



## Carbon Neutral Action Report 2013

### Overview

On behalf of Interior Health (IH), I am pleased to present the sixth annual Carbon Neutral Action Report (CNAR) for 2013. This report contains our 2013 emissions profile, offsets purchased, the actions we have taken in 2013 to reduce our GHG emissions, as well as our plans to continue reducing emissions in 2014 and beyond.

By June 30, 2014, Interior Health's final CNAR will be posted to our website at [www.interiorhealth.ca](http://www.interiorhealth.ca).

### Executive Summary

Our mission at Interior Health is to promote healthy lifestyles and provide health services to the highest quality standards, which includes minimizing our impact on the environment and reducing our carbon footprint by adopting environmental sustainability practices. Our approach to environmental sustainability involves taking actions designed to drive triple-bottom-line results around environmental stewardship, economic prosperity, and social responsibility. Many of our organizational successes in 2013 had linkages to our environmental program, such as: our response to the Slocan Valley fuel spill; celebrating 10 years of telehealth at IH; improving employee engagement; being named a "BC Top Employer" for 2013; and embarking on phase one of Royal Inland Hospital redevelopment in Kamloops.

In achieving these milestones, it is important to note that there were also challenges to overcome along the way. In particular, IH faced significant financial concerns in 2013 and, as a result, took action across the organization to reduce costs and find savings, with direct linkages to reducing our carbon footprint. We expect the years ahead to be equally challenging and we will continue to be fiscally responsible going forward as we strive to provide health care in a more efficient and sustainable way. This includes making responsible decisions that help to reduce Interior Health's negative impact on the environment. Our future sustainability goals focus on challenging traditional practices through innovation and continuous process improvements and improving our overall environmental sustainability program.

In 2013, Interior Health continued to develop innovative sustainability initiatives as well as enhancing environmental initiatives from previous years. Environmental sustainability initiatives included:

- **Improvements in physician accessibility to telehealth** – physicians now use this technology for ongoing professional development and medical education, thereby reducing travel costs, as well as greenhouse gas (GHG) emissions associated with travel.
- **Innovative recycling campaigns for equipment and supplies** – as newer, better technology becomes available, Interior Health retires or disposes of equipment and supplies. To ensure the equipment and supplies are not destined for a landfill, a group



of innovative Interior Health staff identified partners interested in the equipment. One of the partners then acquired a donated warehouse and, along with businesses, charities, and volunteers, managed the cost and manpower required to ship 40-foot containers of equipment around the world to other health-care facilities in need.

- **Onboarding with the Healthpro bio-waste contract and expanding the re-usable sharps container program to Royal Inland Hospital in Kamloops** – Interior Health is the first health authority in British Columbia to implement the reusable sharps program.
- **Continued focus on energy management and completing ten energy retrofit projects** – These projects included lighting upgrades, elevator modernization, and boiler replacements, which helped us manage our greenhouse gas emissions (GHGs) and also assisted with a review of our overall building energy use at a variety of facilities. In addition, we improved our energy management information system (EMIS) usage, enabling plant staff to review energy use data, as we continue to identify areas for energy reduction feasibility studies.

Looking back to 2013, we are proud of our accomplishments which included reducing the amount of waste produced, using less energy, and developing processes toward sustainability. As we move into 2014, we look forward to continuing our efforts to reduce carbon emissions.

Interior Health is committed to sustainable action and continuing our work toward a healthy environment for residents of the Southern Interior, our province, and for all Canadians.

**Dr. Robert Halpenny**  
President & Chief Executive Officer

**Emissions and Offsets Summary:**

<b>Interior Health's GHG Emissions and Offsets for 2013 (TCO2E)</b>	
<b>GHG Emissions created in calendar year 2013 (from SMARTTool Homepage)</b>	
Total Emissions	42,518
Total Emissions for Offsets	42,449
<b>Adjustments to GHG Emissions Reported in Previous Years (from SMARTTool Homepage)</b>	
Total Emissions	83
Total Emissions for Offsets	83
<b>Credit owing from PCT at end of 2012 reporting year (if applicable – from May 15 Invoice):</b>	
Credit Owing	13,500
Total Emissions for Offsets for the 2013 Reporting Year (from Offset Invoice):	29,032



Signature

Date

Dr. Robert Halpenny

President and Chief Executive Officer

Name (please print)

Title

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

Created Wednesday, February 12, 2014

Updated Monday, May 26, 2014

<https://fluidsurveys.com/surveys/cas-z/2013-cnar-form-bps-actions/a5954a02a6a207bf4fcdd23ffbdbf0d3/>

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## 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](mailto:climateactionsecretariat@gov.bc.ca).

