

# 2014

Carbon  
Neutral  
Action  
Report



# **This is the BCLC 2014 Carbon Neutral Action Report\*.**

**This report contains  
our emissions profile,  
the offsets purchased,  
actions we have taken to  
reduce GHG emissions  
and our plans to continue  
reducing emissions  
in 2015 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

At BCCLC we strive to be socially responsible in everything we do, and that includes considering our impact on the environment. We support and encourage our employees, service providers, retailers and stakeholders to take sustainable actions wherever possible.

Sustainability is woven into our culture. Through our procurement practices, environmental responsibility is incorporated into the way we manage our products, services and business relationships. Each year, our employees participate in Bike to Work Week and the Commuter Challenge. In 2014, participants of both events biked nearly 3,000 kilometres avoiding more than 550 kilograms of emissions. In addition, we completed a lighting upgrade in the Vancouver office whereby 140 standard fixtures in common areas and meeting rooms were converted to higher efficiency LEDs in an effort to reduce electricity consumption and maintenance costs.

Waste management continues to be top of mind for BCCLC. In 2012, to remain compliant with the B.C. Recycling Regulation we chose to become a member of Multi-Material B.C. (MMBC). As a producer of paper and packaging products that may end up in a residential waste stream, BCCLC is responsible for reporting the amount of paper produced each year, and paying fees to MMBC, which fund recycling programs across B.C. We also continue to divert end-of-life electronic and electrical equipment away from landfill and, in 2014, more than 56 tonnes of equipment was recycled. In line with reducing our impact on landfills, our Vancouver office has a very successful composting program in place and we are continuing our efforts to introduce composting within our Kamloops office.

In 2014, our reportable greenhouse gas (GHG) emissions decreased by 59 tonnes over last year. The decrease was due to the B.C. Climate Action Secretariat reducing the GHG conversion factor for electricity that all public sector organizations use in their emissions calculations as well as the fact that we reduced our fleet size in Q4 2014 from 94 to eight vehicles. Our emissions would have been even lower were it not for two unexpected refrigerant releases from the HVAC system in our Kamloops office, which contributed 50 tonnes of emissions.

Here is our consumption snapshot for 2014:

- Electricity use in Kamloops down 2%
- Electricity use in Vancouver down 7%
- Natural gas use in Kamloops up 6%
- Natural gas use in Vancouver down 22%
- Litres of fleet gas consumed down 25%  
(due to reduction of fleet from 94 vehicles to 8)
- Emissions from paper up 12%

We are currently on track to meet our target of reducing emissions by 33 per cent by 2020, however, future reductions will likely become more challenging and costly. We will continue to pursue emissions reductions to meet the Government of B.C.'s expectations.

Sustainability is a key component of our social responsibility mandate and our employees will continue to find innovative and creative ways to make environmental responsibility part of our culture. In the coming years, we will continue to build on our accomplishments and invest in our commitment to sustainability.



**Susan Dolinski**

*Vice-President,  
Social Responsibility and Communications*



## 2014 Greenhouse Gas Emissions

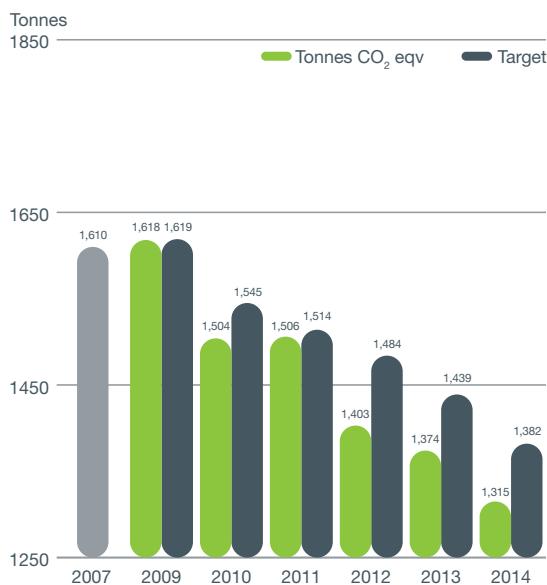
In 2014, our reportable greenhouse gas (GHG) emissions decreased by 59 tonnes compared to 2013. This four per cent decrease is primarily due to two factors. First, the B.C. Climate Action Secretariat reduced the GHG conversion factor for electricity that all public sector organizations use in their emissions calculations. Second, we dramatically reduced our fleet size in Q4 2014 from 94 vehicles to eight.

