2019 CARBON NEUTRAL ACTION REPORT



May 2020

SCHOOL DISTRICT NO. 85

Vancouver Island North

EXECUTIVE SUMMARY

On behalf of the Vancouver Island North School District, I am pleased to submit the 2019 Carbon Neutral Action Report. This report provides an over view of the steps that Vancouver Island North School District has taken to reduce its greenhouse gas emissions as well as other environmental sustaining actions that have been undertaken in the 2019 calendar year.

Environmental sustainability is deeply important to the Vancouver Island North School District. Our Energy Management Committee is now celebrating its eighth year in existence. Our Board of Education continues to support effective practice in the Environmental Sustainability focus areas such as Curriculum, Energy Conservation, Community Gardening, Sustainable Purchasing, Sustainable Transportation, Water Conservation and Waste Management.

The Greenhouse Gas reduction initiatives in 2019 continued to be focused primarily on reducing emissions from buildings, which is our largest source. The main objective this year has been to replace dated fluorescent lighting with more energy efficient LED lighting, this will be an ongoing project which will continue into 2020.

We continue to engage both our students and our employees, leveraging their knowledge and enthusiasm as we strive for lower GHG emissions. Doing so has benefits beyond the environment as it generates both financial savings and social benefits. Our employees are more engaged in working towards sustainability, and the students who create our future are becoming more passionate about caring for their communities and the world that surrounds them.

Ms. Carol Robertson

Superintendent of Schools

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for the 2019 reporting year we will once again be purchasing 622 tonnes until an adjustment is made to reflect actual usage for 2019.

School District No. 85 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)	770.94	
Total BioCO ₂	7.94	
Total Offsets (tCO ₂ e)	622	
Offset Investment (\$25 per tCO ₂ e)	15550	

ACTIONS TAKEN TO REDUCE GREENHOUSE GAS EMISSIONS IN 2019

In 2019, School District No. 85 continued in its efforts to replace existing lighting systems with LED lights being introduced in place of fluorescent. Motion sensor light switches have been installed in washrooms, offices and some classrooms to reduce hydro consumption and waste.

Meeting packages within the District are being sent out electronically in an effort to reduce paper waste and meetings are held via on-line platform whenever possible to reduce travel emissions. Documents are being stored on internal servers and photocopying is set to double-sided when practical. All schools and offices within the District recycle and garbage cans have been removed from low use areas in order to reduce the number of bags being wasted.

2019 saw the replacement of two aging school buses with newer more energy efficient models.

Hydro is used in the School District for both lighting and heating purposes. The total electricity purchased from BC Hydro went from 2,998,377 kWh in 2018 (amended total) to 2,990,010.1 kWh in 2019, an overall decrease of 8,367 kWh. This decrease may be attributed to lighting and building upgrades as well as overall awareness and attention to reducing energy consumption.

Eight of School District 85's properties are heated by propane. 2019 saw an overall decrease of 16,255.1 liters, from 301,403 liters in 2018 to 285,147.9 liters in 2019. This decrease may be attributed to building envelope upgrades as well as heat pump replacement.

PLANS TO CONTINUE REDUCING GREENHOUSE GAS EMISSIONS IN 2020

In 2020, the plan is to continue upgrading heating and hot water systems with more energy efficient models. Cheslakees School will see the replacement of seven aging heaters with newer more efficient units as the current units are beyond their useful life expectancy.

Lighting fixtures are continuously being upgraded to LED rather than fluorescent, which should see a long term cost savings.

Education is an ongoing commitment amongst staff and students in the district, as to how we can all do our part to reduce our environmental footprint. Purchasing recycled content products is encouraged and endorsed whenever possible.

All School District properties remain idle free; this is enforced through signage and verbal communications. Buses and maintenance vehicles are turned off when not being immediately used and ride sharing is encouraged whenever possible.

Our transportation department participates in an oil filter recycling program to minimize their environmental impact and regular maintenance on all fleet vehicles ensures they are running as efficiently as possible. Plans are in place to start replacing vehicles in the white fleet with newer, more fuel efficient models.

RETIREMENT OF OFFSETS

In accordance with the requirements of the Climate Change Accountability Act and Carbon Neutral Government Regulation, School District No. 85 (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:		
day M'Andel	JOHE 8, 2020	
Signature O	Date	
RAY MEDONALS	SECRETARY TREASURER	
Name (please print)	Title	

Confirmation number: 00BB9E06

Submitted date: 2020-04-21 09:00:15 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 <u>Carbon Neutral Government Regulation</u>.

Due to the COVID-19 pandemic, the following <u>Directive</u> 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) <u>website</u> 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	The final, signed version of the CNAR (or Small Emitters Form) must be submitted by email to: <u>Carbon.Neutral@gov.bc.ca</u>
June 30, 2020*	 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 <u>CNAR Survey</u> (optional for Small Emitters) must be completed and submitted online. *Deadline extended from May 29, 2020. All offset invoice payments must be submitted to CAS.
Sept 30, 2020*	Clean Government Reporting Tool (CGRT) Data Entry must be completed for the 2019 reporting year.

	*Deadline extended from April 30, 2020.
Oct 15, 2020*	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 <u>Carbon Neutral Government – Program Requirements website</u> 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:
Jennifer Cattermole
Contact Email:
jcattermole@sd85.bc.ca
Organization Name:
School District No. 85
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:
Administrative Assistant
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

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)

Continued lighting and building envelope upgrades.

Over the long term (6-10 years)

Same

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

N/A

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. Plans made with a goal of energy savings. What % on average of your building portfolio is retrofitted each year in the following categories (if any) - click here for further information: 5 Minor retrofits (e.g. low cost, easy to implement measures including caulking, lighting, adding roof insulation, etc.) 5 Major retrofits (e.g. replacing windows and doors, equipment replacement such as boilers, etc.) 10 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.) 5 Please describe your strategy's re/retro-commissioning goals (if any)? N/A What % on average of your building portfolio do you recommission each year? 0 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. N/A How many newly constructed buildings received at least LEED Gold certification in 2019? N/A How many newly constructed buildings did not receive LEED Gold certification? N/A Please explain why LEED Gold certification was not obtained for those new buildings. No new buildings 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)
In the process of purchasing our first EV bus as well as installing charging infrastructure.
Over the long term (6-10 years)
Looking at the possibility of switching to EV buses to replace diesel. Purchasing new white fleet vehicles with more efficient / smaller engine models.
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?

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:

Cost and availability.

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?
o
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.)
Currently commissioning a charging feasibility study.

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. 3/4 tonne pick-up truck, transport trucks)

Light duty vehicles (LDVs)

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Electric Vehicles – EV - (e.g., Nissan Leaf, Chevy Bolt)
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"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
 Natural gas/propane
 Gas/diesel
Light duty trucks (LDTs)
 Electric Vehicles - EV
 0
 "Plug In" Electric Vehicle - PHEV
 Hybrid vehicles – HEV – (e.g., non "Plug In"- older Ford Escape Hybrid, older Chevrolet Silverado pickup hybrid,
 0
 Hydrogen fuel cell vehicles
 Natural Gas/propane
 Gas/diesel
 11
Heavy duty vehicles (HDV)
 Electric Vehicles - EV
 0
 "Plug In" Electric Vehicle - PHEV
 Hybrid vehicles - HEV - (e.g., non "Plug In")
 0
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Hydrogen fuel cell vehicles
0
Natural Gas/propane
0
Gas/diesel
15
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)
Encouraging scanning and emailing over faxing and copying. All meeting packages are sent electronically.
Over the long term (6-10 years)
Same.
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
N/A