

SCHOOL DISTRICT No. 20

### **Declaration Statement**

This is the 2019 Carbon Neutral Action Report for School District No. 20 Kootenay Columbia. Following the directive from the Climate Action Secretariat in regards to the impact of Covid 19 on reporting, 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 and for the purposes of the 2019 Carbon Neutral Action Report.

This Carbon Neutral Action Report summarizes our emissions profile, the amount of offsets purchased to reach net zero emissions from 2019 and the actions we have taken to further reduce our greenhouse gas emissions. As well, it contains a list of potential future options that may help us reduce greenhouse gas emissions in the future.

### **OVERVIEW**



## **Emission Reduction Activities**

The following is a list of actions taken toward carbon neutrality in 2019:

- Continued to install occupancy sensors in several rooms throughout the District.
- Continued to replace current bulbs with fluorescent and LED bulbs as they burn out.
- Continued to utilize power management software which shuts down computers outside of regular business hours.
- Continued to use auto-sleep settings on computer monitors and CPUs.
- Removed most stand-alone printers, copiers, and/or fax machines across the District and installed multi-function devices.
- Continued to utilize auto-sleep settings on these multi-function devices.
- Continued to replace computers with ENERGY STAR models during regular computer upgrades.
- Continued to replace appliances with ENERGY STAR models whenever new appliances are purchased.
- Continued to replace vehicles in fleet with more efficient vehicles.
- Continued the implementation of computer lab replacement with laptops and tablets rather than desktops.
- Full implementation of Paper Cut program (monitors paper usage)
- Castlegar Primary boiler replacement
- Robson Elementary LED lighting upgrade
- Waneta Bus garage smart power receptacles that use less power for block heater plug ins.



# Future Plans for the continual reduction of Greenhouse Gas Emissions

In 2019 we were looking forward to seeing some reduction in our carbon footprint with a full winter with the new windows at Webster as well as the benefits from Castlegar Primary School boiler replacement, Robson Community School LED upgrade and the upgrade to the smart block heater receptacles at the Waneta Bus Garage.

The District also put in a lot of effort towards paper reduction with the full implementation of the papercut program and we look forward to seeing the results from that program.

For 2020, we are VERY excited about the funding we have received from the Ministry of Education for some big items. We will be getting a new electric bus for the first time and that will reduce the carbon usage for one entire bus route. We are also completing Phase 2 of the window replacement at Webster Elementary as well as upgrading the lighting in most of our buildings to LED. The combination of all these projects is a great success story but of course we are most excited about the modest beginning of an electric bus fleet. We look forward to a carbon reduction as the result of all these great projects.

Other potential future projects that continue to be considered within the buildings in our District include further window replacements, exterior siding/insulation upgrades, re-commissioning and rebalancing of newer mechanical systems, upgrades to DDC controls and the addition of CO2 sensors. We have several roof top units that will need to be replaced in the near future as well and that will continue to help the District reduce its energy usage for the buildings.

We will continue with all the smaller upgrades and changes that we have been working on in an effort to move our District closer to carbon neutrality in these challenging times.



# **Emissions and Offsets Summary Table**

School District No. 20 (Kootenay Columbia)		
Greenhouse Gas Emissions and Offsets for 2019 (using 2018		
as an estimate (TCO2E)		
Greenhouse Gas Emissions:		
Total Offsets	1556	
Total Offset Investment	\$38900	

#### **Retirement of Offsets:**

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, School District No. 20 (Kootenay-Columbia) 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 hereby agrees that, in exchange for the Ministry of Environment ensuring that these offsets are retired on the Organization's behalf, School District No. 20 will pay 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.

2019 CNAR prepared by Director of Operations, Heather Simm

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2019 CNAR approved by Superintendent, Bill Ford

Confirmation number: 00C5665F

Submitted date: 2020-06-26 15:05:10 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 <a href="mailto:Carbon.Neutral@gov.bc.ca">Carbon.Neutral@gov.bc.ca</a> 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*	<ul> <li>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.</li> <li>The <u>CNAR Survey</u> (optional for Small Emitters) must be completed and submitted online.</li> <li>*Deadline extended from May 29, 2020.</li> <li>All offset invoice payments must be submitted to CAS.</li> </ul>
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: <u>Carbon.Neutral@gov.bc.ca</u> .  *Deadline extended from May 15, 2020.

<sup>\*</sup>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:
Heather Simm
Contact Email:
hsimm@sd20.bc.ca
Organization Name:
School District No. 20 Kootenay Columbia
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:
Facilities/Operations Manager/Coordinator

#### 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)

In the next 1-5 years, our plan to reduce emissions from stationary sources includes:

- -Window replacement and exterior insulation Fruitvale Elementary
- -Window replacement and exterior insulation Rossland Summit School
- -Chiller upgrade Fruitvale Elementary
- -RTU upgrade Kinnaird Elementary

#### Over the long term (6-10 years)

N/A

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. N/A Minor retrofits (e.g. low cost, easy to implement measures including caulking, lighting, adding roof insulation, etc.) Major retrofits (e.g. replacing windows and doors, equipment replacement such as boilers, etc.) 2% 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

# 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)
Replacing vehicles as they hit end of life with more fuel efficient models. Utilizing grants from government to replace diesel school buses with electric
Over the long term (6-10 years)
Continue to replace bus fleet with electric as funding from the government allows.
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
Hydrogen fuel cell vehicle
0
Natural gas/propane
0
Gas/diesel vehicle
5
If you purchased new gas/diesel vehicles, can you briefly explain why vehicles from the other categories were not chosen?
Service van-no suitable vehicle in other categories School buses-no funding was available in 2019 for electric school buses. Moving forward, there is funding and that has enable us to purchase one electric bus for our fleet for next year (20-21)
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 How many level 3 stations (if any) were installed specifically for your fleet vehicles? As defined in the previous section 0 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</li> • 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. <sup>3</sup>/<sub>4</sub> tonne pick-up truck, transport trucks) Light duty vehicles (LDVs) Electric Vehicles - EV - (e.g., Nissan Leaf, Chevy Bolt) "Plug In" Electric Vehicle - PHEV -- (e.g., plug-in Prius, Chevy Volt) 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
3
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
12
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
12

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)
Install paper cut program and educate all staff on their usage amount
Do you have an awareness campaign focused on reducing office paper use?
Yes
Purchased alternate source paper (bamboo, hemp, wheat, etc.)