



2018 Carbon Neutral Action Report

**Organization name:** Board of Education, School District No. 83

**Declaration statement:** This Carbon Neutral Action Report for the period January 1<sup>st</sup>, 2018 to December 31<sup>st</sup>, 2018 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2018 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2019 and beyond..

By June 30, 2019 SD83's final *Carbon Neutral Action Report* will be posted to our website at [www.sd83.bc.ca](http://www.sd83.bc.ca).

**Overview:** In 2017 we initiated a Geo Thermal system in one of our Secondary Schools. Phase 2 was completed in 2018-19. Phase 3 has been initiated for 2019-20. We will gain substantial energy savings and further reduce carbon emissions when this project is completed.

A DDC upgrade has been initiated in one of our Elementary Schools for 2019-20. This will provide us improved controls to reduce energy consumption.

**Emissions and Offset Summary Table:**

<i>SD No. 83 GHG Emissions and Offset for 2018 (tCO<sub>2</sub>e)</i>	
<b>GHG Emissions created in Calendar Year 2018</b>	
Total Emissions (tCO <sub>2</sub> e)	3415
Total BioCO <sub>2</sub>	47.02
Total Offsets (tCO <sub>2</sub> e)	2241
<b>Adjustments to GHG Emissions Reported in Prior Years</b>	
Total Emissions (tCO <sub>2</sub> e)	3415
Total Offsets (tCO <sub>2</sub> e)	2241
<b>Grand Total Offsets for the 2018 Reporting Year</b>	
Grand Total Offsets Required (tCO <sub>2</sub> e)	2241
Total Offset Investment	\$56025

**Retirement of Offsets:**

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, *SD No. 83 (the Organization)* is responsible for arranging for the retirement of the offsets obligation reported above for the 2018 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.

Executive sign-off:

Signature

Date

May 21 / 2019

Name (please print)

Title

Peter Jang

Superintendent / CEO

# Part 1: CNAR Survey

## 1. General Information

**Name:** Trevor Bettcher

**Contact Email:** tbettche@sd83.bc.ca

**Organization Name:** School District No. 83

**Sector:** School District

**Role** - Please select your role(s) below.

*If more than one individual completed the survey, multiple categories may be selected:*

Energy Manager: No

Sustainability Coordinator: No

Administrative Assistant: No

Facilities/Operations Manager/Coordinator: Yes

CEO/President/Exec Director: No

Treasurer/Accounting: No

Superintendent: No

### A. Stationary Sources (e.g. Buildings, Power Generators): Fuel Combustion, Electricity use, Fugitive Emissions.

#### 1. Actions taken by your organization in 2018 to support emissions reductions from buildings.

a) Do you have a strategy to reduce emissions from stationary sources?

Yes

If yes above, what are the main goals?: - Replacement of systems with more efficient systems  
- DDC controls to manage energy consumption

b) Whether you have a strategy or not (1.a), briefly describe your organization's plans to continue reducing emissions from stationary sources:

I. Over the medium-term term (1-5 years)

High School HVAC system converting to Geo Thermal Heating

II. Over the long term (6-10 years)

Installation of High Efficiency Gas Boilers in 2 High Schools

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

Replace end of life equipment with more efficient systems.

f) Do you keep records of Refrigerant gases category and refilling volumes?

No

g) How many newly constructed buildings received at least LEED Gold certification in 2018: 0

## B. Mobile Sources (Vehicles, Off-road/portable Equipment): Fuel Combustion:

### 3. Actions taken by your organization in 2018 to support emissions reductions from mobile sources.

#### a) Do you have a strategy to reduce emissions from mobile sources?

Yes

##### I. If yes, what are its goals?

Update fleet to lower emission vehicles  
Reduce Diesel & Gas consumption  
Ensure Vehicles are maintained

#### b) Whether you have a strategy or not (3.a), briefly describe your organization's plans to continue reducing emissions from mobile sources:

##### I. Over the medium-term term (1-5 years)

Strict Ani Idle policy  
Purchase vehicles with low emission engines  
Purdchase smaller more fuel efficient vehicle  
Optimize bus routes  
Ensure equipment is well maintained

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

Same

#### c) 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: 15

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

Large District  
Issues with availability of other fuel sourcer  
Concerns with range of vehicles in a large geographical & remote areas

#### d) How many existing EV charging stations does your organization have in each category:

level 2: 0

level 3: 0

#### e) How many EV charging station(s) did you install in 2018 in each category:

level 2: 0

level 3: 0

**4. Please indicate the number of the vehicles in the following vehicle classes that are in your current fleet (including any purchased in 2018):**

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)

**a) 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: 12

**b) 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: 19

**c) 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: 56

**5. Please indicate the number of the vehicles you plan to replace in your fleet:**

How much do you budget per LDV?: 30

How many LDVs do you plan to procure annually over the next 5 years?: 6

How much do you budget per LDT?: 40

How many LDTs do you plan to replace annually over the next 5 years?: 9

How much do you plan to spend per HDV?: 120

How many HDVs do you plan to replace annually over the next 5 years?: 27

## C. Office Paper: Indicate which actions your PSO took in 2018:

**6. Actions taken by your organization in 2018 to support emissions reductions from paper supplies.**

**a) Do you have an Office Paper strategy?**

No

**b) Whether you have a strategy or not (6.a), briefly describe your organization's plans to continue reducing emissions from paper use:**

**I. Over the medium-term (1-5 years)**

Print Less  
Save Electronically

**II. Over the long term (6-10 years)**

Same

**c) Have an awareness campaign focused on reducing office paper use**

No

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

No