

2019 Carbon Neutral Action Report

Organization: School District No. 69 (Qualicum)

Declaration statement:

This Carbon Neutral Action Report for the period January 1st, 2019 to December 31st, 2019 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2019 to reduce our greenhouse gas emissions and our plan to continue reducing emissions in 2020 and beyond.

Overview:

The district concluded the creation of a Board wide Strategic Plan in 2019. 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.

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. In 2019, the district completed the following projects which will directly reduce carbon emissions:

- The district continues to evaluate every bus replacement in the context of carbon footprint, so with that in mind, we intend to purchase an electric bus in the 2020 capital plan. We also continue to review the size of buses required to conserve energy.
- During summer 2019 the District constructed a Photovoltaic (PV) array placement on the roof of Nanoose Bay Elementary. This is the fourth solar power initiative that continues to help reduce our use of diesel and natural gas and take advantage of this alternate energy source.
- There were 2 Tesla battery backup systems installed at Bowser and Nanoose Bay Elementary schools. These systems allow schools to stay open in the event of power loss in the area.

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. Operations has also installed water meters for Ballenas and Kwalikum fields to monitor the water usage to reduce the need, particularly in summer. These are all part of the annual operations and capital project based work when Ministry funding permits.

Recognizing their role as an agent of educational change, the School Board created a Climate Emergency Task Force in 2019. This group includes membership from all educational partners including students, staff and administration. Its mandate is to promote action to decrease greenhouse emissions, help develop plans to educate our learning community and advocate for progressive policy solutions.

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Emissions and Offset Summary Table:

On March 31, 2020, the Ministry issued the following directive,

"...that all ministries and Public Sector Organizations covered by the Carbon Neutral Government requirement shall use their 2018 GHG emissions as a temporary estimate for their actual 2019 GHG emissions, for the purposes of the 2019 Carbon Neutral Action Reports and 2019 Carbon Neutral Government reporting required under the Climate Change Accountability Act."

School District No. 69 (Qualicum) GHG Emissions and Offsets for 2019	
As per the Directive issued March 31, 2020, each PSO will use their 2018 GHG Emissions as a placeholder for the purposes of their 2019 CNAR	
Total Emissions (tCO ₂ e)	1,945
Total BioCO ₂	19
Total Offsets (tCO ₂ e)	1,442
Offset Investment (\$25 per tCO ₂ e)	36,050

Retirement of Offsets:

In accordance with the requirements of the *Climate Change Accountability Act* and Carbon Neutral Government Regulation, School District No. 69 (Qualicum) (**the Organization**) is responsible for arranging for the retirement of the offsets obligation reported above for the 2019 calendar year, together with any adjustments reported for past calendar years (if applicable). The Organization hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy (**the Ministry**) ensuring that these offsets are retired on the Organization's behalf, the Organization will pay within 30 days, the associated invoice to be issued by the Ministry in an amount equal to \$25 per tonne of offsets retired on its behalf plus GST.

Executive sign-off:



MAY 29, 2020

Signature

Date

RON AMOS

SECRETARY TREASURER

Name (please print)

Title

Confirmation number: 00C5C91D

Submitted date: 2020-06-30 10:51:57 Pacific Daylight Time

Carbon Neutral Action Report Survey - 2019

Public sector organizations (PSOs) are required to complete this survey, in addition to a Carbon Neutral Action Report (CNAR) as mandated by BC's [Climate Change Accountability Act](#) and the [Carbon Neutral Government Regulation](#).

Due to the COVID-19 pandemic, the following [Directive](#) was issued on March 31, 2020. Certain deadlines were also extended for the 2019 reporting year (see below).

March 31, 2020 Directive:

Under my authority as the Director for the purposes of the Act, and under the authority delegated to me in Section 6 of the Carbon Neutral Government Regulation, I hereby direct that all ministries and Public Sector Organizations covered by the Carbon Neutral Government requirement shall use their 2018 GHG emissions as a temporary estimate for their actual 2019 GHG emissions, for the purposes of the 2019 Carbon Neutral Action Reports and 2019 Carbon Neutral Government reporting required under the Climate Change Accountability Act.

Neil Dobson, Executive Director, Clean BC Implementation
Climate Action Secretariat

Although 2018 emissions data will be used as a placeholder for 2019, **all other (qualitative) components of the CNAR and CNAR Survey are to be completed with information from 2019 (e.g., actions taken or planned to reduce emissions)**. The only change to the survey is that the deadline was extended by one month to June 30, 2020.

This survey is divided into two parts:

Part 1 - Will be made public on the Climate Action Secretariat (CAS) [website](#) after June 30, 2020; however, it will not be appended directly to each individual PSO CNAR as was done in previous years. This section collects details about actions taken or planned to reduce emissions and is intended to supplement the legislative requirements in your CNAR.

Part 2 - Will NOT be made public. Information you provide in this section is important and will be used internally to help CAS staff with planning for emissions reduction and climate change adaptation initiatives. Although not required, PSOs are highly encouraged to complete Part 2.

