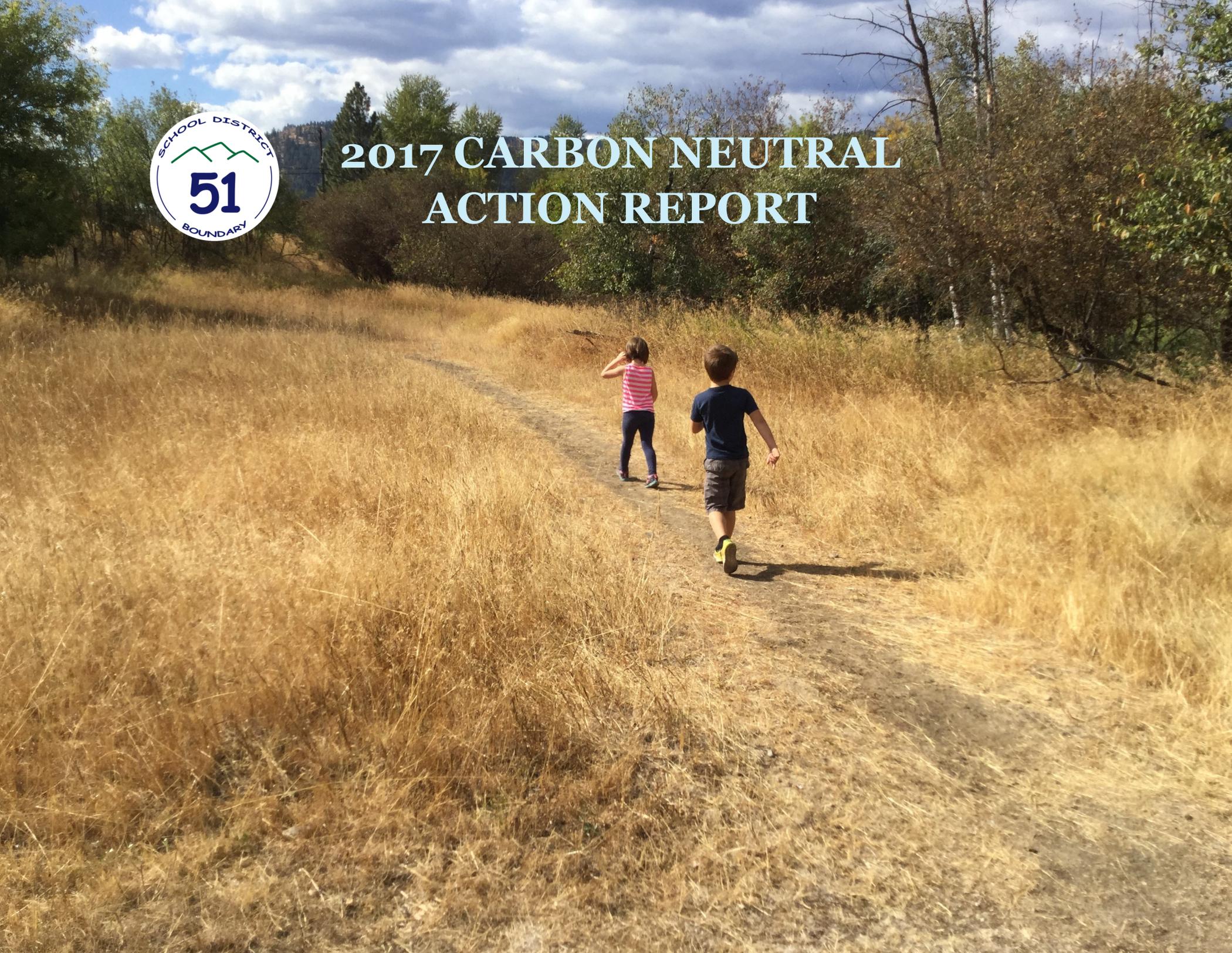




# 2017 CARBON NEUTRAL ACTION REPORT



## TABLE OF CONTENTS

### **Inside this issue:**

Executive Summary	<b>2</b>
Overview of Actions Taken in 2017	<b>3</b>
Plans for Reducing Emissions in 2018	<b>4</b>
Emissions and Offsets Summary	<b>5</b>
Greenhouse Gas Emissions by Source for the 2017 Calendar Year	<b>6</b>

## EXECUTIVE SUMMARY

This Carbon Neutral Action Report for the period January 1<sup>st</sup>, 2017 to December 31<sup>st</sup>, 2017 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2017 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2018 and beyond.

