

School District 79 (Cowichan Valley) 2017 Carbon Neutral Action Report



Declaration statement

This is the 2017 Carbon Neutral Action Report for School District 79 Cowichan Valley. This report is for the period January 1st to December 31st, 2017 summarizing our emissions profile, the actions we have taken in 2017 to reduce our GHG emissions, the amount of offsets purchased to reach net zero emissions and our plan to continue reducing emissions in 2018 and beyond.

By June 30, 2018 School District 79 Cowichan Valley's final CNAR will be posted to our website at www.sd79.bc.ca.

Executive Summary

The Cowichan Valley School District is continuing to work towards reducing their Greenhouse Gas emissions. The actions of the school district have a tremendous impact on the community it serves. In 2009 the district adopted a policy on Resource Management and Sustainability and formed a Sustainability Committee whose mandate was to deal with issues that contribute to the district's carbon footprint. Long term reduction goals were adopted which fall in line with the BC Energy Plan and Bill 44-2007: Greenhouse Gas Reduction Targets Act.

Due to reduced energy consumption over the past 9 years Cowichan Valley School District's electrical consumption was down by 40% and natural gas consumption was down by over 60% for the 2016/17 school year compared to the 2008/09 school year. As well Cowichan Valley School District has been making an effort to switch to cleaner energy sources which has resulted in a large reduction in Greenhouse Gas emissions. These efforts are noticeable all across the district influencing students and staff to become more aware of environmental issues. Cowichan Valley School District continues to upgrade and optimize mechanical systems which have significantly reduced the district's carbon footprint. In 2017 the district continued with its window and building envelope projects. These projects have a large impact on occupant comfort and heating energy consumption. The district has adjusted bus routing to reduce bus runs and driving distances. The district has also continued to do lighting upgrade projects in 2 facilities during this time.

2017 Greenhouse Gas Emissions

School District 79 Cowichan Valley GHG Emissions and Offset for 2017 (tCO₂e)	
GHG Emissions created in Calendar Year 2017:	
Total Emissions (tCO ₂ e)	2,323
Total Offsets (tCO ₂ e)	1,715
Adjustments to GHG Emissions Reported in Prior Years:	
Total Emissions (tCO ₂ e)	94
Total Offsets (tCO ₂ e)	94
Grand Total Offsets for the 2016 Reporting Year:	
Grand Total Offsets (tCO ₂ e)	1,809

Distribution of Emissions

The total Greenhouse Gas Emissions for 2017 were 2,323 tonnes CO₂e. 63.85% of this came from stationary fuel combustion, 29.47% came from mobile fuel combustion, 2.01% came from indirect emissions and 4.67% came from travel and supplies.

Offsets Applied to Become Carbon Neutral in 2017

Of the total Greenhouse Gas Emissions 607 tonnes CO₂e resulted from Carbon Neutral or Offset Exempt sources. As a result of this the total GHG Emissions required to be offset to become Carbon Neutral for 2017 was 1,715 tonnes CO₂e. This resulted in a charge of \$42,875.00 plus GST.

Changes to Greenhouse Gas Emissions and Offsets Reporting from Previous Years

Following the public release of School District 79 Cowichan Valley's 2016 Carbon Neutral Action Report it was determined that the total emissions for the 2016 calendar year were under reported by 94 tonne CO₂e. This resulted in an additional 94 tonnes CO₂e which require the purchase of offsets. This gives an overall total of 1,809 tonnes CO₂e which require the purchase of offsets. Therefore, the total payment to the Ministry of Environment is \$45,225.00 plus GST.

Retirement of Offsets

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, School District 79 Cowichan Valley is responsible for arranging for the retirement of the offsets obligation reported above for the 2017 calendar year, together with any adjustments reported for past calendar years. The district hereby agrees that, in exchange for the Ministry of Environment ensuring that these offsets are retired on the district's behalf, the district will pay the associated invoice issued by the Ministry in an amount equal to \$25 per tonne of offsets retired on its behalf plus GST.

Emissions Reduction Activities

Actions Taken to Reduce Greenhouse Gas Emissions in 2017

The Transportation Department has continued to work on bus routes. Due to an overall increase of ridership the actual distance travelled has increased but through efficient routing this increase has been minimized. The district has also replaced 2 buses with new more fuel efficient buses.

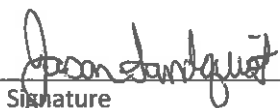
A window reduction and replacement and building envelope project was continued at 1 school. Another building envelope and window replacement project was started at 1 school. These projects will enhance occupant comfort and reduce the consumption of heating energy. The Operations Department has undertaken a number of lighting and lighting control projects throughout the district to reduce electrical consumption. These lighting projects include the completion of an interior LED lighting project at one of the district's secondary schools and the start of the installation of LED lighting at one of the districts elementary schools. Two Continuous Optimization projects are still in progress at facilities which will result in a significant reduction in electricity, natural gas and fuel oil consumption.