Note: Survey progress can be saved at any time by clicking the "Save and continue later" button at the bottom of each page. A new window will open and you will be asked to provide your name and email. An email will be sent to you from Carbon.Neutral@gov.bc.ca with the subject line: "Questionnaire Link", which will include a hyperlink for the "Project: Carbon Neutral Action Report Survey – Broader Public Sector 2019". You can then continue responding at another time or email the hyperlink to a colleague to complete remaining section(s).

May 29, 2020	<ul style="list-style-type: none">The final, signed version of the CNAR (or Small Emitters Form) must be submitted by email to: Carbon.Neutral@gov.bc.ca
June 30, 2020*	<ul style="list-style-type: none">Ministry of Environment and Climate Change Strategy must post a final CNAR for each organization on the BC Government's CNG website and each PSO is encouraged to post the report on their website.The CNAR Survey (optional for Small Emitters) must be completed and submitted online. <p>*Deadline extended from May 29, 2020.</p> <ul style="list-style-type: none"><u>All offset invoice payments must be submitted to CAS.</u>
Sept 30, 2020*	<ul style="list-style-type: none">Clean Government Reporting Tool (CGRT) Data Entry must be completed for the 2019 reporting year.

	*Deadline extended from April 30, 2020.
Oct 15, 2020*	<ul style="list-style-type: none"> • Self-Certification checklist must be completed, signed and submitted by email to: Carbon.Neutral@gov.bc.ca. *Deadline extended from May 15, 2020.

*See the [Carbon Neutral Government – Program Requirements website](#) for more information on program requirements, timelines and templates.

PART 1 - Included as part of your public CNAR report.

Reminder that Part 1 will be made public on the CAS [website](#).

Contact Name:	<i>Ron Amos</i>
Contact Email:	<i>ramos@sd69.bc.ca</i>
Organization Name:	<i>School District No. 69 (Qualicum)</i>
Role – Please select the best category for your current role with your organization. If more than one individual completed the survey, multiple categories may be selected:	<i>Treasurer/Accounting</i>
Please select your sector:	<i>School District (SD)</i>

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

Actions taken by your organization in 2019 to support emissions reductions from buildings

Do you have a strategy to reduce emissions from stationary sources?
<i>Yes</i>

Whether you have a strategy or not, briefly describe your organization's plans to continue reducing emissions from stationary sources:

Over the medium-term term (1-5 years)
<i>We continue to replace older model boilers with high efficiency boilers and have a program to install solar panels where feasible.</i>
Over the long term (6-10 years)
<i>We have plans to upgrade windows and cladding at secondary school sites to take advantage of newer more efficient insulation factors. Also our HVAC units are being considered in the longer term.</i>
Please describe your strategy's goals (if any) related to energy audits.
<i>We do internal audits as needed.</i>

What % on average of your building portfolio has an energy audit completed each year (if any)?

Not sure

Please describe your strategy's goals (if any) related to building retrofits.

As the retrofits come up, we will also consider the latest in construction material in order to reduce green house gases. This will include windows, insulation, style of construction to utilize sunlight and cooling elements and any other suggestions that architects and engineers are now considering.

What % on average of your building portfolio is retrofitted each year in the following categories (if any) - click here for further information:

<10%

Minor retrofits (e.g. low cost, easy to implement measures including caulking, lighting, adding roof insulation, etc.)

LED lighting upgrade at Secondary schools, minor re roofing includes new insulation

Major retrofits (e.g. replacing windows and doors, equipment replacement such as boilers, etc.)

Over the past 5 years we have replaced one boiler each year. Windows when we can get to them 1 site every 5 years

Deep retrofits (e.g. replacing roof, replacing the heating, ventilation and air-conditioning system with a renewable technology like a ground-source heat pump, etc.)

Not as often, we have a major roof replacement at a secondary that has been phased over 4 years due to cost

Please describe your strategy's re/retro-commissioning goals (if any)?

Through the Ministry of Ed, we submit a capital plan based on a 5 year planning cycle. It includes seismic, system renewal and energy projects. Our Board has continued to support the work of energy efficiency projects and created a Climate Emergency Task Force to looking into all areas of the operation with support from students, staff and administration.

What % on average of your building portfolio do you recommission each year?

<10%

Do you keep records of Refrigerant gases¹ category and refilling volumes?

^[1] Fugitive emissions from stationary cooling equipment are attributed to the leakage and loss of HFC and PFC based coolants from air conditioning and commercial type refrigeration systems. Coolant loss can occur during the manufacturing, operation, and disposal of such equipment. Gases that may be reported via CGRT include HFC R-134, HFC R-134a, HFC R-404a, HFC R-407c, HFC R-410a.

No

What, if any, mitigation approaches have been considered? Please describe.

None

How many newly constructed buildings received at least LEED Gold certification in 2019?

