



2023 Climate Change Accountability Report

Prepared May 2024 in accordance with British Columbia's Climate Change Accountability Act, and the Carbon Neutral Government Regulations.

Introduction

The Vancouver School District (District) has a long-standing commitment to sustainability. For many years, the District has implemented energy conservation activities and retrofits. In 2023, these included retrofitting old lighting systems at many school sites, optimizing energy use through controls, and installing new high efficiency heating plants. These projects have reduced our utility bills, improved our operating practices, and improved the learning environment.

Education is our organization's core function, and our students and teachers connect sustainability to their learning experiences daily. Throughout the District, at dozens of schools, our community acts on sustainability - from waste reduction to food gardens to energy conservation and low carbon electrification.

Provincial Policy

The Province of British Columbia (Province) enacted the Climate Change Accountability Act (CCAA) in 2007 (formerly the *Greenhouse Gas Reduction Targets Act* GGRTA 2007). The CCAA requires, among other things, that public sector organizations (PSOs) be carbon neutral beginning in 2010, and for each year thereafter. The District is subject to this requirement.

Being carbon neutral requires that an organization:

- take action to reduce its Greenhouse Gas (GHG) emissions,
- measure and report its carbon emissions (or carbon 'footprint'), and
- purchase carbon offsets for any remaining emissions to effectively 'neutralize' the environmental impact of these emissions.

The Province has defined criteria for reporting and has developed a web-based system for tracking and reporting emissions.

Declaration Statement:

This Climate Change Accountability Report for the period January 1, 2023 to December 31, 2023 summarizes our greenhouse gas (GHG) emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2023 to minimize our GHG emissions, and our plans to continue reducing emissions in 2024 and beyond.

Retirement of Offsets:

In accordance with the requirements of the *Climate Change Accountability Act* and Carbon Neutral Government Regulation, Vancouver School District is responsible for arranging for the retirement of the offsets obligation reported below for the 2023 calendar year, together with any adjustments reported for past calendar years (if applicable). The District hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy (the Ministry) ensuring that these offsets are retired on the District’s behalf, the District 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:



May 22, 2024

Signature

Date

Helen McGregor

Superintendent / CEO

Name (please print)

Title



Superintendent Helen McGregor and students

Greenhouse Gas Emissions

2023 Emissions and Offsets

For the 2023 calendar year, our Greenhouse Gas (GHG) offset-requiring emissions were 15,818 tonnes of CO₂.

As required, we purchase certified carbon credits to offset these emissions through the Ministry of Environment. Carbon offsets are currently priced at \$25 per tonnes of CO₂ resulting in a cost of \$395,450 (+ GST).

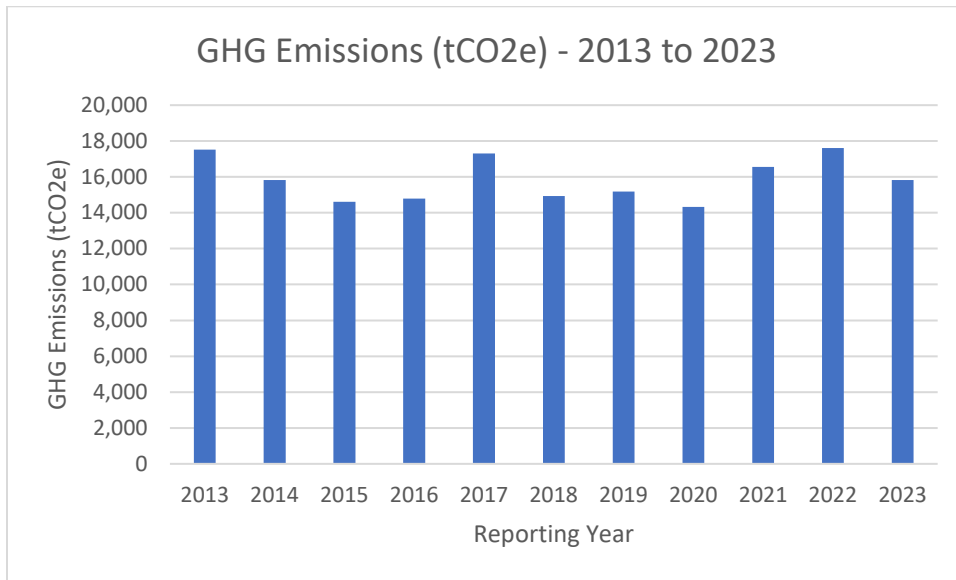
Vancouver School District 2023 GHG Emissions and Offsets Summary (tonnes of CO₂ equivalent)	
GHG emissions for the period January 1 – December 31, 2023 [Note 1]	
Total BioCO ₂	193
Total Emissions of carbon (all types) (tCO ₂ e) [Notes 2, 3]	16,011
Total Offsets (tCO ₂ e)	15,818
Adjustments to Offset Required GHG Emissions Reported in Prior Years	
Total Offsets Adjustments (tCO ₂ e)	0
Grand Total Offset for the 2023 Reporting Year	
Grand Total Offsets to be Retired for 2023 Reporting Year (tCO ₂ e)	15,818
Offset Investment \$ (\$25 per tCO ₂ e) [Note 3]	\$395,450

