

Chilliwack School District

2013 Carbon Neutral Action Report

Executive Summary

Our Energy Management team has continued to have a significant impact in assisting the district to reduce greenhouse gas emissions. We continue to implement a number of projects and initiatives including upgrading our heating and lighting systems with high-efficiency models. We are continuing to tighten up unoccupied schedules through the use of our building's DDC control systems. Our "Green Team" continues to grow and provide projects at the student level, aimed at reducing emissions and encouraging energy efficient behaviours. We are hopeful that the recent opening of three replacement, Leed Gold Certified buildings will continue to push us in the right direction.

Overviews

Actions Taken to Reduce Greenhouse Gas Emissions in 2013

- Continuing project of replacing metal halide perimeter and parking lot lighting with higher efficient LED models.
- Replacement of older, non-efficient domestic hot water boilers and tanks with high efficient tankless, on-demand models.
- Installation of real time energy monitoring through DDC, to better track individual energy use.
- Encourage carpooling to meetings
- Working with Destination/Conservation student based Green Teams on behavioural changes to encourage energy, water and waste reductions.
- Expand on existing sustainability/green awards and recognition program.
- Provide green tips to staff, students and parents, as well as members of the public, in websites, Superintendent's Memo and site based student Green Teams.
- Continue with a water conservation strategy which includes a plan or policy for replacing water fixtures and equipment with efficient models to reduce water use.
- Continue to monitor irregularities in utility invoices, to find any possible problems and reduce preventable waste of energy and water.

2013 Greenhouse Gas Emissions

Chilliwack School District #33 total emissions for 2013 include 32.2% Mobile Fuel Combustion from our fleet and other mobile equipment totalling 1054 tons of CO2, 62.5% from Stationary Fuel Combustion and Electricity (2047 tons of CO2) and 5.3% or 173 tons from paper supplies, for a total of 3274.

Total offsets purchased will be 2811 with a total offset investment of \$70,275.00(+ \$3513.75 GST).

Emissions that do not require offsets are 846, bringing total emissions for offsets to 2429.

Adjustments to GHG emissions reported in previous years is 382.

Gerry Slykhuis

Secretary - Treasurer

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

Created Tuesday, April 08, 2014

https://fluidsurveys.com/surveys/cas-z/2013-cnar-form-bps-actions/dee381960e4d122740f2cbbec361b756/

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 excutive 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.

Page 2

Organization Name
SD 33 Chilliwack
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:
Use of DDC building controls to reduce operating times of HVAC equipment, as well as lower building temp. setbacks. Continue with a "dark campus" approach to reduce use of electricity by lighting.
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 efficent vehicles (gas/diesel)
Yes

Replaced existing vehicles with hybrid of 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:
Encourage car pooling and route planning to reduce fleet mileage.
Zheoui age eus pooting and some planting to seauce steet inneage.
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:

(No response)

Page 3

Actions Taken to Reduce Emissions - continued

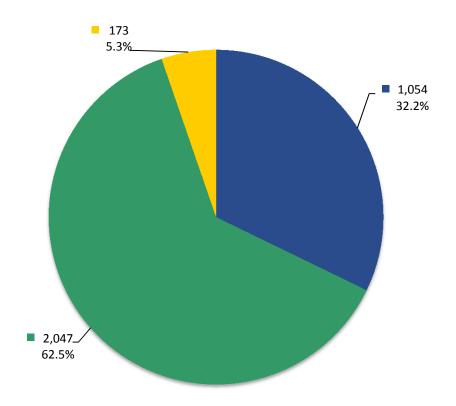
Explain how you plan to continue minimizing emissions in 2014 and future years:

Continue with energy efficient upgrades to building equipment (lighting, boilers, hvac, etc.). Continue to make the most of unoccupied hours to save energy by switching equipment not required off.

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

No

School District 33 - Chilliwack Greenhouse Gas Emissions by Source for the 2013 Calendar Year (tCO₂e*)



Total Emissions: 3,274

- 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 3:30 PM)

Total offsets required: 2,429. Total offset investment: \$60,725. Emissions which do not require offsets: 846 **

^{*}Tonnes of carbon dioxide equivalent (tCO_2e) 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.