By June 30, 2018, School District 51's final *Carbon Neutral Action Report* will be posted to our website at [www.sd51.bc.ca](http://www.sd51.bc.ca).

While this year saw a slight increase in our emissions, School District 51 remains committed to reducing our greenhouse gas emissions. SD51 Board of Education believes that we should all be lifelong learners, and as a District we try to cultivate as well as teach a respect for our environment that will follow our students into adulthood. We believe that the District and its schools have a unique opportunity to reinforce positive environmental concepts, that will enhance the relationship between living things and their natural and built surroundings.



**"NEVER DOUBT THAT A SMALL GROUP OF THOUGHTFUL, COMMITTED CITIZENS CAN CHANGE THE WORLD; INDEED, IT'S THE ONLY THING THAT EVER HAS."**

**— Margaret Mead**

## OVERVIEW OF ACTIONS TAKEN IN 2017

In 2017 School District No. 51 took several actions to improve our efficiencies and help reduce our footprint.

The action we took that had the most impact this year in increasing our efficiencies was through installation of automated HVAC controls at Christina Lake Elementary, Big White Community and Beavertell Elementary Schools.

SD51 also did an upgrade to the cooling system at Grand Forks Secondary School by installing a chiller system. This system removes heat from a liquid, which then can be circulated through a heat exchanger to cool equipment.



Teacher Woodlot Pro-D

The lighting upgrades at Grand Forks Secondary, Christina Lake Elementary School and the Grand Forks bus garage will also have a continual impact on our overall emissions.

In October, an educational opportunity for our District presented itself through an invitation to teachers from the Boundary Woodlot Association to spend a day in a local woodlot with woodlot owners, environmental scientists from forestry, and the Ministry, to engage in learning about woodlot management and forestry practices.

## PLANS FOR REDUCING EMISSIONS IN 2018

In 2018, School District 51 plans to continue to find ways to move forward with energy saving upgrades. Several school enhancement projects are in the queue:

- West Boundary Elementary building envelope
- Further HVAC equipment upgrades
- Lighting retrofits and replacements
- Insulation of windows and doors at J.A. Hutton and West Boundary Elementary Schools
- Two new 76 passenger diesel buses with upgraded emission controls
- Continue to run school recycling programs

We are committed to being responsible environmentally, and the District will continue to look for opportunities through a continuous improvement approach to energy management.

Collectively these changes will continue to support us as we strive to reduce our carbon footprint in 2018.



Grade 6/7 Students Birdwatching at Boothman's Oxbow

## 2017 GREENHOUSE GAS EMISSIONS AND OFFSETS APPLIED TO BECOME CARBON NEUTRAL

<b>School District No. 51 (Boundary) GHG Emissions and Offset for 2017 (tCO<sub>2</sub>e)</b>	
<b>GHG Emissions created in Calendar Year 2017</b> (from SMARTTool Homepage):	
Total Emissions (tCO <sub>2</sub> e)	971
Total Offsets (tCO <sub>2</sub> e)	721
<b>Adjustments to GHG Emissions Reported in Prior Years</b> (from SMARTTool Homepage):	
Total Emissions (tCO <sub>2</sub> e)	0
Total Offsets (tCO <sub>2</sub> e)	0
<b>Grand Total Offsets for the 2017 Reporting Year</b> (from SMARTTool Homepage):	
<i>(This is the total of emissions that must be offset for Reporting Year 2017)</i>	
Grand Total Offsets (tCO <sub>2</sub> e)	721

**Retirement of Offsets:**

In accordance with the requirements of the Greenhouse Gas Reduction Targets Act and Carbon Neutral Government Regulation, *School District No. 51 (Boundary)* (**the Organization**) is responsible for arranging for the retirement of the offsets obligation reported above for the 2017 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 4, 2018

Name (please print)

