



School District No. 47 (Powell River)

Title: 2019 Carbon Neutral Action Report

Organization Name: School District 47 (Powell River)

Declaration Statement

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

Overview

In 2019, School District 47 continued to work towards its ongoing goal of reducing its carbon footprint. Over the course of 2019 we undertook a mechanical upgrade at the Oceanview Education Centre as well as a building envelope upgrade on the annex at James Thomson Elementary. We upgraded the electric car charging stations at Westview Elementary and installed a new one at Henderson Elementary. Also completed in 2019 were enhancements of infrastructure in support of food security and gardening at various elementary schools. This initiative included construction of an outdoor gazebo/classroom at Kelly Creek Community School which was installed adjacent to an improved vegetable garden which teachers use with students in kindergarten to grade 7. At Westview Elementary we added a teaching and garden space to the school grounds for primary aged students to go with the one already there for the intermediate grades.

Planned for the summer of 2020 is an electrical service upgrade which includes installation of an eighteen panel solar system at Edgehill Elementary School. We expect to use this project as a model for future projects at other schools in the coming years. Also planned for 2020 are an LED lighting upgrade at Brooks Secondary school as well as the installation of an electric car charging station, with further plans to continue this initiative annually at each school site.

On the school level, School District 47 continues to take pride in educating the next generation to protect our future by continuing to fund various school led initiatives. School led initiatives have historically included participation in Destination Imagination, a number of energy studies, participation in gardening and recycling programs, as well as a number of community events such as the Trash Bash and Seedy Saturdays. The Outdoor Learning Centre (OLC), completed in 2012, continues to be a contributing factor to the education of students, in both its operation and programs offered. The OLC consists of several cabins and a main lodge, run largely on solar power and maintains other environmentally friendly operating practices. Each year, the OLC offers numerous educational programs to District students, instructing them in practices such as composting, and use of renewable energy sources in a hands-on way.

Evidence of our efforts can be found in the continued maintenance of lower greenhouse gas emissions. Our **Total GHG Emissions for 2019 were 1,019** with **785 in offsets** to make us Carbon Neutral.

We believe in the benefits of our continued efforts and look forward to seeing a further reduction in offsets over the next few years. Financially, we aim to put some of the savings directly back into our schools, funding materials that continue to educate and provide awareness of how to reduce our carbon footprint. Environmentally, we aim to make our small actions have a big impact, both in the present and in the future, as our students take what they've learned into their adult lives, into our community and far beyond. Socially, we aim to provide awareness and collaboration that our students would take what they've learned and share it with others. We are proud of our District, and continue to be amazed at the significant efforts from both staff and students in making positive changes that will better our world for years to come.

Retirement of Offsets

In accordance with the requirements of the *Climate Change Accountability Act* and Carbon Neutral Government Regulation, School District 47 (Powell River) 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. The Organization agrees that, in exchange for the Ministry of Environment and Climate Change Strategy ensuring that these offsets are retired on the Organization's behalf, the Organization will pay the Ministry an amount equal to \$25 per tonne of offsets retired on its behalf.

Emissions and Offsets Summary Table

Government direction for this reporting period was to use the 2018 GHG Emissions data as a temporary placeholder for the 2019 year.

School District 47 (Powell River) GHG Emissions and Offsets for 2019

GHG Emissions created in Calendar Year 2019

| | |
|-------------------------|-------|
| Total Emissions (TCO2E) | 1,019 |
| Total Offsets (TCO2E) | 785 |

Adjustments to GHG Emissions Reported in Prior Years

| | |
|-------------------------|---|
| Total Emissions (TCO2E) | 0 |
| Total Offsets (TCO2E) | 0 |

Grand Total Offsets for the 2019 Reporting Year

| | |
|---------------------|-----|
| Grand Total Offsets | 785 |
|---------------------|-----|

Sincerely,



Steve Hopkins
Secretary Treasurer



Jay Yule
Superintendent

May 29, 2020

Confirmation number: 00BDAD3D

Submitted date: 2020-05-05 14:53:03 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. *Deadline extended from May 29, 2020.<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: | Steve Hopkins |
| Contact Email: | steve.hopkins@sd47.bc.ca |
| Organization Name: | School District 47 (Powell River) |
| 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: | Treasurer/Accounting |
| Please select your sector: | School District (SD) |

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? | Yes |
|--|-----|

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>Continue to explore facility upgrades that will contribute to overall energy savings, plans include LED lighting upgrades and installation of solar panels at certain schools sites. We have also installed electric car charging stations at two of our sites with plans to continue at other school sites. this initiative is intended to support staff use of low emission vehicles.</i> |
| Over the long term (6-10 years) | <i>We will continue with the above mentioned ideas having already completed most of our boiler and mechanical upgrade as well having already completed thermal window upgrades.</i> |

Please describe your strategy's goals (if any) related to energy audits.

We don't qualify for a BC Hydro sponsored Energy Manager however Hydro has agreed to support the development of a district wide energy audit. We also recently filled a Operations manager position that was vacant for a number of years because of budget restraints, with the additional staff resource in place we can devote more time and energy to this sort of planning.

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

Not applicable on an annual basis however have completed them for some sites in anticipation of initiatives such as LED lighting upgrades.

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

Energy audits for sites slated for a lighting upgrade beginning with the largest buildings first.

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

We have moved through most of our building inventory already having completed mechanical and boiler upgrades, thermal door and window upgrades and now onto lighting upgrades.

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

These types of activities are done on an ongoing and routine basis.

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

We have moved through most of our building inventory already having completed mechanical and boiler upgrades, thermal door and window upgrades and now onto lighting upgrades. We have also upgraded much of our plumbing to include low flow faucets and auto flush valves, we are continuing these projects annually as we move through schools.

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.)

We have been replacing roofing systems as needed and identified in a life cycle roof from a consultant having completed several over the last 4 years.

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

Not defined but as stated above have been working through major projects each year for several years

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

Not identified

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.

This one hasn't been contemplated as yet

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?

None, no new buildings

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

Not applicable

Other actions? Please describe briefly:

Not applicable

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)

In recent years we completed a major review of our school bus routes resulting in more efficient routing resulting in fewer daily km driven.

Over the long term (6-10 years)

We expect to explore alternative fuel source equipment as the cost of such equipment starts to come down.

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

1

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

In 2019 we purchased a used vehicle which needed to be large enough to transport a limited number of staff and students as well it had to be suited for off road activities as its main use is in support of several outdoor adventure programs.

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?

2

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?

2

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.)

We upgrades a level 3 station to level 2 at one school in 2019 and installed another at another school. We have plans in place to add another at the secondary school this summer.

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

1

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

8

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

0

Gas/diesel

13

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)

Continued use of recycled paper and high end multi function print devices that encourage scanning. In 2019 we also continued to convert paper based HR and accounting record to electronically stored documents.

Over the long term (6-10 years)

Continue to explore new technologies

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

Yes

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

Yes

Other 2019 actions, please specify

Continued use of all of the above