

## 2018 Carbon Neutral Action Report

*This Carbon Neutral Action Report for the period January 1st, 2018 to December 31st, 2018 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2018 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2019 and beyond.*

*By June 30, 2019, BC Emergency Health Services' final Carbon Neutral Action Report will be posted to our website at [www.bcehs.ca](http://www.bcehs.ca).*

### **PHSA Environmental Sustainability Policy**

*PHSA will act as a leader with respect to environmental stewardship while engaging the healthcare community in a collaborative approach towards sustainability. This will occur through sustainable operations, sustainable facilities and sustainable partnerships.*

### **2018 Actions to Reduce GHG Emissions**

- *1 ambulance received in fiscal year 2018/19 is equipped with an aftermarket hybrid electric drive system.*
- *59 new Crestline Coach Ltd. ambulances received in fiscal year 2018/19 are equipped with ACETECH's ECO-Run module for idle-management.*
- *BCEHS Issued a Notice of Intent to engage with Crestline Coach Ltd in exploration of Low or No Emission Ambulance Vehicles.*
- *BCEHS continues to purchase only 100% recycled paper for office use.*

### **Our Plans to Continue Reducing Emissions in 2019 and Beyond**

*BCEHS Fleet Operations strives to ensure the efficiency of the ambulance fleet. Initiatives designed to improve fuel economy include the trial of an aftermarket hybrid electric drive system in 1 ambulance received in 2018 and currently operating in the Lower Mainland area. The trial aims to determine if aftermarket hybrid electric systems provide a reliable, cost effective means of improving fuel economy and reducing carbon emissions. Information collected by the Fleet Information Management System is and will continue to be used to measure success of this project.*

*9 Additional Hybrid Ambulances are expected to be inducted into the Fleet late in 2019 or early 2020.*

*In 2019 BCEHS Fleet Operations will continue engagement with Crestline Coach in exploration and development of low or no emission ambulance platform. Preliminary work will focus on collection and analysis of vehicle data to determine design requirements.*

*As other hybrid and low-emission technology becomes available at a commercial level, BCEHS will continue to assess these options as a mean of reducing carbon emissions.*

**Emissions and Offset Summary Table:**

<b>BCEHS GHG Emissions and Offset for 2018 (tCO<sub>2</sub>e)</b>	
<b>GHG Emissions created in Calendar Year 2018</b>	
Total Emissions (tCO <sub>2</sub> e)	15,700
Total BioCO <sub>2</sub>	447.60
Total Offsets (tCO <sub>2</sub> e)	15,253
<b>Adjustments to GHG Emissions Reported in Prior Years</b>	
Total Emissions (tCO <sub>2</sub> e)	18
Total Offsets (tCO <sub>2</sub> e)	18
<b>Grand Total Offsets for the 2018 Reporting Year</b>	
Grand Total Offsets Required (tCO <sub>2</sub> e)	15,271
Total Offset Investment	\$381,775.00

**Retirement of Offsets:**

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, [Organization Name] (the Organization) is responsible for arranging for the retirement of the offsets obligation reported above for the 2018 calendar year, together with any adjustments reported for past calendar years. The Organization hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy ensuring that these offsets are retired on the Organization's behalf, the Organization will pay within 30 days, the associated invoice to be issued by the Ministry in an amount equal to \$25 per tonne of offsets retired on its behalf plus GST.

**Executive sign-off:**

Signature	Date
Manraj Chohan	May 30, 2019
Name (please print)	Title
	Director, System Transformation

# Part 1: CNAR Survey

## 1. General Information

**Name:** Molly Carlow

**Contact Email:** Molly.Carlow@bcehs.ca

**Organization Name:** BC Emergency Health Services

**Sector:** Health

**Role** - Please select your role(s) below.

*If more than one individual completed the survey, multiple categories may be selected:*

Energy Manager: No

Sustainability Coordinator: No

Administrative Assistant: No

Facilities/Operations Manager/Coordinator: No

CEO/President/Exec Director: No

Treasurer/Accounting: No

Superintendent: No

Other - Please Specify: Fleet Administration Manager

## A. Stationary Sources (e.g. Buildings, Power Generators): Fuel Combustion, Electricity use, Fugitive Emissions.

### 1. Actions taken by your organization in 2018 to support emissions reductions from buildings.

#### a) Do you have a strategy to reduce emissions from stationary sources?

Yes

If yes above, what are the main goals?: To reduce energy usage and thus reduce emissions

#### b) Whether you have a strategy or not (1.a), briefly describe your organization's plans to continue reducing emissions from stationary sources:

##### I. Over the medium-term term (1-5 years)

Energy usage in BCEHS buildings is reviewed to identify any spikes in usage. These spikes are investigated to ensure there isn't energy loss from equipment issues or other factors. We also look at buildings whose usage has decreased to identify energy saving successes that could be used in other buildings.