Organization Name

*Interior Health Authority*

**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:

- *Enforced HVAC temperature setpoints;*
- *Encouraged sensible lighting use;*
- *Continually revised Direct Digital Controls (DDC) programs to reduce run times on equipment/DDC tuning (night time set-backs, etc.);*
- *Implemented lights out awareness/turn off computers campaigns;*
- *Promoted ongoing lighting upgrades;*
- *Completed boiler combustion analysis at various sites/ implemented boiler management improvements;*
- *Scheduled service/maintenance to generators for optimal performance;*
- *Planted low maintenance plants/grass, where feasible;*
- *Installed low flow aerators;*
- *Variable speed drives installed, where needed;*
- *Ensured HVAC maintenance scheduled to ensure optimal efficiency;*
- *Reduction emissions actions taken at specific buildings: 1) Castlegar District Health Centre – replacement of a 150T chiller to increase efficiency with cooling load and eliminated a high energy usage associated with a 1965 Chrysler chiller; 2) Kootenay Lake Hospital (Nelson) – replacement of a single stage laundry press for regional laundry; this equipment is extracting water from wet laundry to over 40% more than the previous unit, reducing drying time and related gas and heated water consumption; 3) East Kootenay Regional Hospital (Cranbrook) - changed outside lights for Christmas displays to LED lighting; 4) Cariboo Memorial Hospital (Williams Lake) and Royal Inland Hospital (Kamloops) - modernized elevators, which use less energy; 5) Installed thermal blankets at various sites in Invermere, Golden and Revelstoke.*
- 6) *Implemented BC Hydro led energy conservation awareness campaign at Royal Inland Hospital (Kamloops), Shuswap Lake General Hospital (Salmon Arm) and Queen Victoria Hospital (Revelstoke).*

## 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)

No

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:

- *Analysis of fleet vehicle replacement completed to determine which vehicles requiring replacement were suitable as hybrids;*
- *Performed regular fleet maintenance to improve fuel efficiency;*
- *Continued encouraging carpooling in fleet vehicles;*
- *New travel directive encourages virtual meetings and discourages travel (which includes travel by fleet vehicles);*
- *Electric vehicle charging infrastructure available for future use – 14 stations at Kelowna General Hospital and 10 stations at Polson Extended Care in Vernon.*

## 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.)

No

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

- Continued to encourage double-sided printing;
- Continued to discourage unnecessary printing; smarter printing (only when necessary);
- Certain staff able to procure second monitor to enable viewing multiple spreadsheets for analysis (limiting unnecessary printing);
- PharmaFlow initiative (digital scanning of prescription orders).

## Actions Taken to Reduce Emissions - continued

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

- *Develop a strategic Environmental Sustainability Plan incorporating waste, water, and energy use and focusing on demand, supply, communication and training, in order to influence a reduction/conservation approach across the health authority.*
- *Identify opportunities for educating staff and community on environmental factors that contribute to the burden of disease, as well as the environment.*
- *Dedicate staff to implement action items identified in the Environmental Sustainability Plan (Environmental Sustainability Manager and Energy Manager), supplemented by additional resources such as a gas specialist (dependant on funding) and a university student to address environmental issues organization-wide.*
- *Redefine our Strategic Energy Management Plan (SEMP) to enable everyday decision-making, policies, and operating procedures that ensure substantial and long-lasting reductions in energy use throughout IH. For example, we will investigate energy use at existing buildings and implement an energy conservation and efficiency program at select sites, with a goal to set energy reduction targets. As well, we will conduct energy audits or use previous results to inform potential retrofit projects. Through the SEMP, we will also investigate opportunities to integrate occupant education and awareness programs to reduce energy consumption related to occupancy. In mechanically conditioned spaces, we will investigate opportunities to turn thermostats down a few degrees in winter, and up in summer or warmer climates to determine if a slight shift can create significant energy savings without compromising patient/staff comfort.*
- *Invest in research and studies to define investments in energy efficiency.*
- *Pursuing long-term change to core business practices. For example, the PharmaFlow initiative had a positive change in both business practices and environmental practices. A goal within our strategic Environmental Sustainability Plan will be to identify additional avenues/opportunities for core business areas to redefine processes for both cost-effectiveness and sustainability.*
- *Using available resources and financial assistance to achieve our energy management goals. These will include incentive programs from utilities as well as the Carbon Neutral Capital Program funding.*
- *Continue networking and leveraging best practices and approaches of other health authorities.*
- *Continue to identify if the re-usable sharps container program may be rolled out across additional sites.*
- *Continue working with HSSBC as the purchasing agent for IH to influence purchasing directives that stipulate environmental standards, such as the Energy Star label.*
- *Continue segregating waste at source and encouraging recycling of non-hazardous waste.*
- *Continue to encourage staff to walk or use car pools, public transport, or bicycles wherever possible.*
- *Continue looking for opportunities to optimize the energy efficiency of fleet vehicles.*
- *Continue identifying low-cost or no-cost initiatives through an inventory of specific sites.*

