



## **2013 CARBON NEUTRAL ACTION REPORT**

**School District No. 78 (Fraser Cascade)**

**Natalie Lowe-Zucchet, CA**

**Secretary-Treasurer**

**650 Kawkawa Lake Road**

**Hope, BC V0X 1L4**

**March 31, 2014**

# 2013 CARBON NEUTRAL ACTION REPORT

This is the 2013 Carbon Neutral Action Report (CNAR) for School District No. 78 (Fraser Cascade). 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, School District No. 78 (Fraser Cascade's) final CNAR will be posted to our website at [www.sd78.bc.ca](http://www.sd78.bc.ca).

## Executive Summary

On behalf of School District No. 78 (Fraser Cascade), we are pleased to submit the 2013 Carbon Neutral Action Report. The District is committed to continuing to provide environmental leadership by sharing knowledge and best practices around environmental sustainability with our staff students and public. The District is continuing to provide resources for facility upgrades and employee and student training to continue to raise awareness of the importance of sustainability.

Energy savings and emissions reductions continue to be a focus in our commitment toward carbon neutrality. All decisions made on building improvements are made through the lens of energy savings. We continue to upgrade our facilities through window replacement projects, heating control upgrades, further lighting upgrades and commitment to education.

As part of our 2013 energy savings program we upgraded the entire lighting of one of our high schools. We were fortunate in receiving a grant through the Carbon Neutral Capital Program to assist in this initiative. We also replaced the windows in a large K-12 school in Boston Bar, moving from single pane to double pane, low-E glass. We have made a number of projects for mechanical upgrades a high priority on our capital plan and they have been recognized as high priority by the Ministry.

For 2013, the School District's total emissions are 1058 tonnes of CO<sub>2</sub>e (2012- 1154 tonnes), which has meant providing an offset of \$21,700 plus GST to the Pacific Carbon Trust.

The Board of Education for School District No. 78 (Fraser Cascade) recognizes the importance of carbon neutrality and continues to endorse all work toward reduction in energy consumption.

Natalie Lowe-Zucchet, C.A.

# 2013 CARBON NEUTRAL ACTION REPORT

Secretary-Treasurer

## Overview

### Actions Taken to Reduce Greenhouse Gas Emissions in 2013

In 2013 School District No. 78 (Fraser-Cascade) has continued with efforts to reduce our carbon footprint through retro-fitting facilities and professional development. The agreement that the District entered into with our neighbour district, School District No. 33 (Chilliwack), to share an energy manager and professional expertise, has helped to focus our efforts and maintain a higher profile for environmental initiatives. This approach to energy management has helped coordinate our work to ensure we are using best practices to manage energy.

Once again, we provided education to our bus drivers, on bus driving technologies to both reduce emissions and improve the performance of our buses. This is an annual event to maintain the awareness and remind people of good practice.

As part of our annual facility maintenance the District upgraded all the lighting at Agassiz Elementary/Secondary School and the lighting controls at Harrison Hot Springs Elementary School, Boston Bar Elem/Sec School and Agassiz Elementary/Secondary School. There were also some further lighting upgrades at Kent Elementary School to new, brighter, high-efficiency lighting. We also finished the lighting upgrade at Boston Bar Elementary/Secondary to remove the rest of the T-12 technology and took advantage of the BC Hydro rebates.

The District has continued to make strides in going paperless. Although we do not use 100% recycled paper, we have moved to purchasing paper that is harvested through sustainable forestry practices and meets the global forest management standards of the Forest Stewardship Council (FSC). We are also not providing paper copies at meetings and this has been well received by our partner groups. All of our agendas can now be found on Google Calendar for review and therefore can be stored in this format as well.

We are continuing to encourage car-pooling when feasible and have seen the Trustees take on a leading role in this area. We are also encouraging the same behaviour with staff when possible.

# 2013 CARBON NEUTRAL ACTION REPORT

## Plans to Continue Reducing Greenhouse Gas Emissions 2013 – 2016

The School District is continuing with its organizational commitment to and practice of sustainability. We will continue with our facility upgrades to reduce our energy and water consumption. Energy management through on-going evaluation is a key element in our operations goal to reduce our carbon emissions, as well as staff commitment and student involvement. We are working on all these areas. The District has specifically set aside funding to implement the energy management plan. We have set aside Annual Facility Grant funding to undertake the work required to upgrade our most pressing electrical and mechanical work.

We included replacement of our oldest and least efficient heating system in our capital plan and hope to obtain funding for an upgrade to a more energy efficient heating system. The replacements have been ranked as High priority by the Ministry of Education. We will likely undertake the replacement of one boiler that is nearing the end of its useful life either in the summer of 2014 or 2015 that wasn't included in our capital plan. We also plan on upgrading the entire lighting at Hope Secondary School as we have done at AESS in 2013 using the lighting study from Quantum Lighting Inc.

We will also be looking at a power management plan implementation for all of computer labs in the next year. This was identified as an area where we could see additional power savings.

We have seen a decrease in the total offsets we are required to purchase in 2013. The District will be sharing this information with our partner groups to work on education and hopefully come up with new sustainable practices that will be embraced by all.

