



CNAR

Title: 2019 Carbon Neutral Action Report

Organization: School District #78 Fraser-Cascade

Declaration statement: This Carbon Neutral Action Report for the period January 1, 2019 to December 31, 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 plans to continue reducing emissions in 2020 and beyond.

Overview:

Actions taken to reduce Carbon Footprint in 2019 include

- Replacement of 8 rooftop HVAC units at HESS with more efficient units
- Replacement of all the pad mount compressors at BBES with more efficient units
- Replace and partial upgrade DDC Building Automation systems at HESS, HHES, AESS, for continuing optimal controls to reduce consumption

Actions to continue reducing emissions in 2020 include

- Replacement of mid efficient boiler plants at HESS, SCE, and CES schools with high efficient condensing type
- Replacement of mid efficient furnace units at Harp, and Maintenance centers with high efficient condensing type
- Replacement of mid efficient domestic water heaters at HESS, CES, And SCE with high efficient condensing type

Actions to continue reducing emissions beyond 2020 include

- a continued effort to reduce Carbon Footprint by 3% per year
- LED lighting upgrade at HHES, Kent, and BBES

Emissions and Offset Summary Table:

School District No. 78 GHG Emissions and Offsets for 2019	
<p>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.</p> <p>[See the Appendix for instructions on how to access your 2018 emissions data from the Clean Government Reporting Tool (CGRT).]</p>	
Total Emissions (tCO ₂ e)	<i>(10.8 + 949)= 958.8</i>
Total BioCO ₂	<i>10.8</i>



Total Offsets (tCO ₂ e)	736
Offset Investment (\$25 per tCO ₂ e) [Total Offsets x \$25/tCO ₂ e]	(736) X \$25 = 18,400

- i. [Note, BioCO₂ is reported in Total Emissions but not Total Offsets. For School Districts, Total Offsets will not equal Total Emissions minus Total BioCO₂ because offset exempt emissions for school buses are included within Total Emissions.
- ii. Prior Year Adjustments (PYAs) are not applicable as emissions and offsets are based on 2018 alone.
- iii. Total emissions and offset invoice amounts will be validated by CAS prior to distributing invoices.
- iv. Due to a variety of influences including historical data corrections and conversion factors, there may be minor discrepancies between data existing in CGRT vs SMARTTool.]

Retirement of Offsets:

In accordance with the requirements of the *Climate Change Accountability Act* and Carbon Neutral Government Regulation, School District No. 78 (**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: [To be signed by a senior official, such as CEO, COO or Superintendent]

Signature Karen Nelson Date June 5, 2020

Name (please print) Karen Nelson Title Superintendent, School District #78

Please scan and email the completed form to Carbon.Neutral@gov.bc.ca

Confirmation number: 00C423FB

Submitted date: 2020-06-17 16:36:01 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:	<i>doug templeton</i>
Contact Email:	<i>doug.templeton@sd78.bc.ca</i>
Organization Name:	<i>School district 78</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>Facilities/Operations Manager/Coordinator</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>
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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>Continued upgrading of equipment to higher efficiency types</i>
Over the long term (6-10 years)	<i>To review and implement alternate energy sources</i>
Please describe your strategy's goals (if any) related to energy audits.	<i>continual review with utilities and consultants</i>

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

10-20%

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

The first priority is to ensure work is done to reduce energy consumption

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

20% by area

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

LED lighting upgrades, insulation upgrades

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

*boiler replacements annually
furnace upgrades annually*

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.)

*roof replacements 5-105 per year
reviewing alternate sources of energy like solar*

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

Goals limited by available funding

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

we look at 20% of our buildings based on area and we spend about 2% of building replacement value

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.

when replacing cooling equipment we have them pumped down by authorized and certified contractors

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

0

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

0

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

no new buildings

Other actions? Please describe briefly:

none

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)

replace fossil fuel with electric

Over the long term (6-10 years)

continue to purchase more energy efficient vehicles and electric where possible

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?

special purpose vehicle

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?

1

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

1

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.)

District is looking to install EV charging at all sites within 2 years

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

6

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

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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 reduce by encouraging staff and training

Over the long term (6-10 years)

administration to be paperless and schools to reduce by 25%

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

manage reductions by encouraging technology to replace consumption