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)

Yes

Encourage carpooling to meetings

Yes

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*

Actions to Promote Sustainability and Conservation - Optional (continued)

Staff Awareness and Education

Provided education to staff about the science of climate change

No

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

No

Provided green tips on staff website or in newsletters

Yes

Alternate Work/Commuting Options

Allow for telework/working from home

Yes

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

No

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

No

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.)

Yes

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

No

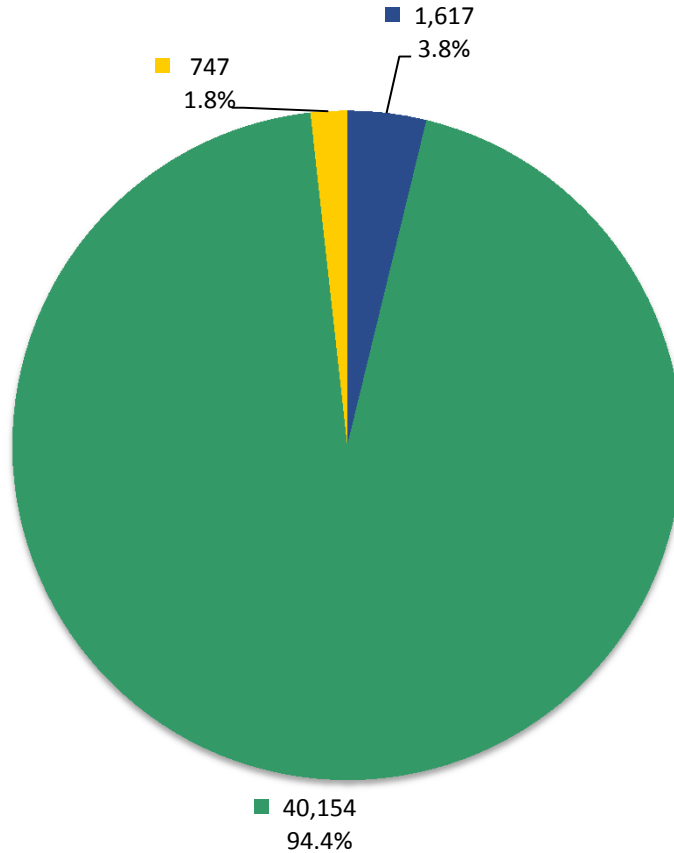
Incorporated lifecycle costing into new construction or renovations

Yes

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

- *Behaviour Change: Interior Health New Travel Policy (Low-Carbon Travel Directive linkages) – limit non-clinical travel by using meeting technologies (WebEx), encourage use of fleet vehicles and use of preferred hotels meeting environmental sustainability goals;*
- *Behaviour Change: Virtual Attendance – Interior Health New Travel Directive strongly encourages virtual attendance, as opposed to in-person;*
- *Behaviour Change: Alternatives to Travel – with additional training on WebEx, staff are more comfortable initiating and suggesting web-conferencing as an alternative to face-to-face meetings;*
- *Capital Planning – Interior Health changed web meeting tools to accommodate larger audiences, increased usage at a decreased cost;*
- *Workplace Conservation Awareness Program – encouraged lights and computers to be turned off at end of day;*
- *Laundry - new system which tracks actual consumption of the new system compared to older system;*
- *Continued with improvements and adoption of Telehealth network – operationally, it has improved access to continuing medical education and ability to seek a second opinion (when required), reducing the isolation of health care professionals working in rural and remote communities.*

## Interior Health Authority Greenhouse Gas Emissions by Source for the 2013 Calendar Year (tCO<sub>2</sub>e\*)



**Total Emissions: 42,518**

- 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 10:03 AM)

Total offsets required: **42,449**. Total offset investment: **\$1,061,225**. Emissions which do not require offsets: **69** \*\*

\*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.