We would have achieved further emissions reductions were it not for a fugitive emission release at our Kamloops office. Two refrigerant leaks from the heating, ventilation and air conditioning (HVAC) system resulted in 50 tonnes of fugitive emissions. In previous years smaller refrigerant releases have been recorded, but in amounts deemed immaterial. Emissions from fugitive sources accounted for four per cent of our total greenhouse gas inventory in 2014.

Overall our energy consumption varied by source in 2014. Electricity use decreased by about three per cent compared to 2013 and is trending down for the first time in seven years. Despite using less natural gas in our Vancouver office, our total consumption increased by four per cent. The decision to eliminate 86 fleet vehicles resulted in 25 per cent less fleet fuel consumed, and we expect this trend to continue in 2015. Finally, our office paper consumption increased by three per cent.

**Reportable greenhouse gas emissions, in tonnes of carbon dioxide equivalent, for 2014 are:**

Electricity	92 tonnes
Natural gas	841 tonnes
Fleet gas	292 tonnes of which 281 tonnes must be offset
Supplies of office paper	34 tonnes
Diesel for building standby generators	6 tonnes
Fugitive sources	50 tonnes
Total declared emissions	1,315 tonnes
Total emissions for offset	1,304 tonnes



Note:

1. Our year-on-year target was set in 2009. The target is for reducing actual reportable emissions and is not intensity based. In Q4 2014 we reduced our corporate fleet from 94 to eight vehicles. This change is expected to reduce our fleet emissions in future years and as a result we have updated our annual target for 2015 onward.
2. We were responsible for vacant floor space in Richmond from mid-December 2010 to June 2011 following our move to a more efficient Vancouver facility. This commitment resulted in slightly increased emissions for 2011 over 2010.

### Fugitive Emissions

BCLC monitors and records the amount of refrigerant added to building heating, ventilation and air conditioning (HVAC) systems and vehicle air-conditioning. In previous years, the amount used was less than one per cent of our greenhouse gas inventory and as a result was not disclosed. In 2014, two leaks were noted during regular maintenance and repair activities resulting in the release of 28 Kg of R 407 C refrigerant. Due to the relatively high global warming potential of this gas, this fugitive release accounts for 50 tonnes of carbon dioxide equivalent emissions and therefore qualifies for disclosure and offsetting. In addition, we replaced 98 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.

## Offsets Applied to Become Carbon Neutral in 2014

As required by Section 7 of the Carbon Neutral Government Regulation, BCLC has offset a total of 1,304 tonnes of carbon dioxide equivalent emissions from the following sources:

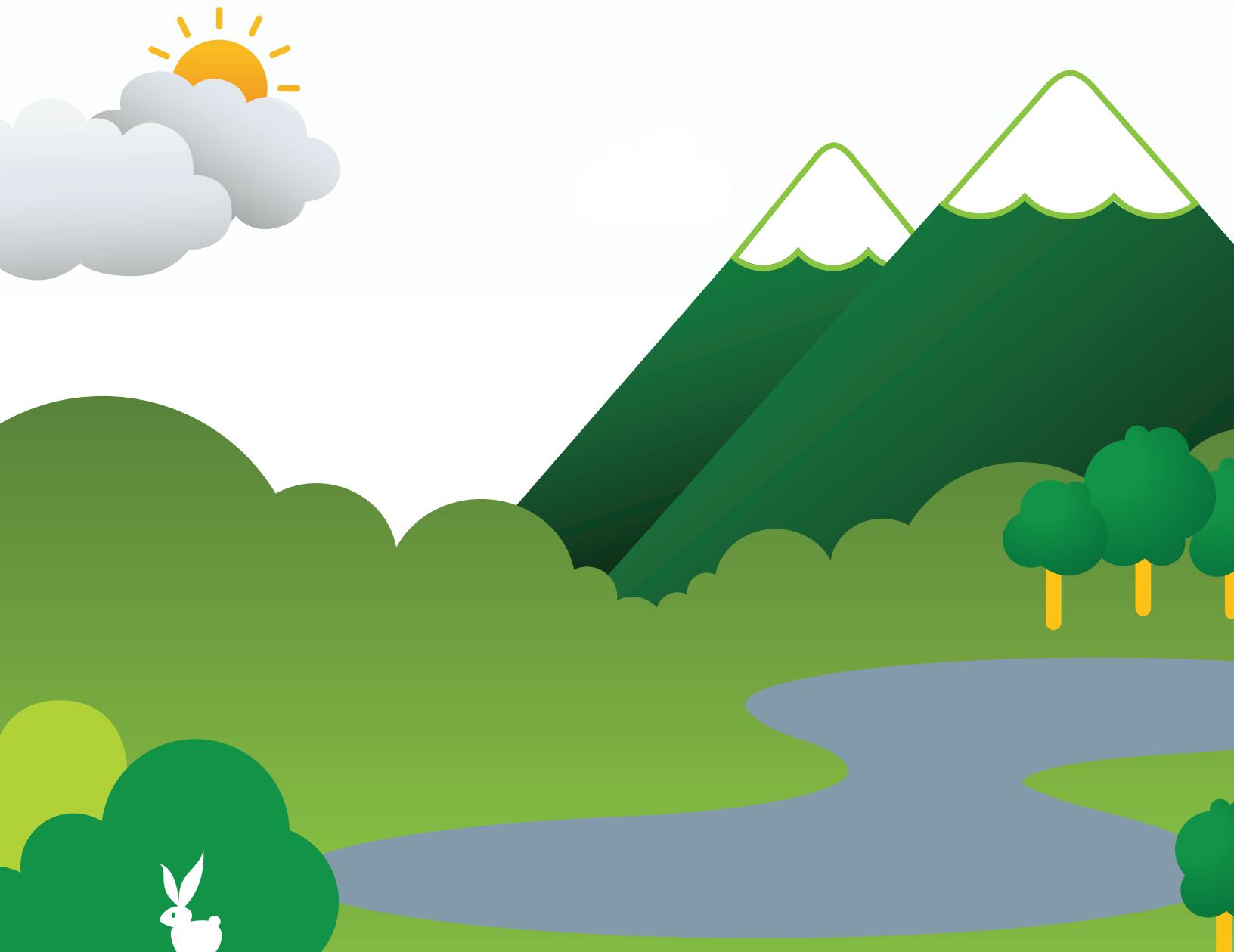
- Building operations, including the consumption of natural gas and electricity.
- Fleet gas consumption.
- Supplies of office paper.
- Fugitive emissions from HVAC refrigeration units.

The emissions offset does not include:

- Eleven 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 fleet refrigeration units. These sources account for less than one per cent of our total emissions inventory.



In 2014 our reportable  
greenhouse gas emissions  
decreased by 59 tonnes.



# Emissions Reduction Activities

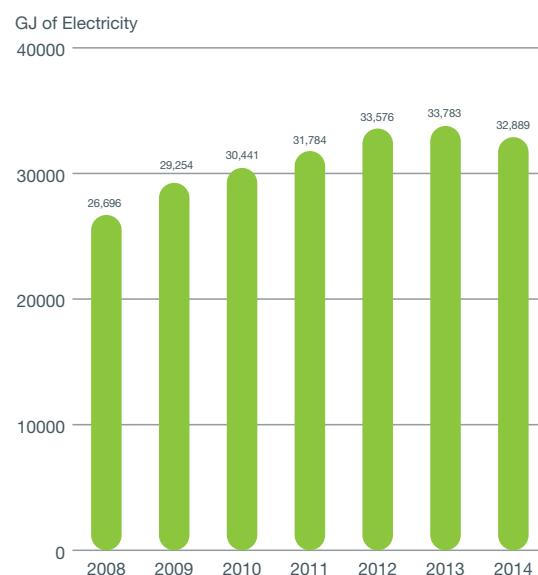
## Actions Taken to Reduce Greenhouse Gas Emissions in 2014

### Electricity

For the first time since we started measuring our impact in 2007, our electricity consumption decreased in 2014. This may be partially attributable to a decrease in the number of full-time equivalents (FTEs), which contributes to less consumption. In March 2014, BCLC initiated significant corporate cost reduction initiatives, including the elimination of a number of FTE positions. The number of FTEs from our Kamloops and Vancouver offices decreased from 750 in 2013 to 654 in 2014.

A lighting upgrade was conducted at the Vancouver facility in late 2013. One hundred and forty standard fixtures in common areas and meeting rooms were converted to higher efficiency LED fixtures in an effort to reduce electricity consumption and maintenance costs. Whenever we undertake building upgrades we install more energy efficient equipment. In addition, we continue to provide tips to staff on how to reduce electricity use in the office.

