

SCHOOL DISTRICT 69 (Qualicum)
2014 Carbon Neutral Action Report

This is the 2014 Carbon Neutral Action Report for School District #69 (Qualicum). This report contains our 2014 emissions profile, offsets purchased, the actions we have taken in 2014 to reduce our GHG emissions and our plan to continue reducing emissions in 2015 and beyond.

By June 30 School District #69 (Qualicum)'s final CNAR will be posted to our website at www.sd69.bc.ca

Executive Summary:

The district concluded the creation of a Board wide strategic plan in 2013. This plan included the following items which are applicable to emission reduction:

- Under values: "Social responsibility and environmental sustainability" and "Innovation as a means of ensuring that we respond and adapt to a changing world and new understandings".
- As a Guiding Principle: "Stewardship of the public investment in education in our community is crucial – this requires an unwavering commitment to fiscal responsibility and allocation of resources based on identified needs and strategic priorities." We see this guiding principle as including environmental stewardship as part of fiscal responsibility.

In 2014 the district plans to conclude with a Framework for Action which will include specific items the district will embark upon to meet the goals of the strategic plan.

Energy conservation is part of our ongoing work. Efforts to conserve energy are included throughout our 5 year capital plan and our Annual Facility Grant projects annually. In 2014, the district completed the following projects which will reduce carbon emissions:

- Through the replacement of end of life buses, the district has chosen to replace one with a propane bus and we have reduced our bus fleet by four bus runs. The district plans to continue evaluating every bus replacement and consider whether to purchase propane over diesel buses and to reduce the size of buses purchased in order to conserve energy.
- Engineering studies were performed on three sites, two of which are run on propane and one which is on a diesel generator. The district plans energy conversion projects for the two propane sites and initiated an upgrade on the site with a diesel generator (further described below).
- The district began a significant upgrade at one of our isolated sites. This site is reliant on energy produced by a diesel generator. The overall system was downgraded to produce less energy and the batteries and converters replaced which will increase the efficiency of the system overall, thereby reducing the amount of energy lost. The district is in the process of installing solar panels which will also save us on the usage of diesel generator power and continues to work with local groups to investigate alternative energy solutions which may further reduce or eliminate the use of a diesel generator in the future.
- The District did a replacement of the old boilers and installed high efficiency boilers and an electric heat pump at Errington Elementary. This site runs on propane and we should now reduce our propane consumption by 25%.
- The district has now put timers on all outside lighting at all their school sites. This will automatically turn off all the outside lights at 12:00 a.m. and turn them on at 06:00 a.m. This will reduce the consumption of electricity.

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Energy conservation continues to be a goal for the district. Our Operations and Maintenance department has completed several projects that have implemented controls for heat and lights, retrofits for lighting and replacing plumbing fixtures with low flow units. These are all part of day to day operations. In addition the district looks to reduce its carbon footprint through conversion to propane buses and reduction of energy usage in unused space.

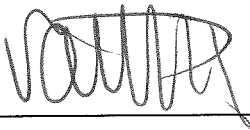
Emissions and Offsets Summary:

School District #69 (Qualicum) Emissions and Offsets for 2014 (TCO2E)			
GHG Emissions created in calendar year 2013:	2014	2013	2012
Total Emissions	1,953	2,206	2,669
Total Emissions for Offsets	1,489	1,633	1,897
Adjustments to GHG Emissions Reported in Previous Years:			
Total Emissions	0		
Total Emissions for Offsets	0		
Credit owing from PCT at end of 2012 reporting year			
Credit Owing	0		
Total Emissions for Offsets for the 2013 Reporting Year:	1,489		

In 2014, School District #69 (Qualicum) paid \$37,225 to purchase offsets. The District maintains a bus fleet for which offsets were not purchased. As required by section 5 of the Carbon Neutral Government Regulation, 573 tCO_{2e} of emissions resulting from the operation of school buses were reported as part of our greenhouse gas emissions for 2014. However, they were not offset as they are out of scope under section 4(2)(c) of the Carbon Neutral Government Regulation.

