

Memorandum to the Board of Trustees

FROM: Johan Glaudemans, Secretary Treasurer

DATE: May 24, 2022

SUBJECT: 2021 PSO Climate Change Accountability Report

For Information

Introduction

The District reports annually (on a calendar year basis) on its activities related to Climate Change and its efforts to reduce Carbon Dioxide output, which contributes to global warming. In so doing, the District provides reporting to the Province and other stakeholders on its efforts towards its impact on climate change.

Background

Our public sector is leading by example. Each year since 2010, B.C. has proudly achieved carbon neutral operations, maintaining a net impact of zero greenhouse gas (GHG) emissions across public sector organizations (PSOs) including health authorities, school districts, universities, colleges, institutes, Crown corporations and government offices. Within we fully participate in this Province wide effort.

Information

Each year, the Board updates its 5-Year Capital Plan that outlines various facilities and transportation initiatives to reduce the district's carbon footprint. We install LED lighting, upgrade building envelopes, replace or improve mechanical systems, all to reduce emissions. Building retrofits aim to reduce the district's carbon footprint, increase efficiencies, and reduce operating costs. The following building designs and retrofits were completed in 2021-2022:

Brent Kennedy Elementary School:

Upgraded four rooftop unit compressors.

Kootenay River Secondary: New air handler for the annex building.

Trafalgar Middle School: renovation, dust collector system upgrade.

WE Graham School: mechanical upgrade classrooms.

Salmo Secondary School: installed new variable frequency drives (VFD) for circulation pumps.

Direct Digital Control (DDC): Additional new digital controls were installed in various buildings.

Nearly all DDCs in district facilities have now been modernized.

All Schools: To date 11 schools have had complete interior and exterior LED lighting upgrades.

Replaced all air filters to Minimum Efficiency Reporting Values (MERV) 13.

The Green House Gas (GHG) offsets in 2021 represented 2,604 (tCO₂e) valued at \$25 per tonne, which represents a total Offset Investment of \$65,100.

Recommendation/Conclusion

We submit the report to the Board for its consultation. It will be submitted to the Province and it will be posted on the website after submission.



School District 8
Kootenay Lake

2021 PSO Climate Change Accountability Report

Prepared May 2022

sd8.bc.ca

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Prepared: May 24, 2022

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Declaration Statement

Title: 2021 PSO Climate Change Accountability Report

Organization: The Board of Education, School District No. 8 Kootenay Lake

Declaration Statement: This Climate Change Accountability Report for the period January 1, 2021, to December 31, 2021, summarizes our emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2020 and 2021 to reduce our greenhouse gas emissions and our plans to continue reducing emissions in 2022 and beyond.

By June 30, 2022, the School District No. 8 Kootenay Lake's final 2021 Climate Change Accountability Report will be posted to our website at www.sd8.bc.ca



Overview

Each year, the Board updates its 5-Year Capital Plan that outlines various facilities and transportation initiatives to reduce the district's carbon footprint. We install LED lighting, upgrade building envelopes, replace or improve mechanical systems, all to reduce emissions. Building retrofits aim to reduce the district's carbon footprint, increase efficiencies, and reduce operating costs. The following building designs and retrofits were completed in 2021-2022:



Trafalgar Renovation

Brent Kennedy Elementary School: Upgraded four rooftop unit compressors.
Kootenay River Secondary: New air handler for the annex building.

Trafalgar Middle School: renovation, dust collector system upgrade.

WE Graham School: mechanical upgrade classrooms.

Salmo Secondary School: installed new variable frequency drives (VFD) for circulation pumps.



Unit Ventilator

Direct Digital Control (DDC): Additional new digital controls were installed in various buildings. Nearly all DDCs in district facilities have now been modernized.

All Schools: To date 11 schools have had complete interior and exterior LED lighting upgrades. Replaced all air filters to Minimum Efficiency Reporting Values (MERV) 13.

The following building retrofits are planned for 2022-2023:

- Central School Building: air handling upgrade and HVAC improvements
- Mount Sentinel Secondary School: mechanical upgrade phase 2
- Kootenay River Secondary School: geothermal project formal application submission
- Trafalgar Middle School: life safety sprinkler system installation (phase 1) and mechanical upgrades including air handling unity (AHU-2) heating coil installation
- DDC (Direct Digital Control): district upgrades continued

As fleet vehicles are replaced, the District plans to acquire EV, PHEV or hybrid vehicles. The District is awaiting delivery of our two new electric buses. The electric school bus rollout has been delayed due to shortage in components. We are currently exploring an opportunity to purchase two additional electric buses, bringing our electric bus fleet to four.

Capital purchases of this nature will be dependent on bylaw capital funding that is provided. The District has plans to replace its bus fleet with full EV buses in the future. As mentioned above such purchases are to commence in 2022. All new non-service fleet vehicles are planned to be electric or hybrid.

Bus charging stations have arrived and will be installed this summer.



New Efficient Heat Pumps



The district's "Go Green" Initiative includes low carbon initiatives in all elements of the district's operations including school-based waste reduction and recycling programs.



Mount Sentinel Expansion Tanks



New piping for heating system at Mount Sentinel

The district's paper reduction initiative uses software to count and reduce usage of paper District wide in all employee categories. An employee E-Bike purchase program was implemented. For a full listing of the district's school and departmental Go Green Initiatives, please visit www.sd8.bc.ca/go-green.

Emissions and Offset Summary Table

School District No. 8 - Kootenay Lake's 2021 GHG Emissions	
GHG Emissions created in Calendar Year 2021	
Total Emissions (tCO ₂ e)	3,346
Total BioCO ₂	38
Offsets	
GHG Emissions created in Calendar Year 2021	
Total Offsets (tCO ₂ e)	2,604
Adjustments to Offset Required GHG Emissions Reported in Prior Years	
Total Offsets Adjustment (tCO ₂ e)	(0)
Grand Total Offsets for the 2021 Reporting Year	
	2,604
Grand Total Offsets (tCO ₂ e) to be Retired for 2021 Reporting Year	X \$25 per tCO ₂ e
Offset Investment	\$65,100

Retirement of Offsets Statement

In accordance with the requirements of the Climate Change Accountability Act and Carbon Neutral Government Regulation, School District No. 8 (Kootenay Lake) (**the Organization**) is responsible for arranging for the retirement of the offset 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.

Executive sign-off

_____	<u>May 24, 2022</u>
Signature	Date
<u>Trish Smillie</u>	<u>Superintendent & Chief Executive Officer</u>
Name	Title