



## CNAR SCHOOL DISTRICT NO.53 OKANAGAN SIMILKAMEEN

**Title:** 2019 Carbon Neutral Action Report”

**Organization:** School District No. 53

**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.

By June 30, 2019 School District #53 final *Carbon Neutral Action Report* will be posted to our website at [www.sd53.bc.ca](http://www.sd53.bc.ca)

### Overview:

Priority items done over the 2019 year include:

- Duct cleaning of two schools to improve air handling
- Re-roofing at 2 locations with improved insulation
- Lighting upgrade T5 – LED in High School Gymnasium
- High School exterior door upgrade for Building Envelop concerns
- Upgrade on failing Roof Top Unit
- Upgrade to white fleet using Transit vans

### Emissions and Offset Summary Table:

<i>School District No. 53 GHG Emissions and Offsets for 2019</i>	
As per the <a href="#">Directive</a> 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 <sub>2</sub> e)	818
Total BioCO <sub>2</sub>	8.66
Total Offsets (tCO <sub>2</sub> e)	649
Offset Investment (\$25 per tCO <sub>2</sub> e)	\$16,225



**Retirement of Offsets:**

In accordance with the requirements of the *Climate Change Accountability Act* and Carbon Neutral Government Regulation, School District No. 53 Okanagan Similkameen (**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]*

*P.S. Subramanian*

Signature

17 / 6 / 20

Date

SUBRA PALIAPPA

Name (please print)

SECRETARY / TREASURER

Title

Please scan and email the completed form to [Carbon.Neutral@gov.bc.ca](mailto:Carbon.Neutral@gov.bc.ca)

**Confirmation number:** 00C36527

**Submitted date:** 2020-06-16 09:40:37 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](mailto: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"><li>The final, signed version of the <b>CNAR</b> (or Small Emitters Form) must be submitted by email to: <a href="mailto:Carbon.Neutral@gov.bc.ca">Carbon.Neutral@gov.bc.ca</a></li></ul>
June 30, 2020*	<ul style="list-style-type: none"><li>Ministry of Environment and Climate Change Strategy must post a final CNAR for each organization on the BC Government's CNG <a href="#">website</a> and each PSO is encouraged to post the report on their website.</li><li>The <b>CNAR Survey</b> (optional for Small Emitters) must be completed and submitted online. *Deadline extended from May 29, 2020.</li><li><u>All offset invoice payments must be submitted to CAS.</u></li></ul>
Sept 30, 2020*	<ul style="list-style-type: none"><li><b>Clean Government Reporting Tool (CGRT) Data Entry</b> must be completed for the 2019 reporting year.</li></ul>

	*Deadline extended from April 30, 2020.
Oct 15, 2020*	<ul style="list-style-type: none"> <li>• <b>Self-Certification checklist</b> must be completed, signed and submitted by email to: <a href="mailto:Carbon.Neutral@gov.bc.ca">Carbon.Neutral@gov.bc.ca</a>.</li> </ul> *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](#).

<b>Contact Name:</b>
<i>De Sansome</i>
<b>Contact Email:</b>
<i>dsansome@sd53.bc.ca</i>
<b>Organization Name:</b>
<i>School District No. 53 Okanagan Similkameen</i>
<b>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:</b>
<i>Facilities/Operations Manager/Coordinator</i>
<b>Please select your sector:</b>
<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

<b>Do you have a strategy to reduce emissions from stationary sources?</b>
<i>Yes</i>

Whether you have a strategy or not, briefly describe your organization's plans to continue reducing emissions from stationary sources:

<b>Over the medium-term term (1-5 years)</b>
<i>Since I came to the organization I have been working on reducing fossil fuel consumption. My strategy has been to upgrade existing mechanical systems to provide efficiencies where they were lacking and increase Indoor Air Quality and student and staff comfort levels. Our latest project is installation of a Geothermal plant at our Osoyoos High School. In the electrical realm we have been upgrading all sites with LED lighting and controls to reduce consumption overall.</i>
<b>Over the long term (6-10 years)</b>
<i>The Geothermal plant will take another 2-3 ears to complete due to funding restrictions and once it is done we will move over to our elementary school in Osoyoos which is next in line for an upgrade. Technology is allowing us to look to electric vehicles, this at the present time is our weakness. We have an entire fleet of diesel fuel buses and there is interest in investigating the option of an electric alternative. Infrastructure for this will take time to bring in and require funding support from the Ministry.</i>

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

*With the new Portfolio Manager it will be easier to review where our systems may not be as efficient as they could/should be. Auditing of the system quarterly will provide us with needed information to determine where those issues are to deal with them. We did do an independent audit on one of our newer schools that was showing extremely high consumption for such a new system. It showed us where the failures were and what needs to be done before we have a total system failure.*

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

*70% - we have had so much mechanical changes going on over the district that it has been challenging to determine how they are performing. There hasn't been enough time since the upgrades to see the results we need.*

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

*As mentioned above, we are in the process of upgrading all of our schools mechanical systems to meet current codes and provide efficiencies where none existed before. In addition the offset of this is providing the school population for better comfort levels and air quality.*

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

100

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

*Minor retrofits are being done all year long with my existing crew. When issues are detected, they provide the remedy if possible.*

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

*15% - upgrades being done annually but is normally limited to one building at a time.*

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.)

*10% - Roof replacement has taken place as they age out of the system. In 2019 there was a full replacement at one school and partial at a second.*

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

*Review and diagnostics are done when we detect consumption levels are too high however, an official investigation utilizing the tools of NRCAN have not yet been done due to time constraints.*

Do you keep records of Refrigerant gases<sup>1</sup> 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.

*We do have regular preventative maintenance scheduled for our refrigerant containing units.*

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.

N/A

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)

*We have replaced older white fleet vehicles with new, smaller vans which use less fuel to transport our trades from school to school.  
We have updated, with Ministry support, two of our diesel buses to more efficient versions.*

Over the long term (6-10 years)

*We are keen to investigate electric buses. Looking at ways to bring in the infrastructure to support an electric fleet. As our buses return to base each afternoon, it is 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?

*The purchase was for 2 buses. Currently we are not established to have electric buses.*

## 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.)

N/A

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

Gas/diesel

10

#### 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)

*Copiers are defaulted to save not print  
Paper in use is 30% recycled content*

Over the long term (6-10 years)

*Technology is removing the need for paper use as it is developing more programs for children to work on-line. COVID 19 has increased the focus on the on-line learning which can have an off-set of supporting reduction.*

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

No

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

No