

# CARBON NEUTRAL ACTION REPORT 2018

School District No. 54 (Bulkley Valley)



This Carbon Neutral Action Report for the period of January 1<sup>st</sup>, 2018 – 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 54 (Bulkley Valley) 2018 Carbon Neutral Action Report will be posted on our District website at [www.sd54.bc.ca](http://www.sd54.bc.ca).

### **Executive Summary:**

Nestled in the Bulkley Valley, School District 54 spans 9600 km<sup>2</sup> of Northwestern BC wilderness. The district has a student population of approximately 2000 students, operates 7 schools as well as maintenance and administrative facilities. The geographic location of the district plays a substantial role in the districts carbon emissions due to unpredictable seasonal factors. Awareness, planning and optimization are all crucial in reducing the districts emissions.

The district remains committed to providing students with tools and learning materials that teach them to reduce their personal carbon footprint. Through active recycling programs, earth day promotion, indoor/outdoor school gardens, paper reduction strategies and implementation of technology students are learning how even small changes can have big impacts on the environment.

### **Key 2018 Projects:**

1. **Completed phase two of a HVAC upgrade project in secondary school.**
2. **Upgraded to LED lighting in two schools with increased controllability.**
3. **Disposed of an aging asset with the sale of an ancillary building.**
4. **Continued to fine tune the heating and cooling control systems.**
5. **Continued our biomass heating arrangement with a local municipality.**



Scope	2018 Emissions (tCO <sup>2</sup> e)	2017 Emissions (tCO <sup>2</sup> e)	2016 Emissions (tCO <sup>2</sup> e)	2015 Emissions (tCO <sup>2</sup> e)	2014 Emissions (tCO <sup>2</sup> e)
Mobile Combustion (Fleet)	501	501	490	484	457
Stationary Combustion	710	707	665	599	767
Purchased Energy	17	17	17	17	17
Procurement–Paper	31	27	24	31	29
Total Emissions	1259	1253	1179	1133	1272
Exempt Offsets	376	391	383	372	346
Total Offsets	883	862	796	761	925

### Offsets Applied to become Carbon Neutral in 2018

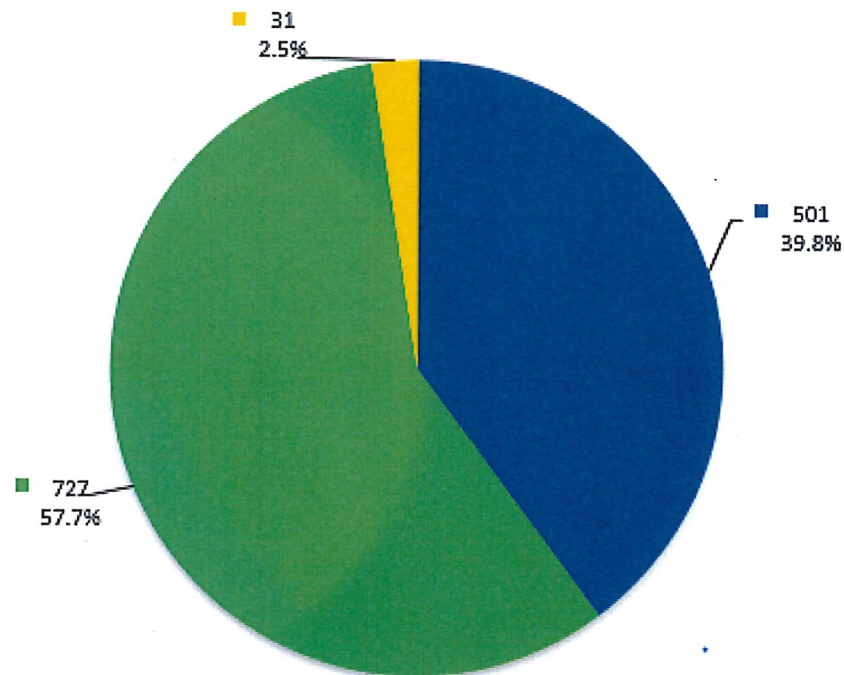
**Total Offsets required: 883 Total Offset Investments \$22075.00 Emissions which do not require offsets: 376**

*\*Tonnes of Carbon dioxide equivalent (tCO<sub>2</sub>e) is a standard measure which all types of greenhouse gases are expressed based on their global warming potential relative to carbon dioxide.*

*Under the Carbon Neutral Government Regulation of the eGreenhouse Gas Reduction Targets Act, all emissions from the sources listed above must be reported. As outlined in the regulation, some emissions do not require offsets.\**



**School District 54 - Bulkley Valley  
Greenhouse Gas Emissions by Source  
for the 2018 Calendar Year (tCO<sub>2</sub>e\*)**



**Total Emissions: 1,259**

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion (Building Heating and Generators) and Electricity
- Supplies (Paper)