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

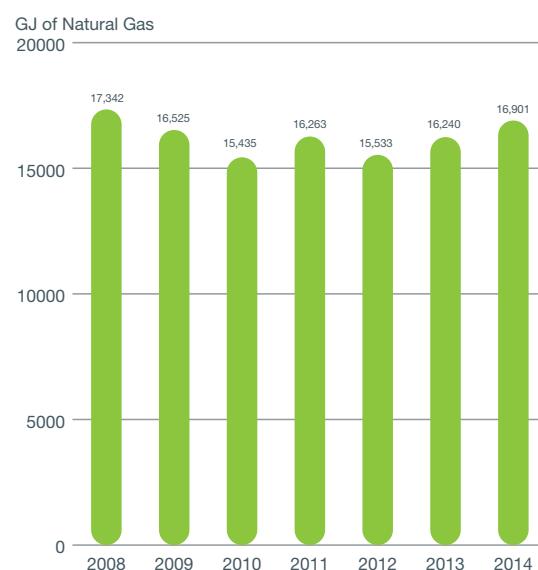


### Natural Gas

In 2014, the consumption of natural gas increased for the second year in a row. The four per cent increase is entirely related to our Kamloops facility, which continues to consume over 90 per cent of BCLC's total natural gas while accounting for only 57 per cent of our total floor space. The reason for the increase in consumption of natural gas is unclear as there were no significant changes to facility operation. However, there were several colder than average days in Kamloops in early 2014, which may have contributed to the increased consumption.

Our facilities team is closely monitoring natural gas use at our Kamloops facility to determine what can be done to curb the upward trend in consumption.

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

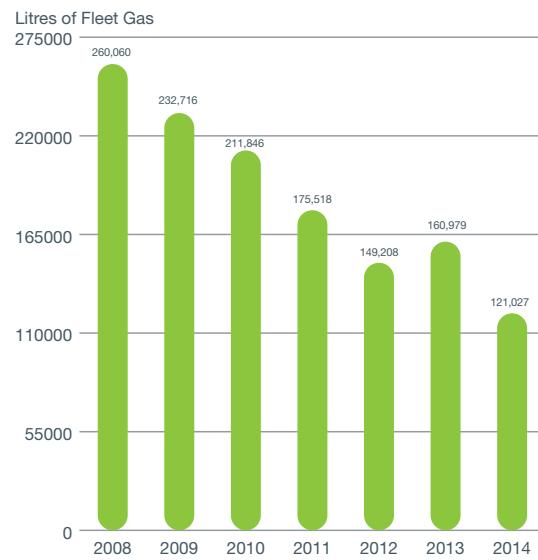


## Fleet Gas

In Q4 2014, BCLC eliminated all but eight of our fleet vehicles as part of a cost-cutting initiative. As a result we saw a sharp drop in the amount of fleet fuel consumed during this period. Overall, our fuel consumption was down by 25 per cent compared to 2013. We expect fleet gas consumption to decrease further in 2015, with fewer fleet vehicles in service.

Seven of BCLC's eight fleet vehicles are hybrids. Both of our offices are equipped with video-conferencing equipment to reduce the need for inter-office travel. When travel between offices is necessary, carpooling is encouraged.

Note: BCLC stopped accounting for private kilometres driven in fleet vehicles from 2009 onwards. BCLC acknowledges that the reduction in fleet size in 2014 did nothing to curb real emissions, but rather reduced the mobile emissions sources which fall in-scope for the purpose of reporting. (As per the 2014 Scope Summary for B.C. Public Sector Greenhouse Gas Emissions, mobile assets that are owned or leased by employees and used for business purposes or commuting to/from work are out of scope.)



## Office Paper

In 2014, our office paper purchases increased for the second year in a row. While paper use accounts for a small fraction of our overall emissions inventory, we will continue to promote actions that reduce our consumption. This includes posting corporate reports online, developing alternatives to printed material (e.g. replacing conference agendas with a smartphone app), and encouraging double-sided printing.

