



---

2023 PSO Climate Change Accountability Report  
SD40 New Westminster

## Table of Contents

PART 1. Legislative Reporting Requirements.....	3
Declaration Statement.....	3
Overview .....	3
Emission Reductions: Actions & Plans.....	4
2023 GHG Emissions and Offsets Summary Table .....	7
Retirement of Offsets: .....	7
PART 2. Public Sector Climate Leadership .....	8
2A. Climate Risk Management .....	8
2B. Other Sustainability Initiatives.....	8
2C. Success Stories .....	9
Executive Sign-off:.....	10

## **PART 1. Legislative Reporting Requirements**

### **Declaration Statement**

This PSO Climate Change Accountability Report for the period of 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 reduce our GHG emissions, and our plans to continue reducing emissions in 2024 and beyond.

### **Overview**

At New Westminster Schools, we recognize and acknowledge the Qayqayt First Nation, as well as all Coast Salish peoples, on whose traditional and unceded territories we live, we learn, we play and we do our work. The City of New Westminster sits in the centre of the Greater Vancouver Regional District between the larger communities of Burnaby, Coquitlam, Surrey and Richmond. While the city is relatively small, New West has retained a strong sense of history and community, with a passion for taking on big challenges.

The student population is reflective of the city's population, with a full range of social and cultural backgrounds forming a diverse presence in our schools. As one of the fastest growing districts in Metro-Vancouver, we continue to support a wide-range of learners.

Our learners are taught and supported by more than 1000 dedicated employees, including teachers, education assistants, clerical staff, crossing guards, maintenance, custodians and administrators. We have 12 schools: 8 elementary, 3 middle, and one secondary school. We also offer alternate education programs, adult and online learning options, and a Home Learners Program.

Our growing enrollment is creating capacity issues, as we're working hard to expand or maximize use of existing sites, while we also build new schools. As a growth District, we're working as hard as we can to build schools that will support the kids we currently have enrolled, while also making strategic choices when it comes to projected growth as well. And we're proud to be building schools in a way that will enable us to lead into the future by creating spaces that will foster innovation, collaboration and take advantage of updated curriculum guidelines and teaching theories.

## Emission Reductions: Actions & Plans

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

2023 saw the demolition of the old New Westminster Secondary School. The old high school had insufficient insulation, single-pane windows, poor roofing membrane, plus other factors hindering the school district's efforts to reduce GHG emissions. Although the boilers were decommissioned in 2022, the electric and natural gas usage finalized and capped in 2023.

The HVAC system at Glenbrook Middle School was upgraded in 2023 as a heat pump was installed for primary heating. The existing IBC high efficient boilers were turned in to backup boilers. The installation of the heat pump has allowed the school to transfer from carbon-based fuels to electricity as the main source of heat.



*Glenbrook Heat Pump*

Glenbrook Middle School and Herbert Spencer Elementary had their ceiling radiant panels upgraded to reheat coils. The high temperature radiant panels were removed, and low temperature reheat coils were installed in the supply ducting to each room. This change will save on the overall heating bill for both schools by lowering the temperature of heating water and the new fan coils are more efficient to heat the space.

Queensborough Middle School had the HVAC system upgraded throughout 2021 and 2022. To increase the efficiency, CO2 sensors were added in 2023. This allows the system to limit intake air and modulates the return air to reduce energy consumption. Further additions included motion sensors in select rooms to revert the settings back to the unoccupied settings when the rooms are not in use. The second and final phase of the roofing project was completed at Queensborough Middle School in 2023 which will lower energy consumption by maintaining the integrity of the roof system for years to come.



*Finishing up the new roof at Queensborough Middle School*

Seven new portables were installed in 2023 to accommodate the growing population in New Westminster. All these new portables had their thermostats immediately replaced with programmable thermostats with a lock out feature. This feature prevents unnecessary heating by not allowing permanent holds and reverts to the HVAC system back to the programmed schedule.

## **B. Mobile Sources**

Throughout the district we have installed EV charging stations to support our staff who have transitioned to electric vehicles. We currently have a total of 12 charging stations located among 7 facilities. All charging stations were upgraded to level 2 charging in 2023.

We are regularly reviewing the usage and demand at our facilities and will add more EV charging stations as needed. In the future, we hope to acquire zero emission district vehicles as we upgrade our fleet.



*EV Charging Stations & carpool parking in School District 40*

In 2023 we replaced an older F150 truck with a newer F150 with “ecoboost” to reduce fuel consumption within our operations fleet. To promote sustainability and reduce our carbon footprint in our day-to-day outdoor maintenance practices, we have replaced several gas leaf blowers with electric cordless leaf blowers.

