

School District No. 51(Boundary)



# 2021 CARBON NEUTRAL ACTION REPORT



# EXECUTIVE SUMMARY

## School District No. 51 (Boundary)

**Title: 2021 PSO Climate Change Accountability Report**

**Organization: Board of Education of School District No. 51(Boundary)**

- This Carbon Neutral Action Report for the period January 1st, 2021 to December 31st, 2021 summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2021 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2022 and beyond.

By June 30, 2022, 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).

- SD51 Board of Education continues to believe 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.

## Overview of Actions

In 2021 School District No. 51 continued to strive to improve our efficiencies and help reduce our footprint. The actions we took in 2021 that had the most impact increasing our efficiencies were:

- Audit the power supply to the bus garages for future planning of electric bus purchase.
- Added building management system controls to the HVAC system
- Completed energy audit at our 3 largest energy consuming schools
- Completed irrigation redesign for 2 schools for more efficient water usage
- Upgraded air handler unit at Dr. D.A. Perley School
- Replaced existing lighting to LED lights on exterior of Dr. D.A. Perley School
- Replaced classroom lighting to LED lighting in the science wing of Grand Forks Secondary School
- Replaced office lighting to LED lighting at Greenwood Elementary School
- Continued improvement of air leakage at West Boundary Elementary School
- Started planning for the replacement of the water tower at West Boundary Elementary School
- Created plan for replacement of the exhaust fans at Grand Forks Secondary School
- At Christina Lake Elementary School lighting controls were tied to occupancy in the building to reduce energy consumption
- Added a heat recovery ventilator in Grand Forks Secondary School
- Applied for funding to support the purchase of 2 electric school buses

## Success Stories in 2021

We are continuing to see consistent trends within our school communities to promote a lifelong habit of recycling and assign importance to a proactive lifestyle. We continue to offer an Environmental Science class as part of the high school curriculum and in 2022 we also offered a District Outdoor Education program for elementary students.

School District No. 51 (Boundary) also continues to promote an active lifestyle and we continue to see staff members choosing to walk, ride their bikes, or commute together to work. This trend seems to be consistent amongst students as well.

As 2021 has continued to challenge school communities to find alternate ways to hold meetings, interviews, and professional development events, we have continued to see reduced travel as well as paper consumption.

### **Plans for Reducing Emissions**

**In 2022, School District No. 51 plans to continue to find ways to move forward with energy saving upgrades. We have completed the energy audits at our 3 highest energy consuming schools. From these energy audits we have identified some areas that can be upgraded to reduce our carbon footprint. Amongst these are adding heat lock outs, upgrading to variable frequency drive motors and or pumps, continued LED lighting upgrades. The District also is looking into the viability of changing coolants used in the HVAC systems to a more efficient fluid to reduce energy consumption. We are constantly working on and with the direct digital controls that work with the building management software. We have increased the maintenance schedule of the HVAC system to ensure that we are running at the most efficient levels possible.**

**Our fleet has been reduced from 18 buses to 15 diesel buses. We have also applied for funding support to purchase 2 new electric buses. The white fleet or service vehicles have also been upgraded to maintain a certain vehicle efficiency including 1 electric car.**

**The District is working toward creating a long-range plan for capital spending that has carbon reduction, as a main focal point, when choosing projects.**

School District No. 51 (Boundary) 2021 GHG Emissions and Offsets Summary	
<b>GHG Emissions created in Calendar Year 2021</b>	
<i>[See <a href="#">Appendix 1</a> for instructions on how to access your 2021 emissions data from the Clean Government Reporting Tool (CGRT). Cells A through E below are identified in <a href="#">Figure 1</a>; cell F is identified in <a href="#">Figure 2</a>.]</i>	
Total Emissions (tCO <sub>2</sub> e)	537
Total BioCO <sub>2</sub>	9.66
Total Offsets (tCO <sub>2</sub> e)	725
<b>Adjustments to Offset Required GHG Emissions Reported in Prior Years</b>	
Total Offsets Adjustment (tCO <sub>2</sub> e)	435
<b>Grand Total Offsets for the 2021 Reporting Year</b>	
Grand Total Offsets (tCO <sub>2</sub> e) to be Retired for 2021 Reporting Year	1498
Offset Investment (\$25 per tCO <sub>2</sub> e) <i>[Grand Total Offsets to be Retired x \$25/tCO<sub>2</sub>e]</i>	\$37,450

- i. *[Note, BioCO<sub>2</sub> is included in Total Emissions but not Total Offsets. For K-12 and Post-Secondary organizations, and BC Transit, Total Offsets will not equal Total Emissions minus Total BioCO<sub>2</sub> because offset exempt emissions for buses are included within Total Emissions.]*
- ii. *Emissions and offset investment amounts will be validated by CAS prior to distributing invoices.*
- iii. *You must round "Grand Total Offsets to be Retired" to a whole number (no decimal places) before multiplying by \$25 (e.g., 43.2 = 43, 43.5 = 44).]*

**Retirement of Offsets:**

In accordance with the requirements of the *Climate Change Accountability 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 2021 calendar year, together with any adjustments reported for past calendar years (if applicable). The Organization hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy (the Ministry) 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.



*May 31, 2022*

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**Signature**

**Date**

*Anna Lautard*

*Superintendent*

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**Name (please print)**

**Title**