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 2014, staff in our two offices utilized an estimated 1,500 hours of video conferencing to host meetings, reducing the need to travel between Vancouver and Kamloops. Not only did this result in significant cost savings, we estimate it helped us avoid 250 tonnes of greenhouse gas emissions.
- 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. We have already reported our paper and packaging use for 2012 and 2013, and will continue to do so on an annual basis. In addition to paper and packaging, BCCLC is also a steward of the Electronic Products Recycling Association (EPRA). In 2014 we recycled 56 tonnes of electronic equipment through this program.
- Waste Management Infrastructure: We continued our progress in diverting office waste from landfill in 2014. In Vancouver, nearly 93 per cent of office wastes were recycled or composted, up three per cent from the previous year. Progress has been made at our Kamloops facility as well. In 2014 an external waste audit was conducted at the facility, which identified numerous opportunities to divert waste from landfill. We are working to implement several of these recommendations, including moving to centralized waste stations throughout the facility. We also ran a pilot program to assess the viability of introducing a composting program throughout the facility. The results of this pilot identified several challenges that we will look to address in 2015.

- Alternate Transportation: Once again BCCLC employees participated in Spring Bike to Work Week. In total our riders biked over 1,750 Km, avoiding 387 Kg of carbon dioxide emissions. In addition, both of our offices participated in the Commuter Challenge and over the week nearly 1,200 Km were logged, avoiding 166 Kg of emissions. With the reduction in our fleet size, there is now a concerted effort to maximize carpooling between offices. Staff can view who has booked vehicles and for how long, making it easier to coordinate shared travel.
- Service Providers Engagement: In 2014 we launched a pilot project with two of our casino service providers, granting them limited access to our CSR reporting tool. This gives service providers improved functionality in energy reporting and allows BCCLC to monitor energy consumption at casino premises. To date the service providers are tracking energy consumption at 10 casino properties, with an eye to expand this number in the future. In 2015 we will continue to support service providers and look for ways to help them reduce energy use.
- New Social Responsibility Charter: BCCLC has adopted a new SR Charter that outlines our commitment to socially responsible business practices and aligns with our corporate goals: Player, People, Public and Profit. In the Public section we have reiterated our commitment to reducing greenhouse gas emissions, as well as engaging our service providers to lessen their environmental impacts.

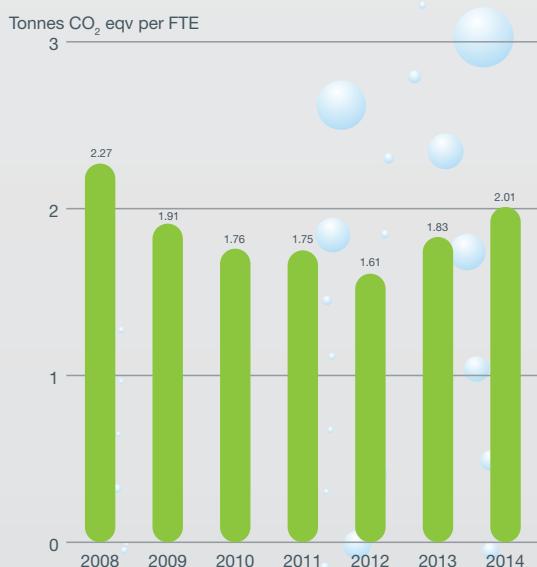


# Operational Changes in 2014

Our reportable greenhouse gas emissions decreased by 59 tonnes to 1,315 tonnes when compared to our 2013 performance. This is below our expected target of 1,382 tonnes, as reported in the 2013 Carbon Neutral Action Report.

For 2014 our GHG emissions per full-time equivalent (FTE) are 2.01 tonnes CO<sub>2</sub> equivalent. This calculation only includes FTEs based at our Kamloops and Vancouver facilities as we believe this more accurately reflects our impact. This is higher than our per FTE emissions in 2013, mainly because we had nearly 100 fewer FTEs in 2014.

We reset our future emission targets in 2014 to account for the anticipated decrease in emissions from our reduced fleet. This reduction was accounted for in the 2015 target, with smaller, incremental decreases targeted in future years. 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 remains to meet our increasing net income and social responsibility goals while reducing actual emissions, and this will become more difficult in the future.



## Plans to Continue Reducing Greenhouse Gas Emissions 2014/15

Climate change has not been identified as a specific risk to BCLC in our current 2015/16 – 2017/18 Service Plan. However, the level of reportable greenhouse gas emissions remains a distinct corporate 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 at and outside of work. Recent changes to our fleet should help to further reduce our reportable emissions.