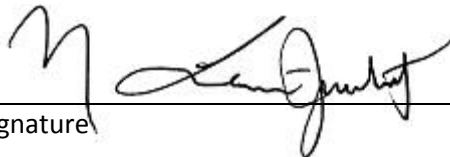


# 2013 CARBON NEUTRAL ACTION REPORT

Recycling Team, Hope B.C.

## Emissions and Offsets Summary:

<b>Organization X GHG Emissions and Offsets for 2013 (TCO2E)</b>	
<b>GHG Emissions created in calendar year 2013 (from SMARTTool Homepage)</b>	
Total Emissions	1058
Total Emissions for Offsets	868
<b>Adjustments to GHG Emissions Reported in Previous Years (from SMARTTool Homepage)</b>	
Total Emissions	
Total Emissions for Offsets	
<b>Credit owing from PCT at end of 2012 reporting year (if applicable – from May 15 Invoice):</b>	
Credit Owing	0
Total Emissions for Offsets for the 2013 Reporting Year (from Offset Invoice):	868



May 15, 2014

Signature

Date

Natalie Lowe-Zucchet

Secretary-Treasurer

Name (please print)

Title

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

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<http://fluidsurveys.com/surveys/cas-z/2013-cnar-form-bps-actions/e81cce68939d223dc688586d76b1bc9a/>

*Filled Thursday, February 13, 2014*

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**

School District 78

## 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.

No

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

The District did a complete upgrade of all the lighting at AESS in Agassiz including installation of sensors. The overall cost of the upgrade was over \$80,000. In addition we finished the upgrade of the lighting at Kent Elementary School and Boston Bar Elementary Secondary School. We ensured lighting sensors were added to all rooms at Boston Bar Elem/Sec. and Harrison Hot Springs elementary. We also upgraded the windows to sealed units at BBESS in Boston Bar .

### 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:

We purchased one diesel vehicle to reduce expenses and provide a more fuel efficient mode of transportation for our itinerant staff. We have tried to coordinate services for itinerant staff so that more car-pooling can occur.

**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.)

Yes

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

We have continued to purchase paper with a recycled content. One of the barriers to moving to 100% recycled content is cost, but we have made headway

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## Actions Taken to Reduce Emissions - continued

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

We will be updating the lighting for the entire Hope Secondary School. We anticipate the cost to be over \$100,000 based upon the lighting study we had completed. We are also replacing windows at Coquihalla Elementary to reduce energy use.

We hope that we may receive some funding for some of our out dated heating systems, otherwise we will begin replacing boilers one at a time.

We are going to continue to have pro-d sessions that focus on sustainability and education for students.

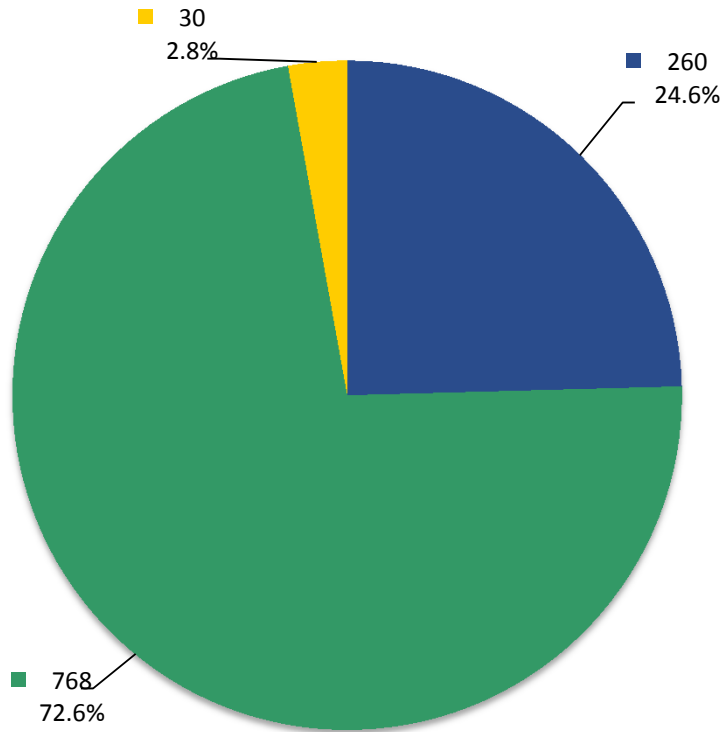
We will maybe revisit Destination Conservation again to see if we can generate interest in the program.

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

No

**Thank you for completing the 2013 Carbon Neutral Action Report. If this form is now complete please use the submit button below to forward it to the Climate Action Secretariat, otherwise you can save it to continue at a later time. Only use the submit button once the form is 100% complete. You can also save your own copy as a WORD or PDF file. Once you click the submit button, the Climate Action Secretariat will create a PDF summary of these actions to append to your final CNAR Overview when it is submitted. Together, these will be posted on the Ministry of Environment website by June 30, 2014 as your final report for 2013.**

## School District 78 - Fraser - Cascade Greenhouse Gas Emissions by Source for the 2013 Calendar Year (tCO<sub>2</sub>e\*)



**Total Emissions: 1,058**

- 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 4:13 PM)**

Total offsets required: **868**. Total offset investment: **\$21,700**. Emissions which do not require offsets: **191** \*\*

\*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.