(Picture: Stitó:s Lá:lém Totí:lt Elementary / Middle School)

Chilliwack School District 33 - Partners in learning!

Located in the Fraser Valley of British Columbia, we are a learning community of over 14,000 students, served by 1,800 teachers and support staff. There are twenty Elementary schools, five middle schools (grades 6 to 8) and five secondary schools (grades 9-12).

2022 PSO Climate Change Accountability Report

Chilliwack School District

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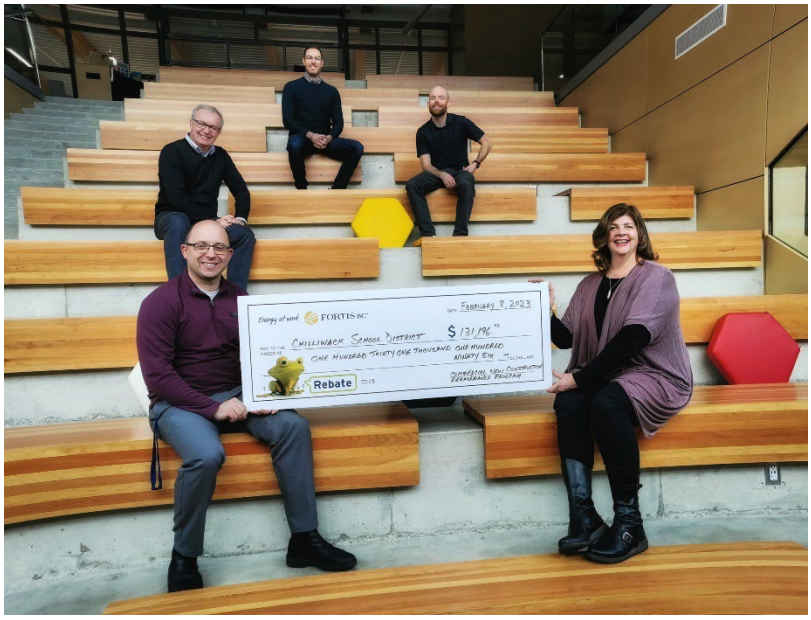
EXECUTIVE SUMMARY

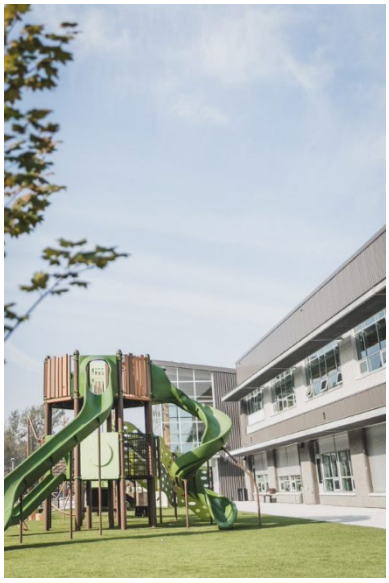
The Chilliwack School District is committed to promoting environmental sustainability by taking various green initiatives aimed at minimizing harmful greenhouse gas emissions. Thanks to our partnerships with B.C. Hydro, Fortis, and the Ministry, we have successfully implemented several projects that have helped us achieve this goal. One of our proudest achievements is the construction of the state-of-the-art Stitó:s Lá:lém Totí:lt Elementary Middle School. By engaging in extensive energy modeling and consultation, we were able to create a LEED-certified school that not only delivers substantial energy savings and climate resilience, but also has provided the best learning environment for the students of today and tomorrow. The building has utilized high-efficiency mechanical systems throughout that are designed to deliver reliable service while improving the comfort of our students and staff. Moreover, our heating plants will be powered by D.D.C. software that not only optimizes building efficiency but also helps to reduce the district's overall carbon emissions.