**Offsets Applied to Become Carbon Neutral in 2018 (Generated April 02, 2019 12:05 PM)**

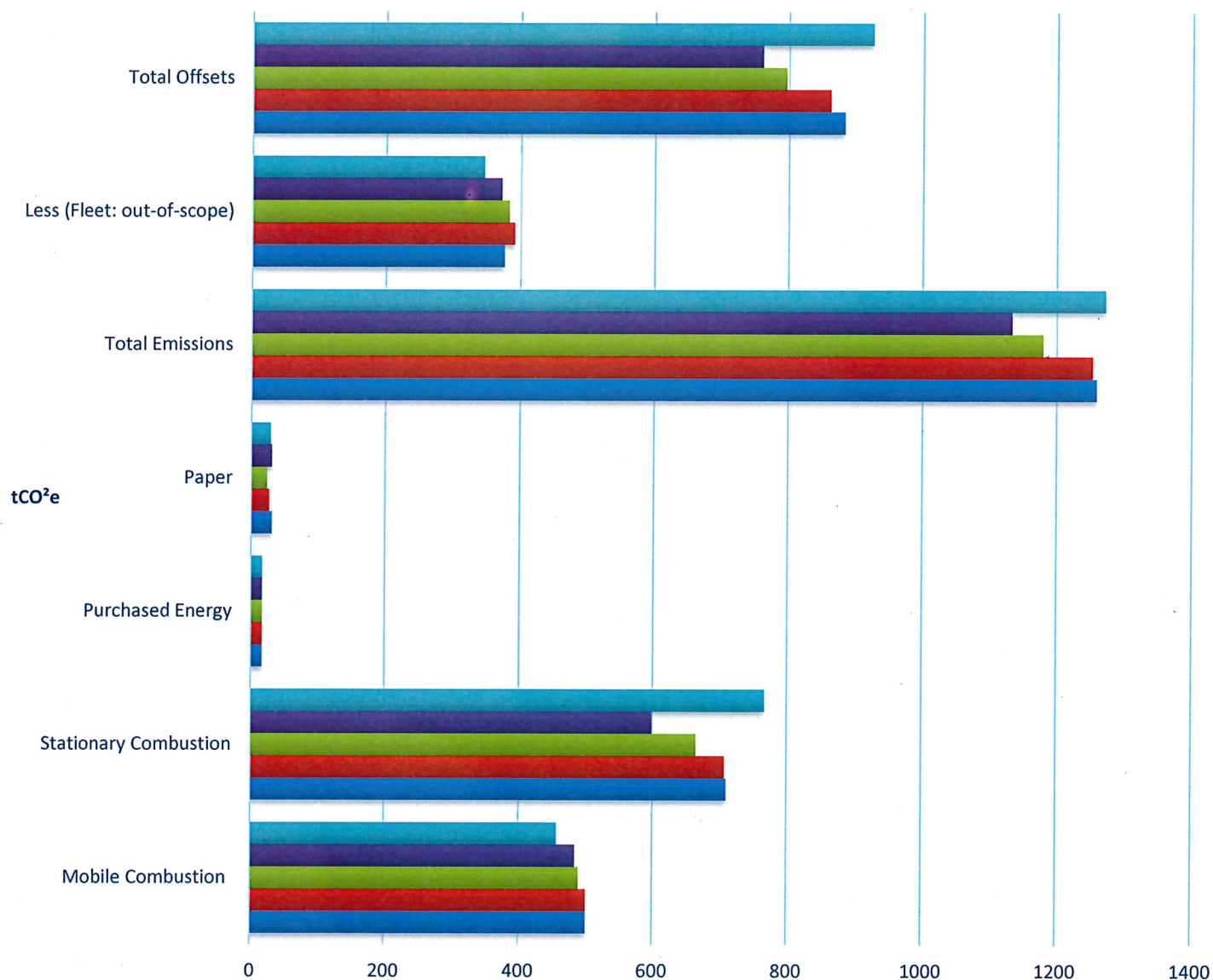
Total offsets required: 883. Total offset investment: \$22,075. Emissions which do not require offsets: 376 \*\*

\*Tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) is a standard unit of measure in which all types of greenhouse gases are expressed based on global warming potential relative to carbon dioxide.

\*\* Under the *Carbon Neutral Government Regulation of the Greenhouse Gas Reduction Targets Act*, all emissions from the sources listed must be reported. As outlined in the regulation, some emissions do not require offsets.



## 2014-2018 Emissions Comparison



	Mobile Combustion	Stationary Combustion	Purchased Energy	Paper	Total Emissions	Less (Fleet: out-of-scope)	Total Offsets
2014 Emissions (tCO <sub>2</sub> e)	457	767	17	29	1272	346	925
2015 Emissions (tCO <sub>2</sub> e)	484	599	17	31	1133	372	761
2016 Emissions (tCO <sub>2</sub> e)	490	665	17	24	1179	383	796
2017 Emissions (tCO <sub>2</sub> e)	501	707	17	27	1253	391	862
2018 Emissions (tCO <sub>2</sub> e)	501	710	17	31	1259	376	883





## Retirement of Offsets:

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, School District 54 (Bulkley Valley) 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 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.

On behalf of School District 54 (Bulkley Valley)

April 16, 2019

Jennifer Williams

Chairperson

Dave Margerm

Secretary Treasurer

# Part 1: CNAR Survey

## 1. General Information

**Name:** Tim Bancroft

**Contact Email:** tim.bancroft@sd54.bc.ca

**Organization Name:** SD54 Bulkley Valley

**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?: Continual review of HVAC and electrical systems

##### 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)

On-going audit of HVAC systems

Retire aging assets

Replace MH and HPS lighting to LED

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

Upgrade HVAC system with all major renovations

##### 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

II. Please explain why LEED Gold certification was not obtained.

NA

## **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)**

When replacing white fleets vehicles, upgrade to most current efficient models

#### **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: 3

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

The necessary infrastructure does not exist

#### **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

How many level 3 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



**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: 0

**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: 0

**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?: 30000

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

How much do you budget per LDT?: 35000

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

How much do you plan to spend per HDV?: 50000

How many HDVs do you plan to replace annually over the next 5 years?: 2

## **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)**

Investigating paperless options as new technology is introduced

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

No

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

No