

2024 Climate Change Accountability Report

School District 54 (Bulkley Valley)



Declaration Statement

Title: 2024 PSO Climate Change Accountability Report

Organization: The Board of Education, School District 54 Bulkley Valley

Declaration statement:

This PSO Climate Change Accountability Report for the period January 1, 2024 to December 31, 2024 summarizes our greenhouse gas (GHG) emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2024 to minimize our GHG emissions, and our plans to continue reducing emissions in 2025 and beyond.

Overview

In 2024, we have implemented initiatives to reduce the district's carbon footprint. We have upgraded building envelopes, HVAC systems, LED lighting, computer monitoring equipment, etc with the intention to reduce emissions and lower our operating costs.

The following is an overview of the retrofits and improvements made throughout our district in 2024.



Telkwa Elementary building envelope install

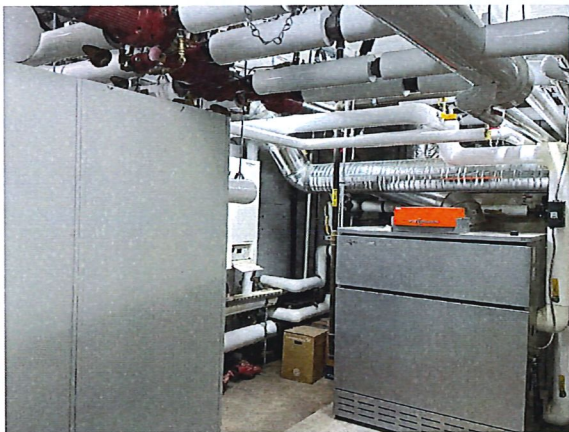


Level 2 charger at School Board Office

2024 Key Projects

Telkwa Elementary

- **HVAC upgrade** includes the implementation of heat pump units. These are large stacked refrigerant units that cycle in stepped stages; the more demand in heating or cooling the more stages that are enabled.
- **Heat Recovery Ventilator** has been added to the site. The HRV unit strips the heat from the exhaust air and uses the energy to pre-heat the incoming fresh air used for ventilation.
- **Variable Air Volume (VAV) upgrade.** 12 VAV boxes were installed to the ventilation system. The VAV boxes reduce the air volume in unoccupied spaces and is controlled by the buildings DDC system. The VAV reacts to heating and CO2 needs, reducing energy consumption by 20-30% from the previous system.
- **Replacement of the buildings DDC system.** This computer system controls the buildings heating ventilation. This equipment helps increase the buildings comfort level while decreasing its energy consumption.
- **Upgraded building envelope.** This included replacing original windows with triple pane, low-E windows with new blinds. To reduce thermal bridging, new strapping and vented ridged insulation have been added. This will help with heat loss as well as reducing trapped moisture. New metal cladding to cover was installed to cover the insulation upgrade.
- **Off site Bio-mas system utilization.** This building also takes advantage of the municipality's Bio-mas system. The DDC system allows for the use of the most efficient energy source to be utilized.

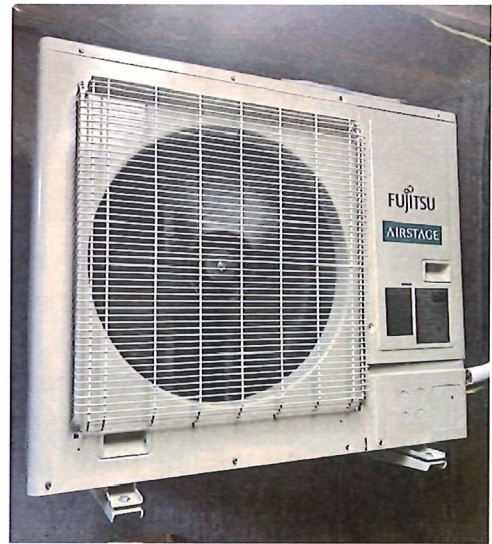


Telkwa Elementary HVAC project



School Board Office

- **School Board Office server room heat pump.** This heat pump was at the end of its life cycle and was replaced with a new, more efficient heat pump.



Server room heat pump replacement



LED light upgrade at Twain Sullivan

Twain Sullivan Elementary

- **Starting envelope upgrade** at Twain Sullivan Elementary. This upgrade, like the one completed at Telkwa Elementary, includes replacing original windows with triple pane low-E windows, all with new blinds. Strapping and adding vented ridged insulation to help with heat loss, reduce thermal bridging and trapped moisture. New metal cladding will be installed to cover the insulation upgrade.
- **Parking lot LED lighting upgrade.** A new lighting pole was added with 4 LED lights.

Muheim Elementary

- **LED lighting upgrade.** LED lights were installed in gymnasium at school site.

Smithers Secondary

- **Retained an engineering firm to study the school's heating ventilation systems.** This helps us understand the condition of the system and identify options for life cycle replacement. The study is intended to reduce energy and greenhouse gas emissions while aligning with the province's carbon neutral initiative.
- **Studying people counter integration** to HVAC for large meeting spaces (theatre, gyms, etc.). This unit counts people in and out of a space and will adjust necessary ventilation volume so the system is not over ventilating when the space is not fully occupied.

2024 GHG Emissions and Offsets Summary Table

SD 54 Bulkley Valley 2024 GHG Emissions and Offsets Summary	
GHG emissions for the period January 1 - December 31, 2024	
Total BioCO ₂	20.4
Total Emissions (tCO ₂ e)	1145
Total Offsets (tCO ₂ e)	856
Adjustments to Offset Required GHG Emissions Reported in Prior Years	
Total Offsets Adjustment (tCO ₂ e)	0
Grand Total Offsets for the 2024 Reporting Year	
Grand Total Offsets to be Retired for 2024 Reporting Year (tCO ₂ e)	856
Offset Investment (\$)	\$21,400

Retirement of Offsets:

In accordance with the requirements of the Climate Change Accountability Act and the Carbon Neutral Government Regulation School District No.54 (Bulkley Valley) is responsible for arranging for the retirement of the offsets obligation reported above for the 2024 calendar year, together with any adjustments reported for past calendar years (if applicable). The Organization hereby agrees that, in exchange for the Ministry of Energy and Climate Solutions (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 Signoff:



 Dave Margem
 Secretary Treasurer

April 2, 2025.

 Date

