tonnes of
carbon dioxide
equivalent
emissions



bclc
playing it right



2013 Carbon Neutral Action Report (CNAR) - Part 2 ACTIONS

Created Monday, February 17, 2014

Updated Monday, March 31, 2014

<https://fluidsurveys.com/surveys/cas-z/2013-cnar-form-bps-actions/fe9b7777bd8566d924fa26c956dd75e0/>

Page 1

Please complete the following sections of the 2013 Carbon Neutral Action Report form. Save your work frequently to prevent it from being lost. You can also save a copy for your own use as either a WORD or PDF file using the buttons at the bottom of each page.

This is Part 2 of the Carbon Neutral Action Report form. This section reports on actions taken to reduce emissions during the 2013 calendar year. This information will be included in your final Carbon Neutral Action Report posted on the Ministry of Environment website.

When the form is complete press the submit button on the last page to automatically submit the information to the Climate Action Secretariat (CAS). Do not press submit before you are ready – this may result in a loss of work.

In addition to completing this survey (Part 1 2), you are required to submit your completed Overview (Executive Summary) and Self-Certification Checklist. The 2013 Overview template was included in the email sent and can also be found on the LiveSmart leaders Community.

Please ensure you meet the following reporting deadlines:

A DRAFT 2013 CNAR is due to CAS by March 31, 2014. The draft is comprised of the Overview ONLY (no executive sign-off required).

The FINAL 2013 CNAR is due to CAS by May 30, 2014. The final 2013 CNAR includes Part 1 Part 2 survey form and Overview.

The Self-Certification Checklist is due to CAS by May 15, 2014.

For more information about the Carbon Neutral Government process, please refer to *Becoming Carbon Neutral 2013*, or should you have any questions please contact climateactionsecretariat@gov.bc.ca.

Organization Name

BCLC

Actions Taken to Reduce Emissions

1) Stationary Fuel Combustion, Electricity (Buildings):

Indicate which actions were taken in 2013:

Performed energy retrofits on existing buildings

Yes

Built or are building new LEED Gold or other "Green" buildings.

No

Undertook an evaluation of overall building energy use.

Yes

Please list any other actions taken to reduce emissions from Buildings:

BCLC replaced legacy 2nd floor heating ventilation and air conditioning (HVAC) fan systems with modern efficient variable speed equipment in their Kamloops facility. In the Vancouver facility a lighting upgrade project converted 120 - 50 watt fixtures to 10 watt LED fixtures.

BCLC continues to monitor its power consumption in the Kamloops facility. In the Vancouver facility, BCLC installed an energy monitoring system to measure and compare energy usage with the Kamloops building.

2) Mobile Fleet Combustion (Fleet and other vehicles):

Indicate which actions were taken in 2013:

Do you have a fleet?

Yes

Replaced existing vehicles with more fuel efficient vehicles (gas/diesel)

Yes

Replaced existing vehicles with hybrid or electric vehicles

No

Reduced the overall number of fleet vehicles

Yes

Took steps to drive less than last year

No

Please list any other actions taken to reduce emission from fleet:

As of 31st December 2013, BCLC ran a leased fleet that comprised of 94 vehicles. This is two vehicles fewer than 31st December 2012.

Hybrid vehicles that met BCLC requirements are no longer available from the manufacturer. BCLC has therefore stopped replacing gas powered vehicles with hybrid alternatives.

3) Supplies (Paper):

Indicate which actions were taken in 2013:

Used less paper than previous year

No

Used only 100% recycled paper

No

Used some recycled paper

Yes

Used alternate source paper (Bamboo, hemp, etc.)

Yes

Please list any other actions taken to reduce emissions from paper use:

By using two-up printing in the Business Centres whenever possible, BCLC was able to reduce the number of pages printed which reduced print costs. 11" x 17" paper was used so whilst the paper consumption would not have reduced compared to using 11" x 8.5", the printing devices were operating more efficiently.

Actions Taken to Reduce Emissions - continued

Explain how you plan to continue minimizing emissions in 2014 and future years:

We will be reviewing our fleet management in 2014 with a view to reducing reportable emissions from this source and will continue to seek ways to reduce emissions from the natural gas used at our Kamloops head office.

If you wish to list any other "sustainability actions" outside of buildings, fleet, paper and travel check "yes". This reporting is optional.

Yes

Actions to Promote Sustainability and Conservation - Optional

The following are actions that fall outside the scope of the *Carbon Neutral Government Regulation*, but which many organizations still undertake and may wish to report on. This section is optional for reporting.

