



2019

CARBON NEUTRAL ACTION REPORT



School District No. 67 (Okanagan Skaha)

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Declaration Statement

This Carbon Neutral Action Report for the period January 1st, 2019 to December 31st, 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 29, 2020 School District No. 67's final Carbon Neutral Action Report will be posted to our website at www.sd67.bc.ca

Actions and Initiatives Taken in 2019

In 2019, we completed the mechanical upgrade at our largest carbon production site, Summerland Secondary School. This project was undertaken in 2018 and continued through 2019. In the last half of 2019, we saw a sizeable decrease in carbon consumption at this site. On average, Summerland Secondary has used approximately 226 tonnes of CO₂e each year. With the new system going into effect part-way through 2019, we have already seen a decrease of 36% to 143 tonnes of CO₂e. We are

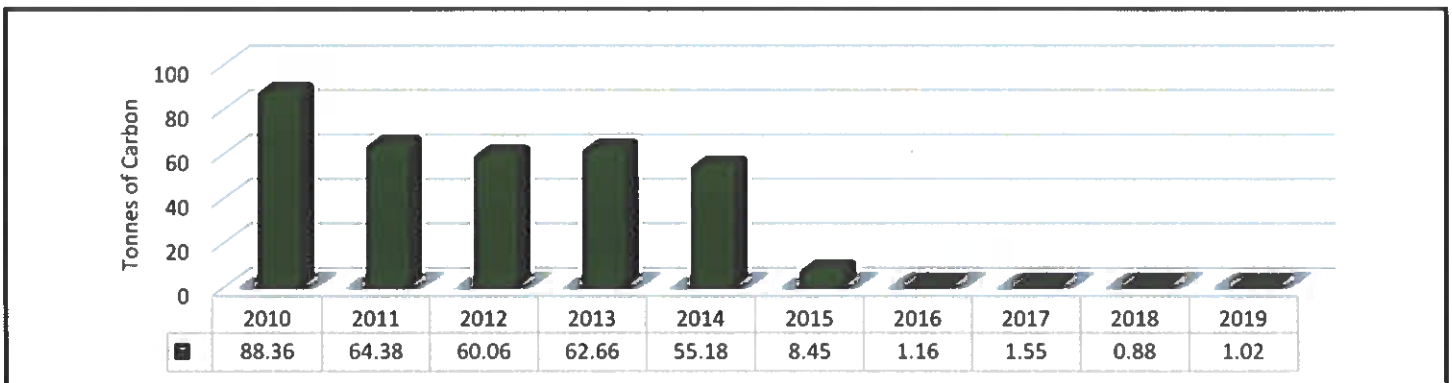


expecting a substantial reduction of our carbon use in 2020 due to the geo-exchange upgrade as well as an increase in occupant comfort.

The District also continued our investment in LED technology lighting. Over the past year, we replaced an additional 2,000 T-8 tubes with new LED tubes. The update not only reduces power consumption, but also adds to the learning environment by creating consistent lighting levels throughout the educational space.

Success Stories

In 2014, the mechanical heating and cooling systems were failing at Wiltse Elementary School. The constant failures and breakdowns were causing a low-quality learning environment and draining the



resources of the facilities department. In response to these issues, a new mechanical system with geo-exchange was designed and installed. Prior to the upgrades, we were offsetting an average of 66 tonnes of CO₂e per year.

The upgrade had an immediate impact on the carbon production at the school: the first year with the new system, the emissions reduced to less than nine tonnes CO₂e. Since the final commissioning, we've had a three-year average of less than two tonnes per year. The final impact results in lower operating costs, a far superior learning environment, and points to the environmental stewardship of School District No. 67 (Okanagan Skaha).

Plans to Continue Reducing Emissions

The District is continuing its efforts to reduce carbon offsets through upgrading our mechanical and electrical systems. We are currently in the design phase for a retrofitted mechanical system at Summerland Middle School, which we are hoping to tender in 2021.

In the fall of 2020, the District will start transitioning its school bus fleet from diesel to electric. It will also be investigating electric fleet vehicles that would further reduce carbon emissions. This will move us away from burning carbon-rich fuels, such as gasoline and diesel, and towards clean, renewable, electric energy.

The District is also looking to continue investing in solar photovoltaic. Summerland Middle School is being considered for as our next building for a photovoltaic system. The 125 kWh array will increase the existing generation capacity of the School District to reduce operating budgets and carbon creation as well as provide additional educational opportunities to students.



Retirement of Offsets

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, School District No. 67 Okanagan Skaha (the Organization) is responsible for

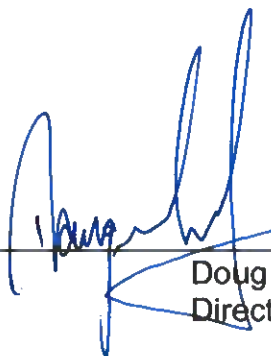
arranging for the retirement of the offsets obligation reported above for the 2019 calendar year, together with any adjustments reported for past calendar years. The Organization hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy ensuring that these offsets are 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.

Emissions and Offsets Summary

School District 67 GHG Emissions and Offsets for 2019 (tCO₂e)	
GHG Emissions created in calendar year	
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.	
Total Emissions (tCO ₂ e)	1,691
Total BioCO ₂	8.6
Total Offsets (tCO ₂ e)	1594
Total Investment (\$25 per tCO ₂ e)	\$39,850.00



Todd Manuel
Assistant Superintendent



Doug Gorcak
Director of Facilities

Confirmation number: 00B8B612

Submitted date: 2020-03-23 11:22:57 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 Gorcak</i>
Contact Email:
<i>dgorcak@summer.com</i>
Organization Name:
<i>School District # 67 (Okanagan Skaha)</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:
Energy Manager Fleet Manager Sustainability Coordinator 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?
Yes

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>We prioritizing upgrading of mechanical systems in buildings based on carbon intensity and age of equipment.</i>
Over the long term (6-10 years)
<i>Once a system has been updated staff training is focused on to ensure building operate efficiently into the future.</i>

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

Monitoring energy is continuous in our District, so we don't complete many full energy audits annually.

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

Buildings are compared to each other to provide baselines for size and building type

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

We prioritizing upgrading of mechanical systems in buildings based on carbon intensity and age of equipment.

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

10%

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

Minor retrofits are ongoing, under maintenance procedures.

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

5%

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)?

We are working on replacing 1 Direct Digital Control system and then recommissioning the building each year. This ensures the buildings are operating efficiently.

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

5

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.

All our Refrigeration is handled by contractors who are certified in the uses of refrigerant and reclamation to prevent accidental leakage.

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.

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)

Purchasing right size vehicles and switching to EV's where possible.

Over the long term (6-10 years)

Continuing the short term goals until the fleet is switched over to EV.

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

0

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

n/a

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.)

We have started the engineering for two level II chargers for District Vehicles and are planing for installation 2020.

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

25

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

8

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)

Recommend staff use paper only when necessary. Report out monthly to schools their total consumption.

Over the long term (6-10 years)

Recommend staff use paper only when necessary. Report out monthly to schools their total consumption.

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