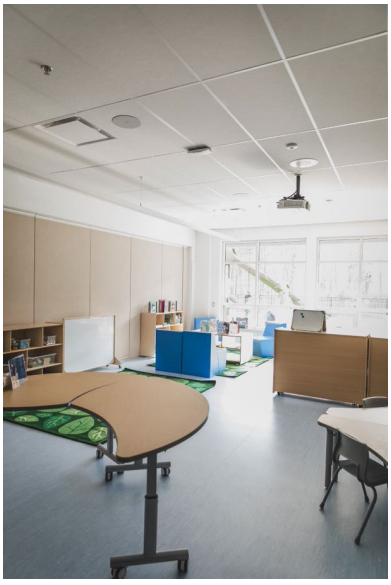


(Picture: Fortis Incentive rebate ceremony at Stitó:s Lá:lém Totí:lt Elementary / Middle School)

Our school district promotes a sustainable culture, with our staff, students, parents, and community partners actively engaging in conservation activities such as turning off lights, recycling, and composting on a daily basis. These efforts align with our District environmental goals and are further supported by student-led "Green Teams" who share their knowledge and enthusiasm with others. We are also proud of our district's move towards electronic document storage as part of our efforts to reduce paper consumption.

Even with these efforts, our school district acknowledges that we still generate GHG emissions. However, we are dedicated to careful planning and strategizing to further reduce our carbon footprint and achieve our goals for future generations.





(Picture: Stitó:s Lá:lém Totí:lt Elementary / Middle School)

Declaration statement: This PSO Climate Change Accountability Report for the period January 1, 2022 to December 31, 2022 summarizes our greenhouse gas (GHG) emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2022 to reduce our GHG emissions, and our plans to continue reducing emissions in 2023 and beyond

OVERVIEW:

PART 1. EMISSION REDUCTIONS: ACTIONS & PLANS

A. Stationary Sources

The Chilliwack school district is committed to reduce GHG emissions through a variety of building upgrades. The upgrades not only reduce harmful emissions but also reduce energy costs and replace aging infrastructures. Through Energy tracking software we are able to prioritize our building assets and target the ill performers.

Mechanical - Boiler Optimization

- High efficiency condensing boilers installed at Stitó:s Lá:lém Totí:lt Elementary / Middle School.

- System designed to LEED Gold Standards lowering energy and operational maintenance costs.

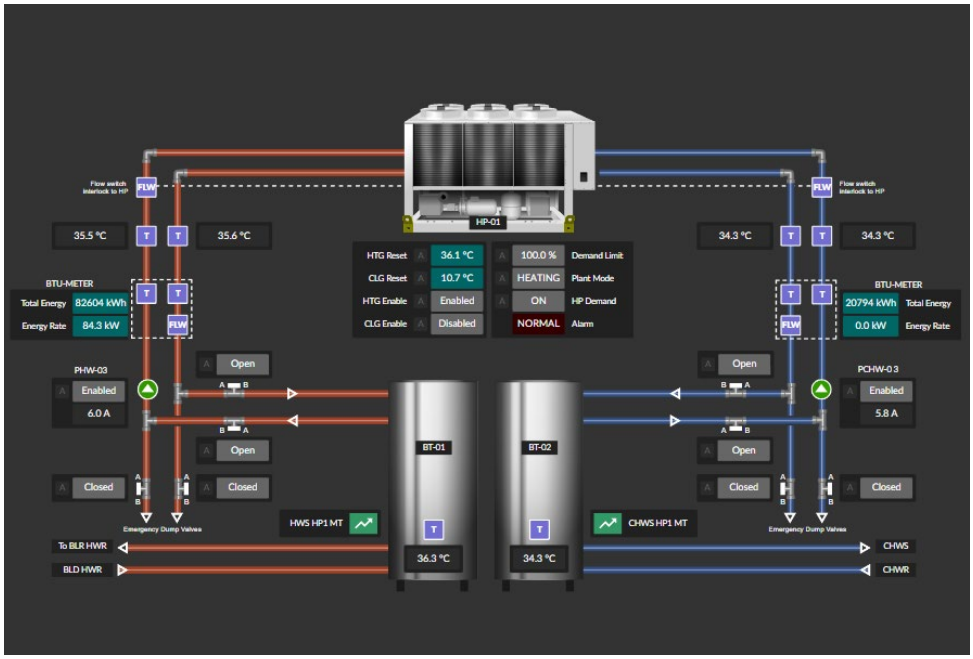
*(Picture: **left** Stitó:s Lá:lém Totí:lt Elementary / Middle on demand Domestic hot water distribution**, above** Stitó:s Lá:lém Totí:lt Elementary / Middle Greendale High Efficiency Boiler Plant)*

- High efficiency on demand hot water heater system installed at Stitó:s Lá:lém Totí:lt Elementary / Middle.

