

Carbon Neutral Action Report – BC Emergency Health Services

This is the 2013 Carbon Neutral Action Report (CNAR) for *BC Emergency Health Services (BCEHS)*. This report contains our 2013 emissions profile, offsets purchased, the actions we have taken in 2013 to reduce our GHG emissions and our plans to continue reducing emissions in 2014 and beyond.

By June 30, 2014, *BC Emergency Health Services'* final CNAR will be posted to our website at www.bcas.ca.

BCEHS Sustainability Goals

BCEHS 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.

How carbon neutrality within Fleet Operations, BCAS links to our organization's mandate:

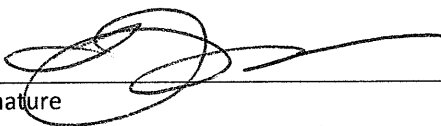
Fleet Operations, BCAS, has a mandate to provide safe, reliable and an efficient ground fleet to support our paramedics. With more than 600 vehicles, being run more than 20 million km every year, we leave a huge carbon footprint. Small measures at gaining efficiencies in the operation of fleet will go a long way in contributing to carbon neutrality for the organization.

Actions taken by BCAS to reduce energy use and/or GHG emissions in 2013:

- **Idle Reduction System-** In 2013-14 BCAS received an additional 55 ambulance equipped with ECOSmart idle reduction technology, bringing the total 118 Ambulance equipped with this technology. The ECOSmart system monitor battery condition and patient compartment shutting down an idling ambulance when the engine is not required. It is anticipated a reduction in fuel consumption by 250 litres per ambulance per year in busy urban deployments. An additional 55 units will be introduced in 2014-15 bringing the 173 ambulances representing over a third of the active ambulance fleet.
- **Aerodynamic Design-** These new ambulances also feature a redesigned air dam and a narrower body to reduce frontal area to reduce the overall air drag on the ambulance and a reduced conversion weight to improve fuel economy.
- **Low- Acuity Patient Transfer Bus-** In January of 2014 BCAS introduced a low acuity patient transfer bus based out of Burns Lake. This bus operates a scheduled transfer vehicle between Burns Lake and Prince George on the Highway 16 corridor. The aim of the service is consolidate trips currently being done by individual ambulances. By allowing for up to five patients at one time, it is expected that this will provide significant reduction in the cumulative number of kilometers traveled, thereby reducing fuel consumption and emissions.
- **Replacement of Single Stretcher Units with Dual Stretcher Units-** Six single stretcher ambulances were replaced with dual stretchers, primarily in remote locations. These dual stretcher cars improve the ability to transport two patients at a time reducing the number of trips.
- **Revised Resource Allocation Policy-** The review and adjustments made to the BCAS resource allocation policy (RAP) is expected to reduce the amount of kilometer travelled code-3 (emergent lights and siren) by 800,000 km and a reduction in Advanced Life support responses by 35%. The change in response mode to a routine response equates to a reduction in more aggressive code-3 driving improving the fuel economy of the ambulance.

Emissions and Offsets Summary:

BCEHS GHG Emissions and Offsets for 2013 (TCO2E)	
GHG Emissions created in calendar year 2013 (from SMARTTool Homepage)	
Total Emissions	14,011
Total Emissions for Offsets	13,599
Adjustments to GHG Emissions Reported in Previous Years (from SMARTTool Homepage)	
Total Emissions	1028
Total Emissions for Offsets	1028
Credit owing from PCT at end of 2012 reporting year (if applicable – from May 15 Invoice):	
Credit Owing	3447
Total Emissions for Offsets for the 2013 Reporting Year (from Offset Invoice):	11,180

 Signature	27 June 2014. Date
LINDA M LUPINI Name (please print)	EVP PHS&A AND BCETS. Title

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

Created Wednesday, June 11, 2014

Updated Monday, June 23, 2014

<http://fluidsurveys.com/surveys/cas-z/2013-cnar-form-bps-actions/8450747f21ad94ccbaf4491332bad05/>

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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

BC Emergency and Health Services

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.

Yes

Undertook an evaluation of overall building energy use.

Yes

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

Brookfield Johnson Controls WSI our contracted building maintenance firm does the following:

- Recycling (paper/cardboard) programs at a variety of station where the services are available. In some specific building expanded recycling programs are been looked at.*
- 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 who's usage has decreased to identify energy saving successes that could be used in other buildings.*
- Energy reports are available for review whenever an issue is identified for quick reference for decision making.*
- Projects are identified that could offer energy reduction outcomes (i.e. T8 upgrades)*

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

No

Took steps to drive less than last year

Yes

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

• *Idle Reduction System - In 2013/14, BCAS received an additional 55 ambulances equipped with ECOSmart idle reduction technology, bringing the total to 118 ambulances equipped with this technology. The ECOSmart system monitors the battery conditions and will shut down an idling ambulance when the engine is not required, such as at the scene of a motor vehicle incident. BCAS anticipates an annual reduction in fuel consumption by 250 litres per ambulance in busy urban centres. An additional 55 units will be introduced in 2014/15, bringing the total to 173 ambulances, representing over 30 per cent of the active ambulance fleet in the province.*

3) Supplies (Paper):

Indicate which actions were taken in 2013:

Used less paper than previous year

Yes

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:

Recycling (paper/cardboard) programs at a variety of station where the services are available. In some specific building expanded recycling programs are been looked at.

Actions Taken to Reduce Emissions - continued

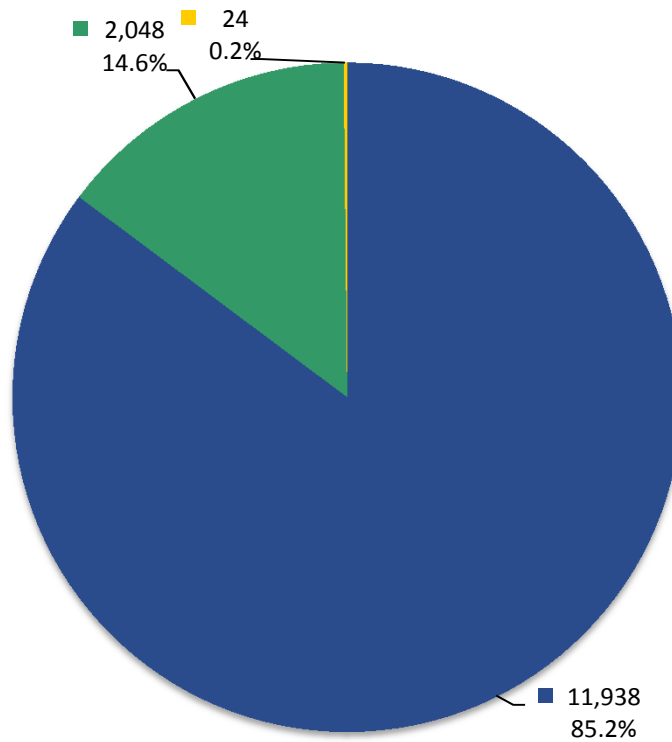
Explain how you plan to continue minimizing emissions in 2014 and future years:

- *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 who's usage has decreased to identify energy saving successes that could be used in other buildings.*
- *Energy reports are available for review whenever an issue is identified for quick reference for decision making.*
- *Projects are identified that could offer energy reduction outcomes (i.e. T8 upgrades)*

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

No

BC Emergency Health Services Greenhouse Gas Emissions by Source for the 2013 Calendar Year (tCO₂e*)



Total Emissions: 14,011

- 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 26, 2014 9:57 AM)

Total offsets required: **13,599**. Total offset investment: **\$339,975**. Emissions which do not require offsets: **412** **

*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.