At the schools we have prioritized placing bike and scooter racks to encourage these alternative modes of transportation for the staff and students. At Queensborough Middle School, we installed a new scooter rack to provide a secure space for staff and students to store their scooters throughout the day.



*Scooter Rack at Queensborough Middle School*

## **C. Paper Consumption**

Embracing a culture of digital documentation, the amount of paper being used in the district is being reduced. Many documents are created, sent, received, signed, and stored digitally. Paper orders are restricted to a minimum 30% recycled wood content. To help further reduce paper use, print settings are set to automatically print double sided and logging in is required to release print jobs. School District 40 has implemented a print job accountability program to keep track of pages printed throughout the organization. When it is noted that staff members have a high print utilization, the information technology department reaches out to educate and encourage environmentally friendly options such as digital distribution of material.

## 2023 GHG Emissions and Offsets Summary Table

<b>New Westminster School District 40 - 2023 GHG Emissions and Offsets Summary</b>	
<b>GHG emissions for the period January 1 - December 31, 2023</b>	
Total BioCO <sub>2</sub>	2.12
Total Emissions (tCO <sub>2e</sub> )	1047
Total Offsets (tCO <sub>2e</sub> )	1045
<b>Adjustments to Offset Required GHG Emissions Reported in Prior Years</b>	
Total Offsets Adjustment (tCO <sub>2e</sub> )	273
<b>Grand Total Offsets for the 2023 Reporting Year</b>	
Grand Total Offsets to be Retired for 2023 Reporting Year (tCO <sub>2e</sub> )	1318
Offset Investment (\$)	\$32,950

### Retirement of Offsets:

In accordance with the requirements of the Climate Change Accountability Act and Carbon Neutral Government Regulation, School District 40 New Westminster is responsible for arranging for the retirement of the offsets obligation reported above for the 2023 calendar year, together with any adjustments reported for past calendar years (if applicable). School District 40 New Westminster hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy (the Ministry) ensuring that these offsets are retired on School District 40 New Westminster's behalf, School District 40 New Westminster 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.

Total offset adjustment for previous years was affected by a combination of corrected floor area of the buildings and the program's substantial adjustments to the emission intensity of natural gas to align with the National Greenhouse Gase Inventory's approach.

## **PART 2. Public Sector Climate Leadership**

### **2A. Climate Risk Management**

The changing climate is considered when making decisions on upgrades or renovations to our buildings. The modular building at FW Howay Elementary had cedar cladding that was riddled with woodpecker holes. The cedar cladding was removed and replaced with metal siding. During this process we added extra insulation to help stabilize indoor temperatures, making the building more resilient to extreme weather events.

The roof was re-done at Queensborough Middle School in 2023 to maintain its integrity and withstand extreme temperatures and large amounts of precipitation.

We continue to upgrade HVAC systems throughout our schools to adjust to the changing climate and reduce carbon emissions. Upgrading our HVAC systems includes higher cooling capacities to maintain comfortable indoor temperatures during periods of extreme heat. The goal is to install systems that make our buildings more weather-resistant to withstand climate changes and events while maintaining essential heating, cooling and ventilation services.

### **2B. Other Sustainability Initiatives**

EV charging stations are being used at many of our locations and we are committed to grow this initiative to encourage and support our staff that use electric vehicles. This year we upgraded all our EV charging stations to level 2 for faster charging.