Mr. Kevin Argue

Title

Superintendent of schools

# Part 1: CNAR Survey

## 1. General Information

Name: Charlene Wiebe

Contact Email: charlene.wiebe@sd51.bc.ca

Organization Name: School District No. 51 (Boundary)

Sector: School District

## 2. Stationary Sources (eg. Buildings, Power Generators): Fuel Combustion, Electricity use, Fugitive Emissions.

During 2017, did your organization take any of the following actions to support emissions reductions from buildings? (please select all that apply)

Performed energy retrofits of the organization's building(s)

2. Stationary Sources - Other? Please specify: - Lighting upgrades at Grand Forks Secondary, Christina Lake Elementary and the Grand Forks bus garage

If you selected "*Performed energy retrofits of the organization's building(s)*":

How many buildings were retrofitted?: 4

If you selected "*Built, or are building new LEED Gold or other "Green" buildings*":

How many new "Green" buildings?:

Did your Organization perform any retrofits during 2017? Please describe briefly:

- Upgraded the cooling system at Grand Forks Secondary School by installing a chiller system
- Automated heating/cooling controls at Christina Lake Elementary, Big White Community and Beaverdell Elementary Schools.

## 2a. Stationary Sources (eg. Buildings, Power Generators): Fuel Combustion, Electricity use, Fugitive Emissions.

Please briefly describe your organization's plans to continue reducing emissions from its stationary sources:

### a) Over the next 1-5 years

- insulation of windows and doors at J.A. Hutton and West Boundary Elementary Schools
- West Boundary Elementary building envelope
- further HVAC equipment upgrades

### b) Over the following 6-10 years

Unknown at this time.

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

During 2017, did your organization take any of the following actions to support emission reductions from its mobile sources? (please select all that apply)

Took steps to drive less than previous years

3) Mobile Sources - Other? Please specify: This year more meetings were attending remotely/virtually.

If you selected "*Replaced existing vehicles with more fuel efficient vehicles (gas/diesel)*":

How many vehicles?:

If you selected "*Replaced existing vehicles with hybrid or electric vehicles*":

How many vehicles?:

## 3a. Mobile Sources (Vehicles, Off-road/portable Equipment): Fuel Combustion:

Please briefly describe your organization's plans to continue reducing emissions from its mobile sources:

### a) Over the next 1-5 years

- Replace 2 older model 76 passenger diesel buses with 2 new 76 passenger diesel buses with upgraded emission controls.
- Attend fewer out of town meetings by attending via goto meeting or conference call

### b) Over the following 6-10 years

## 4. Supplies (Paper): Indicate which actions your PSO took in 2017:

During 2017, did your organization take any of the following actions to support emissions reductions from paper supplies? (please select all the apply)

None of the above

4) Supplies (Paper): Indicate which actions your PSO took in 2017: - Other? Please describe briefly: An internal audit of paper supplies was done which reduced purchasing of paper. This reflects our commitment to hold electronic meetings, reduce waste as well as continue to recycle and use less paper as a whole.

If you selected "*Had a policy requiring the purchase of recycled content paper*":

State the required recycled content here (30%, 50%, 100%):

If you selected "*Had a policy requiring the purchase of alternate source paper (bamboo, hemp, wheat, etc)*", which type of alternate source paper did you use?

Please briefly describe your organization's plans to continue reducing emissions associated with its office paper use in future years.

We will continue to reduce our paper purchase order and encourage continued reduction in photocopying as well as an increase in using electronic filing and electronic meetings.

## 5. Other Sustainability Actions

### a) Business Travel

During 2017, did your organization take any of the following actions to support emissions reductions from business travel? (please select all that apply)

Encouraged alternative travel for business (e.g. bicycles, public transit, walking); Encouraged or allowed teleworking or working from home

### b) Education/Awareness

During 2017, did your organization have any of the following programs or initiatives to support sustainability education and awareness? (please select all that apply)

### c) Other Sustainability Actions

During 2017, did your organization have any of the following programs or initiatives to support sustainability? (please select all that apply)

An operations policy or program to facilitate the reduction and diversion of building occupant waste (e.g., composting, collection of plastics, batteries) from landfills or incineration facilities