Business Travel

Created a low-carbon travel policy or travel reduction goal (Low-carbon: Lowest emission of greenhouse gases per kilometre per passenger)

Yes

Virtual Meeting Technology

Installed web-conferencing software (e.g., Live Meeting, Elluminate, etc.)

Yes

Made desktop web-cameras available to staff

Yes

Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)

No

Encourage carpooling to meetings

No

Education and Awareness

Have created Green, Sustainability, Energy Conservation, or Climate Action Teams.

Yes

Provided resources and/or dedicated staff to support these teams

Yes

Provided behaviour change education/training for these teams (e.g., community-based social marketing)

Yes

Established a sustainability/green awards or recognition program

Yes

Support green professional development (e.g., workshops, conferences, training)

Yes

Planning for Climate Change

Have assessed whether extreme weather events and/or long term changes in climate will affect our organization's business areas

Yes

Long term changes in climate have been incorporated into our organization's decision making.

No

Actions to Promote Sustainability and Conservation - Optional (continued)

Staff Awareness and Education

Provided education to staff about the science of climate change

Yes

Provided education to staff about the conservation of water, energy, and raw materials

Yes

Provided green tips on staff website or in newsletters

Yes

Alternate Work/Commuting Options

Allow for telework/working from home

No

Staff have the option of a compressed work week

No

Commuting by foot, bicycle, carpool or public transit is encouraged

Yes

Shower or locker facilities are provided for staff/students who commute by foot or by bicycle

Yes

Secure bicycle storage is provided

Yes

Other Sustainability Actions

Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models

Yes

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

Yes

Have put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities

Yes

Have implemented a hazardous waste reduction and disposal strategy (Hazardous Waste: E.g., electronics including computer parts and monitors, batteries, paints, fluorescent bulbs)

Yes

Have incorporated minimum recycled content standards into procurement policy for consumable, non-paper supplies (e.g., writing instruments, binders, toner cartridges, etc.)

No

Established green standards for goods that are replaced infrequently and/or may require capital funds to purchase (e.g., office furniture, carpeting, etc.)

Yes

Incorporated lifecycle costing into new construction or renovations

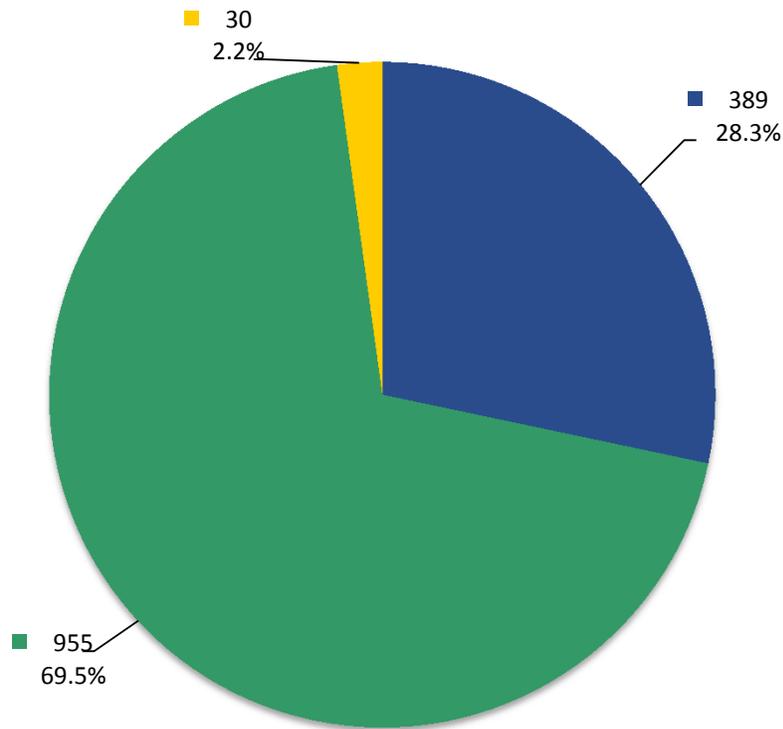
No

Please list and other sustainability actions you wish to report not included in the previous list.

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**BC Lottery Corporation
Greenhouse Gas Emissions by Source
for the 2013 Calendar Year (tCO₂e*)**



Total Emissions: 1,374

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

Offsets Applied to Become Carbon Neutral in 2013 (Generated May 21, 2014 11:43 AM)

Total offsets required: **1,360**. Total offset investment: **\$34,000**. Emissions which do not require offsets: **14** **

*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.