Plans to Continue Reducing Greenhouse Gas Emissions 2018 – 2019

The district will continue to implement projects in an effort to reduce energy consumption and Greenhouse Gas emissions. The district will continue with lighting projects, including the continuation of the installation of interior and exterior LED light fixtures at one of the district's elementary schools and installing lighting controls where appropriate.

The district is also continuing window reduction and replacement as well as building envelope projects. These projects will have a large impact on occupant comfort and the reduction of heating energy and greenhouse gas emissions.

The communication of Energy Efficient and Sustainable practices will continue district wide in an effort to promote the overall awareness of sustainability issues.



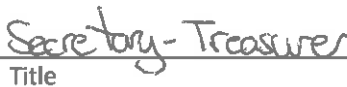
Signature



Date



Name (please print)



Title

Part 1: CNAR Survey

1. General Information

Name: Brian Branting

Contact Email: bbranting@sd79.bc.ca

Organization Name: School District 79 Cowichan Valley

Sector: School District

2. Stationary Sources (eg. Buildings, Power Generators): Fuel Combustion, Electricity use, Fugitive Emissions.

During 2017, did your organization take any of the following actions to support emissions reductions from buildings? (please select all that apply)

Performed energy retrofits of the organization's building(s)

If you selected "*Performed energy retrofits of the organization's building(s)*":

How many buildings were retrofitted?: 4

If you selected "*Built, or are building new LEED Gold or other "Green" buildings*":

How many new "Green" buildings?:

Did your Organization perform any retrofits during 2017? Please describe briefly:

Building envelope projects which included insulation upgrades and window replacement were ongoing at 2 facilities. Lighting projects which included the installation of LED lighting and controls were performed at 2 facilities. A project that included the installation of heat pumps and HRV units was undertaken to retrofit 12 portables at various locations around the district.

2a. Stationary Sources (eg. Buildings, Power Generators): Fuel Combustion, Electricity use, Fugitive Emissions.

Please briefly describe your organization's plans to continue reducing emissions from its stationary sources:

a) Over the next 1-5 years

We still have one active site that uses fuel oil as a primary heat source. We are planning to convert this over to a cleaner and more efficient system in the near future.

b) Over the following 6-10 years

3. Mobile Sources (Vehicles, Off-road/portable Equipment): Fuel Combustion:

During 2017, did your organization take any of the following actions to support emission reductions from its mobile sources? (please select all that apply)

Replaced existing vehicles with more fuel efficient vehicles (gas/diesel)

If you selected "*Replaced existing vehicles with more fuel efficient vehicles (gas/diesel)*":

How many vehicles?: 3

If you selected "*Replaced existing vehicles with hybrid or electric vehicles*":

How many vehicles?: 0

3a. Mobile Sources (Vehicles, Off-road/portable Equipment): Fuel Combustion:

Please briefly describe your organization's plans to continue reducing emissions from its mobile sources:

a) Over the next 1-5 years

We will continue to make attempts to reduce driving distances wherever possible.

b) Over the following 6-10 years

We will continue to make attempts to reduce driving distances wherever possible.

4. Supplies (Paper): Indicate which actions your PSO took in 2017:

During 2017, did your organization take any of the following actions to support emissions reductions from paper supplies? (please select all the apply)

None of the above

4) Supplies (Paper): Indicate which actions your PSO took in 2017: - Other? Please describe briefly:: We have expanded the program so that users need to input their code at the appropriate printer location to pick up their printing. This eliminates print jobs that go to the wrong printer and are not picked up.

If you selected "*Had a policy requiring the purchase of recycled content paper*":

State the required recycled content here (30%, 50%, 100%):

If you selected "*Had a policy requiring the purchase of alternate source paper (bamboo, hemp, wheat, etc)*", which type of alternate source paper did you use?

Please briefly describe your organization's plans to continue reducing emissions associated with its office paper use in future years.

The district makes all attempts to purchase a minimum of 30% recycled content paper when ever possible.

5. Other Sustainability Actions

a) Business Travel

During 2017, did your organization take any of the following actions to support emissions reductions from business travel? (please select all that apply)

Encouraged alternative travel for business (e.g. bicycles, public transit, walking)

b) Education/Awareness

During 2017, did your organization have any of the following programs or initiatives to support sustainability education and awareness? (please select all that apply)

A Green, Sustainability or Climate Action Team

c) Other Sustainability Actions

During 2017, did your organization have any of the following programs or initiatives to support sustainability? (please select all that apply)

An operations policy or program to facilitate the reduction and diversion of building occupant waste (e.g., composting, collection of plastics, batteries) from landfills or incineration facilities