HVAC Control Upgrades

- Continued upgrades to our DDC systems to enable precise control and monitoring of the various components of our HVAC systems resulting in improved energy efficiency, comfort, and indoor air quality.

(Picture: DDC Panel and updated heat pump graphics)



HVAC Mechanical - Upgrades

Heat Recovery Wheel

- Air Side Heat Recovery – Heat Wheel utilized on New Roof top units and Stitó:s Lá:lém Totí:lt Elementary / Middle School to recover heat energy from exhaust air and transfer it to incoming fresh air.

- High Efficiency Air Source Heat Pump provide significant greenhouse gas savings and associated C02 emissions

Aermec NRP

LED Lighting Upgrade

- Exterior building and parking lot LED lighting upgrades at GW. Graham, Vedder Elementary and East Chilliwack providing improved visibility and

(Picture: Top - East Chilliwack Elementary Exterior LED Lighting upgrade, Right-GW Graham Secondary Parking lot LED Lighting upgrade, Bottom – GW Graham Interior Lighting LED Upgraded)

- Full LED corridor and classroom Lighting Upgrade at GW Graham Secondary School.

Building Envelope Upgrades

(Picture: East Chilliwack Elementary Building Envelope Upgrade)

- Ministry funded Building Envelope retrofits have reduced energy usage and heat loss by providing additional insulation.

- Upgrades have incorporated energy efficient window replacements for optimal savings and comfort.

B. Mobile Sources

- Utilizing Video conferencing to reduce driving.
- Encourage carpooling to all district events.
- Smaller more fuel-efficient Vehicles utilized in I.T. departments fleet.
- 10-year Capital plan for fleet vehicle replacement based on vehicle age, fuel consumption, and maintenance costs.
- Exploring and planning for E.V. vehicles and infrastructure requirements

(Picture: Bus drop of G.W. Graham)

C. Paper Consumption

- Power management settings have been utilized in all computers, copiers, and printers.
- Experimenting with cold press bamboo paper.
- Exploring minimum Recycled content Policy.
- Reduced Paper consumption with the use of ***PaperCut*** software and low use presets like standard double-sided printing and print release functions.

PaperCut MF

Unreleased jobs, environmental impact - summary

Jan 1, 2022 to Dec 31, 2022.

Trees Saved	*By not printing these jobs, the number of trees saved.*
CO2 Saved	*By not printing these jobs, the amount of greenhouse gases not emitted due to reduced paper production.*
Equivalent Bulb Hours	*The manufacturing energy saved from not producing paper, represented as the energy consumed by a standard light bulb in hours.*

Sheets:	291,380
Total Printed Pages:	387,171
Color Pages:	29,187
Grayscale Pages:	357,984
Value Saved:	$10,135.37
Jobs:	29,222
Trees Saved:	3.62 trees
CO2 Saved:	1,311.2 kg
Equivalent Bulb Hours:	82,557.7 hours