When work is undertaken, consideration is given to opportunities that could offer energy reduction outcomes (e.g. T8 upgrades or changes to LED lighting, programmable thermostats, motion and light activated lighting).

Professional engineers evaluate energy consumption projections and look for ways to decrease demand for both electrical and mechanical systems. In addition, all buildings are on routine maintenance schedules (e.g. for HVAC systems, regular filter changes results in reduced energy consumption).

##### II. Over the long term (6-10 years)

Continue with the activities outlined above.

**d) Please describe your strategy's goals (if any) related to building retrofits.**

When funds become available for retrofits, BCEHS will direct funds towards high return projects on owned facilities including changes to bay heater units, weatherstripping, windows, doors, etc.

**II. Please explain why LEED Gold certification was not obtained.**

BCEHS did not construct any owned new facilities in 2018.

**B. Mobile Sources (Vehicles, Off-road/portable Equipment): Fuel Combustion:****3. Actions taken by your organization in 2018 to support emissions reductions from mobile sources.****a) Do you have a strategy to reduce emissions from mobile sources?**

No

**b) Whether you have a strategy or not (3.a), briefly describe your organization's plans to continue reducing emissions from mobile sources:****I. Over the medium-term term (1-5 years)**

BCEHS Fleet Operations strives to ensure the efficiency of the ambulance fleet. Initiatives designed to improve fuel economy include the trial of an aftermarket hybrid electric drive system in one ambulance received in 2018.

Furthermore, solar panel technology is being explored to reduce idle time. BCEHS Fleet Operations is currently engaging with our Ambulance manufacture in exploration of a low emission vehicle platform with the current goal of fully understanding current use characteristics and viability this type of platform.

**c) How many fleet vehicles did you purchase from the following categories:**

Gas/diesel vehicle: 97

**I. If you purchased new gas/diesel vehicles, can you briefly explain why vehicles from the other categories were not chosen?**

The unavailability of hybrid and other low-emission technology at a commercial level for ambulance units continues to be a barrier to reducing emissions.

**d) How many existing EV charging stations does your organization have in each category:**

level 2: 4

level 3: 0

How many level 2 stations (if any) are specifically for your fleet vehicles: 0

How many level 3 stations (if any) are specifically for your fleet vehicles: 0

**e) How many EV charging station(s) did you install in 2018 in each category:**

level 2: 4

level 3: 0

How many level 2 stations (if any) were installed specifically for your fleet vehicles: 0

How many level 3 stations (if any) were installed specifically for your fleet vehicles: 0

**4. Please indicate the number of the vehicles in the following vehicle classes that are in your current fleet (including any purchased in 2018):**

Definitions:

- Light duty vehicles (LDVs) are designated primarily for transport of passengers <13 and GVWR<3900kg
- Light duty trucks (LDTs) are designated primarily for transport of light-weight cargo or that are equipped with special features such as four-wheel drive for off-road operation (include SUVs, vans, trucks with a GVWR<3,900kg )
- Heavy duty vehicles (HDV) includes vehicles with a GVWR>3,900 kg (e.g. ¾ tonne pick-up truck, transport trucks)

**a) Light duty vehicles (LDVs)**

Gas/diesel: 4

**b) Light duty trucks (LDTs)**

Hybrid vehicles – HEV – (e.g., non “Plug In”- older Ford Escape Hybrid, older Chevrolet Silverado pickup hybrid etc): 2

Gas/diesel: 751

**c) Heavy duty vehicles (HDV)**

Gas/diesel: 1

**5. Please indicate the number of the vehicles you plan to replace in your fleet:**

How many LDTs do you plan to replace annually over the next 5 years?: 600

**C. Office Paper: Indicate which actions your PSO took in 2018:**

**6. Actions taken by your organization in 2018 to support emissions reductions from paper supplies.**

**a) Do you have an Office Paper strategy?**

Yes

**I. If yes, what are its goals?**

To use 100% recycled paper for all printing and copying needs.

Also, encourage program areas to think twice about necessity to print a document before doing so.

**b) Whether you have a strategy or not (6.a), briefly describe your organization’s plans to continue reducing emissions from paper use:**

**I. Over the medium-term (1-5 years)**

Continue to use only 100% recycled paper. Also, monitor year over year paper purchase levels. If levels don't decline, identify which department(s) are the heavy users and discuss reduction strategies.

**II. Over the long term (6-10 years)**

Same as above.

**c) Have an awareness campaign focused on reducing office paper use**

Yes

**d) Purchased alternate source paper (bamboo, hemp, wheat, etc.)**

No

**e) Other actions, please specify.**

We assist departments in designing records management strategies to keep their records in electronic form.