None, no new buildings

How many newly constructed buildings did not receive LEED Gold certification?

no new buildings

Please explain why LEED Gold certification was not obtained for those new buildings.

N/A

Other actions? Please describe briefly:

N/A

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

Actions taken by your organization in 2019 to support emissions reductions from mobile sources?

Do you have a strategy to reduce emissions from mobile sources?

Yes

Whether you have a strategy or not, briefly describe your organization's plans to continue reducing emissions from mobile sources:

Over the medium-term term (1-5 years)

We continue to optimize our bus and delivery routes in order to minimize the drive times. We will be replacing one bus with an electric engine to see if this is a viable alternative to diesel.

Over the long term (6-10 years)

Continue to look at replacing diesel buses with electric. Will also be looking to replace white fleet vehicles with electric where feasible.

How many fleet vehicles did you purchase from the following categories:

Electric Vehicle – EV - (e.g., Nissan Leaf, Chevy Bolt)

0

"Plug In" Electric Vehicle – PHEV (e.g., plug-in Prius, Chevy Volt)

0

Hybrid vehicle – HEV – non "Plug In"- (e.g., Toyota Highlander Hybrid)

0

Hydrogen fuel cell vehicle

0

Natural gas/propane

0

Gas/diesel vehicle

4

If you purchased new gas/diesel vehicles, can you briefly explain why vehicles from the other categories were not chosen?

We replaced 3 buses this year and considered electric but it was too costly to consider. Ministry will only fund a portion of the cost with remainder needing to come from local district funds. As prices come down, we will consider it.

Actions taken by your organization in 2019 to support emissions reductions from mobile

sources? (Continued)

How many existing EV charging stations does your organization have in each category:

Level 2?
0
Level 3?
0
How many level 2 stations (if any) are specifically for your fleet vehicles? As defined as Level 2 stations only your organization's fleet vehicles may use
0
How many level 3 stations (if any) are specifically for your fleet vehicles? As defined as Level 3 stations only your organization's fleet vehicles may use
0

How many EV charging station(s) did you install in 2019 in each category:

Level 2?
0
Level 3?
0
How many level 2 stations (if any) were installed specifically for your fleet vehicles? As defined in the previous section
0
How many level 3 stations (if any) were installed specifically for your fleet vehicles? As defined in the previous section
0
Please briefly describe any other related actions, (e.g. charging station feasibility studies, electrical panel upgrades, etc.)
<i>With the purchase on one electric bus in 2020, we will be installing a level 2 charging station for its use.</i>

Please indicate the total number of the vehicles in the following vehicle classes that are in your current fleet

Definitions:

- Light duty vehicles (LDVs) are designated primarily for transport of passengers <13 and GVWR<3900kg
- Light duty trucks (LDTs) are designated primarily for transport of light-weight cargo or that are equipped with special features such as four-wheel drive for off-road operation (include SUVs, vans, trucks with a GVWR<3,900kg)
- Heavy duty vehicles (HDV) includes vehicles with a GVWR>3,900 kg (e.g. ¾ tonne pick-up truck, transport trucks)

Light duty vehicles (LDVs)

Electric Vehicles – EV - (e.g., Nissan Leaf, Chevy Bolt)

0

“Plug In” Electric Vehicle – PHEV -- (e.g., plug-in Prius, Chevy Volt)

0

Hybrid vehicles – HEV – (e.g., non “Plug In”- older Toyota Prius, Toyota Camry hybrid)

0

Hydrogen fuel cell vehicles

0

Natural gas/propane

0

Gas/diesel

13

Light duty trucks (LDTs)

Electric Vehicles – EV

0

“Plug In” Electric Vehicle – PHEV

0

Hybrid vehicles – HEV – (e.g., non “Plug In”- older Ford Escape Hybrid, older Chevrolet Silverado pickup hybrid, etc)

0

Hydrogen fuel cell vehicles

0

Natural Gas/propane

0

Gas/diesel

2

Heavy duty vehicles (HDV)

Electric Vehicles – EV

0

“Plug In” Electric Vehicle – PHEV

0

Hybrid vehicles – HEV – (e.g., non “Plug In”)

0

Hydrogen fuel cell vehicles

0

Natural Gas/propane

4

Gas/diesel

32

Actions taken by your organization in 2019 to support emissions reductions from paper supplies.

Briefly describe your organization’s plans to continue reducing emissions from paper use:

Over the medium-term (1-5 years)

Continue to encourage use of some part recycled paper. Refreshed our copier/printer units in 2019 to reduce the # of print devices and has a print management software to track and monitor print usage.

Over the long term (6-10 years)

Continue to monitor print usage to encourage more digital options.

Do you have an awareness campaign focused on reducing office paper use?

Yes

Purchased alternate source paper (bamboo, hemp, wheat, etc.)

No

Other 2019 actions, please specify

Printer/copier replacement program was highlight.Refreshed our copier/printer units in 2019 to reduce the # of print devices and has a print management software to track and monitor print usage