Notes:

- [1] GHG emissions are measured in tonnes of CO₂ 'equivalent' (tCO₂e).
- [2] Total GHG emissions includes the emissions from the biofuel component of vehicle fuels - which do not require the purchase of offsets. Offsets are only purchased for the fossil fuel component of emissions.
- [3] There may be adjustments and corrections to utility bill statements that occur following the offset calculations for each calendar year. These are reported as adjustments in prior years.

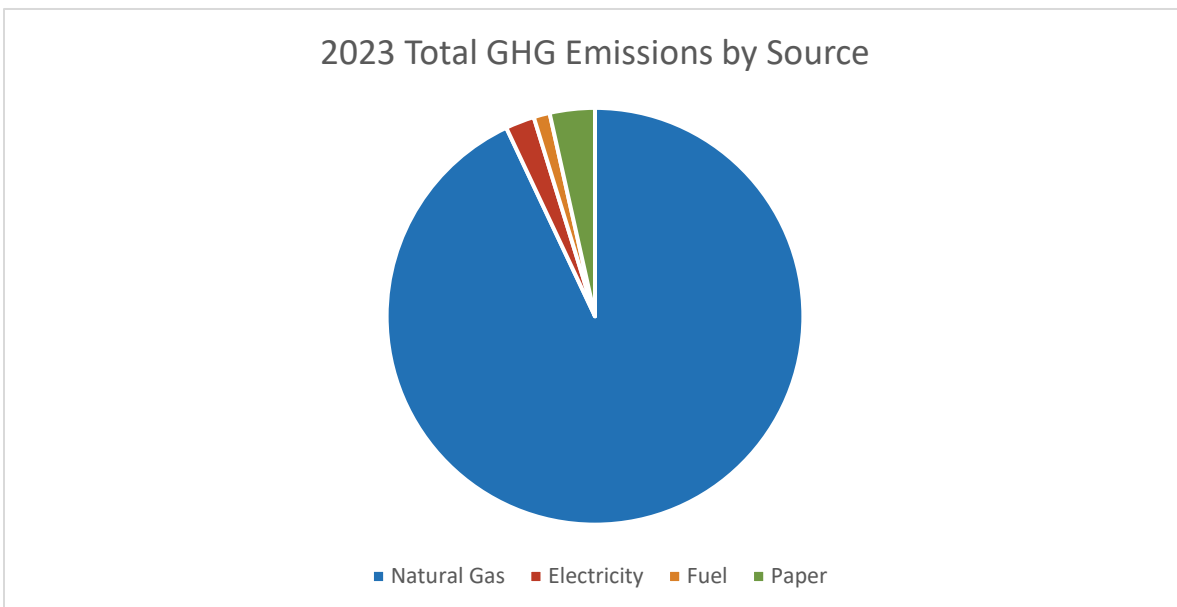
Emissions Trends

The District has calculated its 2023 GHG emissions to be 15,818 tCO₂e. The following graph shows the District's GHG emissions over the past 10 years. Emissions in 2023 have decreased by 1,789 tCO₂e in comparison with 2022. The emissions reductions realized in 2023 reflect the result of some operational efficiency adjustments to HVAC systems and the implementation of energy conservation measures. In 2024, the District will continue to plan and implement energy efficiency measures to support the overall commitment to the reduction of GHG emissions.



Emissions Profile

When emissions are broken down into subsets, the largest contributor is natural gas, accounting for 93% of all emissions; paper use accounting for 4%; vehicle fuel accounting for 1%; and electricity accounting for 2% of all emissions.