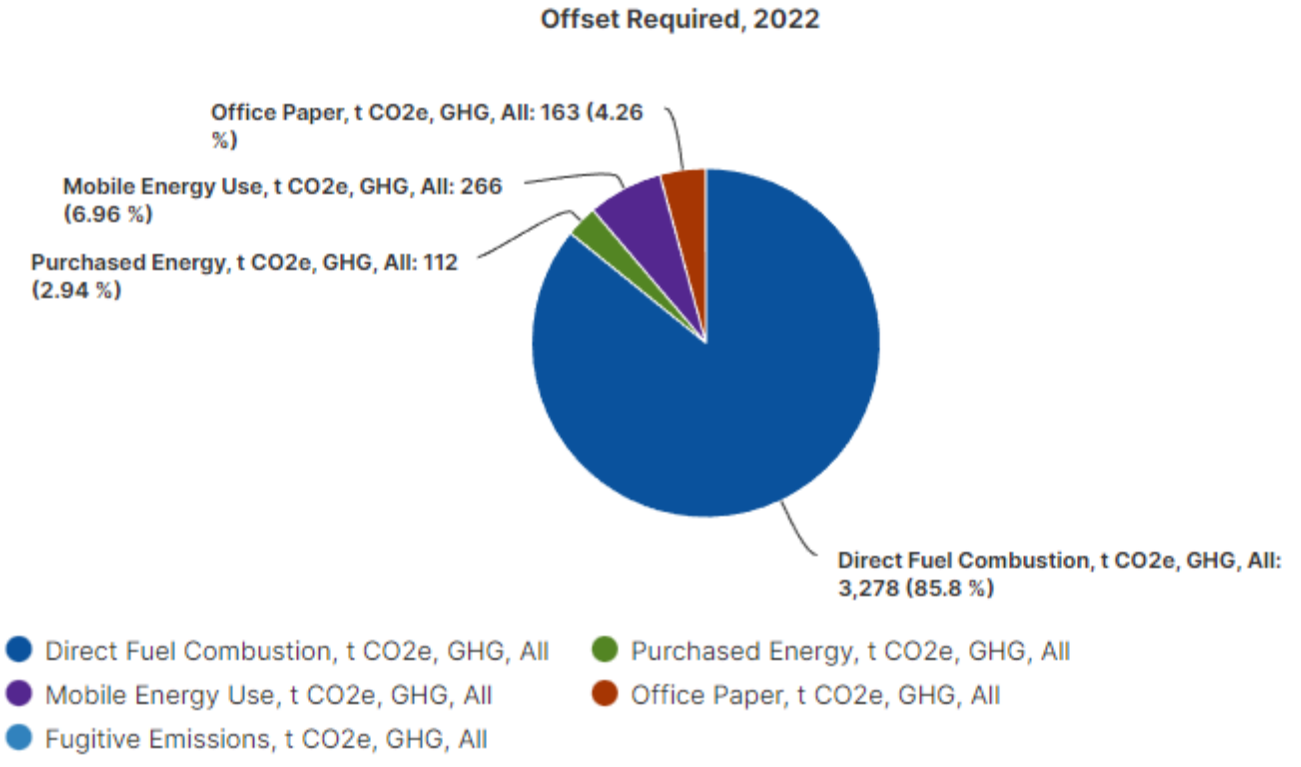
2022 GHG EMISSIONS AND OFFSET SUMMARY TABLE:

Chilliwack School District 2022 GHG Emissions and Offsets Summary	
GHG Emissions for the period January 1 – December 31, 2022	
Total BioCO_2	***42.5***
Total Emissions (tCO_2e)	***4,737***
Total Offsets (tCO_2e)	***3,819***
Adjustments to Offset Required GHG Emissions Reported in Prior Years	
Total Offsets Adjustment (tCO_2e)	***0***
Grand Total Offsets for the 2022 Reporting Year	
Grand Total Offsets to be Retired for 2022 Reporting Year (tCO_2e)	***3,819***
Offset Investment ($25 per tCO_2e)	***$95,475***

Retirement of Offsets:

In accordance with the requirements of the *Climate Change Accountability Act* and Carbon Neutral Government Regulation, The Chilliwack School District (**the Organization**) is responsible for arranging for the retirement of the offsets obligation reported above for the 2022 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.