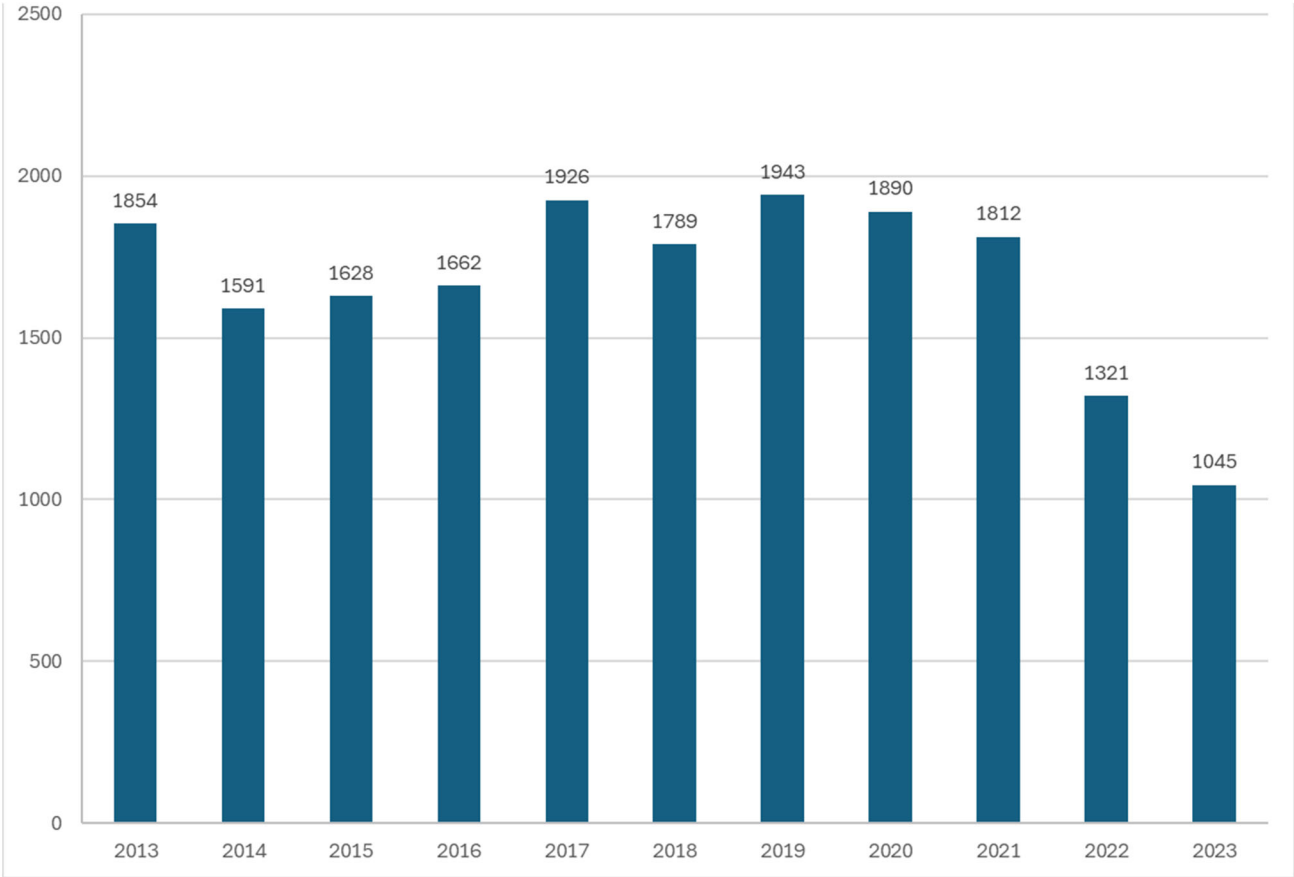
Throughout the district we are upgrading lighting to energy-efficient LED lights. Glenbrook Middle School had all the exterior HID lighting upgraded to LED lights in 2023. Ongoing upgrades include changing to LED lights throughout the district as the florescent tube lighting fails.

To support sustainability within our buildings, we continue to provide collection bins at various locations throughout all our buildings. Plastics, glass, used batteries and paper is collected district wide for recycling. Food scraps are also collected at each location to remove them from the landfill and put into compost.



## 2C. Success Stories

2022 saw the largest drop in carbon emissions since the reporting program started. We have continued the downward trend in 2023. This past year saw the remaining utilities capped and the demolition of the old New West Secondary School.



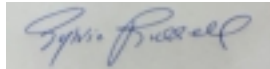
*Ten Year Review of Total tCO<sub>2</sub>e Offsets*

Queensborough Middle School showed a large improvement in energy efficiency and carbon emissions since the installation of the heat pump and upgrading the HVAC units over the last two years. The roof was replaced in the Summer of 2023 which has contributed to the energy efficiency of the building.

Glenbrook Middle School and Herbert Spencer Elementary HVAC units had the old reheat coils replaced with high efficiency reheat coils in the Summer of 2023. Glenbrook Middle School was also upgraded with a heat pump. These upgrades have already shown drops in carbon emissions at these sites for the second half of the year and should continue to minimize the carbon emissions in the future.

Through the ongoing initiatives, renovations and upgrades to our sites, we are expecting to see a continual decrease of CHG emissions from year to year.

**Executive Sign-off:**



April 30, 2024

---

Signature

Date

Sylvia Russell

Superintendent

---

Name (please print)

Title