In 2014, BCLC offset  
1,304 tonnes of carbon dioxide  
equivalent emissions.



# 2014 Carbon Neutral Action Report (CNAR)

## - Part 2 ACTIONS

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### Organization Name

BCLC

### Actions Taken to Reduce Emissions

#### **1) Stationary Fuel Combustion, Electricity (Buildings):Indicate which actions were taken in 2014:**

Performed energy retrofits on existing buildings

No

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

No

Undertook an evaluation of overall building energy use.

No

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

No actions were taken to reduce building emissions in the Kamloops facility. In the Vancouver office 140 standard fixtures in common areas and meeting rooms were converted to higher efficiency LED fixtures in an effort to reduce electricity consumption and maintenance costs.

#### **2) Mobile Fleet Combustion (Fleet and other vehicles):Indicate which actions were taken in 2014:**

Do you have a fleet?

Yes

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

No

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:

N/A

### **3) Supplies (Paper):Indicate which actions were taken in 2014:**

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.)

No

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

BCLC continues to use multi-up printing in the Business Centres whenever possible, reducing the number of pages printed. This method does not necessarily reduce paper consumption as 11x17 sheets are used instead of 8.5x11. However multi-up printing reduces costs and allows the printing devices to operate more efficiently.

### **Page 3**

### **Actions Taken to Reduce Emissions - continued**

Explain how you plan to continue minimizing emissions in 2015 and future years:

The reduction in BCLC's fleet will have a significant effect on BCLC's emissions in the coming years. It was noted that natural gas use in our Kamloops office increased by 6% this year compared to 2013. Given that 2014 was not a particularly cold year in Kamloops, the reason for this increase is unclear. BCLC's facilities team will continue to monitor natural gas use at the Kamloops facility and attempt to determine what factors are contributing to the increased consumption.

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)  
No

**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)**

No

**Established a sustainability/green awards or recognition program**

No

**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

No

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

No

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**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 OptionsAllow 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 ActionsEstablish 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.**

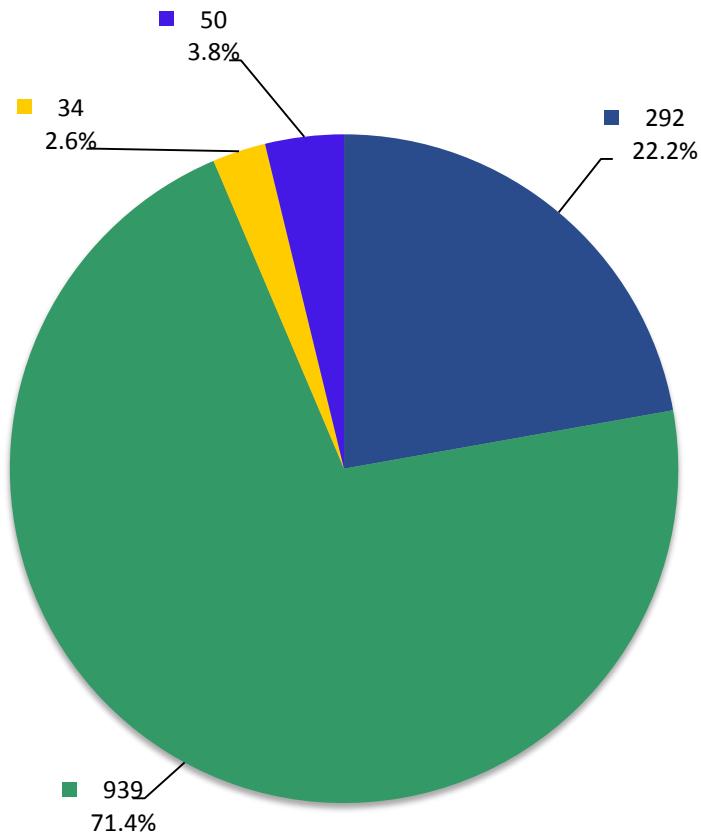
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**BC Lottery Corporation**  
**Greenhouse Gas Emissions by Source**  
**for the 2014 Calendar Year (tCO<sub>2</sub>e\*)**



**Total Emissions: 1,315**

- 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 2014 (Generated June 22, 2015 12:56 PM)**

Total offsets required: 1,304. Total offset investment: \$32,600. Emissions which do not require offsets: 11 \*\*

\*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.