Operational Changes in 2014:

A facility review study was initiated in 2013. This study was to evaluate the appropriate number of buildings for the district and consider whether buildings should be closed. We then closed three schools and sold twelve portables in 2014, therefore the results of this could have an impact on emissions and subsequent reduction of utilities. In addition, if the results of the study allow a simplification of the transportation system, there would be a further reduction in fuel consumption.



MAY 27, 2015

Signature

Date

ROLLIE KOOP

SUPERINTENDENT OF SCHOOLS

Name (please print)

Title

Attached: Chart: Greenhouse Gas Emissions by Source for the 2014 Calendar Year

2014 Carbon Neutral Action Report (CNAR) - Part 2 ACTIONS

Organization Name

School District 69 (Qualicum)

Actions Taken to Reduce Emissions

1) Stationary Fuel Combustion, Electricity (Buildings): Indicate which actions were taken in 2014:

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:

We retrofitted EES with new Electric Heatpump system and new high efficiencies boilers two .

2) Mobile Fleet Combustion (Fleet and other vehicles): Indicate which actions were taken in 2014:

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

Yes

Took steps to drive less than last year

Yes

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

I sold seven buses with high km and will be replacing with six new buses and one of the buses will be propane. We have reduced our routes by four.

3) Supplies (Paper): Indicate which actions were taken in 2014:

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:

we are using 100 % recycled paper hand towels and toilet paper

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Actions Taken to Reduce Emissions - continued

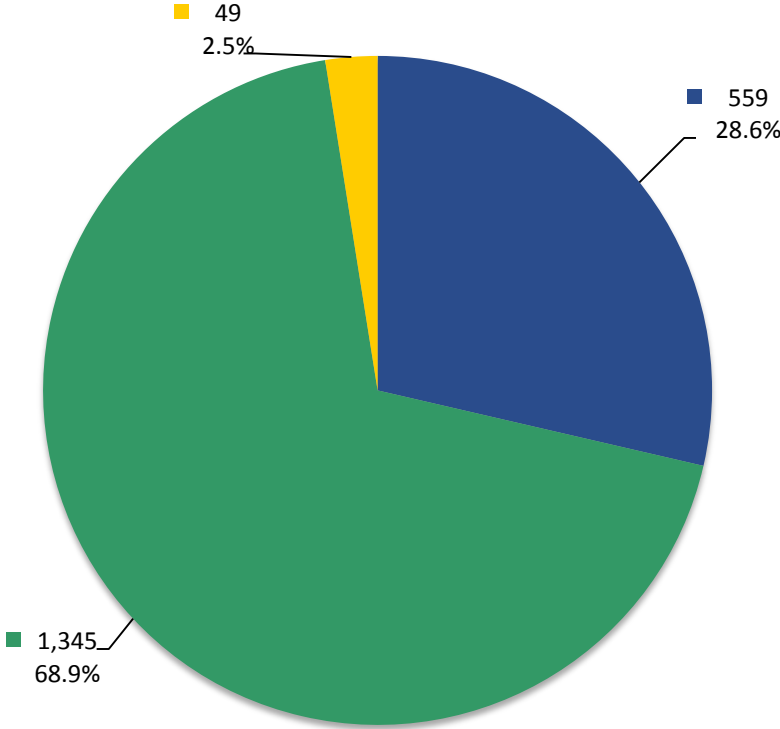
Explain how you plan to continue minimizing emissions in 2015 and future years:

we are always looking into reducing our emissions I will be buying a new propane bus this year ,look into using more recycled paper and parking light upgrades.

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 69 - Qualicum
Greenhouse Gas Emissions by Source
for the 2014 Calendar Year (tCO₂e*)**



Total Emissions: 1,953

- 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 2014 (Generated June 23, 2015 3:20 PM)

Total offsets required: **1,489**. Total offset investment: **\$37,225**. Emissions which do not require offsets: **464** **

*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.