

**2018 Carbon Neutral Action Report**

**School District #53 Okanagan Similkameen**

**Declaration statement:** This *Carbon Neutral Action Report* for the period January 1<sup>st</sup> 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 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 2018 year include:

- Phase 4 Mechanical upgrade for Similkameen Elementary Secondary School
- Duct cleaning of two schools to improve air handling
- Heat Exchanger Cleaning for performance improvement
- Re-roofing at 4 locations with improved insulation.



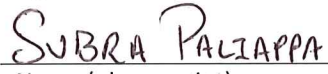
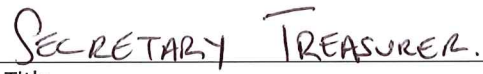
**Emissions and Offsets Summary Table:**

<i>School District #53 GHG Emissions and Offsets for 2018 (tCO2E)</i>	
<b>GHG Emissions created in Calendar Year 2018</b>	
Total Emissions (tCO2E)	818
Total BioCO <sub>2</sub>	8.66
Total Offsets (tCO2E)	649
<b>Grand Total Offsets for the 2018 Reporting Year</b>	
Grand Total Offsets Required (tCO <sub>2</sub> e)	649
Total Offset Investment	\$16225

**Retirement of Offsets:**

In accordance with the requirements of the Greenhouse Gas Reduction Targets 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 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
	
Name (please print)	Title

# Part 1: CNAR Survey

## 1. General Information

**Name:** Deb Sansome

**Contact Email:** dsansome@sd53.bc.ca

**Organization Name:** School District No.53

**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?: To reduce both fuel and water consumption through mechanical upgrades

#### 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)

We have almost completed the complete removal of T8 and replaced with LED. Our focus now is to complete the gymnasium high bay lighting to LED. This past year we have re-roofed 4 building due to need as well as increasing their R rating (insulation) to promote retention of heating and cooling as required.

We have made submission to the Ministry for support in building a Geothermal plant at another of our high schools. If successful, this will be a multi-year project but hopefully completed within the 5 year period.

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

We are looking to the future with Geothermal hoping that once Ministry can support us in this bid, that we may continue with other schools to transfer their heat source and support reductions within our district. With the current year costs of Natural Gas it is an excellent time to be looking for additional protection against fluctuating markets.

Recently approached by another district, we are also looking into potential for electric vehicle recharging stations on our properties. This requires more investigation but is something we look have agreed to support.

**c) Please describe your strategy's goals (if any) related to [energy audits](#).**

In review of the past 5 years we have reduced our Stationary footprint by 15% and overall reduction of 14% in offsets. We wish to continue to reach the goals outlined however improvements require support for other sources. We commit what we can to improve and be sustainable and we have have some significant reductions. We will continue to investigate other opportunities as they arise.

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

When we look to replace energy consumers within our buildings, we look to utilize the most energy efficient on today's market. If possible we look to alternate sources of energy other than fossil fuels.

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

Minor retrofits (e.g., low cost, easy to implement measures including caulking, lighting, adding roof insulation, etc.) (%): 25

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.) (%): 40

**e) Please describe your strategy's [re/retro-commissioning](#) goals (if any)?**

As outlined in our 5 and 10 year plan, we hope to transform fossil fuel consuming buildings into Geothermal opportunities.

I. What % on average of your building portfolio do you recommission each year?: 40

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

No

**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?**

No

**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)

We use, whenever possible, bio-diesel fuels for our bus fleet. With the current direction districts are opening up opportunity for student learning optimization for bands, this may require additional fleet buses to accomplish. Understanding this won't reduce our footprint is always on our minds. We have had discussion with other districts to approach Fortis for opportunities with installation of EV kiosks on our properties in hopes this will offset some of our emission levels.

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

The potential for more infrastructure within the Okanagan will increase opportunities to enhance fleet upgrades to include electric vehicles.

**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: 1

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

No existing infrastructure to service

**d) 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: 0

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

level 2: 0

level 3: 0

How many level 2 stations (if any) were installed specifically for your fleet vehicles: 0

How many level 3 stations (if any) were installed specifically for your fleet vehicles: 0

**f) Other actions, please describe briefly (e.g. charging station feasibility studies, electrical panel upgrades, etc.)**

As previously mentioned we have entered into discussion with another school district to approach Fortis on potential installation of kiosks on School properties to enhance the access in the Okanagan

**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: 2

**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: 9

**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: 0

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

How much do you budget per LDV?: 4

How many LDVs do you plan to procure annually over the next 5 years?: 0

How much do you budget per LDT?: 0

How many LDTs do you plan to replace annually over the next 5 years?: 0

**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?**

Yes

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

To increase the amount of recycled paper content while reducing the amount of paper utilized.

**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)**

We use only recycled white paper and are looking into increasing recycled content in coloured paper. We track usage by site and by user & report on sites. Where we think a site is using more paper in relation to its size with other sites we bring this to the attention of the Principal so that measures can be put in place to reduce usage. At the start of the school year and through the year, we inform staff of the importance of using paper wisely.

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

same as above