Emissions Reduction Activities 2023

Actions to Reduce Reportable Emissions in 2023

Several actions were taken in 2023 to reduce energy use and GHG emissions, including:

- upgraded the lighting systems with LED technology at nine school sites;
- upgraded a heating plant from a low efficiency system to a high efficiency system at one site;
- installed high efficiency boilers and/or heat pumps at one school through the seismic mitigation project;
- performed ‘building energy tune-ups’ at four elementary schools through the BC Hydro Continuous Optimization program resulting in both energy conservation savings and electrification opportunities;
- initiated two gas-reduction FortisBC studies at two elementary schools;
- initiated a CleanBC electrification study to explore the feasibility of retrofitting a site with air source heat pumps;
- added an electric transit van to the existing fleet serving as a service delivery vehicle.

The District has reduced emissions related to paper consumption by reducing the availability of virgin paper by limiting the purchase of paper to 30%, 50% or 100% recycled content (from contracted suppliers) when available. In 2023, the supply of paper with recycled content was limited due to a fire at the manufacturing facility. This resulted in the need for purchasing virgin paper for part of the year.

As a result of these actions, the following conservation savings and facility improvements have been achieved:

- reduced or avoided electricity consumption of 435,000 kWh annually;
- reduced or avoided natural gas consumption of 3,496 GJ annually;
- reduced or avoided utility bill spending of over \$80,000 annually;
- improved occupancy/building comfort;
- improved lighting within upgraded classrooms;
- improved seismic restraint of lighting fixtures within the District.



The District's newest electric fleet vehicle will be delivering lunches to students every day.

Actions to Reduce Non-District GHG Emissions in 2023

The District has participated in several activities that reduce GHG emissions in the community that are not specifically “in scope” for our carbon neutral required reporting. These typically focus on active transportation such as Bike to School Week events, corporate membership in Vancouver’s bike share program, and supporting schools on active travel planning to reduce congestion and improve active commuting to and from school sites.

Actions to Enhance Overall Sustainability in 2023

The District has taken actions that improve the overall sustainability of our schools and community.

These include:

- provided sustainability grants to 36 elementary and annex schools and 10 secondary schools to support student and educator-led initiatives at school;
- 95 school sites received donated starter plants for their educational gardens;
- continued supporting students to organize the District-wide Sustainability Conference (VSBSC) to network with each other and learn from leading sustainability thinkers;
- coordinated sustainability-focused professional development opportunities, including the “Take it Outside” conference and a mentorship series for green club teacher sponsors;
- developed an infographic for educators - *Navigating Environmental Engagement* – illustrating the pathway that students take over their school career, and how appropriate early experiences with outdoor learning can lead to environmental advocacy and sustainability behaviours in secondary school.



Students from Hudson Elementary started a recycling club with their sustainability grant funds.

Future Activities

In 2024 and beyond, numerous activities are underway to continue to reduce our energy use and carbon emissions, and to improve the overall sustainability of our District.

Actions to Reduce Reportable Greenhouse Gas Emissions in 2024

Actions planned for 2024 and beyond include:

- replacing inefficient lighting systems;
- installing high efficiency boilers and/or heat pumps;

- implementing 'building energy tune-ups';
- upgrading building control systems to improve building efficiency and occupant comfort;
- continuing with new facility designs that ensure low carbon, low cost, and low energy intensive facilities become the standard for the District;
- piloting the use of sugar cane fiber paper as a replacement for virgin and recycled content paper.

Actions to Reduce Non-District GHG Emissions in 2024 and Onward

Several activities help reduce carbon emissions in our community that are not considered 'in scope' for our carbon neutral reporting requirements. These include:

- promoting active transportation initiatives like 'Bike to School/Work Week', 'Walking School Bus', 'School Streets', and cycling and pedestrian education programming;
- supporting schools in school active travel planning to increase understanding of travel options for school staff and students and to make infrastructure improvements;
- improving bike and scooter parking infrastructure at schools to support active travel options for staff and students.

Actions to Enhance Overall Sustainability in 2024

Our efforts will continue in 2024. Specific actions include:

- updating and implementing the [Environmental Sustainability Plan](#);
- facilitating sustainability and outdoor learning focused professional development opportunities for educators;
- developing further resources for schools to take steps towards sustainability, specifically a guideline for climate-ready gardens and a climate education digital professional development module.

Closing

The District is proud to maintain its commitment to promoting sustainability within our schools and our community. We will continue to reduce energy use and our GHG emissions. We continue to build on past efforts and work to incorporate sustainability into all aspects of our operations.



A student in the garden at Vancouver Technical School