

2019 Carbon Neutral Action Report School District No 75 (Mission)

May 26, 2020

This 2019 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.

By June 30, 2020, the final Carbon Neutral Action Report for School District No 75 will be posted to our website at www.mpsd.ca.

School District No 75 promotes GHG emission reductions and environmental sustainability through both specific initiatives and guiding policies and procedures. The district's *Environmental Sustainability* policy promotes learning and leadership opportunities related to sustainability, energy and resource conservation, support for continuous monitoring of key environmental metrics, and support for environmental stewardship for both students and staff. The district also has an administrative procedure which established baseline energy consumption metrics, and stipulates the establishment of quarterly energy metrics, an annual review of targets, a target of 5% annual reduction of energy consumption, and remaining compliant with District of Mission GHG emission reduction targets (20% reduction between 2008 and 2020). While these policies, procedures, and goals remain in place, the loss of senior district positions in this area, including a dedicated Energy Manager, along with other funding constraints, has had a significant impact on the ability of the district to continue with the monitoring, reporting, and implementation of initiatives necessary to meet district goals.

There were several initiatives taken in 2019 to reduce GHG emissions, including:

- Mechanical upgrade at Dewdney Elementary School to replace the existing boiler and domestic hot water system
- Mechanical upgrade at Mission Secondary School to replace an older, inefficient HVAC system
- Mechanical upgrade at Heritage Park Middle School to replace HVAC DDC controls
- Wattage reduction continues across all district facilities, helping to reduce annual kilowatt hours of electrical energy

Going forward into 2020 and beyond, there are plans for further reduction of GHG emissions, including:

- Air handler upgrade at Mission Secondary School
- Boiler and plumbing system upgrade at Stave Falls Elementary
- HVAC upgrade at West Heights Elementary
- Replacement of two buses with newer, more fuel efficient models

All proposed initiatives are contingent upon adequate capital funding.


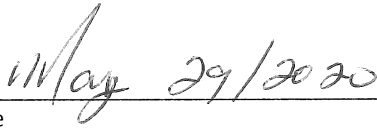
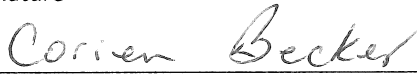

Emissions and Offsets Summary:

School District No 75 GHG Emissions and Offsets for 2019	
As per the <u>Directive</u> 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)	2,018.9
Total BioCO ₂	18.9
Total Offsets (tCO ₂ e)	1,614
Offset Investment (\$25 per tCO ₂ e)	\$40,350

Retirement of Offsets:

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, School District No 75 (**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:

 <hr/>	 <hr/>
Signature	Date
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Name (please print)	Title

Confirmation number: 00B78B4B

Submitted date: 2020-03-16 14:40:49 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>Derek Welsh</i>
Contact Email:	<i>derek.welsh@mpsd.ca</i>
Organization Name:	<i>School District No. 75</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:	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?	No
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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>Replacement/upgrade of inefficient heating and electrical systems and components</i>
Over the long term (6-10 years)	<i>Replacement/upgrade of inefficient heating and electrical systems and components; Replacement of 70 year old secondary school using current building standards for optimum energy efficiency</i>
Please describe your strategy's goals (if any) related to energy audits.	<i>Ongoing efficiency upgrades to older equipment, but no specific energy audit performed</i>

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

0

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

Replacement/upgrade of inefficient heating and electrical systems and components as funding permits

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

See below

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

10% estimate (Lighting upgrades at 2-3 schools on average per year)

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

5% estimate (1 major HVAC or boiler system upgrade on average per year)

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.)

3% estimate (1 major roof replacement or building envelope project on average every two years)

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

Not applicable

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

Not applicable

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.

Yes

If yes, have you quantified and reported the associated emissions? What, if any, mitigation approaches have been considered? Please describe

No

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

Not applicable

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

No new buildings constructed - not applicable

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

No new buildings constructed - not applicable

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

No new buildings constructed - not applicable

Other actions? Please describe briefly:

Heritage Park Middle School - Replacement of existing condensing unit with new high efficiency unit and DDC controls; Roof replacements at West Height Elementary and Stave Falls Elementary; Lighting upgrades at 5 schools

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?

No

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)

Replacement of older fleet vehicles with more fuel efficient or alternative energy models

Over the long term (6-10 years)

Gradual transition to alternative energy fleet vehicle models 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

2

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

Capital funding constraints and availability of feasible options

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.)

Not applicable

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

23

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

30

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)

Photocopier fleet to be replaced in 2020, with technology to help monitor and limit paper use

Over the long term (6-10 years)

Continued use of new technology to reduce reliance on paper

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

No

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

No

Other 2019 actions, please specify

District wide access to new mobile computing devices (laptops, ipads, phones) has helped reduce reliance on paper records