Offset Required GHG Emissions by Activity Data Source (no Biogenic)



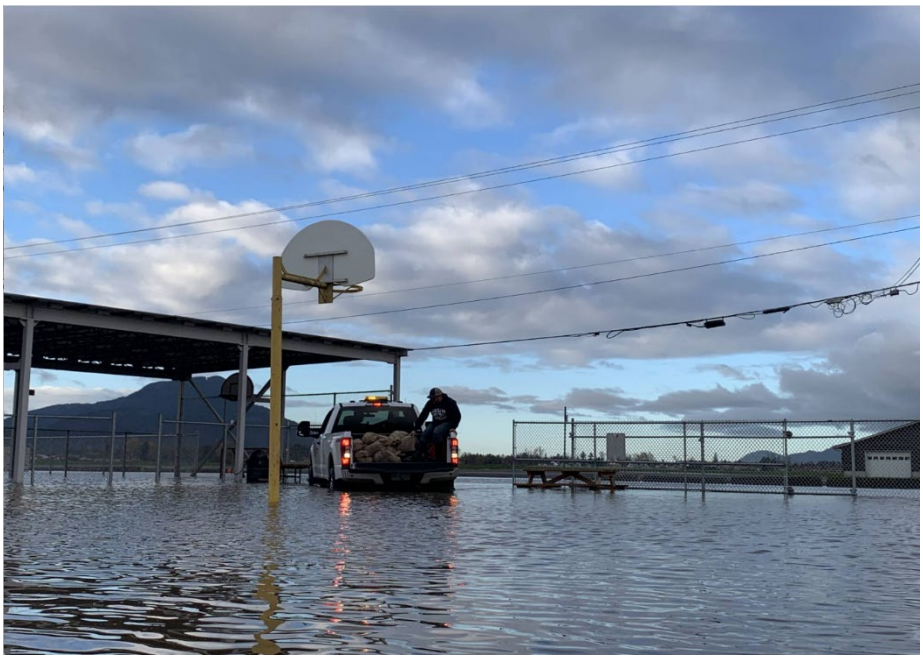
Emissions Overview:

Most of our emissions (85.8 % + 2.94% = **88.74%**) come from our buildings through the burning of natural gas and electrical consumption with the remainder coming from our paper supplies (**4.26%**) and fleet vehicles (**6.96%**).

PART 2. PUBLIC SECTOR LEADERSHIP

2A. Climate Risk Management

Addressing climate change is essential to the School Districts health and well-being. We are working on reducing our carbon emissions, but also assessing current and future climate risks to public sector buildings. Understanding climate change and the risks associated will not only help to prepare for the changes ahead but will also help in planning to protect critical infrastructure while reducing potential costs.



(Picture: Kwiyeqel South flooding and sandbagging)

The Chilliwack School District has taken several measures to address potential environmental challenges. These include:

• Incorporating flood protection measures in all new buildings and additions, with input from local authorities.
• Planning and procuring specialized equipment for flood control mitigation.
• Installing Merv 13 filters in ventilation systems to reduce airborne particles, including smoke during wildfire season.
• Reducing overall water consumption by limiting irrigation to select sites and using drought-resistant vegetation in other areas. This provides resiliency from heat waves and reduces the impact of droughts.
• Designing resilient buildings with cooling systems to address the increasing temperatures associated with climate change.

2B. Other Sustainability Initiatives

- The district has implemented "Bin be gone" recycling stations that are easily recognizable and accessible to provide convenient locations for recycling. These recycling centers have significantly reduced our overall waste and have played a vital role in minimizing our impact on the environment.

- As part of our ongoing commitment to provide clean drinking water while reducing plastic bottle waste, we have been increasing the number of water bottle filling stations throughout the district. These new filtered stations not only offer cleaner and healthier water, but also help to minimize the presence of harmful contaminants like lead. By implementing this strategy, we strive to make clean and healthy drinking water accessible to all, while also promoting a more sustainable environment.

- Our custodial operations have adopted ionized water technology to minimize our environmental impact and support eco-friendly cleaning practices across seven critical areas: energy, carbon dioxide emissions, ozone levels, smog, acidification, eutrophication, and particulate matter.

Executive sign-off:

Signature	*May 26, 2023* Date
Rohan Arul-pragasam	Superintendent
Name (please print)	Title