WEST VANCOUVER SCHOOLS
2022 PSO CLIMATE CHANGE ACCOUNTABILITY REPORT

Title: 2022 PSO Climate Change Accountability Report

Organization: West Vancouver Schools (School District 45)

PART 1. Legislative Reporting Requirements

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 minimize our GHG emissions, and our plans to continue reducing emissions in 2023 and beyond.

Emission Reductions: Actions & Plans

A. Stationary Sources (e.g., buildings, power generation)

West Vancouver Schools' 2022 capital projects included HVAC system installations that have significant impacts on the school district's energy consumption. The following are projects that were completed:

- **Boiler Renewal.** Under the Carbon Neutral Capital Program (CNCP), West Vancouver Schools replaced an atmospherically vented boiler at Ecole Cedardale, which was estimated at only 65-70% efficiency, with new higher-efficiency condensing boiler. This replacement is projected to reduce GHG emissions by 7.6 (tCO2e) annually. With limited funding available to a school district of its size, West Vancouver Schools aims to keep this business model of replacing systems that have come to the end of their useful service life with efficient components.
- **HVAC System Installations.** Funded under the School Enhancement Program (SEP), the school district installed new ventilation systems at Caulfeild Elementary and Eagle Harbour Montessori. These two facilities did not have ventilation systems previously and although these installations added to the district's energy consumption, considerations were made to ensure system components such as boilers, air handling units, and unit ventilators were efficient models. Additionally, the schools were programmed into the district Digital Control Direct (DDC) system, which provides the ability to manage their energy consumption.

- **HVAC Device Audits.** In November 2022, a mechanical consultant was commissioned to conduct an audit of all the HVAC devices in the district's facilities. The assessment included items such as dampers, sensors, and other controls, to verify if these devices performed as intended. Deficiencies were communicated to the school district's HVAC maintenance contractor for resolution.
- **Biomass Furnace Study.** The school district explored the feasibility of biomass technology for heating. The prospect of using wood as an alternative renewable fuel source was compelling to pilot the concept at the Facilities yard, given the yard's access to wood waste from its own operations or from nearby development construction. West Vancouver Schools can look to pilot this initiative as funding becomes available.

B. Mobile Sources (e.g., fleet vehicles, off-road/portable equipment)

Clean Fleet Plan

West Vancouver Schools does not maintain a large fleet of vehicles and does not have a formal Clean Fleet Plan. As stated in last year's report, vehicles of the school district's Facilities department require heavy cargo load capacities that were not readily available in the market. Although there are no current plans to replace fleet vehicles due to fiscal constraints, consideration for electric vehicles remains. Potentially, the Facilities department may replace an existing gas-powered van issued to the district locksmith. The smaller payload would be suitable for an electric vehicle.

The BC Hydro voltage conversion project affecting Sentinel Secondary commences in 2023 and is scheduled to be completed in 2024. The school district is working with its electrical consultant to include in their design of the school's infrastructure, the capacity to install ten (10) EV chargers for future-proofing.

Last, the school district continues to reduce frequencies of supplies and inter-office mail deliveries by consolidating shipments and proper scheduling.

C. Paper Consumption

The school district continues to use the print management software, PaperCut™, to minimize waste. It will include exploring paper consumption reduction initiatives in its sustainability action plan.

2022 GHG Emissions and Offsets Summary Table

West Vancouver Schools 2022 GHG Emissions and Offsets Summary

GHG emissions for the period January 1 - December 31, 2022	
Total $BioCO_2$	3.70
Total Emissions (tCO_2e)	1,818
Total Offsets (tCO_2e)	1,818
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)	1,818
Offset Investment at $25 per tCO_2e ($)	45,450

Retirement of Offsets:

In accordance with the requirements of the *Climate Change Accountability Act* and Carbon Neutral Government Regulation, West Vancouver Schools (**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.

PART 2. Public Sector Climate Leadership

2A. Climate Risk Management

Since 2021, increased precipitation has been the most impactful manifestation of climate change for West Vancouver Schools. This continued in 2022 as school district maintenance staff responded to numerous flooding issues. The financial impact came not only from overtime pay but also from fees of contractors, who were more capable of handling the job of rebuilding the storm drain systems.

The matter emphasizes the need to preserve permeable surfaces within the school grounds. The direction will continue to discourage further hardscape installations as year-round play surfaces and prioritize the need to keep grass and gravel fields.

- **No-Mow Meadows.** Shifting from having clear-cut boundaries, the school district's grounds crew will leave the grasses to grow naturally – only trimming the edges closest to the hardscape. The taller grasses slow down storm water run-offs, help reduce erosion, are more resilient to drought, and provide an environmental benefit by carbon sequestration.
- **Drainage Improvements.** West Vancouver Schools continues to install drainpipes and catch basins to help channel storm water more rapidly to the municipal system. This has been a significant expense but serves as a smart investment to prevent school disruption and water damage.

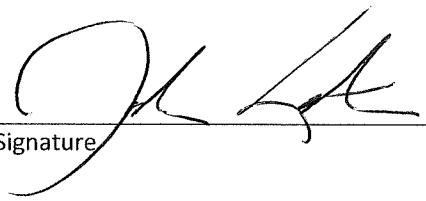
2B. Other Sustainability Initiatives

The initiatives considered in the previous year continues to be in place for 2022. These included building control optimization, renewable energy sources, standard design specifications for its building materials. In 2023, West Vancouver Schools will look to increase its design standardization such as no-finish floor tiles, fixed-length millwork to reduce waste material, and brighter colors of wall paint to improve reflectivity.

2C. Success Stories

While most of the funding and grants that West Vancouver Schools receives annually are allocated towards maintenance and system renewals, the business model it has formulated appears to optimize the impact towards adapting to climate change. Simply stated, it is the model of specifying building system components that are more efficient and anticipating future demands on the system. For example, the boiler renewal at Ecole Cedardale was not a complex installation. Yet, the schematic design allowed incorporating air source heat pumps that will help reduce energy consumption as well. West Vancouver Schools looks at its smaller projects as steps towards the bigger picture of sustainability.

Executive Sign-off:



March 28, 2023

Signature | Date

Julia Leiterman | Secretary-Treasurer/CFO

Name (please print) | Title